

CRITICAL SUCCESS FACTORS OF SUPER TAX DEDUCTION INCENTIVES FOR R&D ACTIVITIES CARRIED OUT BY THE INDUSTRIAL SECTOR

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Abstract: *In order to achieve Indonesia Gold 2045, with one of the missions being an advanced economy country, Indonesia needs to increase its Gross Domestic Product (GDP). One of the programs is to improve the quality of human resources and science and technology, which is carried out through increasing research and development activities. After further review, it turns out that spending on research and development activities compared to Indonesia's Gross Domestic Product is still low, private participation in research and development is still less than the government. The government makes a policy of providing super tax deductions to companies that carry out certain research and development activities in Indonesia. This research was conducted to determine the critical success factors (CSF) or success factors that must be considered by policy makers in implementing super tax deduction for research and development activities, which were carried out with a post positivist approach and data collection by in-depth interviews. Critical Success Factors (CSF) analyzed are divided into 3 dimensions, namely relevance, effectiveness, and efficiency. In the dimension of relevance, the form of super tax deduction incentives is the right form if the cost factor constraint in hindering research and development activities carried out by the industry applies ceteris paribus, and it is necessary to adjust the form of incentives according to industry needs. In addition, it is necessary to determine clear overall policy targets with the preparation of performance indicators. The dimension of effectiveness shows that in implementing the policy, it is necessary to conduct an evaluation to find out the cause of the company's low enthusiasm in conducting research and development activities and proposing incentives, and it is necessary to increase the intensity of socialization and adequate coordination between the ministries/agencies involved. In terms of efficiency, the use of the Online Single Submission (OSS) system in the implementation of incentive submissions needs to be optimized by developing a synchronized OSS system and supporting transparency in policy implementation.*

Keywords: *Critical Success Factors (CSF), tax incentives, research and development, super tax deduction, industrial sector*

1. Introduction

Indonesia plans to become a developed country by 2045. One of the indicators to become a developed country is that Indonesia must become a high-income country (advanced country) as seen from economic growth through Indonesia's Gross Domestic Product (GDP). President Joko Widodo targets Indonesia's GDP in 2045 to reach USD 7 trillion or IDR 99,000 trillion. Indonesian Minister of National Development Planning/Badan Perencanaan Pembangunan Nasional (Bappenas), Bambang Brodjonegoro revealed that in achieving Indonesia's Vision

2045, there are 4 main pillars that have been launched, one of which is human and science and technology development.

The steps taken to achieve these pillars, especially the pillars of human development and science and technology and sustainable economic development are: 1) adoption and application of science and technology; 2) independence and science and technology capabilities; 3) cooperation between the government, universities, and the private sector; 4) development of innovation funds. The four steps are carried out through an innovation process. Innovation is done through R&D activities. In fact, based on data from UNESCO, the number of R&D activities in Indonesia is still low compared to other countries. The cost spent on R&D activities in Indonesia is only about 0.1% of the Gross Domestic Product. The involvement of R&D spending in Indonesia is still dominated by the government, which accounts for 39.4% of all R&D spending. The involvement of the business sector itself in conducting R&D activities is still lacking at only 25.6%. Therefore, encouragement is needed to trigger an increase in R&D activities carried out by the private sector. This encouragement takes the form of a super tax deduction facility for costs incurred for R&D with the issuance of Government Regulation (Peraturan Pemerintah) No. 45/2019.

In October 2020, a derivative regulation as an implementing regulation of PP No. 45/2019 was signed. According to PMK No. 153/PMK.03/2020, the provision of super tax deduction facilities for R&D activities is only for certain R&D conducted in Indonesia. In connection with the enactment of the PMK since October 2020, it is important and very relevant to find out what and how the factors that support the success of the super tax deduction policy for certain R&D in Indonesia. Using the concepts and theories previously described, the author analyzes the factors that lead to policy success.

This research discusses important aspects in the form of critical success factors of the policy of providing super tax deduction incentives for R&D based on 3 (three) dimensions or criteria, namely relevance, effectiveness, and efficiency with the research question of how the success factors of the policy of providing super tax deduction incentives for certain R&D activities in Indonesia as regulated by Minister of Finance Regulation (Peraturan Menteri Keuangan) Number 153/PMK.03/2020 concerning Provision of Gross Income Reduction for Certain Research and Development Activities in Indonesia. The purpose of this study is to analyze the critical success factors of the super tax deduction incentive policy for certain R&D activities in Indonesia which are analyzed based on the implementation of the policy to date using the 3 (three) dimensions used, namely relevance, effectiveness, and efficiency.

2. Literature Review

Tex Policy

According to Mansury, tax policy is defined as a narrow fiscal policy, which means that the policy regulates the tax base. The tax base includes who is taxed and exempted from tax (tax subject), what is taxed and exempted (tax object), and the amount of tax payable, as well as determining the procedure for fulfilling tax obligations/compliance (Rosdiana & Irianto, 2011: 84).

Tax policy is usually used to reduce or eliminate inefficient allocation due to imperfect competition, although other policy instruments (such as antitrust enforcement) can also be applied and at a cost that may be more effective in fixing the problem (Auerbach and Hines Jr., 2002). From the firm's perspective, tax policy affects the firm's decision to produce, create jobs, invest and innovate (OECD, 2010:18).

Tex Incentive

Tax incentives are a form of deviation from the general provisions of taxation aimed at reducing the tax burden on companies to encourage investment in certain sectors. A lower tax burden compared to other countries is expected to attract domestic and foreign investors to invest in Indonesia. So that it can increase national production, support production, increase employment, and provide income to the community which will ultimately increase GDP and public welfare (Gunadi, 2013: 496). There are 2 (two) forms of tax incentives to stimulate R&D activities, namely tax allowances and tax credits (Darussalam and Tobing, 2013). Tax allowances are provided in the form of additional deductions for actual expenditure on R&D activities against gross income in calculating taxable income. In addition, tax allowances can also be given in the form of accelerated depreciation. Tax credits are direct tax reductions or credits. The tax credit is given based on 2 (two) bases, namely volume-based or incremental-based.

Tax Deduction

Tax deduction is a reduction in gross income to determine taxable income. According to Prasetyo (2016: 24), the concept of deduction originates from the concept of taxable-deductible or matching costs against revenues. If a revenue obtained by a taxpayer is taxable (taxable object), then the expenditure incurred by the taxpayer is a deductible expense. Furthermore, Prasetyo explained that expenses that are directly related to the effort to obtain income are deductible expenses. Super tax deduction is a deduction from gross income whose amount is added or greater than the usual deductible expense, which exceeds 100%.

Research and Development (R&D)

R&D is all efforts to improve science and for the purpose of innovation (Congressional Budget Office, 2005: 2). According to Sugiyono (2009: 297) R&D is a basic research activity to obtain information according to user needs (needs assessment), followed by development activities (development) to produce a product and assess the effectiveness of the product. Basically, R&D activities are divided into 3 (three) categories consisting of: 1) basic research; 2) applied research; and 3) experimental development (Congressional Budget Office, 2005: 3).

Critical Success Factors (CSF)

In essence, critical success factors are keys that aim to ensure things must go right in order to achieve the goals of an organization or decision (Bullen and Rockat, 1981). In this study, the grand theory of critical success factors for the super tax deduction policy of certain R&D activities in Indonesia used is critical success factors in general for an economic program or policy according to Diallo and Thuillier and derived into categories according to the theory of tax administration in OECD (2011) and the theory of critical success factors in tax administration from several experts. Diallo and Thuillier suggested that the critical success factors that lead to the success of a policy are relevance, efficiency, effectiveness, and sustainability (A. Ika, Diallo, and Thuillier, 2011).

The relevance dimension explains that a tax policy is considered relevant if the form of tax policy taken is appropriate or in accordance with the objectives to be achieved by implementing the policy. To find out whether the form of tax policy is in accordance with the objectives to be achieved or not, we must know the purpose or motivation of a policy and how the design of the policy is so that a goal is achieved, so that the indicators in the relevance

dimension are policy motivation and policy design. In a broad sense, according to Roobins and Judge in Shagari and Saad (2017), motivation refers to a process that explains the intensity of people, direction, and continuous efforts to achieve the goals of an organization. Policy design is the step of how a policy is discussed and formed with the logic that shows between a policy issue or a problem with a given solution and feasibility that largely determines whether and how the policy can be enforced (Tezera, 2019).

Effectiveness refers to the extent to which the project meets its objectives. A policy is considered effective if the policy can achieve the targeted objectives. In the effectiveness dimension, it is explained how the policy can achieve these objectives, by describing the actors or institutions involved in implementing the policy (stakeholders involved and their autonomy) and how each role, and how the strategy to implement the super tax deduction policy (implementation strategy). Stakeholders in this case are government agencies that make policies and play a role in making and implementing policies. Meanwhile, autonomy according to Abiola and Asiweh (2012) refers to the extent to which departments or institutions in government can carry out their duties independently in terms of law and status, human resources, administrative processes, and funding. An implementation strategy is an operational plan that guides the process of realizing or implementing a policy (Tezera, 2019). Frank et al. (2007) explained that one of the criteria for an effective policy is that the policy implementation process must be adequately structured. In addition, in the context of effective tax administration, Lubua (2014) emphasizes that tax administrators should pay much attention to the issue of public enlightenment, and how a policy can reach its target. Public enlightenment is a process of educating and sensitizing citizens on taxation, which is the process of educating and enlightening the general public to carry out their tax obligations (Badara, 2012).

The efficiency dimension considers that an efficient policy is a policy that can save costs as much as possible to achieve the desired results. In the field of taxation, according to OECD (2011), efficient tax administration depends on how the fiscal authority can reduce costs while providing better services to the public and businesses. OECD adds that efficiency depends on how the organization designs its internal organizational structure, how it allocates its budget to achieve its goals, how it uses information, communication, and technology (ICT) to save costs, and how it determines the level of remuneration of its employees. Furthermore, according to Nzotta, tax administration inefficiency can occur due to high levels of corruption by government officials and a lack of fiscal transparency. Thus, according to this, fiscal transparency affects the efficiency of policy implementation (Shagari and Saad, 2017). The sustainability dimension aims to determine how the benefits of the policy are sustainable or not even though funding assistance has not been provided. This is considered less relevant to the theme that discusses tax incentives for research and development activities carried out by industry, because the policy aims to provide tax assistance or facilities in the form of super tax deduction so that companies in Indonesia are more interested in conducting research and development activities. Based on this explanation, in analyzing the success factors, the author only uses 3 (three) dimensions, namely relevance, efficiency, and effectiveness. Furthermore, as an illustration, the following is the operationalization of the concept of critical success factors used in the study.

Table 1. Operationalization of the Concept

Concept	Variable	Dimension	Indicator
Critical Success	Critical Success Factors of Super Tax Deduction	Relevance	<ul style="list-style-type: none"> • Motivation of policy • Policy design

Concept	Variable	Dimension	Indicator
Factors	Incentives for R&D Activities Carried Out by the Industrial Sector	Effectiveness	<ul style="list-style-type: none"> Stakeholders Involved and their autonomy Implementation strategy Public Enlightenment
		Efficiency	<ul style="list-style-type: none"> Use of Information, Communication, dan Technology (ICT) Fiscal Transparency

Source: Processed by the author based on the theory used

3. Method

The approach used in this research is a post-positivist approach and deductive thinking flow. Based on the research objectives, this research falls into the descriptive research type. Based on the benefits, this research belongs to the type of pure research. The data collection techniques used in this research are literature study and field study, through in-depth interviews. Interviews were conducted with ministries/agencies involved in policy implementation, namely the Directorate General of Taxes (DGT); Fiscal Policy Agency (Badan Kebijakan Fiskal/BKF); Coordinating Ministry for Economic Affairs (Kemenko Perekonomian); National Research and Innovation Agency (Badan Riset dan Inovasi Nasional/BRIN) through Mr. Aris Irawan, ST., M. AP, and Dr. Hariyanto; Ministry of Industry (Kementerian Perindustrian/Kemenperin); Ministry of Investment/Investment Coordinating Board (Badan Koordinasi Penanaman Modal/BKPM); academics and practitioners in the field of taxation; Indonesian Employers Association (Asosiasi Pengusaha Indonesia/APINDO) and Center of Indonesia Taxation Analyst (CITA); and one of the companies that have applied for incentive utilization.

4. Results and Discussion

1. Relevance Dimension

1.1. Motivation of Policy

According to Roobins and Judge in Shagari and Saad (2017), motivation refers to the process that explains the person's intensity, direction, and continuous efforts to achieve the goals of an organization. The results of the study indicate that matters related to policy motivation that need to be addressed are as follows:

a. Clear Policy Objectives and Targeting

The use of tax policy instruments to increase economic growth is appropriate. The purpose of increasing research and development activities is also related to increasing human resources and multiplier effects to increase Indonesia's economic growth in order to achieve the Golden Indonesia 2045. According to Rahman (2009), fiscal policy, including effective tax administration, is a key determinant of the investment climate. Based on this theory, the form of tax policy with tax administration is the right choice. However, there is no clear target or standard to measure the success and effectiveness of the super tax deduction policy. According to Crandall (2010), in implementing tax administration, including tax policy, performance measurement is necessary. Thus, it is necessary to compile overall performance indicators to measure the effectiveness of policy implementation.

b. Policy Conformity with Conditions in the Field

Based on the study result, it is known that the factors or conditions that cause companies to be less interested or consider many things to carry out research and development activities in Indonesia are due to cost factors and non-cost factors such as limited materials to carry out research and development activities, complicated licensing processes, unsupportive ecosystems, and internal company factors that do not want to carry out research and development activities. If the cost factor applies *ceteris paribus*, then the super tax deduction policy is an appropriate alternative as a form of indirect cost assistance that can reduce the company's costs in carrying out research and development activities, but policy makers need to further research and confirm the above non-cost factors to evaluate the implementation of tax policies to encourage research and development activities carried out by the private sector.

c. Increasing Intensity of Efforts Made to Achieve Policy Objectives

The increase in intensity referred to is the intensity of the socialization process of related regulations because the socialization is felt to be lacking, the intensity of coordination carried out between K / L, and the intensity in evaluating the implementation of policies considering that until now there has been no policy evaluation.

1.2. Policy Design

Policy design is a step in how a policy is discussed and formed with a logic that shows between a policy issue or a problem with a given solution and feasibility that largely determines whether and how the policy can be enforced (Tezera, 2019). In this dimension, the author finds that the policy design in the form of a super tax deduction policy has been adjusted based on the results of comparison or benchmarking with other countries, namely China. In addition, the number of incentives has been adjusted to the stages of research and development activities carried out by the industrial sector. However, referring to the previous motivation indicator, it is still necessary to further assess whether the cost factor applies *ceteris paribus*. Further assessment is the basis for determining the form of policy that suits the needs of the industry in conducting research and development. Based on the results of interviews with taxpayers who conduct research and development activities, and have applied for super tax deduction incentives, it is known that the components or types of costs that can get incentives are still not clearly described. In fact, companies that conduct research and development in Indonesia, such as pharmaceutical companies, also require research abroad due to limited resources in Indonesia. Research and development activities cannot necessarily be carried out only in Indonesia, because there are parts of the research and development activity process that can only be carried out abroad. Meanwhile, in accordance with the provisions in the PMK 153/2020, the incentives only apply to certain research and development activities carried out in Indonesia. This can be an input for the government to further expand the components or types of research and development costs that can be incentivized, including costs incurred to conduct supporting research and development activities abroad.

2. Effectivity Dimension

2.1 Stakeholders Involved and their autonomy

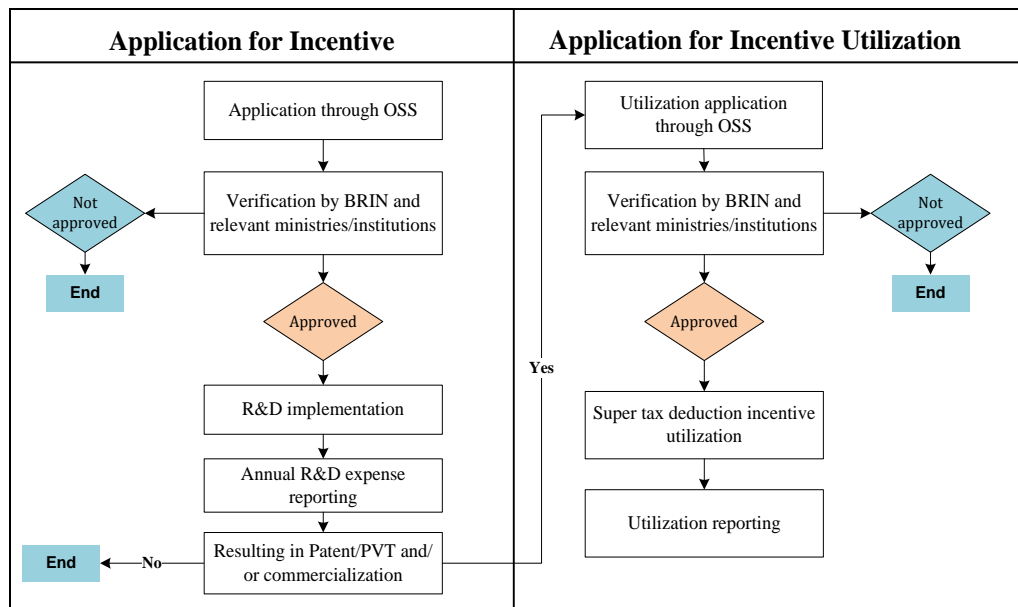
The parties involved in the preparation and implementation of policies include the Ministry of Finance, Directorate General of Taxes (DGT) and the Fiscal Policy Agency (BKF) as the

makers of the legal basis, but also the National Research and Innovation Agency (BRIN), the Ministry of Industry, the Coordinating Ministry for Economic Affairs, as the background of the policy, and the (Investment Coordinating Board (BKPM). The division of labor between K/L is carried out according to their respective responsibilities and backgrounds. With the involvement and division of labor in accordance with the responsibilities, functions, expertise, and background of each ministers/institution, it can form a more adequate human resource system in the implementation of the super tax deduction policy. In this case, according to Pérez & Garcia (2013), the existence of adequate resources will have a positive performance effect on the implementation of a technology and the achievement of agency goals, so that this division can have a positive impact on the implementation of the super tax deduction policy.

The existence of a clear division of labor after each responsibility shows that the ministers/institution involved have their own autonomy. This is in line with Crandall (2010) who argues that the autonomy of government agencies can lead to better performance by eliminating problems towards effective and efficient tax administration while maintaining appropriate transparency and accountability. However, coordination between ministries/agencies is still lacking because until now a routine coordination agenda has not been scheduled to monitor policy implementation. Lack of coordination can be seen from the unsynchronized data that the authors process between one ministries/agencies and another. In fact, according to Hodgson (2004: 297), institutions are simultaneously objective structures that contain a collection of people as policy actors. Actors and structures, although different, are connected in a circle of mutual interaction and interdependence. Likewise, the Ministries/agencies involved in implementing the policy are mutually sustainable and interdependent, so good coordination is needed.

2.2. Implementation Strategy

The following is a scheme of the process of applying for super tax deduction incentives for research and development activities Scheme of R&D on show this figure 1.



Source: Compiled by the author based on relevant regulations and interview (2022)

Figure 1. Scheme of R&D Super Tax Deduction Incentives Implementation in Indonesia

The scheme above shows that the incentive application process is divided into 2 (two), namely the initial incentive application process and the application for incentive utilization. This explains that before being able to utilize the incentive, taxpayers must submit an application by fulfilling files in the form of a research and development activity proposal and a Fiscal Certificate (Surat Keterangan Fiskal/SKF). In the initial application process, important factors that need to be considered are:

- Making proposals for research and development activities must comply with the criteria in the Minister of Finance Regulation No. 153/PMK.010/2020, specifically article 4 and article 7. Broadly speaking, the criteria are the suitability of the theme of research and development activities, the timeline or implementation time, and the novelty of the research and development. Thus, for the proposal to be approved, taxpayers must prepare a proposal that complies with the provisions in the PMK.
- Lack of clarity or legal certainty regarding the implementation of research and development activity proposal assessment. This is because taxpayers are not given certainty when they will receive notification after the application has been submitted. The same applies to the certainty regarding the time of proposal assessment conducted by BRIN. The provision regarding the maximum period of obtaining notification is also not regulated in the PMK. This causes the absence of legal certainty for taxpayers in terms of when they will receive the notification.
- The transparency of the results of the assessment of research and development activity proposals is still lacking because in this case the taxpayer only receives a notification that the application is rejected or approved without knowing the reason why the proposal was rejected. This causes taxpayers to not know where the proposal went wrong and cannot use it as evaluation material for the next application.

Furthermore, in the process of applying for incentive utilization, important factors that must be considered are:

- a. R&D results must result in Patent/PVT or commercialization. This is because the super tax deduction incentive in the form of additional deduction (other than 100%) can only be given for R&D results that have reached the commercialization stage or have obtained a Patent/PVT. So that if the two stages have not been achieved, then it cannot take advantage of the additional reduction in gross income. To obtain a Patent, the company must produce research and development products that have novelty, although not complete novelty, but it can also be novelty in terms of shape, composition, materials, or size.
- b. Taxpayers must ensure proper reporting of research and development cost reports and incentive utilization reports as a form of accountability for incentive utilization. The filing of the research and development cost report and the incentive utilization report must be filled in correctly and appropriately so as not to raise suspicion of report research from the DGT. If there are things that are thought to be unnatural and there are other suspicions related to the reporting of overall tax obligations, the DGT can conduct an overall audit of overall tax obligations.

As an illustration, the following data on the implementation of the super tax deduction policy was obtained from BRIN.

Table 2. Number of Super Tax Deduction Incentive Applications

Year	Number of Applications (Proposals)	Number of Taxpayers Applying for Incentives	Number of Applications Approved
2021	224	30	163
2022	46	15	15
2023	75	15	22
2024	10	5	2
Total	355	65	202

Source: Processed by the author based on the results of interview with BRIN (2024)

Table 3. Number of Super Tax Deduction Incentive Utilization

Year	Amount of Incentive Utilization (R&D Activity Report)	Number of Taxpayers Utilize the Incentive
2021	No incentive utilization yet	
2022	25	2
2023	21	5
2024	No incentive utilization yet	
Total	46	7

Source: Processed by the author based on the results of interview with BRIN (2024)

Based on the data on the number of proposals and taxpayers who have submitted applications above, BRIN feels that this number is still relatively small. Because in total from 2021-2024 there are only 65 (sixty-five) taxpayers with 355 (three hundred thirty-five) who have submitted applications. The average number of taxpayers applying for super tax deduction incentives is 17 (seventeen) taxpayers per year. In addition, when viewed from year to year, the number of taxpayers applying for incentives tends to decrease, especially from 2021 to 2022. When

compared to the average number of companies with medium and large industrial scale in 2017-2019 of 33,539 companies, only around 0.2% of companies have applied to be able to utilize the super tax deduction incentive. This figure is still relatively small considering that the policy has started to be implemented from October 2020.

2.3 Public Enlightenment

Lubua (2014) emphasizes that tax administrators should pay much attention to the issue of public enlightenment, how a policy can reach the target of the policy. Companies in Indonesia must know and understand the policy implementation mechanism to apply for incentives in accordance with the regulations. However, the realization is that the quantity and quality of socialization programs implemented by the government tend to be lacking. This shows the need for regular socialization which is also carried out to reach new taxpayers who have never applied for incentives before. In addition, the government also needs to conduct socialization not only to taxpayers but also to R&D institutions of universities and the government. This is because in conducting R&D activities, companies can collaborate with research and development institutions. In addition, it is also necessary to optimize the use of social media of each ministry/institution by informing the incentives on the official social media of each ministry/institution. This is in accordance with research showing that the emergence and widespread use of social media by citizens provides an efficient channel for the creation and exchange of broad political content (Chadwick, 2009). Bekkers et al (2013) added that broad political content can also include super tax deduction policies.

3. Efficiency Dimension

3.1. Use of Information, Communication, and Technology/ICT

The Online Single Submission (OSS) system is an electronically integrated business license, a business license issued by the OSS Institution for and on behalf of the minister, head of institution, governor, or regent/mayor to business actors through an integrated electronic system. The website-based OSS system is a form of technological development used in implementing the super tax deduction policy. The OSS system does facilitate the process of applying for incentives, because it can be done online and can be implemented one door. There are several factors that need to be addressed in the use of OSS as a means to carry out the process of applying for the following super tax deduction incentives.

a. The Clarity of OSS System Usage Mechanism

The OSS system is already familiar to companies because the OSS system is a one-stop business license that is also used for applying for incentives or other facilities. However, the super tax deduction incentive application system for R&D activities is relatively new because it was only available at the end of April. In addition, based on the results of interviews with the BKPM, it is known that the OSS system will continue to be developed, including system changes as of June 2021 which will be implemented starting July 2021.

Given this, it is necessary to socialize or simulate the use of the OSS system to apply for super tax deduction incentives to companies. The socialization is carried out so that companies that will apply for incentives already know and understand how to use OSS. In the OSS system, there is actually a Technical Instruction for Charging Facilities v 3.0 which is a technical explanation, regarding the use of the OSS system for submitting incentives, but the results

showed that Taxpayers who had accessed the Technical Instructions for Charging Facilities v 3.0 admitted that the instructions were less intuitive.

b. Anticipation of Obstacles in the Use of the OSS System must be Prepared Carefully

The potential obstacles in using the OSS system include technical and systemic issues. Technical obstacles refer to problems that arise due to barriers in accessing the OSS website if there is insufficient internet connectivity. Additionally, since the OSS website is accessible to everyone, it is possible that many taxpayers accessing the website simultaneously could cause it to go down. Systemic obstacles involve the lack of synchronization and data integration within the OSS system. Data synchronization issues sometimes occur, such as invalid Tax Identification Numbers (Nomor Pokok Wajib Pajak/NPWP) or invalid National Identification Numbers (Nomor Induk Kependudukan/NIK). Other problems may arise if the OSS system is not yet operational or is in the process of being developed by BKPM.

Things that need to be done to anticipate these obstacles include:

1) The readiness of relevant ministries/agencies for direct or offline submission of incentives.

This needs to be anticipated considering that there is no other technology that can replace the OSS system. If there are difficulties in accessing OSS, the initial application and utilization of super tax deduction incentives for research and development activities can be done directly by submitting research and development activity proposals to the Ministry of Research and Technology/BRIN.

2) The need for sustainable data synchronization or integration

One of the critical success factors for the technological dimension in policy implementation is sustainable data quality and integrity (Yoeh and Popovic, 2016). This is because these data sources will be used for decision-making and impact the quality of management reports. Since the OSS system is designed to be online so that the incentive claiming process can be done through a single window, data synchronization should be automatic as it is already interconnected between the relevant ministries/agencies. In reality, based on current implementation, the database of incentive application numbers is obtained manually by entering data into Excel, rather than automatically through the OSS system. Therefore, improvements are needed in the data synchronization process within the OSS system, including the creation of a database in the OSS that can be displayed on the OSS home dashboard, automatically showing the number of applications synchronized with the submissions made by taxpayers.

c. The Need to Integrate the OSS System with the Ministry of Research and Technology/BRIN System for Proposal Evaluation

The evaluation of proposals is still conducted semi-manually because submissions entered into the OSS system must first be downloaded, summarized by the secretariat team, and then distributed to the reviewers or proposal evaluators to carry out the evaluation process. Once the proposals are evaluated, the results are recompiled by the secretariat team. Subsequently, the secretariat team, through a single OSS account belonging to the Ministry of Research and Technology/BRIN, will notify the taxpayers of the proposal evaluation results. This semi-manual evaluation process significantly hampers the proposal evaluation, requiring more time to complete the evaluations. To address and anticipate this issue, synchronization or integration between the OSS system and the system being developed by the Ministry of Research and

Technology/BRIN is necessary. This integration will streamline the proposal evaluation process, allowing submissions in the OSS system to be automatically distributed system-to-system to BRIN's system.

3.2. Fiscal Transparency

According to Alt and Lassen (2006), fiscal transparency has a significant and positive impact on fiscal performance. According to the IMF, transparency in government operations is widely regarded as an essential prerequisite for macroeconomic fiscal sustainability, good governance, and overall fiscal integrity. Transparency can influence the likelihood of a budgeting strategy being disclosed. Higher transparency leads to lower budget deficits and makes achieving discipline and expenditure control easier.

a. Fiscal Transparency: The Amount of Possible Potential Loss

The super tax deduction incentive received by taxpayers leads to a reduction in taxable corporate income tax. The decrease in the amount of tax paid by taxpayers affects tax revenue, thus creating a potential loss when implementing the super tax deduction policy for research and development activities. Potential loss refers to the potential decrease in tax revenue due to the implementation of this policy. The author conducted a simulation calculation based on data from companies that had submitted initial incentive applications as of July 7, 2021, totaling 24 companies with planned expenses amounting to IDR 357,642,388,591, using the following assumptions:

- 1) All companies are entitled to the super tax deduction incentive;
- 2) All submitted proposals are executed simultaneously;
- 3) The duration of the research and development activities for all companies is 4 years;
- 4) All companies successfully obtain patents for the results of their research and development activities, thus qualifying for a 50% super tax deduction incentive; and
- 5) The amount of incentive received by each company annually does not exceed 40% of the total gross income before receiving the incentive.

The simulation results indicate that the potential loss each year due to the provision of incentives to 24 companies amounts to IDR 357,642,388,591. When compared to the total tax revenue in 2020, as stated in Indonesia's 2020 state budget (APBN), which was IDR 1,865.7 trillion, this potential loss is 0.019% of the total tax revenue. If summed over 4 years, the total potential loss would be IDR 2,145,864,331,543. This amount is derived from the 100% tax deduction incentive received each year for 4 years, plus the additional 50% tax deduction obtained due to successfully securing patents for the research and development outcomes. The total potential loss represents 0.12% of the total tax revenue in 2020.

Given that the primary function of taxes is as state revenue or budgetary function where taxes are the main source of funding for the state treasury—it's crucial to consider the implications. According to Rosdiana and Irianto (2014:44), taxes are the safest, cheapest, and most sustainable source of state revenue used to finance national development activities. Therefore, it is necessary to ensure transparency regarding the potential loss from providing super tax deduction incentives to corporate taxpayers engaged in specific research and development activities in Indonesia. This information should be included in the tax expenditure report, which is prepared and reported annually by the Fiscal Policy Agency (BKF) and the Directorate General of Taxes (DGT).

b. Transparency in the Implementation of Super Tax Deduction Policy

Transparency in the implementation of the policy in question refers to the lack of transparency in data, particularly regarding the absence of a database for the number of incentive applications submitted through the OSS (Online Single Submission) system. In this context, aside from the Ministry of Research and Technology/BRIN, other ministries/agencies and the general public are unable to know or monitor the extent of the super tax deduction policy implementation. Additionally, transparency is needed concerning the timing of proposal evaluations and the maximum timeframe for receiving notifications. While the results of the evaluations are clearly communicated through notifications in the OSS system, the basis or criteria for the proposal evaluations are not shared with taxpayers. Taxpayers only find out whether their proposal was accepted, rejected, or requires verification, without knowing the reasons for the acceptance or rejection of their proposal.

5. Conclusion

Based on the analysis and discussion, the following research conclusions based on each dimension:

- a. **Relevance Dimension:** in determining policies aimed at enhancing research and development activities, the super tax deduction incentive is an appropriate measure if cost constraints are hindering industrial sectors' interest in engaging in research and development activities, all else being equal. Additionally, setting clear overall policy targets along with the formulation of performance indicators is necessary.
- b. **Effectiveness Dimension:** the implementation of the policy is currently not fully measurable as it is still relatively new, and there hasn't been an evaluation of its implementation. However, taxpayer enthusiasm in applying for the super tax deduction incentive is still low due to various factors, including insufficient policy awareness. The division of tasks among the relevant Ministries/Agencies (K/L) has been carried out according to their respective duties and responsibilities. However, coordination between these entities has not been effectively executed. Moreover, taxpayers feel that the policy's socialization process, particularly regarding the clarity of certain aspects such as the incentive application timeline, is lacking.
- c. **Efficiency Dimension:** the use of the OSS system as a form of information, communication, and technology development in the process of applying for the super tax deduction incentive is a crucial aspect supporting administrative ease and policy implementation transparency. However, the current OSS system is inadequate to facilitate the ease of assessing the conformity of incentive applications with existing regulations by the BRIN and is not fully utilized as it is still under development. Additionally, policy transparency needs improvement to provide information openness and certainty for taxpayers regarding the incentive application process and to provide an overview to the public regarding policy implementation and potential loss resulting from incentives.

Furthermore, here are some suggestions according to the author based on each dimension:

- a. **Relevance Dimension:** ministries/agencies need to evaluate the policy implementation to determine the effectiveness of the policy so far by first developing performance indicators to measure the policy's target achievements. If the evaluation results indicate that the policy is ineffective, then a further review of the policy's form or design and the field conditions

causing the lack of interest from the industrial sector in conducting research and development activities is necessary. Additionally, provisions regarding the research and development costs eligible for incentives need clarification and adjustment based on the conditions of industrial research and development activities. One example is the costs incurred for obtaining materials from abroad or the expenses for supporting research and development activities conducted overseas.

- b. Effectiveness Dimension: Coordination and communication among the Ministries/Agencies involved in policy implementation need to be improved because there are still discrepancies in information and performance between one Ministry/Agency and another. Additionally, critical aspects such as legal certainty, transparency for taxpayers, need improvement in the process of applying for the super tax deduction incentive. Taxpayers also need to pay attention to the written provisions in the regulations when applying for incentives to ensure that their applications are approved by the Ministry of Research and Technology/BRIN. This is because the criteria used by the Ministry of Research and Technology/BRIN in evaluating proposals comply with the criteria outlined in Article 4 and Article 7 of PMK 153/2020. Taxpayers must also ensure to commercialize and/or obtain Patents/Plant Variety Protection for the results of research and development activities.
- c. Efficiency Dimension: There is a need to develop the OSS system so that the implementation of the super tax deduction policy is not semi-manual but can be fully conducted system-to-system. Additionally, there is a need to develop a database of the number of incentive applications that can be automatically linked to the evaluation system of the Ministry of Research and Technology/BRIN to streamline the evaluation process for research and development activity proposals. Furthermore, to support policy implementation, the Ministries/Agencies involved need to improve transparency for taxpayers regarding the evaluation timeline for proposals, the maximum time for taxpayers to receive notifications, and the results of proposal evaluations. This should not only be in the form of notifications but should also include detailed explanations or considerations as to why a proposal was approved or rejected. The government also needs to provide transparency regarding the potential loss that may occur due to these incentives as an illustration of the implementation of incentives to taxpayers and the public.

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