

Citation for published version: Scollo, M & Branston, JR 2022, 'Where to next for countries with high tobacco taxes? The potential for greater control of tobacco pricing through licensing regulation', *Tobacco Control*, vol. 31, no. 2, pp. 235-240. https://doi.org/10.1136/tobaccocontrol-2021-056554

DOI: 10.1136/tobaccocontrol-2021-056554

Publication date: 2022

Document Version Peer reviewed version

Link to publication

Publisher Rights CC BY-NC

University of Bath

Alternative formats

If you require this document in an alternative format, please contact: openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Where to next for countries with high tobacco taxes? The potential for greater control of tobacco pricing through licensing regulation

Michelle M Scollo¹* and J Robert Branston^{2,3}

- 1. Cancer Council Victoria, Melbourne, 3004 Australia; Michelle.Scollo@cancervic.org.au
- 2. School of Management, University of Bath, BATH, BA2 6AN
- Tobacco Control Research Group, Department for Health, University of Bath, Bath, UK

* Corresponding author

Manuscript word count = 3,059; Box 1 = 593, online only, Box 2 (319)

References =44

Keywords: economics, price, public policy, taxation

Funding statement: MMS's work for the Centre for Behavioural Research in Cancer is supported through salary funding from the Cancer Council Victoria. JRB is supported by Bloomberg Philanthropies, Stopping Tobacco Organizations and Products (STOP) project funding (<u>www.bloomberg.org</u>). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Conflicts of interest: MMS works for a cancer charity with a mission to "reduce the devastating impact of all cancers on people and communities through leadership, collaboration, and by developing and applying evidence and insights." JRB owns 10 shares in Imperial Brands for research purposes. The shares were a gift from a public health campaigner and are not held for financial gain or benefit. All dividends received are donated to health-related charities, and proceeds from any future share sale or takeover will be similarly donated.

Abstract (218 words)

Optimising the taxation of tobacco products should be among the highest priorities for health and hence economic policy in every country. The WHO Technical Manual on Tobacco Tax Policy and Administration released in April 2021 provides invaluable advice, including 26 best practice recommendations on policy design, administrative efficiency, and addressing industry tactics to circumvent tobacco tax increases. Introducing and increasing tobacco taxes is the most important tobacco control measure for any jurisdiction. The effects of simple tax structures, high tax levels, and frequent above-inflation increases in specific excise duties can be enhanced through strict controls on packaging (including pack size), product design, and discounting. However, even with such measures, tobacco companies can continue to undermine the effectiveness of tax policy by offering some products in their ranges at very low prices, as well as gradually and selectively increasing the prices of some but not all products after tax increases. This paper is aimed at policy makers in countries that have already adopted best practice tax policy. It explores the idea of wholesale price capping combined with retail licensing to address the problems of brand proliferation, dispersion of prices, cushioning and strategic under/over-shifting of tax increases, thereby radically and sustainably increasing the effectiveness of tobacco tax policy while also raising additional tax revenue for governments by reducing industry profitability.

Tax increases that create higher prices are the most cost-effective strategy available to governments to reduce tobacco consumption.[1-3] The COVID-19 pandemic has shown that the economy and politics of countries are crucially interconnected with the health of the population. Considering the enormity of the contribution of tobacco smoking[4] to premature deaths and morbidity,[5, 6] optimising the taxation of tobacco products should be among the highest priorities for health and economic policy in every country.[7]

In April 2021, the World Health Organization released a comprehensive technical manual on tobacco tax policy and administration.[8] This 300-page document, an update of an earlier report published in 2010, is a 'go-to' for all matters tax and price. It includes comprehensive explanations of all aspects of tax policy, numerous real-world case studies, and invaluable advice for tobacco control advocates, political advisers, and tax administrators. The 26 best practice recommendations from the manual can be viewed in **Box 1**.

Box 1. WHO Best Practice Recommendations for tax policy

TAX POLICY

Use excise tax increases to achieve the public health goal of reducing the death and diseases caused by tobacco use.

Include significant tobacco excise tax increases as part of a comprehensive strategy to reduce tobacco use.

Involve the competent authority from the start when considering the revision of a tax policy.

Promote greater policy coherence across sectors such as agriculture, industry, trade, finance and labour.

TAX DESIGN

Tax structure matters and simpler is better.

Rely more on specific tobacco excises.

Increase tobacco taxes significantly to reduce the affordability of tobacco products. Where revenue increases are a goal, rely on regular excise tax increases. Automatically adjust specific tobacco taxes for inflation and income growth. Pricing regulations cannot be considered an alternative to excise tax. However, in some specific contexts, pricing regulations could be used in conjunction with excise taxes. Implement nontax policies affecting price levels, such as banning promotional discounts for tobacco products and the sale of single sticks of cigarettes. Do not allow concerns about the inflationary impact to deter tax increases.

TAX PARITY

Tax all tobacco products in a comparable way.

Strictly regulate new and emerging tobacco and nicotine products where they are not banned and impose an excise tax.

MONITORING AND EVALUATION

Know your market

Assess the impact of your policies to design and implement the most effective tobacco excise tax policies.

Adopt indicators that help you measure improvements in tax policy and its impact.

TAX ADMINISTRATION

Implement best practice approaches in general tax administration

Ensure compliance and accuracy of information on the tax compliance cycle.

Ensure control and enforcement on the supply chain.

Clearly define procedures to follow after detecting illicit trade of tobacco.

Become a Party to and/or implement the WHO FCTC Protocol to Eliminate Illicit

Trade in Tobacco Products.

Implement, to extent possible, the same rules and regulations for tax administration and enforcement for all tobacco products, as well as new and emerging nicotine and tobacco products.

Implement broad policies for ensuring a good tax system that will trickle down to good tax administration of tobacco products.

POLITICAL ECONOMY

Article 5.3 of the WHO FCTC, "On the protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry", and its guidelines provide useful guidance on how to address tobacco industry interference. All 181 countries that are Parties to the WHO FCTC have a legal obligation to implement the requirements of Article 5.3.

Do not fall for SCARE tactics. For instance do not...

S: Smuggling and illicit trade

... allow concerns over the impact of increasing excise taxes on illicit trade in tobacco affect your decision to increase them. Rely on your own estimates of the level and nature of illicit trade and not on the industry's estimates.

C: Court and legal challenges

... let tobacco industry threats of legal challenges prevent you from improving your tax policy. Closely follow legal requirements for design, procedure and consultation to strengthen your legal position and minimize the possibility that any challenge will be raised.

A: Anti-poor rhetoric

... allow concerns about regressivity prevent tobacco tax increases.

R: Revenue reduction

... let fears of potential revenue reductions prevent you from increasing excise taxes

E: Employment impact

... allow concerns about employment impact to prevent tobacco tax increases.

Earmarking

Consider earmarking tobacco tax revenues for health-focused programmes, especially if it helps advance tobacco control efforts and, efforts to implement large tobacco tax increases and tax reforms. This could have the additional benefit of funding health programmes where they are poorly funded or not prioritized.

> Source: Summarised from Chapter 5, <u>WHO</u> <u>technical manual on tobacco tax policy and</u> <u>administration</u>, 12 April 2021

No jurisdiction anywhere in the world as yet complies with all these best practice recommendations: [9, 10] working towards their full implementation should be the priority for every country. However, with several jurisdictions already having high levels of taxation and adhering to the majority of recommendations, it is timely for some countries to start thinking about possible next steps. As highlighted in the manual, it is increases in price rather than tax increases *per se*, that discourage uptake and prompt people who smoke to quit or reduce tobacco consumption. Understanding industry pricing strategies, and how these relate to tax, is thus crucial to maximising the effectiveness of tax policy. The WHO manual's summary of industry tactics commonly used to undermine tobacco tax increases is reproduced here in **Box 2** (noting that it draws heavily on a paper by Ross and colleagues.[11]).

Box 2. Industry tactics to undermine tax increases

1. Stockpiling (forestalling/front-loading)

Before implementation of announced tax increases, manufacturers overproduce tobacco products, paying the pre-tax-increase rate.

2. Changing certain product characteristics (for example, weight or length) and/or adjusting the production process

When tobacco products are taxed at different rates or subject to different tax increases, the industry can re-label one type of tobacco product as another that has a lower tax burden.

3. Choosing the time of a price increase announcement strategically

Companies may raise prices in anticipation of a tax rise, generating extra profits in the period until the increase is implemented *(and allowing more gradual or selective increases in prices afterwards)*.

4. Adopting price-discriminating strategies or price-related promotions

The industry may offer discounts, retailer rebates or added value (gifts) to tobacco purchases to minimize the loss of price-sensitive consumers.

5. Using brand proliferation (for example, launching a low-priced brand) and price segmentation

Manufacturers can choose to reduce prices of certain brands or introduce new, even cheaper ones to keep price-sensitive consumers in the market. Some have used price-marking – printing the amount directly on packs– to lock in low prices.

6. Differential shifting of tax increases across different price segments, depending on the market circumstances

The industry may overshift the tax increase for higher-priced brands, which are expected to be more price inelastic than lower-priced brands. Additionally, to keep price-sensitive consumers in the market, the industry may temporarily absorb part (or all) of the tax increase on lowerpriced brands.

7. Lobbying government to distort interventions

Industry lobbying might lead government to adopt favourable types of taxation, postpone tax increases or distort the tax rate. While scaremongering about effects on employment, inflation and revenue was once common, current arguments commonly centre around claims that tax increases encourage use of illicit tobacco.

Source: Reproduced from Box 2.1, Chapter 2, <u>WHO</u> <u>technical manual on tobacco tax policy and</u>

administration, 12 April 2021

The manual[8] provides specific and extremely helpful recommendations on how to address industry tactics 1, 2, 4 and 7. It recommends measures to prevent forestalling (including the pre tax increase purchasing of tax stamps). It recommends that excise be as uniform as possible across different types of tobacco products. It discusses some ways in which governments can prevent price-related promotion. The manual also provides detailed advice on preventing and reducing illicit tobacco, and on how to counter each of the other "SCARE" tactics alluded to in **Box 1**.

Differences in real and perceived costliness of different products undermine tax increases and allow companies to retain price sensitive smokers. Limiting tobacco companies' ability to promote products through pricing is a crucial extension to tobacco tax policy. This should include bans on sales of single cigarettes, price coupons, and special gifts—measures all recommended in the WHO manual. Governments could go further along these lines and make it illegal to advertise products as 'on special' or even to engage in 'specialling' at all. Or they could go further still and ban volume discounting—that is discounts for multi-packs and

cartons, and through wholesale discounts for supermarkets and other high-volume retailers.[12]

In the UK, tobacco companies were able to retain price sensitive smokers by marketing smaller pack sizes as an alternative to higher prices for standard-size packs resulting from tax increases.[13] In Australia a proliferation of pack and pouch sizes has confused price signals and blunted the effect of repeated large increases in excise duty: after every increase in tax, most consumers have been able to find a smaller product that is cheaper up front or a larger product that is cheaper *per* stick or *per* gram.[14-16] The experience of these two high-taxing countries suggests that pack size should not just be subject to a minimum as recommended in the WHO manual; it should be restricted in each country to a standard number of cigarettes (for instance, 20 sticks as is already the minimum in the European Union) and a single pouch size of smoking tobacco (for instance 30 grams as is the current EU minimum). The standard pack/pouch size may differ by country. It should be set big enough to put the up-front cost of purchasing a pack/pouch out of reach of teenagers, but not so large that it might encourage higher levels of consumption by established smokers. Similarly, sticks and filters should be standardised to a single length and diameter to avoid perceptions of varying harmfulness and value for morey.

Several commentators[17-19] advocate bans on all flavouring including menthol and elimination or else standardization of filters to one single approved design with no ventilation holes and one standard paper porosity. The nation of Uruguay has restricted brands to just one variant;[20] additionally countries could prohibit all new variants. Such policies would reduce the capacity of manufacturers to capitalise on the popularity of brand names to increase variants within those brand ranges, and to charge more for 'special' products, thereby cross-subsidizing the price of 'ordinary' products.[8]

What next for tobacco tax policy?

Even with simple tax structures, high specific tax levels, and strict controls on packaging (including pack size), product design and discounting, the tobacco industry can continue to (legally) undermine the effectiveness of tax policy in four crucial ways:

- Strategic *timing* of implementation of price increases, which cushion consumers from the full effects of tax increases by spreading them out over several months[21]
- II. *Brand proliferation* including the development of cheaper product versions and very cheap brands
- III. Price segmentation, enabling companies to both maximise profits on premium brands and to attract and keep price conscious smokers in the market by earning lower profits on value and super-value brands.
- IV. Differential shifting of tax and price increases across brands and segments.

Prices are influenced but not fully determined by government taxes. These four challenges exist because the industry retains the ability to set tobacco prices. Excise regulation in the nation of Indonesia prevents companies from introducing brands at prices cheaper than the lowest price in the market in the current year, a minimum which has been regularly increased through regulation.[22-24] This prevents a fall in the lowest prices in the market. Measures prohibiting companies from introducing new variants (as has been done in Uruguay) or any new brands or variants that are cheaper than current products on the market (as in Indonesia) would certainly help prevent any worsening of market segmentation and price dispersion. However, they would not eliminate or even reduce them substantially. Essentially the major issue is that the industry retains the ability to make sure that smokers don't have to feel the impact of higher tobacco taxes.[25] If governments were to take more direct control of tobacco prices, they could both ensure that tax increases always trigger price increases that provide clear price signals to consumers, while potentially also addressing the problem of price-based market segmentation and price dispersion that are so fundamentally undermining tax policy worldwide.[26-29]

In the accompanying piece, commentators Ribisl *et al* [30] propose one model for consideration—the imposition of minimum prices in conjunction with high taxes and bans on price related promotion such as coupons and free gifts. This would eliminate many low-cost products from the market (thereby preventing several industry tactics listed in Box 2, and at least partially addressing pricing issues I and II above).[30, 31] However, the industry would still be free to set its prices above the minimum, and hence substantial variation in prices and differential shifting of tax increases would likely remain (issues III and IV). Further, without appropriately sized accompanying tax increases, the industry would receive the benefit of any increase in prices caused by the minimum (*i.e.* higher profit per unit sold), providing additional revenue for other promotional and marketing activities. Nevertheless, regularly updated minimum pricing could at least *reduce* dispersion and *provide a floor below which prices cannot not go*, thereby substantially increasing the effectiveness of current tax policy.

But might there be even more effective ways to control pricing?

An alternative and more far-reaching option for countries which already have high tobacco taxes, would be to adopt a system of wholesale price cap regulation.[32, 33] This could mandate the timing of increases in wholesale prices (issue I) and comprehensively address pricing issues II, III and IV above. It would also limit the profits that companies are able to earn (by virtue of reducing the prices they can charge), thereby significantly changing industry incentives. The basic idea is that a government or regulatory agency would establish a maximum wholesale price that can be charged for each type of tobacco product sold by any firm in the tobacco industry (*e.g.* one maximum that would apply to all factory-made cigarette products and another maximum for all hand-rolled (roll-you-own) tobacco products). This maximum would be set by the regulator based on the typical costs of

production, including allowing a bellwether firm a reasonable return (a profit margin in line with those of manufacturers of other fast-moving consumer products and so significantly lower than currently[32-34]). Excise duty, sales taxes, retailer mark-ups, and any other legitimate costs would then be added to the capped wholesale price to produce the final retail price in shops. For example, as of April 2021, the average price of 20 cigarettes was £11.44 in the UK.[35] This can be broken down into taxes of £8.69[36], and if (as an estimate) we assume the retailer/distributors earned collective margins of 10% (£1.14), the industry is left with £2.75 in net revenue (the majority of which is profit). Under a price cap scheme, this net revenue figure would be reduced by the price cap, to say $\pounds 0.50$. To prevent retail prices dropping, taxes would need to be increased (by £2.25 per pack here, a 26% increase), so these measures simultaneously introduced would transfer industry profits to government. As such, a scheme of price cap regulation should be seen to work in parallel with excise taxation, rather than as a replacement for it. Crucially, a price cap scheme would eliminate the industry's capacity to price discriminate for a given tobacco product type, as the same price cap would apply to all sales of that tobacco product, including those currently sold at different prices (i.e. economy and premium price points would effectively no longer exist). Furthermore, the price charged to retailers would be permitted to change only when either taxes or the price cap was changed, not at any other time.

In theory the industry could choose to price below the cap for some (or all) of its brands, however, in practice this would be unlikely to happen. The cap would significantly reduce the net revenue available to the industry, thereby reducing both the pricing space available and also the resources for cross subsidisation. Price caps would be periodically reviewed, say yearly, in case market conditions changed (*e.g.* production costs such as the cost of tobacco leaf). If the industry were found to be pricing one or more brands below the cap for that product type (*e.g. via* international subsidisation), the price cap for that product type could be

lowered. The incentive for launching new discount brands/variants/products would thus be removed since it would trigger a fall in the price cap for (and industry revenue from) all other brands of that product type (and at the same time, the tax could be increased to offset any reduction in average wholesale price). Such measures would not only directly address any further attempts by the industry to engage in price-related marketing; they would also remove the incentive to engage in such tactics in the first place as tax/regulatory responses would harm industry profitability going forward.

A price cap is essentially the idea of a regulator, rather than the industry, setting tobacco prices. This type of price regulation has its origins in the world of utility regulation, where competition is lacking due to the nature of the industry. Competition is similarly lacking for tobacco, where a small number of transnational companies dominate most markets, providing clear economic justification for pricing regulation. Further, regulation could provide health benefits beyond control of pricing. Tobacco companies would have to provide the regulator with information on their costs of production as part of the process of setting caps. This would allow the regulator not only to monitor industry actions but also to make sure firms don't have funds for inappropriate activities (*e.g.* marketing (to children), or funding front groups).

Implementing such a scheme is not without challenges. A regulatory organisation would need to be created (with sufficient capacity to regularly review the market), funded, and free from regulatory capture; political/industry opposition is likely to be intense, especially in countries that have a strong tradition of adherence to 'free-market' principles; adjusting excise taxes in parallel with price regulation would require political will; and, finally, the industry may look to blunt regulation *via* transfer pricing. However, many if not all of these potential difficulties can be overcome, particularly in an era of increasingly closer tax cooperation (witness the recent introduction of a global minimum rate for taxation of corporations). Countries with a stronger existing regulatory tradition could lead the way; governments could commit to yearly tax escalators; and international co-operation could strengthen regulatory capacity, reduce costs through the sharing of analysis, and address industry attempts at transfer pricing.

A central element of this proposal for price-oriented regulation of the tobacco industry is the idea of licensing. Licensing would be the mechanism by which a regulator could impose conditions on the right to sell tobacco products. In order to obtain a license to sell, licensees would need to agree to provide information about business costs. In order to keep that license they would have to adhere to all local regulations in relation to packaging and consumer warnings, and would need to demonstrate the highest levels of propriety in dealings with business customers. As happens with utility companies and in many other licensing schemes, the cost of a regulator could be fully covered *via* licence fees on the regulated.

Licensing is already a crucial component of the FCTC Protocol to Eliminate Illicit Trade in Tobacco Products (Article 6).[37] All countries that are signatories to that Protocol are required to establish licensing schemes for manufacturers, importers and wholesalers so that the provenance of all stock can be ascertained anywhere in the supply chain. Regulation of prices is not such a big step from this. Indeed, establishing a single approved price for all tobacco products of a given type (e.g. 'cigarettes' or 'roll-your-own tobacco') would greatly assist authorities in identifying illicit sales and prosecuting offenders.

Could licensing of retailers on the High Street similarly increase government control of pricing?

Whether or not governments set floors, ceilings, or effectively standardize the price of various classes of tobacco products, controlling prices and promotion at the retail level would clearly be beneficial. Licensing of retailers would allow governments (or regulators under

price cap systems) to impose requirements and conditions. The right to continue to sell tobacco products could be withdrawn if such requirements and conditions were not met. A license could be restricted to certain classes of product, for instance excluding menthol and other flavoured products. The charging of a minimum price or of particular prices required by a regulatory authority could be a condition. The implementation of price changes only on a certain date or dates associated with excise increases could be a further condition of license. In addition to being prohibited from offering volume discounting, retailers could be required to sell no more than two packs at a time, a measure that could both help reduce consumption and help reduce cross-border purchases and retail supply of smuggled products. Licenses could be withdrawn for conduct such as selling to minors or possessing illicit tobacco. Revenue from license fees could be used for compliance monitoring and any legal action needed to enforce all of these requirements and conditions. The benefits of retail licensing for preventing excise evasion are also noted in Article 6 of the FCTC Illicit Trade protocol.[37]

Licensing would provide one further very important benefit for tobacco tax and price policy. The US Institute for Health Policy Research's Tobacconomics Scoreboard[10] compares progress in tax policy across countries based on i. *Price of the most popular brand*,[38] ii. *Affordability*, [39] iii. *Tax as a share of final price*[40] and iv. *Simplicity of tax structure*.[40] A similar comparison table published in the World Health Organization biannual reports on the global epidemic, include a fifth component, *Price of the cheapest brand, and a sixth*, *Price dispersion, that is, the price of the cheapest brands* that are available to the most price sensitive smokers *as a percentage of the price of the most expensive brand*.[41]Ideally when comparing countries or tracking progress within a country over time, calculations of price, price dispersion, affordability and tax share would be based not just on the most popular, cheapest and most expensive brands, but rather would take into account *all* the brands in the market, weighted by relative sales volumes. Sales data—including prices and volumes sold in every retail outlet—would enable such a measure to be constructed, although obtaining such data would be challenging in many markets. A final condition of retail licenses could be to provide to the licensing authority data on pricing and sales of every type of product sold. Monthly or even weekly changes in sales would not just enable the effectiveness of tax policy to be more precisely operationalised: it would also allow governments (much more accurately than at present) to assess the impact of many different legislative and program measures and overall tobacco control strategies.

Conclusion

The 2019 *WHO report on the global tobacco epidemic* reported that only 14% of the world's population live in countries with sufficiently high tobacco taxes.[9] Simple tax structure and frequent above-inflation increases in specific excise taxes are crucial tobacco control measures for any jurisdiction and need to be pursued without delay.[42-44] Price caps are not a panacea that all countries could readily adopt, but their potential for significant impact suggests they could be an option for countries that already have high tobacco taxes and which are looking to do more. For such countries, price regulation through licensing offers the possibility of radically and sustainably increasing the effectiveness of tax policy while also raising additional tax revenue for governments by reducing industry profitability.

What this paper adds

Only 14% of the world's population live in countries with sufficiently high tobacco taxes. It is well understood that frequent above-inflation increases in specific excise taxes are a crucial tobacco control measure for any jurisdiction.

- This paper makes the case for establishing price caps as a condition of license for manufactures and importers as well as price controls as a condition of retail tobacco licenses. In combination, these policies could substantially reduce dispersion of tobacco product prices and prevent the tobacco industry from cushioning consumers from the effects of tax increases.
- For countries that already have high taxes, price regulation through licensing of industry players offers the possibility of radically and sustainably further increasing the efficiency and effectiveness of tax policy while also raising additional tax revenue for governments by reducing industry profitability.

References

- The World Bank. Curbing the epidemic: governments and the economics of tobacco control. Washington: World Bank, 1999. Available from: <u>https://documents.worldbank.org/en/publication/documents-</u> <u>reports/documentdetail/914041468176678949/curbing-the-epidemic-governments-and-the-</u> <u>economics-of-tobacco-control (accessed</u>
- 2. US Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000. Available from: http://www.cdc.gov/tobacco/data_statistics/sgr/2000/complete_report/index.htm (accessed)
- 3. Chaloupka FJ, Straif K, Leon ME. Effectiveness of tax and price policies in tobacco control. *Tobacco Control* 2011;**20**:235–8.
- 4. US Department of Health and Human Services. The health consequences of smoking 50 years of progress. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Available from: http://www.surgeongeneral.gov/library/reports/50-years-of-progress/ (accessed
- 5. Global Burden of Disease 2015 Tobacco Collaborators. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990-2015: a systematic analysis from the Global Burden of Disease Study 2015. *Lancet* 2017;**389**:1885-906.
- World Health Organization (WHO). WHO global report: Mortality attributable to tobacco. Geneva: WHO Press; 2012. Available from: <u>http://www.who.int/tobacco/publications/surveillance/rep_mortality_attributable/en/</u> (accessed)
- 7. Chaloupka FJ, Jha P, Corrao MA, et al. Global Efforts for Reducing the Burden of Smoking *Disease Management & Health Outcomes* 2003;**11**:647–61.
- World Health Organization. WHO technical manual on tobacco tax policy and administration. Geneva: WHO, 2021. Available from: <u>https://www.who.int/publications/i/item/9789240019188</u> (accessed

- 9. products Wrotgteanae. WHO report on the global tobacco epidemic, 2019: offer help to quit tobacco use. Geneva: WHO, 2019. Available from: <u>https://www.who.int/teams/health-promotion/tobacco-control/who-report-on-the-global-tobacco-epidemic-2019</u> (accessed
- Chaloupka FJ, Drope J, Siu E, et al. Cigarette Tax Scorecard. Chicago, Illinois: Health Policy Center, Institute for Health Research and Policy; 2020. Available from: <u>https://tobacconomics.org/research/cigarette-tax-scorecard/</u> (accessed 12 May)
- 11. Ross H, Tesche J, Vellios N. Undermining government tax policies: Common legal strategies employed by the tobacco industry in response to tobacco tax increases. *Prev Med* 2017.
- Golden SD, Smith MH, Feighery EC, et al. Beyond excise taxes: a systematic review of literature on non-tax policy approaches to raising tobacco product prices. *Tobacco Control* 2016;25:377-85.
- 13. Hiscock R, Branston JR, McNeill A, et al. Tobacco industry strategies undermine government tax policy: evidence from commercial data. *Tobacco Control* 2018.
- 14. Scollo M, Bayly M, White S, et al. Tobacco product developments in the Australian market in the 4 years following plain packaging. *Tobacco Control* 2017.
- 15. Scollo M, Zacher M, Coomber K, et al. Changes in use of types of tobacco products by pack sizes and price segments, prices paid and consumption following the introduction of plain packaging in Australia *Tobacco Control* 2015;**24**:ii66-ii75.
- Scollo M, Bayly M. 13.3 The price of tobacco products in Australia. In: Greenhalgh E, Scollo M, Winstanley M, editors. Tobacco in Australia: Facts & issues. Melbourne: Cancer Council Victoria; 2020. Available from: <u>https://www.tobaccoinaustralia.org.au/chapter-13-taxation/13-3-the-price-of-tobacco-products-in-australia</u>.
- 17. Malone RE. It's the 21st century: isn't it past time to ban menthol cigarette sales? *Tobacco Control* 2017;**26**:359-69.
- 18. Kozlowski L, O'Connor R. Cigarette filter ventilation is a defective design because of misleading taste, bigger puffs, and blocked vents. *Tobacco Control* 2002;**11**:i40–i50.
- 19. Samet JM, Aladadyan L. Should the FDA Ban Cigarette Filter Ventilation? *Journal of the National Cancer Institute* 2017;**109**.
- 20. DeAtley T, Bianco E, Welding K, et al. Compliance with Uruguay's single presentation requirement. *Tobacco Control* 2018;**27**:220-4.
- 21. Bayly M, Scollo M, Wakefield MA. Evidence of cushioning of tobacco tax increases in large retailers in Australia. *Tobacco Control* 2021.
- 22. Regulation of the Minister of Finance of the Republic of Indonesia, PMK.011/2011 (2011). Available from:

http://www.flevin.com/id/lgso/translations/MoF/No%20167%20PMK.011%202011.pdf.

 Regulation of the Minister of Finance of the Republic of Indonesia, PMK.010/2017 (2017). Available from:

https://www.globaltobaccocontrol.org/sites/default/files/Translation_of_Ministerial_Regulati on_on_tobacco_excise_rates_with_highlights_on_e-cigs_IND.pdf.

- Tax Centre of the Faculty of Administrative Sciences University of Indonesia. A Review of tobacco tax policies in Indonesia. Chicago, Illinois: Tobacco Economics, University of Illinois, 2020. Available from: <u>https://tobacconomics.org/research/a-review-of-tobacco-tax-policiesin-indonesia/</u> (accessed
- 25. Sheikh ZD, Branston R, Gilmore A. Tobacco industry pricing strategies in response to excise tax policies: a systematic review. *Tobacco Control* 2021:12.
- 26. Gilmore AB, Tavakoly B, Taylor G, et al. Understanding tobacco industry pricing strategy and whether it undermines tobacco tax policy: the example of the UK cigarette market. *Addiction* 2013;**108**:1317–26.
- 27. Partos TR, Hiscock R, Gilmore AB, et al. Impact of Tobacco Tax Increases and Industry Pricing on Smoking Behaviours and Inequalities: A Mixed-Methods Study. Impact of tobacco tax increases and industry pricing on smoking behaviours and inequalities: a mixed-methods

study. Southampton (UK)2020. Available from: https://www.ncbi.nlm.nih.gov/pubmed/32271515.

- 28. van Schalkwyk MCI, McKee M, Been JV, et al. Analysis of tobacco industry pricing strategies in 23 European Union countries using commercial pricing data. *Tobacco Control* 2019.
- 29. Berthet Valdois J, Van Walbeek C, Ross H, et al. Tobacco industry tactics in response to cigarette excise tax increases in Mauritius. *Tobacco Control* 2019.
- 30. Ribisi K, Gordon S, others. to be decided2022.
- 31. Golden SD, Kim K, Kong AY, et al. Simulating the impact of a cigarette minimum floor price law on adult smoking prevalence in California. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco* 2020.
- 32. Gilmore AB, Branston JR, Sweanor D. The case for OFSMOKE: how tobacco price regulation is needed to promote the health of markets, government revenue and the public. *Tobacco Control* 2010;**19**:423–30.
- 33. Branston R, Gilmore A. The case for Ofsmoke: the potential for price cap regulation of tobacco to raise {pound}500 million per year in the UK. *Tobacco Control* 2014;**23**:45-50.
- 34. Branston JR. Industry profits continue to drive the tobacco epidemic: A new endgame for tobacco control? *Tob Prev Cessat* 2021;**7**:45.
- Office for National Statistics. RPI: Ave price Cigarettes 20 king size filter. London: ONS; 2021. [updated 18 May 2021]. Available from: <u>https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/czmp</u> (accessed 20 May)
- 36. HM Revenue & Customs. Guidance: Tobacco Products Duty rate. London: Gov.UK; 2020. [updated Nov 2020]. Available from: <u>https://www.gov.uk/government/publications/rates-and-allowances-excise-duty-tobacco-duty/excise-duty-tobacco-duty-rates</u> (accessed 20 May)
- 37. Conference of the Parties to the WHO Framework Convention on Tobacco Control. Protocol to Eliminate Illicit Trade in Tobacco Products. Geneva, Switzerland: WHO; 2012. Available from: http://apps.who.int/gb/fctc/PDF/cop5/FCTC_COP5(1)-en.pdf (accessed)
- Chaloupka FJ, Drope J, Siu E, et al. Cigarette Tax Scorecard- Scoring component policy note absolute price. Chicago, Illinois: Health Policy Center, Institute for Health Research and Policy; 2021. Available from: <u>https://tobacconomics.org/research/cigarette-tax-scorecard/</u> (accessed 12 May)
- Chaloupka FJ, Drope J, Siu E, et al. Cigarette Tax Scorecard : Scoring component policy noteaffordability change. Chicago, Illinois: Health Policy Center, Institute for Health Research and Policy; 2021. Available from: <u>https://tobacconomics.org/research/cigarette-tax-scorecard/</u> (accessed 12 May)
- 40. Chaloupka FJ, Drope J, Siu E, et al. Cigarette Tax Scorecard Scoring component policy note tax share. Chicago, Illinois: Health Policy Center, Institute for Health Research and Policy;
 2021. Available from: <u>https://tobacconomics.org/research/cigarette-tax-scorecard/</u> (accessed 12 May)
- 41. WHO report on the global tobacco epidemic 2021: addressing new and emerging products, report annexes 9. Geneva: World Health Organization, 2021. Available from: https://www.who.int/publications/i/item/9789240032095 (accessed 30 Jul 2021).
- 42. Tesche J, Van Walbeek C. Measuring the effects of the new ECOWAS and WAEMU tobacco excise tax directives. *Tobacco Control* 2020.
- 43. Pichon-Riviere A, Alcaraz A, Palacios A, et al. The health and economic burden of smoking in 12 Latin American countries and the potential effect of increasing tobacco taxes: an economic modelling study. *Lancet Glob Health* 2020;**8**:e1282-e94.
- 44. Gordon MRP, Perucic AM, Totanes RAP. Cigarette affordability in the Eastern Mediterranean Region. *East Mediterr Health J* 2020;**26**:55-60.