

Commentary

Smoking out Australia's growing illicit tobacco market: Current trends and future challenges

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ABSTRACT

Data from the Australian Taxation Office and Australian Border Force show notable recent increases in illicit tobacco seizures across Australia. The illicit tobacco market results in substantial losses in tax revenue, funds organised crime, and perpetuates tobacco use, threatening to undermine Australia's ability to achieve its national commercial tobacco endgame goal of 5 % or less smoking prevalence by 2030. This commentary discusses recent trends in Australia's illicit tobacco trade, reasons why this is of concern, potential drivers of Australians' illicit tobacco use, and policy measures that could be implemented to mitigate increasing illicit tobacco trade such as implementing a track and trace system, increased investment in the Australian Border Force to enhance detection of illicit tobacco shipments at Australia's borders, and encouraging public tip-offs of illicit tobacco sales.

Introduction

Illicit tobacco trade refers to “any practice related to distributing, selling, or buying tobacco products that is prohibited by law” (World Bank Group, 2019). This includes “tax evasion (sale of tobacco products without payment of applicable taxes), counterfeiting, disguising the origin of products, and smuggling” (World Bank Group, 2019). Examples of products sold on the illicit market include unbranded loose-leaf tobacco (often called “chop-chop” in Australia), unbranded cigarettes, counterfeit branded cigarettes, or illegally imported foreign branded cigarettes (see Fig. 1 for examples; King, 2019; Preece, 2019; Preece & Neher, 2020). While it is the behaviour of selling or distributing these products rather than the product that is illegal, for simplicity we will hereafter refer to these tobacco products that have been sold (or offered for sale) to consumers without all the required duties and taxes paid as “illicit tobacco products”. Data from the Australian Taxation Office (ATO) and Australian Border Force (ABF) show noteworthy recent increases in illicit tobacco seizures across Australia (Australian Taxation Office, 2022), and concerns are growing about the impacts of increasing use of this harmful product that decreases the effectiveness of Australia's high tobacco tax rate (National Research Council, 2015; Parliament of Australia, 2020). There are also concerns that consumer demand for cheaper illicit tobacco products will increase as Australia implements more stringent tobacco control policies, including further tobacco tax

increases, to achieve its national goal of reducing smoking prevalence to 5 % or less by 2030 (Department of Health, 2021). In this commentary, we examine recent trends in Australia's illicit tobacco trade and propose further strategies that could be implemented by Australian authorities to minimise this crime.

Recent trends in Australians' illicit tobacco use

The true extent of Australia's illicit tobacco market remains unknown (Preece & Neher, 2020); as well as the inherent challenge of accurately estimating the size of an illicit market, there are additional challenges when attempting to monitor a substance that is freely available for legal purchase (Gallagher et al., 2019). Furthermore, the tobacco industry regularly overestimates the illicit tobacco market as a lobbying strategy against tobacco control policies such as tax increases, arguing that these policies increase illicit tobacco trade and related criminal activity (British American Tobacco, 2021; Evans-Reeves et al., 2020; Gallagher et al., 2019; Gilmore et al., 2019; Joossens & Raw, 1998; Preece & Neher, 2020; Tobacco Control Research Group at the University of Bath, 2012). These tobacco industry-funded estimates are published in reports produced by large global accounting firms such as KPMG (Gallagher et al., 2019; KPMG, 2014). A systematic review of the quality of tobacco-industry funded data on the illicit tobacco trade identified a fundamental “lack of transparency” at every stage of the

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research process, concluding that these data are unreliable (Gallagher et al., 2019), and highlighting the importance of independent research in this area. An example of the tobacco industry's use of illicit tobacco concerns as a lobbying method included claims that the implementation of tobacco plain packaging measures in Australia increased the illicit cigarette market (KPMG, 2014). However, independent national cross-sectional surveys of Australian consumers (Scollo, Zacher et al., 2015; Scollo et al., 2014), and a study of small retail outlets (Scollo, Bayly et al., 2015) found no evidence of greater illicit tobacco availability following plain packaging implementation. An unfortunate consequence of these questionable industry estimates and lobbying tactics is a tendency by some of the public health community to dismiss or downplay concerns about illicit tobacco as simply tobacco industry propaganda. We contend that illicit tobacco trade should be treated as a serious crime, but collaborating with the tobacco industry, and reducing regulation of the licit tobacco market are not appropriate or effective solutions to the problem.

The available official data on Australia's illicit tobacco trade is limited to the estimated dollar value of products seized by the ATO or ABF (Australian Taxation Office, 2022; Commonwealth of Australia, 2022). Data from the ATO suggest substantial growth in Australia's illicit tobacco market in recent years (Australian Taxation Office, 2022). For example, the estimated value of illicit tobacco seized annually has increased from \$135 million in 2015–16 to \$2.09 billion in 2020–21 (Australian Taxation Office, 2022). The ATO estimated that 1234 tonnes of illicit tobacco went undetected in the Australian market in 2020–21, worth approximately \$1.89 billion, and that approximately 10 % of Australia's tobacco market were illicit sales, which is double the estimated size of the illicit market in 2015–16 (Australian Taxation Office, 2022). Furthermore, seizures of domestically-grown illicit tobacco reportedly increased eight-fold from 16 tons in 2014–15 to 130 tons in 2019–20 (Parliament of Australia, 2020). The ABF reported 151 instances of illicit tobacco detections or seizures during 2021–22, worth \$561 million in revenue evasion; this is a 16 % increase, worth \$240 million excluding GST, compared to 2020–21 (Commonwealth of

Australia, 2022).

Similarly, data from Australia's most recent 2022–2023 National Drug Strategy and Household Survey (NDSHS) suggest an increase in the number of Australians who report purchasing tobacco products that do not comply with plain packaging requirements between 2016 and 2022–2023 (see Fig. 2; Australian Institute of Health & Welfare, 2024). The NDSHS report that the percentage difference in the number of people reporting purchasing tobacco products without plain packaging between 2019 (6.2 %) and 2022–2023 (10.2 %) was a statistically significant increase. Previous NDSHS data show that while consumer reports of illicit tobacco use declined after the phasing out of tobacco farming in Australia (~2006), 4.9 % of respondents who smoked tobacco reported current illicit tobacco use in the 2019 NDSHS, an increase of 1.3 percentage points since 2013 (Australian Institute of Health & Welfare, 2020). The 2022–2023 NDSHS did not report current illicit tobacco use, only purchasing of tobacco products without plain packaging.

Why is illicit tobacco a concern?

The illicit tobacco market has uniquely harmful health, social, economic, and political implications. First, illicit tobacco use results in serious health risk; in addition to tobacco's well-established negative health impacts (Global Burden of Disease Tobacco Collaborators, 2021), illicit tobacco may have additional unique risks such as a higher level of fungal spores and mould, due to some illicit products (such as chop) being kept moist in plastic bags to increase the weight of the product to maximise profit (Aitken et al., 2008). Worryingly, participants in two Australian studies reported smoking illicit tobacco because they thought it was healthier than licit tobacco (Aitken et al., 2008; Bittoun, 2002), due to a perception that chop-chop was a more natural product and not treated with potentially dangerous chemicals or additives used during the manufacture of commercial cigarettes (Aitken et al., 2008). Some participants in one of these studies believed that this assumed lack of additives also meant that chop-chop was less addictive (Aitken et al.,



Fig. 1. Examples of illicit tobacco products found in Brisbane, Australia. The first image shows a branded cigarette pack, available for purchase for \$5 per pack from a tobacconist. The second image shows a foreign-branded pack from South Korea observed on the ground outside a tobacconist. Neither pack complies with their country's tobacco packaging laws (e.g., mandatory plain packaging and graphic health warnings in Australia; mandatory graphic health warnings in South Korea), indicating that these products are illicit.

First image courtesy of the primary author; second image courtesy of Mr Cameron Francis.

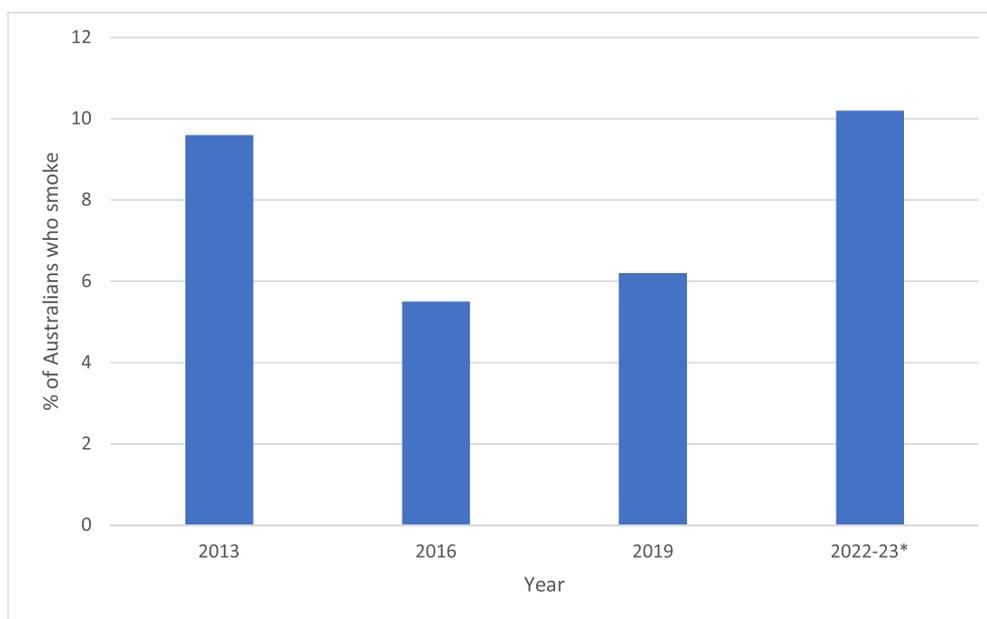


Fig. 2. Proportion of Australians who smoke reporting that they purchased tobacco products without plain packaging. Data from The National Drug Strategy Household Survey (NDSHS) 2022–2023 [1].

*Statistically significant change between 2019 and 2023–2023.

[1] Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2022–2023. Canberra: AIHW, 2024.

2008).

Second, with the illicit tobacco market populated by consumers whose main concern is price (von Lampe et al., 2016), its consumption is most common among people on low incomes (Stead et al., 2013; von Lampe et al., 2015; Wiltshire et al., 2001). People with nicotine addiction who are unable or unwilling to pay the high price of tobacco in the legal market may turn to buying illicit tobacco rather than quitting smoking, thus reducing the health benefit of tobacco taxes (Farrell & Fry, 2013). As such, the availability of illicit tobacco undermines Australia's world-leading tobacco control policies (Preece & Neher, 2020) and perpetuates tobacco use (especially among people on low incomes; Stead et al., 2013; von Lampe et al., 2015; Wiltshire et al., 2001). Third, the illicit tobacco market also results in enormous losses in tax revenue (Wood, 2021); as noted above, it cost Australia an estimated \$1.89 billion in lost tax revenue in 2020–21 alone (Department of Health, 2021). This figure is also likely a significant underestimation, with the ATO estimating that they only seize about 1 % of the total illicit domestic market (King, 2019; Wood, 2021).

In addition, there are reports that the illicit tobacco market is largely operated by organised crime syndicates who capitalise on the product's high profitability and minimal penalties to fund other crimes, such as the global arms trade, illicit drug production and trafficking, and terrorism (Coker, 2003; Lauchs & Keane, 2017; Munksgaard et al., 2020). While cigarette manufacturers have used the spectre of illicit tobacco to argue against tobacco control policies such as high taxation, they have also been implicated as participating in the illicit tobacco trade. An article by Coker (2003) outlines numerous legal cases against tobacco companies that attempted to link manufacturers to illegal operations, including drug trafficking and terrorism. For example, the European Union filed a case against tobacco company R.J. Reynolds accusing it of selling illicit cigarettes to drug traffickers and mobsters, with the Italian Mafia, Russian organised crime syndicates, and Colombian drug cartels all reportedly profiting from R. J. Reynolds' illegal actions (Coker, 2003). In Australia, the involvement of criminal syndicates in the illicit tobacco market has become apparent following a series of more than 30 arson attacks on Australian tobacconists since March 2023, mostly in Melbourne (Lorigan, 2023). Multiple news articles describe criminal syndicates threatening owners of tobacconists to “earn or burn”: either sell

illicit tobacco products to earn money for the syndicate or have their shop firebombed (Bucci, 2023a; Lorigan, 2023; Offer, 2023), while other tobacconists are reportedly targeted because they are controlled by rival syndicates (Bucci, 2023b; Lorigan, 2023).

Drivers of Australia's illicit tobacco trade

The most obvious primary driver of Australians' illicit tobacco use is its cheaper price compared to tobacco products on which required taxes have been paid (Bittoun, 2002; Farrell & Fry, 2013). This price difference is often substantial. Tobacco industry funded estimates cite an average price of 20 % and 43 % of the price of a pack of 25 Winfield cigarettes for unbranded and branded illicit tobacco, respectively in 2022 (equivalent to approximately \$0.40 and \$0.80 per cigarette) (FTI consulting, 2023). Media reporting of the illicit tobacco market in Australia has cited prices ranging from \$10 per pack of 20 cigarettes to \$25 per pack of 25 cigarettes (equivalent to between \$0.5 and \$1 per cigarette) (Daily Mail Australia, 2020; The Courier Mail, 2023; The Project, 2024). A personal contact of the primary author reports purchasing a Marlboro-branded pack of 20 cigarettes for \$5 (i.e. \$0.25 per cigarette) from a local tobacconist (see Fig. 1). A pack of 20 Marlboro cigarettes cost \$47.99 to purchase legally from an online tobacconist in December 2023 (i.e., nearly 10 times the cost of the illicit product; Smokemart, 2023). Consumers' motivation to seek cheaper forms of tobacco may have been further exacerbated by the COVID-19 pandemic and an ongoing cost of living crisis in Australia, which have amplified financial hardship for many people on low incomes (Jackson et al., 2023). However, research shows mixed findings regarding the relationship between tobacco tax increases and illicit tobacco trade (Filippidis et al., 2020; Kurti et al., 2015; Nguyen & Nguyen, 2020; Paraje et al., 2022; Ross et al., 2020), with some studies showing that many countries with relatively low tobacco taxes report higher rates of illicit tobacco trade than countries with higher tobacco tax rates (Blecher, 2019; Joossens et al., 2010; Paraje et al., 2022). Rather than a simple relationship between the tax rate and the size of the illicit market, some researchers argue that a country's capacity and extent of tax compliance and/or governance are the primary determining factors influencing the extent of illicit tobacco trade (Paraje, 2019). Other studies point to

proximity to sources of cheap cigarettes due to lower taxing neighbouring jurisdictions as a primary determining factor, especially for jurisdictions sharing borders with neighbouring jurisdictions offering tobacco products at a lower price (Aziani et al., 2020; Filippidis et al., 2020). Since Australia shares no land borders with other countries and has only a federally applied tobacco tax rate, this is less relevant to Australia's situation.

Furthermore, other Australian research has found that price is not the primary driver of illicit tobacco use for all consumers; a nationally-representative survey conducted in 2007 found that the majority of illicit tobacco consumers reported that they would not change their illicit tobacco consumption even if the relative price advantage of chop-chop reduced (Pellegrini et al., 2011). Other Australian studies suggest that consumers' (incorrect) perception that illicit tobacco is healthier or more 'natural' than licit tobacco is a primary driver for their purchasing behaviour (Aitken et al., 2008), while some participants in a UK-based study described preferring to purchase illicit tobacco so that the government does not benefit from receiving tobacco tax revenue (Stead et al., 2013).

Addressing Australia's growing illicit tobacco market

In response to concerns about a growing illicit tobacco market, the ATO established an Illicit Tobacco Taskforce in 2018 with the aim of "proactively targeting, disrupting and dismantling serious actors and organised crime syndicates that deal in illicit tobacco" (Australian Criminal Intelligence Commission, 2021). According to the ATO, the Taskforce detected and seized illicit tobacco products worth over \$870 million in its first three years of operation (Australian Taxation Office, 2021). However, there are various opportunities for more action by Australian authorities to prevent and/or detect illicit tobacco trade.

First, Australia is yet to sign the World Health Organization (WHO) Protocol to Eliminate Illicit Trade in Tobacco Products (World Health Organization, 2013). This international treaty, signed by 54 countries, is a supplementary treaty to the WHO Framework Convention on Tobacco Control and aims to facilitate international cooperation to address all forms of illicit tobacco trade through a suite of measures (World Health Organization, 2013). A primary objective of the Protocol, described as the "heart of the Protocol", is to establish an international track and trace system (TTS), including a global information sharing point (World Health Organization, 2013). The TTS involves placing a unique, secure marking on every tobacco product pack that provides information on the pack's manufacture, shipping, and distribution. As such, should a legitimately produced product enter the illicit market through smuggling, it can be traced to determine its origin and the point it exited the legal supply chain (Gilmore et al. (2019); World Health Organization (2013). The secure markings also discourage counterfeiting (Ross, 2015). The TTS is considered a crucial tool for securing the tobacco supply chain, singled out as the intervention with the most potential to effectively minimise the illicit tobacco trade (Paraje et al., 2022).

The potential benefits of implementing a TTS were outlined in the Australian Government's 2020 Parliamentary Inquiry into illicit tobacco and the National Tobacco Strategy 2023–2030 (Commonwealth of Australia, 2023; Parliament of Australia, 2020). During the Inquiry, Department of Health representatives noted that Australia's Tobacco Plain Packaging Regulations 2011 prevented implementation of a TTS, as the restrictions on tobacco packaging (e.g., the required colour palette) prohibited adding TTS markings (Parliament of Australia, 2020). While Australia's new tobacco control legislation can facilitate a TTS being implemented in Australia (Australian Government, 2023), the Australian Government has not announced any intention to sign the Protocol, and the Parliamentary Inquiry's recommendation on this point was simply that "the Department of Home Affairs work in collaboration with the relevant law enforcement agencies to provide definitive advice to the Australian Government on the implementation of a track and trace regime in Australia, and whether Australia should become signatory" to

the Protocol (Parliament of Australia, 2020).

Second, there is opportunity to increase interception of illicit tobacco shipments at Australia's borders. The CEO of the Australian Criminal Intelligence Commission has stated that organised criminals need only to successfully smuggle one out of every 30 containers of illicit tobacco through Australia's border to make a profit (Greene, 2022). However, due to limited resources, only approximately seven percent of Australia's imports are robustly examined at Container Examination Facilities, with only containers deemed as 'high risk' eligible for this extensive examination (Parliament of Australia, 2005). There are also reports of unreliable and outdated systems and insufficient resources that affect the ABF's ability to examine imports efficiently (Australian Government Productivity Commission, 2022; Commonwealth Ombudsman, 2018). As such, investing in the ABF's ability to detect and seize smuggled illicit tobacco products is crucial to address this need. The Australian Government's recent commitment of \$188.5 million to increase the ABF's capacity to detect illicit tobacco and vaping products is hence very welcome (Department of Health & Aged Care, 2024).

A third opportunity to better mitigate Australia's illicit tobacco trade, highlighted in the Parliamentary Inquiry (Parliament of Australia, 2020), is increased prosecution of illicit tobacco retailers. Currently, the Illicit Tobacco Taskforce and Australian Border Force focus their efforts on large-scale crime syndicates responsible for smuggling illicit tobacco into Australia or growing large crops, with "minimal enforcement and action taken against retailers" who play a key role in distributing the products to consumers (Parliament of Australia, 2020). While the current maximum federal penalty for selling illicit tobacco products is "a prison sentence of up to 5 years or a fine between \$62,600 and \$313,000, or both" (Australian Taxation Office, 2021), in recent years there has been minimal enforcement action directed to detecting these retailers. The reasons for limited enforcement included "convoluted legislation" that limits the likelihood of successful prosecution, which varies between jurisdictions, and the fact that the Department of Health is the lead agency for tobacco control, but does not have search and seizure powers (Parliament of Australia, 2020). Current penalties are also not a successful deterrent, with the Parliamentary Inquiry describing the case of a retailer caught selling illicit tobacco products five times (Australian Taxation Office, 2021). Furthermore, jurisdictional boundaries have created barriers to enforcement against retailers; selling illicit tobacco has been a federal crime due to the evasion of paying tax, but the states and territories have responsibility for regulating tobacco retailing. New Australian legislation makes possession (other than for personal use), manufacturing, and supply of tobacco products in non-compliant packaging an offence, which increases the opportunities for federal Department of Health and Aged Care to take action against illicit tobacco suppliers (Parliament of Australia, 2023).

The evidence that Australia's tobacco taxes are driving the current increase in illicit tobacco trade and that reducing the tax would reduce this crime is weak (Paraje, 2019). During the series of tobacco tax increases from 2013 to 2020 in Australia, tobacco tax evasion, including use of unbranded tobacco remained low during most of this time (Australian Institute of Health & Welfare, 2020). Despite the final of eight annual 12.5 % tax increases being completed in September 2020 and no further increases beyond bi-annual inflation adjustment between October 2020 and August 2023, the use of unbranded tobacco only increased substantially between 2019 and 2022–2023 (4.9 % to 9.0 %) according to national survey data (Australian Institute of Health & Welfare, 2024). While the higher price of taxed tobacco products may increase consumer demand for untaxed tobacco, it is likely that lower penalties that are enforced on illicit tobacco supply compared to the penalties for illicit supply of other addictive substances, such as cannabis and methamphetamine, has encouraged organised crime syndicates to diversify into illicit tobacco supply, since illicit drug markets remain highly profitable (Coyné & Westendorf, 2021). Increasing the penalties for illicit tobacco supply, coupled with increased investment in detection and prosecution of offenders, is likely to be more effective in

disrupting the illicit tobacco market than reducing the tax on tobacco products.

The Queensland Government has recently taken steps to address the issue of illicit tobacco supply through new laws (Queensland Government, 2023); as of 2 June 2023, it is illegal for Queensland retailers to supply, store or possess illicit tobacco (in commercial quantities). The new laws also provide new powers for Queensland enforcement officers to investigate and seize these products (Queensland Government, 2023), but the effectiveness of these laws may be limited by insufficient resources to hire, train, and deploy an adequate number of Environmental Health Officers to respond to possible breaches. Responding to these breaches also relies on members of the public to report suspected breaches (e.g., via the Queensland Health (Queensland Health, 2023) or ATO (Australian Taxation Office, 2023) websites). However, there are no mass media campaigns promoting community tip-offs, despite evidence from the UK for the effectiveness of such a campaign in promoting increased calls to crime hotlines providing intelligence on illicit tobacco (McNeill et al., 2014). Furthermore, while other Australian states use covert purchasing operations to proactively monitor and enforce tobacco retailing laws such as for sales to minors, Queensland does not use these methods.

Next, tobacco retail licencing is needed in all states and territories as the threat of licence cancellation may be a greater deterrent to supplying illicit tobacco for tobacco retailers than the fines typically administered through courts. Three states (Queensland, New South Wales and Victoria) have not had a tobacco licensing scheme, although one of these (New South Wales) has a tobacco retailer notification scheme with the ability of the state government to impose a tobacco retailing ban on retailers who do not comply with tobacco control laws. The lack of retail licensing may be a factor in Victoria and Queensland being the two states that have been the centre of a series of arson attacks on tobacconists related to illicit tobacco trade (Abbott et al., 2023). Queensland's new tobacco retail licensing scheme will commence in September 2024 (Queensland Government, 2023), while Victoria has announced that legislation to introduce tobacco retailer licensing would be introduced into parliament before the end of 2024 (Business Queensland, 2024; Sciberras, 2024). Ensuring adequate resources for monitoring and enforcement and following through with licence cancellations when illicit tobacco sales are detected will be critical.

A fifth approach is to decrease consumer demand for illicit tobacco products. In addition to reducing the availability of illicit tobacco, discouraging consumers from purchasing it could also assist to minimise the market. A few countries (e.g., Canada, Malaysia, United Kingdom) have implemented public education campaigns in an attempt to reduce consumer demand for illicit tobacco products (National Research Council, 2015). The Australian Taxation Office has also produced public education materials that aim to raise awareness about illicit tobacco trade and its consequences (Australian Taxation Office, 2021). These campaigns aim to raise awareness of the extent of the trade, the penalties for buying or selling these products, and/or the criminality of the trade (Chaloupka et al., 2015; National Research Council, 2015), but there is little evidence on what types of messages in public educational campaigns or other interventions are effective specifically to deter against illicit tobacco purchasing. As such, independent research is crucial to ensure demand reduction interventions for illicit tobacco purchasing are effective and do not inadvertently promote the perception that tobacco products purchased from the legal market are 'safer' or increase consumer interest in purchasing illicit products by increasing awareness of their availability and lower price. More generally, reducing the number of people who smoke through tobacco control interventions and smoking cessation assistance will also reduce demand for illicit tobacco products. Furthermore, another reason why reducing the tax on tobacco products is unlikely to be effective for reducing the illicit market is that research suggests that the price of illicit tobacco products increases when the price of the legal market increases (Tsui, 2016), hence reducing the legal price is also likely to reduce the price of the untaxed

products and make these even more affordable.

Conclusion

A sizeable increase in the quantity of illicit tobacco seized in Australia over recent years suggests a need for more action to control this illicit market that threatens to undermine policies to achieve a national commercial tobacco endgame goal of 5 % or less smoking prevalence by 2030. Policy reform at both federal and state level in multiple Australian states is a positive move. However, challenges remain in adequately monitoring and enforcing laws that prohibit the supply of illicit tobacco. Further policy action, such as implementing a TTS, increasing the proportion of containers searched at the border, encouraging public reporting of illicit tobacco sales, proactive monitoring and enforcement of laws such as via covert purchasing activities, meaningful penalties to deter retailer and criminal syndicate involvement in illicit sales, and development of public education interventions to reduce consumer demand for illicit tobacco could assist Australia to control this growing market.

CRedit authorship contribution statement

Cheneal Puljević: Writing – original draft, Conceptualization. **Michael King:** Writing – review & editing. **Isabel Meciar:** Writing – review & editing. **Coral Gartner:** Writing – review & editing, Conceptualization.

Declaration of competing interest

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