E-ISSN: 2962-6110
P-ISSN: 2964-7843
JSRET
Journal of Scientific Research, Education, and Technology
jsret.knpub.com

Analysis of Fiscal Incentive Policies in The Electronic Industries Using Regulatory Impact Analysis (RIA)

Intan Maria Lewiayu Vierke, Dharma Budhi, Achmad Sanusi, Syaiful Ahmar
Politeknik APP Jakarta
Correspondent Email: intan@kemenperin.go.id

ABSTRACT

As one of the sectors that are the focus of the development of Making Indonesia 4.0, the electronics industry is one of the sectors that must accelerate itself in facing high competition in the era of the industrial revolution 4.0, where the development of digital technology and global needs for various technology support instruments are very high. The competitiveness of the electronics industry must be a concern; for this reason, this research will analyze the fiscal incentives applied to the electronics industry sector, especially the Government Borne Import Duty (BMDTP). The implementation of RIA supports the policy-making process by including valuable empirical data for a policy decision and constructing a rational decision framework to examine the potential implications of regulatory policy choices.

Based on the analysis conducted, the data shows that the BMDTP policy is to encourage the ease of importing raw materials that can increase industrial competitiveness; the application of the BMDTP policy is clear and understandable; only inconsistencies in the timing of its implementation, and the performance of the electronics sector industry shows the benefits of implementing the BMDTP policy.

Keywords: *electronics industry, fiscal policy, BMDTP, regulatory impact analysis*

INTRODUCTION

Many governments use tax incentives to stimulate private spending on research and development (R&D), including the majority of OECD countries and other large economies such as China, India, Brazil, and Russia. In the wake of the fiscal crisis, R&D tax incentives have become more generous in many countries, hoping to improve competitiveness and promote long-term economic growth (Guceri & Liu, 2019). Experience shows that there is often much budget for more effective and efficient consumption of investment tax incentives in third-world countries. Tax incentives rank low in investment climate surveys in low-income countries and, in many instances, are excessive (OECD, 2008). The World Bank says governments typically budget for high fiscal costs, reducing opportunities for much-needed public spending on infrastructure, social support or public

services and imposing higher taxes on other activities (World Bank, 2019). Fiscal packages so far have aimed to cushion the immediate impact of the sudden decline in economic activity on firms and households and to maintain the country's productive capacity. While there is significant variation in the size of fiscal packages, most are pretty significant, and some countries have taken unprecedented measures. Providing support to those in need, including small and medium-sized enterprises, remains a significant administrative challenge (O'Reilly et al., 2020). When facing the pandemic, the Indonesian government used BMDTP as one tool to maintain growth. Maintaining cash flow has been a critical objective of the fiscal policy measures that have been introduced, supported by monetary and financial policies. Using measurements such are extending tax filing deadlines, postponing tax payments, granting faster tax refunds, more generous offset provisions, and several tax exemptions, including from social security contributions, payroll taxes, or property taxes (O'Reilly et al., 2020; Verico, 2021).

The results showed that, on average, from 2000 to 2015, the most competitive industrial sectors were the food and beverage industry, which ranked third among other ASEAN countries, and the textile and apparel industry ranked fourth (Prabowo & Putra, 2015). The causes of the low competitiveness of the electronics industry include the fact that Indonesia's non-oil and gas processing industry is currently still dependent on imported raw materials. The high import share of these raw materials will undoubtedly affect the import costs of companies or industries that import raw materials. The high import content in Indonesian electronics products' raw materials is around 80-90 percent. This data shows the weak linkage of this industry with other supporting industries. Other structural problems include the low quality of human resources and the lack of technological mastery, which has led to Indonesia's electronics industry being an assembler only.

Meanwhile, the chemical, electronic, and automotive industries are not competitive (Prabowo & Putra, 2015). The causes of the low competitiveness of the electronics industry include Prabowo, H., & Putra, H. (2015), which state that the non-oil and gas processing sector in Indonesia is currently still dependent on imported raw materials. The high import share of these raw materials will undoubtedly affect the import costs of companies or industries that import raw materials. In addition to the structural problems above, Indonesia's electronics industry is currently facing several problems that are likely to become barriers to the growth of this industry. The problems include the trend of Chinese products that show an increasing growth rate. The condition is very worrying because Chinese electronics products will become the dominant player in the electronics industry. If this continues, the Indonesian electronics industry will decline further.

The electronics industry in Indonesia shows relatively good development in production and exports, but there are still some problems, namely competitiveness and industry concentration in Java. Developing the electronics industry in Indonesia is inseparable from the role of foreign companies that build factories in Indonesia, most of

which have to import components. With no industry producing high-tech component materials, the sector is still dependent on imports of LCD screens and circuit panels from China and Europe. This results in high imports of components in products produced by the electronics industry, resulting in higher expenditure on raw materials, especially with Indonesia imposing high import tariffs compared to other countries in ASEAN. In addition, the low exchange rate of the rupiah against foreign currencies and high labour wages in most production areas in Indonesia make the competitiveness of electronics products not high enough. The electronics industry's concentration on Java's island means that most of the raw materials and assembly industries are in Java. Indonesia's electronics industries are majority owned by multinational companies (MNCs) with well-known brands. A few large companies only control the market structure of the electronics industry, so new companies have difficulty entering the electronics industry market in Indonesia.

In the last seven years (2015-2021), the growth of the electronics industry fluctuated, as seen from the decline since 2017 by -.85%. The decline peak occurred in 2018, which was -12.92%, and began to rise again in the following year, although it did not reach positive growth until 2021 due to various factors, including domestic electronic products being less competitive than imported products. On the other hand, the contribution of the electronics industry to GDP is relatively stable, ranging from 0.32% - 0.63%. The Ministry of Industry noted that in 2020 the Electronics Industry (Computer Industry, Electronic Goods, Optics, and Electrical Equipment) experienced an increase in export value of 2.49%, from USD 11.38 billion in 2019 to USD 11.66 billion in 2020, while 2019 the export value of this industry decreased by 0.04%. In 2020, the increase only occurred in the export value of the Computer, Electronic, and Optical Goods Industry which rose moderately, namely by 7.09%, while the value of export value of the Electrical Equipment Industry fell by 2.82% (Pusdatin Kemenperin, 2021). From January to March 2021, the export value of the electronics industry experienced a significant increase, namely by 19.45% (yoy), from USD 2.87 billion in the first three months of 2020 to USD 3.43 billion in the first quarter of 2021. In this period, a high increase occurred in the export value of the computer, electronic and optical goods industry which increased by 20.67% (yoy), and in the export value of the electrical equipment industry, which increased by 17.96% (yoy).

In terms of commodities, Electrical Equipment is the largest commodity in generating foreign exchange in the Electronics Industry. This commodity is also the fifth largest industrial commodity in generating foreign exchange in the non-oil and gas industrial sector, after Palm Oil, Iron / Steel, Precious Base Metals, and Apparel (Convection) from Textiles. In 2020 the export value of Electrical Equipment commodities decreased by 2.96%, from USD 5.27 billion in 2019 to USD 5.11 billion in 2020. while in the first quarter of 2021, this commodity experienced a considerable increase, namely by 7.86%.

Seeing the many challenges faced, the government must help these electronics industry players improve competitiveness and performance to face the intense competition

from the development of the world electronics industry. So that Indonesian electronics products can host the domestic market and compete in the world market.

For this reason, the government incentivises domestic industries to compete with imported products through fiscal and non-fiscal incentives. In order to facilitate companies to be able to import raw materials with high volumes but with cheaper import costs, the government issued several policies related to the import of industrial raw materials, one of which is the Bea Masuk Ditanggung Pemerintah/ Government Borne Import Duty (BMDTP) policy to increase productivity in specific industrial sectors.

Research by Prabowo, H. & Putra H. (2015) showed that BMDTP facilities in 17 specific industrial sectors from 2008 to 2013 had a statistically significant impact on growth in the industrial sector, as seen from the increase in BMDTP ceiling utilization. However, on the other hand, there are still problems with the low impact of BMDTP facility utilization on productivity growth in 17 specific industrial sectors, including the non-optimal utilization of the BMDTP facility itself.

This study analyses the implementation of fiscal policy for the electronics industry sector. The study began with a map of fiscal policies related to the electronics industry sector. As one of the sectors that are the focus of the development of Making Indonesia 4.0, the electronics industry is one of the sectors that must accelerate itself in facing high competition in the era of the industrial revolution 4.0, where the development of digital technology and global needs for various technology support instruments are very high. The competitiveness of the electronics industry must be a concern. For this reason, this study will analyze the fiscal incentives applied to the electronics industry sector, especially BMDTP.

METHOD

The analysis method known as Regulatory Impact Analysis (RIA) is a fundamental tool to help the government assess the impact of regulation. RIA tests and measures the possible benefits, costs, and impacts of new or existing regulations. RIA implementation supports the policy-making process by including valuable empirical data for a policy decision and constructing a rational decision framework to examine the potential implications of regulatory policy choices. The critical factor in responding to the impact of modern economies of open international markets, budget restrictions, and the consequences of competing policy demands. The main feature of RIA is the consideration of the potential economic impact of a regulation (Ridwan & Krisnadi, 2017).

One of the guidelines prepared by the Organisation for Economic, Cooperation, and Development (OECD) to assess whether legislation can achieve its objectives effectively is Regulatory Impact Analysis (RIA). The RIA method has successfully developed all related functions in government, so RIA is very relevant to be applied in Indonesia and can be applied sustainably in the preparation of Indonesian government policies. According to

previous studies in preparing regulations in Indonesia, improvements in drafting and evaluating regulations that produce quality. RIA systematically identifies and assesses the expected effects of regulatory proposals using consistent analysis methods, such as benefit/cost analysis. RIA is a comparative process based on determining the underlying regulatory objectives sought and identifying all policy interventions capable of achieving them. These "viable alternatives" should all be assessed using the same methods to inform decision-makers about the effectiveness and efficiency of different options and allow the most effective and efficient option to be systematically selected. According to the OECD1: "...RIA's most important contribution to decision quality is not the precision of the calculations used, but the act of analysing - questioning, real-world understanding impacts, and exploring assumptions." (OECD, 2008).

Using RIA can help improve the decision-making process that shapes final regulations. In particular, RIA helps promote systematic decision-making and a comparative approach to policy decisions. RIA requires to formulate the following questions.

- What, in general, is the problem to be addressed?
- What are the specific policy objectives to be achieved?
- What are the altered ways to achieve them?

Another advantage of RIA is that it provides an analytical method based on evidence and empirical information that compares various proposals or alternatives, promotes the identification of benefits and costs (direct or indirect) derived from regulations, establishes a rational decision-making system, and evaluates cross-sectoral regulations, and so on.

Table 1. : Essential Building Blocks Of RIA

Building block
Definition of the problem
Public policy objectives
Alternatives to the regulation
Impact evaluation
Compliance with regulation
Monitoring and evaluation
Public consultation

Sumber: OECD, 2012

Table 1. shows the crucial stages of RIA that will translate into a practical regulatory quality evaluation. The ex-ante evaluation provided by RIA should ideally include an analysis of the need to regulate or make recommendations for government intervention through identifying specific problems, such as market failure, information asymmetry, the need to protect citizens' rights, etc. (problem definition). This analysis results in transparent and concise problem identification and the best option for government intervention if it can be justified (public policy objectives), which can be in the form of regulatory instruments or other different types (regulatory alternatives).

In addition to the critical RIA stage, monitoring the condition for the development of a proper evaluation process by an entity that has as one of its main objectives to ensure that the regulatory issuance process goes beyond the controls designed by the established standards (regulatory body). This process should identify priorities, risks, exceptions, and impacts. The tasks of such bodies usually go beyond those related to Regulatory Impact Assessment; if possible, they should cover the entire regulatory governance cycle.

Stages in the RIA design process, systematically analysing and communicating the existing impacts of new regulations based on the 2008 OECD version, namely:

1. Definition (policy objective, policy context). Definition of the policy context and objectives, specifically the systematic identification of the fundamental problems for action by the government.
2. Identification (regulatory options). Identify and define all possible regulatory and non-regulatory options to achieve policy objectives.
3. Assessment (cost, benefit, other impacts). Identify and quantify the options' impact, including costs, benefits, and distributional effects.
4. Consultation (involving stakeholders) Systematically established public consultations to allow all stakeholders to participate in the monitoring process. It provides essential information regarding the costs and benefits of alternatives, including their effectiveness. The consultation is to obtain the best alternative by involving stakeholders from the early stages of regulation formulation to the implementation and monitoring stages of regulation implementation. In the RIA method, communication for consultation begins in the problem formulation stage. Consultation at this stage ensures that the government is addressing the right problem and that the government's perception of the problem at hand is the same as that of the community, industry, and other stakeholders. Consultation at the alternative development stage mainly aims to get input on the options that can be selected and to test whether the options are workable. In the cost & benefit analysis stage, consultation primarily aims to obtain input on each option's costs (losses/difficulties) and benefits (gains) and to confirm whether the expected costs/benefits comply.

5. Design (Enforcement, compliance, and monitoring mechanisms). Development of enforcement and compliance and strategies for each option, including evaluation of effectiveness and efficiency. Development of monitoring mechanisms to assess the success of policy proposals and feed that information into future regulatory responses.

FINDING AND DISCUSSION

Regulatory Impact Analysis (RIA) is used to assess a regulation in terms of relevance between community needs and policy objectives, the need for government intervention efficiency between inputs and outputs, effectiveness between policy objectives and outcomes, and sustainability between community needs and outcomes before implementing or changing a regulation. RIA also ensures the most effective and efficient policy choices taken by policymakers through the study of the effects caused by policymakers. Regulatory impact analysis (RIA) is an approach systemically to assess the positive and negative effects of planned and existing regulations and also critically non-regulatory alternatives (Injuries & Board, 2015).

The RIA method is used to assess a regulation in terms of:

1. Relevance between community needs and policy objectives;
2. The need for government intervention;
3. Efficiency between input and output;
4. Sustainability between community needs and the results before the implementation or change of regulation.

The high import share of raw materials affects the import costs borne by companies or industries that import raw materials. Helpman and Grossman (1991) and Amiti and Konings (2007) stated that the use of cheaper imported raw materials due to tariff reduction would have an impact on increasing productivity through the learning process, the addition of variations in raw materials, and the quality effect of imported raw materials. In order to facilitate companies to able to import raw materials with cheaper import costs and increase their productivity, the government issued several policies related to importing industrial raw materials (Prabowo & Putra, 2015).

Some facilities related to the ease of importing raw materials implemented by the government include the Import Facility for Export Purpose (KITE), trade agreements with other countries, and Government Borne Import Duty (BMDTP). These policies aim to reduce trade barriers through import tariffs to reduce the import costs of companies or industries. The policies will undoubtedly help companies or industries that use imported raw materials to reduce production costs and increase production output.

Imported electronics products are estimated to control around 60% of the electronics market in Indonesia. This condition is partly due to the lack of competition for domestically made electronic products and to regulatory support considered less

favourable to the development of the domestic electronics industry. Many legal products in Indonesia hinder the growth of the domestic electronics industry. Fiscal policy tends to kill the domestic electronics industry because import duties on imported finished goods are cheaper than those on components. The condition has led to more imported products sold in the domestic market (Pusdatin Kemenperin, 2021).

Furthermore, the stipulation of BMDTP for several industrial sectors is in line with the government's goal to increase industrial competitiveness through increased productivity. Potential problems that may arise are the position of the BMDTP policy, which is substitutable with other government policies related to importing industrial raw materials such as KITE, FTA, MFN, etc. This condition means that without utilising BMDTP, the industry can still import raw materials using various other import facilities.

Research by Prabowo, et.al. (2015) shows that the BMDTP policy has a statistically significant impact on TFP growth in 17 industrial sectors, but the magnitude of the resulting impact is relatively low. The low impact of the BMDTP policy is due to the relatively low utilisation of this policy itself. The low utilisation of the BMDTP facility is due to the late issuance of BMDTP technical regulations, so companies or industries prefer to import raw materials through other import facilities. In addition, some industries, such as shipping and railways, conduct production based on orders and multi-years, so BMDTP utilisation is not optimal. Meanwhile, other control variables, wage level and raw material tariffs, significantly impact TFP growth. Other control variables like capital intensity and the interaction between raw material tariff and BMDTP utilisation do not significantly impact TFP growth.

Raw materials with BMDTP facility

There are 56 types of imported raw materials required by the Electronics Industry. During 2008-2021, the table below illustrates the top 10 BMDTP realisation, except for electromechanical equipment, which are raw materials for refrigerators and air conditioners, absorbing US$ 6,859,178 BMDTP realisation or 87.79 per cent of the total realisation. Refrigerator raw materials, namely rolled iron and steel, absorbed 65.08 percent of BMDTP realisation and air conditioner raw materials, namely polypropylene and polyethene, absorbed 22.71 percent.

Table 1: Top Ten (10) Imported Raw Materials in Total BMDTP Realisation 2008 – 2021

HS Code	Description	Value in USD	
		Import	Import duty
7210.70.11	Flat-rolled, 600 mm or more in width, less than 0.6% carbon and 1.5 mm or less in thickness	24.131.118	3.124.855
3902.30.90	Polypropylene in neither dispersion nor granular form	10.989.304	1.046.595
7212.40.12	Flat-rolled, width less than 600 mm, carbon less than 0.6%	4.547.923	634.789
7210.49.11	Rolled deck, width 600 mm or more. carbon less than 0.6 %, thickness not exceeding 1.2 mm	4.393.683	557.169
7212.40.19	Rolled deck, width less than 600 mm, carbon less than 0.6 %	4.165.903	422.550
7210.49.12	Rolled deck, width 600 mm or more. carbon less than 0.6 %, thickness not exceeding 1.2 mm	3.283.530	419.482
3901.10.99	Polymer of ethylene (Polyethylene), specific gravity less than 0.94	2.689.780	415.382
8608.00.20	Electromechanical equipment	5.418.630	263.789
3902.10.40	Polypropylene in granulated form	1.728.687	172.294
8501.40.11	Other AC motors, single-phase	1.667.382	166.062
	Other	6.926.718	704.015
		69.942.657	7.926.983

Source: PT. Surveyor Indonesia

PT Asia Electric imports rolled iron and steel, PT Hartono Istana Teknologi, PT Panasonic Manufacture, PT Sanken Argadwija, and PT Sharp Electronics Indonesia as raw materials for the production of refrigerators. In 2008 - 2021, the total value of flat-rolled imports made by these companies amounted to US$ 40,522,156 or 57.94 percent of total raw material imports, with government-borne import duties of US$ 5,158,845. Of the five rolled products, rolled products with a maximum thickness of 1.55 mm were the most imported raw materials by refrigerator manufacturers, accounting for 34.5 percent of the total imported raw materials.

Polypropylene and polyethene are used in producing Household Refrigerators (AC) by PT Panasonics, PT Sanken, and PT Sharp. The import value of polypropylene during the BMDTP period amounted to US$ 17,075,153, or 24.4 percent of the total import value of

raw materials. At the same time, the value of import duties charged to the government amounted to US$ 1,800,333, or 22.71 percent of the total BMDTP.

The dependence of the refrigerator and AC industry on rolled steel and imported polypropylene is very high because rolled steel and polypropylene will determine the quality of refrigerators and air conditioners produced by electronic companies. Regarding production costs, the role of BMDTP is relatively small, but helping reduce the cost of goods sold can help compete with imported products so that the follow-on impact of BMDTP can increase exports.

On average, electronics companies' export performance utilising BMDTP shows a positive trend. In this report, the performance discussed is only the industry with an enormous BMDTP realisation: refrigerators and air conditioners. However, due to the limited availability of time series data, the export and import data used starts from 2014 to 2021.

The refrigerators discussed are those produced by PT Asia Electric, PT Hartono Istana Teknologi, PT Panasonic Manufacture, PT Sanken Argadwija, and PT Sharp Electronics refrigerators with a capacity below 230 litres. The export performance of the refrigerator industry over eight months, as illustrated in graph 1, shows a positive trend, although the variability of the export value explained by time only reaches 38.08 percent. This number illustrates that the development of refrigerator exports over time will experience slow growth. In 7 years, the growth of refrigerator exports based on CAGR was 2.4 percent.

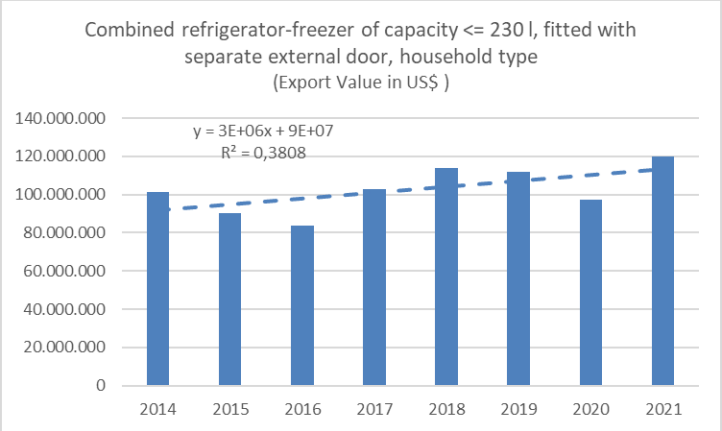

Figure 1: Combined refrigerator-freezer of capacity ≤ 230 l, fitted with separate external door, household type (Export Value in US$)

Figure 2 illustrates the development of imports of refrigerators with capacities below 230 l. When referring to the value of imports, imports of refrigerators are still far below the value of exports. However, over seven years, the growth of refrigerators imports based on CAGR is 13.84 percent. On the other hand, figure 2 shows that the linear

relationship between time and import value can explain 87.33 percent of the variability in refrigerators imports, which means the import of refrigerators grows relatively high over time.

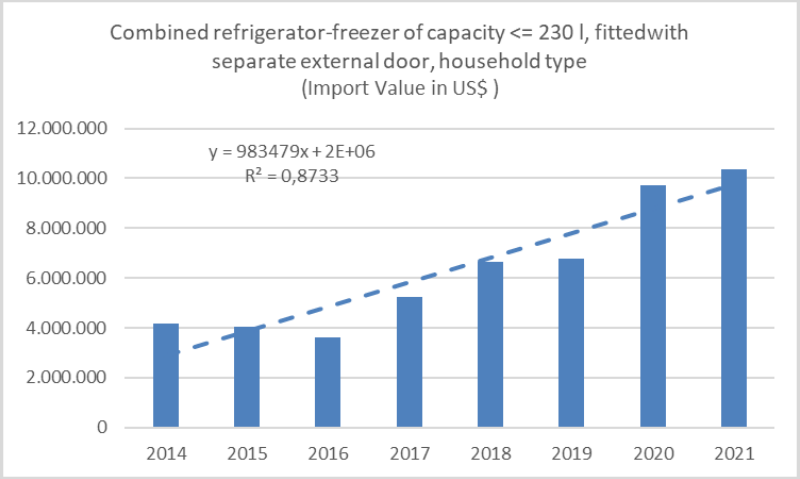

Figure 2: Combined refrigerator-freezer of capacity ≤ 230 l, fitted with separate external door, household type (Import Value in US$)

Refrigerator import exports show a reasonably high inter-industry trade index (IIT) of 0.884, a high IIT indicates that the intensity of trade between Indonesia and partner countries is relatively high, where the trade traffic of reactive refrigerators is dense. Intra-industry trade allows the refrigeration industry to deepen product specialization while providing consumers with wider choices and commensurate benefits.

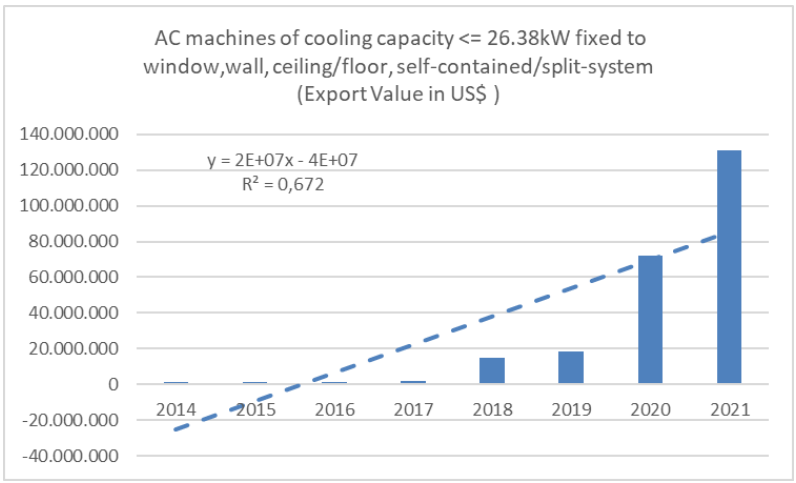

Figure 3: AC machines of cooling capacity ≤ 26.38kW fixed to the window, wall, ceiling/floor, self-contained/split-system (Export Value in US$)

During the same period, Indonesia's cumulative imports of temperature control machines were eleven times the value of its exports at US$2.74 billion. However, as illustrated in Figure 4, the linear trend only shows a growth of 1.8 percent (CAGR), and the variability between import value and time is also low at 23.43 percent. Imports of temperature control machines come from ASEAN countries Malaysia, Thailand, and Vietnam, as well as countries outside ASEAN, such as China.

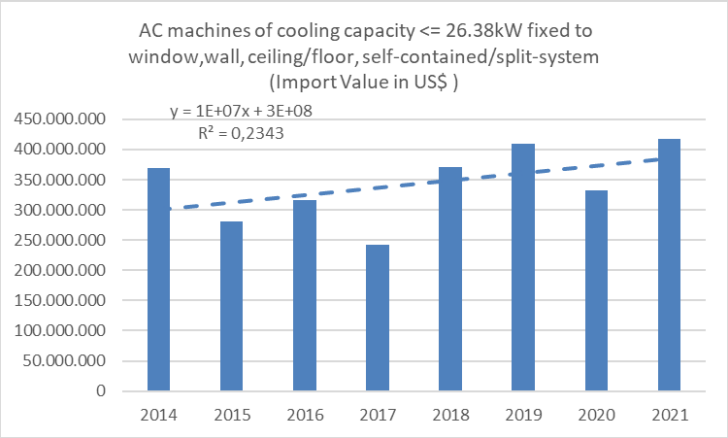

Figure 4: AC machines of cooling capacity ≤ 26.38kW fixed to the window, wall, ceiling/floor, self-contained/split-system (Import Value in US$)

The trade intensity of temperature control machines between Indonesia and partner countries is also relatively high, indicated by the intra-industry trade index of 0.838.

The refrigerator and temperature control machine industry, with high export growth indicators and intra-industry trade index, can be considered an industry with competitiveness in international trade. Such industrial conditions need to be maintained in international competition. The role of government policy is needed to maintain this existence. So far, what determines product competitiveness are quality, delivery, and price. Nevertheless, for household electronic goods, currently, quality and delivery are relatively the same. What is different and determines that an item has high competitiveness is just the price. So, the necessary government policy is to keep production costs low with fiscal stimulus.

The conclusion can be drawn that the BMDTP that has been in effect is still relevant to continue to be given in helping industries dependent on imported raw materials maintain low production costs unless the required raw materials following the required specifications have been produced domestically.

Public Consultation

Businesses argue that tax incentives can be an effective instrument to stimulate investment, but only if used as part of a well-conceived and well-executed strategy. Tax incentives require pre-defined objectives, should be based on legislation, and should be

managed efficiently. They emphasise that it is crucial for investment that the tax regime is predictable, efficient, and stable. Businesses also argue that tax incentives cannot compensate for poor tax structures or an unfavourable investment climate, such as significant administrative barriers, restrictions on competition, no independent legal system, or failure to protect property rights. Finally, they found that countries should be able to set their tax policies and allocate their tax incentives, as there is no size fit. Regional coordination is considered unhelpful (World Bank, 2019).

Making progress requires concerted action from many stakeholders. For various reasons, national reforms and international coordination of investment tax incentives often prove challenging. Political decisions on tax incentives must be based on proper analyses of their effectiveness and efficiency, requiring transparency and systematic information collection and evaluation. Stakeholders must accept their various responsibilities if they are to make progress:

The detailed explanation of the list of RIA drafting questions (Injuries & Board, 2015; OECD, 2008; Ridwan & Krisnadi, 2017) are:

1. Has the problem been correctly well-defined? The problem to be explained should be precisely specified, provide evidence of its nature and magnitude, and explain why it arises (identify the affected incentive entities).
2. Is government action appropriate? Government intervention should rely on explicit evidence with justified action, given the kind of problem, the potential advantages and costs of action (based on an accurate assessment of government effectiveness), and alternative mechanisms to address the problem.
3. Is the existing regulation the best one for government action? Early in the regulatory process, regulators should undertake an informed comparison of various regulatory and non-regulatory policy instruments, bearing in mind relevant subjects such as costs, benefits, distributional effects, and administrative requirements.
4. Is there a legal basis for regulation? The regulatory process should be structured so that all regulatory decisions strictly respect the "rule of law"; that is, the responsibility should be clear to ensure that all regulations authorised by higher-level regulations are consistent with international treaty responsibilities and fulfil relevant legal principles such as certainty, proportionality, and applicable procedural requirements.
5. How many levels of government bureaucracy are involved in regulatory coordination? Regulators should choose the most suitable level of government to take action, or if there are multiple levels involved, they should design an effective system of coordination between levels of government.
6. Is the existing regulation beneficial rather than costly? Regulators should assess the total expected costs and benefits of each proposed and alternative regulation and

make the estimates available in a format accessible to decision-makers—the costs of justified government action benefit before action.

7. Will the distribution of impacts be transparent in society? To the extent that distributive and equity values are affected by government intervention, regulators should make transparent the distribution of costs and benefits across social groups.
8. Are the regulations clear, consistent, understood, and accessible to users? Regulators should assess whether the regulations will be likely easy to understand and, to that end, should take steps to ensure that the text structure and rules are as straightforward as possible.
9. Do all interested interest groups have an equal opportunity to express their views? Regulations should be developed openly and transparently, with appropriate procedures for effective and timely input from interested parties such as affected businesses and labour unions, other interest groups, or other levels of government.
10. How can regulatory compliance be achieved? Regulators should assess the incentives and institutions through which regulations apply and design a response implementation strategy that best uses them.

The ten questions and answer for RIA are as follows.

Table 2. Ten (10) RIA Questions and Answers

No	Questions	Answers
1	Has the problem been correctly defined?	Yes
2	Is the government action appropriate?	Appropriate, with a note that the implementation has not been maximised 2009-2019: PMK 2020-2021: PMK Covid
3	Are the existing regulations the best for government action?	The best is the exemption of tariffs on the entry of raw materials
4	Is there a legal basis for regulation?	Fiscal Law, Industry Law
5	How many levels of bureaucracy are involved in coordinating this regulation?	The bureaucracy involved is from echelon 4 up to the Ministerial level. (Ministry of Finance, Ministry of Industry, Ministry of Trade)
6	Is the existing helpful regulation compared to the cost?	Yes, it can reduce production costs
7	Will the distribution impact be transparent to the public?	Transparent
8	Are regulations clear, consistent, understandable and accessible to users?	The regulations are clear and understandable; only inconsistency at the implementation time.
9	Do all interested parties have the same opportunity to express their views?	Yes, each stakeholder has
10	How can compliance with the regulation be achieved?	The company submits according to the needs and requirements

Good governance of incentives is essential for their effectiveness and efficiency. Transparency is necessary to facilitate accountability and reduce opportunities for rent-seeking and corruption (OECD, 2008). Tax incentives should therefore be subject to a legislative process, consolidated under the tax law, and their fiscal costs reviewed annually as part of the tax expenditure review. The process of approving tax incentives may involve multiple stakeholders but is ultimately best consolidated under the authority of the Minister of Finance and enforced and monitored by the tax administration. Wherever possible, the granting of tax incentives should be based on rules rather than discretion. Despite political obstacles, some countries have successfully reformed their tax incentive regimes (World Bank, 2019).

More systematic evaluation is needed to facilitate informed decision-making. In most low-income countries, the effectiveness and efficiency of tax incentives cannot be assessed due to a lack of data, analytical tools, and skills. This report's background document offers guidance on developing the data and tools needed for systematic analyses(Injuries & Board, 2015; OECD, 2008). Progress requires concerted action by multiple stakeholders to ensure transparent and evidence-based decision-making. In the last seven years (2015-2021), the growth of the electronics industry has fluctuated, with a decline since 2017 of -.85%. The peak of the decline occurred in 2018, which was -12.92% and began to rise again in the following year, although it did not reach positive growth until 2021. This condition is due to various factors, including domestic electronic products being less competitive than imported products. On the other hand, the contribution of the electronics industry to GDP is relatively stable, ranging from 0.32% - 0.63%.Research by Prabowo, et.al. (2015) showed that it has a statistically significant impact on TFP growth in 17 industrial sectors. The low impact of the BMDTP policy is due to its relatively low value, so companies or industries prefer to import raw materials. In addition, some industries, such as shipping and railway, are order-based and multi-year production.

There are 56 types of raw material imports required by the Electronics Industry. During the period 2008-2021, the table below illustrates the top 10 BMDTP realizations, except for electromechanical equipment. Sharp Electronics Indonesia as raw material for refrigerator manufacturers. The total value of its flat-rolled imports was US$ 40,522,156 or 57.94 per cent. On average, refrigerators produced by electronic companies utilizing BMDTP show a positive trend. Due to the limited availability of time series data, the export and import data used starts from 2014 to 2021. In this report, the performance discussed is only the industry with the most extensive BMDTP realization: products that compete with imported products. However, because rolled steel and imported polypropylene are very high, they help reduce the cost of goods sold.

Figures show that the linear relationship between time and import value explains 87.33% of the variability in refrigerator imports, illustrating that refrigerator exports' development over time will experience slow growth.

Indonesia's cumulative imports of refrigerators are worth eleven times the value of its exports at US$2.74 billion. However, as illustrated in figure 4, the linear trend shows only 1.8 per cent growth (CAGR) and variability between import value and time.

Temperature control machines in Indonesia can be considered a competitive industry in international trade. However, for household electronics, quality and delivery are relatively the same, which is different and determines an item. So the necessary government policy is to keep production costs low with fiscal stimulus. Tax incentives should be subject to a legislative process and consolidated under the tax law. Reminds that their fiscal costs are reviewed annually as part of the spending review. Transparency is needed to facilitate accountability and reduce opportunities for rent-seeking and

corruption. Perhaps engaging a good number of stakeholders is critical to its effectiveness and efficiency.

CONCLUSION

Learning from the experience of developed countries, accelerating the development of the manufacturing sector, and making it an engine of economic growth require two conditions. First, the necessary conditions include a sound institutional and regulatory framework to avoid moral hazard and unfair selection of winners. This condition is related to structural reforms. Second, sufficient conditions relate to effective monetary and sound fiscal policy that avoids crowding out trade and investment. These public policies should enhance endogenous factors of human capital development related to education, health, and environmental justice, as well as exogenous factors of infrastructure and technological progress (Verico, 2018, 2021). In order to facilitate companies to be able to import raw materials at lower import costs and increase their productivity, the government issued several policies related to importing industrial raw materials (Prabowo & Putra, 2015). Some facilities related to the ease of importing raw materials implemented by the government include the Import Facility for Export Purpose (KITE), trade agreements with other countries, and BMDTP. These policies aim to reduce trade barriers through import tariffs to reduce the import costs of companies or industries. The policy will undoubtedly help companies or industries that use imported raw materials to reduce production costs and increase production output.

Imported electronics products are estimated to control around 60% of the electronics market in Indonesia. This condition is partly due to the lack of competition for domestically made electronic products and to regulatory support considered less favourable to the development of the domestic electronics industry. Fiscal policy tends to kill the domestic electronics industry because import duties (BM) on imported finished goods are cheaper than BM on components. To anticipate adverse impacts on the Indonesian economy and in order to strengthen the domestic economy, the government in 2010 continued to provide fiscal stimulus in the field of taxation, among others, to (i) increase people's purchasing power, (ii) maintain the resilience of the business world and (iii) increase the competitiveness of businesses and industries. Fulfilling the provision of goods and services for the public interest, encouraging the real sector and increasing the competitiveness of specific domestic industries provides BMDTP.

Tax incentives can be an effective instrument to stimulate investment, but only if used as part of a well-conceived and implemented strategy—tax incentives are based on rules rather than discretion. Transparency is needed to facilitate accountability and reduce opportunities for abuse and corruption. Several stakeholders have shared some countries, but ultimately it is best consolidated. In the RIA method, communication for consultation has begun to solve the problem formulation stage. Consultation at this stage ensures that

the government is addressing the right problem and that the government's perception of the problem at hand is the same as that of the community, industry, and other stakeholders. Consultation at the alternative development stage mainly aims to get input on the options that can be selected and to test whether the options are workable. In the cost-benefit analysis stage, consultation primarily aims to obtain input on each option's costs (losses/difficulties) and benefits (gains) and to fulfil the expected costs/benefits.

Each interested party has an equal opportunity to express their views. The company proposes to customise its needs and requirements. Based on the analysis conducted, here are the following conclusions.

- The BMDTP policy is carried out to encourage the ease of importing raw materials that can increase industrial competitiveness.
- The implementation of the BMDTP policy is clear and understandable; only inconsistencies in the timing of its implementation
- The performance of the electronics sector industry shows the benefits of implementing the BMDTP policy.

As for suggestions for further research, we are considering that this research focuses on desk study and confirmation, which is only carried out in two electronics companies. The RIA method is an essential instrument for impact analysis; however, this research has not yet been conducted.

REFERENCES

Djojosubroto, D. I. (2004). Koordinasi Kebijakan Fiskal Dan Moneter Di Indonesia. In H. Subiyantoro, & S. Riphat, Kebijakan Fiskal: Pemikiran, Konsep, dan Implementasi (pp. 88-97). Jakarta: Penerbit Buku Kompas.

Ejaz, Zara; Ullah, M. Aman; Khan, M. U. (2015). Determinants of Industrial Growth in South Asia: Evidence from Panel Data Analysis. 1–18.

Fan, Z., & Liu, Y. (2020). Tax Compliance and Investment Incentives: Firm Responses to Accelerated Depreciation in China. Journal of Economic Behavior and Organization, 176, 1–17.

Fan, Z., & Liu, Y. (2020). Tax Compliance and Investment Incentives: Firm Responses to Accelerated Depreciation in China. Journal of Economic Behavior and Organization, 176, 1–17. https://doi.org/10.1016/j.jebo.2020.04.024

Hartina & Sudarmo, M.M., Drs. (2013). Analisis Pengaruh Kebijakan Tax Holiday dan Tax Allowance terhadap Perkembangan Penanaman Modal Asing dan Penanaman Modal Dalam Negeri di Indonesia. Undergraduate Thesis, Binus.

Hasan, R., Jiang, Y., & Rafols, R. M. (2021). Place-based preferential tax policy and industrial development: Evidence from India’s program on industrially backward districts. Journal of Development Economics, 150(January), 102621. https://doi.org/10.1016/j.jdeveco.2020.102621

Hemming, Richard, Kell, Michael S., And Mahfouz, Selma. (2002). The Effectiveness of Fiscal

Policy in Stimulating Economic Activity - A Review of the Literature. IMF Working Paper WP/02/208. Washington, D.C: IMF.

Hikmah, M. (2020). Penetapan Regulatory Impact Analysis dalam Penetapan BUT di Indonesia Di Era Ekonomi DIgital.

Guceri, I., & Liu, L. (2019). Effectiveness of Fiscal Incentives for R&D. *American Economic Journal: Economic Policy*, *11*(1), 266–291.

Injuries, P., & Board, R. (2015). *Regulatory Impact Analysis*. 128–129. https://doi.org/10.1787/gov_glance-2015-39-en

O'Reilly, P., Perret, S., & Van Dender, K. (2020). Tax and Fiscal Policy in Response to the Coronavirus Crisis: Strengthening Confidence and Resilience. *Intertax*, *48*(May), 736–742.

OECD. (2008). Introductory Handbook for Undertaking Regulatory Impact Analysis (RIA). *October*, *33*(October), 1–27. https://www.oecd.org/gov/regulatory-policy/44789472.pdf

Prabowo, H., & Putra, H. (2015). *Analisis Dampak Pemanfaatan Kebijakan Bea Masuk Ditanggung Pemerintah (Bmdtp) Terhadap Produktivitas Sektor Industri Tertentu*. 113–123.

Pusdatin Kemenperin. (2021). Tantangan Peningkatan Kinerja Industri Elektronika di Indonesia. *Kementerian Perindustrian*, *Edisi V*.

Ridwan, W., & Krisnadi, I. (2017). Regulatory Impact Analysis Terhadap Rancangan Undang-Undang Konvergensi Teknologi Informasi dan Komunikasi. *Jurnal Telekomunikasi Dan Komputer*, *2*(1), 1. https://doi.org/10.22441/incomtech.v2i1.1101

Verico, K. (2018). Modification of the Regulatory Impact Assessment on Indonesia's Economic Policies. *Economics and Finance in Indonesia*, *64*(1), 43–58. https://econpapers.repec.org/article/lpeefijnl/201803.htm

Verico, K. (2021). *What has been happening to Indonesia's Manufacturing Industry? March 2021*, 18.

World Bank. (2019). *Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment OPTIONS FOR LOW INCOME COUNTRIES' EFFECTIVE AND EFFICIENT USE OF*.