



# IMPLEMENTING FISCAL MEASURES ON SUGAR-SWEETENED BEVERAGES IN INDONESIA

## POLICY RECOMMENDATIONS

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### For Central Government

1. Indonesia's government shall immediately set a tax application policy on sugar-sweetened beverages. The immediate action is important to reduce high sugar-sweetened beverage consumption known for giving negative effects to health. The policy is one of the multi-sectorial attempts to control non-communicable diseases.
  2. Tax application on sugar-sweetened beverages shall comply with the recommended daily sugar intake which is 50 grams/day. The tax application gives positive impacts which are to reduce disease burdens for the long term and to create economic stability.
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### For Regional Government

1. Implementation of Community Health Movement based on the Presidential Decree gives room for regional government to implement the tax application independently

## EXECUTIVE SUMMARY

Sugars consumption, and in particular of sugar-sweetened beverages, is high in Indonesia and this indicates the high prevalence of high sugar diets. Sugar-sweetened beverages (SSBs) contain added free sugars in large amounts, providing high energy content without the added value of other nutrients or the satiety provided by solid foods of the same energy density. As of 2018, 35.4% of Indonesians were overweight or obese. Ten years earlier, over 5% were living with diabetes. Indonesia is a large and growing market for soft drinks and energy drinks. Demand is growing around 8-10% each year. Total sales are expected to be US\$12.9 billion in 2019 – that works out to about 39 litres per person. The Indonesian government has considered taxing sugary drinks to solve the increasing health problems. Several studies have shown that the tax can be implemented and would be economically beneficial. This policy brief provides the main findings of those studies, and also the policy recommendations for central government and regional government to implement fiscal measures on SSBs in Indonesia.

## BACKGROUND

Indonesia is a country with the fourth-largest population in the world. In 2017, the citizens have mounted to 261 million in number and projected to exceed 277 million in 2020. The national health insurance has been accommodated by BPJS (*Badan Penyelenggara Jaminan Sosial*) since 2014. According to the current data in May 2019, more than 83.04% of Indonesian citizens had had insured health by BPJS. The life expectancy rate in Indonesia also rapidly increasing year to year with probability of a 69 and 73-year-old living respectively form man and woman and a life expectancy year average with diseases and disabilities of 8.8 years.

Indonesia is facing a double disease burden triggered by communicable and non-communicable diseases. The burden is greatly affected by social behaviour, environmental changes, and demographic, technological, economic, and socio-cultural transitions. The rising burden of non-communicable diseases is in line with the rising risk factors i.e. increased blood pressure, increased blood glucose, body mass index or obesity, unhealthy dietary pattern, lack of physical activities, smoking behavior, and addiction to alcohol.

In 2017, 10,801,787 millions of people, or 5.7% JKN members were reportedly given catastrophic services. The services had spent 14.6 trillion rupiah or 21.8% of the total health service budget. The composition of the budget was as follows: 7.4 trillion Rupiah, or 50.9% for cardiovascular diseases and 2.6 trillion and 2.6 trillion, or 17.7% for chronic kidney diseases (BPJS data, 2017). Non-communicable disease burden resolution has been significantly improved and the treatments require a larger amount of money in addition to higher technology. The health program and management and policy of each level should be in line and commit to reducing morbidity, mortality, and disability due to non-communicable disease burdens through prevention and control intensification. As a result, an optimum understanding of the significance of non-communicable disease burden can be reached.



Figure 1: Proportion of central obesity on adults > 15 years old in Indonesia, provincial data, National Health Survey, 2018

## PROBLEMS

The prevalence of central obesity in Indonesia increased to be 31%, and the highest percentage was in North Sulawesi which was 42.5%. The prevalence of central obesity in adult group (waist circumference >90 cm (male) and >80 cm (female) increased year to year. It was 18.8% in 2007, increasing to be 31% in 2018). The tendency of increased obesity prevalence was in line with the tendency of increased sugar consumption. Sugar consumption rate in Indonesian reached by 66.6% of total daily sugar consumption in all age categories (Data Survei Diet Total, 2014). Moreover, similar data were also proposed by production and consumption data. Both sugary food and beverage consumption had increased.

Sugar-containing products that continue to experience an upward trend in sales are soft drinks. The types of currently distributed soft drinks are bottled water, carbonated drinks, bottled tea drinks, and other drinks product i.e. isotonic drinks, health drinks, energy drinks, juice, and juice drinks. Soft drink, besides bottled plain/mineral; water often adds artificial sweeteners. Based on data from the Ministry of Trade, the sweetened beverage production level had increased by almost 300% within ten years (2005-2014). It means that the supply had annually increased by 30%. Sweetened beverage production had mounted to 2,100 million liters in 2005 and doubled increases to 5,919 million liters in 2014 (Statistik Industri Kementerian Perindustrian, 2017). The social consumption pattern of SSBs, reported by SUSENAS (*Survei Sosial Ekonomi Nasional*, National Socioeconomic Survey), also had significantly increased in the last 20 years. SUSENAS divided sweetened beverage consumption into four categories i.e. bottled tea drink, carbonated soft drink, bottled fruit drink/juice, and health/energy drink. The sugar-sweetened beverage consumption continued to increase in 2014. The total consumption reached by 780 million liters. In other words, it had increased by 71% within the last nine years with the majority consumption of packaged tea of 405 million liters (BPS, 2017).

## METHODS

This policy brief is synthesized from literature review of sugar tax in Indonesia i.e. literature research, gaining some secondary data from expert reports, associated legislation report, some supported regulations, and other relevant legal documents. To put the discussion of the evidence into context, we begin by outlining an analytical framework for thinking about the role of taxes in promoting health outcomes. This framework draws on both public finance and health economics. We then review the literature on sugar taxes considering this framework,

focusing on the evidence that is available on whether sugar taxes have been effective in other jurisdictions at solving the problem that it is intended to address in Indonesia.

## LESSON LEARNED FOR SSBs INTERVENTION FROM NEIGHBORING COUNTRIES

### Thailand

Thailand started implementing policies controlling the beverages in September 2017. The policies are divided into two i.e. non-tax policy and tax policy. Non-tax policy includes 1) increasing awareness of sugar consumption, 2) altering consumption behavior (in the next five-six years), 3) establishing cooperation between public and private sectors to determine applicable sugar intake, and 4) providing various healthier alternatives.

The tax policy implemented introduces two types of rate for non-alcohol drinks which are ad-valorem rate (price-based) of 10% and specific rate (volume-based). It is the sugar level which is taxed. The buyers are requested to select the rate, hence maximum tax income. The specific rate considers that the higher the sugar level—either added sugar or natural sugar level, the higher the tax rate. The policy also considers the tax accomplishment that changes social consumption behavior in addition to the substitution effects.

Tax policy for non-alcoholic drinks subjected to tax rate is divided into four categories i.e. 1) Artificial mineral water, soda water, and non-sugar or non-sweetener soft drinks are subject to the rate of 37 Baht/440cc; 2) mineral water and sugary or sweetened soft drinks or non-alcoholic drinks, including fruit or vegetable essence are subject to tax of 12%; 3) non-fermented fruit or vegetable essence drinks, including non-alcoholic or non-sweetened grape essence, are subject to tax of 1%; and 4) fruit and vegetable essence drinks, including non-alcoholic sugar/non-sugar or sweetened/non-sweetened grape essence, the composition of which has received permission from the government regulation, are subject to tax of 30%.

Since its tax implementation on non-alcoholic beverages, Thailand reportedly managed to earn 2.763 million Baht from the specific tax for sugar level in beverages. The government of Thailand is expecting a good impact of policy implementation—especially on the sugar tax—on industrial sectors. As a result, industries will formulate low-sugar, free-sugar, and non-calorie products. They will also make a reformulation to produce healthier products. The

government has given the industries a two-year period to make reformulation and charged lower taxes. When the period has passed, the specific tax for sugar-level will be raised. Alteration industrial sectors make are expected to give positive effects on consumers. Finally, they can consume healthier products.

## The Philippines

In the Philippines, the proportion of population consuming sugar-sweetened beverages per capita consumption increase with age. Daily sugar intake and sugar-sweetened consumption increase by 44% within ten years, from 14.9 to 21.4 grams of sugar per capita per day.<sup>24</sup> Regardless of its prevalence of obesity lower than the prevalence in other Southeast Asian countries, the prevalence of overweight and obesity has increased in all age categories. The increase causes the loss of productive years. Annual loss due to objects related to obesity is estimated to reach 567 million US dollars.

Sugar-sweetened beverage tax is a preventive tool against food correlated with the increased number of obesity and diabetes cases. However, there are some inhibiting factors i.e. limited determination to overcome obesity and diabetes, claim that sugar-sweetened beverages helping the poor satisfy their consumption needs, the misconception that the positive effects of tax will give more profits to the rich, and belief that under-nutrition is more emergency than double-burden of malnutrition. Sugar-sweetened beverage tax shall be combined with Tax Reform for Acceleration and Inclusion (TRAIN) design. It is crucial, ensuring the tax is approved as a law.

One month after sugar-sweetened beverage tax was implemented, the average price of taxed sugar-sweetened beverage products in small stores and supermarkets raised by 20.6% 16.6% respectively. The small stores had declined sales by 8.7%/month. Besides, the implementation of sugar-sweetened beverages is a catalyst for alteration in the buffet serving system. For example, free refills have been taken down in several restaurants due to taxed concentrates sold to the restaurants. In term of sugar-sweetened beverage tax implementation in the Philippines, some lessons learned are:

- Supports and commitment by the central government are crucial for the implementation of the sugar-sweetened beverage tax.
- Straight and clear policy cut a possibility of any tax avoidance and policy bias interpretation which may degrade the policy.
- Sugar-sweetened beverage tax should be designed by considering both health and non-health aspects as well.

## TAX APPLICATIONS ON SSBs IN INDONESIA

In terms of legal perspective, the Law of Tax Article 4 Paragraph 2 gives the authorization to make addition or reduction to the taxable objects. Besides, in the Law of APBN 2017, other tax revenue targets have been set with a total of 1 trillion. Those two fundamental laws signal the Ministry of Finance to formulate and to set the newly taxable goods. Taxable goods are goods when used, give negative impacts to both the society and the environment. Sugar-sweetened beverages are among goods close to such criteria.

Regarding the socio-economic perspective, control over sugar-sweetened beverages should be made. Today, people can access beverages easily, hence high consumption. Tax application on those types of sugar-sweetened beverages will help control their consumption patterns and high sugar intake. On the other hand, tax revenue can be used for health improvement.

Based on best practice, tax application on sugar-sweetened beverages in several countries has illustrated various benefits to control obesity and non-communicable diseases. Furthermore, the revenue it raises can be allocated for health improvement. Moreover, in terms of operational perspective, the current number of beverage industrial companies, which are not too large, is still manageable by DJBC (Directorate General of Customs and Excise). 30% of cigar manufacturers have been served by DJBC.

## FINDINGS

Bourke and Veerman conducted a study (published in 2018) to see the potential impacts of sugar-sweetened beverages tax on health in Indonesia. They designed a model calculating the effect of a tax rate of 20% (0.30 dollars) on consumption. Alteration in the consumption determined alteration in the population BMI, diseases linked to obesity, and health-adjusted life years (HALYs). The price change was converted into consumption change using price elasticity (the elastic price of sugar-sweetened beverage and cross-price elasticity used for substitution in milk, diet drinks, and fruit juice. Change in energy intake was calculated using average energy level per drink category (1,609 kJ/L for sugar-sweetened beverages; 1,821 kJ/L for juice; 2,660 kJ/L for milk, and 4 kJ/L for diet drinks). Energy consumption was converted into BMI and body weight gain using energy balance formulation. BMI distribution trends between 1993 and 2008 were annually customized until 2035. Trends in per capita sales of drinks between

2000 and 2014 were also customized for consumption assessment until 2025. The shift in BMI was modeled as relative bodyweight reduction to trends due to lower energy consumption. Meanwhile, the research data source was SUSENAS in 2012. Household income was calculated using household expenditure per capita from Indonesia Family Life Survey 2014 as a proxy for income/revenue.

This study also examined the potential impacts of sugar-sweetened beverage tax policy in developed countries. The study claimed more significant impacts on lower-income groups. However, the countries studied were in different nutrition transition stadiums, sugar-sweetened consumption patterns, and BMI distribution. In Indonesia, low-income groups consume a lower amount of sugar-sweetened beverages than high-income groups. A study found that high-income groups made expenditure 27 times higher than lower-income group. The high-income groups are population with high BMI, which is inversely proportional to the situation in other countries.

Beside of the potential impacts of sugar-sweetened beverage tax on health, revenue earned by the tax is a new income source. The income can be allocated to other health sectors, supporting the government to eliminate non-communicable diseases. In the US, 12 Oz of drinks (equal to 350mL) that are subject to the tax rate of 0.30 dollars may earn up to 50 million US dollars. If the government of Indonesia imposes a tax on sugar-sweetened beverages, the tax income shall be allocated for health promotion and education activities related to non-communicable diseases.

Some studies have presented several implementations of the sugar-sweetened beverage

tax policy in Indonesia. Indonesia shall be prepared to implement the same tax policy thoroughly. A study defines that a tax rate of 5-50% on bottled sugar-sweetened beverages is the preferred rate that can be paid by consumers (41.05%). Most respondents (48.10%) prefer the threshold scheme, as the scheme is considered fairer for both consumers and producers. The scheme enables interested industries to produce low-sugar sweetened beverages and compete to sell the product at a more competitive price. Consumers can more easily control their daily sugar consumption because the industries have also controlled the sugar level in their products based on the threshold scheme.

Public acceptability of the implementation of sugar-sweetened beverage tax cannot be abandoned. A systematic review made by Michelle Eykelenboom *et al.* states that faith in cost-effectiveness, compatibility, economic and socio-economic uses, policy adoption and implementation, and public trust is also the main factor of sugar-sweetened beverage tax regulation policy acceptability. Several ways recommended to increase acceptability and success of sugar-sweetened beverage tax regulation implementation and adoption are: 1) taking mandatory steps to overcome inconsistency of public trust in scientific literatures, 2) using raised revenue to fund health program initiatives, 3) establishing a transparent communication regarding the objectives of sugar-sweetened beverage tax application, and 4) making a political priority upon solutions of challenges during the implementation of sugar-sweetened beverage tax.