



## HARNESSING SSB TAX FOR HEALTH AND ECONOMIC PROSPERITY: A PATH TO SUSTAINABLE GROWTH

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### Abstract

This study explores the implementation of sugar-sweetened beverages (SSB) excise taxes as a policy tool to address public health challenges related to excessive sugar consumption in Indonesia. With rising rates of diabetes and obesity, SSB taxes have been widely adopted globally, yielding positive outcomes such as reduced consumption and increased government revenue. This research synthesizes global evidence through a scoping review and examines how an SSB excise tax could be structured to fit Indonesia's unique socio-economic context. The findings suggest that a tiered tax based on sugar content would be most effective in curbing consumption while encouraging the beverage industry to innovate healthier alternatives. Revenue generated from the tax, estimated to reach IDR 9.68 trillion annually, could be directed toward public health initiatives, particularly for preventing and managing non-communicable diseases. The study also recommends complementary public health campaigns to raise awareness of the risks associated with sugar consumption. Effective collaboration between the Directorate General of Taxes and the Ministry of Health is crucial for successfully implementing and monitoring the policy. The introduction of SSB excise taxes in Indonesia represents a strategic opportunity to enhance public health, generate substantial government revenue, and support long-term sustainable development.

**Keywords:** Fiscal Policy, Public Health, SSB Excise

### INTRODUCTION

The increasing sugar consumption, mainly through sugar-sweetened beverages (SSBs), has emerged as a significant public health challenge in many countries, including Indonesia. According to ~~data from the~~ World Health Organization (WHO) data in 2022, diabetes mellitus, which is closely associated with excessive sugar consumption, ranks as the 9th leading cause of death globally, and in Indonesia, it is the 3rd leading cause of death (Azam et al., 2023). This alarming rise in diabetes prevalence is exacerbated by the growing availability and affordability of sugar-laden products, driven by an expanding beverage industry that thrives on consumer demand for sweetened products (Markou et al., 2015; Sulisty & Firmansyah, 2023). Despite efforts to raise awareness about the negative health impacts of high sugar consumption, the ease of access to these products and aggressive marketing strategies have resulted in an upward trend in SSB consumption.

The problem at hand is that excessive sugar consumption, particularly from beverages, directly contributes to an increase in non-communicable diseases (NCDs) such as diabetes, which in turn places a substantial burden on national healthcare systems and reduces workforce productivity (Bauer, 2019; Malik & Hu, 2022). It raises a critical question: can implementing a tax on sugar-sweetened beverages in Indonesia effectively reduce sugar consumption and mitigate its health impacts, thereby contributing to overall national prosperity through reduced healthcare costs and improved public health?

The problem statement that this research addresses is whether a tax on SSBs can effectively reduce sugar consumption, lower the prevalence of diabetes mellitus, and positively impact national prosperity in Indonesia. Evidence from several countries such as Mexico, the United Kingdom, and the United States suggests that SSB taxes have been successful in reducing consumption and improving health outcomes (Teng et al., 2019; Lee et al., 2020; Sulisty & Firmansyah, 2023). However, despite ongoing discussions in Indonesia about introducing such a tax, no concrete legislative action has been taken, leaving a critical gap in



understanding how such a policy could impact the unique socio-economic conditions of the country (Sulistyo & Firmansyah, 2023).

Previous research has consistently shown that taxing SSBs effectively reduces sugar consumption and improves public health. For example, introducing an SSB tax in Mexico in 2014 led to a 7.3% reduction in SSB consumption annually (Teng et al., 2019). Similar decreases were observed in the United Kingdom and the United States following the implementation of SSB taxes (Lee et al., 2020; Sulistyo & Firmansyah, 2023). However, the context of Indonesia presents unique challenges due to its socio-economic landscape, cultural preferences, and the entrenched consumption patterns of sugary beverages. Therefore, further research is needed to explore the feasibility of such a tax and its potential impacts on Indonesia.

This research explores the potential implementation of a tax on sugar-sweetened beverages in Indonesia and its impacts on consumer behavior, public health, and national prosperity. This research will also seek to identify the challenges and opportunities that may arise in the process of implementing such a policy, with particular attention to the roles of the Directorate General of Taxes (Direktorat Jenderal Pajak) and the Ministry of Health (Kementerian Kesehatan). This research differs from previous studies by focusing on the Indonesian context, which has distinct socio-economic conditions and regulatory frameworks. While earlier studies have primarily examined the effects of SSB taxes in developed countries, this research aims to fill the gap by providing an in-depth analysis of how such a policy could work in a developing country like Indonesia, with its own set of challenges in terms of health infrastructure and consumer behavior (Pratama et al., 2022). The findings of this research will offer new insights into how fiscal policies can be tailored to suit the local context, contributing to the broader literature on health-oriented taxation policies in developing nations (Cassiers & Thiry, 2014).

From a literature perspective, this study contributes to the ongoing discourse on the role of taxation in shaping public health outcomes. It examines how taxes on unhealthy products, like SSBs, can reduce consumption and generate government revenue that can be reinvested in health programs. The research aligns with the broader concept of using fiscal policy to address externalities associated with public health risks. This approach has been widely advocated by international organizations such as the World Health Organization and the World Bank (Sulistyo & Firmansyah, 2023). Furthermore, this study draws on the principles of carbon tax policies, as explored by Pratama et al. (2022), which emphasize how taxation can effectively mitigate negative externalities, such as the environmental impact of carbon emissions. This parallel strengthens the argument that fiscal tools can play a crucial role in addressing public health concerns, much like they are used to combat environmental issues.

Regarding policy contributions, the findings from this research are expected to provide actionable recommendations for both the Directorate General of Taxes and the Ministry of Health. For the Directorate General of Taxes, the study will offer insights into how an SSB tax can be structured to balance revenue generation with the need to reduce sugar consumption. The revenue generated from such a tax could be directed towards health programs, aligning with the broader fiscal goals of the government. Additionally, the study will address the potential economic impacts on the beverage industry and provide recommendations on mitigating any negative effects on producers and consumers.

For the Ministry of Health, this research will provide valuable information on how a fiscal intervention, such as an SSB tax, can be integrated into broader public health strategies to reduce the burden of non-communicable diseases. By reducing sugar consumption, the Ministry can make significant strides in achieving national health targets and reducing healthcare costs for treating diabetes and other sugar-related diseases. Furthermore, the study will emphasize the importance of public health education campaigns to complement the tax



policy, ensuring that consumers are well-informed about the health risks of excessive sugar consumption and the benefits of reducing it.

In conclusion, this research will provide comprehensive insights into the feasibility and potential impacts of implementing an SSB tax in Indonesia, with the dual aims of improving public health and contributing to national prosperity. It will bridge the gap between fiscal policy and public health by offering practical recommendations that can be utilized by key government institutions, including the Directorate General of Taxes and the Ministry of Health, to design and implement a successful policy that addresses the pressing health challenges posed by excessive sugar consumption.

## **LITERATURE REVIEW**

### **Stakeholders Theory**

Stakeholder theory, as initially proposed by Freeman (1984), conceptualizes organizations as networks of relationships among various groups and individuals who can affect or be affected by an organization's activities. Freeman (1984) argued that businesses must consider the interests of all stakeholders, not just shareholders, in strategic decision-making. This broadened focus includes employees, customers, suppliers, and communities, highlighting the ethical dimensions of business actions. The theory suggests that creating value for stakeholders, rather than solely maximizing profits, establishes a stronger foundation for long-term success and ethical responsibility in business.

Freeman et al. (2020) expanded the theory to integrate diverse perspectives- instrumental, normative, and descriptive- each elucidating different facets of the stakeholder-business relationship. The instrumental perspective emphasizes stakeholders' strategic importance, advocating for integrating their interests as a pathway to competitive advantage. In contrast, the normative approach underscores ethical obligations toward stakeholders, advocating for fairness and mutual respect. This multifaceted approach offers a comprehensive framework for understanding how various stakeholders' needs and expectations intersect with organizational goals, promoting a more socially responsible corporate governance model.

Further analysis by Mahajan et al. (2023) underscored the adaptability and relevance of stakeholder theory across disciplines, including sustainability accounting. The theory's flexibility has enabled its application in various sectors, guiding businesses toward practices emphasizing stakeholder value creation alongside ethical and social responsibility. Hörisch et al. (2020) stressed the integration of ethical considerations into business decisions, arguing that companies should pursue objectives beyond profit, rooted in shared value creation. This alignment with social and environmental responsibilities enriches the stakeholder theory's impact, positioning it as a fundamental framework for addressing global corporate challenges and fostering sustainable growth.

### **State Prosperity**

Prosperity is traditionally defined as material wealth, with governments prioritizing economic growth to improve the living standards of their populations through job creation, wage increases, and enhanced public services. Gross Domestic Product (GDP) is commonly used as a global measure of prosperity, serving as a benchmark for economic progress (Woodcraft & Anderson, 2019). However, relying solely on GDP as a measure of prosperity is limiting, as it fails to account for non-monetary factors such as the actual value of state-provided services like healthcare or the improvements in technological quality that impact citizens' lives (Markaki et al., 2015). The core issue lies in the inadequacy of a single technical metric to capture the multifaceted nature of people's daily experiences.

Recent citizen-led research initiatives offer an alternative view of prosperity, extending beyond material wealth to include aspects such as freedom, autonomy, security, social and economic inclusion, healthy environments, a sense of belonging, and active participation



(Mintchev et al., 2019; Moore & Woodcraft, 2019). According to the Legatum Institute (2023), a comprehensive framework for understanding prosperity consists of three foundational domains: Inclusive Societies, Open Economies, and Empowered People. These domains are essential to grasping the true breadth of prosperity.

Inclusive societies play a crucial role in fostering economic prosperity by protecting individuals' fundamental rights and enabling flourishing (UNDP, 2017). Social and legal institutions that ensure human rights and equitable access to services are crucial to supporting a thriving society (Roccas & Brewer, 2002). On the other hand, open economies encourage innovation, attract investment, and facilitate trade by reducing barriers to international commerce. This openness fosters exchanging ideas and technologies, stimulating economic growth (Levine, 2018). Empowered people are at the heart of prosperity, as this domain assesses the lived experiences of individuals and the factors that enable them to reach their full potential. Well-being is a core element here, as it encompasses critical resources needed for individuals to achieve a basic level of welfare (Doyal & Gough, 1991).

In the context of state prosperity, this concept transcends mere economic success, incorporating a state's holistic well-being and social progress. Prosperity, in this broader sense, includes a wide array of indicators that assess the quality of life experienced by residents. This multidimensional understanding of prosperity provides a clearer picture of how states advance socially and economically, highlighting the well-being of their citizens beyond simple financial metrics.

### **Sustainable Development**

The link between sustainable development and state prosperity is crucial, as sustainable development is essential for achieving long-term prosperity and well-being for the state and its citizens. Sustainable development emphasizes balancing economic, social, and environmental objectives to ensure the current growth path does not jeopardize future generations' needs. This approach acknowledges the interdependence of these three dimensions and seeks to harmonize them to promote long-term well-being.

As outlined in "The 'Earth Summit' Agreements: A Guide and Assessment" by Grubb et al. (2019), sustainable development gained global significance following the 1992 Earth Summit in Rio de Janeiro, Brazil. At this summit, nations adopted Agenda 21, a comprehensive blueprint for sustainable development that addressed various environmental, social, and economic challenges at the local, national, and global levels. The Earth Summit marked a turning point in bringing sustainable development to the forefront of the international agenda.

The momentum continued in 2000 when the United Nations adopted the Millennium Declaration, setting eight Millennium Development Goals (MDGs) to address poverty, education, health, and environmental sustainability. While these goals primarily focused on social issues, they laid the groundwork for broader and more integrated sustainable development initiatives. In 2015, the United Nations launched the 2030 Agenda for Sustainable Development, which consists of 17 Sustainable Development Goals (SDGs). These goals are designed to address the most pressing issues facing humanity and the planet, with a 15-year timeline for implementation (United Nations, 2015).

The SDGs are divided into five key areas—people, planet, prosperity, peace, and partnerships (Urata et al., 2023)—and cover many objectives, including poverty eradication, access to education, gender equality, clean water, and climate action. Although the 17 SDGs address distinct areas, they are interconnected, recognizing that actions in one area often affect others. Therefore, sustainable development requires an integrated approach that balances social, economic, and environmental priorities to ensure a comprehensive and long-lasting impact.

**Sugar-Sweetened Beverage Excise**

Taxation is a vital component of a state's socio-economic framework, serving as a fundamental mechanism for state development. Among the various forms of taxation, excise tax is a significant tool for regulating certain goods and services (Purba & Fasini, 2020). In Indonesia, excise is defined by Article 1 No. 1 of Law No. 39 of 2007 as a state duty imposed on specific goods based on their nature and characteristics. This research will consistently use the term "excise" to refer to such taxes unless specified otherwise in different case studies.

Excise taxes are often implemented for several reasons. First, they can serve as a "sin tax," targeting products that are considered harmful or socially undesirable, such as tobacco, alcohol, or sugar-sweetened beverages (Lorosae & Setyawan, 2022). Second, excise taxes can act as Pigouvian taxes, designed to address the negative externalities associated with certain products or services. For example, taxes on sugary beverages aim to account for the societal health costs related to the overconsumption of sugar (Mankiw & Taylor, 2020). Finally, excise taxes also generate revenue for governments, which can be used to fund public services or health initiatives.

Externalities occur when an individual's actions affect others who do not directly bear the costs or benefits of those actions. When the effects are harmful, they are referred to as negative externalities; when beneficial, they are positive externalities. Sugar-sweetened beverages are associated with negative externalities, as their excessive consumption leads to increased rates of obesity, diabetes, and other health issues, which impose significant costs on society. In recent years, the global consumption of sugar-sweetened beverages has risen, particularly in low- and middle-income countries, where access to cheap, processed foods has increased (Hirvonen et al., 2020; Osei-Assibey et al., 2012). This shift in dietary habits, coupled with reduced physical activity, has contributed to rising rates of obesity and related health problems, such as type 2 diabetes (Malik & Hu, 2022). The excessive consumption of SSBs, which offer little nutritional value, has become a significant factor in these health issues.

Historically, governments have taxed sugar and sugary beverages to raise revenue and discourage consumption. As early as the 18th century, economist Adam Smith argued that commodities like sugar, rum, and tobacco—though widely consumed—were not essential for survival and thus suitable for taxation (Mankiw & Taylor, 2020). Since then, various tax instruments have been used to regulate SSB consumption, including excise taxes based on volume or sugar content and value-added taxes (VAT) applied to the final sale price. These taxes are part of broader public health strategies to reduce unhealthy product consumption and mitigate societal costs.

**METHODS**

The research method employed in this study is the scoping review approach. Scoping reviews are designed to provide a comprehensive overview of the available research on a given topic, helping to map out key concepts, evidence, and gaps in the literature. This approach is suitable for exploring broad research questions and synthesizing diverse literature, allowing the researcher to assess and consolidate existing scholarly findings critically. The purpose of the scoping review in this context is to examine the landscape of knowledge surrounding the research topics systematically and to provide a foundation for future empirical and theoretical inquiry.

In conducting the scoping review, We meticulously explored existing scholarly publications to identify key trends, inconsistencies, and gaps in the research. By reviewing a wide range of academic sources, including peer-reviewed journal articles, authoritative books, and relevant laws and regulations, We aimed to build a robust theoretical framework that would support the research objectives. The goal was to summarize current knowledge and critically



assess the breadth and depth of existing research, thereby identifying areas that require further investigation or clarification.

The literature review process was deliberate and systematic, allowing the researchers to gain deeper insights into the topic from multiple perspectives. The process involved reviewing studies that span a variety of methodologies, theoretical perspectives, and contexts to ensure a well-rounded understanding of the subject matter. Integrating this diverse body of literature helped construct a comprehensive picture of the research area while highlighting important issues that have been underexplored or inconsistently addressed in previous studies.

Secondary data, including scholarly articles, authoritative publications, and relevant legal texts, was central to this research. Including legal and regulatory documents was essential to ensure the research was grounded in current policy frameworks, especially given the study's focus on state-level economic and health policies, such as excise taxes. All sources were selected based on their credibility, relevance, and contributions to the field, ensuring that this research's findings would be reliable and valid.

By synthesizing this broad range of secondary data, the research aims to analyze the topic comprehensively. The scoping review method identifies vital patterns and themes across the literature, allowing Us to draw well-founded conclusions and offer informed recommendations. Moreover, this method facilitates the recognition of research gaps, which can guide future studies and policy development, particularly in areas where the literature remains sparse or inconsistent. Thus, using a scoping review methodology allows for a thorough exploration of existing knowledge, establishing a solid foundation for the study while highlighting opportunities for further research. The reliance on carefully selected secondary data ensures the credibility and validity of the study, supporting the development of informed and actionable conclusions.

## **RESULT AND DISCUSSION**

### **SSBs Tax and the Legal Framework in Indonesia**

The regulatory framework for sugar-sweetened beverage (SSB) taxation in Indonesia is grounded in Law No. 18 of 2012 on Food and BPOM Regulation No. 21 of 2016, which emphasizes the government's role in promoting balanced nutrition. Article 59 of Law No. 18 explicitly directs the government to ensure adequate food and nutritional intake for the population, aligning public health goals with dietary guidance. The Badan Pengawas Obat dan Makanan (BPOM) regulation further outlines specific types of sweeteners, including sucrose and palm sugar, setting safe consumption thresholds that aim to mitigate health risks associated with excessive sugar intake. These regulations form a foundation for implementing policies that encourage healthier consumption patterns, with a particular focus on reducing sugar intake from beverages.

Despite such regulatory efforts, Indonesia continues to face a high and rising prevalence of diabetes. According to recent data, as of 2023, Indonesia ranks among Southeast Asia's highest in diabetes prevalence, a concerning trend that has continued to grow. Projections indicate a further increase in diabetes cases, especially in individuals aged 20 to 79, suggesting that current public health initiatives may not be sufficient to curb this growing health crisis. The increasing diabetes rate underscores the need for more robust interventions, with an excise tax on SSBs emerging as a promising option. Such a tax would target sugary beverages directly, discouraging excessive consumption and potentially yielding health benefits by reducing the intake of high-sugar products that contribute to diabetes and related health issues.

An SSB excise tax aligns with Law No. 39 of 2007 on Excise, which provides the legal basis for taxing goods that harm public health or the environment. This law authorizes the government to impose excise taxes on products with negative public health impacts, offering a regulatory pathway for introducing an SSB tax. Studies support this tax's potential to influence



consumption behaviors and generate revenue. For example, a study by Hambali (2022) estimates that an SSB excise tax could generate IDR 9.68 trillion in annual revenue, with an average of IDR 3.22 trillion expected. These funds could be channeled into public health initiatives focused on nutrition education, diabetes management, and preventive health services. The revenue from the tax could thus serve a dual purpose: reducing sugar consumption and providing financial support for healthcare programs, especially those targeting diabetes and other non-communicable diseases. By reinvesting in public health, Indonesia could address the root causes of rising diabetes rates and provide long-term support for citizens' health, ultimately leading to better health outcomes.

### **Evidence of SSB Tax Implementation**

The global adoption of excise taxes on sugar-sweetened beverages (SSBs) underscores their effectiveness in reducing sugar consumption and promoting public health. According to the World Bank's Global SSB Tax Database, 105 countries currently implement excise taxes on SSBs, solidifying their role as a primary fiscal measure to address health risks like obesity and type-2 diabetes. These taxes are designed in various forms—specific taxes based on sugar content or volume, ad valorem taxes calculated as a percentage of the product's value, and hybrid models combining both approaches—allowing countries to adapt tax structures to their unique health and economic objectives (World Bank, 2023).

In Mexico, one of the most cited examples, a 10% excise tax on SSBs introduced in 2014 led to an average 7.3% decline in SSB purchases within the first year, with larger reductions observed among low-income households. Over two years, this tax contributed to an 8% decline in SSB purchases and a 4% increase in bottled water consumption, indicating a shift towards healthier choices (Colchero et al., 2016). In the United Kingdom, a tiered excise tax initiated in 2018 led to a 28% reduction in sugar content across drinks within the first year as manufacturers reformulated their products to avoid higher tax rates. This case highlights an added public health benefit of SSB taxes: they incentivize producers to create healthier alternatives, further amplifying the health benefits (Bandy et al., 2020).

SSB excise taxes are also effective revenue-generating tools that support public health initiatives. In the United States, revenue from SSB taxes across seven cities averaged USD 133.9 million annually, funding community health initiatives and educational programs. Berkeley, California, was the first U.S. city to implement an SSB tax in 2015, and it used the revenue to fund nutrition education and diabetes prevention programs in underserved communities. Within the first year, SSB consumption declined by 21% among low-income residents, while water consumption increased by 63% (Falbe et al., 2016). This pattern demonstrates that SSB taxes can yield meaningful health improvements, particularly for populations disproportionately affected by diet-related diseases.

Comparable studies from other countries reinforce SSB taxes' dual fiscal and health benefits. France's SSB tax, introduced in 2012, generated approximately EUR 280 million in its first year, funding health insurance for low-income citizens. Hungary's public health product tax, which includes SSBs and other unhealthy foods, has reduced sugary product consumption by 10-15% while generating over HUF 60 billion (USD 200 million) annually, which is reinvested into healthcare (Bíró, 2015). These examples highlight that revenue from SSB taxes not only supports health-related programs but also strengthens healthcare systems.

This international evidence establishes a strong link between SSB excise taxes and public health benefits. By reducing SSB consumption, encouraging industry reformulation, and generating revenue for public health initiatives, these taxes have become a common tool in health policy frameworks worldwide. In Indonesia, implementing a similar SSB tax could address the rising prevalence of diabetes and other diet-related diseases, providing a sustainable model for health improvements and economic support through strategic reinvestment in public health and wellness initiatives.

**SSBs Tax and State Prosperity**

Implementing an excise tax on sugar-sweetened beverages (SSBs) has significant implications for multiple dimensions of state prosperity, touching on public health, economic growth, and social welfare. By targeting the high consumption of sugary drinks, such taxes can help address health disparities, particularly among low-income groups who are more vulnerable to diet-related diseases like obesity and type-2 diabetes due to limited access to healthier, affordable food options (Research Institute (IFPRI), 2019; Teng et al., 2020). Reducing SSB consumption through excise taxes directly impacts these communities, creating a more equitable health landscape by increasing access to health services and reducing health inequities.

The Stakeholder Theory, as developed by Freeman (1984) and expanded by Freeman et al. (2020), emphasizes the importance of balancing the needs of various stakeholders in decision-making processes. Applying this theory to introducing SSB taxes underscores the need for collaborative input from diverse sectors, including the food and beverage industry, healthcare providers, government agencies, and public health organizations. By considering the needs and perspectives of each stakeholder, policymakers can develop more comprehensive, equitable policies that achieve public health goals without unduly harming economic stakeholders. For instance, the food industry can play a role in reformulating products to contain less sugar, aligning business interests with public health objectives. This collaboration can reduce the consumption of SSBs, promote health equity, and drive state prosperity by lowering health disparities.

On the economic side, excise taxes on SSBs can stimulate innovation within the beverage industry. With decreased consumer demand for high-sugar drinks, companies are incentivized to explore low-sugar or sugar-free alternatives, leading to product diversification and increased competition in the market. Sánchez-Romero et al. (2020) point out that such shifts drive economic development as companies compete to meet the evolving demands of health-conscious consumers. For manufacturers, adapting product lines to align with health-oriented trends can help balance financial and social responsibilities, meeting the evolving needs of consumers while supporting state-wide health objectives. It aligns with the core of Stakeholder Theory, as the industry addresses a social concern (public health) while ensuring business viability.

Furthermore, SSB excise taxes can fund social programs, such as public health campaigns, education initiatives, and healthcare infrastructure development. By channeling tax revenues into these areas, governments can enhance the population's overall well-being, contributing to long-term prosperity. As resources shift from treating preventable diseases to preventative and community health initiatives, the healthcare system can reduce its focus on chronic disease management and allocate resources to more impactful public health interventions. It benefits healthcare providers and strengthens public trust in health systems, as citizens observe tangible benefits from excise tax policies, reinforcing Stakeholder Theory's emphasis on meeting the needs of all societal actors.

Moreover, SSB excise taxes can empower consumers to make healthier choices. As SSB prices increase, individuals may become more inclined to reduce their consumption, leading to a shift toward healthier dietary habits. This increased awareness of personal health aligns with the broader goals of state prosperity by fostering healthier lifestyles and creating a more productive society. In line with Stakeholder Theory, by empowering individuals to make health-conscious choices, the government actively addresses health concerns while maintaining economic growth and social welfare. A healthier population contributes to national productivity, reduces healthcare costs, and fosters social well-being, creating a sustainable health and economic prosperity cycle.

**SSBs Tax and Sustainable Development**

Introducing excise taxes on sugar-sweetened beverages (SSBs) aligns with multiple Sustainable Development Goals (SDGs), particularly SDG 3, which is focused on ensuring healthy lives and promoting well-being across all age groups. Non-communicable diseases (NCDs) like diabetes and obesity, which are exacerbated by excessive sugar intake, present significant global health challenges. Excise taxes on SSBs address these issues by deterring high-sugar product consumption, reducing diet-related health issues, and supporting the overarching objectives of SDG 3 (UNICEF Indonesia, 2023). By encouraging healthier dietary choices and reducing the prevalence of NCDs, SSB taxes also alleviate the healthcare burden, making healthcare systems more resilient and accessible.

Applying the Stakeholder Theory further strengthens the implementation of SSB taxes as a sustainable policy approach. Developed by Freeman (1984) and later expanded upon by Freeman et al. (2020), the Stakeholder Theory argues that businesses and governments have to consider the interests of all societal actors, including consumers, healthcare institutions, the food industry, and governmental bodies, to achieve long-term and equitable outcomes. Within the context of SSB taxes, policymakers are encouraged to balance consumers' health needs, the beverage industry's financial considerations, and the broader social goals of sustainable development. For example, by targeting excess sugar consumption through taxation, governments align the interests of public health advocates and citizens while pressuring the food industry to adopt healthier practices. This multi-stakeholder alignment is essential for achieving sustainable public health outcomes supporting social welfare and economic resilience.

In addition, SSB excise taxes align closely with SDG 2, which aims to eradicate hunger, enhance nutrition, and promote sustainable agricultural practices. By curbing the consumption of sugar-laden beverages and promoting healthier dietary choices, these taxes directly contribute to improved nutrition and diet-related health outcomes, furthering SDG 2's objectives. Encouraging a shift away from sugar-dense diets is crucial for reducing malnutrition and fostering a culture of nutritional awareness among consumers. From a stakeholder perspective, governments and health organizations collaborate with food producers and retailers to promote a healthier supply chain, which aligns consumer behavior with public health objectives. This partnership across sectors, grounded in Stakeholder Theory, promotes responsible production, where manufacturers are incentivized to reformulate products with lower sugar content and create more sustainable offerings that benefit both consumers and the environment.

Furthermore, the implementation of SSB excise taxes aligns with SDG 12, which promotes responsible consumption and production patterns. By introducing SSB taxes, governments incentivize the food and beverage industry to reduce sugar content, encouraging sustainable production practices that contribute to environmental goals. This alignment supports the notion within Stakeholder Theory that the industry's economic motivations should be balanced with its social responsibility to support public health and environmental sustainability. Studies show that when governments enforce tax policies along with nutritional labeling and production incentives, there is a marked reduction in sugar use in processed foods, benefiting the overall ecosystem by lowering demand for sugar production and fostering a culture of responsible consumption (Royo-Bordonada et al., 2019; Teng et al., 2019). This interconnected approach reflects how multi-stakeholder engagement creates shared value, benefitting public health, industry innovation, and environmental sustainability. Lastly, SSB taxes also support SDG 1, which seeks to reduce poverty. Chronic diseases like diabetes impose heavy economic burdens on individuals and families, especially among low-income groups who face higher rates of diet-related health issues. As diabetes and other chronic conditions lead to increased healthcare costs and reduced productivity, SSB taxes indirectly alleviate



poverty by reducing these health burdens (Research Institute (IFPRI), 2019). Through this lens, stakeholder theory supports policies considering the socioeconomic context, especially for vulnerable communities. Governments, health agencies, and social organizations work collectively to create an equitable approach to SSB taxation, using the generated revenues to fund health education, diabetes prevention programs, and nutritional subsidies. SSB taxes offer indirect economic relief by alleviating the financial strain of healthcare costs, underscoring how inclusive, multi-stakeholder collaboration benefits public health and economic stability in alignment with SDG goals.

## **CONCLUSION**

Implementing excise taxes on sugar-sweetened beverages (SSBs) has proven an effective public health measure in many countries. It helps curb excessive sugar consumption, which is linked to rising rates of obesity, type-2 diabetes, and other diet-related non-communicable diseases (NCDs). Countries like Mexico, Hungary, and the United States have successfully leveraged SSB taxes to reduce consumption and improve health outcomes. Additionally, these taxes generate substantial revenue, often reinvested in public health programs, enhancing societal welfare. The global trend toward using SSB excise taxes reflects their effectiveness in addressing health concerns and reducing the economic burden of NCDs on healthcare systems.

In Indonesia, despite existing regulatory frameworks designed to control sugar consumption, the prevalence of diabetes remains high and is expected to rise in the coming years. This indicates that current policies are insufficient in curbing sugar intake. Implementing an excise tax on SSBs offers a viable solution, as it aligns with Indonesia's legal provisions under Law No. 39 of 2007, which permits the taxation of goods with negative public health impacts. An excise tax could significantly reduce sugar consumption while generating much-needed government revenue. Studies suggest that the potential revenue from an SSB tax could reach IDR 9.68 trillion annually, funds that could be strategically allocated to healthcare and nutrition programs aimed at managing diabetes and promoting healthier dietary choices.

Beyond health benefits, SSB excise taxes contribute to state prosperity by promoting inclusive societies, driving economic innovation, and empowering individuals to make healthier choices. Lower-income populations, which are disproportionately affected by diet-related illnesses, would benefit from a reduction in sugar consumption, as it could alleviate the burden of diabetes and other health-related expenses. Moreover, the food and beverage industry would be incentivized to innovate and produce healthier alternatives, potentially fostering economic growth through new product development and competitive differentiation in response to changing consumer demands.

SSB excise taxes also align with sustainable development goals (SDGs), particularly SDG 3, which focuses on ensuring healthy lives and well-being for all. By reducing sugar consumption and the incidence of NCDs, these taxes contribute to better public health outcomes and help reduce poverty (SDG 1), as fewer families would face the economic hardship associated with chronic diseases. Furthermore, SSB taxes support SDG 12, which promotes responsible consumption and production by encouraging the food industry to adopt more sustainable practices, such as reducing sugar content in products and offering healthier alternatives.

In conclusion, implementing an excise tax on SSBs in Indonesia presents a strategic opportunity to address multiple challenges, including rising diabetes rates, healthcare costs, and the need for revenue to fund public health programs. By leveraging fiscal policy as a public health tool, Indonesia can foster healthier lifestyles, stimulate economic innovation, and align with global sustainable development goals. An SSB tax would enhance public health and



contribute to long-term state prosperity by promoting equitable access to health and economic opportunities for all citizens.

### **Limitation and Direction for Future Research**

This study relies heavily on secondary data from existing literature and international databases, which limits its contextual understanding of Indonesia's specific socio-cultural factors regarding sugar consumption and the beverage industry. Additionally, the focus on health and economic impacts neglects the social and political dynamics that could influence the success of SSB taxation in Indonesia, such as industry lobbying or public acceptance. Moreover, the study does not explore the long-term sustainability of SSB taxes, as the research is based on short-term outcomes observed in other countries without longitudinal data.

Future research should conduct empirical studies within Indonesia, using surveys, interviews, and field experiments to gather primary data on the public's and industry's attitudes toward SSB taxation. It would help capture local socio-economic factors and cultural behaviors more accurately. Further research should also delve into the political economy of SSB taxes in Indonesia, examining the roles of stakeholders like the beverage industry and policymakers in shaping public policy. Longitudinal studies tracking the long-term effects of SSB taxes in other countries could provide valuable insights for Indonesia. Finally, SSB taxation should be integrated with broader public health strategies, such as nutrition education and food subsidies, to assess the synergistic benefits of combined interventions.

### **Suggestion**

Based on this study's findings, several key policy recommendations exist for Indonesia's Directorate General of Taxes (Direktorat Jenderal Pajak) and the Ministry of Health (Kementerian Kesehatan). For the Directorate General of Taxes, the introduction of an excise tax on sugar-sweetened beverages (SSBs) should be carefully structured to maximize its effectiveness. A tiered tax based on the sugar content of beverages would encourage manufacturers to reformulate products, thus offering lower-sugar alternatives to consumers. This approach reduces sugar consumption and promotes healthier product innovations within the beverage industry. It is critical for the Directorate to ensure that the tax is comprehensive and targets beverages with high sugar content, aligning the tax structure with public health goals. Additionally, the revenue generated from the excise tax must be allocated to public health initiatives to ensure transparency and public trust in the policy. Public transparency regarding how the revenue is used, primarily when allocated to health programs, can increase public support for the tax and mitigate resistance from industry and consumers.

For the Ministry of Health, implementing the SSB excise tax should be accompanied by widespread public health education campaigns that raise awareness of the dangers of excessive sugar consumption. These campaigns should target schools, communities, and vulnerable groups to amplify the impact of the tax. The Ministry should use the additional revenue generated by the tax to strengthen healthcare services, particularly in preventing and managing non-communicable diseases like diabetes and obesity. Investment in nutrition programs and access to affordable diabetes care will further reduce the public health burden. The Ministry should also collaborate with other government agencies, including the Ministry of Education and industry stakeholders, to foster an environment that encourages healthier lifestyles. Both agencies must coordinate closely to ensure the successful implementation and monitoring of the SSB tax. Regular assessments of the policy's impact on consumption patterns, health outcomes, and economic indicators will allow for necessary adjustments, ensuring the tax remains effective and beneficial in the long term.

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