



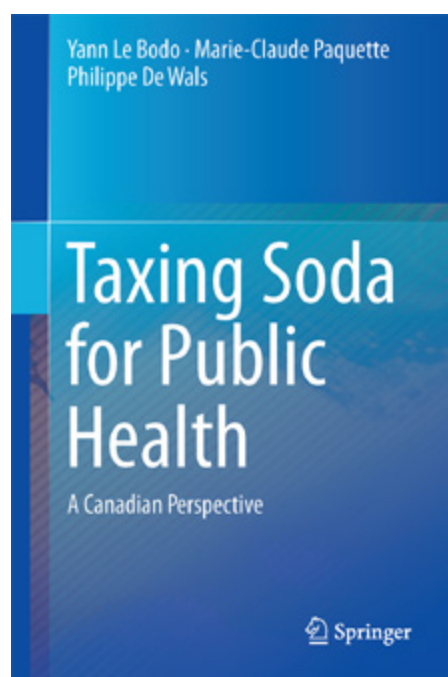
PLATEFORME D'ÉVALUATION
EN PRÉVENTION DE L'OBÉSITÉ
EVALUATION PLATFORM ON
OBESITY PREVENTION



AUGUST 2016

Is it relevant to tax sugar-sweetened beverages in Canada?

Key messages from a comprehensive analysis



Source: Springer International Publishing, 1st ed. 2016, XXII, 242 p.
Book ISBN: 978-3-319-33647-3
E-Book ISBN: 978-3-319-33648-0

Cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are predominant causes of illness and death. About one in five Canadian adults live with at least one of these diseases. This burden significantly affects the quality of life and threatens the sustainability of health care systems. Among multiple causes, unhealthy eating habits play a role and many efforts from a diversity of stakeholders aim to promote the consumption of healthier foods and beverages in the population. However, there is still much room for improvement. Besides other key targets (e.g. promoting fruit and vegetable intakes, limiting salty food intakes), soda or – more broadly - sugar-sweetened beverages (SSBs)* have been a particular focus over the last years because of increasing evidence relating their overconsumption to negative health consequences, their poor nutritive value, a high consumption in youth, and an intense marketing pressure. Although a package of diverse interventions has generally been recommended to tackle this issue (i.e. information, education and regulation), one measure remains particularly controversial: taxation.

In 2012, the Quebec Evaluation Platform on Obesity Prevention, whose support to evidence-based decision-making is part of the mandates, undertook a research project on this issue. The team rapidly observed that the topic had been extensively covered in the scientific literature and the media, but that a global picture in the Canadian context was missing. This was the starting point of an analysis conducted over four years. In 2016, it led to the publication by Springer of the book “Taxing Soda for Public Health: a Canadian Perspective”, which is now available in paper and electronic formats at the following link: www.springer.com/9783319336473.

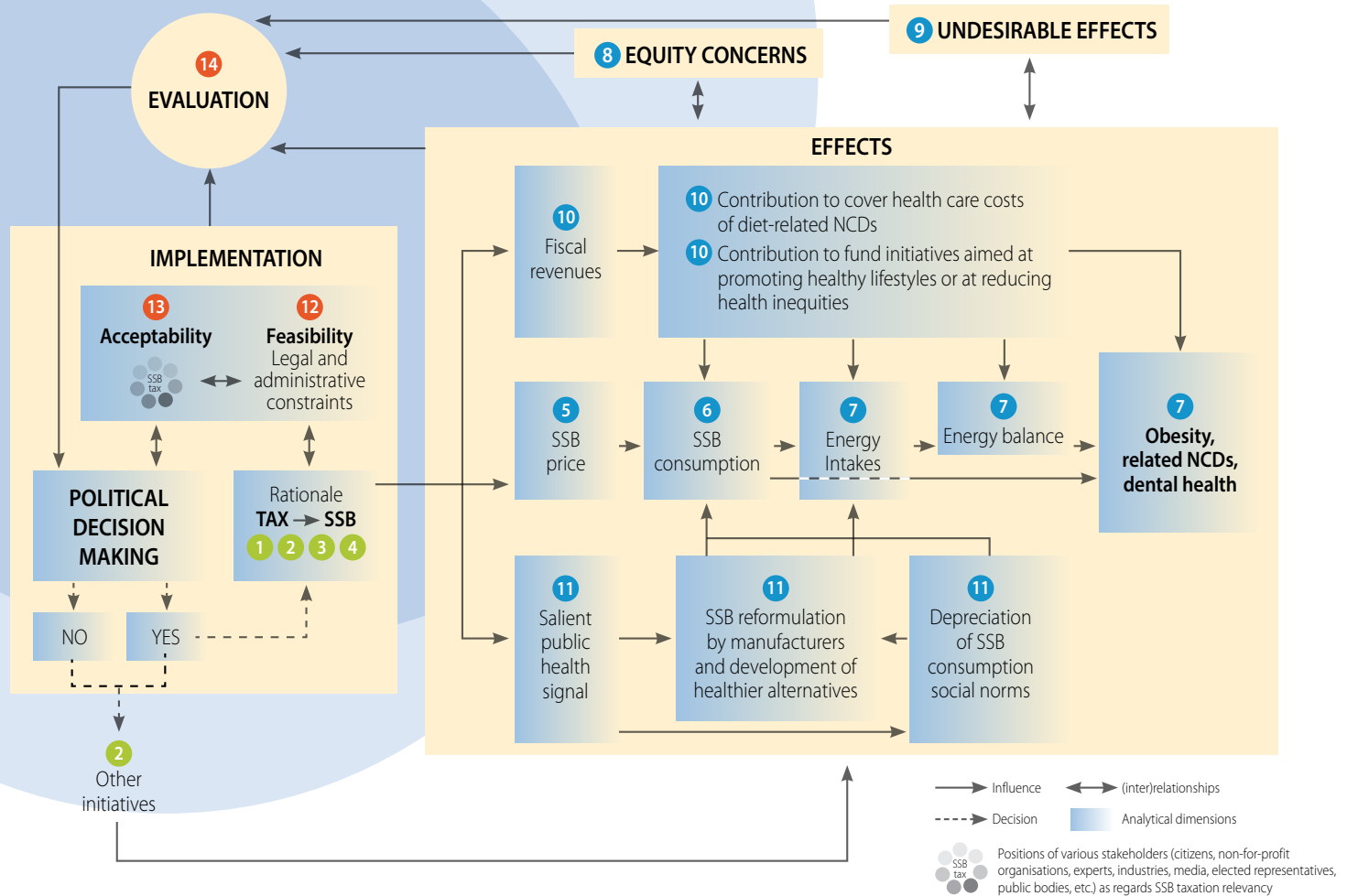
While this book focuses on how the evidence fits into the Canadian context, many of the ideas put forward may be informative for other jurisdictions. After an introductory chapter presenting about 20 cases of soda taxes implemented across the world and detailing the methods used to review evidence from various disciplines, the book is subdivided into three parts: SSB taxation rationale (Part I, Chaps. 2–4), SSB taxation impacts (Part II, Chaps. 5–11) and SSB taxation applicability (Part III, Chaps. 12–14) from a public health perspective. This leaflet summarizes the conclusions of the book in two ways: (1) a graphic representation articulating the 14 areas that have been explored along the book and (2) a table of key messages for each of these areas, corresponding to the different chapters of the book.

The evidence gathered indicates that, provided several considerations are accounted for, a soda tax could be part of a portfolio of nutrition-enhancing policies in Canada. This analysis does not pretend to be definitive, but hopefully brings a constructive and evidence-based contribution to the debate.

Its authors – Yann Le Bodo, Marie-Claude Paquette and Philippe De Wals – from Laval University and the University of Montreal are grateful to the people who have contributed to this work, in particular to the reviewers who have provided insightful comments and suggestions: Emmanuel Guindon (McMaster University) and Barbara von Tigerstrom (University of Saskatchewan).

*The definition of sugar-sweetened beverages varies in the literature, but generally designates non-alcoholic beverages containing added sugars

Relevancy to tax sugar-sweetened beverages (SSBs) as part of a portfolio of nutrition-enhancing policies in Canada: multidimensional perspective and key messages



Source: Le Bodo, Y., Paquette, M.-C., & De Wals, P. (2016). *Taxing soda for public health: a Canadian perspective*. New York, NY: Springer International Publishing (reproduced with permission) – available at www.springer.com/9783319336473

WHY – RATIONALE

1 SUGAR-SWEETENED BEVERAGES AND HEALTH

- Most recent systematic reviews, meta-analyses and experimental studies confirm that SSB overconsumption increases the risk of weight gain, type 2 diabetes, and dental caries.
- SSB consumption is stimulated by an attractive and diversified offer, a widespread distribution, low prices and a strong promotion (especially towards youth).
- SSB consumption represents a significant proportion of sugar intake and daily energy intake in some groups of the Canadian population, youth in particular.
- From a public health perspective, preventing SSB overconsumption in Canada requires specific efforts at a large scale.

2 TAXATION AS A PUBLIC HEALTH INSTRUMENT

- Rather than questioning whether SSB taxation alone is effective in preventing obesity and related chronic diseases, it is more realistic to question whether it can bring a valuable contribution to the issue, as part of a large and comprehensive prevention strategy.
- Many educational initiatives and environmental changes in public places already contribute to prevent SSB overconsumption across Canada. International evidence and recommendations suggest that policies targeting the market environment could bring additional benefits.
- Considering that sugar-sweetened beverages are particularly affordable, taxation has been increasingly suggested as a way to increase price and discourage demand at a large scale.
- The success of taxes applied to other public health domains (e.g. tobacco control), as well as their potential cost-effectiveness, make SSB taxation a policy instrument deserving particular attention.

3 ETHICAL CONCERNS ON SSB TAXATION

- The ethical justification of SSB taxation remains controversial among stakeholders and in the population: this should be carefully considered and debated before implementation on a Canadian ground.
- Several arguments suggest SSB taxation may be ethically defensible: it addresses an acute public health issue; it targets a specific category of food and beverages which is not part of basic groceries; taxation is potentially among the most cost-effective options and may not raise insurmountable concerns in terms of equity, undesirable effects and feasibility.

4 SSB TAXATION LOGICS

- Three SSB taxation intervention logics generally emerge in the literature and could be concurrently pursued.
- The price-induced behavioural logic consists in taxing SSBs as a way to increase their price, decrease consumption and impact the health of the population.
- The fiscal logic consists in taxing SSBs as a way to raise fiscal revenues that may be earmarked for health care, for health promotion activities or for the reduction of health inequities.
- The signal-induced denormalization logic consists in taxing SSBs as a way to send a salient signal to the population and the manufacturers in order to encourage, in a longer term, social norms changes and product reformulation.

WHAT – IMPACT

5 TAXATION EFFECTS ON SSB PRICES

- Overall, there is convincing evidence that the implementation of a significant SSB tax levied on the manufacturers is generally followed by price increases in the short term, sometimes beyond or below the increase theoretically generated by the tax.
- In many cases, it is difficult to disentangle precisely tax effects from other contextual factors. However, evidence from France, Mexico and Berkeley (California) strongly suggests the existence of tax-specific effects on SSB prices.

6 TAXATION EFFECTS ON SSB DEMAND

- Experimental studies in controlled conditions indicate that SSB consumers are sensitive to price change and that a tax has the potential to favour SSB substitution towards healthier beverages.
- In usual market conditions, data analyses from several countries estimate that a 1% SSB price increase is generally accompanied by a 0.8-1.3% decrease in SSB demand. Exploring Canadian data is necessary.
- In places where a 10-20% price hike followed the enactment of soda taxes, SSB demand generally decreased. In most cases, it remains difficult to isolate precisely tax-specific effects from other factors.
- An evaluation of the Mexican soda tax, however, provides sound evidence that an average 9% price increase was associated with SSB purchases that were 6% lower than if no tax had been imposed.
- These encouraging trends will have to be confirmed over the long term.

7 SSB TAXATION EFFECTS ON ENERGY BALANCE AND HEALTH

- A taxed-induced decrease in SSB consumption may be partially compensated by a higher consumption of other caloric foods and drinks. Therefore, SSB taxation objectives on energy balance and health should be stated very carefully.
- Studies simulating a 20% price increase on SSBs and accounting for substitution effects generally predict a positive – although modest – impact on energy balance, but they are based on fragile assumptions. Therefore, substitution effects should be explored from soda taxes implemented across the world.
- Few “real world” evaluations have been conducted, with the exception of Mexico, where evidence suggests that the tax has significantly reduced SSB purchases while favouring water consumption.
- If a tax is to be adopted in Canada, a detailed and robust evaluation plan should be designed ex ante, and preliminary results should be carefully monitored in terms of price change, consumer demand and substitution effects before extending implementation in the longer term.

8 SSB TAXATION DISTRIBUTIONAL EFFECTS

- Evidence suggests that the financial contribution to tax revenues would be relatively modest for most consumers and not much different across income groups. Low-income households consuming large SSB amounts and not prone to reduce their consumption may be more negatively impacted than other consumers.
- As regards SSB taxation health benefits, these are hardly predictable (see point 7) and it remains unclear whether these could be greater in lower-income households and the heaviest SSB consumers. Simulation studies are encouraging, but more research and evaluations will be crucial in this area.
- Inequity concerns surrounding SSB taxation could be somewhat mitigated if the proceeds of a soda tax are truly earmarked for health promotion causes.

9 SSB TAXATION UNDESIRABLE EFFECTS

- Decision-makers have to weigh all SSB taxation potential benefits against potential risks. Among other things, this includes taking into account undesirable effects in terms of administration costs, employment, investment, competitiveness and cross-border shopping.
- Overall, such effects have been weakly documented, but observational studies, simulations and anecdotal evidence suggest that effects of a soda tax on these variables may be relatively limited.
- Provided that other uncertainties are addressed (see other points) and an evaluation of preliminary effects is well designed in advance, these risks may not justify inaction.

10 FISCAL REVENUES FROM SSB TAXATION

- From a public health perspective, taxing SSBs as a way to raise fiscal revenues could be acceptable, realistic and rapidly achievable.
- This fiscal logic could reasonably be accompanied with a behavioural objective to reduce SSB consumption in the population (see point 6).
- If SSB demand decreases significantly over time, a new tax will at worst generate fewer revenues, but it will always be more than if the tax was absent.
- Earmarking tax revenues for health care or for health promotion initiatives could bring additional public health benefits, somewhat mitigate inequity concerns, and increase the acceptability of the tax. It is desirable to ensure that tax revenues will be truly earmarked for such initiatives.

11 SIGNAL EFFECTS OF SSB TAXATION

- Social norms are a significant driver of SSB consumption behaviours, especially in adolescents.
- Parallel data (e.g. from tobacco control) indicate that SSB taxation may work as a signal altering SSB consumption norms, but evidence is limited and counterproductive effects cannot be ruled out.
- Rather than an isolated “signal”, SSB taxation would be better positioned within a comprehensive “denormalization” strategy aimed at influencing knowledge, opinions, attitudes and intentions.
- SSB taxation may also work as a “coercive signal” pushing manufacturers to reformulate existing products or to develop healthier options. Such effects should be further documented. A tax linearly indexed on the sugar content of the beverages or based on a threshold of sugar content above which beverages are taxed may be particularly inciting.

HOW – APPLICABILITY

12 FEASIBILITY OF SSB TAXATION

- Excise duties generally are the more documented and recommended option to tax soda. Introducing such a tax in Canada is likely feasible, but at the federal level only.
- At provincial level, the introduction of a special tax on SSBs sold at retail according to the tobacco and alcohol special tax models is an avenue deserving attention. In particular, the special tax imposed on wine and beer in Quebec grocery and convenience stores suggests transferability to SSB. Nonetheless, the burden it may represent for retailers should be carefully considered.
- Defining the taxation scope would likely raise some issues in Canada since, in the nomenclature, all carbonated beverages are considered regardless of their calorie content and composition.
- Finally, a robust mechanism facilitating the administration and the earmarking of tax revenues for health promotion initiatives and social programs would likely be desirable and feasible in Canada.

13 ACCEPTABILITY OF SSB TAXATION

- The relevancy of health-related food taxes remains debated at international level and in Canada. It often appears to be less popular than other nutritional policies.
- Soda tax proposals are often subject to intense advocacy efforts. Public support for soda taxes generally increases if tax revenues are to be earmarked for health promotion initiatives and social programs.
- In the political arena, the propensity of a “soda tax” to be adopted seems to depend highly on political leadership as well as on budgetary, fiscal and administrative considerations.
- In Canada, SSB taxation has been more intensively debated in Quebec than in other provinces, which may favour the adoption of a tax should a political window of opportunity open.
- A constructive dialogue with stakeholders seems necessary to support decision-making and, eventually, to prevent implementation failures.

14 EVALUABILITY OF SSB TAXATION

- Evaluating the effects and impact of soda taxes is critical to provide evidence with more external validity than what currently provide simulations and experimental trials.
- Uncertainties surrounding soda tax effects make even more essential to plan a robust evaluation. Appropriate methods should be used and corresponding databases should be identified and available.
- In the case of a price-induced behavioural logic, evaluation should focus on SSB price, SSB intakes, energy balance and eventually health outcomes. As far as possible, tax-specific effects should be disentangled from other factors.
- In the case of a fiscal logic, the evaluation would minimally consist in the collection and monitoring of tax revenues as well as in the monitoring of how tax proceeds are earmarked for specific uses.
- In the case of a signal-induced denormalization logic, evaluation may focus on the public awareness of the tax as well as on reformulation and marketing practices of manufacturers.

Source: Le Bodo, Y., Paquette, M.-C., & De Wals, P. (2016). *Taxing soda for public health: a Canadian perspective*. New York, NY: Springer International Publishing (reproduced with permission) – available at www.springer.com/9783319336473