

# Are the tobacco industry's claims about the size of the illicit cigarette market credible? The case of South Africa

Corné van Walbeek,<sup>1,2</sup> Lerato Shai<sup>1</sup>

<sup>1</sup>School of Economics, University of Cape Town, Rondebosch, South Africa  
<sup>2</sup>Economics of Tobacco Control Project, Southern African Labour and Development Research Unit, University of Cape Town, Rondebosch, South Africa

**Correspondence to**  
 Professor Corné van Walbeek,  
 School of Economics, University  
 of Cape Town, Private Bag X3,  
 Rondebosch 7701, South  
 Africa; cwalbeek@gmail.com

Received 15 November 2013  
 Accepted 14 May 2014  
 Published Online First  
 11 June 2014

## ABSTRACT

**Background** The tobacco industry claims that illicit cigarette trade in South Africa is high and rising. This is often used as an argument not to increase the tobacco excise tax or to regulate tobacco products.

**Objectives** To determine how the tobacco industry's estimates of the size of the illicit cigarette market have changed over time.

**Methods** Published media articles were obtained from South African Press Cuttings; published articles and press releases were sourced from the internet.

The period of interest is 1990–2012.

**Results** Between 1990 and 2012 we found 90 newspaper articles and press statements that emphasised the tobacco industry's view on illicit trade. Articles that reported on action taken against illicit trade were excluded.

Between 2006 and early 2011 the Tobacco Institute of Southern Africa, a body representing the interests of large cigarette companies, reported that South Africa's illicit cigarette market share was 20%. This share increased to 25% in late 2011 and 30% in 2012. In a 2012 presentation by Tobacco Institute of Southern Africa to National Treasury the illicit market share in 2008 was indicated as 7.9%, compared with claims in that year that the illicit market share was 20%. Industry findings that the illicit market decreased in 2007 and 2008 were not reported in the press.

**Conclusions** The tobacco industry has adjusted previous estimates of the illicit trade share downwards to create the impression that illicit trade is high and rising. If previous estimates by the tobacco industry were incorrect the credibility of current estimates should be questioned.

## INTRODUCTION

Cigarette consumption in South Africa has fallen by more than 40% in aggregate terms and by more than 60% in per capita terms since the early 1990s.<sup>1</sup> This was the result of a deliberate tobacco control policy based on, among others, large increases in the excise tax.<sup>2</sup> The international literature indicates that increasing the excise tax is the single most effective tobacco control measure.<sup>3</sup> Since 1993 the real (ie, inflation-adjusted) excise tax on cigarettes increased by nearly 500% per pack and the real net-of-tax price doubled (see figure 1).<sup>4</sup> As a result, the real retail price of cigarettes increased by 200% over the past 20 years.

In South Africa the excise tax on tobacco products is levied as a specific tax. The National Treasury annually adjusts the excise tax on cigarettes. According to the National Treasury's policy it

will, at the minimum, increase the excise tax by the inflation rate percentage (Cecil Morden, Chief Director, Economic Tax Analysis at National Treasury, South Africa, Personal communication, 8 December 2012). In reality the excise tax has increased by substantially more than the inflation rate, for reasons explained below.

The excise tax is set at a level where the sum of the excise tax and the value-added tax (VAT) comprise 52% of the recommended retail price of the most popular price category of cigarettes. This policy has been in place since 1994, initially with a 50% total tax burden, but since 2004 with 52% total tax burden.<sup>2</sup>

Although easy to understand and apply, this formulaic approach to setting the excise tax places a lot of power in the hands of the tobacco industry. The tobacco industry, through its control of the net-of-tax price (which is defined as the retail price less the excise tax and VAT), controls the retail price. Throughout the 1990s and for most years between 2000 and 2010 the tobacco industry increased the net-of-tax price by substantially more than the inflation rate. The sharp increases in the real net-of-tax price resulted in an immediate increase in the real retail price of cigarettes. In order to keep to its targeted total tax burden percentage, the National Treasury passively increased the excise tax by an above-inflation percentage in the subsequent year. This cycle of increasing net-of-tax prices feeding increasing retail prices, which in turn increased the excise tax has been a feature of the South African cigarette market for nearly 20 years (1992–2010). The large excise tax increases between 1994 and the late 1990s were primarily the result of the government's desire to reduce cigarette consumption, and to bring the total tax burden to the targeted 50% level. The excise tax increases between 2000 and 2010 were nearly exclusively the predictable consequences of the tobacco industry's aggressive pricing policies (see figure 1).

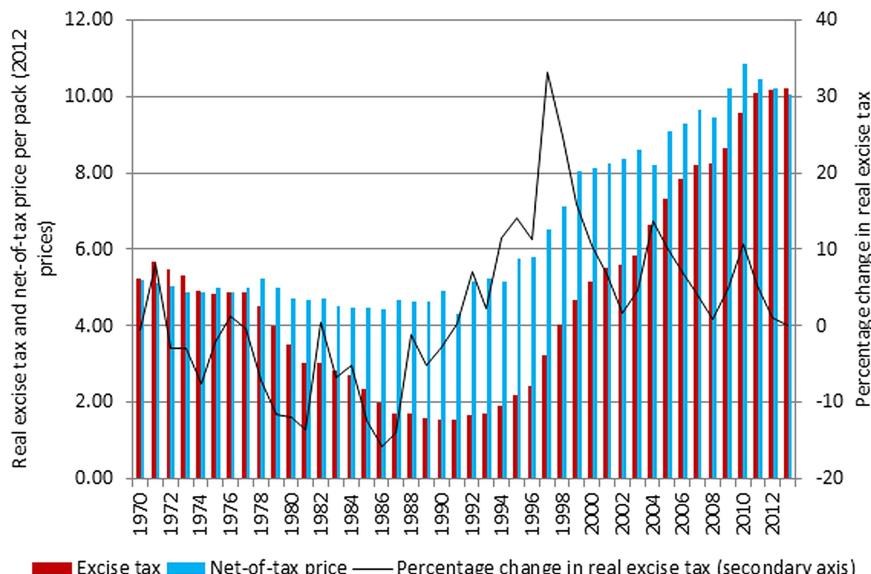
Not surprisingly, the South African tobacco industry strongly opposed the tax increases. Arguments against the tax increases varied (eg, that the tax increases would not reduce tobacco consumption and that it would have detrimental employment effects), but by far the most common argument was that it would encourage cigarette smuggling and other illicit activity, with associated detrimental consequences (eg, revenue loss, the fuelling of organised crime and that illicit cigarettes are more toxic). The tobacco industry never acknowledged to the media that it effectively set the excise tax amount.



CrossMark

To cite: van Walbeek C, Shai L. *Tob Control* 2015;24:e142–e146.

**Figure 1** Real excise tax on cigarettes in South Africa, 1970–2013.  
 Data sources: National Treasury,  
*Budget Review*. Annexure B, various  
 years<sup>1</sup>; Statistics South Africa,  
*Statistical Release P0141 Consumer  
 Price Index*, various months.<sup>4</sup>



Nevertheless, the tobacco industry consistently drew a strong relationship between increases in the excise tax and the alleged increase in illicit trade in cigarettes.

There is little, if any, independent evidence that there was a significant increase in the illicit cigarette market before 2010,<sup>5,6</sup> despite claims by the industry to the contrary. In 2010 there was a substantial spike in the illicit cigarette trade, which was verified by independent research.<sup>6</sup>

Before 2010 the tobacco industry regularly complained about the alleged increase in the illicit market, but this was limited to presentations to policy makers and quotes in the newspapers. In 2010, they went public. British American Tobacco South Africa (BATSA), by far the largest supplier of cigarettes in South Africa and the Tobacco Institute of South Africa (TISA), an industry body representing primarily large cigarette producers, launched a national advertising campaign to alert the public to the link between illicit cigarettes and organised crime. Billboards showed an angry young man, peering through the sights of a gun, with the caption “Warning: The money you spend on illegal cigarettes, he uses to buy guns” (see figure 2). Another advertisement stated: “Warning: The man selling illegal cigarettes to you may be selling drugs to your family”. The public were urged to call a toll-free number if they had any information on illicit outlets. The industry placed posters in many retail outlets which committed the outlet to not sell illegal cigarettes. The industry also ran commercials on radio.

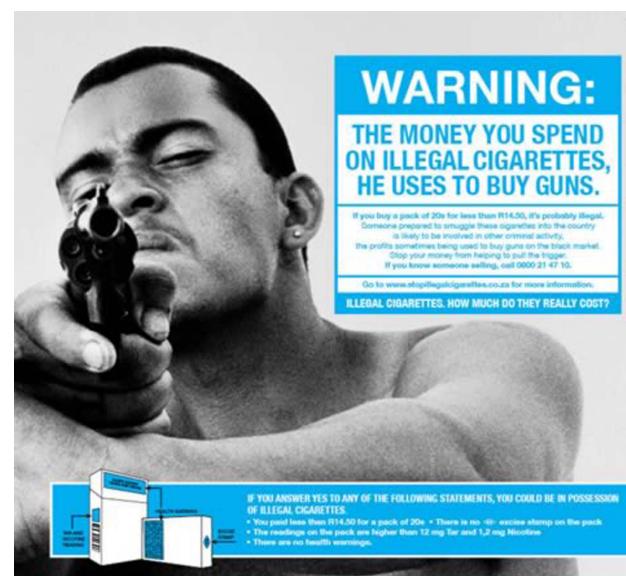
The campaign was short-lived. Eight members of the public complained to the Advertising Standards Authority (ASA) that the campaign was a deceptive way to advertise cigarettes.<sup>7</sup> The complainants argued that BATSA used the campaign as a ploy to circumvent the law that disallowed the advertising of cigarettes in South Africa. By ‘discouraging’ the purchase of illegal cigarettes, it was indirectly encouraging the purchase of legitimate cigarettes. The ASA did not rule on the legality of the advertisements but found that BATSA was unable to provide evidence linking the sale of illicit cigarettes to hijacking and drug activities. The ASA ordered BATSA to withdraw the campaign.<sup>7</sup>

The illicit trade in cigarettes has received much attention in the media in South Africa. It is presented as a significant and growing problem. The police authorities have identified the illicit trade in cigarettes as a ‘national priority crime’, together with crimes like rhino poaching, truck hijacking and the bombing of automatic teller machines. TISA indicates on their

website that they are working closely with the South African Police Service and the South African Revenue Service to curb the illicit trade in tobacco products in South Africa.

No one denies that there is a sizeable illicit market in cigarettes in South Africa and that it will undermine tobacco control efforts if it becomes too large. At this point the tobacco industry is writing the narrative and is claiming that illicit trade is out of control. They have an incentive to make such claims, that is, to prevent the government from raising the tax burden.

This paper aims to investigate and evaluate the claims of the tobacco industry as to the size of the illicit cigarette market in South Africa. We conclude that there are substantial anomalies in their estimates. The tobacco industry has revised their historical estimates of the illicit market downwards, in order to create the impression that the illicit market has grown very rapidly over a short space of time. This type of reasoning casts doubt on the credibility of the current estimates of the illicit market. If the tobacco



**Figure 2** Billboards showed an angry young man, peering through the sights of a gun, with the caption ‘Warning: The money you spend on illegal cigarettes, he uses to buy guns’.

## Research paper

industry's historic estimates of the size of the illicit market were wrong, why would the current estimates be credible?

### METHOD

Published and unpublished media reports related to illicit trade in cigarettes were obtained from a variety of sources: (1) South African Press Cuttings, (2) online newspaper articles, (3) online press releases by BATSA and TISA, and (4) presentations to the National Treasury and to the authors of this paper by BATSA and TISA.

South African Press Cuttings is a media monitoring company that provides press cuttings to clients. The National Council Against Smoking subscribes to all press cuttings (newspaper and magazine articles) on smoking and tobacco. We performed a manual review of articles published between 1990 and 2011, using key words "cigarettes" or "tobacco" and "tax" or "illicit trade" or "smuggling".

We performed a search of online South African newspaper articles using the South African Media Database (via Sabinet Reference) and Google for the period 1990 to 2012. The key words were 'cigarette', 'tobacco', 'tax', 'counterfeit cigarettes', 'smuggling', 'illegal trade', 'illicit', 'TISA', 'BAT' and 'fake cigarettes'.

A search of TISA's and BATSA's websites (<http://www.tobaccosa.co.za> and <http://www.batsa.co.za>) for press releases between January 2011 and February 2013 yielded 28 press releases which mentioned the illicit cigarette market. Of these, 11 were published by newspapers while 17 were not published in newspapers. BATSA has also launched a website that informs the public about illegal cigarettes, for example, how to identify illegal cigarettes, 'facts' about illegal cigarettes, a radio campaign and a database of media articles pertaining to illegal cigarettes (<http://www.stopillegalcigarettes.co.za>). We adopted multiple searches to minimise the risk of missing relevant articles.

Ignoring duplicate articles, a total of 429 articles were found. Of these, 90 emphasised the tobacco industry's perspective. These articles were used in the subsequent analysis. Forty articles focused primarily on the responses by the tobacco control community and/or comments by government agencies and 299 reported on action taken against cigarette smugglers and other illicit traders (eg, arrests, confiscations, trials and verdicts). These 339 articles were not used for the subsequent analysis in this paper.

References to monetary amounts are in South African rand. Where relevant, they are converted to US currency at the average exchange rate of the year in question.

### RESULTS

Between 1990 and 1993 there were no reports in South African newspapers about the illicit trade in cigarettes in South Africa. Real (ie, inflation-adjusted) excise taxes were low, having decreased by more than 70% between 1970 and 1990 (figure 1).<sup>1</sup> Real cigarette prices were at historical lows in the early 1990s.<sup>2</sup> There were no media reports linking the (modest) increases in the excise tax in 1992 and 1993 to increased illicit activity.

In May 1994 the first democratically elected government came to power, and in June 1994 the Minister of Finance announced that government intended to raise the excise tax, primarily for public health reasons. The government also announced that it intended to set the total tax burden at 50% of the retail price, to be phased in over a number of years. At the time the total tax burden was 33% of the retail price. The tobacco industry voiced its disappointment, warning that excise tax increases would result in increased smuggling and other illicit activities.<sup>8</sup>

The nominal excise tax in South Africa was increased each subsequent year. The press published the tobacco industry's reaction to the excise tax increases in 16 years of the 19 years after 1994. The tobacco industry lamented the increase in 13 years of these 16 years. The tobacco industry argued that increases in the excise tax would lead to more illicit trade (n=14), decrease government revenue (n=4), lead to a loss of jobs in the industry (n=2); was unfair to a legal product (n=2); and might not result in a decrease in consumption (n=1).

Between 1994 and 2002 the tobacco industry regularly alleged that the excise tax increase would increase illicit trade, but no published industry estimates of the illicit market appeared. In 2003, in an article in *Sunday World*, BATSA was quoted as saying that counterfeit cigarettes (which is one component of the illicit market) comprised "much less" than 1% of the total market.<sup>9</sup> In 2004 BATSA estimated the illicit cigarette market at between 5% and 15% of the total market.<sup>10</sup>

After 2006, TISA made illicit trade its primary public relations focus. According to its website "TISA has identified the escalation of illicit trade as the single biggest threat to the sustainability of the legal tobacco industry, eroding the market share of legitimate players and government revenue alike".

**Table 1** summarises media reports on the size of the illicit market, ascribed to either TISA or BATSA. The press typically reports the illicit market size in one or more of the following ways: (1) the market share of illicit cigarettes, (2) the number of illicit cigarettes smoked per day or per annum and/or (3) the annual loss of tax revenue.

**Table 1** Summary of estimates of the illicit cigarette market by the tobacco industry

Year	Millions of illegal cigarettes sold per day (median)	% market share of illegal cigarettes (median; range in parentheses)	Forgone tax revenues by government (median; US\$ in parentheses)	Number of TISA references	Number of BATSA references
2004		10 (5–15)		0	1
2005	–	–		0	0
2006	2.5	20 (15–20)		5	0
2007	10	20 (20–20)	1.4 billion rand (\$200 million)	2	0
2008	10	20 (20–20)	1.95 billion rand (\$236 million)	3	0
2009	10	20 (20–20)	2 billion rand (\$237 million)	1	1
2010	15	22.5 (20–25)	2 billion rand (\$273 million)	3	3
2011	15	22.5 (20–25)	2.75 billion rand (\$379 million)	15	1
2012	19	25 (20–30)	4 billion rand (\$487 million)	10	3

BATSA, British American Tobacco South Africa; TISA, Tobacco Institute of Southern Africa.

In 2006, and for each of the five subsequent years, TISA claimed that the illicit market had grown from almost zero in the late 1990s to 20% of the total cigarette market. During the course of 2011 TISA claimed that the illicit market share had increased to 25% in 2011, and in late 2012 it claimed that it had increased to 30% in that year. BATSA's estimates were similar to those of TISA.

Between 2007 and 2009 BATSA and TISA indicated that 10 million illegal cigarettes were sold every day. Presumably these were rounded approximations that could be easily understood by the public. This number was increased to 15 million cigarettes per day in 2010 and 19 million cigarettes per day in 2012 (the latter estimate was presented in the press as 7 billion cigarettes per year). By way of comparison, during this period about 65 million legal cigarettes were sold daily.

The tobacco industry's estimates of forgone tax revenue show a generally increasing trend, from less than 1 billion rand (\$148 million) in 2006 to 2 billion rand (\$273 million) in 2010 and 4 billion rand (\$487 million) in 2012. The increase in forgone tax revenues reflects the increasing cigarette excise tax per pack and the tobacco industry's claim of a growing illicit market. To put the forgone tax revenue in context, in the 2012/2013 financial year the government collected 11.0 billion rand (\$1.34 billion) from legal cigarette sales, up from 6.8 billion rand (\$1.01 billion) in the 2006/2007 financial year and 9.4 billion rand (\$1.28 billion) in the 2010/2011 year (all amounts in nominal terms).

Media reports typically do not provide year-by-year numbers showing how the illicit market share has increased over time. A notable exception was an interview with a BATSA official by *Business Report* in December 2010, when estimates, attributable to BATSA, of the illicit market for 2008, 2009 and 2010 were published.<sup>11</sup> See column (2) in **table 2**. According to these statistics, the illicit market share increased from 11% in 2008 to 23% in 2010. BATSA highlighted that the illicit trade in cigarettes was an increasingly pressing problem. However, this 'trend analysis' directly undermines TISA's claims that in 2008 (and even as early as 2006) the illicit market comprised 20% of the total market.

In a presentation to officials at the National Treasury in June 2012, BATSA indicated that the illicit market share increased from 7.9% in 2008 to 27.8% in the first half of 2012. These estimates were obtained from TNS Global, who had been contracted by BATSA to estimate the size of the illicit market in South Africa. See column (3) in **table 2**. The estimates for 2008–2010 were substantially lower than

the estimates published in December 2010. The tobacco industry had again rewritten history, apparently to emphasise the rapidity with which the illicit market had ostensibly increased.

In a presentation to the authors in 2013, TISA presented similar estimates of the size of the illicit market for the 2008–2012 period, but also included data for 2006 and 2007. See column (4) in **table 2**. The dramatic 2007 and 2008 decrease was ascribed to the closure of Mastermind Tobacco. This company was investigated by the South African revenue authorities for tax evasion and was eventually closed down in November 2006.<sup>12</sup> The directors fled the country.

Not a single media statement by BATSA or TISA alluded to the decrease in illicit trade in 2007 and 2008. This illustrates the selectivity of the tobacco industry in its use of data about the magnitude of the illicit cigarette market. Surveys that indicate that the illicit market is growing get prominence in the media and in presentations to government agencies. However, surveys that show that the illicit market is shrinking are ignored.

## DISCUSSION

There is no doubt that an increase in illicit trade in cigarettes undermines the public health and fiscal benefits associated with an excise tax increase. However, a modest increase in illicit trade may be an acceptable price to pay.<sup>5</sup> Increasing the excise tax remains a potent tobacco control tool in South Africa. Despite the tobacco industry's claims of an increase in illicit cigarettes, independent surveys indicate that South Africa's smoking prevalence among adults in 2012/2013 is about 21%,<sup>13 14</sup> down from 33% in the early 1990s,<sup>15</sup> and excise tax revenue (expressed in inflation-adjusted terms) is higher than it has ever been.

Initially arguments about illicit trade were vague and general and there was no 'statistical evidence' to back up the claims. The tobacco industry's arguments had no impact on the government's excise tax policy, and during the 1990s the excise tax increases were substantial. Since 2006 BATSA has used a large research organisation (TNS Global) to perform regular surveys of retail outlets, with the specific aim to estimate the size of the illicit market. The research methodology was explained at a meeting organised by the National Treasury in September 2013, which was also attended by the authors of this paper. Buyers of cigarettes are approached by fieldworkers as they leave the retail outlet and the fieldworkers buy their product under the guise of 'quality control'. More than 1500 outlets are included in the sample and more than 3000 packs

**Table 2** Illicit market share percentage according to TISA and BATSA

Year	TISA numbers quoted in numerous articles at the time (%) (1)	December 2010 article in Business Report (BATSA) (%) (2)	June 2012 presentation to National Treasury (BATSA) (%) (3)	May 2013 presentation to authors (TISA) (%) (4)
2006	20	—	—	21
2007	20	—	—	11
2008	20	11.0	7.9	8
2009	20	16.6	10.4	10
2010	20	23.1	21.0	21
2011	25	—	26.0	26
2012	30	—	27.8*	30

\*Subsequently updated to 30%.

Source: (1) Numerous articles; (2) Own calculations based on *Business Report* article, (3) unpublished PowerPoint presentation to South Africa's National Treasury, June 2012, (4) unpublished presentation to authors of this paper, May 2013.

BATSA, British American Tobacco South Africa; TISA, Tobacco Institute of Southern Africa.

## Research paper

are retrieved per survey. The survey is nationally representative, but the details of the sampling methodology and the subsequent outlet and volume weighting are proprietary. Illicit cigarettes are defined in three categories: (1) counterfeit, (2) non-compliant (eg, missing health warnings, or quitline number, or excise stamp and tar and nicotine ratings) and (3) 'suspicious price'. Cigarettes are classified as 'suspicious price' cigarettes if the retail price is less than the sum of the excise tax, VAT, and a modest manufacturing cost and retail margin. In 2013 BATSA set the threshold for 'suspicious price' cigarettes at 15.50 rand (\$1.55) per pack of 20. In 2013 the excise tax was 10.92 rand (\$1.09) per pack, irrespective of the retail price. VAT is applied at a rate of 14% on the excise tax and the net-of-tax price. The net-of-tax price (which covers the cost of manufacture, distribution and retail) of a fully tax paid pack of cigarettes selling at 15.50 rand would thus be 2.68 rand (\$0.27) per pack ( $=15.50/1.14-10.92$ ). The retail price of popular price brands sold in supermarkets is about 30 rand (\$3.00) per pack, implying a net-of-tax price of 15.40 rand (\$1.54) per pack ( $=30.00/1.14-10.92$ ).

BATSA indicates that the proportion of 'suspicious price' cigarettes has increased, while the proportion of counterfeit and non-compliant cigarettes has decreased over time. In recent years a number of low-price cigarette manufacturers have entered the market, presumably aiming to capture a part of the lucrative market. There is no legislation in South Africa preventing firms from selling cigarettes below cost, although it seems unlikely that small operators have sufficiently large reserves to do this for long periods of time. The low-cost producers' industry body, Fair-trade Integrity Tobacco Association, claims that they are legitimate operators and pay the full excise tax, and that the incumbent (BATSA), with the support of TISA, is using bullying tactics to destroy them.<sup>16</sup> To the extent that the Fair-trade Integrity Tobacco Association-aligned small manufacturers are legitimate producers, a normal competitive conflict is presented by TISA as an illicit trade issue.

None of the seizures of contraband cigarettes by the authorities has involved members of TISA. This has led to accusations that BATSA is using its security services to provide intelligence about rival local manufacturers to the authorities. Reliance by the South African authorities (eg, South African Police Service and South African Revenue Service) for information from BATSA will help reduce competition for BATSA and means any illegal BATSA activities will go undetected.

While BATSA's research methodology seems broadly reasonable, the estimates of the size of the illicit market, especially in recent years, have a strong upward bias for which there is no reasonable explanation. For example, BATSA claims that the illicit market share increased from 26% in 2011 to 30% in 2012. Legal cigarette sales, based on official tax revenue data, increased by 1.9% in the 2012 financial year.<sup>1</sup> This would imply that aggregate cigarette consumption increased by about 6% in 2012. In a country with fairly strong tobacco control legislation, a history of decreasing smoking prevalence,<sup>2</sup> stable real cigarette prices and modest economic growth (2–3% in recent years), this is simply not credible.

The tobacco industry has a long history of deceit and misrepresentation.<sup>17</sup> By rewriting history about the magnitude of the illicit market, it has again shown itself as an untrustworthy source of information. Government officials would do well to question the tobacco industry's claims on any matter in which it has a stake.

## What this paper adds

- The threat of an increase in the illicit trade of cigarettes is often used as an argument by the tobacco industry for the government not to increase the excise tax. The tobacco industry has an incentive to exaggerate the size of the illicit market.
- This paper considers the tobacco industry's estimates of the illicit market, as published in the media, in a country that has experienced large excise tax increases over the past 20 years. It is found that the tobacco industry has adjusted previous estimates downwards in order to create the impression that the current illicit market is large, and has been growing rapidly.
- This behaviour casts doubt on the tobacco industry as a credible source of information regarding the size of illicit trade in South Africa. Policy makers are recommended to exercise caution when interpreting the tobacco industry's estimates of the illicit cigarette market.

**Contributors** LS compiled the data. CvW analysed the data and wrote the paper.

**Funding** This work was supported by the Bill and Melinda Gates Foundation through the American Cancer Society, grant number NHITCRTR03.

**Competing interests** None.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## REFERENCES

- 1 National Treasury. *Budget Review. Annexure B*, various years. 2013. <http://www.treasury.gov.za/documents/national%20budget/2013/review/Annexure%20b.pdf> (accessed 17 Apr 2014).
- 2 Van Walbeek C. *The Economics of Tobacco Control in South Africa* [Unpublished PhD thesis]. University of Cape Town, 2005.
- 3 International Agency for the Research on Cancer (IARC). *Effectiveness of tax and price policies for tobacco control. IARC Handbooks of Cancer prevention in Tobacco Control*. Vol 14. Lyon, France: International Agency for the Research on Cancer, 2011.
- 4 Statistics South Africa. Statistical Release P0141 Consumer Price Index, various months.
- 5 Blecher E. A mountain or a molehill: is the illicit trade in cigarettes undermining tobacco control policy in South Africa? *Trends Organ Crime* 2010;13: 299–315.
- 6 Van Walbeek C. Measuring changes in the illicit cigarette market using government revenue data: the example of South Africa. *Tob Control* 2014. Published Online First at <http://tobaccocontrol.bmjjournals.org/content/early/2014/01/15/tobaccocontrol-2013-051178.full.pdf+html> (accessed 17 Apr 2014).
- 7 Advertising Standards Authority (ASA). British American Tobacco/ K Williams and Others/17013. <http://www.asasa.org.za/ResultDetail.aspx?Ruling=5562> (accessed 17 Apr 2014).
- 8 Vermeulen A. Smoking tax criticised. *Business Day* 24 June 1994.
- 9 Beharie S. Fake fags bad for economy. *Sunday World* 26 January 2003.
- 10 Inggs M. Changes to tobacco act will encourage smuggling—BAT. *Natal Mercury* 20 October 2004.
- 11 Enslin-Payne S. BAT lashes out at illegal cigarettes. *Business Report* 1 December 2010. <http://www.iol.co.za/business/news/bat-lashes-out-at-illegal-cigarettes-1.894583#.U0z9Hldjmwk> (accessed 13 Apr 2014).
- 12 South African Press Agency (SAPA). Arrest at tobacco firm, Star, 30 June 2005.
- 13 National Income Dynamics Study. *Wave 3* [dataset]. Version 1.2. Cape Town: Southern Africa Labour and Development Research Unit [producer]. Cape Town: DataFirst [distributor], 2014.
- 14 Shisana O, Labadarios D, Rehle T, et al. *South African National Health and Nutrition Examination Survey (SANHANES-1)*. Cape Town: HSRC Press, 2013. <http://www.hsrc.ac.za/en/research-outputs/view/6493> (accessed 17 Apr 2014).
- 15 Van Walbeek CP. Recent trends in smoking prevalence in South Africa: Some evidence from AMPS data. *S Afr Med J* 2002;92:468–72.
- 16 Prinsloo L. Cut-price smokes 'here to stay'. *Business Day*. <http://www.bdlive.co.za/business/retail/2013/09/01/cut-price-smokes-here-to-stay> (accessed 14 Apr 2014).
- 17 Ciresi MV, Walburn RB, Sutton TD. Decades of deceit: document discovery in the Minnesota tobacco litigation. *William Mitchell Law Rev* 1999;25:477–566.



# Are the tobacco industry's claims about the size of the illicit cigarette market credible? The case of South Africa

Corné van Walbeek and Lerato Shai

*Tob Control* 2015 24: e142-e146 originally published online June 11, 2014  
doi: 10.1136/tobaccocontrol-2013-051441

---

Updated information and services can be found at:  
<http://tobaccocontrol.bmj.com/content/24/e2/e142>

---

*These include:*

## References

This article cites 3 articles, 0 of which you can access for free at:  
<http://tobaccocontrol.bmj.com/content/24/e2/e142#BIBL>

## Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

## Notes

---

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://group.bmj.com/subscribe/>