

# MACROECONOMIC POLICY SERIES

Economics of  
Tobacco Taxation in Sri Lanka

**2021**



# **Economics of Tobacco Taxation in Sri Lanka**

Research Intelligence Unit (Pvt) Ltd ©2022. All rights reserved.  
All information contained herein are from sources deemed reliable; however, no representation or warranty is made to the accuracy thereof.

**About  
the RIU**



The Research Intelligence Unit (RIU) is a pioneering research firm that values creativity, innovation, integrity and market intelligence. We offer research-based consulting focused on several key sectors of the economy.

The RIU was first registered in the UK with its office based in London. In 2003, the RIU established its Asia regional office in Colombo, Sri Lanka, where the company continues to grow and serve an international client base. Over the years, the RIU has entrenched itself as the premier research and consultancy firm for many top corporations and development institutions across the globe, including Fortune 500 companies. We have representation in multiple locations across Africa, Asia, Europe and the Middle East.

Our work has been recognised for its originality and quality, with award-winning kudos, as we endeavour to provide timely market intelligence and promote sustainable practices to all our clients. Our research and advisory services include:

- Investment appraisal
- Market and financial feasibility
- Market surveillance and surveys
- Marketing strategies
- Environmental and social impact studies
- Publications
- Newsletters and news alert subscriptions

**Foreword**



As we emerge from a global economic crisis triggered by the pandemic, the current time presents policy makers and business leaders with an opportunity to re-examine some of the perennial issues that have continued to plague the domestic economy. At the frontline of the challenges facing Sri Lanka is that of increasing government revenue by eliminating, or at least minimising the untaxed economy. The consequences of failing to address these leakages in the Treasury will have very significant impacts of the macro economy.

More than ever, policy makers need to address the issue of illicit markets that erode the fiscal revenues of the Treasury. Whilst it is encouraging to note that the Government has accepted and acknowledged the existence of illicit markets in its 2021 budget proposal, policy makers still have ways to go to identify a feasible solution to tackling the menace. Tobacco taxation is a case in point where the politicisation of the issues over many years has resulted in the emergence of a thriving illicit market and a consequent sub-optimal achievement of both the health and fiscal targets.

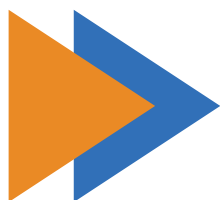
The purpose of this document is to enlighten readers on the effects of the current tobacco taxation policy in Sri Lanka. It does so by carrying out a comprehensive and detailed treatment of the analysis of tobacco taxation. Using available data for 2020, we have carefully and objectively conducted our analysis with a holistic approach that considers tobacco taxation in the context of its entwined relationship with beedi and smuggled cigarettes.

From the consumption side, we have extracted some of the findings from our primary research into consumption of illicit tobacco covering the entire island. This survey of smokers, which has given us unprecedented insights, along with available secondary data forms the basis of our analysis.

The Research Intelligence Unit (RIU) has always been an organisation that has addressed issues of national interest and has been advocating pursuance of prudent and pragmatic policies that avoid spurring the growth of illicit markets. In addition to tobacco, Sri Lanka is affected by illicit markets that exist in other sectors such as agriculture, alcohol, and pharmaceutical products, that all result in fiscal revenue leakage for the Government. As part of our ongoing battle against illicit markets that erode government revenue, we are delighted to present this report “Economics of Tobacco Taxation in Sri Lanka: Insights on the nature and size of the illicit market” as our contribution towards addressing the gap in research relating to tobacco taxation. In this report, we provide insights on consumer behaviour, the impact of taxation, the growth in trade of the illicit tobacco market, the magnitude of the loss of revenue to the government, loss of business to the legitimate industry and the threat it poses to law and order in the country.

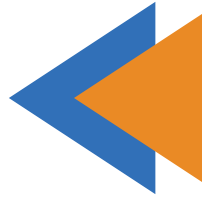
I would like to thank all those individuals, government agencies and the private sector who have contributed towards this study. It is hoped that this study stimulates and provokes further debate and will act as a guiding document for future researchers and policy makers.

D.R. Madawela  
Founder & CEO - RIU



# Contents

	<b>Executive summary</b>	<b>i</b>
<b>01</b>	<b>1.0 Introduction</b>	
	1.1 Industry overview	1
	1.2 Contribution to the economy	2
	1.3 Policy environment	2
<b>03</b>	<b>2.0 Tobacco taxation and its effects</b>	
	2.1 Tobacco taxation in Sri Lanka	4
	2.2 Tax impacts on pricing	7
	2.2.1 Tax impact on cigarette pricing	7
	2.2.2 Tax impact on beedi pricing	9
	2.3 Tax revenue analysis	11
	2.4 Affordability of cigarettes	13
	2.5 Distributional effects of excise taxation	14
	2.6 Efficiency of excise taxation	15
	<b>16</b>	<b>3.0 The nature of the illicit tobacco market</b>
3.1 Overview of the illicit tobacco market		17
3.1.1 Definition of illicit trade		17
3.1.2 Common forms of illicit tobacco and identifying illicit products		17
3.1.3 How smuggling entities work		17
3.1.4 Scale of the global illicit tobacco market		18
3.1.5 Control of illicit tobacco		18
3.2 Illicit tobacco market in Sri Lanka		18
3.2.1 How illicit tobacco is marketed and sold in Sri Lanka		18
3.2.2 Prices of illicit tobacco products in Sri Lanka		19
3.2.3 Detection and enforcement in Sri Lanka	20	



	3.3 Size of the illicit market in Sri Lanka	21
	3.3.1 Illicit market during 1995-2020	21
	3.3.2 Estimation of illicit share for 2021	22
	3.4 Global examples of the illicit tobacco market	24
	3.3.1 Europe	24
	3.3.2 Canada	24
	3.3.3 Pakistan	24
26	<b>4.0 Why should illicit cigarettes concern Sri Lanka?</b>	
	4.1 Revenue loss to the Government	27
	4.2 Loss of employment along the value chain	27
	4.3 Increased criminal activity and threat to national security	28
	4.4 Challenges to national health objectives	30
	4.5 Increased smoking prevalence	30
31	<b>5.0 Combating illicit tobacco trade</b>	
	5.1 Australia's illicit tobacco taskforce	32
	5.2 Ireland's holistic approach and effective enforcement	33
	5.3 Track and trace	35
36	<b>6.0 Conclusion and recommendations</b>	
	6.1 Conclusions	37
	6.2 Recommendations	37
	<b>Bibliography</b>	<b>39</b>

### List of images

- Figure 1: Beedi and cigarette consumption historical trends 2007-2020
- Figure 2: Price of a stick of John Player Gold Leaf 2007-2021
- Figure 3: Excise tax revisions 2014-2020
- Figure 4: Price of a 20-stick pack of the most sold brand in international dollars 2020
- Figure 5: Cross country comparison: GDP vs price of the most sold cigarette brand 2020
- Figure 6: Growth of inflation vs. cigarette prices 2008-2020
- Figure 7: Price and consumption of beedi 2007-2020
- Figure 8: Government revenue overview 2020
- Figure 9: Relative share of tax contributions by sectors 2007-2020
- Figure 10: Government revenue from tobacco taxation
- Figure 11: Share of VAT and excise duty as a percentage of the total tax revenue 2009-2020
- Figure 12: Tax burden of cigarettes by income groups 2021
- Figure 13: RIU survey 2021 - illicit tobacco sources
- Figure 14: Illicit cigarettes sold via an online trading platform
- Figure 15: Total raids 2012-2021
- Figure 16: Total sticks detected 2012-2021
- Figure 17: Illicit cigarette market share by country 2012
- Figure 18: Illicit cigarettes vs Most Popular Price Category (MPPC) cigarette prices in Ireland
- Figure 19: Smoking prevalence in Ireland, 2007-2017

### List of tables

- Table 1: Taxes applicable on the tobacco manufacturers and products 2021
- Table 2: Tax revisions 2014-2021
- Table 3: Excise tax revisions 2014-2021
- Table 4: Cigarette product portfolio and market shares
- Table 5: 2021 tax share of beedi manufactured using locally sourced tobacco (Case 1)
- Table 6: 2021 tax share of beedi manufactured using imported tobacco (Case 2)
- Table 7: Mean annual per capita income needed to buy 100 JPGL packs 2006-2019
- Table 8: Responsiveness of revenue to tax increases 2008-2020
- Table 9: Price comparison of the most consumed illicit vs legitimate tobacco brand 2021
- Table 10: Estimation of the illicit tobacco market in Sri Lanka for 2021
- Table 11: Summary of illicit shares over time 1995-2021
- Table 12: Illicit market share in Pakistan 2010-2020
- Table 13: Calculation of the revenue loss to the Government from illicit cigarettes 2021
- Table 14: Financial impact of the 'Black Economy Package - combat illicit tobacco'

# Abbreviations

ATO	Australian Taxation Office
CAGR	Compound Average Growth Rate
CBSL	Central Bank of Sri Lanka
CCPI	Colombo Consumer Price Index
CESS	A form of Tax on Tax
CTC	Ceylon Tobacco Company
DCS	Department of Census Statistics
DHS	Demographic and Health Survey
EU	European Union
EUR	Euro
FATF	Financial Action Task Force
FBI	Federal Bureau of Investigation
FED	Federal Excise Duty
FCTC	Framework Convention on Tobacco Control
FICC	Federation of Indian Chambers of Commerce and Industry
GDP	Gross Domestic Product
GHW	Graphic Health Warning
HDI	Human Development Index
HIES	Household Income Expenditure Survey
ISIS	Islamic State of Iraq and Syria (Islamic State of Iraq and the Levant)
ITTF	Illicit Tobacco Taskforce
JPGl	John Player Gold Leaf
KRA	Kenya Revenue Authority
LKR	Sri Lankan Rupee
NBT	Nation Building Tax
NCPI	National Consumer Price Index
No.	Number
NZ	New Zealand
PAL	Ports & Airport Levy
PKR	Pakistani Rupee
PMI	Philip Morris International
PPP	Purchasing Power Parity
PTC	Pakistan Tobacco Company
RIP	Retail Index Price
RIU	Research Intelligence Unit
STF	Special Task Force
TIRSP	Tax included retail price
UK	United Kingdom
UNODC	United Nations Office on Drugs and Crime
US	United States
USD	United States Dollar
VAT	Value Added Tax
WAP	Weighted Average Price
WHO	World Health Organisation

# **Executive summary**



Sri Lanka enjoys a higher ranking in the human development index than the regional average and resembles a developed country in its health care system, life expectancy and literacy rates. Sri Lanka has taken significant steps to curb smoking prevalence and these efforts have been met with praise by the WHO. The Island was one of the first to ratify the Framework Convention on Tobacco Control (FCTC) and has followed multifarious WHO guidelines related to pictorial health warnings on packaging, ban on sponsorships, a ban on smoking in enclosed public places and a ban on sales to persons under 21. However, the discussion on progress usually centers on the legal cigarette industry and often ignores the presence of other tobacco products such as beedi as well as a growing illicit market. Both can undermine the progress made thus far by weakening the Government's health objectives.

In this report, we provide a macro level overview on the tobacco industry in Sri Lanka with the aid of preliminary results of an ongoing primary survey, along with a time series analysis of the tax policy framework that has been implemented by successive governments. This report also delves into the efficiency of tax policy that has caused significant market distortions from legitimate to illicit. This undermines the Government's efforts to deter smoking, which in turn has led to a growth in the illicit tobacco market in Sri Lanka. In addition to illicit cigarettes, the discussion on tobacco taxation is also often distorted due to the omission of the much cheaper substitute - beedi from the discourse. Disproportionate application of tobacco taxation of beedi has enhanced the affordability of the product. We see both as central to the policy debate.

Moreover, the current excise taxation puts a greater burden on low-income groups than the upper income groups, eroding the real incomes of low-income individuals. The tobacco excise tax policy in Sri Lanka appears to be characterised by inconsistent elasticity, and low predictability of tax revenues, which could be a result of the improper structuring and/or revenue leakages from the growing illicit market.

In 2012, the illicit share in Sri Lanka was under 10% of total cigarette sales. A massive 52% increase in the price of cigarettes between 2015 and 2016 and subsequent upward price revisions, resulted in Sri Lanka becoming the most expensive country by the year 2018, to purchase a cigarette on purchasing power parity basis (PPP) - a position that Sri Lanka maintains to date. The country saw the share of the illicit market increased to 14% by 2018 and to 24% by 2020.

The research points to the fact that illicit products are getting through despite the supply chain disruptions that have negatively impacted the supply of most other imports. Based on reasons given in section 3.3.2 of this report, we estimated the actual national illicit share for 2021 to be 21%. This translates to a fiscal loss of over LKR 27 billion.

Contrary to research carried out in the past, our research indicates a lower visibility of illicit products in certain parts of the island. This phenomenon is most unusual and can only be explained by the fact that our research was conducted during a period of restricted movement where some areas had been temporarily severed from the (illicit) supply channels. This fact is further affirmed in the responses of the respondents in the resumption of field work post the lifting of lockdown wherein the consumption of illicit products had resumed.

The smuggling business is typically operated by criminal elements who pose a threat to national law and order as well as security. We have presented examples of many countries that have suffered a deterioration in security and faced the threat of terrorism, due to the connection between smuggling and nefarious elements that operate within and beyond borders. These countries have identified illicit tobacco trade as one of the modus operandi for terrorist financing for high profile terrorist groups such as Al-Qaida. This is mainly because the illicit tobacco trade is a high profit low risk operation that fuels the overall spread of criminality in society. Thus, the Government must not rule out the threat it poses to the country and must take action to track down supply chains.

**Introduction**



## 1.1 Industry overview

In Sri Lanka, cigarettes and beedi are the main forms of consumption, followed by tobacco with betel leaf that is popular among many urban and rural communities.

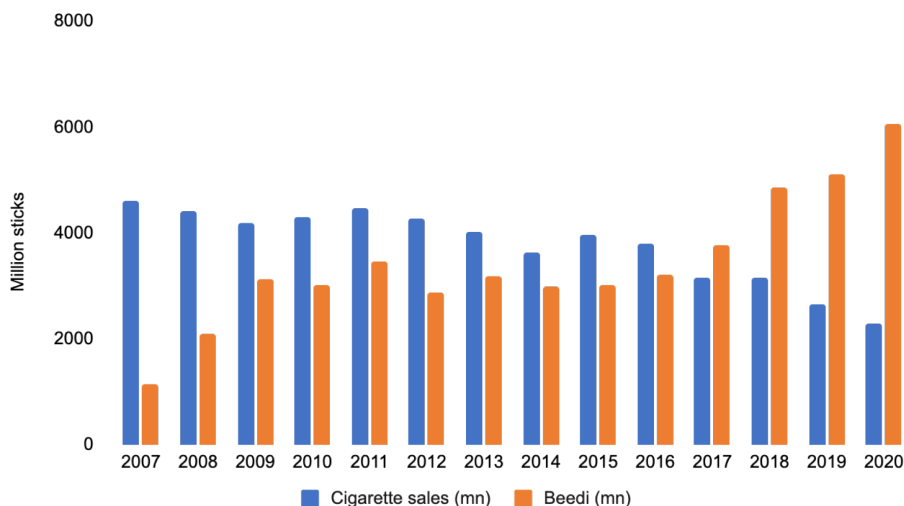
Ceylon Tobacco Company PLC (CTC) is the only licensed manufacturer of cigarettes in the country. The company carries out its entire seed-to-smoke operation locally. Beedi, which is a more popular form of tobacco usage among the low-income rural communities in Sri Lanka, is manufactured by wrapping crushed tobacco in Tendu leaf imported from India (World Bank Group, Global Tobacco Control Program).

According to the WHO, the estimated overall tobacco prevalence level in Sri Lanka was 22.1% for 2020 (upper 95% credible limit estimate was 29.1%). Tobacco usage was estimated to be 44.1% among men and 2.5% among women in the age group of 15 and above for 2020 (WHO, 2019). Figure 1 provides a broader picture of Sri Lankan tobacco consumption trends. Exclusive of illicit products, the consumption of cigarettes in 2020 amounted to 2.3 billion sticks, which represents a consistent downward trend over the past 12 years.

This significant decrease in demand for legal cigarettes can be attributed to excise hikes through which consumer affordability is stretched to breaking points, resulting in the growth of the illicit cigarette market which will be discussed in the later sections of this report. The other factor that can support in analysing the trend is education and greater awareness of the health risks of smoking.

It is also important to note that as illustrated below, the impact of rising taxation on cigarettes and the consequent rise in prices has led to a substitution effect that has benefited the lower priced beedi products. The consumption of beedi has witnessed rising demand, with consumption estimated to be at 6.1 billion sticks in 2020, a growth of over 100% since 2015. By contrast, legal cigarette consumption is characterised by a 42% decline over the same period.

Figure 1: Beedi and cigarette consumption historical trends 2007-2020



Source: CTC Annual Reports, (2016-20)

## 1.2 Contribution to the economy

Tobacco is also a major source of revenue to the Government. Factory manufactured cigarettes by CTC contributed LKR 110 billion to government revenue in 2020 alone (Ceylon Tobacco Company, 2020). The tobacco industry affects over 71,000 direct and indirect workers, farmers, retailers and others, and supports 286,900 livelihoods (Ceylon Tobacco Company, 2020). The industry value chain comprises the tobacco cultivation, processing and manufacturing, and the distribution and retailing of products, thereby creating numerous job opportunities.

Tobacco cultivation is carried out by 23,450 farmers (Oxford Economics, 2020) spread across the island and their livelihoods are supported by the industry. CTC sources 100% of its tobacco leaf requirement locally and by doing so, injected LKR 1.66 billion to the rural economy through leaf purchasing throughout 2020 (Ceylon Tobacco Company, 2020).

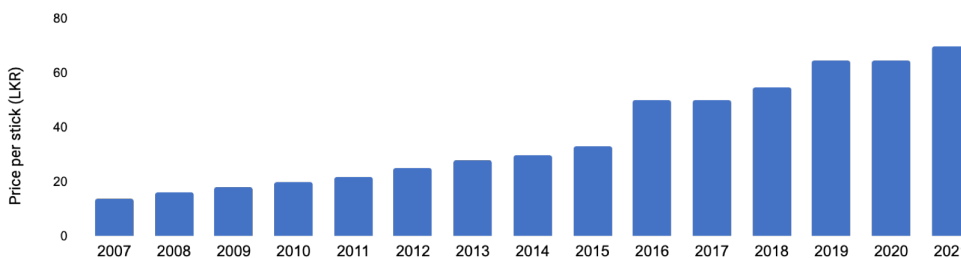
There are many agents involved in the beedi manufacturing industry, including approximately 457 registered manufacturers (Excise Department of Sri Lanka, 2019) and over 8,000 families, more than 95% of whom being women (Daily FT, 2019). However, a few large players enjoy an oligopoly with clear segregation on distribution areas.

## 1.3 Policy environment

The tobacco industry in Sri Lanka is one of the most highly regulated in the world. Tobacco regulation was first introduced in 1953 when the Tobacco Tax Act No. 27 came into force. The subsequent Tobacco Tax Act No. 08 of 1999 replaced the initial tobacco laws and all tobacco products, including cigarettes, beedi and cigars were subjected to taxes. After the implementation of the new Act, the Government has been consistently changing the tax regulations as will be shown later in this report.

Cigarettes have become one of the most taxed commodities in the market due to significant government interventions over the years. Figure 3 shows that prices have increased over three-fold over the period 2010-2019, with it doubling between 2016-2019. The steady upward incline is due to the persistent increase in taxes, especially the increase in excise taxes, which will be looked at in more detail in the upcoming section.

Figure 2: Price of a stick of John Player Gold Leaf 2007-2021



Source: RIU compilation based on market information as of 7th December 2021

Compared to cigarettes, the beedi industry, is underregulated and pays a low amount of taxes, thereby causing discriminatory treatment within the overall tobacco industry (see next section for more information).

# **Tobacco taxation and its effects**



## 2.1 Tobacco taxation in Sri Lanka

Tobacco companies fall into the highest corporate tax bracket, along with gambling, gaming, and liquor companies.

Sri Lanka has a five-tier specific excise tax regime on cigarettes, with the length of the cigarette as the base for tax variations. Excise taxes are the main component of tobacco taxation, while cigarettes are also subject to Value Added Tax (VAT). Nation Building Tax (NBT) was abolished in December 2019.

Beedi is not subject to any form of excise duty, but Tendu leaves (a.k.a. beedi leaves) are subject to Customs Excise and Cess (CESS) during importation.

The importation of tobacco or cigarettes is also subject to additional taxes and duties. In addition, all domestic and imported tobacco leaf which is intended to be used in the manufacture of cigarettes, are subject to tobacco tax. The tax regulations as of 12th November 2021 are detailed below.

**Table 1: Taxes applicable on the tobacco manufacturers and products 2021**

	<b>Cigarettes</b>	<b>Beedi</b>
Corporate tax	40%	40%
Tobacco tax	LKR 10 per kilo of tobacco	LKR 10 per kilo of tobacco
Import duty	15% for manufactured sticks 85% or LKR 200 per kilo for unmanufactured tobacco	75% or LKR 4250 per kilo gross weight per kilo for manufactured beedi 85% or LKR 200 per kilo for imported beedi tobacco 15% or LKR 125 per kilo for beedi leaves
CESS	165% for imported cigarettes 30% for imported tobacco	30% for imported beedi tobacco 30% for manufactured beedi 15% or LKR 3625 per kilo for imported beedi leaves
PAL	10% for imported tobacco Imported cigarettes are exempt	10% for beedi tobacco, manufactured beedi and imported beedi leaves
Excise tax	Length below 60 mm - LKR 6,750 per 1000 sticks. Length 60 – 67 mm - LKR 28,850 per 1000 sticks. Length 67 – 72 mm - LKR 41,100 per 1000 sticks Length 72 – 84 mm - LKR 46,600 per 1000 sticks Length exceeding 84 mm - LKR 51,800 per 1000 sticks.	None
VAT	8%	8%

Sources: Government gazettes, Customs and Ministry of Finance 2021

Tobacco taxes have undergone several revisions every year, with close attention to the excise tax. To simplify tobacco taxation, in 2014 the Government consolidated VAT and NBT into excise tax. As a result, excise revenues were boosted by over 40% but VAT revenue declined. In 2016, the Government re-imposed VAT on cigarettes while increasing the excise tax, on top of the already consolidated excise which included VAT and NBT. This resulted in the price of cigarettes increasing by over 50%.

**Table 2: Tax revisions 2014-2021**

	<b>Cigarettes</b>	<b>Beedi</b>
2014	Excise tax increased (see Table 3 and Figure 3). VAT and NBT on cigarettes were consolidated into a single excise tax.	n/a
2015	Excise tax increased (see Table 3 and Figure 3)	The CESS tax on Tendu leaves was increased from LKR 250 to LKR 350/- a kilo
2016	Excise tax increased (see Table 3 and Figure 3). VAT reintroduced on cigarettes. NBT reintroduced on cigarettes for both retail and wholesale.	July - The CESS tax on Tendu leaves increased from LKR 350 to LKR 2,000/- a kilo September - The CESS tax on Tendu leaves increased from LKR 2,000 to LKR 3,000/- a kilo.
2018	Excise tax increased (see Table 3 and Figure 3).	Import duty on beedi increased to LKR 750 in May. Import duty on beedi decreased to LKR 350 in July.
2019	Excise duty increased twice in the year (see Table 3 and Figure 3). NBT levied on cigarette production was abolished in December. VAT cut from 15% to 8% in December.	CESS duty on the importation of Tendu leaves was revised to LKR 3,500 per kilo (in March). PAL increased to 10% in December. VAT cut from 15% to 8% in December. NBT was abolished in December.
2021	Import duty on imported cigarettes reduced to 15%. CESS on imported cigarettes increased to 165%.  Excise tax increased (see Table 3 and Figure 3).	Import duty on manufactured beedi increased from LKR 4000 per kilo to LKR 4250 per kilo. Import duty on beedi tobacco increased from LKR 165/- to LKR 200/- per kilo. Import duty on Tendu leaves reduced from 30% or LKR 250 to 15% or LKR 125 per kilo.  CESS on Tendu leaves was revised from LKR 3500 to LKR 3625 or 15%.

*Sources: Government gazettes, and news articles published online, 2014-2021*

Excise tax change is a tool that the Government frequently uses to influence cigarette prices. With the 2019 July revision, the 67-72mm cigarettes saw a massive hike and were at the same level as the 72-84mm tier. This move had essentially combined the 67-72mm and 72-84mm tiers together into a single 67-84mm excise tier. However, this adversely affected government revenue and as a result, the Government revised their decision in October 2019. Excise taxes were separated into two independent tiers once again as rates for each length increased by varying amounts (see Table 3).

Table 3: Excise tax revisions 2014-2021

Size	2014	2015	2016	2017	2018	Q1 2019	Q4 2019**	2020
Length 60-67mm	12,675	12,675	17,375	17,375	17,375	19,500	22,300	22,300
Length 67-72mm	14,660	14,660	20,500	20,500	20,500	23,000	37,650*	37,650
Length 72-84mm	21,610	23,750	30,500	30,500	33,550	37,580	43,100	43,100
Length Exceeding 84mm	25,100	27,240	34,250	34,250	37,675	42,200	48,350	48,350

Source: Ministry of Finance

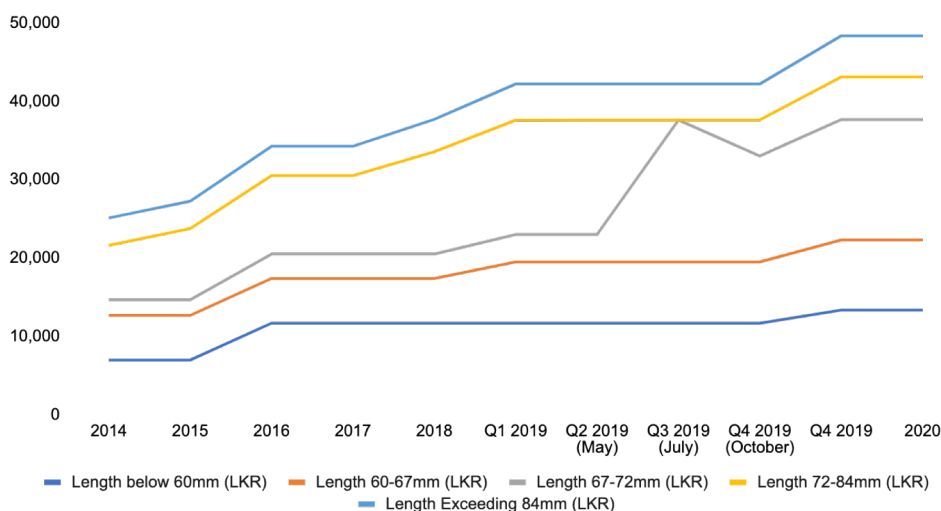
Notes:

Excise tax prices are in LKR per 1000 sticks

\* 67-72mm prior to setting the excise tax to 37,650 in December 2019, this value was previously revised to LKR 37,600 in July 2019, and to LKR 33,000 in October 2019

\*\* VAT was absorbed into excise

Figure 3: Excise tax revisions 2014-2020



Source: Based on Ministry of Finance data, 2014-2020

Table 4 displays the legally manufactured cigarette portfolio in which the product market share for each cigarette length is shown. There are no legally manufactured cigarettes exceeding the 84mm length.

Table 4: Cigarette product portfolio and market shares

	Below 60mm	60-67mm	67-72mm	72-84mm	Exceeding 84mm
Cigarette product market share 2020	10.07%	2.10%	3.90%	83.96%	No product

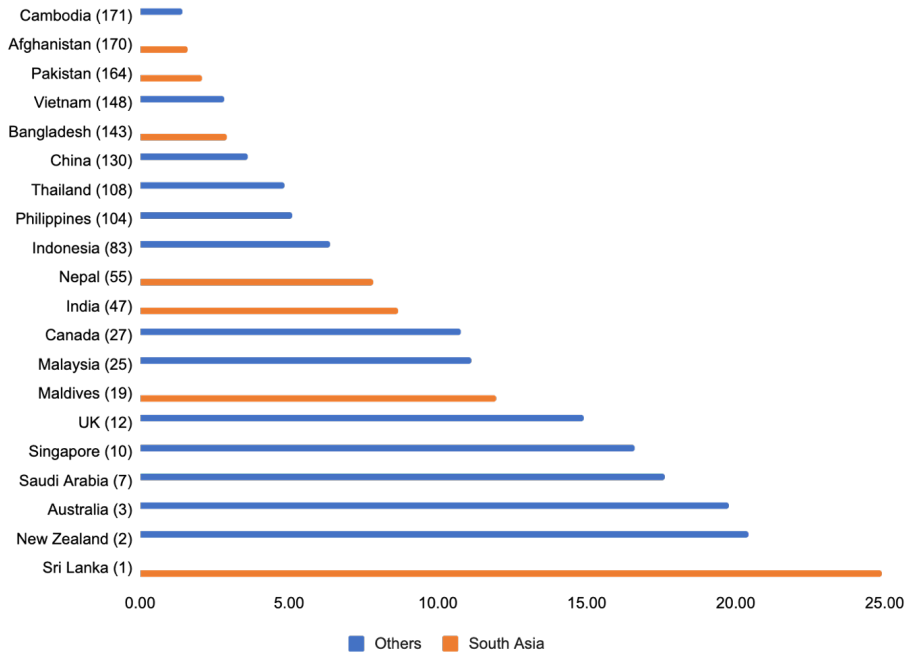
Sources: CTC, Ministry of Finance, and market data – 2020

## 2.2 Tax impacts on pricing

### 2.2.1 Tax impact on cigarette pricing

Sri Lanka has been the most expensive country in the world to purchase cigarettes, in terms of the purchasing power parity since 2018. As per Figure 5, the price of cigarettes in Sri Lanka in international dollars is above the range of high-income countries such as Singapore and Australia.

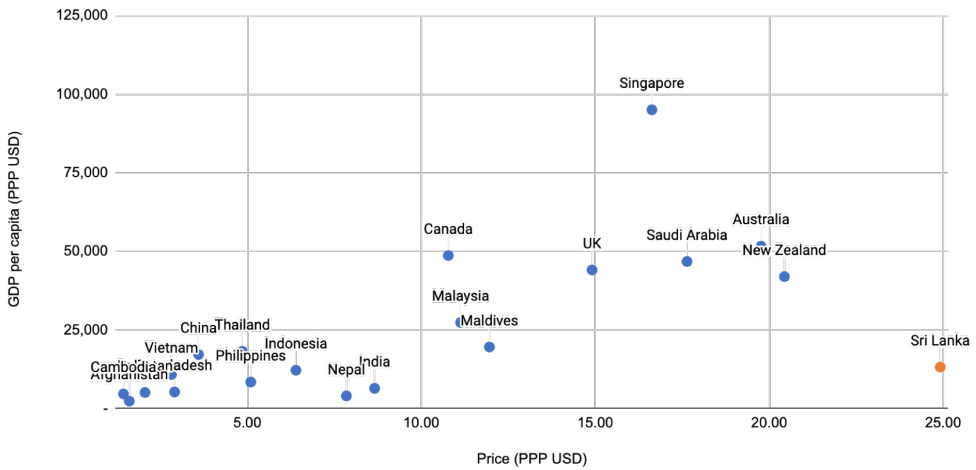
Figure 4: Price of a 20-stick pack of the most sold brand in international dollars 2020



Source: WHO, 2021

Note: country rank in parenthesis

Figure 5: Cross country comparison: GDP vs price of the most sold cigarette brand 2020



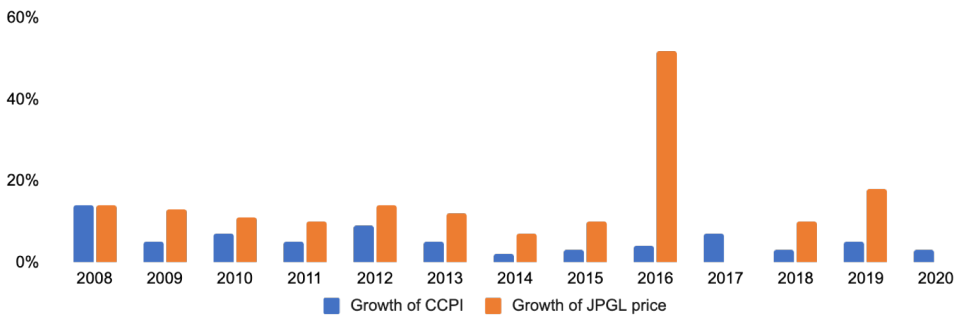
Source: RIU compilation based on WHO 2021 and statistic times

Inflation must be factored in to obtain a clearer picture of the Government’s tax policy on cigarettes. Figure 7 shows the movements in the growth of cigarette prices over the last decade. Price increases have always been above inflation levels. As discussed later, cross country experiences show the escalation of prices for cigarettes is aligned to inflation with a mark-up of around 2 to 3% (e.g., the UK).

The compound average growth rates (CAGR) of CCPI and NCPI are 4% and 1% respectively, while it is 12% for cigarettes in 2019. This leads to the conclusion that price increases in the past were not in line with the rate of inflation and were utterly unfounded. The basis of these tax increments and their consequential impact on the fiscal stance was questioned by multiple studies.

For example, quoting Morais, Colombage, & Wickramasinghe (2018): Adjusted for inflation, the real tax index (2010=100) for cigarettes doubled from 100 in 2010 to 207 in 2017, reflecting that taxes were raised far above inflation.

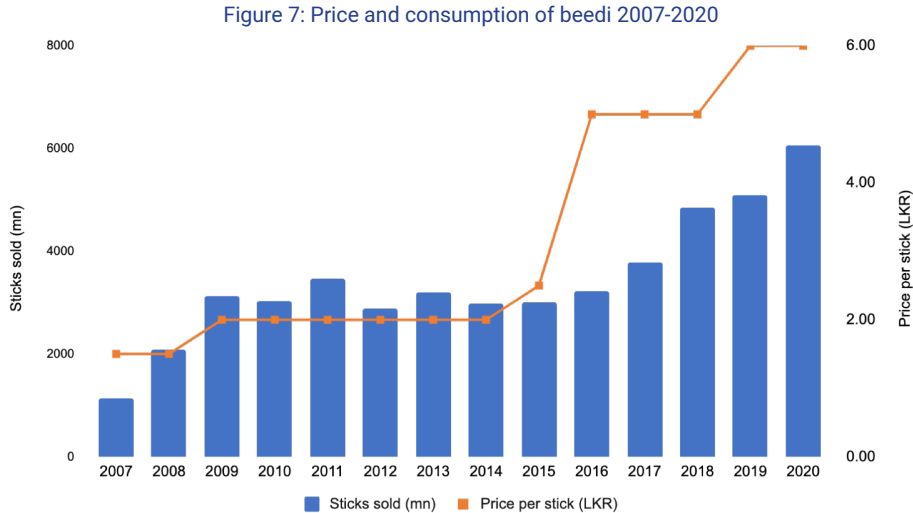
Figure 6: Growth of inflation vs. cigarette prices 2008-2020



Source: Based on Department of Census and Statistics data, 2008-2020

## 2.2.2 Tax impact on beedi pricing

Beedi has had comparatively low taxes over the years and continues to be taxed at low rates. The tax share of beedi is set as 22% for beedi manufactured using locally sourced tobacco and 31% for beedi manufactured using imported tobacco. In 2016, with the increment of CESS on Tendu imports, the prices of beedi doubled, however, consumption did not decline. During the next two years, following the 52% increase in cigarette prices, the price of beedi remained constant. Beedi sales grew at a rapid pace (50% growth in two years) indicating a substitution effect from cigarettes to beedi due to the relative affordability of beedi. In 2020, the estimated consumption of beedi was 6.1 billion sticks.



*Source: RIU compilation based on CTC Annual Reports (2016-19), and market data, 2020*

*Note: Estimated consumption data and beedi price estimated to LKR 6 for 2020*

**Table 5: 2021 tax share of beedi manufactured using locally sourced tobacco (Case 1)**

Case 1	Amount (LKR)
<b>Cost of a kilo of Tendu leaves</b>	<b>1000</b>
VAT (8%)	398
Import duty	150
CESS	3625
PAL (10%)	100
<b>Total tax a kilo</b>	<b>4273</b>
Tax per stick*	1.31
Tax share per stick (@ LKR 6 per stick)	22%

*Note: \*1kg of Tendu leaf produces 3250 standard 6cm beedis (Social Development Network, 2019)*

Table 6: 2021 tax share of beedi manufactured using imported tobacco (Case 2)

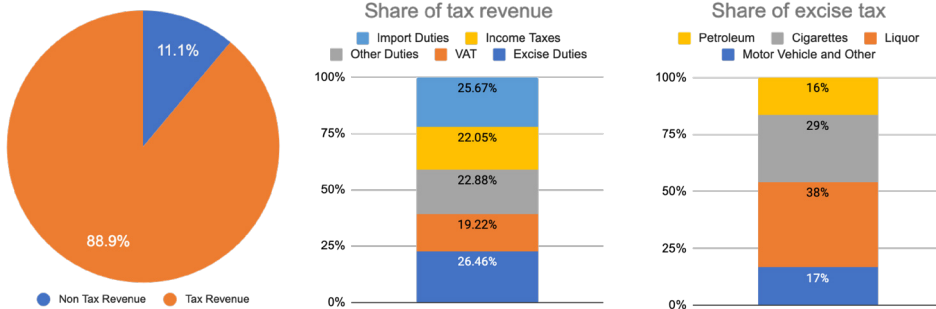
Case 2	Amount (LKR)
<b>Cost of a kilo of Tendu leaves</b>	<b>1000</b>
VAT (8%)	398
Import duty	150
CESS	3625
PAL (10%)	100
Tax on Tendu	4273
Cost of tobacco	1200
VAT (8%)	226
Import duty	1020
CESS	360
PAL (10%)	120
Tax on tobacco	1726
Total tax a kilo	5999
Tax per stick*	1.85
Tax share per stick (@ LKR 6 per stick)	31%

Notes: \*1kg of Tendu leaf produces 3250 standard 6cm beedis (Social Development Network, 2019)  
 Cost per kg of Tendu leaves and Tobacco. Tax on tobacco is ONLY applicable provided they are imported.  
 The price per stick is LKR 6.00 (assumption)

## 2.3 Tax revenue analysis

Excise tax is around 26.5% of the total of the Government’s tax revenue. Therefore, it plays a significant role when the Government determines the fiscal policy that needs to be implemented. In 2020, the tobacco excise tax yielded over LKR 94 billion in revenue. The excise tax on cigarettes accounts for 29% of the total excise tax (see Figure 9).

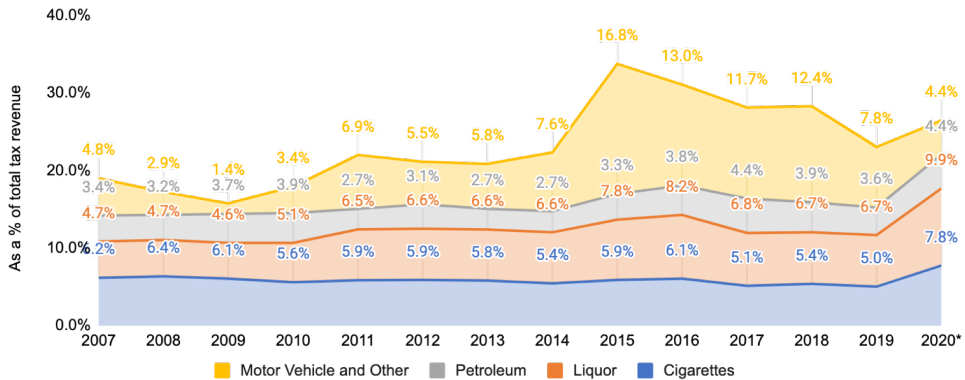
Figure 8: Government revenue overview 2020



Source: Based on CBSL Annual Report 2020

Note: 2020 - provisional data

Figure 9: Relative share of tax contributions by sectors 2007-2020



Source: Based on CBSL Annual Reports 2007-20

Note: \*2020 - provisional data

The above diagram shows the contributions of the sectors to excise tax revenue and it can be observed that there was a deteriorating share of cigarette excise taxes from 2007 to 2019. In 2020, however, the tax share for cigarettes increased to its highest level (7.8%).

An overview of the relative share of tax contributions by sector shows that excise taxes have fluctuated over the years. From 2016 to 2019, however, there was a significant drop in shares for all

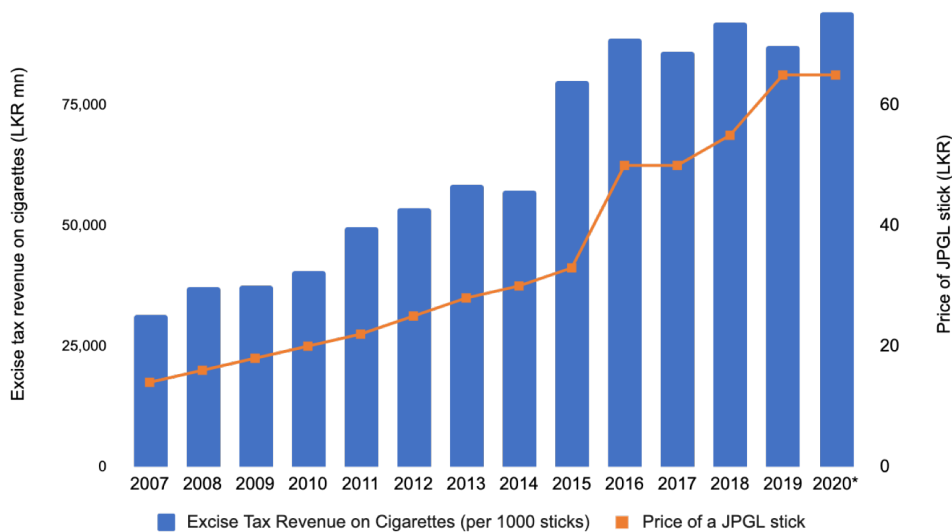
primary sectors. This decline of excise tax began when prices increased sharply in 2016. Excise tax on motor vehicles was reduced significantly in 2015, causing a massive increase in revenue from that sector. However, with subsequent tax increases, revenue declined, clearly indicating it had reached its threshold. With the influx of new vehicles, demand for petroleum increased, causing further growth of excise revenue from petroleum imports. This analysis shows that inconsistent tax increases may generate more revenue in the short run in some cases but will not be sustainable in the long run.

A closer inspection of the below diagram reveals that excise tax revenue from cigarettes has overall, been increasing from LKR 30 billion in 2007 to just over LKR 94 billion in 2020. There was a large increase in excise tax revenue in 2015, as can be seen in Figure 11. This was due to sales taxes (VAT and NBT) being consolidated into the excise tax in October 2014.

In 2016 the Government broke consistency in raising taxes in line with inflation and pushed up prices by 52% - a large margin - which caused a slight improvement in revenue of 11% in the same year, but a dip in revenue the following year in 2017. In 2018, revenue recovered as prices were maintained.

In 2019, revenue decreased again owing to the increase in prices of cigarettes in March of that year. Nevertheless, as indicated in the chart, 2020 provisional data showed that revenue recovered, increasing to its highest point, as prices remained unchanged.

Figure 10: Government revenue from tobacco taxation

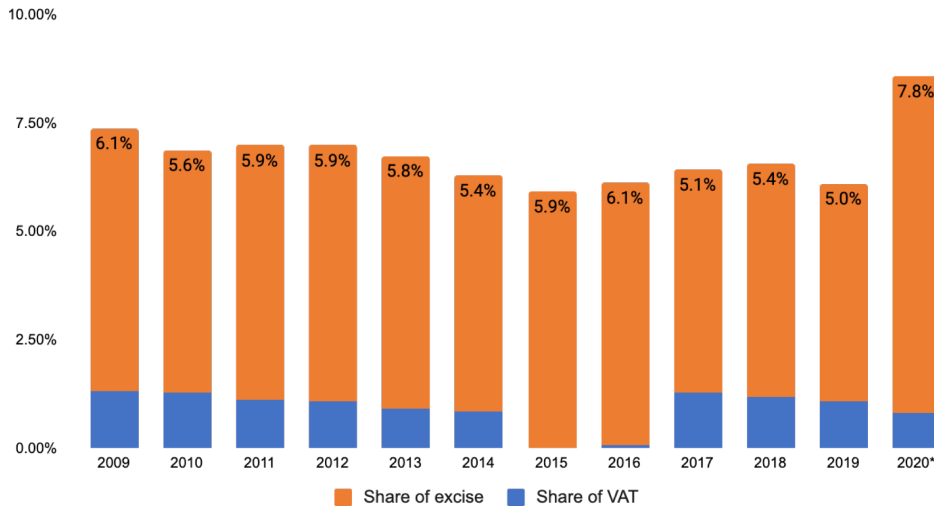


Source: Based on CBSL Annual Reports 2007-20

Note: \*2020 - provisional data

Prior to 2014, cigarettes were subject to VAT and generated a sizable revenue for the Government. In 2014, VAT and NBT on cigarettes were consolidated into the excise tax. In 2016, the Government re-imposed VAT on cigarettes. The VAT share declined over the years to 1.08% by 2019 despite a higher VAT rate than 2014 due to dwindling sales of legitimate cigarettes.

Figure 11: Share of VAT and excise duty as a percentage of the total tax revenue 2009-2020



Source: CTC Annual Reports 2010-2020, CBSL Annual Reports 2009-2020

Note: \*2020 - provisional data

## 2.4 Affordability of cigarettes

One of the main intentions of tobacco taxation is to deter smoking by controlling the affordability of cigarettes.

The standard practice is to use the Relative Income Price (RIP) ratio, which is defined as the percentage of per capita GDP required to purchase 100 packs of cigarettes of the most popular brand. According to WHO (2018), cigarettes in Sri Lanka became more affordable in 2018 compared to 2016 and less affordable since 2008. Contrastingly, Verité Research, in 2019, found that cigarettes became more affordable in 2018 compared to 1980, but less affordable compared to 2016. The fundamental flaw in both these analyses is rooted in the selection of the affordability indicator, GDP per capita, which is not representative of the incomes of the general population.

Income per capita figures, compiled by the Department of Census and Statistics (DCS) in their regular Household Income and Expenditure Survey (HIES), provides better representation of the situation. Based on this, the RIU prepared an analysis of the affordability of cigarettes over the years (see Table 7). As per our analysis, the affordability of cigarettes shows a consistent, clear, and significant decline from 2007 to 2019. This observation is also supported by an almost static share of income per capita spent on cigarettes from 2007 to 2019.

**Table 7: Mean annual per capita income needed to buy 100 JPGL packs 2006-2019**

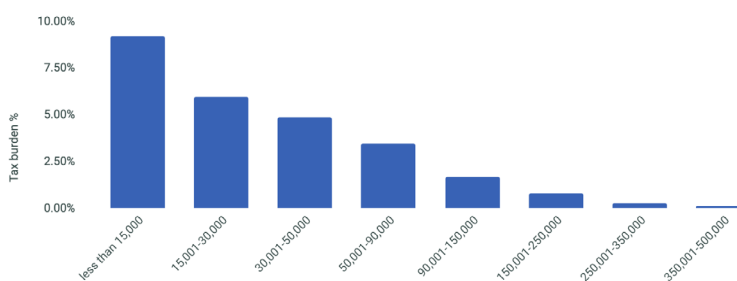
	2006/07	2009/10	2012/13	2016	2019
Mean annual income per capita (LKR)	77,556	109,248	141,828	196,524	246,324
Price of a single JPGL cigarette (LKR)	14	20	28	50	65
Number of cigarettes that can be purchased from annual income	5,540	5,462	5,065	3,930	3,518
Share of income required to buy 100 JPGL packs	36%	37%	39%	51%	57%
Share of income per capita spent on cigarettes	0.43%	0.44%	0.30%	0.31%	0.28%
Number of cigarettes that can be bought with 10% of monthly income	46	46	42	33	29

Source: RIU calculations based on CTC and CBSL annual reports 2008-2019, Department of Census and Statistics 2019

## 2.5 Distributional effects of excise taxation

Due to the upward revisions in excise taxes each year, the tax burden on consumers has increased. An important consequence to note is the distribution effect of tax which indicates that the income of one group is transferred to another. Figure 13 clearly demonstrates the fact that the lower income groups are taxed greatly in comparison to the higher income groups, and this erodes their income. This is because regressive taxation is in place, and it is a tax form that is often criticised since it disrupts the even distribution of income and worsens income poverty.

Generally, all sales taxes are regressive in nature, but the magnitude may differ. The reason is that high-income earners save and invest a larger share of their income compared to low-income earners. Therefore, low-income earners spend a larger share of their income on consumption. It is evident in Sri Lanka, that the tax burden is greater on lower-income earners than on higher-income earners.

**Figure 12: Tax burden of cigarettes by income groups 2021**

Source: Calculations based on the ongoing RIU primary survey, 2021

## 2.6 Efficiency of excise taxation

The increase in revenue from any tax can be divided into two parts; one is the response to increased national income and the other is due to changes in the variables, other than national income. These influence the tax revenue and the most important is the discretionary changes in tax rates or the tax base. The responsiveness of the tax revenue to changes in national income without any change in all the other factors which influence it, is termed as tax elasticity. However, if changes are considered, it is referred to as tax buoyancy. These two serve as indicators of the efficiency of a tax.

Our estimations for the 2008-18 period indicate the tax elasticity to be 0.72 ( $p=0.000$  at 95% CL,  $R^2=0.9492$ ). In other words, a 1% increase in taxes only generates a 0.72% increase in excise revenue. This means low responsiveness to tax increases as quite evident from Table 8. In addition, the tax buoyancy is estimated to be 0.48 ( $p=0.003$  at 95% CL,  $R^2=0.9609$ ) which indicates that the excise revenue only grows by 0.48% if the economy grew by 1%. Another factor that determines the efficiency of excise taxation is the predictability of the revenue from the tax changes. As highlighted (Colombage, Morais, & Wickramasinghe, 2018), in the past, the government revenue forecasts for excise tax show significant deviations from actual outcomes.

All these observations point to inefficiencies of the tobacco excise policy and calls for reviewing the basis for tax increments which need to be reasonable and not ad hoc. These inefficiencies could be a result of the improper structuring and/or revenue leakages from the growing illicit market.

**Table 8: Responsiveness of revenue to tax increases 2008-2020**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
Excise increment (72-84mm)	6%	9%	16%	8%	14%	20%	30%	10%	28%	0%	10%	29%	0%
GDP growth	6%	4%	8%	8%	9%	3%	5%	5%	5%	3%	3%	2%	-3.6%
Excise revenue growth	19%	1%	8%	22%	8%	9%	-2%	40%	11%	-3%	7%	-5%	8%

Source: RIU calculations based on CTC and CBSL annual reports 2008-20

Note: \*2020 - provisional data

**The nature  
of the illicit  
tobacco market** 

## 3.1 Overview of the illicit tobacco market

### 3.1.1 Definition of illicit trade

According to the Financial Action Task Force (FATF), illicit trade in tobacco products is categorised by the supply, distribution, and sale of smuggled, counterfeit, or cheap, white tobacco products (FATF, 2012). These illicit market products evade taxes and duties.

According to the WHO, illicit trade in cigarettes involves the following:

1. Illicit manufacture: cigarettes produced in illegal or covert facilities and not declared to the tax authorities, and
2. Illicit importation: cigarettes produced/bought in one jurisdiction then illegally transported to another to avoid applicable taxes

Illicit importation is more prevalent in Sri Lanka.

### 3.1.2 Common forms of illicit tobacco and identifying illicit products

*Contraband:* Smuggled cigarettes that have escaped local taxes.

*Counterfeit:* Tobacco products with unauthorised trademarks or trade names, with intent to deceive consumers and avoid paying duties.

*Grey Market:* Tobacco products are produced by a legitimate manufacturer for consumption in one country, but along the supply chain the product has been diverted to another country. Diversions frequently occur in Free Trade Zones (FTZ) with the tobacco manufacturer often unaware that its product has been diverted.

*Illicit Whites:* Also known as “cheap whites,” these are cigarettes legally produced in one country for the sole purpose of being exported and illegally sold in another country without duties being paid.

*Loose Tobacco:* Loose tobacco may be used to illegally manufacture cigarettes or other tobacco products, such as roll-your-own tobacco, without payment of tax.

Below are some common indicators of illicit cigarette packs:

- Below market average prices
- No local pictorial health warnings
- Print, spelling errors, inconsistent lettering on product packaging
- Unlisted and unregistered importer or manufacturer or brands

### 3.1.3 How smuggling entities work

A common term in smuggling is ‘bootlegging’, which is the purchase of cigarettes from low or no tax jurisdictions for resale in higher tax jurisdictions without appropriate taxes being paid. Illicit tobacco can be smuggled into the country by both air and sea transport. Direct smuggling is where smugglers use illegal entry points to avoid customs inspection and directly introduce tobacco products via sea or land from neighbouring countries. On the other hand, indirect smuggling implements deceptive methods such as concealing cigarettes in secret compartments aboard ships, vehicles or vehicle parts, wood, luggage, furniture, toys, boats, tires, textiles. Additionally, foreign migrant workers are also reported to have been engaged in smuggling illicit cigarettes into the country.

### 3.1.4 Scale of the global illicit tobacco market

The illicit tobacco business is a rapidly growing, global, multi-billion-dollar operation that annually robs governments of tax revenue. In the mid-90s, smuggling was estimated to be 6%-8.5% of global cigarette consumption (Merriman, Yurekli, & Chaloupka, 2000). A study done in 2006 estimated the global tax loss due to the black market to be approximately USD 40-50 billion annually (US Department of State, 2015). Another study in 2009 stated that 11.6% of the global cigarette market is illicit and is equivalent to 657 billion cigarettes a year and USD 40.5 billion in lost revenue (Joossens, Merriman, Ross, & Raw, 2009).

### 3.1.5 Control of illicit tobacco

Under Article 15 of the Framework Convention on Tobacco Control (FCTC), a protocol has been established to prevent illicit trade in tobacco products. This states that the convention should deal with all forms of illicit trade in tobacco products, including smuggling, illicit manufacturing, and counterfeiting. This was to reduce the impact of consuming low quality illicit tobacco products. Sri Lanka became a party to the WHO Framework Convention on Tobacco Control in 2005 and acceded to the Protocol to Eliminate Illicit Trade in Tobacco Products in 2016.

## 3.2 Illicit tobacco market in Sri Lanka

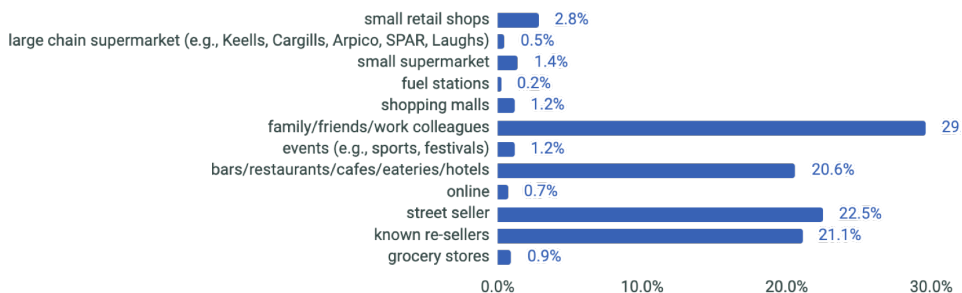
According to the WHO, Sri Lanka was one of the most expensive countries to purchase cigarettes in 2020, based on Purchasing Power Parity (PPP) (WHO, 2021). Therefore, Sri Lanka is seen to be a “high price hot spot” and a prime target for the global illicit tobacco trade.

The street value of a container of illicit cigarettes can be worth approximately LKR 700 million. However, the maximum fine for smuggling a large container load of cigarettes is only LKR 1 million. Consequently, smugglers exploit this system and make substantial profits which is lenient on punishment and lucrative in terms of the market. For example, in May 2021, over 200 million cigarette sticks were attempted to be illegally imported into the country from the Jebel Ali Port in Dubai. This stock was fortunately seized by Sri Lanka Customs thereby protecting the Government from a revenue loss of ~LKR 9 billion.

### 3.2.1 How illicit tobacco is marketed and sold in Sri Lanka

According to the ongoing RIU consumer survey, a substantial number of illicit cigarettes is found to be sold through family/friends/work colleagues, street sellers and known re-sellers. Illicit cigarette smokers have also reported illicit cigarette purchases through hotels, restaurants, and cafes (HoReCa). Alarming, a significant amount of these illicit cigarettes is also reported to have been purchased through small retail shops/supermarkets/grocery stores.

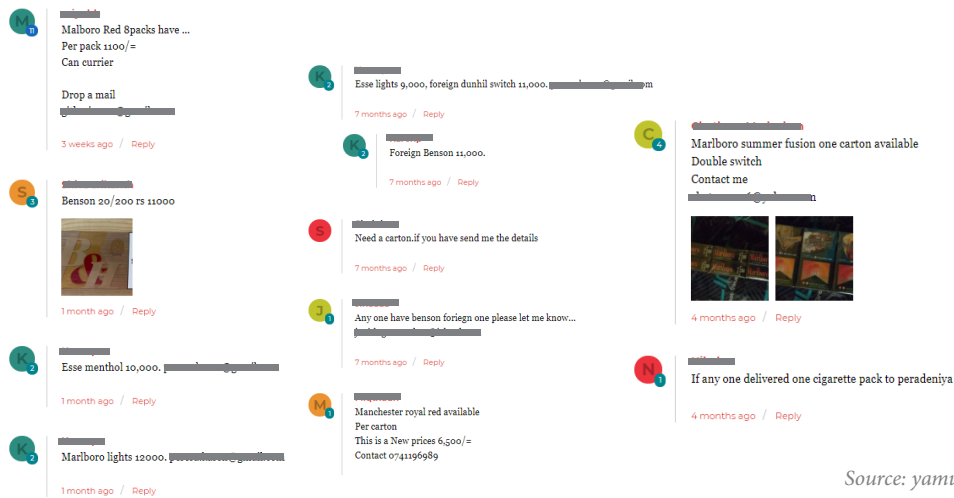
Figure 13: RIU survey 2021 - illicit tobacco sources



In regards to the above figure, it should be noted here that some in cases, such as large chain supermarkets, these locations were indicated as meeting points for dealing illicit cigarettes, rather than ‘sources’ for illicit cigarettes.

Examples of illicit tobacco marketing using online platforms is shown in Figure 13. The goods may even be sold at a premium and hand-delivered to an agreed location.

Figure 14: Illicit cigarettes sold via an online trading platform



Since this is a highly clandestine operation, dealers usually sell illicit cigarettes to known customers only. It has been reported that vendors at times mix the illicit with legally manufactured cigarettes and sell them to unwitting customers at regular prices.

### 3.2.2 Prices of illicit tobacco products in Sri Lanka

A price differential is the strategy that illicit cigarette sellers adopt, and the prices can vary significantly in different areas. In some places prices can be as low as 30% of legal cigarettes, while in other locations, the price is at its premium (Colombage, Morais, & Wickramasinghe, 2018). This allows them to be competitive and to generate high profits. Some exclusive brands can be sold at a premium and are generally bought by high income individuals. Most smokers use mid and low-end cigarettes, and these illicit products pose the greatest threat to the legitimate industry due to marked price differentials.

According to our ongoing survey, the price difference between the most consumed local (John Player Gold Leaf) and most consumed imported cigarette brand (Manchester) is LKR 20.

Table 9: Price comparison of the most consumed illicit vs legitimate tobacco brand 2021

	per stick*	
	Illicit	Legitimate
Price of most consumed cigarette brand*	50	70

Source: RIU ongoing primary survey data 2021

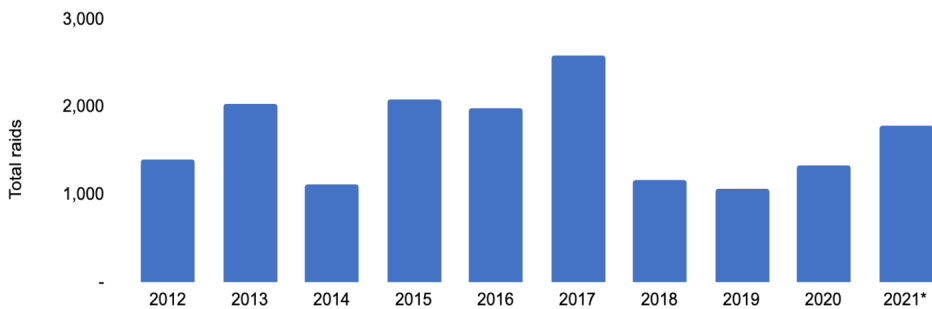
Note: \* Illicit is based on September - December 2021 Survey data median for Manchester, and legitimate is based on market price for John Player Gold Leaf as of December 2021

### 3.2.3 Detection and enforcement in Sri Lanka

Alarming, 76.1% of those that were interviewed in-depth as part of the RIU survey indicated that they are not aware of the legal implications of purchasing/consuming foreign tobacco in Sri Lanka, or the criminality involved with the business of smuggling tobacco and other goods. Two of these respondents thought that the only restriction was the general tobacco age limit. Another respondent thought that foreign cigarettes were legal, since “the shop I purchase from doesn't sell it secretly”.

There are five key agencies that are involved in detecting and seizing illicit tobacco in Sri Lanka. These are the Sri Lanka Customs Department, Navy, Police, Special Task Force (STF) and the Excise Department. The Customs Department carries out inspections at air and seaports to seize any illicit tobacco detected. Meanwhile, the Sri Lankan Navy keeps a watchful eye on smuggling routes across the sea, whilst the STF and the Excise Department are empowered to seize any illicit tobacco products found in-market. It has been reported by Customs officials that most brands of illicit cigarettes have been detected to have been smuggled from China, Turkey, and Vietnam, and selected states in the UAE.

Figure 15: Total raids 2012-2021

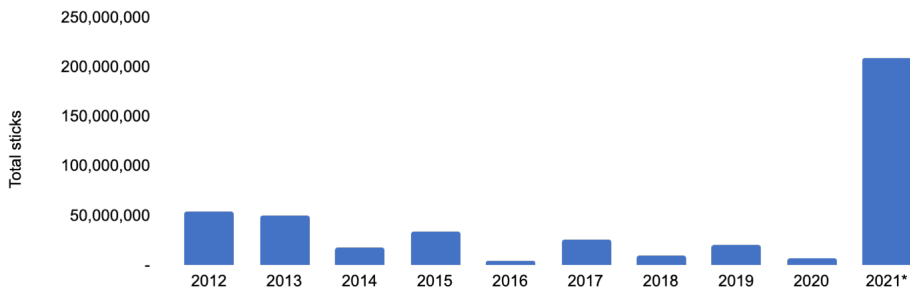


Source: Customs detection data, media reports and CTC

Note: Data includes seizures by the Sri Lanka Customs, Sri Lanka Police, Excise Department of Sri Lanka and the Special Task Force (STF)

\*Value for 2021 is as of 10th December

Figure 16: Total sticks detected 2012-2021



Source: Customs detection data, media reports and CTC

Note: Data includes seizures by the Sri Lanka Customs, Sri Lanka Police, Excise Department of Sri Lanka and the Special Task Force (STF)

\*Value for 2021 is as of 10th December

Figure 14 and 15 above gives a deeper understanding of the movements in illicit cigarettes during the last decade. The sudden price hike in 2016 led to a spike in the demand for illicit cigarettes in 2017. This, in turn, resulted in seizures amounting to 26 million sticks of illicit cigarettes during the year. It served as an indicator of the role of prices in illicit trade. In 2020, 7.6 million illicit sticks of cigarettes were detected and seized.

In 2021, there is a significant bump in cigarette detections, despite the number of raids being usual. As mentioned earlier in this report, over 200 million sticks of smuggled cigarettes brought into the country from the Jebel Ali port in Dubai were detected in May 2021. This contributed to the spike in detections in 2021.

Although Figure 15 shows how many illicit cigarettes have been detected, it is widely known that local enforcement agencies do not have sufficient capacity in terms of human resources and technology to detect all or even most illicit products (Colombage, Morais, & Wickramasinghe, 2018; RIU, 2018). However, the enforcement space has seen some positive results and progress in 2021 with Customs seizing the largest ever detection of smuggled cigarettes in Sri Lanka (May 2021 detection). Additionally, the Government run anti-smuggling campaign has also been observed to contribute toward this successful detection trend in 2021.

Owing to the size of the illicit market, there is much more that needs to be done to truly combat the illicit cigarette industry in the country.

### 3.3 Size of the illicit market in Sri Lanka

Due to the illegal nature of the business which prevents extensive research and conclusive results, the true size of the illicit tobacco market has always been one that is debated in Sri Lanka. One study (Colombage, Morais, & Wickramasinghe, 2018) reveals that 28% of smokers interviewed had consumed illicit cigarettes during the previous week. This demonstrates the extent and prevalence of the illicit market and it is more widespread than had been previously assumed. Therefore, one essential step in understanding the illicit market involves estimating the total market size of illicit tobacco.

#### 3.3.1 Illicit market during 1995-2020

The earliest indication of the size of the illicit cigarette market was reported in a study conducted by the WHO (Merriman, Yurekli, & Chaloupka, 2000). According to this study, in 1995 the illicit share was 10% of the total market. In the 4th edition of the Tobacco Atlas (2012), the illicit share in Sri Lanka was recorded as below 10% in 2012. Thereafter till 2017, no attempt was made by any individual or entity, to accurately estimate the size of the illicit cigarette market. Moreover, there are no records on the size of the illicit beedi market prior to 2017.

RIU's annual estimation of the illicit share of the tobacco industry since 2017 generates some interesting revelations and based on the study's approach and further research, we found that the illicit cigarette share in Sri Lanka was estimated to have increased over the years, from below 12% in 2012 to an estimated value of 24% in 2020.

The sizable illicit market indicates growing attention from criminals to engage in this lucrative business and the loss of potential revenue for the legitimate industry and the Government.

### 3.3.2 Estimation of illicit share for 2021

The RIU's ongoing island wide consumer survey provides insight into the nature and extent of the illicit tobacco market in Sri Lanka. The extensive primary research covers all provinces, as well as the rural, urban and estate sectors.

Preliminary results of the survey shows that consumption of illicit cigarettes was found to be at 17.5%. However, consumption appears to be primarily prevalent in four provinces: Central, North Western, Uva and Western.

This illicit share percentage, at 17.5%, is considerably lower compared to the most recent previous years. During the period of this study, the average monthly per capita consumption was found to be 101 (daily consumption rate of 3.4) – this is also lower compared to historical numbers. Whilst this is a positive result, it may be attributed to multiple factors.

1. The research was conducted during a time that witnessed unusual economic and social conditions, as part of a longer period that was impacted by the pandemic. This is evidenced by the inconsistent and sporadic nature of illicit distribution across the provinces as shown in the ongoing survey. Some provinces do not seem to be receiving the illicit products through their normal network due to lock-down measures that were in place. By November 2021, we can observe signs that the products were starting to get through their normal channels into some provinces while the supply in other provinces remained zero or extremely low. The most extreme example that highlights the effects of lockdown vs post-lockdown dynamics is the illicit cigarette consumption percentage in the Central province, which was found to be 2.27% during the September 2021 lockdown period, whereas post-lockdown, this number was 23.1%.
2. 55.8% of people island wide have admitted to consuming illicit products over a wider period that includes pre-covid years. This indicates that there is potentially strong demand for illicit, especially with local cigarette prices rising. With travel restrictions easing and illicit product access and availability increasing, the market share and consumption of these products are likely to increase.
3. There is a correlation between higher income levels and the propensity for consumers to smoke illicit products. The survey results have shown the illicit share to be higher for higher income earners. However, it is also important to note that 98% of the RIU survey respondents had a monthly household income below LKR 350,000. Therefore, if the survey respondents spread per income levels more closely represented the national population spread per income levels, the general consumption levels and illicit share would likely be higher.
4. 20.6% of illicit tobacco smokers indicated that they purchased illicit products at bar/hotel/restaurant/café type sites in the past, however, the pandemic seriously affected the usual operation of such locations. Also, there was significant reduction in social functions which meant lower tobacco consumption, especially amongst “social smokers”.
5. It should also be considered that a certain percentage of respondents may not be willing to share or may under-report real illicit cigarette consumption due to various reasons such as enforcement fears.

Essentially, considering the period of the study, the real landscape for illicit distribution and overall consumption rates in Sri Lanka for 2021 is likely to be higher. To estimate the overall numbers for 2021, we set varying degrees of importance to above five points and made an assumption that consumption levels would be 9% higher - this translates to an average monthly per capita consumption rate of 110 (daily consumption rate of 3.64). Based on this number, we can estimate the total consumption of cigarettes in Sri Lanka and illicit share.

**Table 10: Estimation of the illicit tobacco market in Sri Lanka for 2021**

	<b>2021</b>
Age 21+ Sri Lanka population in millions*	7.7
Sri Lanka tobacco use percentage: upper 95% credible limit (WHO, 2019)	29.1%
Estimated smokers in millions	2.25
Per capita monthly cigarette consumption (RIU 2021 survey estimate + 9%)	110
Total monthly cigarette consumption in millions	247
Cigarette consumption volume estimate 2021 in millions	2,969
Estimated legal cigarette consumption volume for 2021 in millions**	2,342
Estimated illicit cigarette consumption volume for 2021 in millions	627
Estimated illicit share	21%

Notes:

\*Based on calculations using Department of Census and Statistics 2021 data

\*\*Based on calculations using CTC data up to 30th November 2021

**Table 11: Summary of illicit shares over time 1995-2021**

	<b>1995</b>	<b>2012</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Illicit cigarettes share	10%	< 10%	14-18%	14-18%	19%	23-25%	21%

### 3.4 Global examples of the illicit tobacco market

Illicit tobacco levels are constantly rising and remain a global concern. In this section, we look at some of the cross-country experiences on the size and growth of the illicit market. Figure 17: Illicit cigarette market share by country 2012

Figure 17: Illicit cigarette market share by country 2012



Source: Tobacco Atlas 4th Edition, 2012

#### 3.3.1 Europe

Many European countries have two distinct cigarette markets, one legal regulated market which is declining and an illegal unregulated market that is growing (Maftai, 2012). A study conducted in Europe showed that 74% of smokers who had used illicit cigarettes in the past did so because illicit smokes are cheaper (European Commission, 2016).

#### 3.3.2 Canada

In the late 1980s and 1990s, Canada’s illicit market accounted for 30% of the total market (National Research Council & Institute of Medicine, 2015). The proportion of illicit cigarettes consumed across Canada grew from 10% in the early 2000s, peaked at around 30% in 2007-2008, and decreased to 11% in 2011 (Guindon, Burkhalter, & Brown, 2017).

#### 3.3.3 Pakistan

In the Asian continent, Pakistan ranks third with the highest share of illicit cigarettes in the total market (26.7%) (The Express Tribune, 2013). As a result, the national exchequer continues to face a loss of up to PKR 45 billion annually that hinders the country’s socio-economic progress and the livelihoods of more than 75,000 farmers and 400,000 retailers. The lack of a level playing field for the taxpaying sector discourages both domestic and foreign investment that in turn adversely impacts economic growth, job creation and technology transfer.

Illicit cigarettes, which are widely available in Pakistan, remained well below the minimum price and thus the illicit tobacco market continued to thrive. Tobacco in Pakistan is subject to a sales tax and local tobacco taxes are known as Federal Excise Duty (FED). In 2014, taxation was simplified by introducing a two-tier specific excise tax with price as the base. Excise taxes continued to increase and in 2017, Pakistan became the highest-ranked market by volume of illicit cigarettes consumed, despite showing a 14% decline in illicit consumption (Oxford Economics, 2018).

**Table 12: Illicit market share in Pakistan 2010-2020**

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
18.9%	19.2%	22.0%	22.0%	23.0%	27.7%	40.6%	40.0%	33.2%	36.9%	37.6%

*Source: Pakistan Tobacco Company Annual Reports 2010-20*

**Why should  
illicit cigarettes  
concern Sri Lanka?**



## 4.1 Revenue loss to the Government

The illicit tobacco trade has resulted in huge losses to the Government in the form of lost taxes, as exemplified by the international illicit trade cases described in the previous sections of this report. Building on the analysis in Table 13, the RIU calculated the revenue loss to the Sri Lanka Government from illicit tobacco. Our estimate for the 2021 revenue loss due to the illicit tobacco market is LKR 27 billion.

Table 13: Calculation of the revenue loss to the Government from illicit cigarettes 2021

	2021 estimate
Illicit share	21%
Estimated illicit cigarette market volume for 2021 (million)	627
Average tax per stick (LKR)*	42.5
Revenue loss to the Government (LKR billion)	27

Notes:

\*Based on calculations using CTC data

In addition to the above, there are indirect financial implications of the illicit trade. For example, the profits that criminals make from smuggled cigarettes can fund illegal activities such as drug smuggling and terrorism as well as other illicit items being brought into the market, such as illicit alcohol, recreational drugs, or pharmaceuticals. Criminals can also further advance their transporting and packaging methods, making illicit items more undetectable. Corruption attempts could be possible with criminals trying to influence enforcement agencies by offering substantial bribes. These criminal business expansion activities can lead to increased illicit sales and fiscal losses and the longer this problem is left untouched, the larger and more uncontrollable it becomes with potential terrorism links.

The financial losses can also extend beyond taxes. For example, with increased and widespread illicit activity, additional enforcement personnel and financial investments would be required. International fiscal gain results from successfully decreasing illicit trade are evident in other sections of this report.

## 4.2 Loss of employment along the value chain

As indicated previously, the illicit cigarette market in Sri Lanka is estimated at LKR 27 billion for the year 2021. While this results in fiscal losses to the country, it is also a loss of revenue to legitimate players in the industry who contribute to the economy via creating jobs and paying taxes. Illicit trade affects multiple stakeholders in the legal business, including farmers, suppliers, retailers, manufacturers, distributors, and consumers. Law abiding distributors and retailers also lose out on sales due to the reduced demand for legal products, including supplementary items that smokers usually buy while in their shops.

The tobacco industry in Sri Lanka affects over 71,000 direct and indirect workers and retailers (Ceylon Tobacco Company, 2020).

## 4.3 Increased criminal activity and threat to national security

Cigarettes are one of the most smuggled products in the world and cigarette smuggling is considered a form of transnational organised crime. As such, this activity poses significant and increasing threats to national security and public safety. A perception study on the illicit market found that in all the European countries, close to a third of respondents think that black market cigarettes are one of the most important sources of revenue for organised crime (European Commission, 2016). According to the Italian Minister of Health Care, the value of illicit trade of tobacco products in Italy gives organised crime double the revenue they generate from selling cocaine and heroin.

Evidence shows that many high-profile terrorist organisations such as Al-Qaeda and ISIS operate smuggling rings due to higher profit margins and the relatively lower risk. The founder of the Signed-in-Blood Battalion, a terrorist organisation, is known as “Mr. Marlboro” as he was involved in cigarette smuggling to raise funds for his organisation (Parliament of Australia, 2015).

According to Dr Louise Shelley, University Professor at George Mason University and Director of the Terrorism, Transnational Crime and Corruption Center (TraCCC), “Oil is not ISIS’ only source of revenue... Still more funding comes from the sale of counterfeit cigarettes” (Philip Morris International).

Not only are criminal networks expanding through the trafficking in illicit tobacco products, but this activity also facilitates and provides funding for other criminal activities. These include money laundering, bulk cash smuggling and trafficking in humans, weapons, drugs, antiquities, diamonds, and counterfeit goods (Parliament of Australia, 2015).

Examples of large-scale illicit cigarette seizure cases are listed below:

- Operation Royal Charm and Operation Smoking Dragon led by FBI undercover agents posing as underworld criminals, highlight the convergence of illicit markets and national security issues. USD 40 million worth of counterfeit cigarettes and other illegal items such as methamphetamines, counterfeit pharmaceuticals, counterfeit money, and weapons were smuggled into the USA. Eighty-seven individuals were indicted from Canada, China, Taiwan, and the USA (UNODC, 2011). This case reveals the potential magnitude of tobacco related criminal operations and association of other harmful illegal products.
- An INTERPOL operation named Black Poseidon which was aimed at the illicit tobacco trade industry in Eastern Europe led to the discovery of large-scale illicit cigarette production in Ukraine. More than 1,400 individuals were arrested or under investigation and 7.3 million trafficked goods were seized (INTERPOL, 2012). The manufacturing capacity of this source was estimated at 100,000-125,000 individual packs of cigarettes per day. The INTERPOL operation seized machinery, 30 tons of cut tobacco and 350,000 ready to sell individual cigarette packs worth approximately USD 560,000 (Parliament of Australia, 2015). In addition to the cigarettes, Operation Black Poseidon led to the seizure of illicit agrochemicals, clothing, electronics, food, toys, and vehicle spare parts. The goods in total were worth 123 million Euros. “The high number of arrests and illicit goods seized during Operation Black Poseidon, highlights the international scale of illicit trade and the benefits national police, customs and other law enforcement agencies derive from working closely together with representatives of regulatory bodies and the private

sector, to stop the criminal networks behind this crime,” said John Newton, the head of INTERPOL’s Trafficking in Illicit Goods unit (INTERPOL Red Notice Removal Lawyers, 2012).

- New Zealand (NZ) has had multiple large scale illicit cigarette seizures this year. A Malaysian businessman was charged in August 2020 over allegedly importing 2.39 million cigarettes inside a container from Malaysia on July 27 and trying to avoid a USD 2 million tax bill. This is NZ’s largest ever single-seizure tobacco smuggling case. In September 2020, they arrested multiple personnel involved in another shipment that took place in July which involved 2.2 million illicit cigarettes attempting to evade USD 1.8 million in excise tax. This shipment was also sent from Malaysia and declared as 175 roof extension units and the cigarettes were hidden inside stacks of metal frames. This case led to the discovery of more illicit cigarette units in different parts of New Zealand. Authorities have linked these operations to Malaysian organised crime syndicates. Malaysian syndicates had already been involved in trafficking drugs and smuggling illegal immigrants. However, this was the first time the NZ customs agency had seen cigarettes smuggled on such a large scale. “In recent years, Customs has conducted several investigations involving Malaysian syndicates, which show that members are often sent to New Zealand to smuggle and distribute the commodities. These syndicates often use a shell or inactive company to try to give the appearance of legitimate operations, and we believe this case is no different,” the Customs investigations manager Bruce Berry said. He added that Customs had largely seen Chinese-branded cigarettes exported from China in the past, however, “the Malaysian-exported cigarettes have been a game-changer in terms of the distinctive packaging, sophistication of concealment and the significant volumes per shipment. This is something that our partners in Australia have been seeing for some time – it’s all driven by greed and profit.” (NZ Herald, 2020).
- In one of India’s largest seizures since the COVID-19 lockdown in the country, USD 1.6 million worth of illicit cigarettes were discovered by the Directorate of Revenue Intelligence (DRI) from a container in Navi Mumbai in June 2020. Anil Rajput, Chairman, FICCI CASCADE said that “cigarette smuggling is a big racket across the globe and India continues to remain a hotbed for this menace. Even as the country is grappling with the coronavirus crisis, the seizures of such goods remain high” (The Times of India, 2020). A FICCI press release in relation to these seizures states that cigarette smuggling “creates large scale destabilisation by fomenting crime and funding insurgency and terrorism” (FICCI, 2020).
- Operations carried out by the European Anti-Fraud Office (OLAF) recorded a seizure of nearly 370 million illegal cigarettes in 2020, where the majority were reported to be smuggled from countries outside the EU but destined for sale on EU markets. OLAF estimated that the black-market cigarettes would have caused losses of around Euro 74 million in customs and excise duties and VAT to EU and Member State budgets.

The maximum penalty for smuggling illicit cigarettes in Sri Lanka is LKR 1 million which is less than USD 6,000 - a small price to pay for a large-scale operation in which a container of illicit cigarettes can be worth up to LKR 700 million. Given the softer penalties compared to higher profits, criminals have invested in and developed sophisticated mechanisms to smuggle goods into Sri Lanka.

## 4.4 Challenges to national health objectives

All tobacco products including cigarettes do have their own health risks and ordinary legal are certainly partly responsible for the 7 million tobacco related deaths per year globally (CDC, 2020) and 12,300 annual deaths in Sri Lanka (The Tobacco Atlas). In 2016, tobacco use caused an estimated 20,000 deaths in Sri Lanka (UNDP, 2019). However, the growing numbers of illegal, unregulated, cheap alternative products can further worsen these numbers.

Some of these illicit products have contained five times as much cadmium, nearly six times lead and high levels of arsenic. They also contain 160% more Tar, 80% more nicotine and 133% more carbon monoxide (Coventry Telegraph, 2015). If the illicit product market share increases, we can expect worse health outcomes and deaths.

Negative health outcomes can have indirect effects on government health policy objectives as it deprives funds for anti-smoking campaigns and healthcare costs. Moreover, additional health resources will be required to treat those that are affected by tobacco related diseases.

By most accounts, Sri Lanka has made great progress in meeting the challenges of reducing the harm caused by smoking. Although counterfeit cigarettes in the market are relatively low, smuggled cigarettes continue to be a problem. These smuggled cigarettes avoid various restrictions and health regulations, such as requirements for graphic health-warnings (GHWs) in the local language. These cigarettes could have serious health implications for its users as there is no way to verify the quality standards.

## 4.5 Increased smoking prevalence

As illicit cigarettes evade taxes and cost relatively lower than legal cigarettes, they would attract new smokers who are not willing or cannot afford to pay high prices, for example, school or university students. The lower prices of illicit cigarettes may also increase the tendency for individuals to consume higher quantities which will lead to health complications.

Tobacco, due to nicotine, is considered one of the most addictive substances in the world. As discussed in the Challenge to National Health Objectives section of this report, illicit tobacco products may contain higher levels of nicotine, making these products even more addictive and increasing tobacco desirability. As a consequence, this can also potentially increase cigarette demand and smoking prevalence in the country.

Illicit cigarette packages often do not contain graphic health warnings (GHW) which will further remove the intended psychological effects associated with prevention.

**Combating illicit  
tobacco trade**



As part of the RIU illicit market survey, illicit cigarette smokers in Sri Lanka were asked what would make them shift from illicit tobacco to locally manufactured products. Availability of more options in the local market seemed to be the general theme in this regard, with 55.4% indicating that they would like to see different flavours, taste options and brands. 29.2% considered price to be an important factor. This indicates that part of the illicit market problem is solvable through addressing gaps in the local market, however, concurrent measures such as public awareness campaigns are necessary in order to educate the public of overall tobacco consumption risks.

The below describes some of the policy related international examples of controlling illicit tobacco trade.

## 5.1 Australia's illicit tobacco taskforce

There are several estimates on the size of the illicit tobacco market in Australia. The estimates from the Department of Immigration and Border Protection (USD 0.5 billion to USD 2.3 billion), KPMG (USD 2.5 billion) and others range up to USD 6 billion (Hawkins, 2018). According to the Australian Taxation Office, illicit tobacco costs the Australian community USD 477 million in lost revenue each year (Australian Taxation Office ATO, 2020).

Significant steps have been taken by the Government to address illicit trade. Among these are tobacco tax increases, strengthening the administration of tobacco imports and the creation of a multi-agency task force to increase investigatory and enforcement capability (The World Bank, 2019).

With the numerous tobacco tax increases, the Australian Government recognised the potential implications regarding illicit trade. Budget papers by the Treasury acknowledged that, "Changes to taxation arrangements for tobacco have the potential to increase illicit tobacco activity". For this reason, the measures were supported with USD 5.7 million over two years to expand the Department of Immigration and Border Protection's Tobacco Strike Team (The World Bank, 2019). The Australian Government announced the new Illicit Tobacco Taskforce (ITTF) in May 2018 along with several other budget measures aimed at dealing with illicit tobacco trade as part of the 'Black Economy Package - combating illicit tobacco'. The objective of the ITTF which was later established in July 2018, was "to investigate, prosecute and dismantle organised crime groups who use the proceeds of illicit tobacco to fund other criminal activity, as well as ensure the appropriate revenue is paid to the Australian Government." (Australian Taxation Office ATO, 2020). The taskforce is led by the Australian Border Force (ABF), thereby facilitating access to the expertise and advanced capabilities of the ABF. The capabilities of the Department of Home Affairs, the Australian Criminal Intelligence Commission (ACIC), the Australian Transaction Reports and Analysis Centre (AUSTRAC), the Commonwealth Director of Public Prosecutions (CDPP) and the Australian Taxation Office (ATO) were also integrated into the operations of the ITTF, making it a multi-agency task force. The ITTF therefore can act by utilising a range of options and legislative powers at its disposal.

As part of the ITTF's activities, the ATO seized and destroyed over 131 tonnes of illicit tobacco in the 2019–20 financial year, worth an estimated excise revenue of USD 126 million. Nineteen search warrants were executed and over 184 acres of illicit tobacco were uncovered by the ATO with the help of the police and the ABF (Australian Taxation Office ATO, 2020).

Along with the ITTF establishment, the Australian Government announced other key measures to target the main sources of illicit tobacco in the country. These measures include collecting tobacco duties and taxes at the border, additional resources to monitor domestic tobacco crops,

introducing a prohibited import control for tobacco and an ATO excise systems upgrade. The fiscal impacts of these measures are estimated below.

**Table 14: Financial impact of the 'Black Economy Package - combat illicit tobacco'**

2010	2018-19	2019-20	2020-21	2021-22	SUM
Total — Revenue (USD million)	8	2,418	142	182	2,750
Total — Expense (USD million)	15	22	29	34	100
Total — Capital (USD million)	4	0	3	5	13
Fiscal impact	-11	2,396	109	143	2,637

Source: Australia Foreign Affairs and Trade 2018

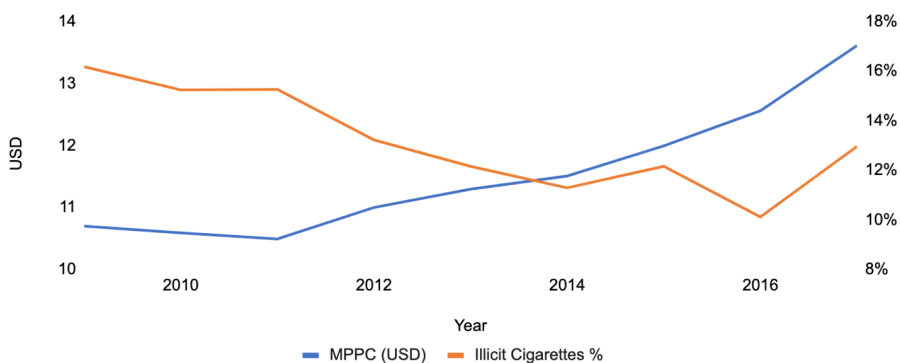
Despite capital and expenses totalling to USD 113 million, it was expected that the measures introduced would bring in USD 2.6 billion in overall fiscal resources in just four years. Note that due to applying customs duties to tobacco products already stored within warehouses, there is a one-off high 2019-20 revenue amount.

## 5.2 Ireland's holistic approach and effective enforcement

Ireland's holistic approach did not solely target the illicit tobacco market, but tobacco consumption as a whole. The tobacco policy in Ireland is closely linked to the public health policy which in 2013, defined a target to reduce the country's smoking prevalence to 5% by 2025.

Ireland managed to reduce illicit cigarettes from 16% in 2009 to 10% in 2016, even though the price of cigarettes rose during this period. The illicit market share appeared to increase again since 2016. However, this is understood to be due to the legal cigarette consumption declining faster than the consumption of illicit cigarettes.

**Figure 18: Illicit cigarettes vs Most Popular Price Category (MPPC) cigarette prices in Ireland**



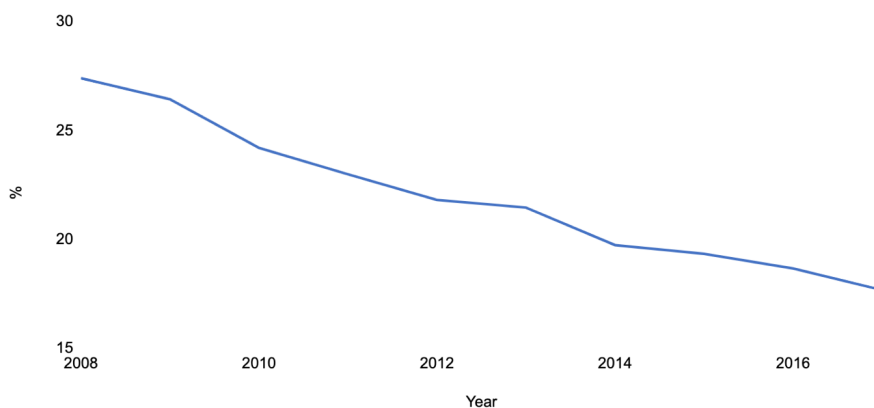
Source: The World Bank 2019

Ireland periodically increased taxes, including a 10-year period when taxes were changed 9 times. The country now imposes the highest duty rates on tobacco products in the European Union, including roll-your-own tobacco. The main driver of illicit flows is linked to the effectiveness of customs and tax enforcement, rather than price alone.

Ireland introduced tax stamps with a range of security features for fiscal purposes and the identification of tax-paid tobacco products. Applying tax stamps to cigarette products and roll-your-own tobacco was made mandatory. Selling items with no tax stamps was made an offence and heavy penalties were imposed on offenders, including fines up to USD 150,000 (LKR 28 million), imprisonment up to 5 years, or both. The average fine for illicit trade in tobacco products-related offences rose from around USD 700 (LKR 131,248) in 2010 to more than USD 2,900 (LKR 543,740) in 2017 (The World Bank, 2019). These tax stamps and security measures helped better identify illicit products and with heavy penalties increasing the risks for illicit activities, engaging in such trade became unfavourable.

In addition to the above, Ireland adopted several measures to reduce general tobacco consumption. Smoking prevalence of licit and illicit tobacco in Ireland declined from 27.6% in 2007 to 17.6% in 2017, while excise revenue remained stable between EUR 1 billion and EUR 1.4 billion per year, perhaps partly due to the revenue gained from penalty payments.

Figure 19: Smoking prevalence in Ireland, 2007-2017



Source: Health Service Executive, *Smoking Prevalence Tracker Half Year - 2017* as cited by The World Bank, 2019

Ireland’s successful approach could be seen as ideal, however in the current Sri Lankan climate, this approach may not be feasible. Sri Lanka’s illicit market is already soaring, and the tobacco industry directly and indirectly supports over 70,000 people. Therefore, a step-by-step approach will be required in Sri Lanka to deal with the illicit problem, one with minimal socio-economic disruptions.


## 5.3 Track and trace

The World Health Organization's protocol named Framework Convention on Tobacco Control (FCTC), which was created to specifically address illicit tobacco trade, emphasises on specific areas that nations should focus on to enable better cross-national collaboration in dealing with the problem. The framework offers new substantive provisions directed at supply chain control, the tracking and tracing provisions and the establishment of a centralised global information-sharing point. These will allow authorities to monitor the legal supply chain and easily identify products being diverted into the illegal market.

Track and trace relevance to Sri Lanka

While several countries have successfully adopted track and trace, including Kenya which has a similar GDP to Sri Lanka, this may be not relevant to Sri Lanka.

- Locally manufactured cigarettes are strictly supervised by government officials to ensure there is no leakage.
- The existence of health warnings in the local languages makes it easy to identify legally manufactured cigarettes.

**Conclusion  
and  
recommendations** 

## 6.1 Conclusions

While general consumption of tobacco in the island has decreased in 2021, likely due to the short-term factors induced by the pandemic, it is estimated that 21% of cigarettes consumed in Sri Lanka in 2021 were illicit. This results in a 2021 fiscal revenue loss around LKR 27 billion due to the illicit tobacco market. Whilst this number is lower compared to previous years. It is still significant and likely to further increase in the coming years if no further steps are taken to control the illicit market once pandemic related restrictions start to ease.

According to the RIU survey, 55.8% of people island wide have admitted to consuming illicit cigarette products over a wider period that includes pre-covid years. Such a high number should prompt cause for serious concern among policy makers in Sri Lanka that illicit tobacco consumption is a long-term challenge that, if unaddressed, will continue to lead to increasing revenue losses for the Government.

## 6.2 Recommendations

Despite progress made to cut down the illicit market in the country, aided with COVID-19 conditions, it is imperative that the Government continues to adopt a comprehensive, but pragmatic tobacco policy to achieve national health objectives, maximise revenue and to curb the growth of the illicit tobacco market.

Some of the salient measures that should be considered following the findings of this study are:

- It is vital that a dedicated task force is considered to crack down on the illicit market, with extra attention placed on the Central, North Western, Uva and Western provinces. Australia's example described in this report shows that financial benefits can be expected within just a few years of implementation, easily covering capital and other expenses involved in setting up such a task force.
- While fixing loopholes in the tax system, the Government must strengthen enforcement by investing in modern equipment for detection, capacity building for officials and increasing incentives. The Government took steps to aid detections by installing high tech scanners over the past decade, however it needs to be ensured that these are being operated efficiently with adequate staff. Particularly port and airport enforcement mechanisms need to be tightened to curb the smuggling of illicit cigarettes and beedis.
- Those engaged in the illicit market see their activities as low risk and highly rewarding. Therefore, penalties should be revisited and made more stringent, as in Ireland, to increase this risk for potential offenders and to deter such activity. In Malaysia, the minimum fine was increased in 2019 for smugglers, traffickers, suppliers, and sellers of contraband cigarettes, to USD 25,000 or a minimum jail term of 6 months or both, if convicted.
- 55.4% of illicit cigarette smokers interviewed in depth as part of the RIU survey indicated that availability more options (e.g., flavours, brands) in the local market would make them consider switching from illicit cigarettes to locally manufactured cigarettes. 29.2% mentioned lower prices would be a reason to switch. This indicates that addressing supply and pricing issues in the local market will help to address the illicit market. However, quality standards need to be ensured and concurrent measures such as public awareness campaigns are necessary in order to educate the public of overall tobacco consumption risks.



- The growing usage of beedi is a threat to national health objectives. Therefore, the focus of the policy should be on tobacco and all tobacco products, rather than just cigarettes.
- Whilst tobacco products in general poses serious health risks to consumers, illicit products can have even greater risks. Furthermore, our primary research has indicated that a considerable segment (76.1%) of the population is unaware of the legal implications of purchasing these products. Public awareness campaigns should therefore be actioned to bridge the knowledge gaps.

# Bibliography

- Australian Taxation Office ATO. (2020, July). ATO destroys \$171 million of illicit tobacco. Retrieved from [https://www.ato.gov.au/Media-centre/Media-releases/ATO-destroys-\\$171-million-of-illicit-tobacco/](https://www.ato.gov.au/Media-centre/Media-releases/ATO-destroys-$171-million-of-illicit-tobacco/)
- CDC. (2020). Smoking & Tobacco Use - Fast Facts.
- Ceylon Tobacco Company. (2020). Annual Report.
- Colombage, S., Morais, N., & Wickramasinghe, C. N. (2018). A BASELINE STUDY ON THE ILLICIT CIGARETTE MARKET AND THE RESULTING TAX IMPLICATIONS FOR SRI LANKA.
- Coventry Telegraph. (2015). Revealed: Dangers of smoking illegal cigarettes as Coventry faces counterfeit problem.
- Daily FT. (2019, February 14). Retrieved from Growth of beedi a great source for taxation to enhance State revenue: <https://www.ft.lk/Front-Page/Growth-of-beedi-a-great-source-for-taxation-to-enhance-State-revenue/44-672853>
- European Commission. (2016). Public perception of illicit tobacco trade.
- FATF. (2012, June). Illicit tobacco trade. Retrieved from <chrome-extension://efaidnbmnnnibpca-pcgjclclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.fatf-gafi.org%2Fmedia%2Ffatf%2Fdocuments%2Freports%2FIllicit%2520Tobacco%2520Trade.pdf&clen=1958493&chunk=true>
- FICCI. (2020, July 15). Retrieved from <http://www.ficci.in/pressrelease-page.asp?nid=3803>
- Guindon, G. E., Burkhalter, R., & Brown, K. S. (2017). Levels and trends in cigarette contraband in Canada.
- Gunasinghe, D. (2018, February 28). Daily FT. Retrieved from Cheaper 'beedi' pushing up smoking in Sri Lanka: <https://www.ft.lk/opinion/Cheaper--beedi--pushing-up-smoking-in-Sri-Lanka/14-650273>
- Hawkins, P. (2018). Budget Review 2018–19 Index. Retrieved from [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Library/pubs/rp/BudgetReview201819/Tobacco](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview201819/Tobacco)
- INTERPOL. (2012).
- INTERPOL Red Notice Removal Lawyers. (2012).
- Joossens, L., Merriman, D., Ross, H., & Raw, M. (2009). How Eliminating the Global Illicit Cigarette Trade Would Increase Tax Revenue and Save Lives.
- Maftai, L. (2012). An Overview of the Tobacco Black Market in Europe.
- Merriman, D., Yurekli, A., & Chaloupka, F. J. (2000). How big is the worldwide cigarettesmuggling problem?
- NZ Herald. (2020). Three more arrested over 2.2 million cigarette bust, thought to be linked to Malaysian criminal syndicate.
- Oxford Economics. (2020). The economics of illicit tobacco in Sri Lanka.
- Pakistan Institute of Development Economics, Islamabad. (2018). Economics of Tobacco taxation and consumption in Pakistan .
- Parliament of Australia. (2015). The Global Illicit Trade in Tobacco: A Threat to National Security. Philip Morris International. (n.d).
- Rogrigo, A. (2016, May 30). Daily Mirror Online. Retrieved from <https://www.dailymirror.lk/110231/Under-regulated-local-Beedi-industry->
- Salary Explorer. (2021). Retrieved from [salaryexplorer.com: http://www.salaryexplorer.com/salary-survey.php?loc=204&loctype=1](http://www.salaryexplorer.com/salary-survey.php?loc=204&loctype=1)
- Social Development Network . (2019). Insights on the beedi trade in Sri Lanka.
- Statistics, D. o. (2019). Department of Census and Statistics 2019. Retrieved from <http://www.>

- statistics.gov.lk/IncomeAndExpenditure/StaticInformation/HouseholdIncomeandExpenditureSurvey2019FinalResults
- Statistics, D. o. (2021). Department of Census and Statistics. Retrieved from <http://www.statistics.gov.lk/Population/StaticInformation/VitalStatistics/BySexandAgeGroups>
- The Express Tribune. (2013, September). How illicit cigarette trade dents the socio-economic fabric. Retrieved from <https://tribune.com.pk/story/598337/cancer-to-society-how-illicit-cigarette-trade-dents-the-socio-economic-fabric>
- The Tobacco Atlas. (n.d).
- The World Bank. (2019). Confronting Illicit Tobacco Trade : a Global Review of Country Experiences.
- UNDP. (2019). Investment Case for Tobacco Control in Sri Lanka.
- UNODC. (2011). Operations Case Law Database - "Smoking Dragon" and "Royal Charm".
- US Department of State . (2015). THE GLOBAL ILLICIT TRADE IN TOBACCO:A THREAT TO NATIONAL SECURITY.
- WHO . (2021). WHO report on the global tobacco epidemic.
- WHO. (2019). Retrieved from [https://cdn.who.int/media/docs/default-source/searo/tobacco/country-fact-sheets/sri-lanka-who-tobacco-prevalence-trend-estimates-2019.pdf?sfvrsn=c9a3d144\\_2](https://cdn.who.int/media/docs/default-source/searo/tobacco/country-fact-sheets/sri-lanka-who-tobacco-prevalence-trend-estimates-2019.pdf?sfvrsn=c9a3d144_2)
- WHO. (2019). Sri Lanka-WHO-tobacco-prevalence-trend-estimates-2019. Retrieved from [https://cdn.who.int/media/docs/default-source/searo/tobacco/country-fact-sheets/sri-lanka-who-tobacco-prevalence-trend-estimates-2019.pdf?sfvrsn=c9a3d144\\_2](https://cdn.who.int/media/docs/default-source/searo/tobacco/country-fact-sheets/sri-lanka-who-tobacco-prevalence-trend-estimates-2019.pdf?sfvrsn=c9a3d144_2)
- WHO. (2020). Retrieved from [https://www.who.int/ipcs/assessment/public\\_health/cadmium/en/](https://www.who.int/ipcs/assessment/public_health/cadmium/en/)
- Wickramasinghe, F. (2018, August 09). Daily Mirror. Retrieved from <https://www.dailymirror.lk/print/features/Broader-policies-to-enhance-social-health-revenues-and-combat-tobacco-abuse/185-153793>



