

## Analysis of Potential Excise Imposition on High Calorie Packaged/Instant Foods: Study Case in Indonesia

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### Abstract

*Studies this aim for analyzing potency of imposition tax on high-calories packaged/instant food in Indonesia by function of excise duty policy. Study this using case study qualitative research methods by conducting in-depth interviews with potential regulators related to policy formulation and implementation as well as academics who have knowledge and expertise related topic. The results showed that high-calorie packaged/instant food was rated could fulfill regulatory nor budgetary function taxes if applied in Indonesia. A number of lessons learned in the study could be useful for the preparation and implementation process of policy tax on packaged/instant food.*

### Keywords

excise sugar salt fat; negative externalities; high-calorie foods; studies case



### I. Introduction

In 2045, the Indonesian nation will be 100 years old since independence. In recent years, the term Indonesia Emas 2045 has even been echoed, as a spirit in encouraging the achievement of the vision of a sovereign, just, and prosperous nation in its century-old age. The momentum of the spirit of Indonesia Gold 2045 is based on many things, the main thing is Indonesia's demographic bonus that occurs in 2030-2040. In that period, the productive age population is predicted to reach 64 percent (Source: Ministry of National Development Planning/Bappenas) of the total projected population of 297 million people. Human Resources (HR) is the most important component in a company or organization to run the business it does. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired (Shah et al, 2020). The development of human resources is a process of changing the human resources who belong to an organization, from one situation to another, which is better to prepare a future responsibility in achieving organizational goals (Werdhiastutie et al, 2020).

One of the pillars of the vision of Indonesia Emas 2045 is the development of human resources (HR). Strategic issues in the 2020-2024 RPJMN Narrative are related to increasing quality and competitive human resources. Human existence as the main capital of national development must be followed by improving the quality of health. This is to ensure the formation of healthy human resources and not vice versa, becoming a burden for the government which is counterproductive for the government plan of National development. In the health sector, Bappenas said that the focus of the health sector is solving multiple nutritional problems, namely those related to malnutrition but on the other hand, the percentage of non-communicable diseases (NDCs) continues to increase.

Tax instrument as alternative effort to drop the prevalence of NDCs is based on the European Regional World Health Organizations (WHO) publication (2015, 2) state that the reason imposition of taxes on alcohol and products tobacco that has externality negative,

can also be applied to food products included of unhealthy diets. This unhealthy diet products including high-calorie foods or that contains excessive amounts of sugar, salt, and fat (GGL). Excessive consumption of this products related to an increase in NDCs so which add a burden on ealth and social protection besides decreasing the productivity in economy.

In the short-term goal, namely the revenue side, a new revenue base is needed in the midst of the reality of not meeting the set tax targets (short fall), even since 2008. The potential for new subject to excise duty (BKC) in the form of packaged/instant food can be an alternative source of income that deserves consideration besides sweetened drinks and plastic packaging. Is known, that BKC in Indonesia for this is existing policies since the era of Dutch colonialism (Ordinance excise duty). So, actually, there is no completely new BKC set post-independence. This thing makes Indonesia one of those classified as extremely narrow coverage in the imposition of excise duty.

This study aims to analyze the potential imposition of excise duty on high-calorie packaged/instant foods based on the planned expansion of excise duty based on processed foods containing a certain level of GGL. Specifically in the practical field, this research is expected to provide input for the Directorate General of Customs and Excise (DJBC) and the Fiscal Policy Agency (BKF) in formulating policies in the excise sector, in particular the plan to impose excise on food-based products (non-alcoholic).

## **II. Review of Literature**

This study refers to the excise tax theory proposed by Cnossen (2005) in Cnossen's Theory and Practice of Excise Taxation (2005,2). This theory is in line with the excise characteristics required by the Excise Law. Cnossen stated that the unique character of excise levies is:

### **2.1 Selectivity in coverage**

Excise levies do not apply to all types of goods and/or services but are selective only on goods and/or services stipulated by law. The selective principle also applies in determining the number of tariffs. The amount of the tariff is determined based on the purpose of imposing excise on a group of goods.

### **2.2 Discrimination in intent**

Excise levies are also discriminatory, meaning that excise levies are aimed at certain goals to be achieved by the government, not merely to obtain revenue. Cnossen (2005, 3-6) details the objectives of the imposition of excise, namely, first, to increase government revenues. The income aspect is always dominant in every state levy. Cnossen considers that it is very difficult to find substitute goods that can provide the same satisfaction for an item that will be subject to excise duty so that even though the price is high, consumption will remain high so that excise duty will function more to increase state revenue.

The second objective is to reflect the costs of negative externalities. The government imposes an excise duty on an item as a reflection of the external costs generated by consumers and manufacturers of goods for other parties. These external costs cannot be charged directly and will be borne by the government, so it is more appropriate if they are calculated into the selling price of BKC. Excise duty plays an important role in the management of external cost related to the potential health problems arising from excisable products such as obesity and related diseases.

The third objective is to control consumption. The imposition of excise duty can be justified if it is used as a fiscal instrument to control the use of goods that cause external diseconomies. This goal actually seems to contradict the goal of increasing revenue. Object of excise duty which tend to be price elastic will find it easier to reduce consumption. This is because these goods have many substitute goods. The revenue target may decrease, but the regulerend function of the imposition of excise will be more pronounced.

### 2.3 Quantitative measurement

This is what makes excise duty different from VAT levies in relation to physical and administrative control. Physical supervision is very important, considering that the purpose of imposition of excise is not solely for the benefit of state revenues. Administrative supervision occurs with the authority of the Directorate General of Customs and Excise through audits of the company's books or manufacturers to make excise as an efficient levy.

## III. Research Method

This research uses a case study qualitative approach. This study is based on supporting events, including the plan to expand the excise object based on food processing to control the consumption of GGL and the discourse on the imposition of excise on sugar-sweetened beverage by the Minister of Finance at the DPR in February 2020. This study seeks to find appropriate contexts that can be applied when formulating and implementation of policies that are the theme of research, as well as lessons learned that are useful for decision makers. The accuracy of this context is done iteratively during data collection.

## IV. Result and Discussion

### 4.1 Regulatory Aspects

#### a. Determination of Definitions and Categories High Calorie Foods

The definition of high-calorie packaged/instant food is different in every country that has and still applies excise duty on packaged/instant food. This is based on what aspects of the food you want to control. The definition is in accordance with the concept of selectivity in scope by Cnossen where the tax object must be clearly described in the rules so that it can be separated from other products.

Sources of nutritional intake in GGL can be obtained from various foods, both staple foods and snacks, or maybe other forms of food. This is because the content of GGL is actually a basic nutrient for processed food. Its existence is needed by the body. The food category in this study is shown in the category of food consumed as a recreational food. This reduction in consumption goals is carried out with the consideration that the GGL nutrition has been fulfilled in the consumption of staple foods with an average consumption of 3 times a day. This narrowing of consumption goals was strengthened when participants gave examples of products that could potentially be subject to excise duty.

*" What is clear is for salt, sugar and fat such as instant noodles, biscuits (especially those with a soft taste), which are high in calories, wafers, snacks, etc., sweet breads, candies, chocolate products, especially those that are processed by us which only fulfill our taste." ( P-03a 2020, 1)*

**Table 1.** Category of Packaged/Instant Food Potentially Levied of Excise Duty in Indonesia

Foods with high sugar intake		
Processed Cereals	Biscuits	Snacks
	Instant Baby Porridge	Breakfast Cereals
	Wafers	Instant Cereal Drinks
	Sweet Breads	
Confectionary, Chocolate	Candy	Chocolate Products
		Jam
Dairy Products	Ice Cream	
Foods with high sodium intake		
Instant Noodles	Breads/Sweet Breads	Dry Noodles
Wet Noodles	Biscuits	
Foods with high fat intake		
Processed Cereals including snacks	Instant Noodles	Snacks
	Wafers, Biscuits	Cookies
Processed Nut Products	Roasted Penauts	
Confectionary, Chocolate Products	Sweet Chocolate Bar	

Source: processed writer from description participants (including data shown)

Limitation of the definition is carried out in view of the condition of the circulation of high calorie foods in Indonesia. For high calorie foods besides packaged/instant food where produced for large area (large market share) is need other approach outside tax. This exception has to be considerate because a lot of it, produce in small scale and source of livelihood for low-income class economies.

*“a survey should be made of what is consumed the most. This is to avoid taxes or excise on food products (especially local products such as traditional foods which are mostly high in carbohydrates), which do not have much market share” (P-08 2020, 1).*

In this studies, instant noodle product included as category packaged/instant food that can be tax levied although its consumption has switch from snacks to staple food. This done with consideration sodium content in instant noodles belong to high. Consumption of instant noodles, including significantly (more than 2 times a week) can increase a person's risk of suffering from cardiometabolic syndrome, especially in women (Shin et al, 2014).

The average calorie consumption of staple foods in Indonesia is 250 to 350 kcal based on description of P-08. Definitions offered by participant related high calorie packaged/instant food in Indonesia is food with calorie content of 125 to 175 kcal per package. The definition shows that the target of packaged/instant food products is outside the staple food. If referring to the intake limit recommended by the ministry of health regarding sugar consumption (50 g), salt ( $\geq 5$  g), and fat ( $\geq 67$  g) and the description of P-08, then ideally foods with a sugar composition ( $\geq 8.3$  g), salt ( $\geq 0.83$  g), and fat ( $\geq 11.16$  g) per package may be subject to excise duty.

*“ if 1 meal is average 250-350 kcal, then the equivalent food is in 1 package or 1 serving or if it exceeds 50% it can be considered high in calories and can be subject to tax or excise ” (P-08 2020, 5)*

The definition above is in line with benchmarking countries that have previously applied food and beverage excise. For example in Thailand, excise duty is levied starting at 6 g sugar/100ml with an increasing rate classification (Source: Excise Tax Act, B.E. 2560 (2017)). Another example, in Hungary, is where the excise duty is imposed at 8g/100ml for sugar content in sweetened packaged drinks and 1g/100 g for salt content in snacks (Bíró, 2015). Another definition offered by participants is that trans fats in food

can be taxed at any level because of their bad effects. This type of fat is found in packaged/instant foods.

This limitation of definition is supported by regulations regarding supervision related to the content of GGL which so far have not been strict in determining healthy criteria. Therefore, excise duty can be included as a policy because so far there have been no restrictions in the form of certain prohibitions and restrictions.

*"Indeed, we don't have a limit, but there is a maximum limit, it can't be more than 100% of the daily nutrition. This means that you should not consume only one type of product then the needs for salt, fat, and sugar are met for one day."* (P-04 2020, 3).

The definition of high-calorie foods is actually more appropriate to be shown in fast food, even though fast food itself tends to be seen as a staple food. This is because fast food consumers are generally people with medium-high economic income. Determination of excise tax objects is encouraged to prioritize the ability to bear the tax burden (people with high middle-income) than packaged/instant food which by general consumed by people with low to high class economic income.

### **b. Consumption Rate Food Packaging / Instant in Indonesia**

Consumption rate is needed to see how much packaged/instant food contribution in frequency as well as proportion to diets of Indonesian people. Based on participant P-3, that a trend consumption of Indonesian people tend no change overtime. Participants evaluate that trend pattern of public consumption still more prioritize on taste instead foods nutrition.

*"But right now, It's not going in that direction, I'm also tired of it (people's urgency doesn't indicate a better direction of changing consumption patterns)." (P-03 2020, 2)*

From industrial side, the absence of prohibitions and restrictions on the content of certain sugars, salts in circulating packaged/instant foods is an indication that the industry will continues to follow the tastes of the people. The trend of increasing consumption of packaged/instant food is also strengthened by data on the level of sales of several packaged/instant food manufacturers compared to the average consumption level of Indonesian households, which is  $\pm 5\%$ .

**Table 2.** Food Sales Trends of Several Domestic Food Manufacturers For The 2014-2018 Period (Trillion Rupiah)

Manufacturer	Product	2014	2015	2016	2017	2018	Trend
PT Indofood Sukses Makmur Tbk	Instant Noodle	19,92	21	22,54	23,11	25,56	6%
	Snacks	2	1,99	2,34	2,57	2,56	6%
	Dairy Product	5,25	5,88	6,81	7,09	7,54	9%
PT. Mayora Indah Tbk (PT Inbisco Niagatama Semesta)	confectionery, Biscuits,Chocolate	8,08	7,21	9,68	10,86	12,5	12%
PT Garudafood Putra Putri Jaya Tbk	Food Division	N/A	N/A	N/A	6,32	6,85	8%
PT Siantar Top Tbk	Snacks	2,17	2,54	2,62	2,83	2,83	7%
PT Unilever Indonesia Tbk	Food and Refreshment	9,87	11,06	12,35	13,08	12,08	7%

*Source processed writer from Company Annual Reports 2014-2018 period*

However so, trend increase consumption food packaging / instant this by general down in 2020 due to Covid-19 pandemic.

### **c. Effectiveness of Application Excise Related to Health Issue**

In assessing the success of the excise policy, reduction in consumption is only limited to *output*, not the desired *outcome*. The objective of effective excise duty will be

considered successful if there is a healthy lifestyle change. The main parameter used is the decrease in the prevalence of NDCs. Relation to the consumption of GGL, diabetes and hypertension are the two main diseases. These two diseases are referred to as the entrance to other diseases as comorbidities (comorbid) so that complications occur.

*“When you consume excessive GGL every day then it's a bad investment. You will get if you don't have hypertension, you have diabetes. This two disease is the entrance to other diseases, (such as) heart failure, hypertension makes the heart swell, kidney failure and then cancer.” (P-03 2020, 3)*

This confirms a number of research related connection pattern consumption and NDCs, especially diabetes and disease heart (including hypertension). Consumption of excess sodium (above 2g per day) is one of the leading causes of death from heart disease of 1.7 million worldwide in 2010 (Mozaffarian 2014). Regarding sugar, there are relationship between excess sugar consumption and decreased insulin sensitivity (IA Macdonal 2016). Decreased insulin sensitivity causes sugar increase in blood and ultimately cause diabetes. Consumption of excessive GGL in packaged/instant food not only showing pattern of unhealthy life but also increase common risk factors from NDCs such as obesity especially in children and teenagers. The pattern of consumption of energy-dense foods and snacking are both associated with obesity in children based on BMI and age (Nisak. et al, 2018).

GGL is certainly not only found in packaged/instant foods, for example in self-cooked foods (including staple food).

*“We know that the nutritional contribution does not only come from packaged-processed food, (but also staple foods) which is purchased at restaurants and (made in) households. We can't take care of that (GGL issue in not taken care of packaged-processed food) and overlooked the others (GGL issue in staple foods), that's also impossible (to achieve a healthy life).” (P-04 2020, 1).*

There are special conditions in Indonesia regarding high calorie foods, namely the many types of local food (market and traditional snacks) which, although not in packaged form, are of many types.

*“Traditional snacks such as fried bananas, fried sweet potatoes, cassava chips. Included in the category of high calories (carbohydrates or sugar), high in fat are snacks that are sold such as french fries, mixed ice, snacks that are given "cheese". In Indonesia, many foods are homemade or traditional. There are a lot of foods that fall into the “junk food” category, including street food, such as egg roll noodles, cilok, etc.” (P-08 2020, 4).*

The number of substitute goods that can replace this product if it is subject to excise. This indicates that the elasticity of demand for packaged/instant food in Indonesia tends to be high. In addition to the large number of substitute goods, the elasticity of demand for packaged/instant food products is reflected during the Covid-19 pandemic.

*“If you look at it now, it means that the elasticity is quite high huh. People are more likely to save money to buy basic goods and they tend to eat inside (home) so the growth rate of a food industry has decreased quite deeply.” (P-05 2020, 2).*

*“The ones that get the most are snacks. Snacks as well as biscuits.” (P-05 2020, 4).*

The product sector that is most affected by the packaged/instant food industry is in the form of snacks (snacks, biscuits, etc.) with a decline in industrial utilities from 80% (before the Covid-19 pandemic) to 70% (during the Covid-19 pandemic). In general, packaged/instant food in Indonesia tends to be price-elastic in demand. Traditional food and food made by home industries are widely sold in Indonesia. Of course, the GGL content is not controlled by the government. This condition is not found in European and

American countries where the food industry have strict in the registration process to be sold in the market. Of course, the circulation of these substitutes can lead to unwanted effects. Undesired side effect occurs if there is a shift in consumption patterns from goods subject to excise to other goods that have the same or even worse externality impact (Frey in Cnossen 2005, 232).

Attention to the relationship between GGL in high calorie food outside of packaged/instant food is in line with the opinion of one participant on fast food. Limiting the definition of packaged/instant food will make it difficult to assess the relationship between NDCs prevalence and dietary patterns. In the end, it leads to ineffective outcomes on the health side. It also provides insight that further research is needed on the expansion of excise taxes on other processed foods other than packaged/instant foods.

The complexity in assessing the effectiveness of the application of this excise tax in a preventive effort to control consumption does not stop there. The cause of the prevalence of NDCs is not only excessive consumption of GGL but also other risk factors that are included in other common risk factors, namely smoking, lack of physical activity, and obesity.

*"The first is an unhealthy diet. In NDCs, unhealthy eating patterns are associated with excessive consumption of GGL. So that's the point there. now you take care of your diet. You reduce consumption of GGL, OK that's good. But you don't do this physical activity, it's the same thing, you reduce it here, the food is good, the GGL has been controlled, but you still smoke it's impossible (still high risk). Then obesity. So, these four common risk factors must be run simultaneously." (P-03 2020, 3)*

*NDCs is generally called a disease with multiple etiological factors. The point is lifestyle, namely diet, stress and physical activity. So, the link between obesity, NDCs and packaged food could be 50-50." (P-08 2020, 3).*

The complexity of this relationship makes the benefits (outcomes) of policies related to efforts to reduce the prevalence of PTM difficult to measure. Plus, PTM is often felt after a long time to manifest in the body. The impact is often felt when it is severe or complications with other diseases. Regarding the time of PTM that is formed slowly, it can raise doubts for the community, industry, and the government itself to understand, assess, and accept whether a policy related to efforts to reduce the prevalence of PTM has been effective.

The distinctive feature of excise is that apart from being able to assess excise duty from the dimensions as a preventive tool, it can also be viewed as a handling tool (corrective). This is because excise duty reflects the cost of a negative externality of a good (Pigou 1920, 142). In practice, the cost of externalities can be determined from the average aggregate cost of handling the existing impacts and the level of consumption of the BKC. Ideally, if it adheres to the pigouvian principle, then all revenue from excise is allocated to the sector that is considered the most affected by BKC externalities. However, this has never been done in Indonesia. In the context of high calorie packaged/instant food excise, the health sector should still be a priority because of the biggest impact on this sector.

*"The same as excise duty on sweetened drinks or high-calorie foods, especially for health" (P-02 2020,7)*

Earmarking is not specifically an obligation in excise theory. This specific earmarking is more appropriate as a commitment by the government in preventive, detective and corrective efforts for negative externalities caused by BKC. As a proxy, the Excise Revenue Sharing Fund has so far been channeled more in preventive and detective policies on the negative impact of HT products. This corrective effort was only

felt in 2020 through the distribution of the HT Excise DBH to JKN KIS. Participants judged that this corrective function should be more prominent.

Apart from the earmarking pattern, the imposition of excise tax needs to be followed by other policies, namely incentives (in the form of subsidies or others).

*"Stimulation for food manufacturers to make food that is more in line with nutritional needs and does not cause health side effects." (P-01 2020, 4).*

The pattern of subsidy is not only given to manufacturers who produce healthier packaged/instant food but also other healthier substitutes (fruits and vegetables). There are conditions where the choice of healthier substitute foods such as fruit and vegetables, the price is still relatively high.

*".. He (local governments) should maintain the supply in that area, the availability in that area of cheap pesticide-free fruit and vegetables, for example of (the price of ) cigarettes Rp. 1500 (retail) and bananas Rp. 25.000." (P-03 2020, 8)*

*"If high-calorie foods are subject to excise duty, of course, the availability of healthier substitutes must be guaranteed by the government." (P-06 2020, 5).*

The provision of subsidies is expected to encourage people to switch to healthier food because of the availability of healthier substitute foods at affordable prices. In addition to the tax incentive pattern, there are other incentive patterns that lead to the production of products with a certain level of GGL.

*"Actually, we are discussing the super tax deduction for R&D, maybe we can get into that. For example, a company conducts research, I don't know what form it will take, for example (research) on functional food production, maybe it can be given (subsidy pattern or tax cuts)." (P-05 2020, 4)*

On the other hand, this subsidy pattern is still not free from criticism. The opinion whether or not there is a tax incentive on the production of healthier packaged/instant food is not the reason the industry produces healthier packaged/instant food. Industry more leaning to do innovation follow appetite of society, if public want more healthy foods then industry will also lead to there automatically.

*"The Manufacture conducts research to produce healthier snacks because it is a necessity, not forced to get subsidies. I have to make changes, otherwise I will be left behind, if I produce food that is too sweet or whatever, it means I am not following the existing trend." (P-05 2020,5)*

Excise taxation policies basically cannot stand alone in achieving certain goals/conditions. If assessing the effectiveness of the application of excise tax from changes in the prevalence of NDCs, the results do not necessarily reflect the actual facts. This is due to other factors beyond the control of the application of excise. Seeing the complexity of the relationship between the factors that cause NDCs, there is still a need for other policies that move in that direction.

*"There has not been an integrated and focused effort....it is not enough just to impose high taxes or excise taxes for high GGL food products. How to get people to want to move (physical activity) or for example hiring employees based on body weight (BB) or body mass index. (P-08 2020, 5)*

The number of parties involved and the understanding of the importance of reducing the prevalence of NDCs determine the success of the government's efforts to reduce the prevalence of NDCs.

*"There is political will, right...So with what? Tighten the rules. (P-03 2020, 1)*

*"... If I'm honest about answering this, only 30% of it is in charge of Health (Ministry). 70% of control is outside." (P-03 2020, 7)*

*"... actually, if it sits together at the top level, it can be done quickly. (P-03 2020,7)*



The initiation and role of the president is important to resolve this issue of understanding. The political will and priority of the president on the topic of health, especially the prevalence of NCDs, will be followed by the regulations below to lead to these results (including this excise discourse).

## 4.2 Budgetary Aspects

### a. Potential Excise Revenue

This is inseparable from excise duty as a fiscal instrument and it is important to know the potential revenue (regardless as a priority or not). The determination of the pattern of excise duty can determine the priority of the excise destination, whether it leans towards the budgetary or regulatory aspects. In this simulation, specific rates were chosen because they better reflect the concept of a *pigouvian tax*. This is because basically the negative impact caused by BKC is separate from the price of BKC itself.

*“... the object of excise duty is subject to a specific excise tariff system” (P-06 2020, 5)*

The specific tariffs imposed will open up space for manufacturers to improve product quality so that consumers are more "bound" to the products offered (Keen in Cnossen 2005, 73). This means that this has the consequence that consumers are less affected by the imposition of excise on prices (the decrease in consumption is not significant) because it is followed by an increase in product quality or consumers switch to products of better quality. On the other hand, ad valorem tariffs will reduce the initiation of product quality improvement due to the additional cost of product quality improvement in prices. Consequently, the competition between manufacturers in these types of products is getting tougher because the quality of the products will be more balanced. However, it should be noted that quality improvement only follows consumer tastes (not tied to whether the resulting product is better or worse in terms of externalities).

**Table 3.** Excise Revenue Simulation of Snacks in 2020

Type of Foods	Average HJE/Gram	Production and Importation (Gram)	Tariff		Revenue Projection
			Ad valorem	Spesific	
Snacks (including Biscuits, Breads, Chips, Wafers, Savory/Sweet/Salty, etc	Rp 109,64	732.043.348.187	5%	Rp 5	Rp 4.012.954.942.590

*Source: processed from BPS*

Table 3 shows the potential excise tax revenue for one of the packaged/instant food categories, namely snacks (snacks) of IDR 4 trillion at a 5% tariff simulation. This tariff is small when compared to research by Mytton (2012) which suggests a tariff of at least 20% so that the effectiveness of excise is seen in improving health. However, Mytton in his research focuses on European countries where food and beverages subject to tax tend to be inelastic, for example in Hungary (Bíró, 2015). A different situation is found in Indonesia, where food that is targeted for excise is known to be elastic to price changes. Therefore, the significant effective tariff for improving health should be less than 20% if this tax were implemented in Indonesia.

**Table 4.** Excise Revenue Simulation on Packaged/instant Food At 5% Rate

Type of Foods	Revenue Projection
Snacks Products	Rp 4.012.954.942.590
Confectionary Products	Rp 1.921.001.096.174
Chocolate Products	Rp 3.171.821.264.081
Nuts Products	Rp 569.228.740.585
Cereals Products	Rp 135.655.703.609
Ice Cream Products	Rp 210.303.585.385
Jam Products	Rp 1.767.376.313.533
Noodles Products	Rp 3.862.083.176.972
Total	Rp 15.650.242.822.929

Source: processed by the author

Looking at the results of this simulation, it is known that excise revenues on high calorie food have the potential to contribute even though they are not as large as excise revenues from tobacco products (HT).

#### **b. Consideration of Opportunity Cost**

Any fiscal policy including excise taxes can incur opportunity costs. This opportunity cost is not included in the cost component in the APBN budget. The budget allocation does not yet reflect the actual costs incurred.

*" we looking at changes in production after being subject to excise duty, in this change it is seen that there is transmission to other sectors, for example, increases in the price of other goods, inflation, reduction in labor and other macroeconomic factors (P-02 2020)*

The imposition of excise also affects the affected industries directly by reducing production and can potentially result in a reduction in the workforce. As an indirect result, the costs incurred are reflected in GDP growth contributed by the affected industries. The imposition of excise on the products of the food and beverage industry will affect GDP growth because this industry is the largest contributor to GDP for the non-oil and gas industry.

*" people's purchasing power decreases for products (food and beverage industry) which has such a large contribution to the national (GDP) of 36.54% ... "* (P-05 2020, 1).

The multiplier effect of the application of excise duty on high calorie packaged/instant food can create opportunity costs for the industry, but also for the government. The additional tax imposition on packaged/instant food will have the effect of reducing other sources of tax revenue that have been contributed by the industry, including Corporate Income Tax, VAT, and Article 21 Income Tax (PPH 21) in the event of termination of employment due to decreased production.

*"Manufacture sales will also experience a decline or contract when we aim for implementing excise, if the target is how to increase revenue from excise, it will also reduce corporate income tax and VAT income from the sale of goods."* (P-05 2020, 2)

Different opinion related influence economy delivered by one participant on existence a new tax. BKC consumers are more in the middle-high income class. Considering Indonesia's income class as an medium-high income country and the *tax burden* theory, the decline in purchasing power should not be taken into account in the application of excise policy.

*"... it's just a wrong way of thinking, because in terms of expenditure ratio, it is the lower class who are the most affected, but if you look at the quantity of purchases, it is the upper economy class who are affected because they do not reduce their consumption of excisable goods. In my opinion, leaving it aside, the money from excise revenue is also used for other things which will ultimately improve the economy."* (P-07 2020, 5)

The multiplier effect of excise can not only be seen from the effect of the decline in economic growth due to the decline in people's purchasing power, this is because excise is also returned in the form of programs in the APBN whose general aim is to improve the country's economy and the welfare of its citizens. So these things correct each other. Regarding the context of excise on packaged/instant food, the multiplier effect of benefits is directly related to the decreasing prevalence of NCDs, for example the increasing production of fruit and vegetables as substitute goods. However, more research is needed on these costs and benefits.

## V. Conclusion

In 2030-2040, it is predicted that Indonesia will experience a demographic bonus. The government through the RPJMN has begun to prepare an agenda, one of which is to increase quality and competitive human beings. In the health sector, one of them concerns the expansion of excise taxes on processed food products. The problem of NCDs (including obesity) is not a new thing in Indonesia, but the efforts that have been made so far are still limited to preventive efforts. On the other hand, the use of fiscal instruments as a means of controlling food consumption for health purposes has been carried out in other countries.

In this studies disclose that fulfillment regulatory function from tax on packaged/instant food potential obtained good as effort in preventive nor corrective (in specific earmarking pattern). However, synergies and priorities from policy makers are needed so that potentially conflicting goals of ministries/agencies can be compromised. Likewise with other policies that reinforce each other. On the other hand, the budgatory function in excise duty on packaged/instant food should not be a priority given the tendency of the targeted product to be price sensitive. However, based on the simulation of potential excise duty, the funds collected from this excise should cover the costs of handling NCDs on JKN KIS which is a reflection of the negative externality costs of consuming high calorie packaged/instant food.

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