Opportunities and Challenges of Implementing Sugar-Sweetened Beverage Tax in Indonesia: Analysis of Fiscal, Public Health, and Industry Resistance (2020–2024)

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Abstract. Indonesia has experienced increasing consumption of sugar-sweetened beverages (SSBs), contributing to rising risks of obesity and diabetes while exacerbating plastic packaging waste. This study examines the opportunities and challenges associated with implementing an SSB tax in Indonesia during the 2020–2024 period, focusing on fiscal, public health, environmental, and political economy dimensions. Using a qualitative, document-based approach adapted from PRISMA guidelines, the study reviews 97 documents, including government policies, parliamentary records, media reports, and comparative policy evidence from Thailand and the Philippines. The findings indicate that a 20% tax could generate approximately IDR 3.6 trillion in annual revenue, while international evidence suggests that SSB taxation can reduce consumption and encourage product reformulation. Key barriers to implementation include coordinated industry opposition, fragmented advocacy in support of the tax, and limited consideration of potential environmental co-benefits. Effective implementation would require a phased, sugar-content-based tax, partial earmarking of revenue for JKN premium subsidies and clean water provision, independent oversight mechanisms, and an early public communication campaign.

Keywords: Administrative complexity; Corporate lobbying; Diabetes prevention; Packaging sustainability; Regressive impacts

1 Introduction

Indonesia faces a growing public health challenge associated with the consumption of sugar-sweetened beverages (SSBs). These products, commonly distributed in plastic bottles and aluminum cans through various retail outlets, including street vendors and supermarkets, have become increasingly prevalent in the Indonesian market. Their growing consumption has raised concerns regarding the associated health consequences. Ahsan et al. (2025) examined this issue and found that, even after controlling for total food intake and physical activity, calories derived

ICISPE 2025, August 04-05, Semarang, Indonesia
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DOI 10.4108/eai.4-8-2025.2368380

from sugary beverages among Indonesians remained a significant predictor of the risk of developing type 2 diabetes [1]. This finding is particularly significant, as it highlights the potential health risks associated with SSB consumption beyond their contribution to overall caloric intake. Malik and Hu (2022) similarly emphasize the adverse health implications of SSB consumption at the global level. The growing body of evidence has prompted international health authorities to advocate for policy interventions aimed at reducing SSB consumption and mitigating its associated health risks [2]. Despite the increasing global adoption of SSB taxation as a public health policy instrument, Indonesia has yet to introduce a comparable measure. By 2020, more than 45 countries had already implemented some form of excise tax on sugar-sweetened beverages (SSBs) [3]. This disparity raises questions about the institutional, political, and economic factors underlying Indonesia's delayed adoption of such a policy [3]. Countries such as Mexico and the United Kingdom were among the early adopters of SSB taxation, followed by Thailand and the Philippines. These developments demonstrate the increasing acceptance of SSB taxation as a fiscal instrument for addressing public health concerns. However, Indonesia has yet to introduce a comparable policy.

Previous studies have provided empirical evidence of the effectiveness of SSB taxation in reducing consumption. Nakhimovsky et al. (2016), in their systematic review of evidence from middle-income countries, found that taxes on sugar-sweetened beverages can reduce consumption and potentially contribute to slowing the increasing prevalence of overweight and obesity over time [4]. Backholer et al. (2016) further emphasized the differential effects of SSB taxation across socioeconomic groups, suggesting that lower-income populations may experience greater effects from these policy interventions [5]. Although this distributional effect may raise political and equity concerns, it also presents an important public health opportunity, as lower-income populations may derive substantial health benefits from reduced SSB consumption. Evidence from Mexico illustrates this relationship: the implementation of a 10% tax was associated with a sustained reduction of approximately 6–7% in SSB purchases over a two-year period [6]. Although the observed reduction may appear modest, its persistence over time suggests that SSB taxation can contribute to sustained changes in consumption patterns. More recent systematic reviews have examined the effectiveness of SSB taxation in Asian and African countries. Fernandes et al. (2025) found that these tax policies can effectively reduce SSB consumption, although their effectiveness depends on policy design and adaptation to local socioeconomic and institutional contexts [6]. Thailand's tiered, sugar-content-based tax, introduced in 2017 and subsequently increased in phases, encouraged manufacturers to reformulate their products by reducing sugar content to avoid higher tax rates [7]. The Philippines, meanwhile, introduced a flat-rate excise tax on sweetened beverages in 2018, generating substantial government revenue [8]. Together, the experiences of Thailand and the Philippines illustrate alternative approaches to SSB taxation and demonstrate their potential applicability to Indonesia, subject to differences in institutional capacity, economic conditions, and policy implementation contexts.

Despite the growing international adoption of SSB taxation, the factors constraining its implementation in Indonesia remain insufficiently explored. Existing research has primarily focused on Latin American countries and high-income economies, leaving the political economy of SSB tax adoption in Indonesia relatively underexamined. Johnson et al. (2025) examined Indonesia's nutrition policy landscape and identified competing institutional interests among key stakeholders. The Ministry of Health supports policy interventions, whereas the

Ministry of Finance is concerned with revenue stability. The Ministry of Agriculture has its own sectoral interests, while the food and beverage industry actively engages in policy advocacy [9]. Similarly, Siregar et al. (2024) identified insufficient political commitment as a major obstacle to advancing SSB taxation in Indonesia [10]. Putri et al. (2023) further investigated the advocacy coalitions supporting and opposing the proposed tax [11]. Their findings indicate that the coalition advocating for SSB taxation is fragmented and has limited resources, whereas the industry coalition is comparatively well organized, financially supported, and has greater access to policy decision-makers.

An additional dimension that warrants greater attention in the SSB taxation debate is its potential environmental impact, particularly in relation to plastic waste. Indonesia is among the world's major contributors to marine plastic pollution. The beverage industry is a significant user of single-use plastics, with nearly 60% of plastics produced or imported in Indonesia reportedly utilized in the food and beverage packaging sector [12]. A substantial proportion of this plastic waste originates from product packaging, including beverage containers. Consequently, reducing SSB consumption through taxation may also contribute to reducing the volume of plastic beverage packaging entering the environment, including rivers and marine ecosystems. This potential environmental co-benefit provides an additional rationale for considering SSB taxation within Indonesia's broader sustainability agenda. However, the relationship between SSB taxation and plastic waste reduction remains insufficiently examined in the Indonesian context, representing an important gap in the existing literature.

To address these research gaps, this study examines the opportunities and challenges associated with implementing an SSB tax in Indonesia during the 2020–2024 period. Specifically, it analyzes four dimensions: fiscal outcomes, public health implications, industry resistance, and environmental consequences. A comparative analysis of Thailand and the Philippines is also conducted to identify relevant policy experiences and potential lessons for Indonesia. By integrating these dimensions, this study seeks to provide an evidence-based assessment of the opportunities, implementation barriers, and potential policy implications of SSB taxation in Indonesia.

2 Methods

This study employs a qualitative, document-based approach to examine the factors constraining and facilitating the implementation of a sugar-sweetened beverage (SSB) tax in Indonesia. The analysis primarily covers the period from 2020 to 2024, with limited consideration of developments in 2025. It is situated within an interpretive policy analysis paradigm, which emphasizes understanding how different policy actors frame policy issues, construct arguments, and shape competing policy narratives. Rather than focusing primarily on quantitative measurement, this approach examines the underlying perspectives, interests, and interactions that influence the policy process. The research design draws on qualitative content analysis of publicly available documents to identify dominant narratives, stakeholder positions, and areas of policy contestation across fiscal, public health, and environmental dimensions. Furthermore,

the study incorporates a comparative analysis of SSB taxation policies in Thailand and the Philippines to provide regional context and identify relevant policy experiences and lessons for Indonesia.

Document selection followed a systematic process adapted from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Although this study adopts a qualitative approach, the systematic selection procedure was employed to enhance the transparency and consistency of document identification and screening. Initially, 847 potentially relevant documents were identified. The inclusion criteria required that documents be published between January 2020 and December 2024, written in either Indonesian or English, and directly relevant to SSB taxation in Indonesia or the comparative cases of Thailand and the Philippines. Documents that mentioned SSBs only incidentally, opinion pieces lacking an adequate factual basis, and duplicate records identified across databases were excluded. Following the removal of 187 duplicates, 660 documents remained. Subsequently, titles and abstracts were screened, resulting in the exclusion of 512 documents that did not meet the relevance criteria. This process yielded 148 documents for full-text assessment.

The full-text documents were subsequently evaluated against predefined quality assessment criteria. Official government documents, including ministerial regulations, parliamentary records, and national development plans, were included based on their relevance to the research objectives. Media reports and NGO publications were retained only when they originated from recognized media outlets or organizations with established editorial standards. Academic publications were required to have undergone peer review. Following this assessment, 97 documents were selected for the final analysis. Of these, approximately 35% originated from government sources, 40% from media and NGO reports, and 25% from academic literature and comparative policy documents.

Several key documents were particularly relevant to the analysis. Government sources included the Ministry of Finance's 2020 policy brief on SSB taxation, relevant sections of the 2020–2024 National Development Plan addressing non-communicable disease prevention, and parliamentary hearing records from 2021 and 2023 concerning the proposed SSB tax. For the comparative analysis, the study examined amendments to Thailand's Excise Tax Act issued between 2017 and 2023 and the Philippines' Republic Act No. 10963, commonly known as the Tax Reform for Acceleration and Inclusion (TRAIN) Law. Media and NGO sources included reports published by the Center for Indonesia's Strategic Development Initiatives (CISDI) and the Indonesia Health Economic Association, as well as relevant coverage from Kompas, Tempo, and CNN Indonesia.

More broadly, the documentary materials comprised four categories: (1) official policy documents and regulatory drafts issued by the Ministry of Finance, Ministry of Health, and Ministry of Environment and Forestry between 2020 and 2025, including national planning documents, press releases, and fiscal policy statements; (2) parliamentary records and legislative proceedings, including DPR RI hearing transcripts and budget committee reports addressing the proposed SSB tax, health financing, and environmental targets; (3) media articles and reports from national and international news outlets, think tanks, and NGOs documenting perspectives from industry, public health advocacy, and environmental stakeholders; and (4) comparative policy literature on SSB taxation in Thailand and the Philippines, comprising peer-reviewed journal articles and official government publications. All documents were selected purposively

based on their relevance to the policy process and stakeholder discourse surrounding SSB taxation in Indonesia.

This study has several methodological limitations that should be acknowledged. First, because the analysis relies exclusively on documentary sources, it does not capture stakeholder perspectives through direct interviews or ethnographic observations. Consequently, informal negotiations, communications following parliamentary hearings, and unexpected political developments that may influence policy decisions cannot be fully examined through the available documentary evidence. Second, Indonesia's decentralized governance structure grants local governments considerable discretion in policy implementation. Therefore, this document-based analysis cannot fully assess the capacity of individual regencies and municipalities, particularly in regions such as Papua and Sulawesi, to implement an SSB tax at the subnational level. Third, although the comparative experiences of Thailand and the Philippines provide relevant policy insights, differences in their respective political economies and institutional contexts limit the direct transferability of their policy experiences to Indonesia. Furthermore, the influence of Indonesia's beverage industry and historical patterns of resistance to health-related taxation, including tobacco taxation, may not be comprehensively reflected in publicly available documentary sources.

Despite these limitations, the diversity of documentary materials examined provides valuable insights into the policy dynamics, stakeholder positions, and competing narratives surrounding the SSB tax debate in Indonesia. This study does not seek to predict definitively whether an SSB tax will ultimately be adopted or rejected. Rather, it identifies the opportunities and implementation challenges evident in the available documentary evidence. Future research could complement document-based analysis with elite interviews and subnational case studies to provide a more comprehensive understanding of stakeholder interactions, institutional dynamics, and the practical feasibility of implementing SSB taxation across different regions of Indonesia.

3 Results

The analysis of the 97 selected documents reveals that the implementation of a sugar-sweetened beverage (SSB) tax in Indonesia is shaped by a complex interaction of fiscal considerations, public health objectives, industry interests, and environmental concerns. Although international experiences demonstrate the potential of SSB taxation as an instrument for generating government revenue and improving population health, its adoption in Indonesia remains constrained by institutional, political, and economic factors. The findings also indicate that the debate surrounding SSB taxation extends beyond its immediate fiscal implications, encompassing broader questions of policy coordination, stakeholder influence, and environmental sustainability. To provide a comprehensive understanding of these dynamics, the results are organized into four interrelated dimensions: (1) fiscal opportunities and revenue potential, (2) public health implications, (3) industry resistance and political economy constraints, and (4) potential environmental co-benefits. The comparative experiences of Thailand and the Philippines are incorporated throughout the analysis to identify relevant policy approaches and assess their implications for the Indonesian context.

3.1 Fiscal

The fiscal analysis indicates that a 20% increase in the price of sugar-sweetened beverages (SSBs) in Indonesia could generate approximately IDR 3.6 trillion (equivalent to approximately USD 238 million) in annual government revenue. This amount represents approximately 0.2% of the total tax revenue collected in 2022 [13]. From a public health perspective, the World Health Organization (WHO) identifies taxation that increases the retail prices of SSBs by at least 20% as a cost-effective intervention, or a *best buy*, for preventing noncommunicable diseases. Regional experiences further illustrate the potential fiscal benefits of such policies. The Philippines, for example, has generated government revenue through its excise tax on sweetened beverages (Huse et al., 2023). Thailand's tiered SSB tax has likewise generated revenue while creating incentives for product reformulation, as manufacturers have reduced the sugar content of their products to qualify for lower tax rates [14].

3.2 Health

The public health findings are particularly relevant in light of Indonesia's increasing burden of noncommunicable diseases. National data indicate that adult obesity prevalence increased from approximately 10.5% in 2007 to 21.8% in 2018, while diabetes prevalence reached 8.5% in 2024 [10]. In addition, average per capita consumption of sugar-sweetened beverages (SSBs) is estimated at approximately 20 liters annually, and 61% of the population reportedly consumes SSBs on a daily basis. These figures highlight the public health significance of addressing SSB consumption in Indonesia. International evidence further suggests that SSB taxation can contribute to reductions in beverage purchases. In Mexico, the introduction of a 10% tax was associated with a 6–7% reduction in SSB purchases and a 16% increase in bottled water purchases [15]. The largest reductions in SSB purchases were observed among lower-income households, suggesting that the effects of taxation may vary across socioeconomic groups. Comparable patterns have also been reported in Thailand and the Philippines, particularly in contexts where taxation has been accompanied by public education campaigns [10], [16]

The regressivity concern appears repeatedly in Indonesian policy documents. Critics argue that SSB taxes hurt poor people more. However, the evidence from Mexico and other settings suggests a more nuanced picture. Low-income households tend to be more price-sensitive, meaning they reduce consumption more sharply than wealthier households. That translates into disproportionate health gains relative to the financial burden they bear. Earmarking tax revenues for public health programs—such as clean water access or nutrition interventions—further offsets equity concerns. Studies from several U.S. cities have shown that revenue earmarking enhances both policy effectiveness and public acceptance.

Concerns regarding the regressive nature of SSB taxation frequently emerge in Indonesian policy discussions. Critics argue that such taxes may impose a disproportionately greater financial burden on lower-income households. However, evidence from Mexico and other countries suggests that the distributional implications of SSB taxation are more complex.

Lower-income households tend to exhibit greater price sensitivity, meaning that they may reduce their SSB consumption more substantially in response to price increases than higher-income households. Consequently, although these households may bear a relatively greater financial burden, they may also experience proportionally greater health benefits from reduced SSB consumption [15]. Furthermore, allocating a portion of tax revenues to public health programs, such as improving access to clean drinking water and supporting nutrition interventions, may help mitigate potential equity concerns [10]. Evidence from several cities in the United States also suggests that earmarking tax revenues for community health initiatives can strengthen public acceptance of SSB taxation and support the implementation of complementary public health programs [15].

3.3 Environmental

The environmental findings are more mixed. SSB production contributes significantly to plastic waste and water consumption. One estimate cited in policy documents indicates that over 5 liters of water are required to produce just 1 liter of SSB. Indonesia's original 2020 proposal combined an SSB tax with a plastic excise tax, explicitly aiming to address both health and environmental issues simultaneously. However, by 2024, the government had dropped the plastic component entirely. Documentary evidence from NGO reports attributes this decision to industry opposition. The result is a policy gap that undermines potential environmental gains. Meanwhile, beverage companies have been actively promoting their own recycling initiatives, which some analysts argue may be a strategy to weaken the rationale for taxation.

The environmental findings present a more complex picture of the potential implications of SSB taxation. The production of sugar-sweetened beverages (SSBs) is associated with substantial plastic waste generation and water consumption. One estimate cited in policy documents suggests that more than five liters of water are required to produce one liter of an SSB[17]. Indonesia's initial policy proposal in 2020 combined an SSB excise tax with a plastic excise tax, reflecting an intention to address public health and environmental concerns simultaneously [18]. However, by 2024, the plastic excise component had been removed from the government's policy agenda. NGO reports attribute this development to opposition from industry stakeholders [19]. The removal of the plastic excise component potentially limits the scope of the proposed fiscal policy to address environmental externalities associated with beverage production and packaging. Meanwhile, beverage companies have actively promoted their own recycling initiatives. Some analysts interpret these initiatives as potentially serving not only environmental objectives but also broader industry interests, including efforts to challenge the rationale for additional regulatory or fiscal interventions [17].

3.4 Political Economy

The political economy findings are derived from parliamentary records, media coverage, and reports published by advocacy organizations. The analysis identifies two broad stakeholder coalitions with competing positions on SSB taxation. The pro-tax coalition, comprising public health NGOs, several academic institutions, and elements within the Ministry of Health, demonstrates support for the proposed policy but remains fragmented and constrained by limited

organizational and financial resources. In contrast, the anti-tax coalition, led primarily by major beverage companies and supported by elements within the Ministry of Industry, appears to be more institutionally coordinated, better resourced, and more directly connected to policy decision-makers [9], [11].
A recurring theme in the documentary evidence is the comparison between SSB taxation and tobacco taxation. Indonesia's experience with tobacco control advocacy suggests that sustained policy engagement can be supported by broad, multi-stakeholder coalitions. Previous research has highlighted the importance of such coalitions in maintaining advocacy efforts and responding to industry opposition [1]. This experience offers a potential reference for strengthening advocacy in support of SSB taxation. However, the available documentary evidence indicates that comparable coalition-building efforts have not yet been effectively consolidated in the context of SSB tax advocacy.

4 Discussion

The findings demonstrate that the implementation of a sugar-sweetened beverage (SSB) tax in Indonesia involves considerations that extend beyond its potential to generate government revenue or reduce SSB consumption. Although international experiences provide evidence of the fiscal and public health benefits of SSB taxation, the Indonesian context presents a more complex policy environment shaped by institutional fragmentation, competing stakeholder interests, and broader economic considerations. The analysis suggests that the principal challenge is not merely the technical design of the tax but also the political and institutional conditions required to secure its adoption and ensure effective implementation.

From a fiscal perspective, the projected revenue potential provides an economic rationale for introducing the tax, while its public health implications strengthen the case for using fiscal instruments to influence consumption patterns. Nevertheless, concerns regarding the distributional effects of taxation require careful consideration, particularly in relation to lower-income households. The environmental dimension further broadens the policy debate by highlighting the potential relationship between beverage consumption, packaging waste, and environmental sustainability. However, realizing these potential benefits would require policy coordination beyond the introduction of an SSB tax alone.

Most importantly, the political economy findings indicate that the adoption of SSB taxation is influenced by the relative organizational capacity, resources, and policy access of competing stakeholder coalitions. The comparatively fragmented advocacy supporting the tax, alongside organized industry opposition, presents a significant challenge to policy advancement. These findings are discussed in relation to existing empirical studies and the experiences of Thailand and the Philippines to identify the implications for Indonesia's policy development. The following discussion examines these interconnected dimensions and considers the institutional and political conditions necessary for advancing SSB taxation in Indonesia.

4.1 Fiscal

The projected annual revenue of IDR 3.6 trillion represents a potentially meaningful fiscal contribution, although its overall impact on the state budget would remain relatively modest. Accounting for approximately 0.2% of total tax revenue, the proposed SSB tax is unlikely to transform Indonesia's fiscal capacity on its own. Nevertheless, the fiscal value of health-related taxation should not be assessed solely in terms of the proportion of national revenue it generates. Its broader significance also lies in its potential to support public health objectives and strengthen the financing of health-related programs.

In this regard, the allocation of tax revenue may be as important as the amount collected. Earmarking a portion of SSB tax revenue for public health initiatives, as illustrated by the Philippines' use of sweetened beverage tax revenues to support universal health coverage financing, could strengthen the policy's public legitimacy and demonstrate its tangible social benefits. The visibility of revenue allocation may also improve public understanding and acceptance of the tax, particularly when the resulting expenditure addresses identifiable community needs. This approach could provide an important consideration for Indonesia in designing its SSB tax framework.

However, the repeated delays in implementing health-related excise policies suggest that fiscal considerations alone are insufficient to advance policy adoption. The experience of the proposed plastic excise tax illustrates the potential influence of competing stakeholder interests on the policy process. Initially proposed alongside the SSB tax in 2020, the plastic excise component was subsequently removed from the government's policy agenda by 2024. Documentary evidence attributing this development to industry opposition raises concerns about the extent to which similar pressures could affect the proposed SSB tax. These developments highlight the importance of sustained political commitment and interinstitutional coordination in advancing health-related fiscal policies. The Ministry of Finance, despite its central role in tax design and revenue administration, cannot secure policy adoption independently. Effective implementation requires coordinated support from relevant government institutions, sustained political leadership, and engagement with stakeholders across the public health and fiscal policy sectors.

4.2 Health

The public health rationale for implementing an SSB tax in Indonesia is substantial and may extend beyond its immediate fiscal benefits. National health indicators demonstrate an increasing burden of obesity and diabetes, alongside high levels of SSB consumption. Adult obesity prevalence nearly doubled between 2007 and 2018, while diabetes prevalence reached 8.5% in 2024. Furthermore, approximately 61% of the Indonesian population reportedly consumes SSBs daily. These trends underscore the importance of strengthening policy responses to address the health risks associated with excessive sugar consumption. International evidence consistently indicates that increases in SSB prices through taxation can reduce consumption. Mexico's experience provides an illustrative example: the introduction of a 10% tax was associated with a 6–7% reduction in SSB purchases, with the largest reductions observed among lower-income households. This finding is particularly relevant because

socioeconomic inequalities may influence both exposure to health risks and access to healthcare services and healthier consumption alternatives.

The distributional implications of SSB taxation nevertheless require careful consideration, particularly in light of recurring concerns about its potentially regressive effects in Indonesian policy debates. Critics argue that lower-income households may bear a disproportionate financial burden because they spend a relatively larger share of their income on these beverages. This concern is relevant and should not be dismissed. However, an assessment of the distributional effects of SSB taxation should also consider its potential health benefits. If lower-income households are more responsive to price increases, they may experience greater reductions in SSB consumption and, consequently, potentially greater health benefits over time. These considerations are especially important given the socioeconomic barriers that may limit access to healthcare and the resources required to manage chronic diseases. Moreover, allocating a portion of SSB tax revenues to subsidize health insurance contributions or improve access to safe drinking water could help mitigate the financial burden on vulnerable populations. Therefore, the overall distributional impact of SSB taxation should be assessed by considering both its direct financial effects and the potential benefits arising from reduced consumption and publicly funded health interventions. Under appropriate policy design, these mechanisms could make SSB taxation more equitable and contribute to improved population health.

The Philippine experience provides a relevant reference for linking SSB tax revenues to health financing objectives. Its approach to allocating sweetened beverage tax revenues to support the National Health Insurance Program offers a potential model for Indonesia. Drawing on this experience, Indonesia could consider establishing a similar legal framework that earmarks 40–50% of SSB tax revenues for subsidizing National Health Insurance (Jaminan Kesehatan Nasional, JKN) contributions for low-income households. Such an arrangement could help address concerns regarding the potentially regressive effects of SSB taxation by directing a portion of the revenue toward populations that may be particularly vulnerable to its financial burden. To ensure accountability and maintain public trust, the allocation mechanism should be accompanied by independent oversight, transparent fund management, and regular public reporting on revenue collection and expenditure. However, establishing these arrangements would require more than formal regulatory provisions; it would also depend on sustained political commitment, institutional coordination, and the capacity to ensure that earmarked revenues are used effectively.

4.3 Environmental

The environmental dimension remains relatively underdeveloped in both Indonesian policy documents and the academic literature on SSB taxation. This gap is particularly significant given that Indonesia faces not only substantial public health challenges but also persistent problems associated with plastic waste and marine pollution. Beverage packaging represents an important area of concern within the broader discussion of plastic waste management. In this context, the dual-tax proposal introduced in 2020 was notable because it sought to combine an excise tax on sugar-sweetened beverages (SSBs) with a plastic excise tax, thereby addressing public health and environmental objectives through complementary fiscal instruments. However, the plastic excise component was subsequently removed from the government's policy agenda by 2024. Documentary evidence attributing this development to industry opposition raises questions about the relative influence of environmental considerations in the

policy formulation process. This development also suggests that environmental objectives may receive less sustained attention than public health considerations in debates surrounding fiscal policy.

Integrating environmental considerations more explicitly into the SSB taxation framework could broaden its policy relevance. A reduction in SSB consumption may contribute to lower demand for beverage packaging and, consequently, reduce the volume of plastic containers entering the waste stream, although the magnitude of this potential benefit would depend on consumption patterns, packaging alternatives, and waste management practices. Despite this potential co-benefit, the relationship between SSB taxation and plastic waste reduction remains insufficiently addressed in Indonesian policy discussions. Framing SSB taxation as an instrument that can contribute to both public health improvement and environmental sustainability may therefore broaden the coalition of stakeholders supporting its implementation, particularly by creating opportunities for greater engagement with environmental organizations and the Ministry of Environment and Forestry.

The role of corporate recycling initiatives also warrants critical examination. Although recycling programs may contribute to improved waste management, they do not necessarily address the broader environmental impacts associated with the production and consumption of packaged beverages. In particular, recycling initiatives do not directly reduce SSB consumption or address the health risks associated with excessive sugar intake. Furthermore, corporate environmental campaigns should be evaluated in relation to companies' broader policy positions and business practices. Where such initiatives are used to emphasize voluntary environmental responsibility while opposing regulatory measures intended to reduce packaging-related externalities, concerns may arise regarding the extent to which corporate sustainability claims reflect substantive environmental commitments. Accordingly, recycling initiatives should be considered complementary to, rather than substitutes for, regulatory and fiscal interventions. A comprehensive policy approach should integrate waste reduction, improved recycling systems, corporate accountability, and public health measures to address the interconnected challenges associated with SSB production and consumption.

4.4 Political Economy and Policy Implications

The political economy findings indicate that the implementation of SSB taxation in Indonesia is constrained by an imbalance between a fragmented pro-tax coalition and a comparatively well-organized industry opposition. This asymmetry may reflect differences in organizational capacity, financial resources, advocacy strategies, and access to policy decision-makers. The beverage industry's sustained engagement with policymakers and its efforts to frame SSB taxation as potentially detrimental to economic activity have contributed to the challenges facing tax advocates. By comparison, public health organizations and their institutional partners have faced difficulties in consolidating advocacy efforts and mobilizing sufficient resources to advance the proposed policy. Nevertheless, Indonesia's experience with tobacco taxation provides a relevant reference for understanding how coordinated advocacy can contribute to the advancement of health-related fiscal policies despite industry opposition. The involvement of health NGOs, academic researchers, supportive parliamentarians, and international partners has been identified as an important component of multi-stakeholder advocacy in tobacco control. Similar coalition-building strategies could be considered in the context of SSB taxation, although the available evidence suggests that such efforts have not yet been sufficiently consolidated.

The experiences of Thailand and the Philippines also offer relevant lessons concerning policy sequencing and public communication. Thailand's tiered SSB tax demonstrates the potential value of providing manufacturers with advance notice and a transition period before the full tax structure takes effect. Such an approach can give manufacturers time to reformulate their products and adjust production strategies, potentially reducing abrupt market adjustments and addressing concerns about the economic implications of taxation. Indonesia could consider a similar phased implementation strategy, including an advance announcement approximately 12–18 months before the tax takes effect. This period could be used to establish the regulatory framework, communicate tax requirements, and allow manufacturers to prepare for implementation.

The Philippines provides an additional reference concerning the importance of public communication in supporting SSB taxation. A comprehensive communication strategy can help explain the public health rationale for the tax, clarify how the resulting revenue will be allocated, and address concerns raised by consumers and industry stakeholders. For Indonesia, such a strategy could combine mass media communication with community-based health education to improve public understanding of the policy and its intended benefits. Communicating the relationship between taxation, disease prevention, and health financing may also help counter arguments that portray the tax primarily as a revenue-generation measure. Taken together, these comparative experiences suggest that the adoption of SSB taxation requires not only an appropriate tax design but also coordinated advocacy, a carefully managed implementation process, and sustained public communication.

Based on the findings and comparative policy experiences, several policy measures could be considered to advance SSB taxation in Indonesia. First, the government could adopt a phased, tiered tax structure based on sugar content, accompanied by an advance notification period of approximately 12–18 months to allow manufacturers to adjust their production processes and reformulate products where necessary. Second, a legal framework could establish the allocation of 40–50% of SSB tax revenues to support Jaminan Kesehatan Nasional (JKN) premium subsidies for low-income households and improve access to safe drinking water infrastructure. Third, an independent oversight mechanism should be established to monitor revenue allocation and expenditure, supported by annual public reporting to strengthen transparency and accountability. Fourth, a formal multi-stakeholder working group should be institutionalized to facilitate policy coordination and ensure meaningful participation from public health NGOs, consumer advocacy organizations, environmental groups, academic institutions, and small-scale beverage manufacturers. Such an arrangement could help broaden the policy dialogue and reduce the risk of policy discussions being dominated by larger industry stakeholders. Fifth, a comprehensive public communication campaign should be initiated at least six months before implementation. The campaign should explain the public health rationale for SSB taxation, communicate its potential environmental co-benefits, and provide transparent information about the programs and activities to be financed through the resulting revenues.

The implementation of these measures would require sustained political commitment, institutional coordination, and consistent engagement with relevant stakeholders. Without an effective implementation framework and sufficient political support, the proposed SSB tax may encounter challenges similar to those experienced by the proposed plastic excise tax, including prolonged policy deliberations and the possibility of its removal from the government's policy agenda. Conversely, an integrated policy approach that combines appropriate tax design, equitable revenue allocation, institutional oversight, stakeholder participation, and public

communication could strengthen the prospects for SSB tax implementation in Indonesia. Such an approach would offer an opportunity to pursue multiple policy objectives, including improved population health, additional government revenue, and potential reductions in plastic packaging waste.

5 Conclusion

The proposed sugar-sweetened beverage (SSB) tax in Indonesia presents opportunities to advance fiscal, public health, and environmental objectives. The findings suggest that a 20% excise tax could generate more than IDR 3.6 trillion in annual government revenue while potentially contributing to reductions in SSB consumption and the associated risks of obesity and diabetes. Reduced demand for SSBs may also generate environmental co-benefits by lowering the demand for beverage packaging and associated water use, although these potential benefits remain insufficiently integrated into current policy discussions. Nevertheless, the adoption of SSB taxation continues to face significant challenges, particularly industry opposition, institutional fragmentation, and limited political commitment. The documentary analysis indicates that advocacy supporting the proposed tax remains relatively fragmented, whereas industry opposition is comparatively well organized and better positioned to influence policy deliberations.

To address these challenges, several policy measures are proposed. Drawing on Thailand's experience, Indonesia could introduce a phased, tiered tax structure based on sugar content, accompanied by an advance notification period of 12–18 months to allow manufacturers to adjust their production processes and reformulate products. Lessons from the Philippines also highlight the importance of comprehensive public communication, which could be initiated at least six months before implementation through mass media and community-based health education initiatives. Furthermore, a legal framework could allocate 40–50% of SSB tax revenues to Jaminan Kesehatan Nasional (JKN) premium subsidies for low-income households and improvements in access to safe drinking water. These arrangements should be supported by independent oversight, transparent revenue management, and annual public reporting. Institutionalizing a multi-stakeholder working group involving public health organizations, academic institutions, consumer advocates, environmental groups, and representatives of small-scale beverage manufacturers would also help broaden policy participation and strengthen advocacy for implementation.

Overall, the prospects for SSB taxation in Indonesia depend not only on the design of the fiscal instrument but also on the institutional and political conditions supporting its adoption and implementation. Integrating fiscal objectives with public health priorities and environmental considerations could strengthen the broader policy relevance of SSB taxation. If accompanied by transparent governance, equitable revenue allocation, coordinated stakeholder engagement, and sustained political commitment, this policy could contribute to a more integrated approach to fiscal, public health, and environmental governance in Indonesia. The Indonesian experience may also offer relevant insights for other emerging economies considering similar fiscal interventions.

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