cisdi
Center for Indonesia's Strategic Development Initiatives

Policy Brief

Bitter to better: unpacking the potential of sugary drink taxation for health and economic gains

BACKGROUND

The pervasive and escalating growth in the consumption of sugar-sweetened beverages (SSBs)(1) has given rise to unprecedented health risks in Indonesia [1]. Furthermore, as obesity and diabetes in the country have increased significantly over the last two decades, the need to regulate SSBs has become more urgent.

Numerous studies have shown a strong correlation between high consumption of sugar-sweetened beverages (SSBs) and non-communicable diseases (NCDs), particularly type 2 diabetes [2-5]. Indonesia has experienced a 15-fold increase in SSBs consumption over the past 20 years [6,7]. Indonesia's 2018 Basic Health Research study found that 61% of the population consumes SSB at least once per day [8]. In 2019, seven out of 10 causes of mortality in Indonesia were NCDs, with type 2 diabetes ranked third [9]. Between 2013-2018, the prevalence of type 2 diabetes among individuals aged ≥ 15 has increased from 6.9% to 8.5% [8,10].

(1) Sugar-sweetened beverages (SSBs) are defined as: (1) all sweetened packaged beverages, which contain added caloric and non-caloric sweeteners; (2) all sweetened beverages in the form of liquid, concentrate and powder. These include, but not limited to carbonated drinks, energy drinks, fruit juices, isotonic, herbal and vitamin drinks, flavored milk, packaged tea and coffee, condensed milk, and syrup.

Studies have found that SSB excise taxes are a cost-effective policy to reduce consumption, potentially contributing to a reduced burden of NCDs and premature mortality [11-15]. Globally, there are over 100 countries that have implemented SSB excise taxes [16]. Indonesia's Ministries of Finance (MoF) and Health (MoH) have discussed implementing SSB taxes since 2016 [17]; however, as of March 2024, the policy remains yet to be implemented. According to the Directorate General of Customs and Excise (part of the MoF) in 2023, the implementation was postponed to allow for domestic and global economic recovery post-pandemic, and because the required government regulation has yet to be finalized [18]. Additionally, the Indonesia's Food and Beverages producers association (GAPMMI) stated that the taxes would negatively impact their business [19] while also falsely claiming that they are not effective public health measures [20], subsequently influencing the narrative.

This policy brief presents CISDI's 2024 study on the 10-year health and economic effects of an SSB tax which increases the price by 20%, assessing its impact on the future burden of type 2 diabetes in Indonesia compared to the status quo. The study emphasizes the need to implement SSB taxes in Indonesia in 2024 to address the escalating health and economic risks associated with SSB consumption.

METHODS

The health and economic impact of SSB taxes on the future diabetes type 2 burden is estimated using a modeling approach. Indonesia's Basic Research (RISKESDAS) survey data from 2018 [8] and SSB price elasticity computed specifically for Indonesia [21] are used as the model's main inputs. The model estimates the impact of the hypothetical SSB tax, which is assumed to increase the price of SSBs by 20%, on average, on the changes in type 2 diabetes incidence and premature mortality among adults (age ≥ 20 years old) over the period of 2024 to 2033, assuming the tax is implemented in 2024. The reduction in disability-adjusted life years (DALYs)(2) and the economic loss associated with T2DM, which can be avoided as a result of implementing effective SSB excise taxes, are also estimated. The estimated results of the model are then compared with the counterfactual scenario (i.e., expected outcomes if there is no tax implemented).

(2) DALYs, represent the sum of the years of life lost due to premature mortality and the years lived with a disability due to a disease or health condition (i.e., T2DM) in a population.

KEY FINDINGS

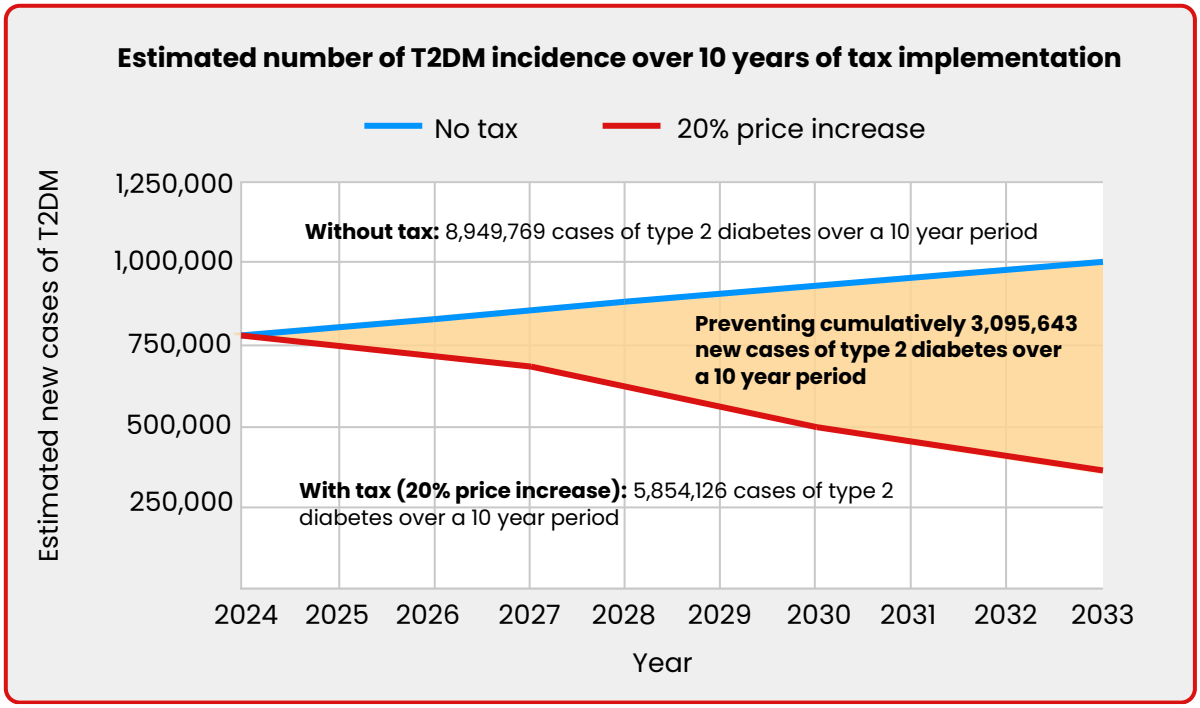
SSB taxes could contribute to reducing overweight and obesity cases.

A 20% price increase on SSB products[(3)] through excise taxes would reduce the body weight of the population and subsequently decrease their body mass index (BMI). The decrease in BMI may then prevent 253,527 overweight and 502,576 obesity cases in one year.

More than 3 million new cases of diabetes could be avoided.

The new cases (incidence) of type 2 diabetes is projected to increase every year during 2023-2033 and cumulatively reach 8.9 million new cases by 2033 if the SSB tax policy is not implemented (**Figure 1**). The implementation of a 20% price increase on SSBs through an SSB excise tax is projected to be able to prevent new cases every year and cumulatively prevent 3.1 million new cases by 2033.

Figure 1: Estimated new cases of type 2 diabetes in 2024 - 2033 (no tax versus SSB taxes implemented in 2024



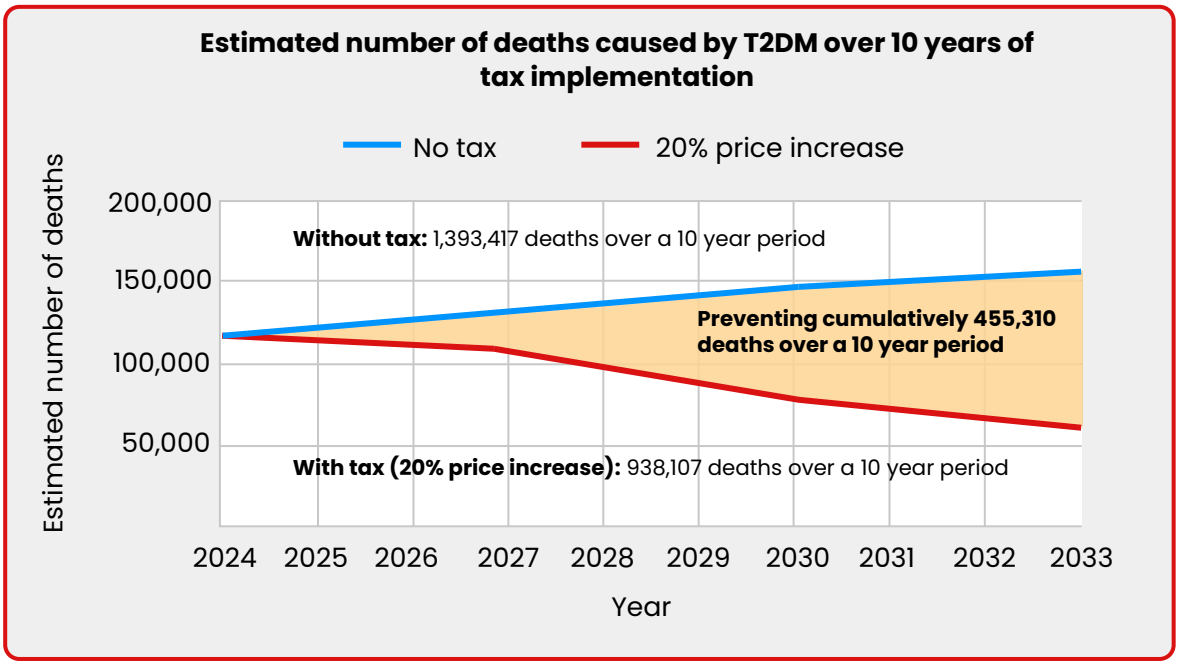
Source: CISDI (2024)

(3) SSB products included in the study are the beverage commodities surveyed in Basic Health Research 2018: (1) "sweet drinks," (2) soft drinks and carbonated drinks, and (3) energy drinks.

SSB taxes could reduce the number of deaths from diabetes

The number of deaths associated with type 2 diabetes is projected to increase every year from 2024 to 2033 and cumulatively reach 1.4 million deaths by 2033 without an SSB tax policy in place (status quo). The implementation of SSB taxes could significantly reverse the trend, preventing 455,310 deaths **(Figure 2)**.

Figure 2: Estimated deaths caused by type 2 diabetes in 2024-2033 (no tax versus SSB taxes implemented in 2024)



Source: CISDI (2024)

SSB taxes are economically beneficial to Indonesia

The implementation of an SSB tax which increases the selling price by 20% over 10 years would avert 268,080 DALYs from prevention of type 2 diabetes. This means the tax would reduce the potential productivity loss caused by premature mortality and life-years lost due to illness or disability. Furthermore, Indonesia would avoid IDR 40.6 trillion economic loss caused by type 2 diabetes.

POLICY RECOMMENDATIONS

1

The Indonesian government should implement SSB taxes, increasing the selling price of SSBs by at least 20%

We recommend that the government adopt an SSB tax scheme that effectively raises the selling price of SSBs by 20% in the market. This approach proves not only effective in reducing consumption [14], but also beneficial in terms of reducing the NCD burden i.e, type 2 diabetes. Without an SSB tax scheme implemented in 2024, the number of deaths caused by type 2 diabetes is estimated to reach 1,393,417 by 2033. This number could be reduced significantly with the implementation of the tax, which would save an estimated 455,310 lives.

Furthermore, the policy would contribute to the achievement of Long-term National Development Strategies "the Golden Indonesia Vision 2045" which pushes for regulation of health harming products to advance public health, strengthen the health system, and eventually achieve health for all by 2045 [22]. Moreover, an SSB tax policy could contribute to the fulfillment of Sustainable Development Goal (SDG) number three (Good Health and Well-being), aiming to decrease premature mortality from NCDs by one third by 2030 [23].

2

The government should not only rely on education and health promotion to effectively reduce SSB consumption at population level

The government should not rely solely on intensifying education and health promotion regarding the harmful effects of sugar consumption; instead, it should primarily focus on making the national food environment healthier by implementing the SSB Tax. WHO reported that SSB tax is an effective tool to reduce consumption by reducing affordability of SSBs [15].

3

SSB taxes should be earmarked for public health programs

Besides helping the country to save up to IDR 40.6 trillion economic costs associated with type 2 diabetes, the SSB tax would generate additional revenue [21,24] for the government, providing opportunities to invest in healthy food subsidies, community infrastructure (e.g., parks, libraries), and workforce development [25]. However, in best practices, the revenue collected should be allocated to fund public health/services [26], especially for vulnerable groups. This would also enhance the policy's favorability among the public [27]. Therefore, we recommend the revenue to be earmarked to improve the public health services.

4

The government should implement complementary policies in addition to SSB taxes that support consumers in choosing healthier options

In Indonesia, the food environment is becoming increasingly obesogenic [1]. Besides SSB taxes, adding nutrition information on the front of packages (front-of-package labeling/FOPL) and restricting the advertising of products high in fat, sugar, and/or salt, would help drive consumers to choose healthier foods and beverages [28,29]. These policies ensure sustained, meaningful change toward a healthier food environment in Indonesia [30].

CONCLUSION

The effective reduction of obesity and diabetes mellitus in Indonesia requires immediate action and a robust political commitment.

This commitment should be fulfilled by implementing mandatory and comprehensive policies, like strong SSB Taxes, front-of-package labeling, marketing restrictions, and others that prioritize public health and invest in long-term human development. The next few years will be critical for the government to carry out strong policies to achieve the Golden Indonesia Vision 2045.

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