Research Report on the Illegal Tobacco Market

March 2005
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>AFFA</td>
<td>Department of Agriculture, Fisheries and Forestry</td>
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<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>ANOA</td>
<td>Australian National Audit Office</td>
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<td>ATO</td>
<td>Australian Tax Office</td>
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<tr>
<td>ATS</td>
<td>Aggressive Tobacco Strategy</td>
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<td>BATA</td>
<td>British American Tobacco Australia</td>
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<tr>
<td>CPEoD</td>
<td>Cross Price Elasticity of Demand</td>
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<tr>
<td>EBL</td>
<td>Excise Business Line</td>
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<tr>
<td>GST</td>
<td>Goods and Services Tax</td>
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<tr>
<td>ITWP</td>
<td>Illegal Tobacco Working Panel</td>
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<tr>
<td>PIN</td>
<td>Penalty Infringement Notice</td>
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<tr>
<td>PM</td>
<td>Phillip Morris</td>
</tr>
<tr>
<td>QTMGC</td>
<td>Queensland Tobacco Marketing and Growing Cooperative</td>
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<tr>
<td>RYO</td>
<td>Legal roll-your-own pouch tobacco</td>
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<tr>
<td>TCV</td>
<td>Tobacco Cooperative of Victoria</td>
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<tr>
<td>TIG</td>
<td>Tobacco Excise Industry Group</td>
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<tr>
<td>TMC</td>
<td>Tailor-made cigarettes</td>
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Executive summary
Executive Summary

This report focuses on the primary component of the illegal tobacco market in Australia; the trade in “chop chop”. This product is tobacco that is diverted from legal channels of sale and distribution, thereby avoiding tax and excise. Chop chop is grown on licensed farms, backyard plantations or imported illegally and is sold on the Australian black market in large quantities.

While international smuggling of cigarettes to Australia is also a serious problem, it is not the primary subject of this report. Other illegal tobacco markets present in Australia, including counterfeit products, duty free diversion and illegal internet sales, are similarly not a focus of this report.

This report develops previous work by industry stakeholders in building an understanding of illegal tobacco markets by utilising models to estimate the size of these illegal markets. This report also suggests regulatory intervention options for curbing the trade in illegal tobacco.

It is intended that the information contained in this report will be used as a means of generating discussion and promoting action amongst concerned stakeholders.

The domestic tobacco industry (Chapter 2)

The Australian tobacco industry makes a significant contribution to the economy in terms of government revenue, retail sales and employment. During the 1999/00 financial year the industry contributed an estimated $6 billion in value added and an additional $21 billion from flow-on effects.

The tobacco industry in Australia comprises, tobacco growers and cooperatives; manufacturers and distributors; and retailers. The Australian Taxation Office (ATO) is responsible for the collection and administration of tobacco excise duties. In terms of revenue, the total estimated tobacco excise tax to be collected in 2004/05 is $5.21 billion.

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1 Chris Schofield, Customs spokesman, Sydney Morning Herald, 10 December 2003
3 Commonwealth 2004-05 Budget Paper No.1, Statement 5: Revenue, pg.13
Profile of the illegal tobacco market (Chapter 3)

Chop chop

Chop chop dominates the illegal tobacco market in Australia and is regarded as the area of greatest risk to tobacco excise revenue. As such it is the subject of greatest attention by the ATO law enforcement policy. It is estimated that approximately 1 in every 17 cigarettes smoked in Australia contains chop chop.4

Estimates of the size of the chop chop market vary between 0.4 and 2.6 million kg per annum, which translates to between $99 million and $600 million in lost tax and excise per annum. In the 2003-04 financial year, the ATO seized around 68 tonnes of chop chop with an excise value of more than $19 million.6

Several factors have influenced some licensed growers to divert tobacco into the illegal industry:7

- a decline in demand for Australian tobacco leaf by manufacturers;8
- the farm gate market price for chop-chop is around 4 to 6 times the market rate paid by manufacturers;
- exporting Australian tobacco leaf is not a commercial proposition. The international market price for tobacco is significantly cheaper than the price Australian growers are willing to accept for their tobacco;
- the evasion of taxes, particularly GST and income tax; and
- the application of pressure by organised crime.9

Currently, taxes on cigarettes including excise and GST account for almost 70 per cent of the total cost of cigarettes in Australia. The Australian National Audit Office (ANAO, 2002) stated that “...it is this high proportion of tax that provides generous margins to illegal dealers”. PricewaterhouseCoopers also argues that “the attractiveness of excise tax avoidance will remain so long as the high taxation approach is maintained.”10

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4 Based on estimated volume of chop chop (equivalent sticks) as a proportion of the total number of TMCs, legal RYO (equivalent sticks) and chop chop (equivalent sticks) consumed in 2003.
6 ANAO, Audit report on the Administration of Tobacco Excise.
7 Almost double the amount of tobacco leaf purchased from Australian tobacco growers was imported as un-manufactured tobacco into Australia (14 million kilograms) - ANAO 2002 p32.
8 The ANAO confirmed that Commonwealth law enforcement authorities have evidence to link organised crime groups to the trade in chop-chop. (ANAO 2002, 1.31).
The attractiveness of chop chop to traders and consumers is obvious. Chop chop buyers pay on average around $3,500 for a bale of tobacco\textsuperscript{11} compared with around $600 per bale when sold legally. In 2003, the general market price for chop chop stood at between $80 and $160 per kilogram\textsuperscript{12}, compared to a kilogram of legal roll-your-own (RYO) tobacco that retails for around $423. The ANAO suggest that the chop chop supply chain is becoming more sophisticated and involves crime syndicates and other criminal organisations.\textsuperscript{13}

Chop chop is not labelled with government health warnings, so consumers are not exposed to important messages about the usual hazards associated with smoking. Furthermore, there is evidence to suggest that health impacts of smoking may be exacerbated as a result of illegal tobacco use given the minimalist processing methods and absence of quality assurance systems. It is often dampened to add to weight, turning the tobacco mouldy. It is then bleached with chlorine to treat the mould, which turns to chlorine gas when inhaled.\textsuperscript{14}

Legislative changes to widen the ATO’s powers to vary individual tobacco licence conditions, combined with the ATO’s monitoring and enforcement activities are likely to have had a positive impact on curbing the chop chop trade. Evidence includes an increase in the reported street price of chop chop. However, the cessation of legitimate tobacco growing in Queensland is also likely to have affected the supply of chop chop.

**Tobacco smuggling**

Tobacco smuggling involves the illegal transportation, distribution and sale of large consignments of cigarettes and other tobacco products, generally avoiding all taxes. International smuggling of cigarettes is also a serious problem in Australia.

Customs detected 47 million illegally imported cigarettes in 2002/03\textsuperscript{15} over 30 separate consignments representing evasion of duty to the value of $22 million.\textsuperscript{16} In 2002/03 Customs also seized a total of approximately 17 tonnes of imported chop chop.\textsuperscript{17} Since 1 July 2003, Customs has reported seizures of 4.3 million smuggled cigarettes. A

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\textsuperscript{11} Geiss 2004, p6.  
\textsuperscript{12} The Commissioner of Taxation – Annual Report 2002-2003.  
\textsuperscript{13} The ANAO confirmed that Commonwealth law enforcement authorities have evidence to link organised crime groups to the trade in chop-chop. (ANAO 2002, 1.31).  
\textsuperscript{14} Smoking Research Unit, Department of Psychological Medicine, University of Sydney NSW 2003.  
\textsuperscript{15} Press Release of 10 January 2002, Minister for Justice and Customs, “Customs Seizes Record Quantity of Smuggled Cigarettes”  
\textsuperscript{16} Chris Schofield, Customs spokesman, in an article in the Sydney Morning Herald, 10 December 2003  
\textsuperscript{17} Sydney Morning Herald, 2 March 2003 p14 and Canberra Times 13 April 2003, p2.
recent seizure at Port Melbourne in November 2004 netted 9 tonnes of loose tobacco from the Philippines.\textsuperscript{18}

Of concern is the possibility that the potential to avoid high proportions of excise creates substantial profit margins which attracts the interest of organised crime both in Australia and overseas. There is evidence from the United States of America to suggest that the lucrative illegal tobacco market has begun to rival drug trafficking as a relatively lower risk funding source for terrorist groups.

In June 2004, The Washington Post reported that the Federal Bureau of Alcohol, Tobacco, Firearms and Explosives has more than 300 open cases of illegal cigarette trafficking. It is reported that a proportion of these cases have some alleged links to terrorist organisations including Al-Qaeda and Hezbollah.\textsuperscript{19}

Closer to home, Australian Federal Policy Commissioner Michael Keelty has also expressed concern that there is evidence of money laundering through the sale of tobacco in East Timor, which is used as a stepping stone to Australia. It is believed that crime gangs buy tobacco in the free trade zone with money from drug production, and then sell the tobacco, which effectively launders the money.\textsuperscript{20}

**Quantifying demand for illegal tobacco (Chapter 4)**

A key recommendation of the ANAO’s audit of the ATO’s administration of tobacco excise duties was to work towards more accurately quantifying the revenue leakage associated with chop chop.\textsuperscript{21} It is important to estimate the size of the illegal tobacco problem in Australia because:

- it helps contribute to the accuracy of the revenue estimation process;
- strategies developed to manage risks to tobacco excise revenue need to be commensurate with the magnitude of the problem to be effective; and
- when an approach to systematically quantify revenue leakage is established, comparative assessments can be made to determine the effectiveness of the risk management strategies over time.\textsuperscript{22}

The two most promising methods of estimating the size of the chop chop market are to estimate the volume of chop chop:

\textsuperscript{18} Customs Media Release, 10 November 2004, “Technology helps foil massive tobacco smuggling attempt”.
\textsuperscript{19} Horwitz, S. “Vow to smoke out al-Qaeda tobacco bandits”, *The Washington Post*, June 12, 2004
\textsuperscript{21} ANAO 2002 Recommendation no. 3 paragraph 2.50.
\textsuperscript{22} ANAO, 2002.
• consumed via cigarette tubes and papers imported for this purpose (cigarette tube and paper importation model); and
• as the difference between expected tobacco crop yields and reported tobacco volumes (tobacco crop yield model).

Cigarette tube and paper importation model (chop chop)

The consumption of imported cigarette tubes is used as an indicator of the value of the illegal tobacco market, as they are used almost exclusively in the consumption of illegal tobacco.

According to an update of the Illegal Tobacco Working Group (ITWP)\textsuperscript{23} cigarette tube and paper importation model (the ITWP model), chop chop volumes increased overall by around 200 million sticks, from 1.4 billion sticks (1.6 million kg) in 2000 to 1.6 billion sticks (2 million kg) in 2003. Between 2002 and 2003 the model shows a slight reduction in chop chop volumes. There could be a number of reasons for this:

• model reliability - the ATO acknowledges that several of the model assumptions remain to be tested, and the gaps in the current information prevent it from obtaining an accurate estimate of the size and value of the chop-chop market.\textsuperscript{24}
• effective intervention by the ATO;
• stockpiling of cigarette tubes leading to excess inventory built up during 2000/02 and consumed in 2003;
• incentive not to declare correctly to avoid association with illegal activities, as no duty means no penalty;
• tobacco growing in Queensland ceased in 2003, which would have been likely to affect the supply of chop chop; and
• mis-classification of imported goods into another tariff code.

Under this model the following losses are implied in 2003:

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<tbody>
<tr>
<td>Community (lost tax revenue)</td>
<td>$450 million</td>
</tr>
<tr>
<td>Legitimate retailers (lost profitability)</td>
<td>$35 million</td>
</tr>
</tbody>
</table>

\textsuperscript{23} The ITWP is a work group comprising industry and government representatives initially tasked to examine various aspects of the illegal (chop chop) tobacco market.
\textsuperscript{24} ANAO 2002, 2.43.
\textsuperscript{25} Based on an average estimated gross margin (or the difference between the price for which a business purchases goods and the price for which they are sold) across retail categories that would have resulted if chop chop had been sold legally divided in half to recognise that in the absence of chop chop, not all sales would transfer to ‘legitimate’ retailers. Source: An analysis of the Significance of Sales of Cigarette and Tobacco Products to Retailers in Australia DRAFT PricewaterhouseCoopers 2004 (unpublished at the time of writing this report).
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**Legitimate growers (lost profitability)** $54 million

**Tobacco crop yield model (chop chop)**

Another approach for estimating the size of the chop chop market is to measure the size of tobacco crops and estimate expected tobacco yields. The expected yields are then compared with the yields declared by growers. The difference could be indicative of the volumes of tobacco being diverted to the illegal market.

The data collected by the ATO with respect to these activities is subject to a confidentiality classification and was therefore unavailable for the purposes of this report. However, an indicative estimation of the size of the chop chop market based on yield estimation implies that in 2003 some 2.4 billion sticks (1.7 million kg) of tobacco may have been diverted to the illegal market.

Under this model the following losses are implied in 2003:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community (lost tax revenue)</td>
<td>$382 million</td>
</tr>
<tr>
<td>Legitimate retailers (lost profitability)</td>
<td>$30 million</td>
</tr>
<tr>
<td>Legitimate growers (lost profitability)</td>
<td>$54 million</td>
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</tbody>
</table>

**Household consumption model (smuggled tobacco)**

An estimate of the size of the tobacco smuggling problem in Australia was undertaken based on this methodology using 1998 and 2001 National Drug Strategy Household Surveys. The analysis implies that some 246 million sticks were smuggled into Australia undetected in 2001/02 with an equivalent excise value of around $39 million.

**Consumer demand for illegal tobacco**

In combination with quantifying the size of the chop chop market, an understanding of the characteristics of consumer demand for chop chop is also an important step toward the development of effective regulatory interventions aimed at curbing the chop chop trade.

Survey evidence indicates that legal roll your own (RYO) and chop chop are substitute products. This is not surprising given that both products are generally smoked in the same manner. In addition legal

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26 Lost profits represented by the profits forgone by legitimate growers as a result of not allowing illegal diversion of tobacco. Based on $3,500 paid for chop chop bale (105kg), less $600 paid for legitimate bale.

27 The crop yield estimation approach was the basis of a recommendation of the Senate Economics Legislation Committee in its consideration of the Excise Amendment (Compliance Improvement) Bill 2000.

28 Advice from ATO during consultations.
RYO consumers, and intuitively chop chop consumers, are more likely to be low income earners, and 72 percent of adult RYO consumers surveyed state ‘cost’ as the main reason for smoking RYO, evidencing that these consumers are more price sensitive.29

The cross-price elasticity of demand (CPEoD) is used to measure the sensitivity of the demand for a good given a price change of another good. A positive CPEoD tells us that the goods are ‘substitutes’ and that if the price of one good increases, the demand for the other good also increases. A CPEoD analysis of reported price increases in chop chop and demand for legal RYO between 2001 and 2003 yields a marginally positive result of 0.3.

It is plausible to conclude that the increase in the quantity of RYO demanded over the period may partially be explained by the price increase of chop chop. Regrettably, the lack of verifiable data on the quantity of chop chop limits valid attempts to fully test this relationship. However, governments should be alert that such a relationship could mean that an increase in tobacco excise has direct implications on demand for chop chop, which would result in:

- lost tobacco excise, GST and corporate tax revenue;
- profit for organised crime;
- damage to legitimate retailers and growers; and
- reduction in the impact of government health warnings;

The Federal Government should consider these important implications before using ‘price’ as a way of managing smoking incidence and achieving government’s health objectives. These implications should be considered as part of the National Tobacco Strategy.

**Recommended approach (Chapter 5)**

It is acknowledged that governments have made progress with respect to providing a more holistic approach to addressing the illegal tobacco problem. However, success is generally defined in terms of outputs (such as seizures), rather than being based on the achievement of outcomes which have a direct and measurable impact on the problem.

It is recommended that the ATO and Customs review their approaches to curbing the trade in illegal tobacco with respect to:

- supply intervention measures involving disruption along the entire illegal supply chain which is likely to involve the use of additional resources and technology;

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29 BATA Consumer Tracker 2003.
• targeted measures such as tougher penalty regimes for those caught dealing in illegal tobacco markets; and
• measuring, monitoring and reporting progress to treasury against a range of agreed objectives and targets.

Options for regulatory intervention

The formulated options for regulatory intervention aim to minimise the illegal tobacco trade in Australia. The options are presented at a high level and further work would need to be undertaken to evaluate their potential impacts. The options include:

• Licensing of importers/distributors of cigarette papers and tubes;
• Placing an equalisation tax on the import of cigarette tubes to make the cost of a cigarette manufactured from chop-chop closer to the cost of a tailor made cigarette;
• Implementing an effective system that permits authorities to independently trace the movement of tobacco products from the time of manufacture through to the point to where all duties and taxes have been collected.
• Establishing a registration system to require those in the business of exporting or importing cigarettes to conduct their business within normal trading channels;
• Establishing a certificate of origin/end-user or single transit document; and
• Creating an ‘early warning system’ so that receiving and transit countries are alerted that an export shipment is about to take place.
• Establishing export bond arrangements whereby all exporters are required to post a bond for commercial quantities of tobacco products. Liability under the bond is relieved upon proof of landing in a foreign jurisdiction.

These intervention options will need to be explored in more detail in order to prioritise them on the basis of their practicality, barriers to implementation and potential for success.
Introduction
Introduction

The Australian tobacco industry makes a significant contribution to the economy in terms of government revenue, retail sales and employment. During the 1999/2000 financial year the industry contributed an estimated $6.2 billion in value added and an additional $21.3 billion from flow-on effects.30

The tobacco industry in Australia comprises three main groups:

- Tobacco growers and cooperatives;
- Manufacturers and distributors; and
- Retailers.

The Australian Taxation Office (ATO) is responsible for the administration of tobacco excise duties. In terms of revenue, the tobacco excise tax currently brings in more than $5 billion annually, compared with $12 billion from petroleum and $3 billion from alcohol, the other two major excise tax revenue producers. The combined excise tax and the Goods and Services Tax (GST) account for approximately 70 percent of the cost of cigarettes in Australia.31

Australian tobacco is grown primarily in the Myrtleford Valley region of Victoria. There are also six licensed growers located in the Glasshouse Mountains area of southern Queensland. A significant amount of tobacco was also grown in the Mareeba region (North Queensland) until 2003 when growing in the region ceased as a result of a commercial decision by manufacturers to consolidate the purchase of domestic leaf within the Myrtleford area.

The major form of illegal tobacco in Australia, known as ‘chop-chop’, is simply loose tobacco. This loose tobacco leaf is grown on farms or in backyard plantations and sold illegally on the Australian market. The estimated equivalent value of chop chop if it were sold through legal channels is around $400 million. The ANAO estimated lost revenue as a result of the illegal tobacco trade as between $99 million and $220 million. Other estimates are that it could be as high as $600 million per annum in 2003.32

International smuggling of cigarettes also occurs in Australia. Customs detected 47 million illegally imported cigarettes in

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30 www.bata.com.au
31 Geiss 2002 p4
Research Report on the Illegal Tobacco Market

2002/03, and over 30 separate consignments representing evasion of duty value of $22 million. However, the chop chop market is regarded as the area of greatest risk to tobacco excise revenue and is where the ATO concentrates its law enforcement policy.

The trade in illegal tobacco affects manufacturers and many stakeholders, the most notable of which are State and Federal governments. Not only does the trade in illegal tobacco evade payment of the excise tax, but due to its cash nature other taxes and levies are also avoided, such as GST and income tax.

This study focuses primarily on the problem of the production and sale of chop chop on which excise has not been paid. We have, to a lesser extent, also considered the problem of the trade in smuggled tobacco goods. Other illegal markets in tobacco present in Australia include counterfeit products, duty free diversion and illegal internet sales. While these markets should be monitored closely, they are not considered in any detail in this report.

This report builds on the work that has been done to date by industry stakeholders in developing an understanding of the chop chop and smuggled tobacco markets in Australia. We profile the markets and identify alternative models of market estimation and monitoring and regulatory intervention options. It is intended that the information contained in this report be used as a means of generating discussion and promoting action amongst concerned stakeholders.

The remainder of this report is structured as follows:

- **Chapter 3** provides an overview of the domestic tobacco industry;
- **Chapter 4** profiles the illegal chop chop and smuggled goods markets;
- **Chapter 5** provides estimates of the size of the illegal tobacco markets using several models; and
- **Chapter 6** provides information on options for regulatory intervention designed to curb the illegal tobacco trade in Australia.

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33 Press Release of 10 January 2002, Minister for Justice and Customs, “Customs Seizes Record Quantity of Smuggled Cigarettes”
34 Chris Schofield, Customs spokesman, in an article in the Sydney Morning Herald, 10 December 2003
Overview of the domestic tobacco industry
Overview of the domestic tobacco industry

The Australian tobacco industry makes a significant contribution to the economy in terms of government revenue, retail sales and employment. During the 1999/2000 financial year it is estimated that the industry contributed over $6 billion in value added and an additional $21 billion from flow-on effects36.

Australian tobacco is grown in two main regions: the Myrtleford Valley (Victoria) (130 licensed growers); and the Glasshouse Mountains-Beerburrum-Caboolture area of southern Queensland (six licensed growers). Until recently tobacco was also grown in the Mareeba-Dimbula-Muchilba region in North Queensland (115 licensed growers)37. Growing in this region ceased after the 2003 crop due to the commercial decisions by manufacturers to consolidate domestic leaf purchases to Victorian grown tobacco. These decisions effectively abolished the legitimate market for North Queensland tobacco. It is understood the ATO has suspended, or is in the process of suspending, tobacco licences in North Queensland.38

The tobacco industry in Australia comprises four main groups:

Growers and cooperatives - There are approximately 251 growers in Australia licensed to grow tobacco by the ATO.39 These growers are represented by three cooperatives:
- Tobacco Cooperative of Victoria (TCV);
- Queensland Tobacco Marketing and Growing Cooperative (Queensland Tobacco Co-operative); and
- South Queensland Tobacco Growers Cooperative Association Limited (South Queensland Cooperative).

Manufacturers and distributors - There are two major tobacco manufacturing companies in Australia, British American Tobacco Australia (BATA) and Philip Morris (PM). Imperial Tobacco is also present in Australia, but does not have a manufacturing plant here and contracts BATA to produce its cigarettes in Australia as well as importing certain products. BATA, PM and Imperial Tobacco sales represent almost 95 per cent of tobacco sales in Australia40.

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36 www.bata.com.au
37 The Queensland Tobacco Marketing and Growing Cooperative advise that tobacco growing in the Mareeba-Dimbula-Muchilba region ceased following the 2002/03 crop. 12 July 2004.
39 The ATO (Tobacco Industry Group) advised that there are no licensed tobacco growers in the North Queensland region as at 8 September 2004.
40 ANAO 2002, 1.8.
Retailers - There are approximately 48,000 tobacco retailers in Australia, ranging from supermarkets and convenience stores to newsagencies and petrol stations. These retailers conduct trade in tobacco products under State laws and regulations.\(^\text{41}\)

Tobacco excise administration - The ATO’s Excise Business Line (EBL) is responsible for managing commodity-based revenue and business payment (transfer) systems. The EBL collected $20.7 billion in 2002/03, which accounted for around 11 percent of the total tax revenue collected by the ATO for that year. Revenue attributable to tobacco products collected by the EBL in 2002/03 totalled $5.2 billion, which accounted for 25 percent of total excise collections in that year, showed a growth of 8 percent from the previous year.\(^\text{42}\)

The ATO’s Revenue and Intelligence Branch is responsible for managing excise revenue collection and developing industry and other intelligence to improve policy and compliance for the three Excise Industry Groups (tobacco, alcohol and petroleum). The Field Services Branch is responsible for providing compliance and investigations services to the Excise Industry Groups. The Tobacco Excise Industry Group (TIG) is the unit within the EBL that has dedicated responsibility for revenue collection, developing tobacco excise policy and monitoring compliance of the tobacco industry (growers, dealers and manufacturers) with the excise legislation.\(^\text{44}\)

Australian tobacco production

Australian tobacco production peaked in 1969/70 at a level of 17.2 million kilograms. Throughout the 1970s annual production was 15 million kilograms, this declined to around 13 million kilograms by the mid-1980s and further declined to under 6 million kilograms in 2002/03. The table below charts the decline in tobacco production in Australia between 1993/94 and 2002/03.

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\(^{41}\) ANAO 2002 p  
\(^{42}\) Tax Statistics 02-03, ATO 2005  
\(^{44}\) ANAO 2002 2.3 and 2.4.  
\(^{47}\) Tobacco Research and Development Corporation Annual Report 2001/02.
The decline in tobacco production in Australia in recent years can generally be attributed to several factors including the:

- downward trend in consumption of tobacco products;
- higher costs of tobacco products resulting from the imposition of government excises and taxes;
- growth in the trade of illegal tobacco product; and
- reduction in the proportion of domestically grown tobacco leaf purchased by manufacturers (Australian growers supply around 40 percent of domestic leaf demand).

These factors have combined to result in the cessation of tobacco growing in North Queensland and the emergence of the Myrtleford region in Victoria as the most important production region for tobacco in Australia. Victorian growers number 130 and produce between 3 and 4 million kg of tobacco on approximately 1,600 ha. Farm gate value of Victorian grown tobacco is approximately $26 million, with an excise value of around $1 million. The economic value of the industry to the region is estimated at $90 million.48

Tobacco taxes and excise

Until 1998, both customs and excise duties were administered together. In 1998 the Government decided to transfer responsibility for the administration of excise duties from the Australian Customs Service (Customs) to the ATO.

Excise duties are levied on excisable goods that have been produced domestically and are intended for consumption in Australia. Types of

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excisable goods are petroleum products, most alcoholic beverages and tobacco products. Excise duties are not payable on goods exported from Australia. Customs duties are imposed on imported goods.

The deregulation of the tobacco industry, the introduction of uniform excise legislation for the manufacture of Australian tobacco products, and the introduction of the per-stick method of calculating excise have all contributed towards a changing tobacco industry in Australia.

On 1 January 1995, the Government deregulated tobacco production in Australia and reduced the protective tariff on imported tobacco leaf products to zero. This reduced the incentive for manufacturers to purchase Australian tobacco, and had the effect of many growers moving out of the tobacco industry.

In August 1997 the High Court determined that business franchise fees that had been imposed by some States and Territories on tobacco products were unconstitutional. From 1997 to 1999/2000, the Government collected an increased rate of excise duty on tobacco products and reimbursed surcharge amounts to the States under agreed ‘safety net’ repayment schemes until the introduction of the Goods and Services Tax (GST) from 1 July 2000 (minor amounts of surcharge revenue were collected in July and August 2000).

According to the ANAO, prior to the High Court decision and the Government’s introduction of new rates of excise, the illegal tobacco trade was focussed on mechanisms to avoid paying business franchise fees. It was shortly after the introduction of the new arrangements that law enforcement authorities noticed a significant increase in the amount and availability of illegally manufactured Australian tobacco, known as chop chop.  

A further Government initiative in 1999, which had a significant influence on the price of tobacco products, involved changing the way that manufacturers calculated the amount of excise paid on their products. Prior to 1999, tobacco excise was calculated on the weight of tobacco products produced by the manufacturers. Taxing on a weight-basis has arguably encouraged the production and consumption of lighter weight cigarettes.

In November 1999, a change in Government health policy meant that tobacco excise was calculated per-stick. A per-stick method of calculating tobacco excise encourages the production and consumption of fewer cigarettes with higher tobacco weight and

discourages the practice of producing lighter cigarettes with higher numbers of cigarettes per pack.

The GST, introduced in 2000, added a further 10 percent to the price of tobacco products. Currently, taxes on cigarettes including excise and GST account for almost 70 percent of the total price of cigarettes in Australia.
Profile of the illegal tobacco market
Profile of the illegal tobacco market

Introduction

This chapter contains a profile of the illegal tobacco market in Australia focussing on chop chop and to a lesser extent on smuggled tobacco. Other illegal markets in tobacco present in Australia include counterfeit products, duty free diversion and illegal internet sales. While these markets should be monitored closely, they are not considered in any detail in this chapter.

Over the past decade Australia has experienced substantial growth in the level of illegally traded tobacco products. The ANAO suggests that it is due to the high proportion of tax providing generous margins to illegal dealers. PricewaterhouseCoopers also argues that “The attractiveness of excise tax avoidance will remain so long as the high taxation approach is maintained.”

The ANAO reported that the illegal tobacco trade is characterised by several factors which have changed the extent and nature of the illegal tobacco trade significantly, including:

- the increased production and sale of Australian-produced tobacco, upon which excise has not been paid (chop chop)
- increased smuggling of tobacco product into Australian domestic markets;
- increased smuggling of counterfeit tobacco product into Australian domestic markets; and
- increased diversion of Australian-produced underbond stock for export into domestic markets (eg. diversion of duty-free tobacco product).

It is generally accepted that the reason illegal trade in tobacco products has become significant is that tobacco products:

- are highly taxed - taxes on cigarettes account for almost 70 percent of the total cost of cigarettes in Australia.
- are relatively easy to distribute – a shipping container can carry 10 million cigarettes while a B-double truck can carry up to 14 million cigarettes;

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50 ANAO 2002 s1.28.
51 PricewaterhouseCoopers, 2001: “The Current Economic and Public Environment for the Australian Tobacco Industry”
52 ANAO 2002 p14.
• contain less Australian leaf - a decline in demand for Australian tobacco leaf by manufacturers has resulted in an oversupply of leaf. In 2000/01, almost double the amount of tobacco leaf purchased from Australian tobacco growers was imported as un-manufactured tobacco into Australia (14 million kilograms).  
• are susceptible to fraud and counterfeit – counterfeit products have been imported into Australia (quantities unknown);  
• are always in demand and tax avoidance is often seen as ‘fair game.’

Chop Chop

Unlike other jurisdictions around the world, the tobacco black market in Australia is dominated by chop chop. Chop Chop has become an entrenched problem for government, retailers and the tobacco industry. It is estimated that approximately 1 in every 17 cigarettes smoked in Australia contains chop chop.

Chop chop is primarily tobacco which is domestically grown by licensed growers. Licensed growers are estimated to supply some 90 percent of the chop chop market. Other sources of chop chop include tobacco grown by un-licensed growers and illegally imported chop chop, which industry refers to as ‘cut rag’ loose leaf tobacco.

In its audit report on the Administration of Tobacco Excise, the ANAO outlined the factors considered by the ATO to have influenced some licensed growers to avoid legal channels and sell tobacco on the black market:

• a decline in demand for Australian tobacco leaf by manufacturers resulting in an oversupply of Australian tobacco leaf;  
• the market price for chop-chop is around 4 - 6 times the market rate paid by manufacturers;  
• exporting Australian tobacco leaf is not a commercial proposition. The international market price for tobacco is significantly cheaper than the price Australian growers are willing to accept for their tobacco;  
• the evasion of taxes, particularly GST and income tax; and  
• the application of pressure by organised crime.

In its ‘retail’ form, chop chop is generally sold in cheap packaging (e.g. clear plastic bags such as the one featured in figure 2 below) as

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55 Geis, 2002, pp. 10-11; and Consultations. T
‘loose tobacco’ in half-kilogram and one-kilogram lots and generally carries no health warnings or other labelling. Chop chop may also appear on the market as tailor-made cigarettes (TMCs) and has been known to be sold in counterfeit packaging of legitimate manufacturers. Chop-chop reportedly enjoys widespread availability and is sold at numerous retailers including licensed tobacconists, hotel bars, street markets, newsagents and milk bars.56

Chop chop is generally consumed in the same way as legal RYO pouch tobacco and can also be consumed via ready-made cigarette tubes. These tubes can be purchased from some tobacco retailers and supermarkets at an affordable price. When used in conjunction with a tubing machine (a small inserting device featured in the figure 3 below, available from tobacconists) many chop chop users are making a product equivalent to mainstream TMCs at a fraction of the usual packet price.

Continuous improvements in the quality of chop chop and a marked increase in average retail prices make the business more lucrative to new and existing players, including some retailers. The steady demand for illegal leaf, for example, has allowed chop chop dealers to purchase quality leaf comparable with legitimate loose leaf products at a premium price above the market rate paid by the legitimate tobacco manufacturers. The TCV perceive that the variation in leaf quality passing through the cooperative in recent years is an indication that chop chop buyers often purchase the best quality leaf.\textsuperscript{57}

The considerable growth in the illegal tobacco trade in Australia since 1997 led to the implementation of the Excise Amendment (Compliance Improvement) Act in September 2000. This Act introduced tougher penalties for those dealing in the illegal tobacco trade, and extended the powers of the ATO to facilitate its enforcement activities. Persons dealing in illegal tobacco now face a maximum of two years imprisonment or fines of up to $55,000.

\textit{Cost to the community}

The ANAO reported that the ATO was unable to fully quantify the revenue loss that can be attributed to chop-chop.\textsuperscript{58} A key recommendation of the ANAO’s audit of the ATO’s administration of tobacco excise duties was to work towards more accurately

\textsuperscript{57} Consultations 28 June 2004.
\textsuperscript{58} ANAO 2002, s2.43.
quantifying the revenue leakage as a result of the chop-chop trade and to develop more informed risk assessments.\textsuperscript{59}

The most commonly cited estimates of the size of the chop chop market in Australia range from between 0.4 and 2.6 million kilograms per annum or between $99 million and $600 million per annum in lost tax and excise revenue. The table below summarises the most commonly cited estimates as well as estimates derived as part of this study.

Table 2 Chop chop market estimates

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimate equivalent tax value ($M)</th>
<th>Equivalent chop chop volume (million kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAO\textsuperscript{1}</td>
<td>$99 - $220</td>
<td>0.4 – 0.9</td>
</tr>
<tr>
<td>ANAO\textsuperscript{2}</td>
<td>$136 - $272</td>
<td>0.6 – 1.2</td>
</tr>
<tr>
<td>Manufacturers\textsuperscript{3}</td>
<td>$227 - $272</td>
<td>1.0 – 1.2</td>
</tr>
<tr>
<td>'Yield estimation' model</td>
<td>$382</td>
<td>1.7</td>
</tr>
<tr>
<td>Industry</td>
<td>$400</td>
<td>1.7</td>
</tr>
<tr>
<td>ITWP model\textsuperscript{4}</td>
<td>$450</td>
<td>2.0</td>
</tr>
<tr>
<td>Industry\textsuperscript{5}</td>
<td>$600</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Notes
1. ANAO 2002, s2.46.
2. VicHealth Centre for Tobacco Control (implied estimate)\textsuperscript{60} http://www.vctc.org.au/industry/market_information.pdf
3. ANAO 2002, s1.33.
4. 2001 estimate based on the industry chop chop tube importation model (referred to elsewhere in this report as the ‘ITWP model’).

Estimates for the year 2000 placed the equivalent retail value of chop chop at $400 million and growing. An ANAO analysis in 2001/02 estimated that if illegal tobacco had been legally grown, it would increase commercial output of Australian leaf by between 10-20 percent a year.\textsuperscript{60} This assertion implies an equivalent value of chop chop of up to $275 million.\textsuperscript{61} In 2002, the ANAO estimated lost revenue as a result of the illegal tobacco trade as between $99 million and $220 million based on household survey data and smoking prevalence rates. Other industry estimates place the equivalent value of chop chop as high as $600 million per annum.\textsuperscript{62}

Despite the range of available estimates, it is generally agreed by government and industry that chop chop costs governments, retailers, manufacturers and the community millions of dollars each year.

\textsuperscript{59} ANAO 2002 Recommendation no. 3 paragraph 2.50.
\textsuperscript{60} Quoted in VicHealth Centre for Tobacco control: http://www.vctc.org.au/industry/market_information.pdf
\textsuperscript{61} Based on $227 in tax per kg and Australia tobacco production in 2001/02 of up to 6,000,000 kg. (http://www.vctc.org.au/industry/market_information.pdf - page 1.)
\textsuperscript{62} Geis, 2002 p18.
Conservatively assuming that the chop chop market is around 1.5 million kilograms (an average of the estimates shown in table 2), the annual drain would be equivalent to approximately $17 in lost tax revenue for every man, woman and child in Australia.\(^{63}\)

Sales of cigarettes and tobacco products are significant contributors to the profitability of many retailers and, in the case of smaller retailers, these sales are critically important for sustaining the viability of a number of these businesses.\(^{64}\) Interviews with retailers who do not stock chop chop suggest that the product is negatively impacting their turnover of branded tobacco products by as much as 25 percent.\(^{65}\) This situation may be responsible for forcing many more legitimate retailers into chop chop distribution in an attempt to protect their livelihoods.

**Chop chop and health**

There has been little research undertaken into the health effects of illegal tobacco, which is partially due to its unregulated status and variation across batches. However, there is evidence to suggest that health impacts may be exacerbated as a result of illegal tobacco use.

Chop chop is frequently cut with straw or dampened to increase its weight. This practice can increase the prevalence of mould spores which could enter the lungs, causing alveolitis or pneumonia. Some products are fumigated with chlorine bleach, meaning users are at risk of inhaling chlorine gas.\(^{66}\)

A survey of people attending smokers clinics run by Central Sydney Area Health Service\(^ {67}\) found that almost half were using chop chop. The survey respondents who admitted to using chop chop were overwhelmingly using it because it was cheaper than commercial tobacco,\(^ {68}\) and many also believed it had no additives and was healthier.

**Organised crime**

The attractiveness of chop-chop to traders and consumers is obvious. Chop chop middlemen pay between $3,000 and $4,000 for a bale of tobacco\(^ {69}\) compared with $600 per bale paid by manufacturers when

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\(^{63}\) Based on approximate Australian population of 20 million, and tax rate of $227 per kg.

\(^{64}\) PricewaterhouseCoopers 1999 The Significance of Cigarettes and Tobacco Products to Retailers: An analysis of retail sales. p3.

\(^{65}\) BATA, PM and Imperial Tobacco 2000 “Chop Chop” A Report on the manufacture and sale of illegal tobacco in Australia.

\(^{66}\) Smoking Research Unit, Department of Psychological Medicine, University of Sydney NSW 2003.

\(^{67}\) ibid.

\(^{68}\) Robotham 2002.

\(^{69}\) Geiss 2004, p6.
sold legally. If a grower sells just six bales of tobacco to a chop chop buyer, the grower can increase their income by around $20,000 more than if they were to sell those bales legally.

It is estimated that in 2001 chop chop retail prices ranged between $45 and $60 a kilogram.\(^{70}\) The ATO indicated that in 2002, the general market price had risen to between $80 and $100 per kilogram.\(^{71}\) In comparison, legal RYO tobacco retailed at around $21 per 50 grams in 2003 (or $423 per kilogram).\(^{72}\)

The ANAO suggest that the chop chop supply chain is becoming more sophisticated and involves crime syndicates and other criminal organisations.\(^{73}\) A joint ATO/Australian Federal Police taskforce was set-up in January 2001 to investigate a large-scale evasion of tobacco excise. The nature of the criminal activities identified by the ATO included the presence of “...criminal activities involving cash-based transactions, with sophisticated tobacco sourcing, transportation and distribution.”\(^{74}\)

The ANAO notes that organised crime groups involved in the manufacture and sale of chop-chop have sophisticated distribution networks which use trucking firms and long haul coaches to transport the illegal product.\(^{75}\) Hire vehicles are also a preferred means of transporting illegal tobacco.

Tobacco is available to supply the illegal trade throughout the year due to the practice by growers of storing tobacco grown in excess of their allocated entitlement on individual farms. In addition, bales that are rejected by manufacturers or the TCV as a result of inferior quality\(^{76}\) are usually returned to the grower (unless the grower is identified as at risk of serious non-compliance by the ATO). This practice may facilitate the supply of tobacco to the illegal market. Anecdotal evidence suggests that up to three days notice may be given by the ATO prior to a farm inspection which may provide opportunity for growers involved in the illegal trade to conceal evidence of illegal activity.\(^{77}\)

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\(^{70}\) Geiss 2004, p 10
\(^{71}\) ANAO 2002, 1.33
\(^{72}\) RYO average retail price of three leading brands of 50g pouch tobacco in 2001 and 2003, converted to an average price per kg. Source BATA.
\(^{73}\) The ANAO confirmed that Commonwealth law enforcement authorities have evidence to link organised crime groups to the trade in chop-chop. (ANAO 2002, 1.31).
\(^{74}\) ANAO 2002, 3.60.
\(^{75}\) ANAO 2002, 3.64.
\(^{76}\) On average approximately 2 percent of bales reaching the cooperative may be rejected for reasons associated with inferior quality.
\(^{77}\) Source consultations with TCV. Geiss 2002, p 25 confirms the practice of notifying growers prior to an ATO inspection.
In 2003, the ATO responded to an emerging threat of criminal activity by providing funds of $470,000 to the TCV in order to improve storage security.\textsuperscript{78} Over the past year, the ATO seized around 68 tonnes of chop chop with an excise value of almost $19 million.\textsuperscript{79} The TCV has real concerns that trucks transporting tobacco to and from the TCV could be a target for crime and that driver safety and tobacco theft is a real and constant threat.\textsuperscript{80}

The ATO’s powers have recently been extended to vary individual tobacco licence conditions. The legislative amendments enable the ATO to target growers that are considered at risk of non-compliance by imposing further restrictions on growing and tobacco transportation arrangements. These extended powers would presumably enable the ATO to require growers to store ‘transportable amounts’ of tobacco at the TCV rather than on individual farms. Such a requirement would better utilise the government’s investment in security at the TCV and minimise opportunities for tobacco theft and/or sale of tobacco by growers to chop chop traders.

\textit{Monitoring and compliance}

The ATO’s Excise Business Line (EBL) is responsible for managing commodity-based revenue and business payment (transfer) systems. The EBL collected $20.7 billion in 2002/03, which accounted for 11.2 percent of the total tax revenue collected by the ATO for that year. Revenue attributable to tobacco products collected by the EBL in 2002/03 totalled $5.2 billion, which accounted for 25 percent of total excise collections in that year, showed a growth of 8\% from the previous year.\textsuperscript{81}

The ATO’s Revenue and Intelligence Branch is responsible for managing excise revenue collection and developing industry and other intelligence to improve policy and compliance for the three Excise Industry Groups (tobacco, alcohol and petroleum).

The Field Services Branch is responsible for providing compliance and investigations services to the Excise Industry Groups. The Tobacco Excise Industry Group (TIG) is the unit within the EBL that has dedicated responsibility for revenue collection, developing tobacco excise policy and monitoring compliance of the tobacco industry (growers, dealers and manufacturers) with the excise legislation.

\textsuperscript{78} Press release of Senator Helen Coonan, Minister for Revenue and Assistant Treasurer, 1 May 2003.
\textsuperscript{79} Consultations with ATO 15 July 2004.
\textsuperscript{80} Consultations with TCV, 28 June 2004.
\textsuperscript{81} Tax Statistics 02-03, ATO 2005
The ATO also has strategic partnerships with Customs and other law enforcement agencies, Department of Health and Ageing, Department of Agriculture, Fisheries and Forestry (AFFA), State Road Traffic Authorities and the tobacco industry. A tobacco intelligence framework operates to collect, analyse and store suitable intelligence particularly in relation to chop-chop.

The Aggressive Tobacco Strategy (ATS) commenced in December 2001 with a Tobacco Task Force being deployed in the field from March 2002 and the establishment of a permanent presence in Cairns and Albury. The ATS was formulated by the Tobacco Industry Group in conjunction with key stakeholders to target the major tobacco growing regions.

A large number of investigators are working nationally to detect, identify and prosecute people supplying illegal tobacco leaf. In 2003 it was reported that the ATO had some 100 excise staff investigating the illegal chop chop trade. The ATO advises in 2004 that there are significant resources devoted to its compliance activities in this area.

Some of the ATO’s intervention and compliance measures include:

- licensing of growers and introduction of the Excise Compliance Act;
- measuring crops planted on licensed premises, ensuring correct bookkeeping procedures and identifying growers planting for the next season;
- reviewing manufacturers’ refunds, remissions and drawback processes and supervision of tobacco destructions; and
- reviewing and re-issuing excise storage licenses and continuing permissions of duty-free stores.

Legislative changes to widen the ATO’s powers to vary individual tobacco licence conditions, combined with the ATO’s monitoring and enforcement activities are likely to have had a positive impact on curbing the chop chop trade. The cessation of legal growing in Queensland’s Mareeba district since 2003 as a result of commercial decisions taken by manufacturers should further disrupt the supply of domestically grown chop chop.

However, the established involvement of organised crime in the chop chop trade and the number of retailers involved in its distribution are reminders that the chop chop problem needs to be tackled on a number

of fronts. There have been a number of cases of seizures of imported chop chop, including a recent seizure at Port Melbourne in November 2004, where customs foiled a sophisticated attempt to import 9 tonnes of loose tobacco from the Philippines.\textsuperscript{85} In the last financial year, Customs made 17 separate seizures of tobacco products in sea cargo, comprising almost 10 tonnes of tobacco and more than 21 million cigarettes. These recent hauls provides evidence that overseas sources of chop chop may be an option for chop chop traders in the event of disruptions to the supply of domestically grown chop chop.

**Tobacco smuggling**

International smuggling of cigarettes is also a problem in Australia. Smuggling involves the illegal transportation, distribution and sale of large consignments of cigarettes and other tobacco products, generally avoiding all taxes. This type of smuggling usually involves millions of cigarettes that are smuggled over long distances, potentially involving organised crime networks and sophisticated systems for distributing smuggled cigarettes at the local level.

Customs detected 47 million illegally imported cigarettes in 2002/03\textsuperscript{86} over 30 separate consignments representing evasion of duty value of $22 million.\textsuperscript{87} Customs also seized a shipment of 4.3 million cigarettes in April this year that was consigned from Malaysia.

Of concern is the possibility that the potential to avoid high proportions of excise creates substantial profit margins which attracts the interest of organised crime both in Australia and overseas. There is evidence from the USA that suggests the lucrative illegal tobacco market has begun to rival drug trafficking as a relatively lower risk funding source for terrorist groups.

In June 2004, The Washington Post reported that the Federal Bureau of Alcohol, Tobacco, Firearms and Explosives has more than 300 open cases of illegal cigarette trafficking - including some with alleged links to terrorist organisations including al-Qaeda and Hezbollah.\textsuperscript{88}

Closer to home, the Australian Federal Policy Commissioner Michael Keelty has also expressed concern that there is evidence of money laundering through the sale of tobacco in East Timor, which is used as a stepping stone to Australia. It is believed that crime gangs buy

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\textsuperscript{85} Customs Media Release, 10 November, “Technology helps foil massive tobacco smuggling attempt”.

\textsuperscript{86} Press Release of 10 January 2002, Minister for Justice and Customs, “Customs Seizes Record Quantity of Smuggled Cigarettes”

\textsuperscript{87} Chris Schofield, Customs spokesman, in an article in the Sydney Morning Herald, 10 December 2003

\textsuperscript{88} Horwitz, S. “Vow to smoke out al-Qaeda tobacco bandits”, The Washington Post, June 12, 2004
tobacco in the free trade zone with money from drug production, and then sell the tobacco which launders the money.89

This emerging issue highlights the need to reinvigorate the focus on reducing the size of the illegal tobacco market in Australia.

Customs has measures in place for the detection and intervention of cigarette smuggling and diversion, including:

- an Intelligence Branch to undertake research and risk assessments on smuggling;
- an intelligence network including the World Trade Organization, overseas liaison officers, co-operation with other law enforcement agencies in Australia as well as mutual assistance arrangements with customs administrations in other jurisdictions and Interpol;
- container x-ray detection equipment in most major ports; and
- the conduct of audits including audits of duty-free shops.

In addition, the *Customs Legislation Amendment and Repeal (International Trade Modernisation) Act 2001* (ITML) amended the Customs Act by adding a new provision, section 243U, in relation to the making of false or misleading statements with respect to container contents. The intent of the amendment is to assist in improving the accuracy of data required by Customs to underpin its border control and trade reporting responsibilities.

It is understood that the monitoring and compliance capabilities of Customs are set to be further enhanced in 2005 with the introduction of TRACE technology. The technology will provide real time tracking information on the movements of containers containing excisable (and other) goods.

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82 ANAO, 2002.
Quantifying demand for illegal tobacco
Quantifying demand for illegal tobacco

As noted in the previous chapter, the range of estimates for the size of the chop chop market attests to the difficulty in precisely estimating the size of the illegal tobacco problem in Australia. Despite these inherent difficulties in measuring the revenue loss attributed to illegal market activity, it is important to do so because:

- it helps contribute to the accuracy of the revenue estimation process;
- strategies developed to manage risks to tobacco excise revenue need to be commensurate with the magnitude of the problem to be effective; and
- when an approach to systematically quantify revenue leakage is established, comparative assessments can be made to determine the effectiveness of the risk management strategies over time92.

This chapter builds on the work that has been done to date by industry stakeholders to quantify components of demand for illegal tobacco in Australia. The chapter focuses primarily on chop chop as the form of illegal tobacco regarded as the area of greatest risk to tobacco excise revenue in Australia, and to a lesser extent on smuggled tobacco. Models relating to other forms of illegal tobacco (such as counterfeit and duty free diversion) are not considered here.

Consumer demand for chop chop

In combination with quantifying the size of the chop chop market, an understanding of consumer behaviour and the characteristics of consumer demand for chop chop is an important step toward the development of effective regulatory interventions aimed at curbing the chop chop trade.

Due to the illegal nature of the market it is inherently difficult to conduct research on the behaviour of consumers of chop chop. However, consumer surveys provide some information on consumer demand for chop chop. For example, the Australian Institute of Health and Welfare (AIHW) included questions on unbranded tobacco (chop chop) in its national household survey. The survey found that of the 3.6 million Australian smokers in 2001:

- almost one in five (19 percent) Australians aged 14 years and over had seen unbranded tobacco (chop chop); and
Research Report on the Illegal Tobacco Market

- in the majority of jurisdictions, around 60 per cent of smokers and ex-smokers who had seen unbranded tobacco had smoked it more than once.\(^{93}\)

BATA market research shows that of the 1,147 adult RYO users surveyed in 2003, 23 percent claimed they had seen ‘unbranded tobacco’ (chop chop) and almost half claimed to have purchased it.\(^{94}\)

It is not surprising that legal RYO and chop chop may be substitute products given that both products are generally smoked in the same manner. In addition, consumers of legal RYO and (intuitively) chop chop are likely to be more price sensitive. BATA consumer research shows that adult smokers of legal RYO are more likely to be low income earners\(^{95}\) and 72 percent of adult RYO consumers surveyed state ‘cost’ as the main reason for smoking legal RYO products.

If chop chop and RYO are substitute goods, it would follow that the quantity demanded of one good will be influenced by price changes of its substitute. The cross-price elasticity of demand (CPEoD) is used to measure the sensitivity of the demand for a good given a price change of another good. A positive CPEoD tells us that if the price of one good increases, the demand for the substitute good should increase as well.

The table below illustrates the effects on demand for legal RYO given a price increase of chop chop. The analysis yields a marginally positive CPEoD result of 0.3.

<table>
<thead>
<tr>
<th>Product</th>
<th>Year</th>
<th>Price/kg (P^{CC})</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chop Chop (CC)</td>
<td>2001</td>
<td>$52.50</td>
<td>52% (%\Delta P^{CC})</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>$80.00</td>
<td></td>
</tr>
<tr>
<td>Qty/sticks (Q^{RYO})</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal RYO (RYO)</td>
<td>2001</td>
<td>1,897,763</td>
<td>15% (%\Delta Q^{RYO})</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>2,183,964</td>
<td></td>
</tr>
<tr>
<td>CPEoD formula</td>
<td>(%\Delta Q^{RYO}/%\Delta P^{CC})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implied CPEoD</td>
<td></td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

*The price of chop chop is based on The Commissioner of Taxation – Annual Report 2002-03.

This positive CPEoD supports survey evidence to suggest that RYO and chop chop are substitute goods. It is plausible to conclude that the increase in the quantity of RYO demanded over the period may partially be explained by the price increase of chop chop. Regrettably, the lack of verifiable data on the quantity of chop chop limits valid attempts to fully test this relationship. However,

\(^{94}\) BATA consumer tracker data 2003. Note that only consumers of RYO products are asked questions relating to unbranded tobacco.
\(^{95}\) 60 percent of respondents to BATA market research earn less than $30,000 per annum - Consumer Tracker 2003.
governments should be alert that such a relationship could mean that an increase in tobacco excise has the potential to increase demand for chop chop, which would result in:

- lost tobacco excise, GST and corporate tax revenue;
- profit for organised crime;
- damage to legitimate retailers and growers; and
- reduction in the impact of government health warnings;

The Federal Government should consider these important implications before using ‘price’ as a way of managing smoking incidence and achieving government’s health objectives. These implications should be considered as part of the National Tobacco Strategy.

**Tube and paper importation model**

The consumption of imported cigarette tubes is an indicator of the size of the chop chop market. Imported cigarette tubes are used almost exclusively in the consumption of illegal tobacco. This is the case because tubes cannot easily be used in conjunction with legal RYO products due to the high moisture content of the tobacco which makes insertion into the tube difficult. Illegal tobacco is not as refined or as moist as legal RYO and is therefore more suitable for use with tubes.

The ATO’s attempts to quantify the revenue loss to date has been based largely on an assumption that the increasing trends in the importation of cigarette tubes and cigarette papers into the country since 1997 are a reflection of increasing use of chop chop.

The ITWP is a work group comprising industry and government representatives initially tasked to examine various aspects of the illegal (chop chop) tobacco market. The ITWP was responsible for developing a model (the ITWP model) to estimate the size of the illegal chop chop market. The underpinning assumptions of the ITWP model include:

- growth or decline in the market is indicated by importation of papers and tubes;
- trends in legal cigarette and RYO sales are important indicators of the illegal tobacco trade;
- 1.25 grams is to be used in all calculations for content of tubes;
- 50 leaves per booklet to be used for imports of papers where papers are involved;
• an average figure to be used for imports of papers where values are unknown;
• unclear or poorly defined tariff items to be listed as ‘tubes only’ in calculations; and
• price increases in chop-chop are related to risk factors – i.e. a reflection of organised supply and distribution networks.

In order to calculate the value of the illegal market based on the information available, a formula is used to obtain an overall figure, as illustrated below:

• the number of cigarette tubes being imported into the country in one year;
• the number of cigarette papers in booklets being imported;
• the amount of domestic roll your own tobacco manufactured in one year;
• the amount of legal RYO tobacco imported in one year;
• from these figures determine the number of cigarette tubes required for the legal RYO market;
• determine the number of cigarette papers required for the legal RYO market;
• estimate the number of cigarette papers that would be consumed by alternative uses, damages and exports;
• calculate the number of cigarette tubes in excess of what is legally required in a given year; and
• calculate the number of cigarette papers in excess of what is legally required in a given year.

There has been no attempt by the ITWP to update the ITWP model (as far as PwC are aware) since 2001. The table below provides an estimate of the size of the chop chop market based on an update of a reconstruction of the ITWP model. Further details of the calculations and assumptions used are provided in Appendix A.

Table 4 Chop chop market estimation (the ITWP model)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total value of imported papers/tubes*</td>
<td>$10,145,099</td>
<td>$13,083,175</td>
<td>$13,268,474</td>
<td>$11,891,054</td>
</tr>
<tr>
<td>Value of papers used in chop-chop</td>
<td>$617,445</td>
<td>$489,679</td>
<td>$474,127</td>
<td>$381,339</td>
</tr>
<tr>
<td>Value of tubes used in chop-chop</td>
<td>$3,796,307</td>
<td>$6,774,192</td>
<td>$6,559,033</td>
<td>$5,275,419</td>
</tr>
<tr>
<td>Total chop-chop volume (‘000 sticks)</td>
<td>1,379,670</td>
<td>2,039,768</td>
<td>1,974,982</td>
<td>1,588,475</td>
</tr>
<tr>
<td>From papers (RYO)</td>
<td>425,824</td>
<td>337,710</td>
<td>326,984</td>
<td>262,992</td>
</tr>
<tr>
<td>From tubes</td>
<td>953,846</td>
<td>1,702,058</td>
<td>1,647,998</td>
<td>1,325,482</td>
</tr>
</tbody>
</table>
According to the ITWP model, chop chop volumes increased overall by around 200 million sticks from 1.4 billion sticks (1.6 million kg) in 2000 to 1.6 billion sticks (2 million kg) in 2003. Between 2002 and 2003 the model shows a slight reduction in chop chop volumes. There could be a number of reasons for this:

- model reliability - the ATO acknowledges that several of the model assumptions remain to be tested, and the gaps in the current information prevent it from obtaining an accurate estimate of the size and value of the chop-chop market;  
- effective intervention by the ATO;  
- stockpiling of cigarette tubes leading to excess inventory built up during 2000/02 and consumed in 2003;  
- incentive not to declare correctly to avoid association with illegal activities, as no duty means no penalty;  
- tobacco growing in Queensland ceased in 2003, which would have been likely to affect the supply of chop chop;  
- mis-classification of imported goods into another tariff code; and  
- the model does not accurately account for the number of tubes and papers lost, spoiled or discarded.

Under this model the following losses are implied in 2003:

<table>
<thead>
<tr>
<th>Category</th>
<th>Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community (lost tax revenue)</td>
<td>$450 million</td>
</tr>
<tr>
<td>Legitimate retailers (lost profitability)</td>
<td>$35 million</td>
</tr>
<tr>
<td>Legitimate growers (lost profitability)</td>
<td>$54 million</td>
</tr>
</tbody>
</table>

### Tobacco crop yield model

Another approach for estimating the size of the chop chop market is to measure the size of tobacco crops and estimate expected tobacco yields. The expected yields would then be adjusted for crop loss due to pest, disease, adverse weather conditions and agronomic practices. The revised expected yields would then be compared with the yields declared by growers. The difference could be indicative of the volumes of tobacco being diverted to the illegal market.

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96 ANAO 2002, 2.43.
97 Based on an average estimated gross margin (or the difference between the price for which a business purchases goods and the price for which they are sold) across retail categories that would have resulted if chop chop had been sold legally divided in half to recognise that in the absence of chop chop, not all sales would transfer to ‘legitimate’ retailers. Source: An analysis of the Significance of Sales of Cigarette and Tobacco Products to Retailers in Australia DRAFT PricewaterhouseCoopers 2004 (unpublished at the time of writing this report).
98 Lost profits represented by the profits forgone by legitimate growers as a result of not allowing illegal diversion of tobacco. Based on $3,500 paid for chop chop bale (105kg), less $600 paid for legitimate bale.
Although historical information on crop yields can be a useful guide, accurately predicting yields is difficult. Yields are subject to a range of variables such as agronomic practices (extent of fertiliser and watering) and environmental (weeds, pests, adverse weather conditions, bushfire) factors. Adverse weather conditions, pests and disease were responsible for between 7 per cent and 10 per cent of Victorian crop losses in 2003.

Consultation revealed that it was quite common for there to be large variations in yields between farms of up to 0.6 tonnes (or 600 kg) per hectare. These discrepancies are often due to the level of experience held by the grower (the decline in leaf quality in Victoria may be partially attributed to a number of new inexperienced growers entering the industry in recent years).

However, these disparities may also conceal a diversion of tobacco to the illegal trade. Despite the number of variables affecting yields, the accuracy of estimating yields can be improved through greater uniformity of crops and agronomic practices. Crop yield estimation is therefore likely to become increasingly important as a means of estimating the size of illegal market diversion, forming the basis of a recommendation from the Senate Economics Legislation Committee in its consideration of the Excise Amendment (Compliance Improvement) Bill 2000.

"The Committee is of the view that the most effective point at which to successfully counter the illegal trade in tobacco is at the growing stage. The Committee encourages both government and industry to investigate methods of better monitoring crops and predicting yields.....".

It is understood that the ATO have visited a number of licensed tobacco farms in Victoria and Queensland to:

- measure crops planted on licensed premises;
- ensure correct record-keeping procedures were being followed; and
- identify the growers that were intending to plant for the next season.

It is also understood that GPS technology is also employed by the ATO for the purpose of crop estimation.

99 Consultations Queensland Tobacco Marketing and Growing Cooperative, 12 July 2004
100 Senate Economics Legislation Committee, 2000 p5.
Our understanding is that the most recent surveys by the ATO measure crops that are already planted rather than the acreage that will be used prior to planting. The latter approach is less accurate as such surveys tend to overestimate the amount of land available for cultivation and do not account for growers planting seedlings closer together to increase yields.\(^{101}\)

The data obtained by the ATO with respect to above activities would be a useful source of information for the purposes of estimating the extent of diversion of tobacco to the illegal market. However, this information is subject to a confidentiality classification and was therefore unavailable for the purposes of this report.\(^{102}\)

In the absence of the ATO information, we have undertaken an indicative estimation of the size of the chop chop market based on yield estimation. The steps taken to undertake this analysis are shown in the table below.

**Table 5 Chop chop volume estimate\(^ {1}\)**

<table>
<thead>
<tr>
<th>Process step</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area under crop in Victoria(^ {2})</td>
<td>1,600 ha</td>
</tr>
<tr>
<td>Multiplied by average yield per ha(^ {2})</td>
<td>2,800 kg/ha</td>
</tr>
<tr>
<td><strong>Expected yield</strong></td>
<td><strong>4,480,000 kg</strong></td>
</tr>
<tr>
<td>Less actual Co-op volume 2003(^ {2})</td>
<td>3,100,000 kg</td>
</tr>
<tr>
<td><strong>Implied “excess” tobacco</strong></td>
<td><strong>1,380,000 kg</strong></td>
</tr>
<tr>
<td>Plus “excess” Queensland grown tobacco(^ {3})</td>
<td>150,000 kg</td>
</tr>
<tr>
<td>Plus tobacco grown by unlicensed growers (10%)(^ {4})</td>
<td>153,000 kg</td>
</tr>
<tr>
<td><strong>Implied total volume of chop chop</strong></td>
<td><strong>1,683,000 kg</strong></td>
</tr>
<tr>
<td><strong>Equivalent sticks</strong>(^ {5})</td>
<td><strong>2,404,285,714</strong></td>
</tr>
</tbody>
</table>

**Notes:**
1. Does not include tobacco grown in the Glasshouse Mountains region of Queensland or illegally imported chop chop known as ‘cut rag’.
2. Source: Consultations 2004. yield per ha calculated on total amount sold divided by total area planted and is based on historical (recent) sale data.
5. Based on 0.70g weight of TMC sticks.

The estimate contained in table 4 implies that in 2003 nearly 1.7 million kg of chop chop tobacco may have been diverted to the illegal market. This estimate does not include tobacco grown in Queensland’s Glasshouse Mountains region that may have been diverted to the illegal market or illegally imported chop chop.
Sold through legal channels, growers would receive approximately $9.6 million from manufacturers on this volume of tobacco. Sold illegally, growers could expect to receive approximately $56 million. This represents an additional $46 million in revenue to the grower when sold illegally. This volume of tobacco has an equivalent retail value of around $134 million and represents approximately $382 million in lost tax and excise revenue.

Under this model the following losses are implied in 2003:

<table>
<thead>
<tr>
<th>Loss Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community (lost tax revenue)</td>
<td>$382 million</td>
</tr>
<tr>
<td>Legitimate retailers (lost profitability)</td>
<td>$30 million</td>
</tr>
<tr>
<td>Legitimate growers (lost profitability)</td>
<td>$54 million</td>
</tr>
</tbody>
</table>

**Household consumption model (smuggled tobacco)**

Where reliable independent estimates of tobacco consumption are available, e.g., household surveys, then the difference between consumption and tax paid sales can be used to estimate the amount of smuggled tobacco. This is the methodology employed by UK Customs & Excise in its estimates of tobacco smuggling in the UK.

An estimate of the size of the tobacco smuggling problem in Australia was undertaken based on this methodology. The 1998 and 2001 National Drug Strategy Household Surveys were selected as indicators for reported consumption in Australia. Part of the reason for selecting the Surveys was that the 2001 Survey included questions on chop chop use. Therefore, reported chop chop data could be excluded when determining licit consumption.

The analysis assumes that the excised statistics do not include imported product. This assumption is consistent between the baseline data and the comparative data for the purpose of establishing the volume of cigarettes that may be smuggled into Australia.

A summary of the sales versus consumption methodology to Australian data is shown in the table below.

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103 Based on $600 paid by manufacturers per bale; and 105kg per bale.
104 Based on chop-chop market price of approx. $3,500 per bale Source, Geiss 2004, p6
105 The price of chop chop is based on The Commissioner of Taxation – Annual Report 2002-03.
106 Based on tax of approximately $227 per kilogram (Geiss 2002, p5).
107 Alternatives that were considered for measuring consumption but thought to be less accurate for determining the degree of smuggling were:
- Annual adult per capita consumption of cigarettes and tobacco products
- Average household expenditure on tobacco products
- Reported budget revenue from excise and customs duty on tobacco products
- ABS census figures and population estimates to calculate cigarette and tobacco consumption
108 Although many websites in Australia carry consumption, import and other data for tobacco control purposes, there appears to be a dichotomy between the volume of imports quoted in those sources compared to the import data we received from the ABS making the reconciliation of consumption
including assumptions associated with this analysis are contained in Appendix B.

**Table 6 Tobacco smuggling estimation**

<table>
<thead>
<tr>
<th>Process step</th>
<th>2001/02 (M of sticks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported consumption (from survey data)</td>
<td>17,481</td>
</tr>
<tr>
<td>Less estimated chop chop consumption</td>
<td>863</td>
</tr>
<tr>
<td>Licit consumption</td>
<td>16,618</td>
</tr>
<tr>
<td>Total tax paid sales (imports less exports)</td>
<td>22,785</td>
</tr>
<tr>
<td>Plus assumed consumption under-reporting (34%)</td>
<td>5,650</td>
</tr>
<tr>
<td><strong>Total estimated licit consumption</strong></td>
<td><strong>23,130</strong></td>
</tr>
<tr>
<td><strong>Estimated smuggling</strong></td>
<td><strong>346</strong></td>
</tr>
<tr>
<td>Estimated smuggling as % of total consumption</td>
<td>1.5%</td>
</tr>
<tr>
<td>Less smuggled cigarettes seized by customs</td>
<td>100</td>
</tr>
<tr>
<td><strong>Estimated smuggling without detection</strong></td>
<td><strong>246</strong></td>
</tr>
</tbody>
</table>

Based on this analysis, smuggling represents approximately 1.5 percent of the total licit consumption of tobacco in Australia. In comparing this result with the number of cigarettes seized by Customs in 2001/02, approximately 246 million cigarettes were smuggled into Australia without detection.

The results from the sale and consumption of cigarettes in Australia compare favourably with the Transparency Index developed by a number of experts for the World Bank. The index is used as a measure of the ease with which illegal cigarettes could be imported and distributed. According to the results, each 1 percentage point increase in a country’s transparency index is associated with a 2 percentage point decrease in the expert’s estimates of cigarette smuggling.

The World Bank found that the experts’ population weighted average figure for smuggling of about 8.5 percent (for 30 countries), as a percentage of the total consumption, to be remarkably consistent with its own results (6 percent). Although there was no recorded estimate figures problematic. There appeared to be no clear validation point for quantities consumed and we have found in the past that the use of revenue data as the basis of determining those quantities is often susceptible to variation. There are several reasons for this:

- Excise and customs duty rates on cigarettes are set twice a year, February and August
- The budget papers do not differentiate between these rates
- The revenue on excisable and like customizable tobacco products is usually prepared as a consolidation of revenue on that product group and does not differentiate between TMCs, RYO and other tobacco products.
for Australia, countries with a similar Transparency Index\textsuperscript{109} that did record smuggling estimates experienced smuggling in the range of 2 percent to 15 percent of domestic sales.\textsuperscript{110}

\textsuperscript{109} The Transparency Index is produced by Transparency International and ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. It is a composite index drawing on a number of different polls and surveys from independent institutions. Transparency International is funded by the public sector, foundations and the private sector. Contributions to the International Secretariat from public institutions and foundations finance the greater part of Transparency International’s activities.

\textsuperscript{110} Transparency International 1998. The World Bank used this index as a measure of the ease with which illegal cigarettes could be imported and distributed. According to empirical results, each 1 point increase in a country’s transparency index is associated with a 2\% point decrease in experts’ estimates of cigarette smuggling.
Options for regulatory intervention
Options for regulatory intervention

**Intervention measures - current**

In October 1998, the administration of excise duties was transferred from Customs to the ATO with full implementation of the Government decision from February 1999. Customs continues to administer the import and export of tobacco products. Duty free stores are licensed under the Customs Act 1901 but these entities also gain access to excisable products through the holding of storage licenses and permission granted under the Excise Act.

The Excise Act provides penalties for the illegal transport, storage, manufacture and sale of tobacco. Growers apprehended for illegal traffic in chop-chop risk the loss of their license and can be penalized by a fine of up to $55,000 and two years imprisonment. The Act also provides for Penalty Infringement Notices (PINs) for possession or sale of tobacco on which the excise tax has not been paid.

In addition, the Excise and Other Legislation Amendment (Compliance Measures) Bill 2004 passed through the Senate on 24 June 2004 and received royal assent on 29 June 2004. The amendments are designed to assist the effectiveness of the ATO’s ongoing campaign against the illegal tobacco sector by providing the ATO with greater compliance and administrative powers with respect to the payment of excise. The amendments include:

- movement of tobacco seed and plants requiring the permission of the ATO;
- allowing the ATO to dispose of seized excisable goods in a wider range of circumstance than at present;
- altering the confidentiality provisions in section 159(3A) of the Excise Act to allow information relating to licences to be disclosed to a second person where the disclosure is necessary to ensure compliance with excise legislation; and
- requiring relevant export movements to be explicitly authorised by the ATO thereby enhancing its ability to ensure any excise due is in fact paid.

The ATO has excise management arrangements in place to monitor chop chop in Australia. Similarly customs also has measures in place for the detection and intervention of cigarette smuggling and diversion. These arrangements were discussed in chapter 4.
Intervention measures - future

If combating the illegal trade in tobacco and excise fraud is one of the pillars of the Government’s taxation policy, it should be able to protect:

• the revenue required for increased investment in public services;
• the wider objectives behind the level of taxation on tobacco and other products;
• law abiding businesses from unfair and criminal competition;
• society from organised criminal activity; and
• local communities from criminal supply chains.

A successful intervention strategy in Australia should have four overriding themes:

• practices to combat the illegal tobacco trade must reflect the unique circumstances of the chop-chop market;
• communication and cooperation between the various arms of government are essential to enhance the effectiveness of tobacco control measures;
• exploring the effectiveness of new or innovative practices or more sophisticated tools to address the illegal market as criminals become more professional in their approach; and
• an effective regulatory regime to control tobacco trade at and within its borders.

The following provides further detail on how these themes may operate at the general level and then explores how these themes may operate in practice.

Intervention options targeting chop chop

**Licensing of importers/distributors of cigarette papers and tubes** - the number of cigarette tubes being imported into Australia, for what appears to be for the purpose of excise evasion, has continued to grow. This alternative places conditions on the importation and distribution of cigarette papers and tubes in Australia through a licensing arrangement. The conditions on the importers/distributors could include:

• that all importers/distributors must be licensed
• importations are prohibited unless to a license holder
• a sale to a person (company) at the next level of trade is illegal unless it is to a 'fit and proper' person (this could be defined as to whether the person/company is bona fide)
the importer/distributor and the receiver would be subject to penalties unless the receiver is on the 'continuing permission' list

the importer/distributor is subject to record keeping requirements in relation to sales (and penalties if not held correctly)

all records (sales, continuing permissions, etc) would be subject to auditing by the ATO

**Equalisation Tax on Tubes** - an equalisation tax on the import of cigarette tubes may be one means of reducing the illegal use of chop-chop in the community. The effect would be to make the cost of a cigarette manufactured from chop-chop closer to the cost of a tailor made cigarette thereby reducing the incentive to buy illegal cigarettes or tobacco.

Our examination of Australia’s international trade commitments revealed that the Australian Government has bound its duty rates on the tariff classification of cigarette tubes to 0 percent. Another consideration would be the effect of the imposition of another tax on cigarette tubes on Australia’s commitments under the World Trade Organization.

**Tracking and tracing** – an effective system permits authorities to independently trace the movement of tobacco products from the time of manufacture through to the point to where all duties and taxes have been collected, as well as being able to identify the customers throughout the supply chain.

In Australia, the greatest threat to tax revenue has been the use of chop-chop. The introduction of a tracking and tracing system is better suited to tailor made cigarettes and may not achieve the ATO’s outcomes of deterring, preventing and detecting chop-chop in the Australian market.

This type of system is very costly to implement and monitor, and it is not clear whether benefits would outweigh costs.

**Intervention options targeting smuggled tobacco**

**Certificate of origin/end-user or single transit document** – this system would require that the product be accompanied at all times with such a document or certificate. The value of a Certificate of Origin is reliant upon the technical competency of the issuing authority and the information provided to the authority by the exporter or manufacturer. As tobacco products are subject to fixed rates of duty (as opposed to ad valorem rates) in many jurisdictions, and origin in many instances does not confer a preferential rate of duty, the integrity of that information provided may be questionable.
Export/import licensing or permits - a registration system would require those in the business of exporting or importing cigarettes to conduct their business within normal trading channels. Australia operates a number of successful export and import licensing schemes where it is subject to a multilateral trade or other agreement. Australia’s import and export controls are implemented through the Customs Act 1901, the Customs (Prohibited Imports) Regulations and the Customs (Prohibited Exports) Regulations.

If a similar scheme was applied to tobacco products, importers and exporters would be required to apply for a license in order to move products legally across the Australian border. Tobacco leaf is already controlled in a similar fashion.

In terms of options for border controls, it is likely the Australian Customs Service and the Government would be more receptive to this approach than to others which are outside the normal administrative channels. Changes to the controls are reasonably straightforward to implement by revising the Regulations rather than having to change an Act of Parliament.

Early warning system – whereby Australia would alert the receiving and transit countries that an export shipment is about to take place. A variation to this could involve the exporting country authorising an export shipment only if the exporter presented all the appropriate export documentation.

For most jurisdictions, this is an administratively burdensome option and one subject to delays at the importing end while waiting to receive the relevant documentation from the exporting country’s customs or other law enforcement service.

Export bond – whereby all exporters are required to post a bond for commercial quantities of tobacco products. Liability under the bond is relieved upon proof of landing in a foreign jurisdiction. Manufacturers and exporters of tobacco products would be unable to legitimately export products from, or transport them through, any country which has implemented the system unless they have posted a bond.

Initial indications are that this proposal may conflict with international trade laws. There may also be jurisdictional issues for the exporting country and its ability to hand over that bond to another jurisdiction. However, there are may be sound arguments available to meet such objections by invoking exceptions to relevant trade rules.
**Recommended approach**

Our review would suggest that the intervention measures essentially take a tactical approach. For example, at present, success is defined in terms of outputs (e.g., increased numbers of seizures) rather than being based on the achievement of outcomes which have a direct and measurable impact on the problem the Government and the Australian industry are aiming to resolve.

The ATO and Customs could review their approaches with the following six key components in mind. While both agencies have already paid attention to some or parts of the components, it would appear that this exercise could be undertaken in a more holistic fashion:

- **Estimating the size of the problem** – the ANAO found that the ATO was not able to estimate the size of the chop chop market and therefore did not know the size of the problem it faced. The ATO and Customs should develop robust estimates of the size of the chop chop market and smuggled tobacco markets based on the best and most accurate information available. These estimates should be published routinely and revised if significant new information emerges. If the estimates are not robust, they should not be published as they would give an inaccurate baseline against which to measure smuggling and fraud trends, or the performance of anti-smuggling and anti-fraud strategies.

- **Analysing the problem** – establishing the nature and economics of the illegal markets through the analysis of intelligence in order to develop well-targeted strategies. The nature of smuggling and fraud and any trends in the development of the strategy need to be carefully understood before the ATO and Customs can develop appropriate operational responses.

- **Operational responses** – the ATO’s and Customs’ operational response should be entrenched in an analysis of the nature of the illegal markets, and the resulting assessment of the most efficient and effective means of tackling it. At times, this could involve a simultaneous strengthening of the enforcement effort to ensure maximum pressure at all different levels of the fraud network, from additional staff designed to improve front-line detection, to tougher penalties targeted at those involved in the supply chain.
• **Establishing outcomes** – the ATO’s and Customs’ strategic approach should be based on establishing and delivering ambitious outcomes. Each of the ATO’s and Customs’ strategies should be designed to achieve a clear and measurable outcome in terms of its impact on the problem being tackled.

• **Strengthening controls** – chop chop and smuggling are more likely to flourish by exploiting weaknesses in the tax control regime. Underpinning the operational response to each fraud is therefore an assessment of any changes required to strengthen the control regime and prevent its exploitation. This is essential if additional resources are to be deployed effectively, i.e., increased numbers of staff will achieve little if there are fundamental weaknesses in the revenue control regime.

• **Monitoring and delivery** – comparing the ATO’s and Customs’ performance against their key outcomes is central to measuring the effectiveness of each strategy, and thereby to monitoring their delivery of the Government’s high-level revenue and public interest objectives. However, the ATO and Customs should also set lower operational output targets (e.g., relating to the number of seizures or criminal gangs disrupted), which are important indicators of whether their performance is on track to deliver the key outcome. Once established, these outcomes and targets can be monitored through each agency’s annual report.

At the operational level, supply intervention measures should be aimed at:

• deterring and preventing illegal trade;
• increasing detection;
• increasing the risk or reducing the reward of smuggling; and
• acting on information provided by the public.

With these aims in mind, and being aware that some of the following points have already been put in place by the ATO and Customs, the tactics employed by both agencies could include:

• disruption all along the supply chain involving a step change in interception rates and a harsh seizure policy;
• improved intelligence to optimise interception rates and target major inland distribution around the tobacco growing areas;
• investigation geared to maximum disruption of supplies at import and key distribution points; and
• extra resources both human and technological (e.g., x-ray scanners, satellites and aerial crop measurement techniques) to
enhance the vigour and scope of the enforcement effort and achieve the step change in interception rates necessary to make smuggling and excise fraud an economically unattractive proposition;

- targeted measures to apply effective sanctions against those caught involved in inland distribution, with a particular emphasis on preventing illegal supplies of chop-chop seeping into the ordinary retail market, thus keeping up the economic pressure on the evaders’ distribution processes;
- increased emphasis on asset confiscation to remove the economic rewards of smuggling;
- financial investigation should be an integral part of all large scale chop chop and smuggling related cases to ensure assets are identified and Seizure Orders obtained;
- use of civil recovery and related economic penalties where retailers are caught making illegal supplies; and
- enhanced working relationships with other law enforcement agencies as well as other stakeholder agencies

Targeted measures

- new offences and penalties for those caught handling or selling chop chop and smuggled tobacco;
- a tougher penalty regime for owners of premises where non-excise paid goods are sold; and
- a system of import and export licences or permits so that anyone not importing or exporting cigarettes under the scheme is subject to sanctions and the goods subject to seizure.

Monitoring progress

Important data sources for tracking the success of the strategy include:

- a key part of reducing the profitability of those trading in illegal tobacco will be increasing seizures. Monitoring these figures and trends will be a key element of knowing if the strategy is working;
- other enforcement measures such as the number of vehicles seized, the number of organisations broken up and the range of financial assets confiscated will be important indicators of the extent to which the strategy is increasing the penalties of being caught; and
- total consumption of tobacco, legal sales of tobacco and revenue receipts will be important in tracking the total size of the market. This will be necessary to estimate the percentage of the market
that is smuggled or where excise is being evaded and whether the Government is achieving its health objectives.

Customs and the ATO could report progress against all of these categories on a regular basis to the Treasurer and Minister for Revenue. This will enable the Government to ensure that it is going to meet its objectives, and thus assess whether further action needs to be taken.
## Appendix A  Update of ITWP chop chop model

### CHOP CHOP MARKET ESTIMATES  
Based On Cigarette Papers/Tubes Import Data

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</thead>
<tbody>
<tr>
<td>Legal RYO Market Volume (Kgs)</td>
<td>1,544,000</td>
<td>1,486,321</td>
<td>1,406,700</td>
<td>1,332,654</td>
<td>1,285,972</td>
<td>1,328,434</td>
<td>1,529,266</td>
<td>1,528,775</td>
</tr>
<tr>
<td>Number of Sticks (@0.7gms/stick)</td>
<td>2,205,714</td>
<td>2,123,316</td>
<td>2,009,571</td>
<td>1,903,791</td>
<td>1,837,103</td>
<td>1,897,763</td>
<td>2,184,666</td>
<td>2,183,964</td>
</tr>
<tr>
<td>ChopChop Market Volume in 1996 (Kgs)</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Volume Tubed (Kgs)</td>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Volume Rolled (Kgs)</td>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Sticks Tubed (@1.200gms/stick)</td>
<td>40,000</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Number of Sticks Rolled (@0.700gms/stick)</td>
<td>71,429</td>
<td></td>
<td></td>
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### ChopChop Volume Distribution

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<tr>
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</thead>
<tbody>
<tr>
<td>ChopChop Volume Used in Tubes</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>ChopChop Volume Used in Papers</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
</tr>
</tbody>
</table>

### Value of Papers/Tubes Imports

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Value of Papers/Tubes Imports</td>
<td>$6,528,605</td>
<td>$6,868,137</td>
<td>$8,498,659</td>
<td>$9,710,290</td>
<td>$10,145,099</td>
<td>$13,083,175</td>
<td>$13,268,474</td>
<td>$11,891,054</td>
</tr>
<tr>
<td>Value of Papers Based on Legal RYO Volume</td>
<td>$3,198,285</td>
<td>$3,078,808</td>
<td>$2,913,878</td>
<td>$2,760,497</td>
<td>$2,663,799</td>
<td>$2,751,756</td>
<td>$2,167,766</td>
<td>$2,166,748</td>
</tr>
<tr>
<td>Value of Papers Used in ChopChop</td>
<td>$103,572</td>
<td>$157,368</td>
<td>$446,600</td>
<td>$543,092</td>
<td>$617,445</td>
<td>$497,679</td>
<td>$474,127</td>
<td>$381,339</td>
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<tr>
<td>Value of Tubes Used in ChopChop</td>
<td>$159,200</td>
<td>$564,413</td>
<td>$2,068,633</td>
<td>$3,339,153</td>
<td>$3,796,307</td>
<td>$6,774,192</td>
<td>$6,559,033</td>
<td>$5,275,419</td>
</tr>
</tbody>
</table>

** Check Value Tubes & Papers **

|          | 262,772 | 721,781 | 2,517,233 | 3,882,245 | 4,413,752 | 7,263,871 | 7,033,160 | 5,656,758 |

### Total sticks(000s)

<table>
<thead>
<tr>
<th></th>
<th>111,429</th>
<th>250,342</th>
<th>829,136</th>
<th>1,213,529</th>
<th>1,379,670</th>
<th>2,039,768</th>
<th>2,039,274</th>
<th>1,997,982</th>
</tr>
</thead>
<tbody>
<tr>
<td>RYO (000s)</td>
<td>71,429</td>
<td>108,530</td>
<td>309,379</td>
<td>374,546</td>
<td>425,824</td>
<td>337,710</td>
<td>326,984</td>
<td>262,992</td>
</tr>
<tr>
<td>Tubes (000s)</td>
<td>40,000</td>
<td>141,812</td>
<td>519,757</td>
<td>838,983</td>
<td>953,846</td>
<td>1,702,056</td>
<td>1,647,990</td>
<td>1,325,482</td>
</tr>
<tr>
<td>Tubes %</td>
<td>35.9%</td>
<td>56.6%</td>
<td>70.0%</td>
<td>75.0%</td>
<td>80.0%</td>
<td>83.4%</td>
<td>83.4%</td>
<td>83.4%</td>
</tr>
</tbody>
</table>

### Total Weight (Kgs)

<table>
<thead>
<tr>
<th></th>
<th>100,000</th>
<th>253,236</th>
<th>866,262</th>
<th>1,310,911</th>
<th>1,490,384</th>
<th>2,363,970</th>
<th>2,288,887</th>
<th>1,840,947</th>
</tr>
</thead>
<tbody>
<tr>
<td>RYO (Kgs)</td>
<td>50,000</td>
<td>75,971</td>
<td>216,565</td>
<td>262,182</td>
<td>298,077</td>
<td>236,397</td>
<td>228,887</td>
<td>184,095</td>
</tr>
<tr>
<td>Tubes (Kgs)</td>
<td>50,000</td>
<td>177,265</td>
<td>649,696</td>
<td>1,048,729</td>
<td>1,192,307</td>
<td>2,127,573</td>
<td>2,059,998</td>
<td>1,656,853</td>
</tr>
<tr>
<td>Tubes %</td>
<td>50.0%</td>
<td>70.0%</td>
<td>75.0%</td>
<td>80.0%</td>
<td>80.0%</td>
<td>90.0%</td>
<td>90.0%</td>
<td>90.0%</td>
</tr>
</tbody>
</table>

** Total RYO Consumption Check **

|          | 1,594,000 | 1,562,292 | 1,623,265 | 1,594,836 | 1,584,049 | 1,564,831 | 1,758,155 | 1,712,870 |
RYO Trends

Legal RYO Consumption (Kgs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>1,544,000</td>
<td>1,486,321</td>
<td>1,406,700</td>
<td>1,332,654</td>
<td>1,285,972</td>
<td>1,328,434</td>
<td>1,529,266</td>
<td>1,528,775</td>
</tr>
</tbody>
</table>

Trend in Legal Consumption

-3.70%  -5.40%  -5.30%  -3.50%  3.30%  15.10%  0.00%

Customs Value

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Importer A</td>
<td>$248,989</td>
<td>$315,404</td>
<td>$444,659</td>
<td>$799,872</td>
<td>$796,071</td>
<td>$113,662</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importer B</td>
<td>$273,771</td>
<td>$266,759</td>
<td>$763,551</td>
<td>$1,456,634</td>
<td>$1,716,170</td>
<td>$2,437,424</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importer C</td>
<td>$1,100,398</td>
<td>$1,146,412</td>
<td>$2,186,551</td>
<td>$4,455,609</td>
<td>$4,317,198</td>
<td>$5,183,633</td>
<td>$4,737,160</td>
<td>$7,024,670</td>
</tr>
<tr>
<td>Importer D &amp; E</td>
<td>$4,389,796</td>
<td>$4,764,591</td>
<td>$4,021,973</td>
<td>$2,605,857</td>
<td>$4,377,138</td>
<td>$5,518,363</td>
<td>$4,737,160</td>
<td>$7,024,670</td>
</tr>
<tr>
<td>Others</td>
<td>$515,651</td>
<td>$414,971</td>
<td>$481,973</td>
<td>$402,318</td>
<td>$261,523</td>
<td>$348,224</td>
<td>$483,960</td>
<td>$4,866,384</td>
</tr>
<tr>
<td>Total Customs Value</td>
<td>$6,528,605</td>
<td>$6,868,137</td>
<td>$8,498,659</td>
<td>$10,145,099</td>
<td>$13,083,175</td>
<td>$13,268,474</td>
<td>$11,891,054</td>
<td></td>
</tr>
</tbody>
</table>

Value based on Legal RYO Trends

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>6,528,605</td>
<td>6,868,137</td>
<td>8,498,659</td>
<td>10,145,099</td>
<td>13,083,175</td>
<td>13,268,474</td>
<td>11,891,054</td>
<td></td>
</tr>
</tbody>
</table>

Excess Value (ChopChop)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>0</td>
<td>581,090</td>
<td>2,551,113</td>
<td>4,077,964</td>
<td>4,709,994</td>
<td>7,468,619</td>
<td>8,047,354</td>
<td></td>
</tr>
</tbody>
</table>

Assumptions

- RYO Grams/Stick: 0.700 (Average based on rolling habits)
- ChopChop Grams/Tube: 1.250 (Includes wastage and shrinkage)
- FOB Price - Papers/1000: 1.450 (Weighted Average of $1.19 and $1.54 based on clearances)
- FOB Price - Tubes/1000: 3.980 (Weighted Average of $3.90 and $4.10 based on clearances)

*The ratio of Tubes to Cigarette Papers increases in line with increased availability of Tubes in 1996 to 1998
*Ratio between RYO and TMC smokers used to determine percentage of tubes to Cigarette Papers used with ChopChop
*Clearance value apportioned on percentage of Cigarette Papers to Tubes consumed with ChopChop after taking into account the legal RYO usage and recreational use to arrive at quantity.
*Average Cigarette Paper Value arrived at with reference to importers and their price structure
*No allowance has been made for filter plugs used.
*For 2002 and 2003, in addition to the customs value for cigarette paper in the form of tubes and booklets (4813.10.00/15 and 4813.10.00/16), the customs value for "cigarette paper in rolls of a width not exceeding 5cm" (4813.20.00/12) was included to determine the total value of imports.
*For 2002 and 2003, the ratio of RYO to TMC remains at 10:90 (to determine the percentage of tubes to cigarette papers used with chop chop)
*For 2002 and 2003, the FOB value for papers remains at a weighted average value of $1.45 (as found in the Panel model)

*Value of Papers/Tubes Imports also includes cigarette papers imported under the "Other" code (4813.90.00/13), which are described as cigarette papers not in the form of booklets or tubes or in rolls of a width exceeding 5cm. Imports under this code increased by 393 tonnes or $3,412,050 between 2002 and 2003. Only the difference in value/tonnes between 2002/03 is included in the 2003 figure.
## Appendix B  Estimated Smuggling using Household Survey Data

Details of the sales versus consumption methodology to Australian data is shown in the table below.\textsuperscript{111}

### Estimated Smuggling Using Household Survey Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported consumption (from survey data)\textsuperscript{#}</td>
<td>17732.09</td>
<td>17801.00</td>
<td>-1%</td>
</tr>
<tr>
<td>Less estimated chop-chop consumption\textsuperscript{*}</td>
<td>0.00</td>
<td>563.56</td>
<td></td>
</tr>
<tr>
<td>\textbf{Licit tobacco consumption}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excised Cigarette Sales\textsuperscript{*}</td>
<td>22690.84</td>
<td>22612.99</td>
<td></td>
</tr>
<tr>
<td>Plus imported TMCs not exceeding 0.8 gms per stick\textsuperscript{*}</td>
<td>2040.71</td>
<td>1796.62</td>
<td></td>
</tr>
<tr>
<td>Plus imported TMCs exceeding 0.8 gms per stick\textsuperscript{*}</td>
<td>30.45</td>
<td>43.73</td>
<td></td>
</tr>
<tr>
<td>Plus imported smoking tobacco stick equivalents\textsuperscript{*}</td>
<td>1342.50</td>
<td>1345.69</td>
<td></td>
</tr>
<tr>
<td>Total tax paid sales</td>
<td>23779.67</td>
<td>22785.43</td>
<td>-4%</td>
</tr>
<tr>
<td>Assumed under-reporting (34% of reported consumption)\textsuperscript{#}</td>
<td>6047.67</td>
<td>5649.93</td>
<td></td>
</tr>
<tr>
<td>\textbf{Total estimated licit consumption}</td>
<td>23779.67</td>
<td>23130.93</td>
<td>-3%</td>
</tr>
<tr>
<td>Estimated smuggling\textsuperscript{*}</td>
<td>0.00</td>
<td>345.50</td>
<td></td>
</tr>
<tr>
<td>Estimated smuggling as a percentage of total estimated consumption</td>
<td>0%</td>
<td>1.49%</td>
<td></td>
</tr>
<tr>
<td>Smuggled cigarettes seized by Customs</td>
<td>100.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Quantities expressed in millions of sticks

Notes:  
\textsuperscript{#} National Drug Strategy Household Surveys 1998 and 2001. Includes tobacco smoking other than tailor made cigarettes (calculated by the number of regular smokers x the mean number of cigarettes smoked per week x 52 weeks). Although using the 1998 survey consumption data does not provide an exact match to 2000/2001 tax paid sales, it is the nearest approximate data available.  
\textsuperscript{\*} In the Australian Institute of Health and Welfare analysis of the 2001 Household survey, chop-chop use was reported as representing 4.94% of consumption  
\textsuperscript{*} ABS, Number of cigarettes excised, Codes 8A80 and 8B81, sourced from [http://www.vctc.org.au/tc-res/latest.htm](http://www.vctc.org.au/tc-res/latest.htm). Assumption made that excised cigarettes did not

\textsuperscript{111} Although many websites in Australia carry consumption, import and other data for tobacco control purposes, there appears to be a dichotomy between the volume of imports quoted in those sources compared to the import data we received from the ABS making the reconciliation of consumption figures problematic. There appeared to be no clear validation point for quantities consumed and we have found in the past that the use of revenue data as the basis of determining those quantities is often susceptible to variation. There are several reasons for this:  
• Excise and customs duty rates on cigarettes are set twice a year, February and August  
• The budget papers do not differentiate between these rates  
• The revenue on excisable and like customizable tobacco products is usually prepared as a consolidation of revenue on that product group and does not differentiate between TMCS, RYO and other tobacco products.
include imported cigarettes or tobacco products or cigarettes or tobacco products cleared for export
< ABS, HS 2402.20.20 stat code 05, “Cigarettes containing tobacco not exceeding 0.8 grams per stick of tobacco content”.
> ABS, HS 2402.20.80 stat code 06, “Cigarettes containing more than 0.8 grams per stick”. Data are recorded in kilograms and converted to per stick on the basis of 1.2 grams per stick equivalent
≈ ABS, HS 2403.10.70 stat code 02, Smoking tobacco (exceeding 0.8 grams per stick if in stick form). Data are recorded in kilograms and converted to per stick on the basis of 0.7 grams per stick equivalent. Assumption made that tobacco was not imported in stick form but rather as RYO tobacco
$ ABS, AHECC 2402.20.001, “Cigarettes containing tobacco not exceeding in weight 0.8 grams per stick actual tobacco content”
¥ ABS, AHECC 2402.20.002, “Cigarettes containing tobacco exceeding 0.8 grams per stick”. Data are recorded in kilograms and converted to per stick on the basis of 1.2 grams per stick equivalent
€ ABS, AHECC 2402.20.000, “Cigarettes containing tobacco”. Data are recorded in kilograms and converted to per stick on the basis of 0.7 grams per stick equivalent
≤ ABS, AHECC 2403.10.10, “Cut tobacco”. Data are recorded in kilograms and converted to per stick on the basis of 0.7 grams per stick equivalent
≥ ABS, AHECC 2403.1090, “Smoking tobacco (excluding cut tobacco)”. Data are recorded in kilograms and converted to per stick on the basis of 0.7 grams per stick equivalent
≠ Assumed consumption under reporting in the baseline year of 2000/2001 remains a constant for future periods
+ Estimated smuggling is assumed to be zero in 2000/2001.