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Commentary

Sugar-sweetened beverage taxation in 2017: a commentary on the reasons behind their quick spread in the EU compared with the USA

Luc L Hagenaars[1,*], Patrick PT Jeurissen[1] and Niek S Klazinga[2]
[1]Scientific Institute for Quality of Healthcare (IQ Healthcare), Radboud University Medical Centre Nijmegen, Postbus 9101, 6500 HB Nijmegen, The Netherlands: [2]Department of Social Medicine, Academic Medical Centre Amsterdam, Postbus, Amsterdam, The Netherlands

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Abstract
In the final issue of *Public Health Nutrition* in 2017, Kathryn Backholer and colleagues provide a clear overview of the spread of taxes on sugar-sweetened beverages (SSB) in 2017, and a useful overview of opposing arguments and their counterpoints. Backholer *et al.* argue that much of the action was concentrated in the USA, but in the present commentary we point out that the recent sweep of SSB tax policy announcements in the EU seems much more promising. Policy makers in EU countries seem to learn from neighbouring countries, while political ideologies do not appear to stand in the way. This could have international spillover effects as the default tax thresholds of 5 and 8 g sugar/100 ml, used in EU cases, provide clear incentives for the multinational soda industry to reduce sugar levels across the board, although it is not yet clear whether the tiered tax designs used in the EU are actually more effective than the flat rate tax designs used in the USA. Scholars may contribute to the policy momentum by comparing the effectiveness and feasibility of both designs in different policy contexts, including lower- and middle-income countries. The spread of SSB taxes in the USA will nevertheless most likely be limited so long as it remains a local policy and 'no-go' for the Republican Party. We explain the differences between the EU and USA by comparing the level of fiscal decentralization, the political context and the use of framing strategies.

Keywords
Sugar-sweetened beverages
Food policy
Taxation
Obesity

In the final issue of *Public Health Nutrition* in 2017, Kathryn Backholer and colleagues provide a clear overview of the global spread of taxation on sugar-sweetened beverages (SSB) for health-related reasons in 2017[1], and a useful overview of opposing arguments and their counterpoints[2]. Backholer *et al.* argue that much of the SSB tax action was concentrated in the USA, because an SSB tax was implemented in six US cities in 2017. In the present commentary we point out that SSB taxes in fact spread much more quickly in the EU compared with the USA. Backholer *et al.* also argue that academics can accelerate the current policy momentum by robustly evaluating and widely disseminating the public health results of SSB taxes. It is also important to better understand the policy enablers of SSB taxes. Governance and the attributes of the political system often seem more important policy determinants for the acceptance of an SSB tax than the potential positive effects on public health. This observation helps to explain why in some settings SSB taxes are adopted more easily, as well as how they are shaped. Up to now, academic literature has been heavily skewed towards measuring the impact of SSB taxes through behavioural changes of the consumer instead of enabling issues such as the optimal tax design, the administrative and political context, and specific implementation strategies[3]. In the present commentary we use a narrative review to hypothesize how such factors can explain the quick spread of SSB taxes that currently seems underway in the EU in comparison to the USA.

EU shows multiple sugar-sweetened beverage tax thresholds

Governments in the EU all have a tiered tax mechanism, with taxation thresholds of 5 g and/or 8 g sugar per 100 ml.

*Corresponding author: Email luchagenaars@gmail.com

The UK appears to be an influential early adaptor. In 2017 Cataluña, Estonia, Ireland and Portugal followed its two-tiered 'soda industry level' of 18 pence for SSB with 5–8 g sugar/100 ml and 24 pence for SSB with more than 8 g sugar/100 ml. Estonia also has a lower tax rate for SSB with less than 5 g sugar/100 ml. Hungary taxes only SSB with more than 8 g sugar/100 ml. Finland charges €0·11 per litre on beverages with less than 5 % sugar; beverages that fall above this threshold are charged double[1,4]. France introduced a flat rate of €7.16 per 100 litres for all sugar- and artificially sweetened beverages in 2012, but announced a tiered tax in its 2018 budget. Beverages with less than 5 g sugar/100 ml are not charged, drinks with 5–8 g sugar/100 ml incur the same rate as before, beverages with 8–10 g sugar/100 ml will be charged double, and triple when sugar content exceeds 10 g/100 ml[5]. So France also changed its tax mechanism to follow the UK model.

Differentiation of tax thresholds on the basis of sugar levels does not occur in the USA. The may be because such approaches are more complex to administer, which can pose a bigger problem on the level of local government. Berkeley was the first US city that adopted a flat rate of $0·01 per ounce (i.e. US fluid ounces; 1 US fl. oz = 29·75 ml) for the distribution of SSB in 2015. Neighbouring cities San Francisco, Oakland, and Albany imitated the Berkeley experience, as did Cook County although the latter has already been abolished. Boulder charges $US 0·02 and Seattle charges $US 0·0175 per ounce. Philadelphia charges $US 0·015 per ounce also on artificially sweetened beverages.

A clear preference for tiered or flat rate tax designs does not appear to exist outside the EU or USA. For instance, a flat rate is used by governments in Barbados, Dominica, Mexico, several islands in the Pacific, the Philippines, Saudi Arabia and the United Arab Emirates, while a tiered design is used in Brunei (threshold of 6 g sugar/100 ml), Chile (threshold of 6·25 g sugar/100 ml) and Thailand (thresholds of 6 and 10 g sugar/100 ml)[1,4,6–8]. Interestingly, the governments of South Africa and Sri Lanka deploy a mechanism where the tariff increases with every gram of sugar per 100 ml. Drinks with less than 4 g sugar/100 ml are exempted in South Africa; in Sri Lanka all SSB are targeted[9,10].

The evidence base does not allow us to draw conclusions on the preferred tax design. Flat rate taxes may be easiest to administer and are therefore more realistic for governments with limited administrative capacity. They pose the incentive to completely remove sugar from beverages, but this may be less feasible for certain SSB than reducing sugar content which is stimulated by tiered designs. Recent evidence from the UK shows that over 50 % of manufacturers reduced the sugar content of beverages in the two years between tax announcement and implementation[11]. A downside is that tiered taxes project the idea that some sugar is fine, especially when drinks that fall below a certain sugar level are exempted from taxation (as in the UK). In that respect the continuous scale used in Sri Lanka poses the strongest and fairest incentive for reformulation, but this design may be most difficult to administer.

EU shows faster diffusion of sugar-sweetened beverage taxes

SSB taxes have thus far been enacted only locally in the USA. Attempts on the state and federal level all failed[12]. Democratic Party dominance is strongly associated with SSB tax uptake, all attempts in Republican jurisdictions thus far have failed[13]. In contrast, SSB taxes in the EU are adopted by parties all across the political spectrum: from the Conservative Party in the UK, to the centre-right coalition government in Finland, la Republique en Marche in France and a centre-left coalition government in Estonia, up to a Socialist Party minority cabinet in Portugal.

US regions with higher obesity prevalence rates are generally associated with higher levels of support for the Republican Party[14], thus suggesting the US spread of local SSB taxes may not reach those jurisdictions with the highest obesity rates. Furthermore, only about 5 million Americans out of a total 327·4 million lived in jurisdictions with active soda taxes as per 6 April 2018[15]. This compares with approximately 170 million people in the EU out of a total 511·5 million[16], with SSB taxes implemented also in countries with relatively high obesity rates (Finland, UK, Hungary, Ireland).

So while the USA has some early adaptors, an early majority is beginning to form in the EU. One can therefore conclude that at this point in time SSB taxes not only spread much more rapidly, but also more effectively in the EU than in the USA. This seems mainly to relate to differences in fiscal decentralization, politics and framing strategies.

Fiscal decentralization in the USA

The high level of fiscal decentralization in the USA may be a reason why SSB taxes do not spread as quickly as in the EU. Table 1 presents figures from the Organisation for Economic Co-operation and Development's tax autonomy database[17] and includes solely those countries where a share of total sub-central government (SCG) tax revenue falls under the highest category of tax autonomy. It points out the relatively high level of fiscal decentralization of the USA compared with EU countries, with the exception of Spain. Indeed, SSB taxes are adopted by SCG precisely in the USA and Spain (Cataluña).

The USA has a tradition of levying consumption taxes at the SCG level. It employs a retail sales tax instead of a value-added tax (VAT) as the principal consumption tax, which is imposed at the state and local government level. EU countries all deploy VAT nationally. Excises are levied in the USA by the federal government but many state and local governments levy excises on top of the federal tax.

Table 1 Taxation power of sub-central governments (SCG) in the EU and USA. Only the highest level of tax autonomy (category A1) is included; countries without SCG taxation with such an autonomy level were excluded. Adapted from the Organisation for Economic Co-operation and Development[17]

	SCG tax revenue, as % of total tax revenue	Full discretion on rates and reliefs, as % of total tax revenue of the SCG
Austria	4·6	
Länder	1·6	33·4
Local	3·1	9·7
Belgium	9·9	
States	5·3	95·4
Local	4·6	8·2
Estonia	1·1	
Local	1·1	8·0
France	13·0	
Local	13·0	45·6
Italy	16·5	
Regions	10·6	
Local	5·9	28·1
Luxembourg	3·3	
Local	3·3	6·3
Slovak Republic	2·7	
Local	2·7	4·0
Slovenia	10·6	
Local	10·6	15·0
Spain	23·6	
Regions	13·6	92·1
Local	10·0	30·0
USA	33·7	
States	19·7	100·0
Local*	14·1	

*Local government in the USA has a wide variety of taxing powers but it is not possible to identify the share of each.

Excise can be levied only once in the EU, because the movement of excisable products is subject to a duty-suspension arrangement until products are released for free circulation under EU single market policy[18].

EU single market policy has previously impeded the development of other taxes on unhealthy foods. The initial exclusion of meat in the Danish fat tax was judged as illegal state aid by the EU Commission and the threat of an EU lawsuit was a deciding reason why it was repealed only one year after implementation[19]. The Finnish Government experienced something similar when its tax on sweets and ice cream was abolished on 1 January 2017, after the EU Commission judged that it discriminated between similar products. SSB tax policies did not experience such issues[4]. In fact, EU single market policy may have even set a 'soft governance' framework for how to shape SSB taxes, as evidenced by the congruent use of taxation thresholds of 5 and/or 8 g sugar/100 ml in EU cases.

The reverse may be true in the USA, where higher levels of government can restrict or eliminate the policy activity of lower levels of government through preemption. Federal preemption of local and state SSB taxation seems unlikely, because this may occur only when SCG taxes reduce federal benefits or when they interfere with interstate commerce. But SSB consumption does not affect any federal programme and SSB excise taxes are administered in the state where they are actually sold[20]. State preemption of local SSB taxes seems more likely, because local SSB taxes often affect the state budget as states mostly charge a general retail sales tax. In other public health areas state preemption has counteracted local policy action as well (e.g. food nutrition information), making it a significant threat to SSB taxes, also because industry lobbyism is more permanent at the state level[21]. State coercion is unlikely when SSB taxes are approved through referenda, as it poses a democratic calibration that higher governments likely will not overrule. Adopting local excise taxes through ballot issues is a formal requirement under state law in ten states including California, which probably makes the SSB tax policies in these states (Albany, Berkeley, Oakland, San Francisco, Boulder) more robust than policies that did not require ballot approval (Philadelphia, Cook County and Seattle)[13,22]. The California Governor nevertheless recently adopted a measure that bans new local SSB taxes for the next 12 years, making California the first state that coerces local governments not to implement SSB taxes. The measure does not abolish local SSB taxes that are already in place. It was apparently adopted in exchange for the soda industry to withdraw a ballot measure that would have raised the voter threshold to approve local sales tax increases for any product, from a majority to a supermajority[23].

Political environment and framing strategies

Governments with diverse ideological backgrounds adopt SSB taxes in the EU, but in the USA they have been adopted solely in cities where the Democratic Party dominates. A reasonable explanation might be that the USA knows a political system with two dominant political parties with very different ideological backgrounds, whereas governments in the EU often have a much more fragmented political system with more room for coexisting policy frames. This is exemplified by the fact that all US cities where an SSB tax was proposed knew fierce campaigns, whereas many governments within the EU simply announced the tax in their yearly budgets. Attempts in the USA without external aid for pro-tax campaigns therefore seem unviable. Local US SSB taxes appear to require one dominant policy frame. In all successful ballot issues public health effects dominated the debate, and in all successful cases with council voting there was a dominant focus on specific benefits or programmes that could be financed with the extra revenue (e.g. pre-kindergarten in Philadelphia)[13,24]. On the contrary, proponents in the EU mostly employed all arguments in favour of SSB taxes: public health effects, extra revenue for the public health system or cost savings in health care, and incentives for the soda industry to decrease sugar levels. The latter argument is not often used in the USA, which makes sense as local taxes pose smaller incentives for multinational soda companies to decrease sugar levels.

Conclusion

The recent sweep of SSB tax policy announcements in the EU is promising and may continue, because policy makers seem to learn from neighbouring countries while political ideologies do not appear to stand in the way. On the contrary, in the USA the spread of SSB taxes will most likely be limited as long as it remains a local policy and 'no-go' for the Republican Party. This is disappointing from a public health perspective, but if SSB taxes keep spreading as they do in the EU, this could have international spillover effects for the multinational soda industry to reduce sugar levels across the board. Scholars may contribute to the policy momentum by continuing to compare the public health effects and feasibility of tiered and flat rate tax designs in different policy contexts.

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