An Analysis of the Adoption and Implementation of A Sugar-Sweetened Beverage Tax in South Africa: A Multiple Streams Approach

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ABSTRACT
This paper describes a case study of the adoption and implementation of the sugar-sweetened beverage tax in South Africa, termed the Health Promotion Levy. Qualitative data extraction and analysis of institutional documents, such as policy proposals and parliamentary debate records, stakeholder submissions to Parliament and media reports, were guided by the Kingdon Multiple Streams Theory as adapted to study agenda setting, policy adoption, and implementation. We present the following key findings: First, consistent messaging from policy entrepreneurs, consisting of advocacy groups, health organizations, and research entities, was key to ensuring that a tax policy solution was proposed and passed. Second, the continuity of certain key policymakers contributed to the relatively expedient passage of the tax policy. Third, the use of an excise tax was, amongst others, an appealing policy solution because of its revenue-raising potential; however, uncertainty regarding the purpose of the tax negatively impacted public attitudes toward it. Fourth, industry arguments, relating to unemployment, were effective in restructuring the tax in favor of industry actors. Finally, regulatory action by sectors outside of finance and health impacted stakeholder perceptions of the tax and possibly obstructed regular annual adjustments for inflation.

Introduction
There has been a world-wide increase in the prevalence of diet-related non-communicable diseases (NCDs).1 Rapid urbanization and changes to the food landscape, globally, have seen countries transition from undernutrition to overconsumption of energy, leading to overweight and obesity.2,3 Obesity is a major risk factor for NCDs, including diabetes and heart disease.4 In 2012, more than 8,000,000 South Africans were obese,5 and national data revealed a steep increase in the prevalence of obesity and overweight in children across all age groups and adults.6 In 2013, obesity-related NCDs contributed to 40% of deaths in South Africa.7 The consumption of sugar-sweetened beverages (SSBs), which has significantly increased in the last decade,5 is linked to increasing rates of overweight and obesity.8,9

The global increase in NCD prevalence has resulted in calls from international organizations, such as the World Health Organization (WHO), to improve national prevention efforts, including the use of fiscal measures.10 In South Africa, a modeling exercise of a 20% tax on SSBs showed promising results in terms of reduction in consumption.11 This modeling added to positive effects of SSB taxation in countries, such as the United Kingdom, Ireland, India, and Brazil.11–15 SSB taxes seemed to reduce the consumption of SSBs mostly among lower income groups who are most vulnerable to, and severely impacted by, obesity-related NCDs.16 In 2016, the South African Minister of Finance proposed an SSB tax for the country,17 which was bolstered by developing evidence of the efficacy of SSB taxes in other countries.18,19

Despite the growing burden of overweight and obesity in South Africa, and evidence suggesting that SSB taxes decrease consumption in other countries and jurisdictions,18 the tax policy was controversial. The formal process of adopting the policy attracted comments from an array of stakeholders, and there was significant media coverage. Tax opponents echoed prior arguments made in reaction to tobacco-control policies.20 However, despite opposition, especially from industry actors, South Africa adopted an SSB tax in April 2018. The tax was formulated as an excise tax of 2.1 cents for each gram of sugar exceeding 4 grams (equivalent to one teaspoon) per 100 ml. The tax was adjusted for inflation to 2.21 cents per gram in the next financial year, based on the same threshold requirement.

Several studies of the passage of SSB tax policies have been undertaken, focusing on aspects such as the nature and make-up of industry opposition, considering the

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overall contextual environment that contributed to the success of a tax initiative, and exploring fatal obstacles. However, given the variety of policy determinants that may lead to the successful adoption of a tax policy, or its defeat, there have been calls from academic and scientific organizations to engage in more policy analyses on SSB taxation to foster experience sharing. Unlike Australia and Hawaii, where the impact of the local sugar or SSB industry posed an insurmountable obstacle to the passage of a tax policy, South Africa was successful in adopting the policy, despite a strong sugar cane industry and local business investment in the SSB value chain. This is especially important, given that South Africa is the first country on the African continent to implement a tax policy for health reasons related to obesity, and therefore has precedent-setting potential, which will arguably contribute to the force of multinational industry opposition. The inverse of this was noted with the passage of the tax policy in the Pacific, where small markets and little media attention minimized the involvement of multinational corporations.

The passage of the South African SSB tax policy has enjoyed some academic attention with respect to health policy and economic analysis. In this paper, we propose a different systematic social theory analysis, looking at the success of adding the tax to the policy-maker agenda. We consider how different factors impacted the adoption process and policy reformulation, and discuss the implementation of the tax and subsequent policy adjustment. This enables us to propose a more far-reaching assessment and to reflect, holistically, on the so-called policy levers related to the SSB tax. We provide data from qualitative, desk-based research to analyze and explain the successful passage of a fiscal mechanism to promote public health, despite competing interests. We used the Multiple Streams Theory on agenda setting, proposed by John Kingdon, and adapted it to also scrutinize adoption and implementation of the SSB tax policy.

Methods

Conceptual Framework

We used the Kingdon Multiple Streams Theory developed to assess how agenda-setting in policy making takes place. The theory proposes that policy change does not have a fixed formula but is rather a convergence of three complementary “streams” through which the interventions of policy entrepreneurs combine to open a “policy window.”

The first stream relates to how a set of circumstances come to be defined as a problem. A systematic indicator where activities and events are routinely monitored—such as a national health survey—is one way to define a problem. A focus event (such as a major event or a personal experience of a policy-maker) or feedback on existing government initiatives can also define a problem. However, Kingdon observes that focus events are less likely to lead to problem definition or recognition in the health-care sector. There are two necessary notes on problem definition. First, budgetary concerns are a special contributor to defining a problem. It is often seen as a constraint but can be a facilitator where solving a problem can alleviate stress on the budget such as through a tax policy that raises revenue. Second, the category into which one places a set of circumstances defines whether it is seen as a problem. For example, if the perception is that a set of circumstances is not for government to address, then it is not seen as a problem. This is relevant for SSB taxation where a counter-argument can be framing the problem as one of individual responsibility.

The second stream relates to how a policy proposal is developed. Tracing the origins of policy proposals is very difficult. Policy development is a process of evolution, or rather a recombination of previous ideas. A policy community, often specialists in the relevant field such as academics, bureaucrats, and consultants, shapes the landscape through proposing policy solutions. These specialists communicate their ideas in various fora and in various formats in a process termed “softening up.” An idea or proposal needs to meet a checklist to be taken up by the relevant communities as part of the shortlist of ideas: Technical feasibility, value acceptability, and consideration of future constraints. This process of “softening up” and meeting the survival checklist can lead to emerging consensus on a specific policy formulation.

The final stream, politics, represents the perception of a national mood, or how the public perceives issues. The mood does not always reflect the true opinions of the public. Conflicting organized interests can stop a policy idea. Governments tend to prioritize policy solutions with the perceived balance of support. Intensity of communication factors into perceptions of where the balance vests, but perceptions of the resource availability of organizations also come into play. Here, consensus is not just the diffusion of ideas, but based on bargaining between different interest groups.

The Kingdon framework has previously been used in public health to assess SSB taxation. While the original Kingdon theory addresses only agenda-setting, it has been adapted to include policy adoption and implementation. According to Mosier, this is because the theory is a nonlinear evaluation of conditions surrounding policy issues and can analyze
significant variables, identifying what ultimately leads to adoption of policies.\textsuperscript{31} The Kingdom theory has also been employed to interrogate incremental decision-making,\textsuperscript{32} which can assist in analyzing not only the implementation of the tax but also future increases or decreases in the tax rate, scope, or threshold. We used this adaptation and considered the South African SSB tax policy beyond its successful placement on the policy-makers agenda.

**Data Collection**

We used a single-case study design to explore how, why and with what results, decisions are taken.\textsuperscript{33,34} Case studies are often used in health policy analyses where the researcher cannot control the outcome of a phenomenon.\textsuperscript{33,34} Other studies using the Kingdom theory for analysis have also relied on single-case studies.\textsuperscript{35,36}

Several data sources were utilized, including statements during hearings of the legislature, both outside and during the formal processes of adopting the SSB tax policy and stakeholder submissions to parliament during public participation processes. These documents were obtained from the Parliamentary Monitoring Group (PMG) database, a digital, open-access database that collates all of South Africa’s parliamentary activities. We used the search terms “sugar tax,” “sugary beverage tax,” “sugar-sweetened beverage tax” and “health promotion levy” to identify relevant documents. Policy proposals and responses were also identified, using the same search terms on the National Treasury website. These documents include all the written submissions or presentations on the bill in various stages by different stakeholders (n = 48), parliamentary committee minutes where detailed discussions of policymakers are captured (n = 27), and treasury response documents which provide detailed feedback on the written submission or presentations by the stakeholders (n = 2).

Public statements, important events, and media coverage were captured by use of an independent media analysis tool administered by Meltwater Media Monitoring, which collated and identified online reports around the SSB tax policy—prior to its proposal, during the adoption process, and at implementation stage. This tool used the following search terms: ("sugar* OR "sugar sweetened" OR sugar-sweetened OR Beverage* OR "sugar* drink*" OR "soft drink*" OR soda OR Sweet*) near/30 (tax* OR levy OR "Health Promotion Levy" OR “Obesity Bill*”). The tool also classified each online report per sentiment (positive, negative, or neutral) using manual vetting by media analysts to ensure accuracy. Over 3,600 online reports were captured using the media analysis tool.

Throughout the process, as documents were reviewed and themes emerged, informed subsequent sampling and data collection occurred. We considered documents from 2002 (the introduction of an initial and later repealed soda tax) to April 2020, which allowed us to review two budget cycles post policy implementation.

**Analysis**

We considered the submissions made by each stakeholder during the public hearings, and the reception by members of the committees who represent the policy-makers during these hearings. We grouped the stakeholders, by their main activities, into the following groups: academia, civil society, health organization, industry, industry association, industry-funded research organization, labor, and other. We considered the overall sentiment of the submission (supportive, supportive with certain key exceptions, opposed, or neutral) of each stakeholder group to construct Table 1. We coded the sentiments of the committee members according to their political affiliation (supportive, opposed, or neutral) to construct Table 2. We relied on quantitative results, using the independent media analysis tool, to reflect media sentiment.

Using the Kingdom theory, the data were arranged chronologically to review how the problem, policy, and politics streams converged to the agenda-setting, passing and, finally, the incremental adjustment of the SSB tax policy. It was also used to build a comprehensive timeline for the three phases of the tax policy: agenda-setting, adoption, and implementation (Figure 1).

We analyzed the data, using the three Kingdon streams.

**Kingdon Multiple Streams Analysis**

**Background**

In 2002, South Africa phased out an existing tax on soft drinks and mineral water, which was used to raise revenue, but was not aimed at promoting health.\textsuperscript{37,38} The tax was phased out due to lobbying efforts by the beverage industry.\textsuperscript{37,38} In 2016, the Minister of Finance announced that an SSB tax would take effect from April 2017.\textsuperscript{17} In July 2016, the National Treasury Department circulated a discussion document, which contained a policy for a proposed excise tax to be levied on each gram of added sugar in SSBs, which roughly equated to a 20% tax on the most popular soft drink.\textsuperscript{37} The excise tax was not to be applied to beverages that derive sugar from only intrinsic sugars, such as fruit juices.
Table 1. Overview of stakeholder submissions stance on the SSB tax as mechanism to address obesity.

| Stakeholder submissions | Opposed (n = 17) | Oppose in part (n = 6) | Neutral (n = 2) | Support (n = 23) |
|--------------------------|------------------|------------------------|----------------|-----------------|
| Percentage (%)           | 35%              | 12.5%                  | 4.1%           | 47.9%           |
| Academia (n = 7)         | 0                | 0                      | 0              | 7               |
| Civil Society (n = 8)    | 0                | 0                      | 0              | 8               |
| Health Organization (n = 5)| 0              | 0                      | 0              | 5               |
| Industry (n = 9)         | 5                | 4                      | 0              | 0               |
| Fruit juice and concentrates industry (n = 5) | 1 | 4 | 0 | 0 |
| Other (=4)               | 4                | 0                      | 0              | 0               |
| Industry association (n = 11)| 10            | 1                      | 0              | 0               |
| Fruit juice and concentrates industry (n = 1) | 0 | 1 | 0 | 0 |
| Other (=10)              | 10               | 0                      | 0              | 0               |
| Industry-funded research (n = 3) | 1 | 1 | 1 | 0 |
| Funded by fruit juice and concentrates industry (n = 1) | 0 | 0 | 1 | 0 |
| Funded by other (n = 2)  | 1                | 1                      | 0              | 0               |
| Labor (n = 3)            | 1                | 0                      | 0              | 2               |
| Other (n = 2)            | 0                | 0                      | 1              | 1               |

Source: Authors construction.

Table 2. Overview of policy maker view on the SSB tax as mechanism to address obesity.

| Political party | Pro-tax | Anti-tax | Neutral | Supports tax but wants specific exclusions |
|-----------------|---------|----------|---------|------------------------------------------|
| ANC1            | 62%     | 3%       | 32%     | 3%                                       |
| DA2             | 22%     | 0%       | 56%     | 22%                                      |
| EFF3            | 50%     | 0%       | 50%     | 0%                                       |
| NFP4            | 100%    | 0%       | 0%      | 0%                                       |

1African National Congress; 2Democratic Alliance; 3Economic Freedom Fighters; 4National Freedom Party

Source: Authors construction.

Figure 1. Phases of SSB tax development.

The Problem Stream

Awareness of the Problem: Consistent Messaging from Policy Entrepreneurs and Public Dissemination

In 2012, more than 8,000,000 South Africans were obese, and there was a steep increase in prevalence in the following years.56 In response, the Department of Health published the Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013–17.7 This document highlighted the link between sugar consumption and unhealthy diets, resulting in non-communicable diseases. It also canvased taxes on unhealthy foods, such as foods high in sugar, as a cost-effective policy intervention. Members of academia, civil society and health organizations were credited, in the document, for determining the direction of the Strategic Plan. A 2015 study on the cost of inaction on SSB consumption was picked up by the media, resulting in a collective reach exceeding 300 million readers.59–61 Opinion pieces by, or interviews with, members of academic institutions and health organizations directly targeted the messaging about the rise of obesity and the role of excessive sugar intake to the public.61 The Healthy Living Alliance (an advocacy group) continued public messaging on the link between obesity and SSB consumption in the media.62 The same players also undertook joint messaging efforts to promote a SSB tax, such as directing a public letter to the National Treasury Department and garnering support from various individuals and organizations.63 A call, by the WHO, on governments to intervene to decrease the consumption of SSBs also received media attention.1 This messaging was picked up by policymakers during the public debates about the proposed SSB tax and received favorable responses.44 Public debates often occurred where policymakers with a health background were present—for example, in the health portfolio committee of the National Assembly.
These policymakers engaged with evidence presented by public health experts and commented on the consistency of evidence, with the chairperson of one public hearing commenting that he was amazed that the “not a single health expert had said anything contrary to the evidence presented” and that “the people who did not have vested interests were all taking one position on the SSB tax.” However, messaging related to the inclusion of 100% fruit and vegetable juices was inconsistent and, ultimately, the final tax policy excluded those products.

**Stable Political Landscape**

In 2011, the then Minister of Health, Dr. Aaron Motsoaledi, expressed his concern about the growing problem of NCDs in South Africa at several forums, including before the United Nations General Assembly and the South African Summit on the Prevention and Control of Non-Communicable Diseases. Dr. Motsoaledi was the SA Minister of Health from 2009 to 2019, as a member of the African National Congress (ANC). The ANC has been the governing political party since 1994. Within the ANC, NCDs have enjoyed specific focus since 2012. Dr. Motsoaledi’s priorities shifted from HIV/AIDS to NCD prevention, as antiretroviral therapy increased the lifespans of HIV-infected individuals and NCD comorbidities became a more pressing issue. This shift was driven by a need to reduce the overall disease burden in South Africa. Dr. Motsoaledi specifically identified the need to improve South African diets, and passed his first major intervention in 2013 in the form of mandatory salt reduction regulations.

In 2015, a minority political party, the Congress of the People (COPE), asked about the potential introduction of a sugar tax during a question and answer session in Parliament. This was favorably received, and Dr. Motsoaledi acknowledged the WHO call for fiscal interventions in NCDs. It is noteworthy that COPE also generated significant media attention by publicly appealing to Dr. Motsoaledi to obtain the screening rights to an Australian documentary, “That Sugar Film,” which highlights the role of sugar in various health problems, and called on national dissemination of the documentary. When facilitating public debates, the available information on the settings of the various committees indicates that they were all chaired by members of the ANC. In addition, during the public debates, the majority of members of the ANC supported the tax policy, with negligible active opposition (see Table 2). This is not surprising given that the ANC parliamentarians take policy directives from top-party officials and therefore align with party policy objectives. The bill containing the HPL was passed by majority vote in the National Assembly (ANC held 62% of the seats) and in the National Council of Provinces (ANC delegates = 66.6%). This continuity of stakeholders in government and the power of those stakeholders saw NCD prevention quickly rise on the agenda, with a tax solution being developed and implemented soon thereafter.

**Uncertainty Relating to the Goal of Tax as a Dual Public Health Intervention and Revenue-raising Mechanism**

The invitation for public comment linked the tax policy with the goal of combating obesity due to the overconsumption of sugar. In response, almost all the stakeholders—pro or anti-tax—engaged in the dialogue on obesity. Most conceded that obesity was a growing concern in South Africa and that measures should be implemented in response. Initially, the Treasury Department estimated, in the policy document, that the implementation of a tax solution would cost the state 20 cents per capita, rather than raise revenue. The draft Bill linked the goal of the tax policy with NCD prevention. Throughout the public participation process, the National Treasury Department highlighted that the primary function of an SSB tax was to address health concerns and not to raise revenue.

However, this was challenged by some stakeholders during the parliamentary submissions. A report by a think tank, titled “A Stealth Tax, not a Health Tax,” expressly challenged this narrative. It was later revealed that this report was partially funded by Coco-
Cola.49 The main opposition party also challenged the tax as a revenue-raising mechanism, in the media. A study on the attitudes and perceptions of urban South Africans toward the SSB tax reported that more than half of the participants believed that the SSB tax was a disguised way of raising additional government revenue.50 During public comment, this distinction was also addressed, with industry and labor organizations challenging the motive for introducing the tax.

Stakeholders across various sectors indicated that the health goal would be clearer and that passing the tax policy would be eased if some of the revenue was earmarked for health promotion activities. After the implementation of the tax policy, reports of the increase in revenue and subsequent investment by the Department of Health of some of those funds in a public health awareness campaign to complement the tax, was reported in the media.

The Policy Stream

Introducing a Tax as an Appropriate Answer
The experience of the United Kingdom and Mexico in implementing an SSB tax to combat NCDs, along with a call from the WHO to take action, such as introducing an SSB tax, garnered support in South Africa from health professionals, academia, and civil society.

The Minister of Health’s NCD Strategic Plan proposed the use of fiscal measures to combat unhealthy diets.7 The final indication that tax as a policy solution was part of government parlance was the Minister of Finance’s suggestion of a tax on SSBs during his 2016 budget speech.17

At the time of The National Treasury Department’s proposal, a tax solution was the clear policy formulation. The SSB tax was proposed, and subsequently tabled in Parliament, as an additional excise tax, which meant that it formed part of several fiscal changes suggested by government after the budget speech. The majority of the stakeholder submissions to Parliament supported the tax solution, either wholly or with specific suggestions for its scope or structure (Table 1). Policy makers also broadly supported the introduction of an SSB tax (Table 2).

The Structure of the Tax: Feasibility and Acceptability
At the stage of introducing a policy document (July 2016), the proposed tax rate was 20%. This was in line with the consensus amongst tax proponents, based on published tax modeling research specific to South Africa, and a report from a WHO technical meeting, supporting a tax rate of 20–50%.11,51

Excise taxes are a widely used and accepted means of reducing the consumption of unhealthy goods, such as alcohol and tobacco.52 The implementation of an excise tax has several benefits. First, government can rely on existing tax structures to collect and administer the taxes: the tax can be structured using known processes and tax legislation, and can be administered using a well-established excise tax department. Second, lessons from its use in alcohol and tobacco control, where evidence-based strategies and guidelines have emerged, can be used.51,53 One such lesson is the regular upward revision of the tax rate, adjusted for inflation.51,52

Third, excise taxes, or “sin taxes,” are also a tool to express condemnation and flag the unhealthy nature of a product, and encourage reformulation of products to reduce harmful ingredients.51 As an example, during the adoption process of the tax and post-implementation, SSB producers have introduced a range of reformulated or “diet” products. Fourth, the use of an excise tax increases government revenue, which increases its acceptability and feasibility to policymakers.29

During the public participation process, there was detailed discussion about the structure of the tax, and some structural changes were introduced. The first 4 mg of sugar per 100 mg product were not taxed to alleviate the administrative burden of collecting the tax, rather than using other mechanisms to compensate for intrinsic sugars. The tax rate was also revised down from 2.29 cents per gram to 2.1 cents per gram. National Treasury indicated that the introduction of the threshold and the lowering of the tax is in direct response to concerns—raised by industry actors during the adoption process—about the impact of the tax on jobs.54

Inertia? Increasing the Tax after It Was Successfully Adopted
To ensure the efficacy of an excise tax solution, regular inflation-related revisions are required.51,52 The tax policy was passed in 2017 and the revenue service was to start collecting the tax in April 2018. In 2019, the sugar tax was increased by 10 cents to fall in line with an inflation rate of 5.2%. This increase was despite a reduction in positive media sentiment toward the tax (Figure 2), reports of growing public skepticism toward the tax, and continued industry and labor messaging on the negative impact of the tax. However, once a policy has been implemented, it does not simply disappear as an agenda item.31,32 This “staying power” is called inertia and has been previously incorporated into discussions on SSB taxation.31,32

A similar increase in the tax did not occur in 2020 although, in that year, excise taxes on alcohol and tobacco were raised, and there was increased messaging to hike the tax to 20% by civil society organizations, such as the Healthy Living Alliance.55,56
The Politics Stream

Perceptions of the National Mood and the Framing of the Debate as Health versus Jobs

Before the announcement that the government will be introducing a SSB tax, media reflection of the sentiment toward a proposed SSB tax was overwhelmingly positive, with very little negative coverage (see Figure 3). Health professionals and organizations advocated for the tax policy to combat obesity, specifically in children. An SSB tax was seen to align with successful policies in other countries and excessive sugar consumption was topical; “sugar addiction” became widely discussed in the media. Government had expressed a positive opinion toward a possible tax. Some negative sentiment from industry was detected with SSB companies claiming that a tax would infringe on the autonomy of consumers and, to a lesser extent, a concern over job losses was expressed. However, a significant shift in sentiment occurred with the proposal of the tax by the Minister of Finance. Trade unions and industry associations became active in opposing the tax due to potential job losses and the perception that the tax would debilitate the economy. Support from health professionals increased, along with that of members of academia and political parties, favoring the tax as a necessary health intervention, as well as a revenue-raising mechanism.

The issue of job losses was a central discussion point around the tax. The National Treasury Department acknowledged a potential loss of 5,000 jobs. Industry and labor unions disagreed and projected a much higher impact on employment, some estimating job losses as large as 60,000. Certain pro-tax stakeholders claimed that this argument was a ‘straw man,’ with job losses being willfully overestimated. However, the question was formulated as a trade-off between health and jobs. Members of the parliamentary committee in the National Assembly that considered the tax from different political parties largely agreed that a tax solution was necessary; the concern related to whether a tax would be effective and what the impact on employment would be. Members of the committee were heavily influenced by evidence on the efficacy of taxes presented by academics, health organizations, and civil society, frequently making positive comments on its utility in framing the discussion. However, even some of the clearest proponents of the tax policy in the committee expressed concerns about jobs and cited this as complicating the decision on the policy.

Negative media sentiment reduced throughout the legislative process and industry started making on-the-ground changes to products in anticipation of the tax being passed, by reformulating their products to contain less sugar. Industry also frequently declared to the committee that they were taking measures to effectively reduce the potential harms of their products. Public sentiment was reflected as pro-tax according to the media (see Figure 4). Allegations of foul play from industry made the news, with members of parliament involved in the HPL allegedly receiving threats, and concerns over misleading evidence and interpretation by tax opponents. The process also revealed allegations that members from the sugar industry were involved in advocating harmful uses of sugar, such as prescribing it to combat diabetes.

The tax rate was reduced and a threshold of 4 mg was introduced, with the primary motivator being to reduce the potential impact on jobs. Here, industry arguments on the impact on employment and the

![Figure 3](image-url)
economy significantly diluted the tax structure as a “compromise” between health and economic concerns.

Immediately after passing the sugar tax Bill, media sentiment plummeted, with much of the press citing the negative effects on the sugar industry in keeping with the theme of job losses. Consequently, the tax has been adjusted for inflation only once since the law was promulgated.

**Regulatory Failings in Other Government Departments after the Passage of the Tax Policy**

After the adoption of the tax policy, backlash from the sugar industry was largely coupled with concerns relating to cheap sugar imports from other countries impacting the local sugar market. Sugar imports from Brazil alone quadrupled in the year prior to the implementation of the tax policy. The local sugar industry was concerned about insufficient tariff protection. Similarly, a costly administrative error was reported, where sugar imports were accidentally made duty free. This was paired with delays in amending the import duty applicable to sugar. Globally, sugar prices also decreased significantly and local sugar cane farmers were emerging from a serious drought. This led to several reports of the potential collapse of the South African sugar industry. Often, the sugar industry will address these complaints along with lobbying, to reduce or remove the SSB tax. One industry association, the South African Cane Growers’ Association, was very vocal, and their activities resulted in several negative news articles about the HPL. It is possible that this contributed to the failure to revise the SSB tax upwards for the 2020/2021 fiscal year.

**Discussion**

We observed a few factors that contributed to successful agenda-setting and consequent adoption of the tax policy: continuity within the policy maker, consistent evidence-based messaging from advocates, and the feasibility and acceptability of an excise tax as a policy solution. However, the emergence of a strong narrative about employment and economic effects led to some policy dilution. We also observed how policy weaknesses in other sectors can impact narratives about a policy solution post implementation.

**The Benefit of Continuity**

Similar to the Australian experience, the South African public and policy-maker’s awareness of the growing obesity problem was not triggered by a particular event, but through the publication of national health data, showing steep increases in obesity rates. In Australia, a change in political leadership slowed the focus on combating consumption of SSBs. In France, a change of political leadership and continued political in-fighting undermined the initial passing of an SSB tax policy (although a tax policy was later successfully passed). In comparison, in South Africa, the same political party and key government officials remained in office from the time of the first government comments hinting at an SSB tax, through to the first phases of the policy implementation. These key officials had sufficient time to develop a multi-pronged NCD strategy, a milestone of which was the successful passage and implementation of sodium restrictions. They also benefitted from internal party solidarity (similar to the experience in Mexico with the Partido Revolucionario Institucional

![Figure 4. Media sentiment toward the SSB tax policy: 2017–2019 (April). Source: Meltwater, 2020.](image-url)
voting along policy lines and supporting the SSB proposal of President Enrique Peña Nieto) which led to guaranteed majorities in Parliament.\textsuperscript{63} It was therefore possible for the “problem” of increased overweight and obesity to be immediately addressed with a possible policy solution—a tax—and debated and placed through legislative processes in quick succession.

\textbf{Contributing to the Acceptability of the Tax through Altering Elements of Its Structure}

The use of an excise tax mechanism as a health intervention in line with international experiences relating to increasing acceptability and feasibility of policy interventions.\textsuperscript{14,25} However, questions emerged about the true purpose of the tax. While the revenue-raising function of an SSB tax has proven to increase its appeal in Denmark, Hungary, Finland, Mexico, Fiji, and Samoa,\textsuperscript{21,25,31,63} opponents of the tax policy in South Africa used this doubt about the tax’s purpose to attack the authenticity of the public health goal. This goes against experiences in other countries, such as France, where industries seem to favor ambiguity in the stated goal of the tax.\textsuperscript{64} However, evidence suggests that the clear earmarking of tax revenue can engender more public support.\textsuperscript{65} The failure to earmark the tax revenue was an obvious weakness in the tax proposal, and stakeholders across various sectors called for the ring-fencing of tax revenue for health promotion purposes. This failure also contributed to the ambiguity of the tax purpose. Evidence suggests that clear and initial earmarking of the SSB tax revenue would have removed this basis for industry opposition and potentially positively contributed to the acceptability of the tax policy. It is therefore useful for policy entrepreneurs to consider ring-fencing taxes in their initial messaging.

\textbf{Industry Narrative}

The South African experience of industry questioning the efficacy of SSB taxes is similar to those of other countries.\textsuperscript{21,25} Excluding 100% fruit and vegetable juices from the scope of the tax are in line with a generally observed hesitancy among policymakers to widen the scope of the tax.\textsuperscript{21,25} However, policymakers in South Africa did not endorse any position on whether 100% juices are inherently more beneficial to consumers; nor did they state that they were excluded to promote their consumption as a substitute for SSBs. Rather, the exclusion was acknowledged to be based on the potential economic impact on the local fruit industry, which is a very important economic contributor in certain rural areas in South Africa.

Unlike in the US, Australia, Hungary, and France, the SSB tax debate in South Africa did not follow a health versus individual autonomy narrative.\textsuperscript{21,25,26} However, industry mimicked international trends to uniformly combat an SSB tax policy, using job losses and revenue reduction as arguments against the policy.\textsuperscript{26} The sugar cane industry predictably proved to be a loud voice in the debate, similar to other sugar-growing countries.\textsuperscript{26} Industry was fragmented in terms of proposed policy solutions, with some advocating for the exclusion of their products (100% juice producers), the implementation of sugar caps (SSBs producers), or buffering of any policy action through the provision of subsidies (sugar cane producers). This fragmentation has been observed in other successful experiences in the adoption of SSB tax policies.\textsuperscript{25} In contrast, academia, civil society, and health organizations acting as policy entrepreneurs engaged in consistent messaging. Experience shows that dissonance from policy entrepreneurs can hinder government’s ability to find an appropriate SSB solution.\textsuperscript{26,66}

In countries like France, SSBs were not seen as a local product.\textsuperscript{25} However, where local interests are affected, policymakers are sympathetic to economic concerns.\textsuperscript{22} This ultimately rang true in South Africa, where industry narratives successfully reduced the scope of the tax policy, led to the introduction of a threshold of sugar content before sugar became taxable, and reduced the tax rate.

\textbf{Impact of Government Failures in Other Sectors}

The failings of government to adequately administer and quickly revise their import duties related to sugar exports severely endangered the local sugar cane market. An anti-tax narrative was often coupled with reporting on these events, and positive media sentiment toward the SSB tax plummeted. It is possible that these failings in sectors, such as trade and industry impacted the failure to adjust the SSB tax in 20/21. The South African experience illustrates the interrelatedness of policy making for public health with other sectors. It also illustrates, to policy entrepreneurs, that the policy battle is not over, despite the successful adoption of the policy. Policy inertia, or the ability of a policy item to remain on the agenda once it has been adopted, is not enough to keep an item on the policy agenda after its implementation. Other factors might lead to a failure to revise a fiscal policy to account for inflation (or even to strengthen the policy).
Limitations

This study consisted of secondary data analysis and desk-based review, methods that have strengths and limitations. We did not conduct any primary data collection. We acknowledge this as a limitation of the study as, in some instances political economy analysis supplements desk-based review with key informant interviews. The use of desk-based review was informed by the extensive data on the HPL that was already publicly available and was supplemented by secondary data analysis of media and other stakeholder interviews. We relied on this secondary data analysis to minimize recall bias given the efflux of time between the HPL and when this research began as well as difficulties in accessing key stakeholders during the COVID-19 pandemic. We were able to achieve saturation in the findings through this analysis and do not consider the lack of primary data collection a significant limitation. As mitigation, the authors extensively reviewed the publically available and complete transcripts of parliamentary submissions, academic literature that incorporated interviews and repeated public comments and parliamentary submissions from key stakeholders.

Conclusion

South Africa’s policy landscape benefitted from political stability and continuity in key roles, which assisted in the passage of the SSB tax policy. Civil society, academia, and health organizations acted as policy entrepreneurs, and assisted the policy process during the agenda-setting and adoption phase to identify the problem, counter the industry narrative (especially as reported in the media), and provide guidance on the technical feasibility and acceptability of the policy, all of which was guided by published peer-reviewed evidence. The consistent messaging from these policy entrepreneurs was important for the ultimate success of the policy proposal. However, local industry involved in the SSB value chain succeeded in either escaping the tax (100% fruit and vegetable juice producers) or significantly diluting the tax through the introduction of a tax threshold or a reduction in the rate.1

Note

1. Sourced from independent media analysis tool.

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Authors’ Contributions

PK prepared the first draft of the manuscript and collected data. PK, SAK, AT, and SG undertook the data analysis. PK drafted the final manuscript with inputs from SAK, AT, and SG. All the authors contributed by commenting on the draft report. All the authors saw and approved their authorship.

Availability of Data and Material

The data that support the findings of this study are available from the corresponding author [PK] upon reasonable request.

Disclosure Statement

The authors are affiliated with the SAMRC/WITS Centre for Health Economics and Decision Science, PRICELESS SA, School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, which engaged in the public participation process leading up to the adoption and subsequent revision of the Health Promotion Levy.

Ethics Approval and Consent to Participate

Not applicable

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References

1. Global Burden of Disease 2017 Diet Collaborators. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2019;393:1958–72. doi:10.1016/S0140-6736(19)30041-8. PMID: 30954305.
2. Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, Moodie ML, Gortmaker SL. The global obesity pandemic: shaped by global drivers and local environments. Lancet. 2011;378:804–14. doi:10.1016/S0140-6736(11)60813-1. PMID: 21872749.
3. Rivera JA, Barquera S, Gonzalez-Cossio T, Olaiz G, Sepulveda J. Nutrition transition in Mexico and other Latin American countries. Nutr Rev. 2004;62(7):49–57. doi:10.1111/j.1753-4887.2004.tb00086.x. PMID: 15387482.

4. World Health Organization. Food and agriculture organization. Geneva (Switzerland): WHO; 2017. Joint WHO/FAO report: diet, nutrition and the prevention of chronic diseases.

5. Tugendhaft A, Manyema M, Veerman L, Chola L, Labadarios D, Hofman K. Cost of inaction on sugar-sweetened beverage consumption: implications for obesity in South Africa. Public Health Nutr. 2016;19(13):2296–304. doi:10.1017/S1368946216000306. PMID: 26494269.

6. Shisana O, Labadarios D, Rehle T, Simbayi L, Zuma K, Dhansay A, Reddy P, Parker W, Hoosain E, Naidoo P, et al. South African National Health and Nutrition Examination Survey (SANHANES-1). Cape Town (South Africa): HSRC Press; 2013

7. National Department of Health, Republic of South Africa. Strategic plan for the prevention and control of non-communicable diseases 2013-17. Pretoria (South Africa): National Department of Health; 2013 [accessed 2020 Nov 8]. https://extranet.who.int/ncddccs/Data/ZAF_B3__NCDs_STRAT_PLAN_1_29_1_3%5B2%5D.pdf.

8. Malik VS, Popkin BM, Bray GA, Desprès JP, Hu FB. Sugar-sweetened beverages, obesity, type 2 diabetes mellitus, and cardiovascular disease risk. Circulation. 2010;121(11):1356–64. doi:10.1161/CIRCULATIONAHA.109.876185. PMID: 20308626.

9. Malik VS, Pan A, Willett WC, Hu FB. Sugar-sweetened beverages and weight gain in children and adults: a systematic review and meta-analysis. Am J Clin Nutr. 2013;98(4):1084–102. doi:10.3945/ajcn.113.058362. PMID: 23966427.

10. World Health Organization. Taxes on sugary drinks: why do it? Geneva (Switzerland): WHO; 2016.

11. Manyema M, Veerman LJ, Tugendhaft A, Labadarios D, Hofman KJ. Modelling the potential impact of a sugar-sweetened beverage tax on stroke mortality, costs and health-adjusted life years in South Africa. BMC Public Health. 2016;16:405. doi:10.1186/s12889-016-3085-y. PMID: 27240422.

12. Briggs ADM, Mytton OT, Kehlbacher A, Tiffin R, Rayner M, Scarborough P. Overall and income specific effect on prevalence of overweight and obesity of 20% sugar sweetened drink tax in UK: econometric and comparative risk assessment modelling study. BMJ. 2013;347:f6189. doi:10.1136/bmj.f6189. PMID: 24179043.

13. Briggs ADM, Mytton OT, Madden D, O’Shea D, Rayner M, Scarborough P. The potential impact on obesity of a 10% tax on sugar-sweetened beverages in Ireland, an effect assessment modelling study. BMC Public Health. 2013;13:860. doi:10.1186/1471-2458-13-860. PMID: 24044370.

14. Claro RM, Levy RB, Popkin BM, Monteiro CA. Sugar-sweetened beverage taxes in Brazil. Am J Public Health. 2012;102(1):178–83. doi:10.2105/AJPH.2011.300313. PMID: 22095333.

15. Cabrera Escobar MA, Veerman JL, Tollman SM, Bertram MY, Hofman KJ. Evidence that a tax on sugar sweetened beverages reduces the obesity rate: a meta-analysis. BMC Public Health. 2013;13:1072. doi:10.1186/1471-2458-13-1072. PMID: 24225016.

16. Colchero MA, Rivera-Dommarco J, Popkin BM, Ng SW. In Mexico, evidence of sustained consumer response two years after implementing a sugar-sweetened beverage tax. Health Aff (Millwood). 2017;36:564–71. doi:10.1377/hlthaff.2016.1231. PMID: 28228484.

17. Minister of Finance. Budget speech 2016. Pretoria (South Africa): Treasury; 2016.

18. Colchero MA, Popkin BM, Rivera JA, Ng SW. Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study. BMJ. 2016;352:h6704. doi:10.1136/bmj.h6704. PMID: 26738745.

19. Colchero MA, Molina M, Guerrero-López CM. After Mexico implemented a tax, purchases of sugar-sweetened beverages decreased and water increased: difference by place of residence, household composition, and income level. J Nutr. 2017;147:1552–57. doi:10.3945/jn.117.251892. PMID: 28615377.

20. Fooks GJ, Williams S, Box G, Sacks G. Corporations’ use and misuse of evidence to influence health policy: a case study of sugar-sweetened beverage taxation. Global Health. 2019;15(1):56. doi:10.1186/s12992-019-0495-5. PMID: 31551086.

21. Hagenaaars LL, Jeurissen PPT, Klazinga NS. The taxation of unhealthy energy-dense foods (EDFs) and sugar-sweetened beverages: an overview of patterns observed in the policy content and policy context of 13 case studies. Health Policy (New York). 2017;121:887–94. doi:10.1016/j.healthpol.2017.06.011. PMID: 28711301.

22. Choy L, Dela Cruz MR, Hagiwara M, Hee Hoo H, Peacock T, Pearce MG, Usagawa T, Sentell T. Insights in public health: taxing sugar sweetened beverages to improve public health: policy action in Hawaii. Doctoral Health Policy Seminar, Spring 2013. Hawaii J Med Public Health J. 2013;72(8):286–91. PMID: 24349893.

23. Roache SA, Gostin LO. Tapping the power of soda taxes: a call for multidisciplinary research and broad-based advocacy coalitions – a response to the recent commentaries. Int J Health Policy Manage. 2018;7:674–76. doi:10.15171/ijhpm.2018.30. PMID: 29996590.

24. World Cancer Research Fund. Building momentum: lessons on implementing a robust sugar sweetened beverage tax. London (United Kingdom): WCRF; 2018.

25. Le Bodo Y, Etélie F, Gagnon F, De Wals P. Conditions influencing the adoption of a soda tax for public health: analysis of the French case (2005–2012). Food Policy. 2019;88:101765. doi:10.1016/j.foodpol.2019.101765.

26. Sainsbury E, Magnusson R, Thou A, Colaguiri S. Explaining resistance to regulatory interventions to prevent obesity and improve nutrition: a case-study of a sugar-sweetened beverages tax in Australia. Food Policy. 2020;93:101904. doi:10.1016/j.foodpol.2020.101904.
27. Myers A, Fig D, Tugendhaft A, Mandle J, Myers J, Hofman KJ. Sugar and health in South Africa: potential challenges to leveraging policy change. Glob Public Health. 2017;12(1):98–115. doi:10.1080/17441692.2015.1071419. PMID: 26315455.

28. Stacey N, Mudara C, Ng SW, van Walbeek C, Hofman KJ. Sugar-based beverage taxes and beverage prices: evidence from South Africa’s health promotion levy. Soc Sci Med. 2019;238:112465. doi:10.1016/j.socscimed.2019.112465. PMID: 31472286.

29. Kingdon J. Agendas, alternatives, and public policies. New York (United States): Addison-Wesley Longman; 1995.

30. Edalati S, Omidvar N, Roudsari AH, Ghodsi D, Zargaran A. Development and implementation of nutrition labelling in Iran: a retrospective analysis. Int J Health Plann Manage. 2020;35(1):c28–c44. doi:10.10102/hpm.2924. PMID: 31709620.

31. Mossier SL. Cookies, candy and coke: examining state sugar sweetened-beverage tax policy from a multiple streams approach. Int Rev Public Administration. 2013;18(1):93–120. doi:10.1080/12294659.2013.1080524.

32. Travis R, Zahariadis N. A multiple stream model of U.S. foreign aid policy. Policies Study J. 2002;30(4):495–514. doi:10.1111/j.1541-0072.2002.tb02160.x.

33. Yin RK. Case study research: design and methods. In: basic types of designs for case studies. 5th ed. Thousand Oaks (CA): Sage Publications; 2014.

34. Mattison CA, Lavis JN, Hutton EK, Dion ML, Wilson MG. Understanding the conditions that influence the roles of midwives in Ontario, Canada’s health system: an embedded single-case study. BMC Health Serv Res. 2020;20:197. doi:10.1186/s12913-020-5033-x. PMID: 32164968.

35. Llamosas C, Upham P, Blanco G. Multiple streams, resistance and energy policy change in Paraguay (2004–2014). Energy Res Soc Sci. 2018;42:226–36. doi:10.1016/j.erss.2018.03.011.

36. Jones MD, Peterson HL, Pierce JF, Herweg N, Bernal A, Lamberta RH, Zahariadis N. A river runs through it: a multiple streams meta-review. Policy Stud J. 2016;44(1):13–36. doi:10.1111/psj.12115.

37. National treasury. Taxation of sugar sweetened beverages. Pretoria (South Africa): Treasury; 2016.

38. Baloyi N. Proposed ‘sin’ tax on sugar sweetened beverages. Werksmans Attorneys; 2016 Oct 5 [accessed 2020 Mar 31]. https://www.werksmans.com/wp-content/uploads/2016/10/061749-WERKSMAN-S-octsain-tax-on-sugar.pdf.

39. Parliamentary Monitor Group. Minister of finance on the 2016 budget; 2016 Feb 25 [accessed 2020 Mar 19] https://pmg.org.za/committee-meeting/22081/.

40. Mabuza E. Proposed tax will discourage poor from drinking more harmful sugary drinks: expert. Times Live; 2016 Oct 5 [accessed 2020 Mar 20]. https://www.timeslive.co.za/sunday-times/news/2016-10-05-proposed-tax-will-discourage-poor-from-drinking-more-harmful-sugary-drinks-expert/.

41. Tugendhaft A, Hofman K. Obesity: why South Africans need to can soft drinks. The Conversation; 2015 Nov 24. [accessed Apr 14]. https://www.news24.com/citypress/news/R23bn-over-nine-years-and-its-only-getting-worse-20150606.

42. TMG Digital. Measures must be taken to address obesity, including sugar tax. Sowetan Live; 2017 May 18 [accessed Apr 14]. https://www.sowetanlive.co.za/news/2017-05-18-measures-must-be-taken-to-address-obesity-including-sugar-tax/.

43. Bring on sugar tax say SA’s top health expert. Health24; 2016 May 09. [accessed 2020 Mar 19]. https://www.health24.com/Diet-and-nutrition/Beverages/bring-on-sugar-tax-say-sas-top-health-experts-20160421.

44. Parliamentary Monitor Group. Taxation of sugar sweetened beverages: public hearings; 2017 Jan 31 [accessed 2020 Feb 19]. https://pmg.org.zacommittee-meeting/2389/.

45. Ndinda C, Ndhlovu TP, Juma P, Asiki G, Kyobutungi C. The evolution of non-communicable diseases policies in post-apartheid South Africa. BMC Public Health. 2018;18(Supp1):956. doi:10.1186/s12889-018-5832-8. PMID: 30168397.

46. Parliamentary Monitor Group. Questions & replies: health; 2015 March 23 [accessed 2020 Feb 19]. https://pmg.org.za/question_reply/549/.

47. Booyens S. Causes and impact of party alliances and coalitions on the party system and national cohesion in South Africa. J Afr Elections. 2014;13(1):66–92. doi:10.20940/JAE/2014/v13i1a4.

48. Institute of Race Relations. Stealth tax, not a health tax; 2016 [accessed 2020 Mar 19]. https://irr.org.za/reports/occasional-reports/files/irr-policy-paper-a-stealth-tax-not-a-health-tax.pdf.

49. Cameron J. Sugar tax research funding scandal: investigation exposes sickly Coca-Cola, IRK links. Biznews; 2016 Dec 7. [accessed 2020 Apr 14]. https://www.biznews.com/health/-2016/12/07/sugar-tax-research-funding/.

50. Bosire EN, Stacey N, Mukona N, Tugendhaft A, Hofman KJ, Norris S. Attitudes and perceptions among urban South Africans towards sugar-sweetened beverages and taxation. Public Health Nutr. 2019;23(2):374–83. doi:10.1017/S1368980019001356. PMID: 31179956.

51. World Health Organization. Fiscal policies for diet and prevention of non-communicable diseases: technical meeting report. Geneva (Switzerland): WHO; 2016. [accessed 2021 May 20]. https://www.who.int/dietphysicalactivity/publications/fiscal-policies-diet-prevention/en/.

52. Chaloupek FJ, Powell LM, Warner KE. The use of excise taxes to reduce tobacco, alcohol, and sugary beverage consumption. Annu Rev Public Health. 2019;40:187–201. doi:10.1146/annurev-publhealth-040218-043816. PMID: 30601721.

53. Bird RM. Tobacco and alcohol excise taxes for improving public health and revenue outcome: marrying sin and virtue? World Bank: health nutrition and population global practice group. Washington (United States): World Bank; 2015. Policy Research Working paper 7500.
54. National Treasury. Response to public comments; 2017 [accessed 2021 Aug 11]. http://www.treasury.gov.za/public%20comments/Sugar%20sweetened%20beverages/2017022701%20-%20QandA%20Tax%20on%20Sugar%20Beverages.pdf.

55. Sehoai R. Consumers’ react to the new sugar tax. IOL; 2018 Apr 4 [accessed Apr 14]. https://www.iol.co.za/lifestyle/health/consumers-react-to-the-new-sugar-tax-14236149.

56. Mathe T. A spoonful of sugar makes taxes go up. Mail & Guardian; 2020 Feb 21 [accessed 2020 Mar 19]. https://mg.co.za/business/2020-02-21-a-spoonful-of-sugar-makes-taxes-go-up/.

57. Omarjee L. Sugar tax could cause over 70 000 job losses – report; 2016 Sep 23 [accessed 2020 May 17]. https://www.news24.com/fin24/economy/sugar-tax-could-cause-over-70-000-job-losses-report-20160923.

58. Wasserman H. Cucumber sprite is now in South Africa–its taste surprised us. Business Insider; 2018 Oct 13. [accessed 2020 June 2]. https://www.businessinsider.co.za/we-tasted-the-new-cucumber-flavoured-sprite-2018-10.

59. Cullinan K. Industry threatens MP over sugar tax. Health-E News; 2017 Nov 22 [accessed Mar 19]. https://health-e.org.za/2017/11/22/industry-threatens-mp-sugar-tax/.

60. Daniels N. Sugar industry strikes, warns of collapse. Jacarandafm; 2018 June 26. [accessed Apr 14]. https://www.jacarandafm.com/news/news/sugar-industry-strikes-warns-collapse/.

61. South Africa Sugar Association v Minister of Trade and Industry and Others. 2017. 4 All SA 555 (GP).

62. Mkentane L. Save our sugar: desperate sugar cane farmers send SOS to Ramaphosa. IOL; 2019 Feb 19. [accessed 2020 Mar 19]. https://www.iol.co.za/business-report/economy/save-our-sugar-desperate-sugar-cane-farmers-send-sos-to-ramaphosa-19249161.

63. James E, Lajous M, Reich MR. The politics of taxes for health: an analysis of the passage of the sugar-sweetened beverage tax in Mexico. Health Syst Reform. 2020;6(1):e1669122. doi:10.1080/23288604.2019.1669122.

64. Landon J, Graff H. What is the role of health-related food duties. London (United Kingdom): National Heart Forum; 2012.

65. Jou J, Nierdeppe J, Barry CL, Gollust SE. Strategic messaging to promote taxation of sugar-sweetened beverages: lessons from recent political campaigns. Am J Public Health. 2014;104(5):847–53. doi:10.2105/AJPH.2013.301679. PMID: 24625177.

66. Roxon N. Interview with the Hon. Nicola Roxon: getting evidence into health policy. Public Health Res Pract. 2017;27(1):2711701. doi:10.17061/php2711701. PMID: 28243667.