



The Economic & Health Impacts of a Sugar Tax



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Executive Summary

There is a recent renewed focus on sugar-sweetened beverage (SSB) taxes as public health interventions. While over 104 countries worldwide have implemented some form of SSB taxation, implementation outcomes vary dramatically - even among countries with similar economic profiles and health systems.

The critical determinant of success lies not only in policy adoption but also in the analytical rigour applied to design and implementation. Effective SSB tax policy requires sophisticated economic modelling to predict consumer and industry responses, careful calibration of tax structures to local market conditions, and robust monitoring systems to detect unintended consequences.

European experience illustrates this complexity. Despite having the second-highest regional obesity rates globally, the WHO European Region shows relatively low SSB consumption and cautious tax adoption (only 18 of 48 countries). This apparent paradox demonstrates that simple assumptions about consumption patterns, health outcomes, and optimal policy responses do not always hold across different contexts.

Instead evidence supports the effectiveness of well-designed interventions. Systematic reviews show consistent reductions in SSB purchases following tax implementation, with tiered sugar-based taxes proving more effective than volume-based approaches. The UK's Soft Drinks Industry Levy achieved a 34.3% reduction in sugar sales while voluntary industry commitments failed to deliver meaningful outcomes.

However, implementation challenges are substantial. Cross-border shopping, public opposition, administrative complexity, and unintended substitution effects can undermine policy effectiveness. Success requires anticipating industry responses, monitoring public perception, and ensuring reformulation produces genuine health benefits rather than problematic alternatives.

For governments considering SSB taxation, five critical areas must be addressed through rigorous analysis: policy justification based on demonstrated effectiveness; optimal tax structure for local conditions; appropriate rate determination; revenue allocation strategy; and comprehensive impact monitoring systems.

Effective implementation demands institutional capacity for sophisticated economic analysis, cross-sectoral policy coordination, and adaptive review mechanisms.

Introduction

The recent UN General Assembly High-Level Meeting on Non Communicable Diseases (NCDs) has renewed international focus on fiscal health policies, particularly sugar-sweetened beverage (SSB) taxes, as mechanisms for reducing premature mortality from obesity and diabetes-related diseases. This underscores fiscal policy's dual role: beyond healthcare system financing, taxation can influence both consumer purchasing decisions and corporate reformulation strategies.

However, while political momentum for SSB taxation continues to build, implementation experience across Europe reveals significant variations in policy effectiveness. The critical determinant of success lies not in simply adopting such measures, but in the analytical rigor applied to their design and deployment. Effective policy development requires sophisticated economic modelling to anticipate market responses, careful calibration of tax structures to local conditions, and robust monitoring frameworks to detect unintended consequences. This analysis examines European implementation experience to identify the key design decisions and analytical capabilities that distinguish successful SSB tax policies from those that fail to achieve their intended objectives.

Implementation of an SSB tax faces substantial barriers that extend beyond public health considerations to fundamental questions of economic policy and governance. These key implementation challenges include:

- **Economic competitiveness:** Countries fear disadvantaging domestic producers compared to untaxed jurisdictions, or singling out one industry while others also contribute to poor diet quality.
- **Administrative and market complexity:** Effective tax design requires sophisticated understanding of local market structures, consumer behaviour, and regulatory capacity. Optimal tax rates and structures vary significantly across jurisdictions based on baseline consumption patterns, price elasticity, and industry concentration.
- **Development trade-offs:** Lower-income countries may understandably prioritize economic growth and employment over health taxation, particularly where regulatory infrastructure for complex tax administration is limited. Taxes may result in a shock with a negative effect on employment in some domestic industries
- **Policy design risks:** Denmark's failed "fat tax" demonstrated how poorly designed fiscal policies can create unintended substitution effects, potentially worsening rather than improving health outcomes. Similar concerns exist regarding substitution toward artificial sweeteners with unclear long-term health implications.

These complexities underscore why effective SSB tax policy requires rigorous analytical frameworks that account for local economic conditions, market dynamics, and implementation capacity rather than standardized global approaches.

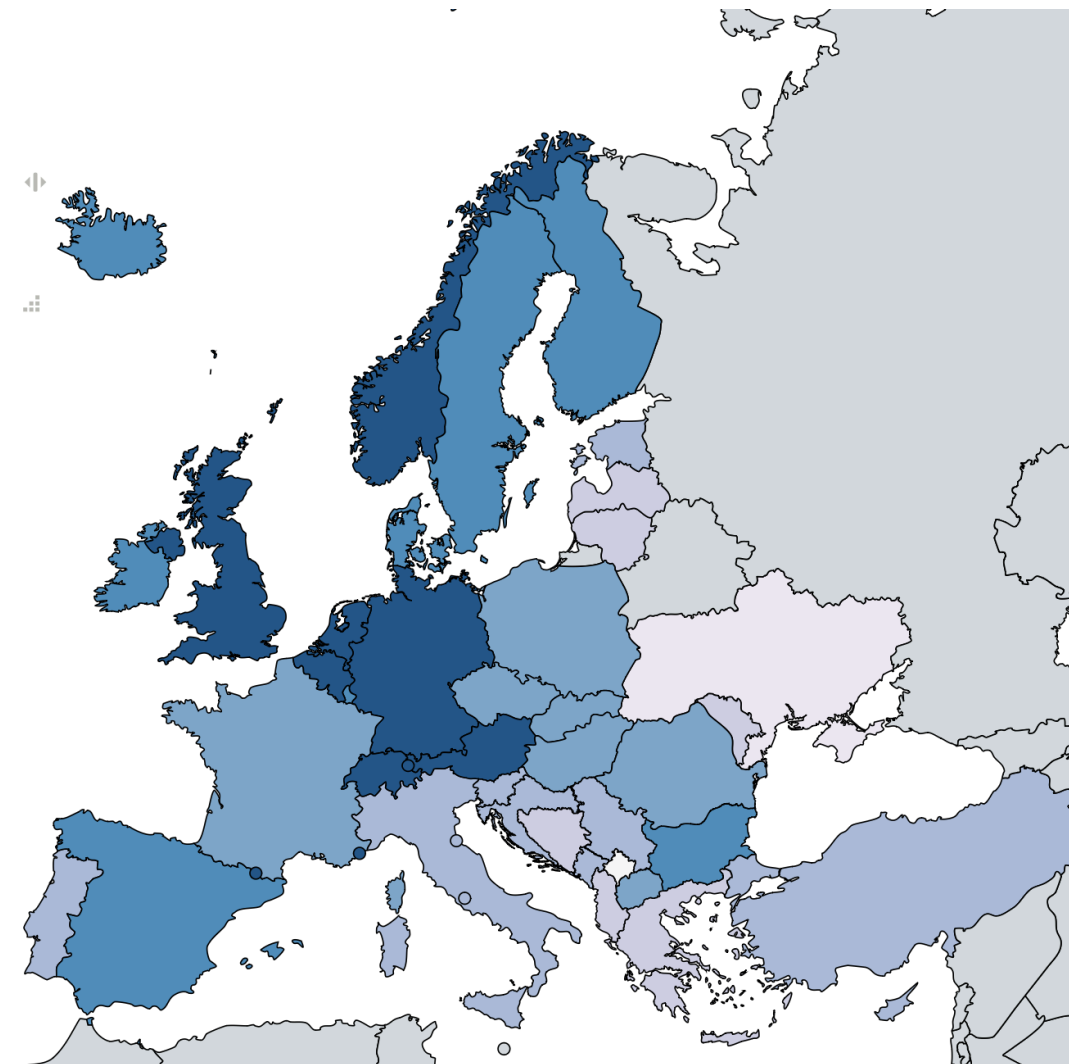
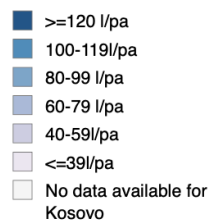
Non Communicable Disease

The staggering global impact of NCDs underlines why there is such urgency in the policy debate. NCDs account for around 74% of deaths globally, with more than 60% of deaths attributable to modifiable risk factors (WHO, 2019, Eurostat, 2019). While multiple dietary and lifestyle factors contribute to this burden, the evidence for SSB consumption as a driver of obesity and poor health outcomes is particularly robust and dose-dependent, making it a defensible target for fiscal intervention (Luger 2017, Malik 2013, Nguyen 2022, Santos 2022). Well established dose-dependent associations also exist between SSB consumption and Type 2 Diabetes Mellitus (T2DM) (Imamura 2015, Malik 2010, Greenwood 2014, Meng 2021, Xi 2014).

While individual behaviour plays a clear role in this pathway, changes in the composition and nutritional quality of food have also contributed to rising obesity levels. For example, analyses from the early 2000s showed that high fructose syrup has become increasingly prevalent in food, rising from less than 1% of caloric sweeteners in the 1970s to 42% by 2000 (Bray, 2004). Added sugars and sweeteners reached a peak of over 69 kg per person per year in the USA in 1999 (Bentley, 2017), coinciding with the rise in obesity, diabetes and cardiovascular disease.

The situation in Europe

However, data on SSB consumption across the WHO European Region reveals a pattern that differs from global trends leading to important implications for policy design. In 2010, European countries reported relatively low levels of SSB consumption compared to other regions (Singh et al. 2015), with evidence suggesting further decline in SSB purchases since then (ICCR 2016). Notwithstanding this decline, significant variation does exist within the region. Western European countries consistently show higher consumption than Eastern European countries, with the Netherlands and Belgium identified as the highest consumers for both adults and children (Azais-Braesco et al. 2017; ICCR 2016). This variation reflects different market conditions, including price discounting strategies and marketing intensity, which create distinct baseline conditions for tax policy design (Tedstone et al. 2015; Sjolín 2006).



Per capita SSB consumption (litres / per annum) (2019). Created by Zeumed using Euromonitor data

Tax Policies

Policymakers are increasingly considering fiscal interventions as part of broader NCD prevention strategies, reflecting both the compelling evidence base for SSB-health linkages and the potential for taxation to serve multiple policy objectives. According to World Bank data, a form of SSB tax has been implemented in more than 104 countries worldwide.

However, only 18 out of 48 countries in the European geographical region have adopted such taxes - despite Europe having the second-highest regional obesity prevalence globally. This apparent paradox reflects the complexity of translating SSB tax policy across different contexts. European countries generally have lower SSB consumption levels than other regions with widespread tax implementation, yet still face significant obesity burdens.

The mixed European experience further illustrates this complexity. While some countries like the UK and Portugal have seen successful implementation, others have encountered significant challenges. Norway and Denmark both abolished their taxes after implementation, while Estonia has delayed planned measures. This demonstrates that countries with direct experience of SSB taxation have reached different conclusions about their effectiveness or feasibility - whether these reversals represent appropriate policy adjustments or missed opportunities for public health improvement remains a matter of ongoing debate.

European experience therefore demonstrates that effective SSB tax policy requires sophisticated analysis to determine optimal approaches for each jurisdiction, accounting for baseline consumption patterns, existing dietary risk factors, alternative intervention pathways, and local market dynamics. This analysis must begin with understanding the fundamental mechanisms through which SSB taxes operate.

A tax on SSB can be effective in several ways including:

- triggering shifts in consumption and purchasing behaviour;
- incentivising product reformulation;
- increasing government revenues to fund public services and goods.

The five critical questions that policymakers must address when considering SSB taxation are:

- Policy justification: Is fiscal intervention warranted given health objectives, economic impacts, and alternative policy options?
- Tax structure: What design framework will optimize policy effectiveness - volumetric, tiered, or proportional to sugar content?
- Rate determination: What tax level will achieve stated objectives while maintaining economic and political feasibility?
- Revenue allocation: How should generated funds be deployed to maximize policy legitimacy and effectiveness?
- Impact monitoring: What systems will detect and address unintended consequences throughout implementation?

1. Policy Justification

Robust policy justification requires demonstration of effectiveness in achieving health outcomes. Without evidence of meaningful health impact, SSB taxation risks being perceived as a regressive revenue-raising tool rather than a legitimate public health intervention.

The earliest European HFSS taxes (foods high in fats, sugar and salts) were mainly justified as a means for additional revenue generation (e.g. in Denmark (1946 and 1968), the Netherlands (1992), Finland (1994), Croatia (1994), Latvia (2004) and Belgium (2009)). This approach has evolved significantly, with WHO reports indicating that high-income countries now increasingly emphasize health goals over revenue objectives, while lower-income countries continue to prioritize revenue generation (WHO, 2022). A policy analysis of ten European countries revealed that four governments included healthcare costs as a consideration when implementing sugar tax policies (Thow, 2022). In seven of these countries, government health expenditure exceeded 60% of total health expenditure, making revenue generation through indirect taxation a strategic objective alongside health goals.

In contrast, Finland, Ireland and Portugal explicitly positioned their SSB taxes as instruments to address non-communicable diseases and improve nutritional outcomes, often linking them to specific NCD policies (Thow, 2022). Separate European Commission analysis found that taxes in Hungary and Poland aim to reduce consumption of unhealthy foods as well as raise revenue, while Portugal's tax explicitly links to product reformulation incentives (European Commission, 2025).

This evolution toward health-focused justifications has raised the evidentiary bar for policy adoption, requiring demonstration of measurable health benefits rather than simply fiscal utility.

Consumption

Systematic reviews suggest that SSB taxes effectively reduce purchases of targeted beverages by increasing their prices (Thow 2022). Additional evidence from narrative reviews generally confirms these patterns while revealing important design distinctions: tiered taxes based on sugar content produce statistically significant decreases in high-sugar drink sales, while volume-based taxes show decreases in overall sales and pure sales taxes show no significant change (Andreyeva, 2022). Public Health England reported a substantial 28.8% reduction in sales-weighted sugar content between 2015 and 2019 in the UK following implementation of their tiered levy (Scarborough 2020).

These taxes have both supply-side and demand-side responses. On the supply side, manufacturers' decisions about tax pass-through rates vary significantly - global analysis estimates an average 82% pass-through rate, but this ranges from 39-100% in France depending on beverage type and sales channel, to approximately 100% in Portugal (Andreyeva 2022). However, there is no guarantee that differential pricing will support policy objectives, with evidence from Ireland showing that prices for lower sugar drinks have been increased to balance the impact (Houghton, 2024).

On the demand side, consumer price sensitivity provides the foundation for predicting consumption responses. Price elasticities for SSBs are generally estimated between -0.8 for high-income countries and -1.3 for low- and medium-income countries, with evidence suggesting even higher sensitivity to tax-induced price increases at -1.59 (European Commission 2025).

Reformulation

Product reformulation represents a particularly valuable mechanism for SSB tax effectiveness because of its broad impact on all consumers, not only those who are nutritionally aware. It can help remove barriers to healthy food access across populations, including rural, low-income, and ethnic and racial minority groups (Muth 2019). The UK's Soft Drinks Industry Levy (SDIL) demonstrates the potential for well-designed tiered taxes to drive substantial reformulation, with a 34.3% reduction in total sugar sales from soft drinks - from 135,391 tonnes in 2015 to 89,019 tonnes in 2020. The sales-weighted average sugar content of taxed soft drinks decreased from 3.8 to 2.1 g/100 mL, with evidence suggesting the levy prevented over 5,000 cases of obesity in girls aged 10-11 years and reduced adolescent hospital tooth extractions by 12.1% (Hashem 2024). This reformulation success occurred despite soft drink sales volumes increasing by 21.3% over the same period, driven by large shifts toward lower-sugar products (Scarborough 2020).

United Kingdom

SDIL was announced in March 2016 and came into force in April 2018. It was two tiered:
18p per litre for drinks containing 5-8g sugar/100ml;
24p per litre for drinks containing 8g+ sugar/100ml.

Sugar content fell by circa 28.8% per 100ml between 2015 and 2018 as brands reformulated.

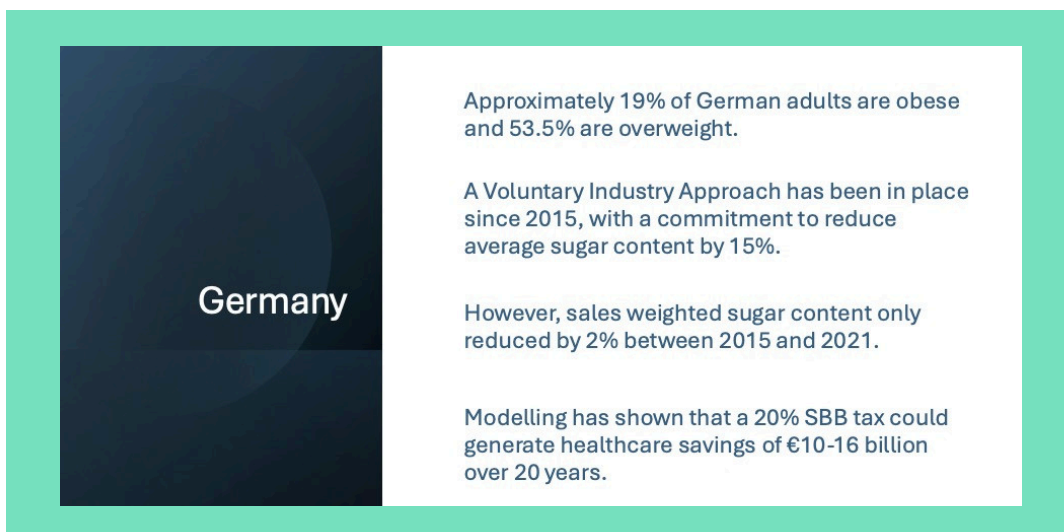
Estimated reduction in daily sugar content:
3.0g / day for children;
5.2g/ day for adults.

Evidence of an improvement in some health outcomes, including dental caries for children.

Alternatives

Several European countries including Germany and the Netherlands have pursued voluntary sugar reduction commitments as an alternative to fiscal measures (see Case Study 3 - Germany). These approaches offer clear political and administrative advantages, avoiding the implementation complexities and potential opposition associated with new taxation. However, evaluation evidence suggests they consistently fail to deliver meaningful outcomes.

A UK study directly compared the effectiveness of the SDIL with a similarly timed voluntary reduction program for other sugar-containing foods (including baked goods and confectionery). While the fiscal measure achieved substantial sugar reductions, the voluntary program resulted in a 7.1% increase (51,986 tonnes) in total sugar sales from foods, demonstrating that voluntary commitments cannot deliver the behavioural and industry changes necessary for population health impact (Hashem, 2024).



Germany

Approximately 19% of German adults are obese and 53.5% are overweight.

A Voluntary Industry Approach has been in place since 2015, with a commitment to reduce average sugar content by 15%.

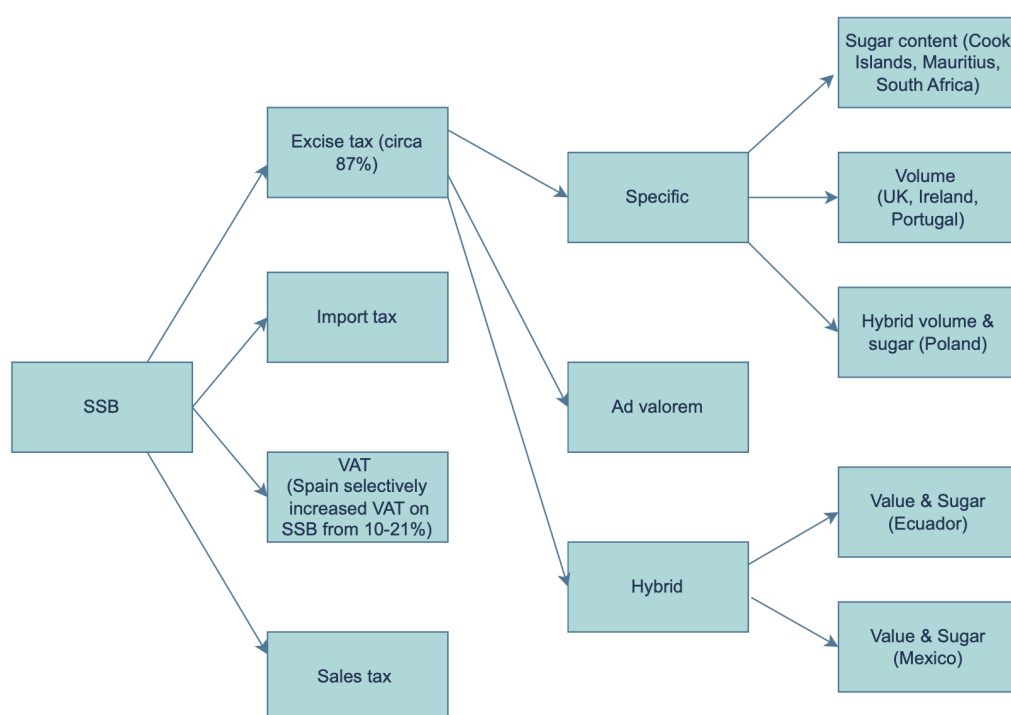
However, sales weighted sugar content only reduced by 2% between 2015 and 2021.

Modelling has shown that a 20% SBB tax could generate healthcare savings of €10-16 billion over 20 years.

2. Tax Structure

Effective tax structure design requires sophisticated analysis of local market conditions, policy objectives, and administrative capacity rather than adopting standardised approaches. Even within a region as economically integrated as Europe, SSB taxes have been implemented in markedly different forms - including Norway (2009, reduced and repealed 2021), Finland (2011), France (2012), Belgium (2015), Portugal (2017), Ireland (2018), the United Kingdom (2018), and Latvia (2020). These vary in tax design (volumetric or based on sugar content), rate structure (flat or tiered), and product scope (with exemptions for fruit juices in some jurisdictions) (WHO, 2015, Cornelsen and Smith, 2018; WHO 2022b).

These design variations reflect different strategic priorities and implementation constraints. Some countries, including Finland, Hungary, Norway, and the UK, incorporated provisions to mitigate employment effects, particularly through exemptions protecting small domestic industry sectors - demonstrating how tax structure must account for broader economic and political considerations beyond health objectives.



Summary of common SBB tax structures. Created by Zeumed using World Bank Global Tax Database

The choice between specific excise taxes (fixed amounts based on consumption measures), ad valorem taxes (percentage of product value), or mixed approaches involves complex trade-offs. Specific excise taxes, more common in higher-income regions, provide more precise targeting but require greater administrative capacity and regular adjustment for inflation. Ad valorem taxes offer administrative simplicity but can be susceptible to industry price manipulation strategies. While sugar-specific excise taxes theoretically provide the most efficient demand shifting toward lower-sugar alternatives, only three countries globally apply purely sugar-specific designs (Cook Islands, Mauritius, South Africa). Most policymakers consider this approach administratively unrealistic, instead using tiered tax structures to approximate the same effect.

Evidence supports this pragmatic approach: a difference-in-differences study comparing trends in average sugar content of new product launches found that the UK's tiered sugar-based tax design proved more effective at encouraging reformulation than France's volume-based approach (Allais 2023).

3. Rate of Tax

Determining optimal tax rates involves local consumption patterns, price elasticity, and behavioural responses, as rates represent the primary mechanism for achieving policy objectives while maintaining economic and political feasibility. The relationship between tax rates and effectiveness is generally positive - higher rates produce greater consumption reductions - but the optimal rate depends critically on baseline consumption levels, consumer price sensitivity, and competitive market dynamics.

The WHO's recommendation of approximately 20% or more of retail price provides a useful benchmark based on modelling studies suggesting this level can reduce obesity prevalence by 1.3% (Briggs 2013). However, this threshold should be viewed as a starting point requiring local calibration rather than a universal target. Nonetheless, evidence strongly supports rates at or above this level: analysis from Maine and Ohio found their modest rates of 5.5% and 5% respectively were insufficient to create statistically significant consumption changes (Colantuoni, 2015), while Belgian authorities reported no sizeable price or behavioural impacts following initial implementation of their low-rate tax (European Commission 2025).

Ex-ante modelling consistently demonstrates the importance of adequate rate setting. German modelling studies indicate that a 20% SSB tax could decrease obesity prevalence by approximately 4% if fully passed through to consumers (Schwendicke 2017).

For tiered tax systems, rate determination becomes more complex as governments must balance consumption reduction and reformulation incentives. UK evidence suggests their marginal rates were sufficient to drive substantial reformulation, contrasting with South Africa where lower rates achieved consumption reduction but less industry reformulation. If encouraging reformulation is a primary objective, the optimal rate structure may actually involve lower thresholds to incentivize industry response rather than maximize consumption reduction.

4.Revenue Raising

Using SSB taxes primarily as revenue-raising instruments presents significant fiscal management challenges that require careful analysis and planning. The tax base is inherently narrow and the revenue stream unstable, creating fundamental tensions between health policy success and fiscal planning objectives. When effectiveness is measured by decreased consumption - the primary health goal - revenue generation necessarily declines, creating a policy success that appears as fiscal failure such as Hungary's SSB tax which generated only 0.12% of GDP despite relatively broad implementation.

Earmarking SSB tax revenues for specific health programs, while politically attractive, compounds these challenges. When revenues decline due to successful consumption reduction or industry reformulation, earmarked health spending faces automatic cuts unless compensatory mechanisms are built into fiscal frameworks. Only a few European countries (Hungary, Poland, and Portugal) have attempted earmarking, with Poland transferring 96.5% of tax revenue to the National Health Fund for educational, preventive, and treatment activities related to lifestyle diseases (European Commission, 2025).

The regressive nature of SSB taxes adds another layer of complexity to revenue policy design. These taxes disproportionately affect low-income households who spend larger shares of income on food and beverages. However, the equity implications depend critically on policy objectives: when designed purely for revenue generation, regressive burden represents a clear equity problem requiring compensatory policies. In contrast, when functioning as health interventions, the equity calculus becomes more complex, as low-income populations often experience higher rates of diet-related diseases and may derive greater health benefits from reduced consumption.

5. Impact Monitoring

Cross-border shopping represents a predictable but often underestimated consequence of SSB taxation when neighbouring jurisdictions lack similar policies. Norway's experience illustrates the scale of potential displacement: cross-border shopping increased by 45% from 2008, totalling approximately USD 1.87 billion annually, with an estimated 20% of Norwegian SSB consumption occurring in untaxed Sweden. Such displacement partially offsets intended health effects while creating economic distortions that contributed to Norway's eventual policy reversal (Seiler 2019).

Public perception monitoring reveals another critical implementation challenge, as SSB tax proposals can reduce perceived legitimacy of health promotion institutions themselves. A Netherlands population-based survey found that proposing such interventions led to lower institutional trust, particularly among populations without tertiary education. This delegitimization reflects not only concern about price increases but broader resentment toward interventions perceived as restricting choice (van Meurs 2024).

Detailed survey evidence confirms the complexity of public attitudes: approximately 40% of participants supported SSB taxes generally, rising to 55% when revenues fund health initiatives. However, 47% viewed such taxes as unfair to low-income populations, and 50% saw them as limiting individual freedom. Support correlated with education levels, with higher-educated populations more supportive than those with lower education (Eykelboom 2021).

Substitution toward alternative sweeteners presents a third monitoring challenge, as reformulation may create new health risks. Studies have identified links between specific artificial sweeteners and obesity, cardiovascular disease, and cancer, while ultra-processed sweetened beverages remain associated with cardiometabolic disease risk regardless of sugar content (Cordova 2023). Effective monitoring must therefore track not only sugar reduction but the health implications of substitute ingredients to ensure reformulation genuinely improves rather than displaces health risks.

Norway

Despite long-standing taxation, obesity in Norway has increased from 12% in 2000 to 23% in 2022. The government increased tax rates considerably in 2018 (42% increase for SSB).

Average SSB price increased by 8% with no discernable effect on consumption.

Concerns arose regarding cross-border shopping in Sweden, disproportionate effects on small domestic manufacturers, administrative complexity, and regressivity.

In 2021 the government abolished the chocolate and confectionary tax, and reduced the SBB tax by 50%.

Considering Counter Arguments and Trade-Offs

Several arguments merit consideration when assessing whether fiscal intervention represents optimal resource allocation for population health improvement. The WHO estimates indicate that only 0.14% of deaths in the European region are attributable to SSBs, significantly lower than diets with processed meat (1.06%) and high sodium diets (2.27%) (WHO, 2024). This suggests that other dietary components may warrant greater regulatory priority from a population health perspective.

In general, evidence for measurable health impacts of SSB taxation does remain limited, as most studies focus on intermediate indicators such as reduced consumption rather than documented health outcomes. Studies from the United States examining health endpoints found no detectable changes in body mass index or overall dietary quality following tax implementation (Andreyeva, 2022). While this may reflect relatively short follow-up periods, modest tax rates, or specific market characteristics, the absence of demonstrable health effects raises questions about the relationship between consumption changes and population health benefits.

Administrative complexity also presents significant challenges for both governments and industry. Sugar content-based tax designs require systems to determine product composition and assess liability, though many authorities believe existing infrastructure for sin taxes (such as alcohol taxation) can be adapted. However there are clear investment and operational costs for companies, which of course occur alongside reduced sales volumes and profitability. While employment impacts appear limited - only 14% of companies reported negative employment effects, with no evidence of unemployment in US or Portuguese studies - financial impacts can be substantial. A Portuguese study found that SSB taxes hindered firms' financial health, affecting net income and cash conversion, though companies maintained wages and workforce levels (Gonçalves 2024).

What Governments Should Do

Effective SSB tax policy requires more than the simple adoption of a tax instrument. Governments must approach the policy cycle holistically, from design and implementation through to evaluation and adjustment, to ensure both health and fiscal objectives are met.

Integrate Tax Design with Product and Market Structure

Most taxes to date have adopted flat or tiered designs, often without sufficient analysis of how these will interact with national consumption patterns, industry configurations, and distribution channels. Taxable product definitions are often either too narrow (missing high-sugar drinks reformulated with artificial sweeteners to avoid thresholds) or too broad (including 100% juice which includes free sugars but occupies a contested space in dietary guidelines).

Governments should:

- Use market data to simulate the fiscal and consumption impact of different product definitions and structural designs.
- Analyse price elasticity by consumer segment to help identify where taxes are likely to reduce intake versus where they may result in financial burden without substantial behaviour change.
- Ensure that the legal definitions used in tax legislation are consistent with existing regulatory categories, such as those used in nutrition labelling or food composition standards, to prevent ambiguity, reduce legal risk, and close off potential compliance loopholes.

Pre-Plan for Industry and Consumer Response

Implementation planning is frequently confined to revenue collection systems, overlooking how producers and consumers will respond. Reformulation, product downsizing, strategic pricing, and marketing repositioning are all foreseeable.

Governments should:

- Establish formal engagement with industry to anticipate likely adjustments, without compromising public health objectives.
- Incorporate safeguards such as nutrient thresholds in tax or labelling policy but recognise that most front-of-pack labelling schemes do not penalise the use of artificial sweeteners. Without explicit warning or disclosure, reformulation may be incentivised in ways that undermine broader dietary goals.
- Monitor substitution effects, including shifts to untaxed but equally unhealthy products, using retail data and national consumption surveys.

Embed Monitoring and Adaptive Review Mechanisms

Many taxes are introduced with no formal requirement for post-implementation review or adjustment. Where monitoring does exist, it is often siloed between fiscal and health authorities, limiting the ability to course-correct.

Governments should:

- Establish a multi-sectoral monitoring plan at the outset, defining shared indicators for health, fiscal, and economic outcomes.
- Use administrative and retail purchase data to track tax pass-through, consumption shifts, and fiscal revenue performance quarterly.
- Conduct regular reviews with authority to adjust rates, expand product scope, or revise implementation rules. Short-term reviews (within 12–18 months) should focus on fiscal performance, pricing strategies, and early behavioural responses. A broader review, including health and equity outcomes, should follow within three to five years, once sufficient data is available.

Position SSB Taxes Within Broader Fiscal and Health Strategy

SSB taxes are frequently implemented as standalone measures, disconnected from broader health financing strategies and nutrition policy frameworks. This isolation reduces policy effectiveness by creating inconsistent signals to consumers and industry, while limiting public understanding of how the intervention fits within government health objectives.

Governments should:

- Situate SSB taxes within a comprehensive portfolio of fiscal tools, including healthy food subsidies, VAT exemptions on essential foods, and coordinated pricing policies that reinforce health messaging.
- If earmarking is used, design fiscal mechanisms that protect health program funding from revenue volatility. This includes fixed multi-year budget commitments that use SSB tax revenue as a funding source without making program scope dependent on tax performance.
- Coordinate taxation policy with procurement standards, marketing restrictions, school food programs, and broader subsidy reform to ensure government actions across different domains reinforce rather than undermine SSB tax objectives.

Build Internal Capacity and Independent Technical Review

Many countries rely heavily on external partners for initial tax design and do not build the institutional capacity needed to refine or defend the tax once implemented. Modelling is often limited to basic fiscal projections without behavioural sensitivity testing or real-world substitution scenarios.

Governments should:

- Develop internal capacity to commission, interpret, and update impact assessments using both economic and health data.
- Establish independent review bodies or technical panels to assess proposed tax changes, rate structures, and product definitions.
- Invest in long-term partnerships that can support simulation, policy evaluation, and cross-sectoral coordination.

While this analysis focuses on SSB market effects, optimal policy design would benefit from economic modelling that captures broader economic impacts such as employment effects across the beverage supply chain, regional economic consequences particularly in areas with manufacturing facilities, fiscal effects including administrative costs and revenue losses from cross-border shopping, and shifts in overall consumer spending patterns. Such analysis would help policymakers weigh the full economic trade-offs against anticipated public health benefits.

Conclusion

International experience with sugar-sweetened beverage taxation demonstrates that policy outcomes depend critically on the analytical rigour applied to design, implementation, and integration within broader policy frameworks. The choice between flat, tiered, or voluntary approaches reflects not only political and institutional constraints but the sophistication of economic modelling used to predict market responses and optimise intervention effectiveness.

In many countries, fiscal nutrition policy has been introduced as a discrete measure, without formal mechanisms for adaptation, cross-sectoral alignment, or technical review. This approach limits both immediate effectiveness and long-term policy sustainability.

Evidence suggests that structured approaches grounded in comprehensive economic modelling, robust governance arrangements, and systematic evaluation significantly improve both health impact and policy durability. Future progress will depend not only on political support but on institutional capacity to treat health taxes as components of evidence-based strategies for improving dietary outcomes and managing health system costs through sophisticated analytical frameworks.

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