



Tobacco Taxation and Impact of Policy Reforms

# TRINIDAD AND TOBAGO



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# EXECUTIVE SUMMARY

## The Challenge of Tobacco Use in Trinidad and Tobago

**Health Impact.** In Trinidad and Tobago, more than 33% of adult males and 9.4 % of adult females use tobacco and tobacco-related products. An examination of the prevalence of cigarette smoking in Trinidad and Tobago reveals that the country has the highest rate of cigarette smoking in the Caribbean Community (CARICOM) region.<sup>1</sup> The average price per pack of twenty sticks cigarettes is TT\$28.66, or US\$4.28, with little to no variation in pricing between filtered and unfiltered.

Tobacco use was already among the top five health risk factors contributing to ill health and premature mortality in the country in 2016 (IHME, 2016). Since cigarette smoking is

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so widespread and significant as a health risk factor, it is also a leading preventable cause of disease and deaths.

In Trinidad and Tobago, the top 3 causes of premature death (measured in terms of years of life lost (YLLs) in 2016 were tobacco use related: Ischemic heart disease, Diabetes and Cerebrovascular Disease (IHME, 2016). Available evidence indicate that cigarette smoking increases the risk of Coronary Heart Disease by itself (U.S. Department of Health and Human Services, 2014). It increases blood pressure, decreases exercise tolerance

and increases the tendency for blood to clot. Smoking also increases the risk of recurrent coronary heart disease after bypass surgery. Cigarette smoking is the most important risk factor for young men and women as it produces a greater relative risk in persons under age 50 than in those over 50. Women who smoke and use oral contraceptives greatly increase their risk of coronary heart disease and stroke compared with nonsmoking women who use oral contraceptives. Smoking also decreases HDL (good) cholesterol, and cigarette smoking combined with a family history of heart disease also seems to greatly increase the risk. Cumulative lifetime exposure to active cigarette smoking is directly associated with cerebrovascular disease. Smokers are 30–40% more likely to develop type 2 diabetes

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<sup>1</sup> The Caribbean Community (CARICOM) is a grouping of twenty countries: fifteen Member States and five Associate Members. It is home to approximately sixteen million citizens, 60% of whom are under the age of 30, and from the main ethnic groups of Indigenous Peoples, Africans, Indians, Europeans, Chinese and Portuguese. The Community is multi-lingual; with English as the major language complemented by French and Dutch and variations of these, as well as African and Indian expressions. Stretching from The Bahamas in the north to Suriname and Guyana in South America, CARICOM comprises states that are considered developing countries, and except for Belize, in Central America and Guyana and Suriname, all Members and Associate Members are island states. While these states are all relatively small, both in terms of population and size, there is also great diversity with regards to geography and population as well as the levels of economic and social development (<https://caricom.org/about-caricom/who-we-are>).

than nonsmokers. And people with diabetes who smoke are more likely than nonsmokers to have trouble with insulin dosing and with controlling their disease.

**Societal Response.** It is noteworthy that in Trinidad and Tobago there is an awareness of the problem and the need for state intervention in exerting a downward push on tobacco consumption levels. A range of measures have been implemented over the years with the aim of curbing tobacco use. These include the Tobacco Control Act of 2009 and the Tobacco Control Regulation of 2013. These measures made allowances for high fines and imprisonment for non-compliance. There are extensive penalties for selling or manufacturing tobacco products without a license, which include, on summary conviction, a fine of TT\$100,000 and imprisonment for six months or on conviction on indictment, a fine of TT\$200,000 and imprisonment for one year.

Perhaps equally noteworthy though, is the fact that in the face of such efforts, cigarette sales in Trinidad and Tobago have remained constant, except for a decline in 2016, the year in which the tax on tobacco products was increased by 15% moving from TT\$3.81 per pack of 20s to TT\$4.38 per pack of 20s. After the 2016 increase in excise taxes, revenue from cigarette excise duties increased by 11.92% in 2017 fiscal year from TT\$202.91 million in 2016 to TT\$227.1 million.

It is therefore timely that the country should seek to benefit from two significant pieces of evidence. The first is that, as seen in many other countries across the world, increases in taxes on tobacco in Trinidad and Tobago do exert downward pressure on consumption. The second is that, as is the international norm, in Trinidad and Tobago, when taxes are increased, while consumption falls, tax revenues are projected to increase.

## Modelling the Impact of Tobacco Tax Hikes in Trinidad and Tobago

The model, adapted to Trinidad and Tobago tobacco tax structure, assessed: (i) the potential impact of tobacco tax policy measures on price, and tobacco use and hence on the risk of ill health, premature mortality and disability associated with tobacco-related diseases, and (ii) as a positive externality, to mobilize domestic resources to expand the fiscal capacity of the government to fund priority investments and programs that benefit the entire population.

Two scenarios were simulated:

**Scenario 1:** The 2017 specific excise tax rate on cigarettes is increased by 50% in 2018 to TT6.57 per 20 cigarettes pack; by 100% in 2019 (TTD13.14 per pack), and 100% in 2020 (TTD26.28 per pack).

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**It is noteworthy that in Trinidad and Tobago there is an awareness of the problem and the need for state intervention in exerting a downward push on tobacco consumption levels.**

**Scenario 2:** The 2017 specific excise tax rate on cigarettes is increased by 150% in 2018 to TTD 10.95 per pack; by 100% in 2019 to TTD 21.90 per pack; and by 100% in 2020 to TTD 43.80 per pack.

## Results

Table E-1 summarizes in detail the results of modeling the impact of the proposed tobacco excise tax policy changes.

### Increased Tax Revenue

**Scenario 1:** Total tobacco tax revenue collected (import duty, excise taxes, and VAT) would increase from US\$61 million projected for 2017 (0.3% of GDP) to:

- US\$71.1 million in 2018 (0.37% of GDP)
- US\$107.9 million (0.58% of GDP) in 2019, and
- US\$175.8 million (0.91% of GDP) in 2020.

**Scenario 2:** Total tobacco tax revenue collected (import duty, excise taxes, and VAT) would increase from US\$61 million (0.3% of GDP) in 2017 to:

- US\$101 million in 2018 (0.53% of GDP)
- US\$154 million (0.83% of GDP) in 2019, and
- US\$251 million (1.30% of GDP) in 2020.

### Reduction in Consumption

**Scenario 1:** The expected reduction in total cigarettes taxed (as a proxy of consumption) is estimated to fall by

- 4% in 2018
- 10% in 2019, and
- 14% in 2020.

**Scenario 2:** The expected reduction in total cigarettes taxed (as a proxy to consumption) is estimated to fall by:

- 11.3% in 2018
- 13.1% in 2019, and
- 16% in 2020.

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<sup>2</sup> A seminal work done by the WBG "Curbing the Epidemic" (1999), concluded that policymakers who seek to reduce smoking should use as a yardstick the tax levels adopted as part of the comprehensive tobacco control policies of countries where cigarette consumption has fallen. In such countries, the tax component of the price of a pack of cigarettes is between two-thirds and four-fifths of the retail cost. Currently, in the high-income countries, taxes average about two-thirds or more of the retail price of a pack of cigarettes. This recommendation has been further supported by the WHO (2015, 2017).

**TABLE E-1: TRINIDAD AND TOBAGO PROPOSED TOBACCO TAX POLICY MEASURES 2018–2020 (SUMMARY RESULTS [1])**

GOVERNMENT REVENUE TYPE	YEAR		
	2017 Baseline (Projected)	Baseline 2017 (Projected): simple specific increased to TT\$4.38 per 20 cigarettes pack	
Total excise tax revenue (billion TTD)		0.255	
Total excise tax revenue (US\$ million)		\$38.04	
Total government revenue (import, excise, and VAT, billion TTD)		0.408	
Total government revenue (import, excise, and VAT, US\$ million)		\$60.89	
<b>Proposed Tax Policy Measure</b>	2018	<b>50% and 100% increase on specific excise tax per pack (Scenario 1)</b>	
<b>Proposed Tax Policy Measure 2018</b>		Specific excise tax rate 2017 increased by 50% to TTD6.57 in 2018 pack (Scenario 1)	
Total excise tax revenue (billion TTD)		0.367	
Total excise tax revenue (US\$ million)		\$48.97	
Total government revenue (import, excise, and VAT, billion TTD)		0.533	
Total government revenue (import, excise, and VAT, US\$ million)		\$71.09	
<b>Proposed Tax Policy Measure 2019</b>	2019	Specific excise tax rate 2018 increased by 100% in 2019 to TTD13.14 per pack (Scenario 1)	
Total excise tax revenue (billion TTD)		0.659	
Total excise tax revenue (US\$ million)		\$82.39	
Total government revenue (import, excise, and VAT, billion TTD)		0.863	
Total government revenue (import, excise, and VAT, US\$ million)		\$107.89	
<b>Proposed Tax Policy Measure 2020</b>	2020	Specific excise tax rate 2019 increased by 100% in 2020 to TTD26.28 per pack (Scenario 1)	
Total excise tax revenue (billion TTD)		1.134	
Total excise tax revenue (US\$ million)		\$141.74	
Total government revenue (import, excise, and VAT, billion TTD)		1.407	
Total government revenue (import, excise, and VAT, US\$ million)		\$175.81	



		DIFFERENCE
	Front end loaded 150% (2018) to 100% (2019–20) increase on specific excise tax per pack (Scenario 2)	
	Specific excise tax rate 2017 increased by 150% to TTD10.95 in 2018 pack (Scenario 2)	
	0.565	0.198
	\$75.40	\$26.42
	0.755	0.222
	\$100.67	\$29.59
	Specific excise tax rate 2018 increased by 100% in 2019 to TTD21.90 per pack (Scenario 2)	
	0.983	0.324
	\$122.86	\$40.47
	1.233	0.369
	\$154.07	\$46.18
	Specific excise tax rate 2019 increased by 100% in 2020 to TTD43.80 per pack (Scenario 2)	
	1.654	0.520
	\$206.70	\$64.96
	2.006	0.599
	\$250.69	\$74.88

Source: WBG Staff estimates  
 [1] Based on assumptions for elasticity price and elasticity income for high-income countries (HIC) — (see Annex I: Table 2)

TABLE E-2: TRINIDAD AND TOBAGO: SUMMARY CIGARETTE RETAIL PRICE AND TAX BURDEN PROJECTIONS—2018–2020 [1]

SUMMARIZED OUTPUT	BASELINE 2017 (PROJECTED): SIMPLE SPECIFIC INCREASED TO TTD\$ 4.38 PER 20 CIGARETTES PER PACK	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 50% TO TTD6.57 IN 2018 PER PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD13.14 PER PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD26.28 PER PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 150% IN 2018 TO TTD10.95 PER PACK (SCENARIO 2)	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD21.90 PER PACK (SCENARIO 2)	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD43.80 PER PACK (SCENARIO 2)
	Total cigarettes taxed (billion pieces)	1.16	1.12	1.00	0.86	1.03	0.90
Average cigarette price (TTD)/per pack	23.45	26.48	36.33	56.49	32.82	49.73	83.37
Average cigarette price (US\$ per pack)	\$3.50	\$3.53	\$4.54	\$7.06	\$4.38	\$6.22	\$10.42
Average excise tax burden (excise tax as percentage of price)	18.7	24.8	36.2	46.5	33.4	44.0	52.5
Average excise tax (TTD per 1000 pieces)	219.0	328.5	657.0	1,314.0	547.5	1,095.0	2,190.0
Average excise tax (US\$ per 1000 pieces)	\$32.69	\$43.80	\$82.13	\$164.25	\$73.00	\$136.88	\$273.75
Average excise tax (EU equivalent 1 EU = 1.24 US\$)	€30.84	€35.32	€66	€132	€59	€110	€221
Average tax burden (total tax – import, excise, and VAT, – as percentage of price)	29.9	36.0	47.4	57.7	44.6	55.2	63.7
Percentage change in:							
Total cigarette sales taxed (% change)	-1.9	-3.9	-10.3	-14.0	-11.3	-13.1	-15.9

Source: WBG Staff estimates.

[1] Based on assumptions for elasticity price and elasticity income for high income countries (HIC) – (see Annex I – Table 2)

The Policy Options assessed under Scenarios 1 and 2 would increase significantly the average tax burden (total tax per pack as a percentage of average retail price) to a high close to 58% in 2020 for scenario 1, and 64% in 2020 for scenario 2, but still below the 75% recommended by WBG (1999) and WHO (2015)<sup>2</sup> (see Table E-2).

## **Sensitivity of Tobacco Consumption, Retail Price and Revenue to Price and Income Elasticity of Demand**

The simulation exercise showed that under a range of elasticity options,<sup>3</sup> the public health benefit (measured in terms of consumption reduction) and domestic revenue mobilization, are positively impacted with the tobacco excise tax increase. That is, increasing tobacco taxes results in a reduction in total cigarette consumption and an increase in tobacco tax revenue over the simulated period (2018-2020) in both policy option scenarios.

## **Conclusion**

Evidence from across the world shows that raising taxes sharply on tobacco products, and then adjusting for inflation and increased affordability due to growing incomes, is the single most cost-effective measure to reduce tobacco consumption (World Bank, 2017). A scaled-up and stronger tobacco control effort is required in Trinidad and Tobago to achieve the WHO-recommended target of at least 30 percent reduction in smoking prevalence by 2030, which would avoid ill health, premature mortality, and disability among current and future smokers by the end of the 21st century. A reduction in smoking prevalence of this magnitude is also critical to reach the health and social targets of the United Nations Sustainable Development Goals (SDGs) (United Nations 2015).

The benefits of tobacco taxation go beyond public health. As documented in a recent report by researchers at the International Monetary Fund (IMF, 2016), in many countries, raising tobacco taxes can offer a “win-win”: higher revenue and positive health outcomes. While countries’ circumstances and governments’ weighting of revenue, health, and other objectives vary, and hence the desirable level of tobacco tax rates, in many cases, current tax rates are far below what is feasible in terms of revenue potential.

In the case of Trinidad and Tobago, increasing tobacco taxes as assessed in this report, could serve revenue purposes as well as health and other objectives. And if the government decides to put more weight on health objectives, it could raise taxes even further.

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<sup>3</sup> Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low- and middle-income countries (LMIC) (IARC, 2014)



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# 1 / INTRODUCTION

## 1.1 – Background

Tobacco use is the single most preventable cause of death in the world.<sup>4</sup> Globally, it is estimated that in 2017, tobacco use will claim more lives than tuberculosis, HIV/AIDS and malaria combined. Specifically, more than five million people worldwide will die as a result of tobacco related diseases such as lung cancer, heart disease and other respiratory illnesses. More than 80% of these deaths take place in developing countries. One of the major implications of tobacco related illnesses for developing countries is lost worker productivity and mounting health care costs of the related diseases.

It is projected that the number of smokers will increase mainly due to expansion of the world's population. By 2030 there will be at least another two billion people in the world and the death toll from tobacco-related diseases is expected to exceed eight (8) million annually. The evidence suggests that even if prevalence rate of smoking falls, the absolute number of smokers will increase. In fact, it is anticipated that tobacco could kill one billion people during the course of this century.<sup>5,6</sup>

Worldwide, the total economic costs of smoking (including productivity losses from death and disability) have been estimated at more than US\$1.4 trillion per year, equivalent to 1.8 percent of the world's annual Gross Domestic Product (GDP).<sup>7</sup> In the Americas, tobacco consumption is responsible for 16% of deaths from cardiovascular diseases, 25% of deaths from cancers and 52% of deaths from chronic respiratory diseases. In these circumstances it is reassuring to note that tobacco control measures play a critical role in mitigating against this negative impact, with taxation being seen as the most effective means through which this can be accomplished.<sup>8</sup>

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4 [http://www.who.int/nmh/publications/fact\\_sheet\\_tobacco\\_en.pdf](http://www.who.int/nmh/publications/fact_sheet_tobacco_en.pdf)

5 Jha P. 2009. "Avoidable global cancer deaths and total deaths from smoking." *Nat Rev Cancer* 9: 655–64.

6 Peto, R., Lopez, A.D. 2001. "Future worldwide health effects of current smoking patterns." In: Koop, C.E., Pearson, C.E., Schwarz, M.R., eds. *Critical issues in global health*. San Francisco: Wiley (Jossey-Bass): 154–61

7 Goodchild M, Nargis N, Tursan d'Espaignet E. 2017. "Global economic cost of smoking-attributable diseases." *Tob Control Online First*: 30 January 2017. doi: 10.1136/tobaccocontrol-2016-053305

8 Blecher, E, and J Drope. "The Rewards, Risks and Challenges of Regional Tobacco Tax Harmonization." *Tobacco Control* 23, no. e1 (2014): 7–11. doi:10.1136/tobaccocontrol-2013-051241.

## 1.2 – Study Rationale

In the Caribbean Community (CARICOM), taxes are levied on tobacco and tobacco products, through various fiscal measures. At a workshop on Alcohol, Tobacco and Sugar-sweetened beverages taxation organized by the Pan American Health Organization's (PAHO) in May 2017, it was noted that global evidence indicates that taxation of tobacco is the most cost-effective and feasible way to reduce tobacco consumption and generate revenue. However, in the CARICOM, there are important differences in the implementation of such tax measures across the region and this has led to varying degrees of success in reducing tobacco consumption. Specific excise taxes as a percentage of the price of cigarettes range between 0% in Antigua and Barbuda to 55.9% in Suriname.<sup>9</sup> There is no question that greater harmonization of tobacco taxation will contribute to the goal of lower tobacco consumption.

There is evidence that economic integration has resulted in some measure of harmonization of taxation policies among Member States, aimed at reducing transition costs and boosting efficiency. Further, the harmonization of tobacco tax policies across free trade areas may enhance the effectiveness of tobacco control efforts through taxation, by reducing incentives to evade the tax.<sup>10</sup> Generally, this leads to higher overall tobacco taxes and prices and lower consumption.

It is possible that the European Union's (EU) taxation policy, which came into effect in the early 1990s, can serve as a model for the harmonization of tobacco taxation policy in the Caribbean region as it was successfully able to reduce tax and price differentials among the 28 Member States of the European Union.<sup>11</sup> The WHO noted in 2016 that the Region of the Americas is uniquely positioned to enact a harmonized policy on tobacco taxation.

The process of tax harmonization can take place in different ways. Countries can synchronize the rate of excise taxes and the type of taxes levied on tobacco products. While some countries apply customs duties on the product, others levy an excise tax as it offers the highest level of effectiveness. This tends to be relatively easy to administer and leads to a higher final consumer price of the product. Moreover, the choice of a specific or ad valorem excise tax is another area of possible harmonization.

Given independent status of the Caribbean countries, a formal agreement among all CARICOM Member States on harmonization of taxes may require that countries set a minimum or maximum tax burden.<sup>12</sup> Such an agreement may also include a harmonized

9 WHO 2017. WHO Report of the Global Tobacco Epidemic 2017. WHO, Geneva

10 This result is not guaranteed, See Blecher and Drope, 2014.

11 CDC 2015. British Medical Journal (BMJ). 2015. Lessons learned from cigarette tax harmonization in the European Union; Blecher, Evan and Drope Jeffery. 2014. The rewards ricks and challenges of regional tobacco tax harmonization. British Medical Journal.

12 The percentage of the final consumer price that constitute excise tax.

approach to the frequency of tax increases in order to maintain the real tax burden which, over time, may be eroded by inflation. The objective will be to ensure that the environment of tobacco consumption will be standardized throughout the region.

This study is a first step in the development of a road map for advancing the action necessary for the harmonization of tobacco taxes in the CARICOM. It undertakes an assessment of the fiscal policy implications of the current structure of the tobacco tax system in Trinidad and Tobago. This sets the backdrop for examining the possibilities for harmonizing tobacco taxation between Trinidad and Tobago and the OECS. This latter issue is dealt with as part of a companion report on the OECS sub region.

### ***Study Overview***

This study of tobacco excise taxes in Trinidad and Tobago was undertaken as the first phase of an overarching framework for developing a road map for advancing action on the implementation of tobacco tax harmonization in the CARICOM region. The study provides a brief macroeconomic overview of the Trinidad and Tobago economy, including key indicators of performance, a fiscal assessment and an overview of the tax structure of Trinidad and Tobago. An assessment of the tobacco tax system along with its use and prices highlights some of the key elements of the types of tax, the respective revenues generated and the legislation that governs tobacco consumption and related fines for failure to comply with the Tobacco Control Act.

In spite of severe data limitations the study also conducts a price analysis of the market for tobacco in Trinidad and Tobago, focusing on cigarettes. Using a stratified random sampling process, the study found that cigarette sales in Trinidad and Tobago have remained constant, with the exception of a decline in 2016, the year in which the tax on tobacco products was increased. The price analysis is followed by a discussion on the prevalence of cigarette smoking in Trinidad and Tobago which reveals that the country has the highest rate of cigarette smoking in the CARICOM region. In this context the study establishes that excise taxes in Trinidad and Tobago are well below the WHO recommended levels. These findings point to an imperative to curb consumption, with the objective of reducing the accompanying health care costs as a result of related illnesses due to smoking. Herein lies the overriding need to increase excise taxes.

Using the WHO Tobacco Tax Simulation Model (TaXSiM), this study demonstrates that requisite increases in the tobacco excise tax can have the twofold effect of reducing tobacco consumption and generating significant revenue streams in the short term. The simulations carried out in the study utilized the WHO established benchmark for the minimum excise tax on tobacco to perceptibly reduce cigarette consumption.



## 2

# OVERVIEW OF THE ECONOMY AND TAX SYSTEM IN TRINIDAD AND TOBAGO

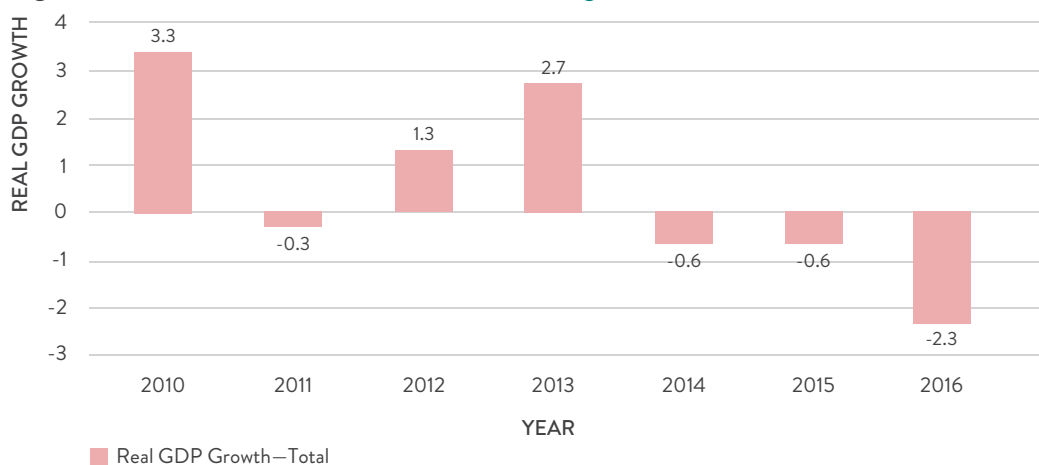
## 2.1 – Economic Overview

Trinidad and Tobago is a resource rich country that has been heavily dependent on the energy sector for the past several decades. After showing signs of recovery from the global crisis of 2008–2009, the country's real economic growth declined in 2011 to -0.3%, down from 3.3% in 2010 (Figure 2.1).

While the recovery in 2010 was due, in part, to real growth in the petroleum sector, the decline that followed in 2011 was due to reduced activity in the non-petroleum sector occurring from spill-over effects of the global economic crisis. The rebounding of the non-petroleum sector helped to boost growth in 2012, driven in large part by the services sector.

With the recovery of global commodity prices, the country experienced continued economic growth throughout 2013 and into early 2014. In the ensuing years, real activity declined, largely due to the precipitous decline in oil prices from US\$93.1 per barrel in 2014 to US\$43.2 per barrel in 2016 and gas prices from US\$4.4 to US\$2.5 per MMBTU, respectively (Table 2.1).

**Figure 2.1: Real GDP Growth in Trinidad and Tobago for the Period 2010–2016**



Source: Central Bank of Trinidad and Tobago (CBTT) 2017

**TABLE 2.1: OIL AND GAS PRICES FOR THE PERIOD 2010–2016**

YEAR	WTI CRUDE OIL PRICE (US\$/BBL)	HENRY HUB NATURAL GAS PRICE (US\$/MMBTU)
2010	79.4	4.4
2011	95.1	4
2012	94.2	2.8
2013	97.9	3.7
2014	93.1	4.4
2015	48.7	2.6
2016	43.2	2.5

Source: Central Bank of Trinidad and Tobago (CBTT) 2017

In 2015, the Trinidad and Tobago economy experienced a decline in production within the energy sector for the fourth consecutive year. The non-energy sectors of Finance, Insurance and Real Estate recorded the strongest growth performance in 2015 which tempered the fall-off in production from the energy sector. The decline in the Energy sector was as a result of planned and unplanned maintenance activities undertaken by key producers in the sector to facilitate infrastructural upgrades (CCMF Report, June 2016). Notwithstanding, the lull in economic activity persisted in 2016 with the economy contracting by 2.3 percent, recording three consecutive years of negative growth. The closure of ArcelorMittal Point Lisas Limited (ISPAT) and Central Trinidad Steel Limited (CENTRIN) represent structural changes in the economy that lowered the non-energy GDP. The country continues to suffer the effects of failure to diversify the non-energy sectors in an attempt to slowly decrease its dependence on energy revenues, reduce the risks pose by exogenous shocks transmitted through the global energy market and promote economic growth and development.

## 2.2 – Fiscal Assessment

The Trinidad and Tobago economy remains vulnerable to commodity cycles because of its heavy dependence on the energy sector and has been running a fiscal deficit since 2012 as expenditure outpaced revenues (Table 2.2).

The country's public-sector debt has been increasing since 2010, with net public debt rising from 33.5% of GDP in 2011 to 57% of GDP in 2016, with transfers and subsidies accounting for 56% of government expenditure (CBTT, 2017). According to the Inter-American Development Bank's (IDB) September 2017 Quarterly Bulletin, empirical evidence shows that for debt-to-GDP ratios above 60%, any marginal increases in this ratio tend to have a negative effect on economic growth. This fiscal position presents a challenge

.....

**The lull in economic activity persisted in 2016 with the economy contracting by 2.3 percent, recording three consecutive years of negative growth. The economy has been running a fiscal deficit since 2012 as expenditure outpaced revenues.**

**TABLE 2.2: FISCAL BALANCE FOR THE PERIOD 2010–2016**

YEAR	REVENUE (TT\$MN)	EXPENDITURE (TT\$MN)	OVERALL FISCAL BALANCE (TT\$MN)
2010	45,064.0	43,606.5	1,457.4
2011	50,084.5	48,993.5	1,091.0
2012	47,062.0	52,284.2	-5,222.2
2013	57,617.8	58,369.8	-752.0
2014	55,686.2	63,950.4	-8,264.1
2015	55,704.7	59,518.1	-3,813.4
2016	41,736.9	51,401.9	-9,664.9

of implementing a compressive fiscal consolidation plan that includes tax reform and expenditure reform that seeks to reduce transfers and subsidies and focus on critical infrastructure to enhance export competitiveness. As of June 2017, import cover was 9.6 months, which is a 15% decline from the 11.3 months level in June 2016.

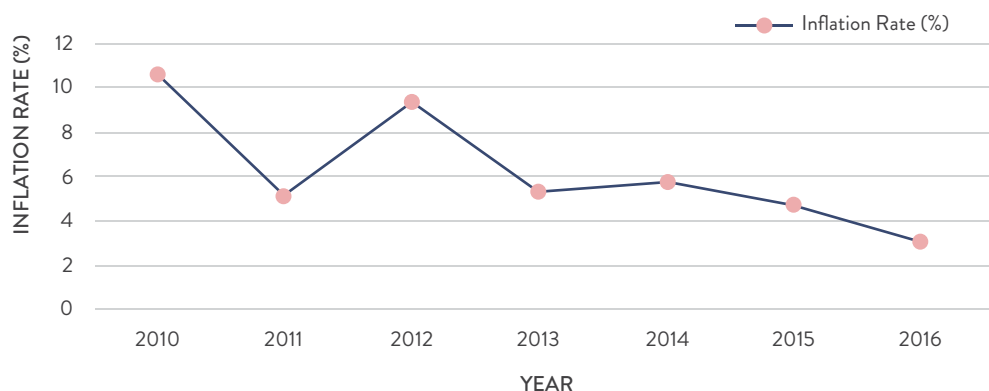
After four years of budget deficits, the budgeted revenue for FY2016 was revised to TT\$52.3 billion, down from the original TT\$60 billion. This was made up of recurrent core revenue of TT\$37 billion with the rest being one-off revenue items. Although expenditure for FY2016 was budgeted at TT\$ 63 billion, with expenditure cuts, budgeted expenditure was revised to TT\$59 billion and the projected deficit was revised to TT\$6.7 billion.

## 2.3 – Labor and Prices

Somewhat surprisingly, Trinidad and Tobago’s unemployment rate was on a steady decline from 2010 to 2014, moving from 5.9% to 3.3% respectively, though these figures may mask underemployment in the economy (Figure 2.2). The creation of jobs has been largely due to gains in the services sector.

**Figure 2.2: Unemployment Rate in Trinidad and Tobago for the Period 2010–2016**

Source: Central Bank of Trinidad and Tobago (CBTT) 2017

**Figure 2.3: Inflation Rate in Trinidad and Tobago for the Period 2010–2016**

Source: Central Bank of Trinidad and Tobago (CBTT) 2017

The inflation<sup>13</sup> rate for Trinidad and Tobago's economy has been volatile for the period 2010 to 2013 (Figure 2.3). In 2010, the inflation rate was 10.5% and then there was a sharp decline to 5.1 percent in 2011. A significant increase followed in 2012 to 9.3 percent and another sharp decline in 2013 to 5.2 percent. These movements occurred largely due to fluctuations in food price inflation. Easing of inflationary pressure followed over the years 2014 to 2016 and inflation remains on a downward trend.

## 2.4 – Tax Structure of Trinidad and Tobago

The mix of tax revenues in Trinidad and Tobago has undergone a number of changes within recent years. Total tax revenues increased for four consecutive years from TT\$35,760.3 million in 2010 to TT\$45,665 million in 2014 (Table 2.3) or 27.7%. Although there was an increase in total tax revenues from 2010 to 2014, the growth rate of total tax revenues had been increasing at a decreasing rate from approximately 13% growth in tax revenue in 2011 to a smaller increase of 9.44% in tax receipts in 2015. There was a significant fall in total tax revenues for the fiscal year 2016 where there was a notable 30.9% reduction in tax revenue; a decrease of TT\$12,777.7 million between 2015 and 2016. In 2016, the government implemented increases in excise duties on tobacco and alcohol, both locally manufactured and imported, by 15% and 20% respectively.

<sup>13</sup> Annual Average Percent Change in the Index of Retail Prices (%)



**TABLE 2.3: TAX REVENUE FOR THE FISCAL YEARS 2010–2017 FOR TRINIDAD AND TOBAGO**

	2010	2011	2012	2013	2014	2015	2016	2017 <sup>RE</sup>
Revenue	(Local currency millions)							
Total tax revenue	35,760.3	40,411.4	41,963.1	43,109.3	45,665.0	41,351.4	28,573.7	26,974.5
Income and profits	26,224.3	31,660.5	31,499.3	31,976.5	35,130.7	29,027.6	16,391.1	16,135.8
International Trade	1,905.5	2,167.8	2,319.4	2,587.6	2861.5	3,014.1	3,003.2	2,582.9
Other	193.7	195.3	218.9	249.9	288.5	406.0	339.3	318.1
Total taxes on goods and services:	7,436.8	6,387.7	7,925.6	8,295.2	7,384.3	8,903.7	8,840.2	7,937.7
<i>Total excise duties</i>	705.1	705.4	725.2	703.8	675.7	694.7	718.61	691.8
Cigarettes excise duties	240.5	239.9	241.5	235.6	230.8	234.8	202.91	227.1**
Rum and spirits excise duties	156.1	167.4	172.8	152.7	156.5	153.7	159.0	142.8
Beer excise duties	201.8	195.5	209.3	195.8	172.2	189.2	182.5	191.8
Oil (petrol) excise duties	104.9	101.1	98.7	102.6	93.5	87.9	144.5	101.6
Malta beverages excise duties	1.8	1.6	3.0	17.1	22.6	29.0	29.7	28.5
Value added tax	6,032.3	4,917.0	6,337.4	6,657.4	5,744.8	7,223.3	7,015.9	6,400.0
Tobacco tax	2.4	3.0	3.4	2.7	4.0	8.4	23.2	19.3**
Others*	697.0	762.3	859.6	931.3	959.8	977.3	1,068.9	917.3

Source: Trinidad and Tobago, Ministry of Finance. Draft Estimates of Revenue (various years)

\*Others = Motor Vehicles Taxes and Duties; Liquor & Miscellaneous Business Licenses & fees; Betting and Entertainment Taxes and Purchase tax

**Figure 2.4: % Change in Tax Receipts in Trinidad and Tobago for the Period 2010–2016**

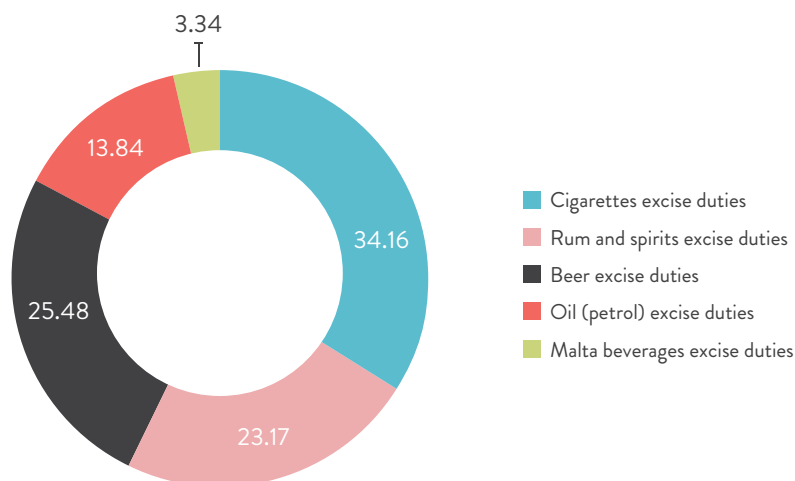


Source: Trinidad and Tobago, Ministry of Finance. Draft Estimates of Revenue (various years)

During the period 2016 to 2017, while total revenues from excise duties decreased by 3.73% (TT\$26.81 million), receipts from cigarette excise duties increased by 11.92%, an increase of TT\$24.19 million, which was the largest increase for the entire period under consideration. This was in large part due to the increase in the excise rate from a rate of TT\$3.81 per pack of 20s to \$4.38 in October 2016.

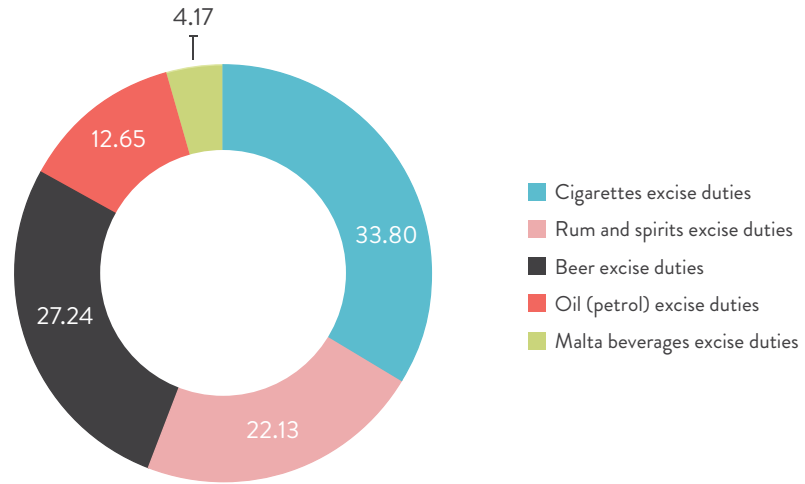
Total taxes on goods and services and total excise duties have been volatile and depict divergent trends over the last 7 years (Figure 2.4). For the period 2014-2017, changes in excise tax revenues have been relatively stable. Moreover, the data from the Ministry of Finance show that excise duties on cigarettes have consistently dominated the revenues from excise taxes, accounting for between 29-34 % of excise tax receipts from 2014 to 2017 (Figures 2.5 to 2.7).

**Figure 2.5: Percentage Breakdown of Total Excise Duties for the Fiscal Year 2014**



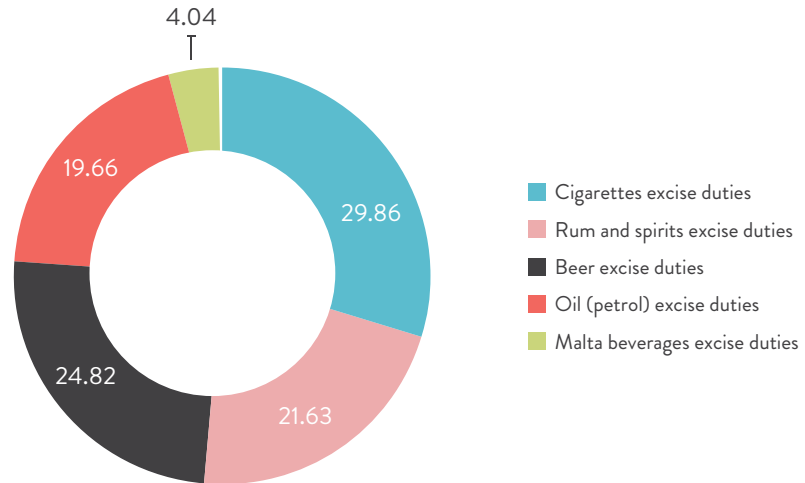
Source: Ministry of Finance Trinidad and Tobago 2016

**Figure 2.6: Percentage Breakdown of Total Excise Duties for the Fiscal Year 2015**




Source: Ministry of Finance Trinidad and Tobago 2017

**Figure 2.7: Percentage Breakdown of Total Excise Duties for the Fiscal Year 2016**



Source: Ministry of Finance Trinidad and Tobago 2017



The Tobacco Control Act of 2009 and the Tobacco Control Regulation of 2013 have been enacted to reduce consumption, dissuade non-users from beginning to consume and to insulate non-users from the negative spill-over effects of smoking. However, these efforts do not seem to have made much impact on consumption.

# 3

## TOBACCO – TAXATION, USE AND PRICES

### 3.1 – Tobacco Use in Trinidad and Tobago

The government and people of Trinidad and Tobago recognise that consumption of tobacco is a problem and steps have been taken to impact the levels of consumption, to dissuade non-users from beginning to consume and to insulate non-users from the negative spill-over effects from those who consume. This has been largely done via the Tobacco Control Act of 2009 and the Tobacco Control Regulation of 2013. However, as this section would show, these efforts do not seem to have made much impact on consumption.

The most common form of tobacco use in the CARICOM region is cigarette smoking, with most users being male. In 2005, Trinidad and Tobago had the highest prevalence rate for cigarette smoking in this region with a rate of 37% for males and 6% for females<sup>14</sup> (Hagley 2011). This rate fell in 2009 for male smokers however, the rate reflected that smoking among females increased to 11% which is an increase of more than 80% from its original rate. The decline in male smoking in 2009 was short-lived as an increase was again seen in 2011. Table 3.1 refers.

Notably, 2009 coincided with the time when the Tobacco Control Act 2009, Chapter 30:04 (hereafter the Act) was enacted. One of the main tobacco control mechanisms laid out in Section 12 (1) of this Act, prohibits smoking or holding a lighted tobacco product in public places, workplaces, malls and other areas where the public converges<sup>15</sup> (Schedule 2 of the Act). Any person who contravenes this section commits an offence and is liable to a fine of \$10,000 and imprisonment for 6 months.

**TABLE 3.1: TOBACCO SMOKING ADULT PREVALENCE RATES FOR SELECTED YEARS**

TOBACCO SMOKING PREVALENCE	2005 <sup>1</sup>	2009 <sup>2</sup>	2011 <sup>3</sup>
Male	37	27	33.5
Female	6	11	9.4

Sources: 1 Hagley, Kew. 2011. Tobacco and non-communicable diseases controlling the tobacco epidemic. West Indian med. j. [online]. 2011, vol.60, n.4, pp. 490-492. ISSN 0043-3144; 2 WHO report on the Global Tobacco Epidemic, 2011. Country Profile Trinidad and Tobago. World Health Organization, Geneva.; 3 WHO report on the Global Tobacco Epidemic, 2017. Country Profile Trinidad and Tobago. World Health Organization, Geneva.

<sup>14</sup> Hagley, Kew. 2011. Tobacco and non-communicable diseases controlling the tobacco epidemic. West Indian med. j. [online]. 2011, vol.60, n.4, pp. 490-492. ISSN 0043-3144.

<sup>15</sup> (a) public transportation terminals (b) workplaces (c) retail establishments including bars, restaurants and shopping malls (d) clubs (e) cinemas (f) concert halls (g) sports facilities (h) pool and bingo halls (i) publicly owned facilities rented out for events (j) any other facilities that are accessible to the public.

The Act also prohibits the sale of tobacco products to persons under the age of 18 years (Section 13.2), and also makes it illegal for persons selling tobacco products to do so in such a way that the consumer may handle the product themselves but rather they must have the assistance of a sales clerk or other employee or agent of the seller prior to purchase (Section 14). The Act also bans the sale of tobacco products in health care facilities, sporting, athletic or recreational facilities, government buildings, educational facilities and any other facilities prescribed by the Regulations (Section 17).

Any person who violates the provisions contained in Section 13 through 17, some of which are described herein commits an offence and is liable:

1. on summary conviction:
  - (a) to a fine of \$50,000 and to imprisonment for three months for the first offence;
  - (b) to a fine of \$100,000 and to imprisonment for six months for the second offence; and
  - (c) to a fine of \$100,000 and to imprisonment for nine months for the third offence; or
2. on conviction on indictment, to a fine of \$200,000 and to imprisonment for one year (Section 37).

The Tobacco Control Act has also placed prohibitions against advertising. There are, however, some limitations to the prohibitions. For instance, a person may advertise a tobacco product by information advertising or brand preference advertising by way of:

- (a) a publication that is provided by mail and addressed to an adult smoker who is identified by name;
- (b) a publication that has an adult readership of not less than eighty-five percent (85%);
- (c) in a place where children (under 18 years) are not permitted by law (Section 19).

These allowances do not apply to lifestyle advertising<sup>16</sup> or advertising that could be interpreted as being appealing to children. Tobacco sponsorships, advertising and other promotions of tobacco sponsorships in which the name of a sponsoring entity is publicised are prohibited.

Notwithstanding the provisions and prohibitions contained in the Tobacco Control Act, tobacco use, specifically cigarette smoking in Trinidad and Tobago continues to be a problem. These control mechanisms may have had a small impact on cigarette smoking initially (2009) however they have not been able to curtail consumption in such a way as to move the country away from double digits cigarette smoking prevalence rates.

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<sup>16</sup> advertising that associates a product with, or evokes an emotion about, or image of, a way of life such as one that includes glamour, recreation, excitement, vitality, risk or daring

### 3.2 – Current Structure of Taxation of Tobacco in Trinidad and Tobago

The tobacco tax system in Trinidad and Tobago consists of four main taxes; these are Import Duties; Excise Taxes; Value Added Tax (VAT) and a Tobacco Tax (which is applied to imports). The rate of import duty on cigarettes and other tobacco products for fiscal 2016/17<sup>17</sup> is 50.7% of the Cost, Insurance and Freight (CIF) value. The specific excise and the Tobacco Tax are applied on a pack of 20s at a rate of TT\$4.38 per pack. The excise tax is applied on locally manufactured cigarettes that are produced for consumption in Trinidad and Tobago, while the Tobacco Tax is applied on imported cigarettes with a base of CIF

.....  
 The rate of import duty on cigarettes and other tobacco products is 50.7% of the CIF value. The specific excise and the Tobacco Tax are applied on a pack of 20s at a rate of TT\$4.38 per pack.

value plus import duties. The existing rate of excise taxes represents a 15% increase from its 2015 level.

Table 3.2 provides an overview of the trend in the rates of the various taxes levied on Tobacco products in Trinidad and Tobago for the period 2009 to 2017.

A compounded 12.5% VAT is also levied on all tobacco and tobacco products purchases, down 2.5 percentage points from 2015. *The Import and Excise Taxes as well as the VAT rates are applied across the board, with no variations based on the tobacco product.* This is different to what occurs in other

international jurisdictions, where the taxation rates may vary based on the size and nature of the tobacco and tobacco product. For example, in Canada, different rates of duties are applied to cigarettes, tobacco sticks, manufactured tobacco and cigars. Indeed, *given the objective of lower tobacco consumption, this represents one area in which fiscal policy can be modified.*

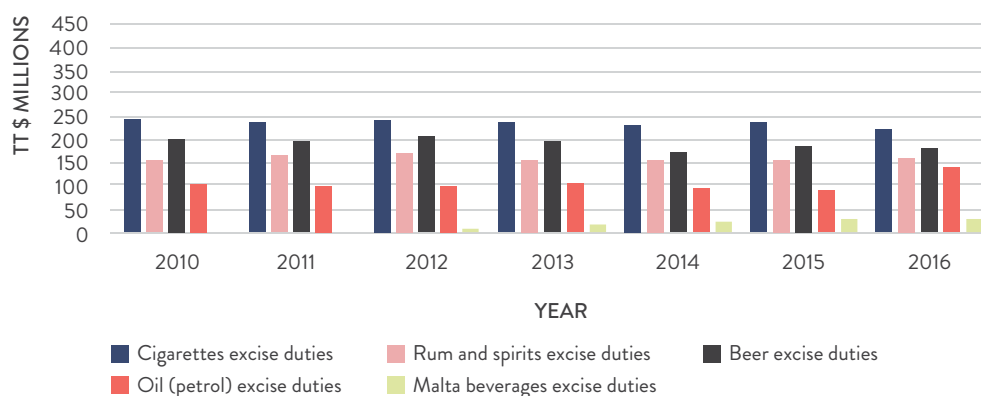
**TABLE 3.2: TAX RATES FOR TOBACCO PRODUCTS FOR THE PERIOD 2009 TO 2017**

TYPE OF TAX	2009	2010	2011	2012	2013	2014	2015	2016	2017
Import Tax rate	...	...	...	...	...	50.07	50.07	50.07	50.07
Excise Tax Rate (per pack of 20s)	3.81 (as of Sept.)	3.81	3.81	3.81	3.81	3.81	3.81	4.38 (as of Oct.)	4.38
VAT	15%	15%	15%	15%	15%	15%	15%	12.5%	12.5%

Source: Customs & Excise Division

<sup>17</sup> The fiscal year in Trinidad and Tobago runs from October to September. For conciseness, in this report the fiscal year is reported as the latter year. For example, fiscal 2016/17 is reported as 2017 in the text, figures and tables.

**Figure 3.1: Revenues from the subcomponents of Excise Taxes in Trinidad and Tobago for the period 2010–2016**

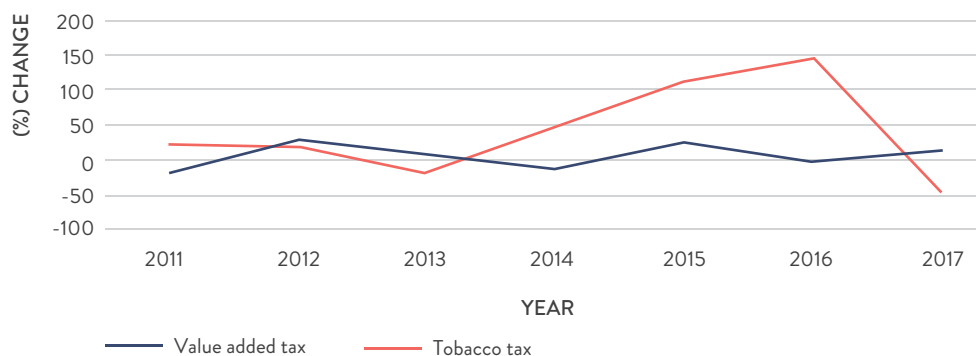


Source: Ministry of Finance Trinidad and Tobago 2010–2017

The range of excise taxes in Trinidad and Tobago consists of taxes on cigarettes, beer, malt beverages, rum and spirits and oil. Figure 3.1 shows details.

As can be seen in Figure 3.2, which follows, the growth rate of VAT and tobacco tax revenues has been increasing over the last seven years with a small decline in 2013 and a sharp fall in 2017. These revenues increased from TT\$2.4 million in 2011 to TT\$20.3 million in 2016. Similarly, tobacco revenues have increased substantially from 2013 to 2016 from 19.7% to 142.3% respectively. Growth in value added tax revenues has been fluctuating over the last four years reaching a high of 28.8% in 2012 and a low of -2.87 percent in 2016. Despite these trends there is a significant difference in excise revenues collected, which are much higher, compared to those collected from tobacco taxes and VAT. This is not unexpected, since the top selling brands of cigarettes in the country are locally manufactured

**Figure 3.2: Growth in VAT and Tobacco Tax Revenues in Trinidad and Tobago for the period 2011–2017**



Source: Ministry of Finance Trinidad and Tobago 2010–2017



**Figure 3.3: Overview of Tax Types and Impact on Price and Consumption**



Source: ITC Project (May, 2014). *Tobacco Price and Taxation: ITC Cross-Country Comparison Report*. University of Waterloo, Waterloo, Ontario, Canada

and are therefore not subject to import duties and taxes. Furthermore, VAT and import duties are ad valorem taxes applied to items of relatively lower value, whereas the excise tax is a specific tax that is sensitive to the quantity of the product sold.

Over the years Trinidad and Tobago sometimes increased the cost of tobacco through increases in the tax rates for tobacco products. Based on the information provided in Table 3.1, while there have been some positive trends in the rates of taxes charged on tobacco products, these have been few and relatively small. In fact, there have been only two increases in the excise rate during the period 2005 to 2017, one in 2009 and the other in 2016 and even then, there was only a 35% increase in the rate from its 2005 rate.

TABLE 3.3: TOBACCO TAXATION SUCCESS STORIES

SOUTH AFRICA	UKRAINE	MEXICO	TURKEY	UNITED STATES
Impact of 1993–2009 excise tax increase on	Impact of 2008–2010 excise tax increase on	Impact of 2009–2011 excise tax increase on	Impact of 2005–2011 excise tax increase on	Impact of 2008–2009 excise tax increase on
Final retail price = 211% ↑	Final retail price = 120% ↑	Final retail price of a pack of Marlboro = 35% ↑	Final retail price of high/luxury cigarettes = 128% ↑	Final retail price = 22% ↑
Tobacco sales = 33% ↓	Tobacco sales = 50% ↓ among males <sup>ii</sup>	Tobacco sales = 30% ↓	Tobacco sales = 15% ↓	Tobacco sales = 9.7% to 13.3% ↓ among youth in grades 8, 10 and 12 <sup>iii</sup>
Government revenues = 800% ↑	Government revenues = 400% ↑	Government revenues = 38% ↑	Government revenues = 124% ↑	Government revenues = 129% ↑

Source: ITC Project (May, 2014). *Tobacco Price and Taxation: ITC Cross-Country Comparison Report*. University of Waterloo, Waterloo, Ontario, Canada

Article 6 of the WHO Framework Convention on Tobacco Control (WHO FCTC) states that countries should implement tax and price policies, on tobacco and tobacco products to reduce tobacco consumption.<sup>18,19</sup> Figure 3.3 provides an overview of the various types of taxes that can be imposed by countries.

According to the International Tobacco Control Policy Evaluation Project (2014), “governments should favour excise taxes on goods with large sales volumes, few producers, inelastic demand (unchanging demand), easy definability and a lack of close substitutes.”<sup>20</sup> Tax and price increases on tobacco and tobacco products should therefore be at levels that can effectively reduce the consumption of these products and at the same time, increase Government revenues. Some countries have managed to achieve some measure of success in reducing tobacco consumption by implementing significant taxes on tobacco products (Table 3.3).

18 Trinidad and Tobago signed this treaty in August 2003 and ratified it in August 2004, which made the provisions of this treaty legally binding

19 United Nations Treaty Series website. WHO Framework Convention on Tobacco Control. [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IX-4&chapter=9&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IX-4&chapter=9&clang=_en). Accessed 14 November 2017

20 ITC Project (May, 2014). *Tobacco Price and Taxation: ITC Cross-Country Comparison Report*. University of Waterloo, Waterloo, Ontario, Canada

### 3.3 — Tobacco Price Analysis

The market for tobacco in Trinidad and Tobago is dominated by one local producer — West Indian Tobacco Company (WITCO). The company supplies 25 brands of tobacco products to the local and regional markets. However, in Trinidad and Tobago, there are four dominant brands: Dunhill, Du Maurier, Broadway and Mt.d'or, which vary in price. Other local brands include Morello and Pall Mall. In addition to the cigarettes produced locally, there are several imported brands such as Marlboro, Millionaire, Zonking, Tradition and L & M, among others, some of which originate from Asia and the Middle East, and which have seen a recent upsurge in usage.

Given that price is a critical determinant of tobacco consumption, an analysis of cigarette prices in Trinidad and Tobago was carried out over a two-week period in October 2017. The sampling methodology and results are provided in the following sub-sections.

#### 3.3.1 — Sampling Process

A sampling frame was constructed using a list of registered retail establishments in Trinidad and Tobago, provided by the Central Statistical Office (CSO). This list was further augmented by searches of the online telephone directory and other internet sources. The sample was selected through a stratified random sampling process, with Municipal Regions being chosen as the stratification factor.

Among the entities sampled were supermarkets, restaurants, restaurant and bars, bars, liquor stores and groceries and bars. Each retail entity was categorized based on its registration description or its trading name description (in the case of telephone directory searches). Refer to Table 3.4 for details.

For brevity, four broad categories were created, namely "Supermarkets/Grocery Stores", "Restaurant and Bars/Restaurants/Bars", "Liquor Store" and "Grocery and Bars". Table 3.5 displays the distribution of the sample by Category of Establishment. Prices of cigarettes by brand size, category of establishment, Municipal Region (Trinidad) and Island (Tobago) were collected via telephone contact. A sample of 114 establishments was used in the analysis.

**TABLE 3.4: DISTRIBUTION OF SAMPLE BY CATEGORY OF ESTABLISHMENTS**

CATEGORY OF ESTABLISHMENT	FREQUENCY	PERCENTAGE
Grocery and Bar	5	4.39
Liquor Store	3	2.63
Restaurant and Bar/Restaurant/Bar	36	31.58
Supermarket/Grocery Store	70	61.40
<b>Total</b>	<b>114</b>	<b>100</b>

TABLE 3.5: DISTRIBUTION OF SAMPLE BY REGIONS

REGION	NO. OF DATA POINTS	NO. OF ESTABLISHMENTS
Arima	40	5
Chaguanas	61	9
Couva/Tabaquite/Talparo	81	12
Diego Martin	52	9
Mayaro/RioClaro	23	3
Penal/Debe	52	7
Point Fortin	28	4
Port of Spain	72	13
Princes Town	44	6
San Fernando	68	10
San Juan/Laventille	38	6
Sangre Grande	30	5
Siparia	40	5
Tobago*	55	7
Tunapuna/Piarco	94	13
<b>Total</b>	<b>778</b>	<b>114</b>

Note: \*=island

The Couva/Tabaquite/Talparo, Port of Spain, San Fernando and the Tunapuna/Piarco Regions had greater representation in the sampling frame, hence the size of the sample chosen for each (12, 13, 10 and 13 respectively). In total, 778 price observations from the 15 regions were used in the analysis. Table 3.5 provides further details of the sample distribution by Region.

### 3.3.2 — Sample Descriptive Statistics

The price analysis was conducted using only the four main brands used in Trinidad, since these are the brands that attract the greatest volume of sales.

The average price of a pack of cigarettes 20s (full pack), is TT\$28.66 (US\$3.92)<sup>21</sup> 95% CI [28.04, 29.60], while a pack of 10s (half pack) averaged TT\$15.31 (US\$2.25) 95% CI [14.98, 15.63]. The results show that the price of a pack of cigarettes is slightly higher in Trinidad than in Tobago. In Trinidad, the average prices of packs of 20s and 10s are TT\$28.69 (US\$4.21) and TT\$15.31 (US\$2.25), respectively, versus TT\$ 28.23 (4.15) for a pack of 20s and TT\$15.30 (US\$2.25) for a pack of 10s in Tobago.

<sup>21</sup> Exchange rate of 6.7993 to 1 USD, effective date: 27/10/17

**TABLE 3.6: AVERAGE PRICE OF CIGARETTES BY REGION**

REGION	AVERAGE PRICE (PACK OF 20S, TT\$)	AVERAGE PRICE (PACK OF 20S, USD)	AVERAGE PRICE (PACK OF 10S, TT\$)	AVERAGE PRICE (PACK OF 10S, USD)
Arima	25.19	3.70	14.50	2.13
Chaguanas	32.45	4.77	15.69	2.31
Couva/Tabaquite/Talparo	26.85	3.95	14.71	2.16
Diego Martin	30.26	4.45	16.28	2.39
Mayaro/Rio Claro	28.27	4.16	14.69	2.16
Penal/Debe	26.41	3.88	14.65	2.15
Point Fortin	28.94	4.26	15.67	2.30
Port of Spain	30.85	4.54	15.16	2.23
Princes Town	28.85	4.24	15.11	2.22
San Fernando	28.05	4.13	15.42	2.27
San Juan/Laventille	30.59	4.50	16.19	2.38
Sangre Grande	28.47	4.19	16.55	2.43
Siparia	26.82	3.94	14.94	2.20
Tobago*	27.40	4.03	15.32	2.25
Tunapuna/Piarco	28.41	4.18	15.49	2.28

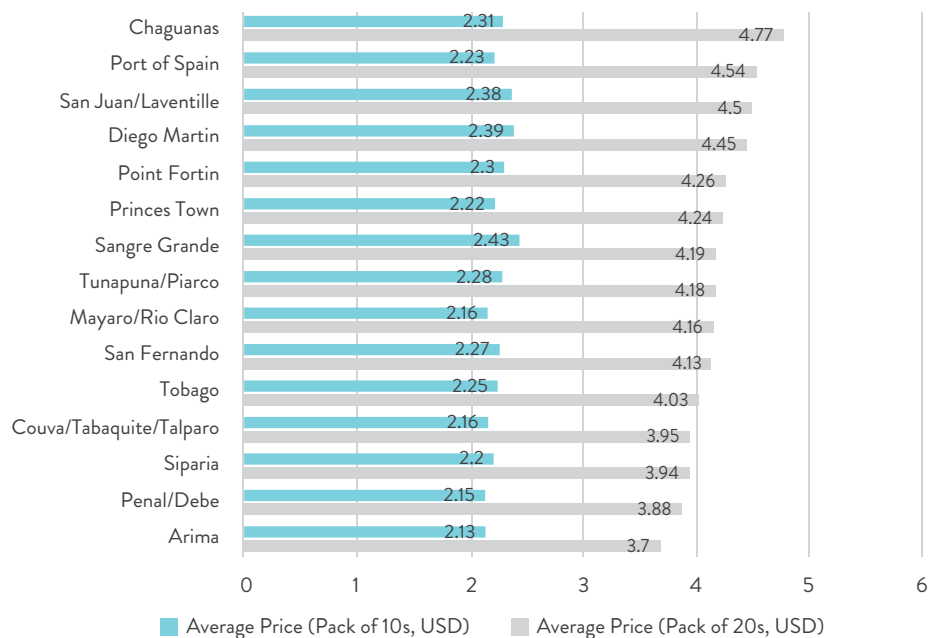
Note: \*=island

Similar variances in prices were observed across Regions in Trinidad and across category of establishments. The Chaguanas Region recorded the highest average prices for the 20-sticks pack of cigarettes, while Sangre Grande Region recorded the highest average price for the 10-sticks pack of cigarettes; TT\$32.45 (US\$4.77) and TT\$16.55 (US\$2.43), respectively. The lowest average prices per pack of cigarettes (20s and 10s) were found in the Arima Region; TT\$25.19 (US\$3.70) and TT\$14.50 (US\$2.13), respectively. See Table 3.6 and Figures 3.4 to 3.6 for average price details.

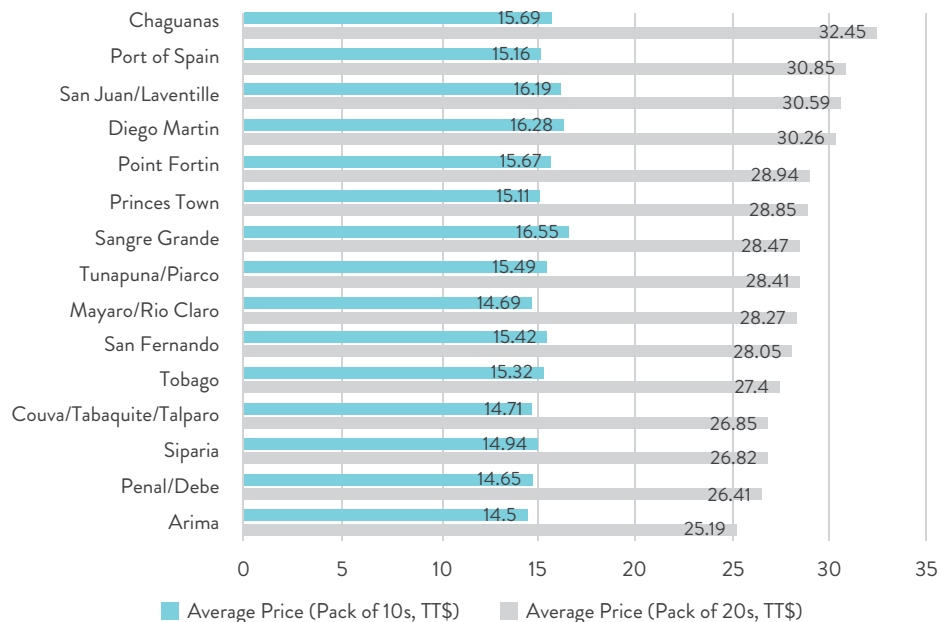
Across establishments, the “Restaurant and Bar/Restaurant/Bar” category recorded the highest average prices of cigarettes, TT\$33.44 (US\$4.92) per pack of 20s, which is TT\$4.78 (US\$0.70) higher than the national average. Similarly, the average price per pack of 10s in that category came in at TT\$17.27 (US\$2.54) per pack, TT\$1.96 (US\$0.29) above the national average, (see Table 3.7 and Figure 3.6).

Data on cigarette sales were not available and were therefore derived using published data on cigarette excise revenues and the specific excise tax rate. Market share was estimated from ‘percentage sales by brand’ information, provided by retailers. Based on this information the estimates show that the Du Maurier brand accounted for approximately 63% of the cigarette market, followed by Mt’dor with approximately 14% (Figure 3.7).

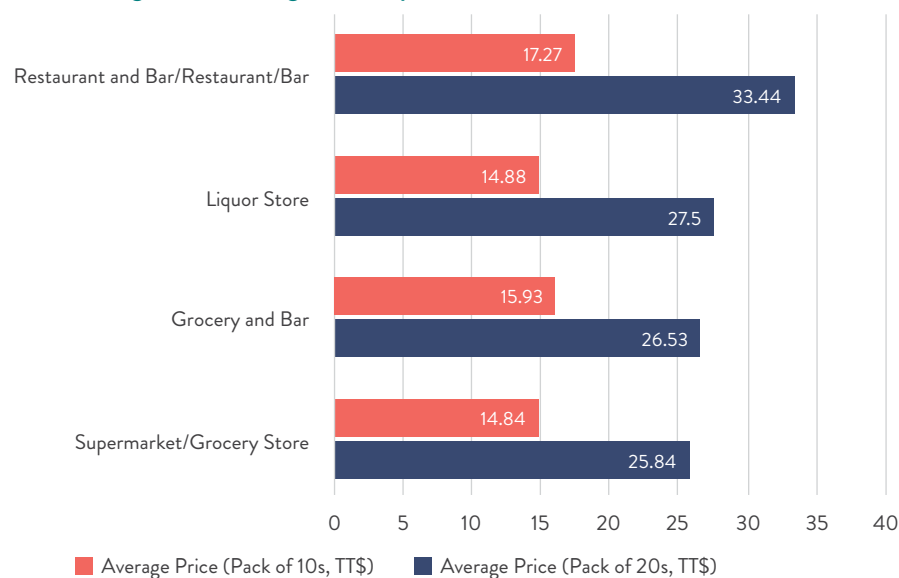
**Figure 3.4: Average Price of Cigarettes by Region (US\$)**



**Figure 3.5: Average Price of Cigarettes by Region (TT\$)**



**Figure 3.6: Average Price of Cigarettes by Establishments**

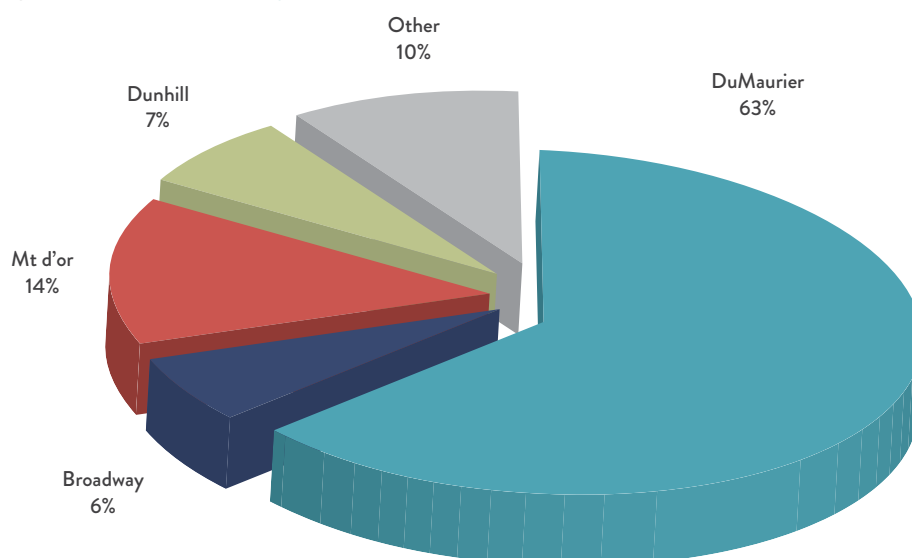


The selected brands of cigarettes were placed into three market segments; Premium, Mid-price and Economy, based on price. The premium brand of cigarettes is the Dunhill brand and its variations (including Dunhill Switch, Release, Fine Cut), while mid-price brands include Du Maurier, Broadway and Marlboro. The economy brand category has a larger selection of brands which include Mt.d'or, L & M, Millionaire, Tradition and Zonking, among others. Prices per pack of 20 sticks premium brand range from TT\$32 to TT\$55 (US\$8.09), depending on the place of purchase. Mid-price brands normally range between TT\$20 (US\$2.9) and TT\$30 (US\$4.41) for the 20s stick pack. The survey of prices showed that prices of the economy brands can be as low as TT\$15.00 (US\$2.21) per pack of 20 sticks. As seen in Figure 3.8, the Mid-price brand category accounts for 72% of the cigarette market in Trinidad and Tobago.

Figure 3.9 shows the estimated quantity of cigarettes sold for the three brand categories; for the period 2009 to 2016. During the period, cigarette sales remained relatively stable between 2010 and 2012. However, overall sales fell in 2013 and 2014, but recovered in

**TABLE 3.7: AVERAGE PRICE OF CIGARETTES BY ESTABLISHMENTS**

CATEGORY OF ESTABLISHMENTS	AVERAGE PRICE (PACK OF 20S TT\$)	AVERAGE PRICE (PACK OF 10S TT\$)
Grocery and Bar	26.53(US\$3.90)	15.93(US\$2.34)
Liquor Store	27.5(US\$4.04)	14.88(US\$2.19)
Restaurant and Bar/ Restaurant/Bar	33.44(US\$4.92)	17.27(US\$2.54)
Supermarket/Grocery Store	25.84(US\$3.80)	14.84(US\$2.18)

**Figure 3.7: Estimated Cigarette Market Share, by Brand**

Source: Estimated from retailers' estimates of percentage sales by brand.

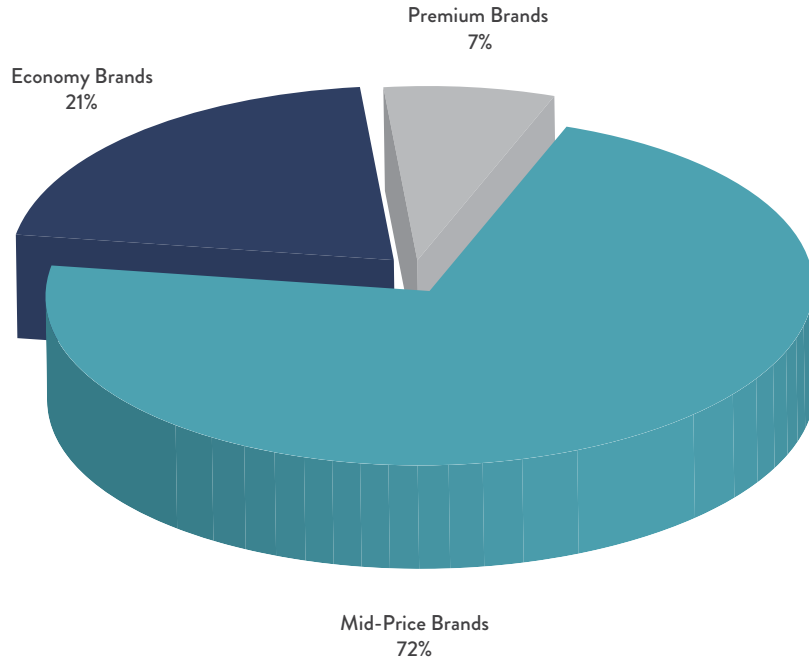
2015; driven by a sharp (112%) increase in imports of mostly economy brands. Sales of the locally produced cigarettes experienced a notable downturn (13.6%) in 2016 that was largely led by the mid-price and premium categories of the market segment, which fell 11.4% and 13.6%, respectively. The data suggest that locally produced mid-priced brands of cigarettes have lost market share to mostly imported economy and other mid-price brands. The observed decrease in cigarette sales in 2016 also coincides with a 15% increase in the excise tax, which took effect in the last quarter of the same year. During the period (2010–2016) an estimated average of 62.7 million packs (20s) of cigarettes were sold each year.

This price analysis is especially important for a comparative study of prevailing prices in the neighbouring OECS countries, since it will highlight price differentials among the countries. This will give some indication of the incentive for intra-regional cross border smuggling—a possible fallout from higher tax-induced prices and will also provide the basis for one of the dimensions of the argument for a harmonized approach to tobacco taxation in the region. Since harmonization will require, inter alia, a monitoring of the impact of tobacco taxation it will be useful to consider the impact of the taxation under different scenarios. Simulated consequences of these scenarios are presented in the following section.

The data suggest that locally produced mid-priced brands of cigarettes have lost market share to mostly imported economy and other mid-price brands.

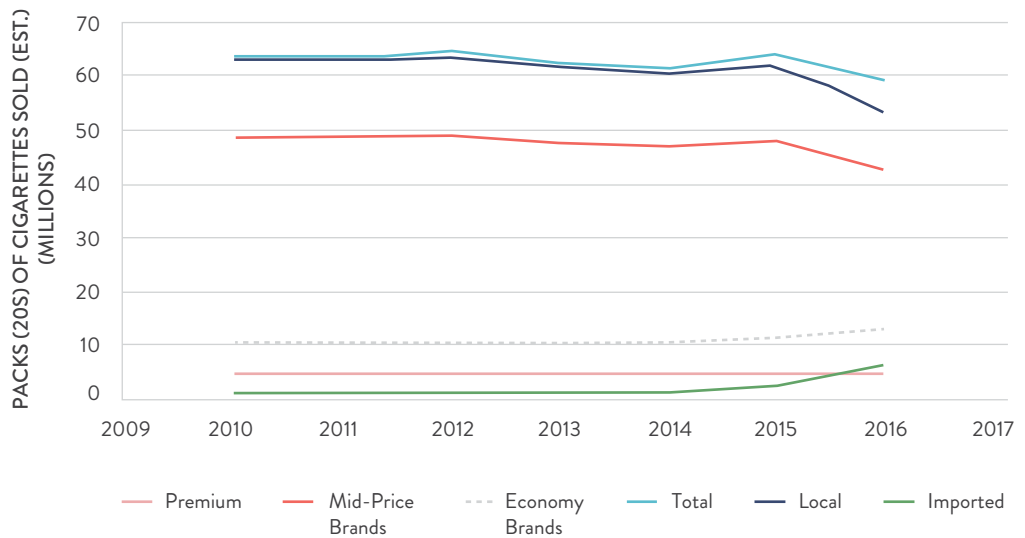


**Figure 3.8: Estimated Cigarette Market Share by Brand Segments**



Source: Estimated from retailers' estimates of percentage sales by brand.

**Figure 3.9: Cigarette Sales by Brand Category**



Source: Estimated from excise revenues data published by the Ministry of Finance, Trinidad and Tobago and retailers' supplied estimates of percentage sales by brand, after adjustments for place of manufacture.



# 4

## IMPACT ASSESSMENT OF TOBACCO TAX INCREASES ON PRICE, CONSUMPTION, AND TAX REVENUE

### 4.1 – Rational for Taxing Tobacco

Taxes can be a powerful instrument to decrease tobacco consumption for health reasons and have therefore been a core component of efforts by the World Health Organization (WHO) and World Bank Group (WBG) to curb the tobacco epidemic. With an annual global death toll of over 7 million people, tobacco is one of the most prominent killers of our times. Despite low price elasticity in the short run, the much larger long-run impact of taxes on consumption has motivated a significant surge toward the use of taxes as a way to decrease the burden of tobacco-related diseases.<sup>22</sup>

According to the International Monetary Fund (IMF),<sup>23</sup> determining the desirable level of tobacco excises requires considering various demand-related factors. These notably include overall consumption (and therefore prevalence), price, income levels and the ensuing affordability of tobacco products, and the reaction of the demand to tax increases, as well as due consideration to negative externalities from smoking—harm suffered, in some form, by non-smokers, has been the primary economic argument for taxing tobacco products more heavily than the generality of goods, and also needs to be taken of “internalities”— self-control problems that can provide a distinct reason (additional to external effects) for heavy taxes on smoking.

Given the problems of quantifying the various social costs and offsets, particularly for countries with limited data, the WBG and WHO recommend that countries, which want to adopt comprehensive tobacco control policies, should use, as a yardstick, a rule that

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<sup>22</sup> Jha, P and Chaloupka, F.J. 1999. *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington, DC: World Bank.

<sup>23</sup> Petit, P., and Nagy, J. 2016. “How to design and enforce tobacco excises?” How-to notes. Fiscal Affairs Department, International Monetary Fund, October 2016.

tax should account for two-thirds to four-fifths of the retail price of a pack of cigarettes.<sup>24</sup> This yardstick, which should be viewed as a floor or goal and not as a ceiling, has become widely used in discussions of tobacco control across the world. It is desirable that the application of this yardstick is referred to excise taxes and not total taxes. The reason that an excise yardstick would be preferred is that cigarette excises raise the price of cigarettes relative to the prices of other consumer goods. In contrast, a general consumption tax at a standard rate does not change relative prices and thus will have a minimal effect on smoking.<sup>25</sup>

In many countries, raising tobacco taxes can offer a “win-win”: higher revenue and positive health outcomes. Countries’ circumstances and governments’ weighting of revenue, health, and other objectives vary, and hence so too will the desirable level of tobacco tax rates. In many cases, however, current tax rates are evidently far below what is feasible in terms of revenue potential. Thus, tax increases could serve revenue purposes as well as health and other objectives, as recently evidenced by the recent experience of different countries in the world; e.g. Armenia, Botswana, Colombia, China, Moldova, Montenegro, Philippines, Turkey, Ukraine, and the United States (in most of these countries, the WBG has supported in the assessment and design of tobacco tax policy reforms). Of course, countries putting more weight on health objectives could raise taxes even further than the revenue maximizing point, in which case lower tax revenue would be an implicit and accepted consequence of a higher tax level.

## 4.2 – The Trinidad and Tobago Context

As noted in the previous section of this report, the market for tobacco in Trinidad and Tobago is dominated by one local producer—West Indian Tobacco Company (WITCO). The company supplies 25 brands of tobacco products to the local and regional markets. However, in Trinidad and Tobago, there are four dominant brands: Dunhill, Du Maurier, Broadway and Mt.d’or, which vary in price. Other local brands include Morello and Pall Mall. In addition to the cigarettes produced locally, there are several imported brands such as Marlboro, Millionaire, Zonking, Tradition and L & M, among others, some of which originate from Asia and the Middle East, and which have seen a recent upsurge in usage.

To estimate the average retail price of a pack of 20-cigarettes for most common brands, a sampling frame was constructed by HEU, Centre for Health Economics, The University

<sup>24</sup> Jha, P. and Chaloupka, F.J. 1999. *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington, DC: World Bank; and, World Health Organization (WHO). 2015. “WHO Report on the Global Tobacco Epidemic, 2015: Raising Taxes on Tobacco.” Geneva: WHO.

<sup>25</sup> Sunley, E. 2009. “Taxation of cigarettes in the Bloomberg Initiative Countries: overview of policy issues and proposals for reform.” [http://www.tobaccofreeunion.org/images/stories/economic-report/Sunley\\_White\\_paper\\_12\\_09\\_09.pdf](http://www.tobaccofreeunion.org/images/stories/economic-report/Sunley_White_paper_12_09_09.pdf)

of the West Indies. The sampling was carried out using a list of registered retail establishments in Trinidad and Tobago provided by the Central Statistical Office (CSO); online searches and other internet sources further augmented the sample.<sup>26</sup>

As shown in Table 4.1 below, most of the cigarettes consumption is domestically produced with less than 4% imported, mainly in the economy type cigarettes and a few in the mid-price range. During the period 2010–2016, cigarette sales taxed (as a proxy to consumption) remained relatively stable between 2010 and 2012. However, overall sales fell in 2013, 2014, and 2016 with a temporary increase in 2015. While the Economy brands

**TABLE 4.1: TRINIDAD AND TOBAGO CURRENT CIGARETTE MARKET – RETAIL PRICE TRENDS AND MARKET SHARE**

<b>TRINIDAD AND TOBAGO TOBACCO TAX MATRIX</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Average Exchange rate TT\$/ 1US\$ (Estimate)	6.38	6.43	6.43	6.44	6.41	6.38	6.67
<b>Macroeconomic data [1]</b>							
GDP per capita growth (annual % – constant local currency terms) [2]	2.8	(0.8)	0.8	2.1	(1.0)	(1.0)	(5.8)
Inflation rate (Inflation, annual average %)	10.5	5.1	9.2	5.3	5.7	4.6	3.1
Total cigarette sales taxed (million packs of 20s) (est) [3]	63.76	63.75	64.27	62.54	61.63	63.84	59.34
<b>Composition of the retail price [4]</b>							
Cigarettes (Average price 20 cigarettes pack TT\$) (est)	17.60	19.20	20.40	24.71	26.40	27.51	28.09
Cigarettes (Average US\$ price 20 cigarettes pack)	2.76	2.99	3.17	3.84	4.12	4.31	4.21
<b>Economy cigarettes Domestic (Mt. d'or)</b>							
Average retail price of economy cigarettes (per pack) (est)	13.00	14.00	15.00	15.00	15.00	16.21	17.03
Market share of economy cigarettes (est)	17%	18%	18%	18%	19%	22%	32%
<b>Economy cigarettes Imported (Millionaire, Zonking, Tradition, L&amp;M)</b>							
Average retail price/Economy imported cigarettes (per pack) (est)	13.86	14.17	14.65	15.31	15.74	16.05	16.50
Proportion of total economy cigarettes imported (est)	0.12	0.12	0.12	0.12	0.12	0.12	0.12

26 The sample was selected through a stratified random sampling process, with Municipal Regions being chosen as the stratification factor.

**TABLE 4.1: TRINIDAD AND TOBAGO CURRENT CIGARETTE MARKET—RETAIL PRICE TRENDS AND MARKET SHARE (cont.)**

TRINIDAD AND TOBAGO TOBACCO TAX MATRIX	2010	2011	2012	2013	2014	2015	2016
<b>Mid-price cigarettes Domestic (Du Maurier, Broadway)</b>							
Average retail price/mid-price cigarettes (per pack) (est)	16.50	18.00	19.00	21.50	23.50	25.57	26.87
Market share of mid-price cigarettes (est)	75%	75%	75%	75%	74%	71%	63%
<b>Mid-price cigarettes Imported (Marlboro)</b>							
Average retail price/mid-price imported cigarettes (per pack TT\$) (est) (Marlboro)	21.24	21.74	22.45	23.46	23.92	24.39	25.07
Proportion of total mid-price cigarettes imported (est)	1%	1%	1%	1%	1%	1%	1%
<b>Premium cigarettes Domestic (Dunhill)</b>							
Average retail price of premium cigarettes (per pack) (est)	21.00	23.00	25.00	29.00	31.00	31.75	33.36
Market share of premium cigarettes (est)	7.3%	7.2%	7.2%	7.2%	7.1%	6.7%	5.4%

1 Source: Central Bank of Trinidad and Tobago & MOF projections 2017–2020

2 IMF WEO October 2017

3 Calculated from tax revenues data (Tobacco Tax System, Structure, Fiscal Assessment and Recommendations, TRINIDAD AND TOBAGO; HEU, Centre for Health Economics, The University of West Indies

4 Estimated from historical prices provided by WITCO and adjusted 2017 prices; HUE, Centre for Health Economics, The University of West Indies

consumption increased from 2014 to 2016, almost doubling its market share from 18% to 32% at the expense of mid-price cigarettes which decreased from 75% in 2013 to 63% in 2016 as well as the premium cigarettes from 7.2% to 5.4% in the same period. This consumer shift from higher to lower retail price of 20 cigarettes pack, coincided with a reduction in the GDP per capita in the range of –1% in 2014 and 2015, an –5.8% in 2016. The last coupled with a specific tax increase in October 2016 from TTD 3.81 to TTD 4.38 per 20 cigarettes pack (15% increase). Retail sale prices increased in average from about TTD 24.70 to TTD 28.10 (about 13.8%), however the ratio from economy domestic produced cigarettes to mid-price remained close to 60% lower, providing enough incentives to downshift consumption to lower retail prices per cigarettes pack.

### 4.3 – The Tobacco Tax Structure and Prices in Trinidad and Tobago

The tobacco tax system in Trinidad and Tobago consists of four main taxes; these are Import Duties; Excise Taxes; Value Added Tax (VAT) [1], and a Tobacco Tax (which is applied to imports) (see Table 4.2)

- The rate of import duty on cigarettes and other tobacco products for fiscal 2016/2017 is 50.7% of the Cost, Insurance and Freight (CIF) value.
- The specific excise and the Tobacco Tax<sup>27</sup> are applied on a pack of 20s at a rate of TT\$4.38 per pack (effective October 2016). The excise tax is applied on locally manufactured cigarettes that are produced for consumption in Trinidad and Tobago, while the Tobacco Tax is applied on imported cigarettes with a base of CIF value plus import duties. The existing rate of excise taxes represents a 15% increase from its 2015 level.
- The value-added tax (VAT) (12.5%) is equivalent to 11.11% of final retail price; for modelling purposes and to fully represent the impact of the VAT in total tobacco tax revenue, the model assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, wholesale and retail point of sale.

The fiscal year in Trinidad and Tobago runs from October to September. For conciseness, in this report the fiscal year is reported as the latter year. For example, fiscal 2016/17 is reported as 2017 in the text, figures and tables.

**TABLE 4.2: TRINIDAD AND TOBAGO TOBACCO TAX SCENARIOS – CURRENT CIGARETTE EXCISE TAX STRUCTURE**

TAX DESCRIPTION	ACTUAL 2015		ACTUAL 2016		BASELINE 2017	
	1/01–31/09/2015	1/10–31/12/2015	1/01–31/09/2016*	1/10–31/12/2016*	1/01–31/09/2017	1/10–31/12/2017
	TAX (% OR TT\$)					
Import Duty (ID)	50.07%	50.07%	50.07%	50.07%	50.07%	50.07%
Value Added Tax (VA) [1]	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
<b>Current Excise Tax Structure</b>						
Simple Specific excise tax & Cigarette Tobacco Tax (on imports)	3.81	3.81	3.81	4.38	4.38	4.38
	190.50	190.50	190.50	219.00	219.00	219.00

\*Source: Structure, Fiscal Assessment and Recommendations, TRINIDAD AND TOBAGO; HEU, Centre for Health Economics, The University of the West Indies, December, 2017.

\*\* TT\$4.38 per pack applicable from Oct 1st, 2016.

The fiscal year in Trinidad and Tobago runs from October to September. For conciseness, in this report the fiscal year is reported as the latter year. For example, fiscal 2016/17 is reported as 2017 in the text, figures and tables.

[1] The simulation model assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, wholesale, and retail point of sale.

<sup>27</sup> For modelling purposes and average excise tax metrics, the excise tax on domestic produced cigarettes and the Tobacco Tax for imported cigarettes are both considered excise tax.

[1] The simulation model assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, wholesale, and retail point of sale.

The 60% price differential shown in Table 4.2 above, between the cheapest brands to the mid-priced brands is providing downward switching incentives to consumers in response to tax and price increases. Recent findings documented in an IMF publication<sup>28</sup> show that the structure of cigarette taxes is critical in determining the relative prices of different tobacco products and brands across the price spectrum and thereby influencing the behavior of consumers within a country. Indeed, while tax policy can help reduce negative externalities associated with tobacco consumption, the taxation arrangement needs to avoid providing incentives to switch down to cheaper cigarette brands in response to tax related and other price increase therefore protecting public health.

Although the uniform specific excise tax in TT is applied equally to economy, mid-price, premium and non-filter cigarettes, international best practice is to impose uniform specific taxes that are adjusted regularly to account for increases in the price level and increases in average incomes. As indicated in Table 4.2, last excise tax increase took place back in October of 2016. Within the period 2016–2018 the GDP per capita growth has been projected to move from negative (-5.8%) in 2016 to positive (1.4%) in 2018;<sup>29</sup> on the other hand, inflation continues eroding 2016 tobacco tax increase gains at an estimated rate of 3.2% annually<sup>30</sup> (see Annex I Table 1). Both trends suggest the need for the Government of Trinidad and Tobago to consider reviewing the tobacco excise tax levels.

**Trinidad and Tobago signed the WHO Framework Convention on Tobacco Control (WHO FCTC) in August 2003, and ratified it in August 2004, which made the provisions of this treaty legally binding.** As can be observed in Table 4.3 below, current average excise tax share in the retail price of cigarettes at 17% (2016) and 18.7% (2017 projected) is lower than the WHO recommended share of 70%, suggesting that there is significant potential for extracting more tax revenue that has remained untapped. To simulate the consumption and additional fiscal revenue needed to calibrate and validate the model, the model projections were compared with the 2015–2016 revenues reported by the MoF. The tobacco excise revenue reported by the MoF (2015 = 243.24 million TTD; and 2016 = 226.1 million TTD) provided the metrics to calibrate the model comparing this figures with the simulation model output (see assumptions Annex I-Table 2).

As observed in Table 4.3, projected excise tax revenue for 2015 = 243 million TTD; and 2016 = 226 million TTD, resulted in small differences (within less than 0.01%) which falls in a statistical accepted range. The revenue for the period 2017 was annualized based on

28 Cevik, S. 2016. "Smoke Screen: Estimating the Tax Pass-Through to Cigarette Prices in Pakistan." IMF Working Paper WP/16/179. Washington, D.C.: IMF.

29 IMF. 2017. World Economic Outlook. Seeking Sustainable Growth: Short-Term Recovery, Long-Term Challenges. Washington, D.C.

30 Central Bank of Trinidad and Tobago; IMF WEO October 2017.



**TABLE 4.3: BASELINE / ACTUAL & MODEL OUTPUTS EXCISE TAX SCENARIOS**

SUMMARIZED OUTPUT	ACTUAL 2015*	ACTUAL (2016): SIMPLE SPECIFIC TTD3.81 PER 20 CIGARETTES PACK	BASELINE 2017 (PROJECTED): SIMPLE SPECIFIC INCREASED TO TT\$4.38 PER 20 CIGARETTES PACK
CIGARETTES			
Total cigarettes taxed (billion pieces)	1.28	1.19	1.16
Average cigarette price (TTD)/per pack	23.85	22.59	23.45
Average cigarette price (US\$ per pack)	\$3.74	\$3.39	\$3.50
Average excise tax burden (excise tax as percentage of price)	16.0	16.9	18.7
Average excise tax (TTD per 1000 pieces)	190.5	190.5	219.0
Average excise tax (US\$ per 1000 pieces)	\$29.87	\$ 28.55	\$32.69
Average tax burden (total tax – import, excise, and VAT – as percentage of price)	27.2	28.1	29.9
Total tobacco excise tax revenue (billion TTD) [1]	0.243	0.226	0.255
Total government revenue (import duty, excise, and VAT, billion TTD) [2]	0.414	0.376	0.408
Percentage change in: Total cigarette sales taxed (% change)		-7.0	-1.9

Source: WBG Staff estimates.

[1] Total tobacco excise revenue includes the Tobacco Tax on cigarette imports in TTD

Note: Simulation model result of 243 million TTD for 2015 and 226 million TTD for 2016 provided the metrics to calibrate the model comparing this figures with actual revenue reported by the TT MOF (\*) with a small difference within less than 0.01% which falls in a statistical accepted range.

[2] The total government revenue for cigarette taxes including import duty, excise, and VAT generated by the simulation model, assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, warehouse, and retail point of sale

available datasets up to September 2017. For 2017,<sup>31</sup> applying the existing specific excise tax of TTD4.38 per 20 cigarettes pack, the model projected a tobacco excise tax revenue of TTD 255 million, generating an additional excise tax revenue of only TTD of 29 million (about US\$2.4 million). Including the excise tax, VAT and import duties on cigarettes. Total government tobacco tax revenue for 2017 is expected to reach TTD 408 million (US\$61 million) or 0.29% of GDP.<sup>32</sup> The reduction in taxed cigarettes (as a proxy to consumption) was projected to only -2.0% (see assumptions in Annex I Table 2). The total government revenue for cigarette taxes including import duty, excise, and VAT generated by the

31 The fiscal year in Trinidad and Tobago runs from October to September. For conciseness, in this report the fiscal year is reported as the latter year. For example, fiscal 2016/17 is reported as 2017 in the text, figures, and tables.

32 2017 WBG/Trinidad and Tobago Central Bank projections.

simulation model, assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, warehouse, and retail point of sale. The parameters and assumptions of the simulation model that was constructed are described in the tables included in Annex I below.

#### 4.4 — Modelling The Fiscal Impact of Tobacco Tax Policy Reforms in Trinidad and Tobago Over 2018–2020 Under Different Policy Scenarios

**Expected Benefit of Increasing Tobacco Tax Rates.** Tobacco taxes are non-distortionary taxes, which have a dual benefit: (i) reduce tobacco use among current tobacco smokers and harm to others due to second-hand smoke, and prevent initiation among the youth, which reduces the risk of tobacco-related diseases that lead to ill health, premature mortality, and disability, and cost health systems and individual's significant amounts of money for treating diseases that are often preventable; and (ii) mobilize additional domestic revenues to expand the fiscal space and hence the capacity of the government to fund priority investments and programs that benefit the entire population (this per the 2015 Financing for Development Addis Ababa Action Agenda).

**The modeling exercise included two scenarios:** Table 4.4 presents the proposed two scenarios for the period 2018–2020:

- **Scenario 1:** The 2017 specific excise tax rate on cigarettes is increased by 50% in 2018 to TT6.57 per 20 cigarettes pack; the resultant increased 2018 specific excise tax rate is increased by 100% in 2019 (TTD13.14 per pack), and 100% in 2020 (TTD26.28 per pack).
- **Scenario 2:** Adopting a front end loaded approach, the 2017 specific excise tax rate on cigarettes is increased by 150% in 2018 to TTD 10.95 per pack; by 100% in 2019 to TTD21.90 per pack; and by 100% in 2020 to TTD43.80 per pack. Under this scenario, which takes into account the minimum rate mandated by the European Union (EU) tobacco tax directive;<sup>33</sup> a total tax burden of about 64% in the price of a 20-cigarette pack would be reached by 2020—under the current tobacco tax structure, the total tobacco tax burden (total tax = import duties + excise + VAT) as percentage of average retail price for a pack of 20-cigarettes fluctuates between 27.2% and 29.9% in Trinidad and Tobago—far below the recommended level of 75% by WHO.

<sup>33</sup> The EU tobacco excise duty directive requires Member States to levy a minimum overall excise duty on cigarettes: At least €90 per 1000 cigarettes, and at least 60% of the weighted average retail selling price. Member States that apply an excise duty of €115 or more, however, do not need to comply with the 60 percent criterion above.

## 4.5 – Impact Assessment of Tobacco Tax Increases in Trinidad and Tobago

To assess the fiscal revenue, price, and consumption impact of proposed tobacco tax increases in Trinidad and Tobago the simulations cover projections for 2017 as baseline (based on available datasets provided by the MoF for 2017), and two scenarios for the period 2018–2020. The parameters and assumptions of the simulation model that was constructed are provided in detail in the tables included in the Annex 1.

To carry out a sensitivity analysis to determine how different values of price and income elasticity impact tobacco consumption, retail price and tax revenue, this scenario is based on the assumption that the price elasticity of demand range in T&T will respond to ranges observed in high income countries (HIC)<sup>34</sup> (see Annex I Table 2). This assumption is supported on the fact that Trinidad and Tobago is the wealthiest country in the Caribbean as well as the third richest country by GDP (PPP) per capita in the Americas after the United States and Canada. Furthermore, it is recognized as a high-income economy by the World Bank Group.

Tables 4.5 and 4.6 present the revenue outputs generated by the two scenarios and the impact that such excise tax and total government revenue contribute into the country GDP compared to 2017 projections. As indicated in Annex I Table 2, the price elasticity is estimated between -0.5 for economy cigarettes; -0.4 for mid-price cigarettes and -.03 for premium cigarettes;<sup>35</sup> the income elasticity range is between 0.8 for economy cigarettes, 0.6 for mid-price, and 0.4 for premium cigarettes.

Under Scenario 1 (Table 4.5), the tobacco excise tax revenue projected for 2018 with a TTD 6.57 per 20 cigarette pack is US\$49 million. The total tobacco tax revenue collected (import duty, excise taxes, and VAT) would increase from US\$61 million projected for 2017 (0.3% of GDP) to US\$71.1 million in 2018 (0.37% of GDP – WBG/Central Bank TT projections), representing an additional tax revenue collection of US\$10.2 million, while the expected reduction in total cigarettes taxed (as a proxy of consumption) is estimated to fall by 4%.

For 2019, the tobacco excise tax revenue projected with TTD 13.14 per 20 cigarette pack would be about US\$82.4 million. The total tobacco tax revenue for 2019 is estimated at US\$107.9 million (0.58% of GDP) and consumption would be reduced by about 10%.

For 2020, the tobacco excise tax revenue projected with TTD 26.28 per 20 cigarette pack would be about US\$14.7 million. The total tobacco tax revenue for 2020 is projected to be equivalent to US\$175.8 million (0.91% of GDP), and the estimated retail price increase of a 20-cigarettes pack would contribute to decrease the number of cigarettes taxed (as a proxy to consumption) by 14% in 2020.

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<sup>34</sup> Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low and middle-income countries (LMIC) (IARC, 2014)

<sup>35</sup> Meta-analyses of the relationship between tobacco prices and use suggest that the overall elasticity of demand for adults lies between -0.3 and -0.7 (CBO 2012, IARC 2011, Gallet and List 2003, Chaloupka and Warner 2000).

TABLE 4.4: TRINIDAD AND TOBAGO TOBACCO EXCISE TAX STRUCTURE—ALTERNATIVE POLICY SCENARIOS PROPOSAL 2018–2020

TAX DESCRIPTION	BASELINE 2017	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 50% TO TTD6.57 IN 2018 PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD13.14 PER PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD26.28 PER PACK (SCENARIO 1)	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 150% IN 2018 TO TTD10.95 PER PACK (SCENARIO 2)	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD21.90 PER PACK (SCENARIO 2)	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD43.80 PER PACK (SCENARIO 2)	TAX BASE
	1/10–31/12/2017	TAX (% OR TT\$)						
Import Duty (ID)	50.07%	50.07%	50.07%	50.07%	50.07%	50.07%	50.07%	CIF (Cost, Insurance, and Freight)
Value Added Tax (VA) [1]	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	After CIF + Import Duty + Excise or Tobacco Tax & Ex-factory, wholesale & distribution chain
<b>Current Excise Tax Structure</b>								
Simple Specific excise tax	4.38	6.57	13.14	26.28	10.95	21.90	43.80	Per pack of 20s, after CIF + Import Duty & Ex-factory declared value for domestic production
	219.00	328.50	657.00	1,314.00	547.50	1,095.00	2,190.00	or per 1000 cigarettes

\*Source: Structure, Fiscal Assessment and Recommendations, TRINIDAD AND TOBAGO; HEU, Centre for Health Economics, The University of the West Indies

\*\* TT\$4.38 per pack applicable from Oct. 1st, 2016.

The fiscal year in Trinidad and Tobago runs from October to September. For conciseness, in this report the fiscal year is reported as the latter year. For example, fiscal 2016/17 is reported as 2017 in the text, figures, and tables.

[1] The simulation model assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, wholesale, and retail point of sale

**TABLE 4.5: SUMMARY CIGARETTE EXCISE TAX GDP IMPACT 2017 FORECAST, AND PROPOSED SCENARIO 1 OUTPUT 2018–2020** (Price elasticity range -0.5/-0.3; and Income elasticity range 0.8 to 0.5)

GOVERNMENT REVENUE TYPE	BASELINE 2017 (PROJECTED): SIMPLE SPECIFIC INCREASED TO TT\$ 4.38 PER 20 CIGARETTES PACK	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 50% IN 2018 TO TTD10.95 PER PACK (SCENARIO 1)	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD21.90 PER PACK (SCENARIO 1)	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD43.80 PER PACK (SCENARIO 1)	EXPECTED CONTRIBUTION TO GDP
Total cigarettes taxed (billion pieces)	1.16		1.12		1.00		0.86	
Average cigarette price (TTD)/per pack	23.45		26.5		36.3		56.5	
Average cigarette price (US\$ per pack)	\$3.50		\$3.53		\$4.54		\$7.06	
Average excise tax (TTD per 1000 pieces)	219.0		328.5		657.0		1314.0	
Total tobacco excise tax revenue (billion TTD) [1]	0.255		0.367		0.659		1.134	
Total excise tax revenue (US\$ million)	\$38.04	0.18%	\$48.97	0.26%	\$82.39	0.44%	\$141.74	73%
Total government revenue (import duty, excise, and VAT, billion TTD) [2]	0.408		0.533		0.863		1.407	
Total government revenue (import duty, excise, and VAT, US\$ million)	\$60.89	0.29%	\$71.09	0.37%	\$107.89	0.58%	\$175.81	0.91%
Percentage change in total cigarette sales taxed (%)	-1.9		-3.9		-10.3		-14.0	

Source: WBG Staff estimates.

[1] Total tobacco excise revenue includes the Tobacco Tax on cigarette imports in TTD

[2] The total government revenue for cigarette taxes including import duty, excise, and VAT generated by the simulation model, assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, warehouse, and retail point of sale

**TABLE 4.6: SUMMARY CIGARETTE EXCISE TAX GDP IMPACT 2017 FORECAST, AND PROPOSED SCENARIO 2 OUTPUT 2018-2020** (Price elasticity range -0.5/-0.3; and Income elasticity range 0.8 to 0.5)

GOVERNMENT REVENUE TYPE	BASELINE 2017 (PROJECTED): SIMPLE SPECIFIC INCREASED TO TT\$ 4.38 PER 20 CIGARETTES PACK	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2017 INCREASED BY 150% IN 2018 TO TTD10.95 PER PACK (SCENARIO 2)	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2018 INCREASED BY 100% IN 2019 TO TTD21.90 PER PACK (SCENARIO 2)	EXPECTED CONTRIBUTION TO GDP	SPECIFIC EXCISE TAX RATE 2019 INCREASED BY 100% IN 2020 TO TTD43.80 PER PACK (SCENARIO 2)	EXPECTED CONTRIBUTION TO GDP
Total cigarettes taxed (billion pieces)	1.16		1.03		0.90		0.76	
Average cigarette price (TTD)/per pack	23.45		32.8		49.7		83.4	
Average cigarette price (US\$ per pack)	\$3.50		\$4.38		\$6.22		\$10.42	
Average excise tax (TTD per 1000 pieces)	219.0		547.5		1095.0		2190.0	
Total tobacco excise tax revenue (billion TTD) [1]	0.255		0.565		0.983		1.654	
Total excise tax revenue (US\$ million)	\$38.04	0.18%	\$75.40	0.40%	\$122.86	0.66%	\$206.70	1.07%
Total government revenue (import duty, excise, and VAT, billion TTD) [2]	0.408		0.755		1.233		2.006	
Total government revenue (import duty, excise, and VAT, US\$ million)	\$60.89	0.29%	\$100.67	0.53%	\$154.07	0.83%	\$250.69	1.30%
Percentage change in total cigarette sales taxed (%)	-1.9		-11.3		-13.1		-15.9	

Source: WBG Staff estimates.

[1] Total tobacco excise revenue includes the Tobacco Tax on cigarette imports in TTD

[2] The total government revenue for cigarette taxes including import duty, excise, and VAT generated by the simulation model, assumes that the VAT is applied along the cigarettes distribution chain from customs/ex-factory, warehouse, and retail point of sale

Under Scenario 2 (Table 4.6), tobacco excise tax revenue (with TTD10.95/per pack) is estimated to bring tax revenue in the amount of US\$75.4 million in 2018; (with TTD21.90/per pack) US\$122.9 million in 2019; and (with TTD43.80/per pack) US\$206.7 million in 2020. This would contribute to increase total tobacco tax revenue collected (import duty, excise taxes, and VAT) from US\$61 (0.3% of GDP) in 2017 to US\$101 million in 2018 (0.53% of GDP), an additional tax revenue collection of US\$40 million, while the total cigarettes taxed (as a proxy to consumption) is estimated to fall by 11.3%.

Total tobacco tax revenue for 2019 is projected to reach US\$154 million (0.83% of GDP) and expected consumption would fall by 13.1%. Total tobacco tax revenue for 2020 is projected to reach US\$251 million (1.30% of GDP). The estimated retail price increase of a 20-cigarettes pack could contribute to decrease the number of cigarettes taxed (as a proxy to consumption) by 16% in 2020 compared to 2019 projections under this scenario.

#### 4.6 — Price and Income Elasticity Impact on Consumption, Retail Price, and Revenue Sensitivity Analysis 2018–2020

Continuing with the adopted sensitivity analysis in previous Scenarios 1 and 2, and in order to determine how different values of price and income elasticity impact tobacco consumption, retail price and tax revenue, this scenario is based on the assumption that the elasticity price of demand range in TT will respond to ranges observed in upper medium-income countries (UMIC)<sup>36</sup> (see Annex I Table 3 for detailed assumptions).

To make an informed assumption using available Caribbean region studies, the elasticities adopted are derived from a study carried out on price and income elasticities of demand in Jamaica (Corne van Walbeek, 2004).<sup>37</sup> The study found that the likely range for the true value of the price elasticity of demand is between –0.3 and –0.6. Relative to income elasticities, the study found statistically significant ranges for Jamaica between 0.51 and 0.89.

Considering that Jamaica is classified by the WBG as upper-middle income country (UMIC),<sup>38</sup> the WBG team selected such elasticity ranges as appropriate for the sensitivity analysis. Box 1 shows the elasticities adopted for HIC used in previous simulations and UMIC for the sensitivity analysis (see detailed assumptions in Annex I):

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36 Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low and middle-income countries (LMIC). See detailed discussion at: International Agency for Research on Cancer (IARC). 2011. "Effectiveness of Tax and Price Policies for Tobacco Control." IARC Handbooks of Cancer Prevention: Tobacco Control, Vol. 14.

37 van Walbeek, C. 2004. Economics of tobacco control in Jamaica: will the pursuit of public health place a fiscal burden on the government?. Report written for the Ministry of Health and funded by Research for International Tobacco Control, housed in the International Development Research Centre, Ottawa. Accessed at: [https://www.researchgate.net/publication/277165348\\_Economics\\_of\\_tobacco\\_control\\_in\\_Jamaica\\_will\\_the\\_pursuit\\_of\\_public\\_health\\_place\\_a\\_fiscal\\_burden\\_on\\_the\\_government](https://www.researchgate.net/publication/277165348_Economics_of_tobacco_control_in_Jamaica_will_the_pursuit_of_public_health_place_a_fiscal_burden_on_the_government) [accessed Feb 07 2018].

38 World Bank Country and Lending Groups. 2017. Accessed at: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

**BOX 4.1: TOBACCO PRICE AND INCOME ELASTICITY RANGES SELECTED FOR HIC AND UMIC SENSITIVITY ANALYSIS [1]**

CIGARETTES TYPES		HIGH-INCOME COUNTRIES (HIC)	UPPER MIDDLE-INCOME COUNTRIES (UMIC)
Price elasticity for economy cigarettes	Value (must be negative)	-0.5	-0.6
Price elasticity for medium cigarettes	Value (must be negative)	-0.4	-0.5
Price elasticity for premium cigarettes	Value (must be negative)	-0.3	-0.4
Income elasticity for economy cigarettes	Value (typically positive)	0.8	0.9
Income elasticity for medium cigarettes	Value (typically positive)	0.6	0.7
Income elasticity for premium cigarettes	Value (typically positive)	0.4	0.5

[1] Meta-analyses of the relationship between tobacco prices and use suggest that the overall elasticity of demand for adults lies between -0.3 and -0.7 (CBO 2012, IARC 2011, Gallet and List 2003, Chaloupka and Warner 2000)

Table 4.7 shows the impact of a different price elasticity assumptions for HIC and UMIC ranges from Box 1 above in scenarios 1 and 2 for 2018. The Table also compare the Base-line outputs of projected 2017 (with HIC elasticities) with the two scenarios. For the HIC price and income elasticity (-0.5/-0.3 and 0.8/0.4 respectively) , compared to the UMIC (-0.6/-0.4 and 0.9/0.5 range) considered less price and income elastic than UMIC option, a specific excise tax per 20 cigarettes pack of TTD6.57 for scenario 1 would result in the same price change as in the UMIC scenario 1, but the total number of cigarette taxed (as a proxy for consumption) would decrease by a smaller quantity (-3.9%) than had the price and income elasticity been at the UMIC range (5.5% for 2018). Furthermore, a lower price elasticity results in a larger tobacco excise tax revenue increase (28.7% compared to 26.7% in scenario 1; and 98% compared to 91% in scenario 2 for 2018) for a given increase in the specific excise tax. Under the same elasticity assumptions, the total tobacco tax increase in GDP contribution would be larger for the HIC elasticity assumption (0.21% compared to 0.19% scenario 2), once the consumption reduction gap (-11.3% versus -14.5%) increases as observed in Scenario 2 for 2018.

What this simulation exercise shows is that the increase of the specific excise tax has positive public health and fiscal consequences: there is a reduction in total cigarette consumption and an increase in tobacco excise and total tobacco tax revenues, including their contribution to GDP increase. It can also be concluded that:

- If demand for cigarettes is more price elastic, the public health benefit will be somewhat larger (UMIC option).
- And if the demand is less price elastic (HIC option), the fiscal benefit will be somewhat larger.

Annex 1 – Table 4 expand the sensitivity analysis to scenarios 1 and 2 for years 2019 and 2020. In both elasticity options, as demonstrated in scenarios 1 and 2 for 2018, the public health and the fiscal goals are positively impacted with the excise tax increase.



**TABLE 4.7: TRINIDAD AND TOBAGO SENSITIVITY OF TOBACCO CONSUMPTION, RETAIL PRICE AND REVENUE TO PRICE AND INCOME ELASTICITY SELECTION**

YEAR	POLICY OPTION SCENARIO	BASELINE 2017 (PROJECTED)	2018			
			SCENARIO 1		SCENARIO 2	
	Parameters based in HIC and UMIC [1]	HIC	HIC	UMIC	HIC	UMIC
	Price elasticity range	-0.5/-0.3	-0.5/-0.3	-0.6/-0.4	-0.5/-0.3	-0.6/-0.4
	Income elasticity range	0.8/0.4	0.8/0.4	0.9/0.5	0.8/0.4	0.9/0.5
	Simple Specific Excise Tax (TTD/per 20 cigarettes pack)	TTD 4.38		TTD 6.57		TTD 10.95
<b>Percentage Changes (%)</b>						
	Increase in specific excise tax (%)	15%	50%	50%	150%	150%
	Increase in average retail price for a 20 cigarette Pack	3.4%	0.8%	0.8%	25.0%	25.0%
	Percentage increase in total excise tax revenue (%)	12.3%	28.7%	26.7%	98.2%	90.9%
	Percentage change in total cigarette sales taxed (%)	-1.9%	-3.9%	-5.5%	-11.3%	-14.5%
	Total tobacco tax increase in GDP contribution (%)	0.02%	0.05%	0.05%	0.21%	0.19%
<b>Simulation Outputs (2018)</b>						
	Total 20 cigarette packs taxed (million packs)	58.2	55.9	55.0	51.6	49.7
	Total excise tax revenue (US\$ million)	\$ 38.04	\$ 48.97	\$ 48.20	\$ 75.40	\$ 72.62
	Total government revenue (import duty, excise, and VAT, US\$ million)	\$ 60.89	\$ 71.09	\$ 69.96	\$100.67	\$96.96
	Average cigarette price (US\$ per pack)	\$ 3.50	\$ 3.53	\$ 3.53	\$ 4.38	\$ 4.38

Source: WBG Staff estimates

## 4.8 – On Illicit Trade and Taxes

One of the main arguments often raised by the tobacco industry and other parties against the adoption of tax increases on tobacco products is the threat of illicit trade. Accumulated international experience, however, demonstrates that this argument is flawed.

Tobacco taxes are not the primary reason for cigarette smuggling and cigarette tax avoidance. Despite high cigarette prices due to high taxes in high-income countries, illicit trade is much less common in these countries than in low-income countries with low tobacco taxes. Indeed, many countries, such as the United Kingdom, Chile, Ireland, Kenya, or various states in the United States, have increased tobacco taxes significantly without experiencing major changes in illicit trade.

While high taxes may create incentives for illicit trade, evidence indicates that other factors have a much bigger effect on illicit trade of tobacco products. The trade thrives where the potential for illicit gains is high, and the risk to illegal operators is low. More specifically, factors driving illicit trade include: the ease and cost of operating in a country, tobacco industry participation, sophistication of crime networks, and low capacity in a nation's tax administration system, and the likelihood of being caught and punished.

Also, as documented by the U.S. Government Accountability Office,<sup>39</sup> where cigarette packs in the United States are taxed at varying rates at the state level, criminal enterprises have incentives to engage in cross-border and illicit schemes to profit or take advantage of these tax rate differentials.

What to do? Experience shows that these illegal activities can be controlled by legal means (e.g., use of prominent tax stamps, serial numbers, special package markings, health warning labels in local languages, adoption of uniform tax rates nationwide that facilitate successful collection at the points of manufacture and import), and by increased law enforcement (e.g., improving corporate auditing, better trace and tracking systems, and good governance). For example, since Her Majesty's Revenue and Customs' (HMRC) "Tackling Tobacco Smuggling" Strategy<sup>40</sup> was introduced in the U.K. in 2000, the size of the illicit cigarette market has been cut by almost half, with more than 20 billion cigarettes and over 2,700 tons of hand-rolling tobacco seized. Additionally, the U.K. has seen more than 3,300 criminal prosecutions for tobacco offences following action by law enforcement officers. In Chile,<sup>41</sup> a country that has one of the highest tax rates on cigarettes in the world, with taxes accounting for 78% of the price of each pack, the government has also experienced increased success in seizures of smuggled tobacco products. This has affected the country's tobacco supply and is helping curtail the slight growth in illicit trade observed after a 2013 increase in tobacco prices.

After making the above argument on the need to delink tobacco taxation from illicit trade in policymaking discussions, it needs to be acknowledged that illicit trade of tobacco products is both a major health and fiscal challenge that merits urgent attention and action by governments across the world.

According to WHO research,<sup>42</sup> one in every 10 cigarettes might be illicit. From a health perspective, increased availability and affordability of untaxed and inexpensive cigarettes puts more people at risk of being harmed because of increased smoking, addiction to a deadly product, and the resulting ill health, premature mortality and disability associated with tobacco-related diseases. From a fiscal perspective, illicit tobacco trade only benefits

39 United States Government Accountability Office. 2011. ILLICIT TOBACCO Various Schemes Are Used to Evade Taxes and Fees. Report to Congressional Committees. Washington, D.C.

40 HM Revenue & Customs and UK Border Agency. 2011. Tackling tobacco smuggling: building on our success. Accessed at: <https://www.gov.uk/government/publications/tackling-tobacco-smuggling-building-on-our-success>

41 Euromonitor. 2017. Tobacco in Chile. Available at: <http://www.euromonitor.com/tobacco-in-chile/report>.

42 WHO. 2015. Illegal trade of tobacco products: What you should know to stop it. Accessed at: <http://www.who.int/campaigns/no-tobacco-day/2015/brochure/en/>

a few (often criminal enterprises) at the cost of forgone tax revenues for the government, which results from taxes not being paid on tobacco products.

Ratification of the Protocol to Eliminate Illicit Trade in Tobacco Products, which is a supplementary treaty to the WHO Framework Convention on Tobacco Control (FCTC), is a critical first step to confront this global health, economic and social scourge. The Protocol is now open for ratification, acceptance, approval, formal confirmation or accession by all Parties to the WHO FCTC. So far, eight countries have ratified it (Gabon, Mongolia, Nicaragua, Spain, Turkmenistan and Uruguay). Thirty-two additional country ratifications are needed to make this Protocol an international law.

## 4.9 – The Broader Economic Impact of Tobacco Taxation

**The Health Challenge of Tobacco Use.** The scientific evidence accumulated over the past five decades is clear: tobacco kills. Smokers who begin early in adult life and do not stop smoking face a three-fold higher risk of death compared to otherwise similar non-smokers, resulting in a loss, on average, of at least one decade of life (Jha and Peto, 2014).

In Trinidad and Tobago, more than a third of adult males, and 9.4% of adult females, use tobacco and tobacco related products. Tobacco use is already the top 5th risk contributing to disability adjusted life years (DALYs) lost in 2016 in the country.<sup>43</sup> Since cigarette smoking is so widespread and significant as a health risk factor, it is a leading preventable cause of disease and deaths.

The top 3 causes of premature death (measured in terms of years of life lost (YLLs) in 2016 were tobacco use related: Ischemic heart disease, Diabetes, and Cerebrovascular disease.<sup>44</sup> Cigarette smoking increases the risk of coronary heart disease by itself. Medical evidence shows that smoking increases blood pressure, decreases exercise tolerance and increases the tendency for blood to clot. Smoking also increases the risk of recurrent coronary heart disease after bypass surgery (U.S. Department of Health and Human Services, 2014).

Cigarette smoking is the most important risk factor for young men and women as it produces a greater relative risk in persons under age 50 than in those over 50. Women who smoke and use oral contraceptives greatly increase their risk of coronary heart disease and stroke compared with nonsmoking women who use oral contraceptives. Smoking also decreases HDL (good) cholesterol, and cigarette smoking combined with a family history of heart disease also seems to greatly increase the risk.

Cumulative lifetime exposure to active cigarette smoking is directly associated with cerebrovascular disease. Smokers are 30–40% more likely to develop type 2 diabetes than

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<sup>43</sup> IHME, 2016.

<sup>44</sup> IHME. 2016. Trinidad and Tobago Country Profile. Accessed at: <http://www.healthdata.org/trinidad-and-tobago>.

**TABLE 4.8: SUMMARY TABLE OF THE OUTPUTS AS RATES PER UKRAINE POPULATION, BY YEAR**

EPIDEMIOLOGICAL OUTPUTS	YEAR	SCO (BASELINE)	SC1
Cumulative incident cases	2025	5480948[±4237]	5427558[±4237]
	2035	11366868[±5753]	11255173[±5753]
Cumulative incident cases avoided	2025	NA	56224[±6341]
	2035	NA	126730[±9123]
Incident cases per year	2025	589035[±1545]	582341[±1545]
	2035	646600[±1545]	640799[±1727]
Attributable incident cases	2025	218221[±1121]	208475[±1121]
	2035	222603[±1041]	211984[±1041]
Cumulative premature deaths avoided	2025	NA	6372
	2035	NA	29172
Cumulative potential years of life lost relative to baseline	2025	NA	48923
	2035	NA	267098
<b>Economic outputs</b>			
Direct costs avoided (millions UAH)	2025	NA	542.23
	2035	NA	1545.81
Cumulative premature mortality costs avoided (millions UAH)	2025	NA	3568.4
	2035	NA	16536.4

Source: Webber, L et al. 2017.

nonsmokers. And people with diabetes who smoke are more likely than nonsmokers to have trouble with insulin dosing and with controlling their disease.<sup>45</sup>

**Tobacco Taxes Discourage Tobacco Use.** The public-health rationale for tobacco taxation is clear. Higher taxes induce some smokers to quit and prevent other individuals from starting. They also reduce the number of ex-smokers who return to cigarettes and reduce consumption among continuing smokers.

**Averting the Cost of Smoking-Related Diseases.** Retrospective studies have shown the importance of tobacco taxation in public health outcomes. For example, in the United States, it has been observed that a 10% increase in cigarette taxes could decrease the number of deaths from respiratory cancers by 1.5%.<sup>46</sup> The French Government increased cigarette taxes substantially from the mid-1990s, with cigarette prices tripling in real terms by 2005. Among French males, rates of death from lung cancer fell by 50% during the same period.<sup>47</sup>

45 U.S. Department of Health and Human Services. 2014. "The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General." Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Printed with corrections, January 2014. Available at: <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>

46 Moore, M.J. 1995. Death and Tobacco Taxes. NBER Working Paper No. 5153. Accessed at: <http://www.nber.org/papers/>

47 See: Hill C. Impact de l'augmentation des prix sur la consommation de tabac. Paris: Institut Gustave Roussy, 2013 (<http://www.igr.fr/doc/cancer/pdf/prevention/prixtab2013.pdf>); and Jha and Peto, 2014.

Smoking-related illness also cost billions of dollars each year, imposing a heavy economic toll on countries, both in terms of direct medical care costs and lost productivity among affected workers.<sup>48</sup> According to recent estimates, tobacco-related diseases account for US\$ 422 billion in health care expenditures annually, representing almost 6 percent of total global spending on health. The total economic cost of smoking (including productivity losses from death and disability) amounts to more than US\$ 1.4 trillion per year, equivalent to 1.8 percent of the world's annual GDP).<sup>49</sup> Already 40 percent of these economic costs are estimated to be borne by low- and middle-income countries (LMICs), and there is a risk that these costs will escalate, if effective and sustained action is not supported over the medium term.

This poses a major challenge for countries, such as Trinidad and Tobacco, where smoking is on the rise, and the out-of-pocket spending for medical care, particularly for costly treatment of tobacco related diseases, was estimated at 38% in 2014.<sup>50</sup> These countries often lack the resource base, the health systems, or the social safety nets required to protect their populations from the negative health, social, and economic consequences of tobacco-related chronic diseases. While the hazards of smoking accumulate slowly, cessation is effective quickly, helping to reduce tobacco-related mortality, and more importantly, inequality of mortality. People who quit by age 40 get back nearly the full decade of life that they would have lost from continued smoking.<sup>51</sup> The results of a recent assessment conducted in Ukraine, as summarized in Table 4.8 illustrate the health impact of tobacco tax increases. The model estimated that by 2035 the recent 2017 tax increase would result in the avoidance of: 126,730 new cases of smoking-related disease; 29,172 premature deaths; and 267,098 potential years of life lost relative to no change in tax. These reductions in disease and death will result 1.5bn UAH or about US\$57 million in healthcare costs avoided, and 16.5bn or US\$631 million premature mortality costs avoided.<sup>52</sup>

**The Pro-Poor Nature of Tobacco Taxation.** Recent assessments done in different countries such as Chile, Ukraine and Moldova demonstrate that tobacco taxes and other tobacco control measures are progressive. The greatest benefits from these measures accrue to poor households, which tend to allocate larger shares of their budgets than do wealthier

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48 National Cancer Institute (NCI), in collaboration with World Health Organization (WHO). 2016. "Monograph 21: The Economics of Tobacco and Tobacco Control." Bethesda, Md.: U.S. Department of Health and Human Services, National Institutes of Health. Available at: [https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21\\_exec\\_sum.pdf](https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_exec_sum.pdf); and Xu, X., Bishop, E.E., Kennedy, S.M., Simpson, S.A., Pechacek, T.F., 2015. "Annual Healthcare Spending Attributable to Cigarette Smoking. An Update. *Am J Prev Med* 48(3):326–333.

49 Goodchild M., Nargis N., Tursan d'Espaignet, E. 2017. "Global economic cost of smoking-attributable diseases." *Tob Control* 2017;0:1–7. doi:10.1136/tobaccocontrol-2016-053305.

50 IHME, 2016.

51 Jha and Peto, 2014.

52 Webber, L., Andreeva, T.I., Sotomayor, R., Marquez, P.V., et al. 2017. "Modeling the Long-Term Health and Cost Impacts of Reducing Smoking Prevalence through Tobacco Taxation in Ukraine." Washington, D.C.: The World Bank Group.

TABLE 4.9: DISTRIBUTIONAL IMPACT OF TOBACCO TAXES IN CHILE, UKRAINE, AND MOLDOVA

CHILE										
	Deciles									
	1	2	3	4	5	6	7	8	9	10
Price Shock Under										
Complete pass-through	-0.35%	-0.39%	-0.36%	-0.33%	-0.33%	-0.26%	-0.25%	-0.24%	-0.16%	-0.09%
Considering price elasticity	-0.07%	-0.11%	-0.12%	-0.14%	-0.16%	-0.15%	-0.16%	-0.17%	-0.13%	-0.07%
Reduction in Medical expenses	0.47%	0.30%	0.24%	0.17%	0.14%	0.09%	0.06%	0.04%	0.02%	0.01%
Gains in years of working life	0.10%	0.11%	0.10%	0.09%	0.09%	0.07%	0.06%	0.05%	0.03%	0.02%
<b>Net effect</b>	<b>0.50%</b>	<b>0.30%</b>	<b>0.22%</b>	<b>0.13%</b>	<b>0.07%</b>	<b>0.01%</b>	<b>-0.04%</b>	<b>-0.08%</b>	<b>-0.07%</b>	<b>-0.04%</b>
UKRAINE										
	Deciles									
	1	2	3	4	5	6	7	8	9	10
Price Shock Under										
Complete pass-through	-0.62%	-0.62%	-0.60%	-0.56%	-0.56%	-0.55%	-0.53%	-0.48%	-0.45%	-0.37%
Considering price elasticity	-0.16%	-0.22%	-0.21%	-0.24%	-0.25%	-0.25%	-0.25%	-0.23%	-0.25%	-0.22%
Reduction in Medical expenses	0.64%	0.50%	0.40%	0.28%	0.24%	0.19%	0.18%	0.16%	0.10%	0.06%
Gains in years of working life	0.008%	0.007%	0.007%	0.006%	0.006%	0.005%	0.005%	0.005%	0.004%	0.004%
<b>Net effect</b>	<b>0.48%</b>	<b>0.28%</b>	<b>0.19%</b>	<b>0.05%</b>	<b>-0.01%</b>	<b>-0.06%</b>	<b>-0.08%</b>	<b>-0.07%</b>	<b>-0.15%</b>	<b>-0.16%</b>
MOLDOVA										
	Deciles									
	1	2	3	4	5	6	7	8	9	10
Price Shock Under										
Complete pass-through	-0.17%	-0.14%	-0.16%	-0.16%	-0.17%	-0.20%	-0.15%	-0.17%	-0.17%	-0.13%
Considering price elasticity	-0.06%	-0.07%	-0.08%	-0.09%	-0.10%	-0.12%	-0.09%	-0.12%	-0.12%	-0.09%
Reduction in Medical expenses	0.14%	0.06%	0.06%	0.04%	0.03%	0.02%	0.02%	0.01%	0.01%	0.01%
<b>Net effect</b>	<b>0.08%</b>	<b>-0.01%</b>	<b>-0.02%</b>	<b>-0.05%</b>	<b>-0.08%</b>	<b>-0.09%</b>	<b>-0.07%</b>	<b>-0.11%</b>	<b>-0.11%</b>	<b>-0.07%</b>

Source: Fuchs, A. and Meneses, F., 2017 and 2018.

households to purchase tobacco.<sup>53</sup> Since tobacco taxes have been shown to discourage use, higher taxes reduce some of tobacco's most serious adverse effects on poor households. Relevant adverse impacts include lower life expectancy, higher medical expenses, and risk of having a breadwinner's death or disability throw families into extreme poverty, added years of disability, higher risks for families for second-hand smoking, and reductions

53 See reports: Fuchs, A., and Meneses, F. 2017. Are Tobacco Taxes Really Regressive?: Evidence from Chile. World Bank Report Number 112072. 112072. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/389891484567069411/Are-tobacco-taxes-really-regressive-evidence-from-chile>; Fuchs, A. and Meneses, F. 2017. Regressive or Progressive? The Effect of Tobacco Taxes in Ukraine. Washington, D.C.: World Bank Group; Fuchs, A., and Meneses, F. 2018. Tobacco Price Elasticity and Tax Progressivity in Moldova. Washington, D.C.: World Bank Group.

in smokers' quality of life. Where tobacco control has been reinforced, the main driver of higher incomes among the poor appears to be reduced medical expenses due to fewer tobacco-related health problems (see Table 4.9).

**A Path Forward.** A scaled-up and stronger tobacco control effort is required in Trinidad and Tobago to achieve the WHO-recommended target of at least 30 percent reduction in smoking prevalence by 2030, which would avoid ill health, premature mortality, and disability among current and future smokers by the end of the 21st century. A reduction in smoking prevalence of this magnitude is also critical to reach the health and social targets of the United Nations Sustainable Development Goals (SDGs) by 2030.

How can such reductions in smoking be achieved in the next decade? The path from policy to reductions in tobacco use depends on the likelihood that a country will implement tobacco control measures, and on the measures' effectiveness.<sup>54</sup> Raising taxes sharply on tobacco products, and then adjusting for inflation and increased affordability due to growing incomes, is the single most cost-effective measure to reduce tobacco consumption. It is especially powerful tool in LMICs, where smokers are more price-sensitive. Tobacco use among young people is also very price sensitive, with reductions in tobacco use in this group two to three times larger with a given price increase than among adults.<sup>55</sup>

Indeed, as noted in *The Economist* (2017), "As the success in rich countries shows, there is no mystery about how to get people to stop smoking: a combination of taxes and public-health education does the job. This makes the abysmal record in poor countries a grave failure of public policy. The good news is that, following recent research, it is one that has just become easier to put right."<sup>56</sup>

Gains to productivity and human capital from reduced tobacco use further underscore how raising tobacco taxes is consistent with fiscal policies that enhance macro-economic development and improved social welfare.


Today, policy makers and development experts concur in seeing LMICs' domestic resource mobilization as the primary financing engine for the next wave of development, and they point to tobacco taxation as a potentially decisive contributor (Junquera-Varela et al. 2017).

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54 Gravelly, S., Giovino, G.A., Craig, L., Commar, A., Tursan D'Espaignet, E., Schotte, K., Fong, G.T. 2017. "Implementation of key demand-reduction measures of the WHO Framework convention on Tobacco Control and change in smoking prevalence in 126 countries: an association study," *Lancet Public Health* 2017;2: e166–74. Published Online March 21, 2017 [http://dx.doi.org/10.1016/S2468-2667\(17\)30045-2](http://dx.doi.org/10.1016/S2468-2667(17)30045-2).

55 See WHO 2015 above.

56 *The Economist*. 2017. "Cough up. How to cut smoking in poor countries." *Leaders*, June 1, 2017. Available at: <http://www.economist.com/news/leaders/21722828-recipe-get-people-quit-well-known-why-are-so-many-governments-ignoring-it-how?fsrc=dg%7Cc>. Accessed on June 1, 2017.



With the damage being done by tobacco consumption, for the Caribbean at this time, it is the “social protection” mandate that safeguarding the health of the population is what matters at this time. It is this that makes the harmonization of tobacco taxation an imperative.



# 5

## HARMONIZATION OF TOBACCO TAXES

### 5.1 – Harmonization of Taxes

By its very nature harmonization is aimed at bringing tax systems in different countries in closer alignment with one another. Yet we are very much aware that *“The tax systems in different countries differ from each other: On the structure, the set of taxes, the collection methods, the tax rates, the fiscal powers of the various levels of government, the tax base, the tax benefits.”*<sup>57</sup> It is also true that *“... taxation is not the end in itself of the state. Taxes are... to guarantee... social protection and justice,” as well as “... to provide stable receipts in the state budget.”*<sup>58</sup>

Unlike the case of the European Union where harmonization of tobacco taxes heralded the reduction of tax and price differentials among the 28 Member States, a different approach is probably required when we consider Trinidad and Tobago and the OECS. The main objective of tobacco tax harmonization is the reduction of tobacco consumption. Based on global evidence, the cost-effective approach for achieving this objective has been shown to be increases in tobacco related taxes as part of a harmonized framework. This is an attractive policy approach given the high debt levels and the lack of fiscal space in Trinidad and Tobago and the OECS. The truth is that tobacco tax harmonization, in the short term, can generate additional revenue for the respective countries.

Set against the backdrop of debt-to-GDP ratios of the states outlined in Table 5.1 and the lack of fiscal space, the fiscal implications for tobacco tax harmonization involving increased excise taxes to curb consumption in Trinidad and Tobago could be significant. The levels of government debt for Trinidad and Tobago are lower when compared to the Member States of the OECS. For harmonization of tobacco taxes to be successful, Trinidad and Tobago will have to consider increases to both the levels of tobacco taxes as well as the range of taxes imposed on tobacco.

Harmonization of tobacco taxes, in the very long run, is expected to lead to declines in revenues as demand for tobacco decreases based on increases in excise taxes and the introduction of new taxes. From the overall fiscal point of view, such a development will most likely lead to the adoption of new taxes to compensate for the loss of tax revenue from tobacco taxes. In Appendix 1 we consider a range of options in this regard.

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<sup>57</sup> Safonova et al., “Taxes Harmonization Features in the European Union Countries”, *International Journal of Economic and Financial Issues*, 2016, 6(S8), 154–159.

<sup>58</sup> Ibid

**TABLE 5.1: GOVERNMENT DEBT TO GDP**

COUNTRY	2015	2016	CHANGE IN %
Antigua and Barbuda	99.1	93.6	-5.5
Dominica	85.5	87.2	2.2
Grenada	94.3	89.2	-5.1
St. Kitts and Nevis	70.7	67.2	-3.5
St. Lucia	77.0	81.1	4.1
St. Vincent and the Grenadines*	79.2	81.5	2.3
Trinidad and Tobago	52.1	56.6	4.5

Source: Caribbean Development Bank 2016 Economic Review 2017 Forecast

\*: ECCU Central Statistical Offices and Eastern Caribbean Central Bank

Even as we consider harmonization between Trinidad and Tobago and the OECS it will be useful to have a look at the current picture of tobacco taxation across the OECS countries. Table 5.2 provides a snapshot of Tobacco Taxes and Bases among selected member countries of OECS.

Table 5.2 highlights some of the difficulty in data collection. Across the countries data were available in different formats, sometimes in currency format and sometimes as percentages. However, where comparison was possible, a few glaring differences were evident. For example, in the case of Excise Taxes, St. Kitts and Nevis was at 20% while Grenada was at 105%. Similarly, for the VAT, where the rate in St. Kitts and Nevis was 17%, in Trinidad and Tobago it was 12.5%. For Consumption Tax the Table shows Montserrat at 40%. Finally, only Grenada was implementing an Environmental Levy on tobacco products.

If the objective of reducing tobacco consumption remains a common one for the region the need for bringing the tax systems into better alignment is obvious.

## 5.2 — Harmonization of Legislation

One of the implications of the harmonization of tobacco taxes is the concomitant need for synchronization of legislation that works to support efforts to protect the health of the population, shield the young and guard against the effects of second hand smoke. In this regard, the use of tobacco taxes should be targeted at a number of critical items. Nevertheless, taxation by itself will not be the answer to the reduction of consumption.

First, the use of enforcement to ensure those designated areas specified in the Tobacco Control Act are kept smoke free as the law requires is critical. Second, as taxes increase there is a perverse incentive for an increase in illegal trade. In order to counter such a development, some of the revenues should be used to develop monitoring and other systems to reduce or eliminate contraband. Third, in the period before revenues received from tobacco taxes fall due to an expected decrease in consumption, some of the funds must be used to prevent and treat Non-Communicable Diseases (NCDs) related to tobacco use. This will ensure that tobacco-related illnesses are the target of taxes imposed on tobacco consumption.

**TABLE 5.2: TOBACCO TAXES AND BASES AMONG SELECTED MEMBER COUNTRIES OF OECS**

TAXES	ST. KITTS AND NEVIS (2017)		SAINT VINCENT AND THE GRENADINES (2017)		GRENADA (2017)		MONTSERRAT (2017)		ST. LUCIA (2017)		ANTIGUA & BARBUDA (2017)	
	Rate	Base	Rate	Base	Rate	Base	Rate	Base	Rate	Base		Base
Import Duty (ID)	\$18	per kg	35% - Cigar and cigarettes 5% raw tobacco	CIF			30%	CIF	5% on stemmed/striped tobacco 45% on cigars, cigarettes and other forms of tobacco and tobacco products.	CIF	35%	CIF
Excise Tax	20%	CSC+ ID	14% - cigars EC\$1.50 per 100 sticks cigarettes, 6% raw tobacco 12% other 6 - tobacco substitute	ID+ CIF	105% - cigarettes	CSC+ CET+ CIF			\$176 per 1,000 Sticks on cigarettes 125.60 per kg on cigars and other tobacco products.			
Value Added Tax	17%	EXT+ CSC+ ID	16%	CSC+ EXT+ ID+ CIF	15% -tobacco and cigarettes	EXT+ CSC+ CET+ CIF			12%	EXT+ CSC+ ID+CIF	15%	CIF+ ID+ RRC
Customs Service Charge	6%	ID	5%	EXT+ ID+ CIF	6% tobacco and cigarettes	CET+ CIF			6%	ID +CIF		
CET	-		-		35% - cigarettes 5% - tobacco	CIF						
Consumption tax							40%	ID+CIF	-			
Other taxes (RRC) <sup>59</sup>											10%	CIF
EPA			4% raw tobacco									

Abbreviations: C.I.F. — Cost, insurance and freight

Source: Customs and Excise Divisions 2017

<sup>59</sup> Revenue Recovery Charge



# 6

## RECOMMENDATIONS

### 6.1 – Contextual Statement

The challenges posed to the health and economic development of Trinidad and Tobago by tobacco consumption must be met with swift decisive action. At the current rate of taxes, Trinidad and Tobago exhibits the highest prevalence rates of smoking in the CARICOM region. This statistic suggests that existing tax rates on tobacco products are too low to effectively reduce consumption and by extension reduce the health and economic burden of tobacco use in a meaningful way. The *total tax* share as a percentage of the price of a pack of cigarettes in Trinidad and Tobago only accounted for 25.5% in 2016 (WHO 2017). This is substantially lower than the WHO benchmark of the excise tax share representing 70% or more of the retail sale price of a pack of cigarettes. The recommendations which follow, build on the WHO Global Tobacco Report 2015 and the World Bank 2017 report on Tobacco Tax Reform.

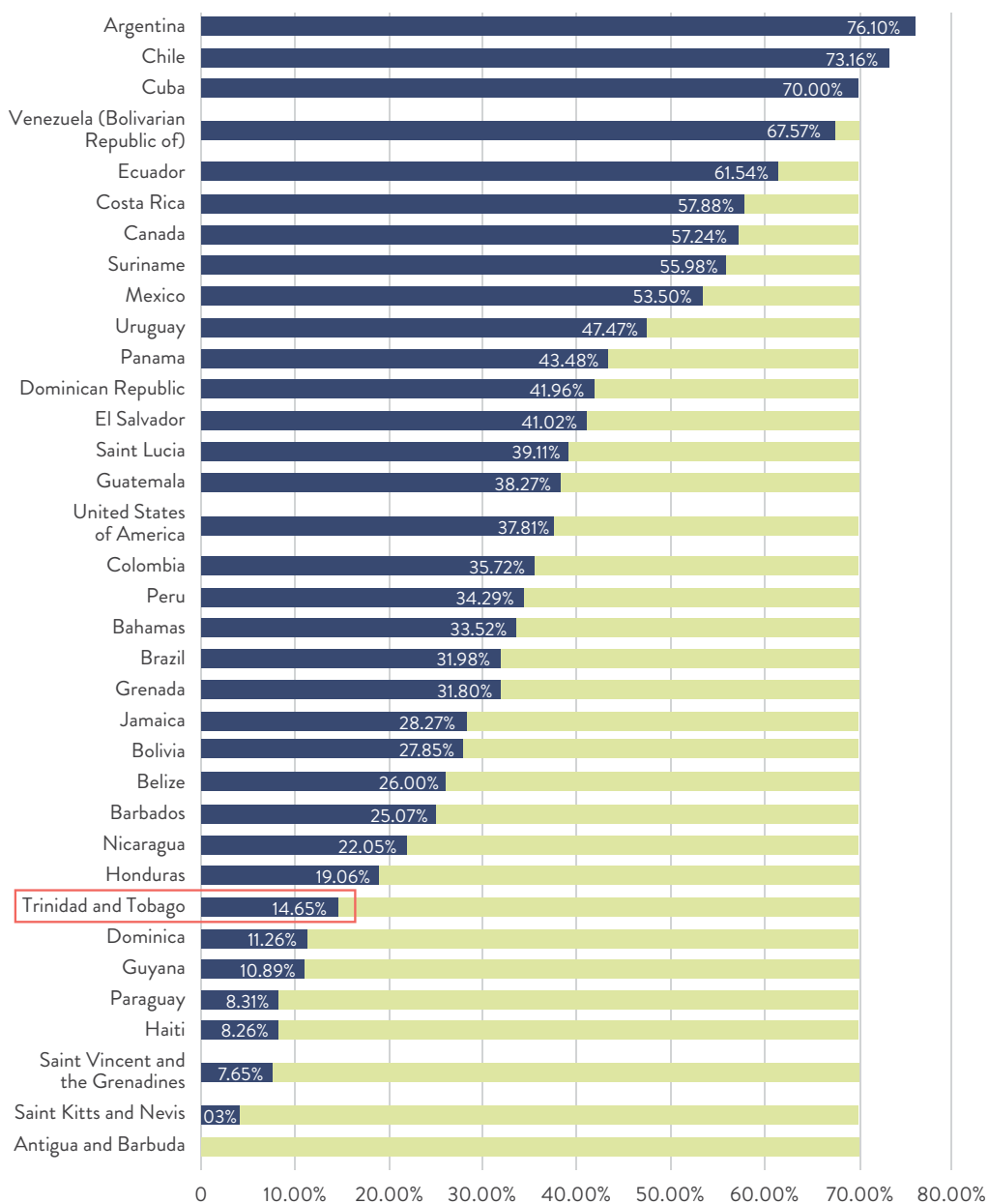
### 6.2 – Increase Specific Excise Taxes

There is consensus that specific excise taxes which are levied per pack of cigarettes as opposed to net weight or other criteria, are the most efficient instruments to discourage cigarette consumption (WHO 2015). Since the intention is to have significant effects on the consumption of tobacco the evidence, which shows that large initial increases in taxation have been found to be more effective in reducing consumption cannot be ignored. The truth is that gradual increases allow cigarette consumers an opportunity to adjust in ways which do not bring about any major change in their consumption (Savedoff and Alwang 2015).

Moreover, while a positive side effect of tobacco taxation is increased government revenue, it must be kept in mind that the main aim of such taxation is to reduce the health and economic burden brought on by tobacco consumption. Therefore, even as we accept that eventually tax revenue from tobacco will fall significantly as consumption falls, it is the goal of reducing tobacco consumption that justifies the bold and decisive tax policy moves being suggested.

Figure 6.1 shows that Trinidad and Tobago's excise tax rate is below WHO 70% excise tax benchmark, with its rate only accounting for 14.65% of the retail price of the most sold brand of cigarettes. This is much lower than its regional counterparts,

**Figure 6.1: Specific Excise Taxes as a Percentage of the Price of the Most Sold Brand of Cigarette – Region of the Americas (2016)**



Source: WHO 2017

with CARICOM member states such as Barbados, Jamaica, Grenada and St. Lucia, which have comparably higher rates.

### **6.3 – Excise Taxes Indexed to Inflation Rate**

If we are to maintain the affordability impact of the tax increases, specific excise taxes will need to be indexed to the inflation rate. For Trinidad and Tobago, there were increases in both excise tax and the price of cigarettes in 2017, but the excise tax as a percentage of price only increased to an estimated 14.65% of the price of the most sold brand. Indexing the tax changes would certainly increase the share of the tax in the price.

### **6.4 – All Tobacco Products Comparably Taxed**

Although there are no Trinidad and Tobago data on the substitution effects of tobacco consumption, international data strongly suggest that to minimize these effects and to secure an overall reduction in tobacco consumption all tobacco products should be taxed at comparable rates.<sup>60</sup> It is important that taxes are all-encompassing and sufficiently high to discourage both between brand substitution and substitution across the tobacco product categories. Experience has shown that differential taxation results in some overall reduction in cigarette consumption but may lead to increased consumption of cigarette substitutes.<sup>61</sup>

### **6.5 – Embark on Regional Tobacco Tax Harmonization**

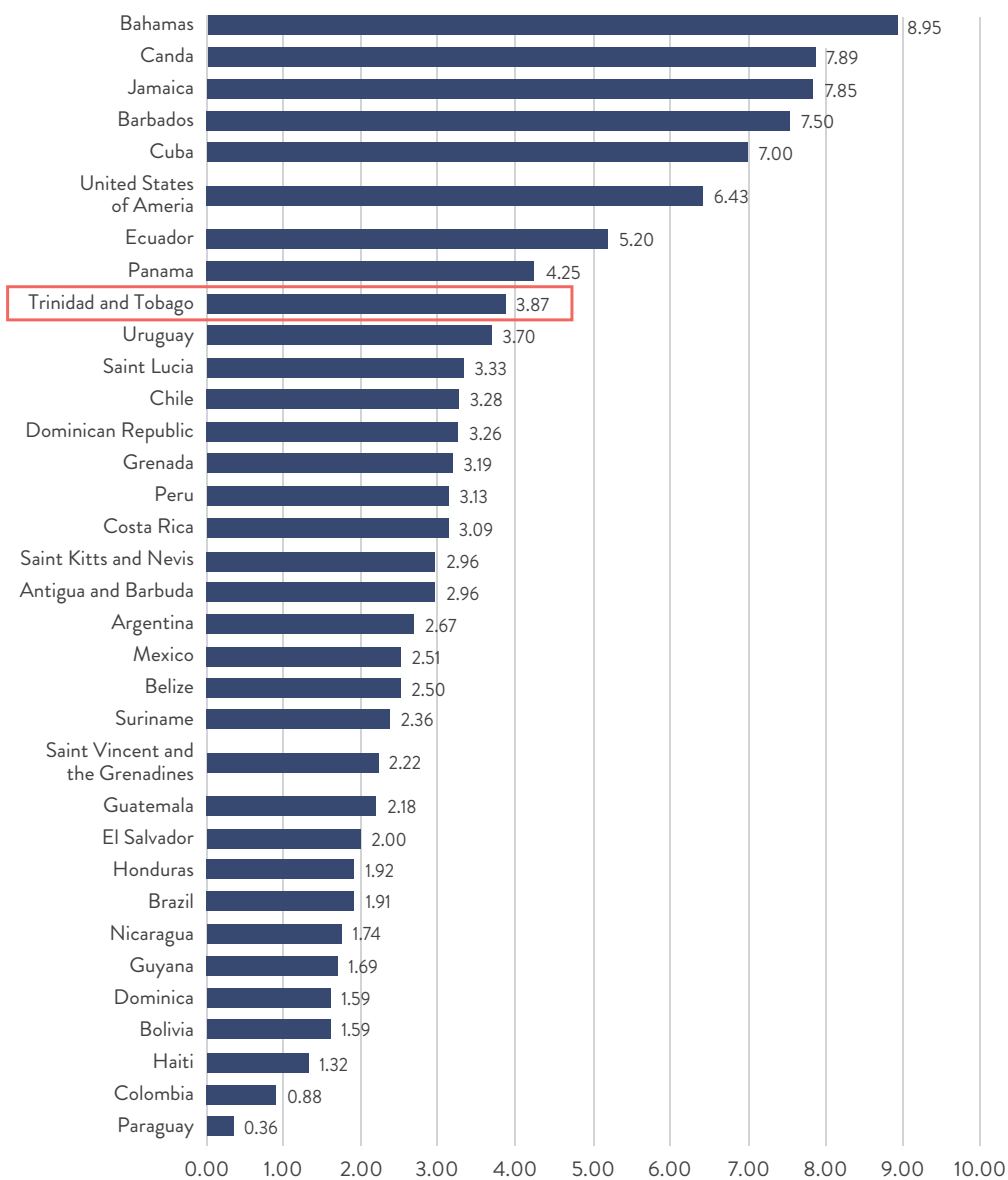
We would expect that the maximum taxation effect on tobacco consumption will come from a standardized regional tobacco environment. This is what makes harmonization important to the region. Although the harmonization issue will be addressed more thoroughly in the OECS tax harmonization report, it is reasonable to expect that regional tobacco harmonization will reduce the incentive for smuggling and tax evasion, resulting in lowered consumption. Figure 6.2 shows that Trinidad and Tobago's retail cigarette prices for its most sold brand are more expensive than most of its regional neighbours. It does not stretch the imagination to infer that such large price differentials amongst countries that are so geographically close, produce economic incentives for individuals to engage in the illicit tobacco trade amongst OECS and CARICOM member countries. It is imperative that regional tax harmonization be pursued to ensure that the gains in consumption reduction are not eroded by illegal cigarette consumption.

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<sup>60</sup> Jha, Prabhat and Frank J. Chaloupka. 2000. Tobacco control in developing countries. Oxford University Press.

<sup>61</sup> Ibid

**Figure 6.2: Prices of Most Sold Brand in US\$ at Official Exchange Rates**



Source: WHO 2017



## 6.6 — Implement Strong Tax Administration

While the Tobacco Control Act of 2009 and the Tobacco Control Regulation of 2013 provide a foundation for tax policy, strong tax administration is required. In developing countries like Trinidad and Tobago, tax avoidance/evasion is a systemic problem. Recently the level of tax evasion was estimated at close to 30% of total revenues. To ensure compliance in respect to tobacco taxation, administrators must have the capacity to monitor product flows, identify illicit activities and consistently enforce penalties. To encourage the required level of compliance necessitates monitoring of tobacco products as they move through the distribution chain. This requires the ability to monitor flows of products from manufacturer/importer to distributor. Implicitly this touches on the issue of border control and national security. Consideration must be given to an integrated collaborative framework, which links the Customs and Excise Division with the Ministry of National Security where necessary. An inter-ministerial integrated electronic system that builds on existing IT platforms is certainly worthy of consideration.



# 7 / CONCLUSION

*If we accept that “Well over 100 studies, including a growing number from low-income and middle-income countries, clearly demonstrate that tobacco excise taxes are a powerful tool for reducing tobacco use while at the same time providing a reliable source of government revenues,<sup>62</sup> it will follow that “Significant increases in tobacco taxes (will) increase tobacco product prices encourage current tobacco users to stop using, prevent potential users from taking up tobacco use, and reduce consumption among those that continue to use. ...”<sup>63</sup>*

Trinidad and Tobago remains with the highest prevalence rates of cigarette smoking in the CARICOM region. Undoubtedly, there will be significant economic costs associated with smoking related diseases both direct and indirect. While there is empirical evidence which supports the view that increases in excise taxes on tobacco will reduce the consumption and prevalence of smoking, given the proximity of the countries in the CARICOM region, if the taxes are not harmonized, there will be an incentive to engage in smuggling and tax evasion which will not lead to the much need reduction in consumption.

There seems to be no doubt that significant increases in tobacco taxes will be a highly effective instrument for controlling tobacco consumption with significant benefits to public health. The evidence shows that the positive health impact and the incidence of tobacco taxation are even is even greater when, as indicated in the 2007 Port of Spain Declaration, some of the revenues generated by tobacco tax increases are earmarked for tobacco control, health promotion and for providing health insurance for the poor. These are all areas of consideration for Trinidad and Tobago as it moves to greater harmonization with the OECS.

The analysis presented in this study demonstrates that there are fiscal options that may be considered by the Trinidad and Tobago authorities, aimed at curbing the consumption of cigarettes in Trinidad and Tobago and which also have the added dimension of increasing revenue streams in the short term. The analysis shows that over the three-year period under consideration, the excise tax rate can be increased without any immediate concern for loss of excise or total cigarette-related revenues. The model predicts that this can be achieved alongside a significant reduction in consumption of the product and as such, presents viable paths through which the prevention and control of tobacco consumption may be realised.

In a nutshell, what the study shows is that while there is nothing to lose and everything to gain, from increasing tobacco taxation in a harmonized environment, there will be a tremendous and a growing cost if the current situation with tobacco consumption is allowed to continue. The case for action is a strong one and the time for action is now.

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62 Frank J Chaloupka et al. “Tobacco taxes as a tobacco control strategy”, 30 Tobacco Control 2012;21:172e180

63 Ibid



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# ANNEX

ANNEX I – TABLE 1: TRINIDAD AND TOBAGO MACRO-ECONOMIC INDICATORS

TRINIDAD AND TOBAGO TOBACCO TAX MATRIX	2010	2011	2012	2013	2014	2015	2016	2017 FORECAST	2018 FORECAST	2019 FORECAST	2020 FORECAST
Average Exchange rate TT\$/1US\$ (Estimate)	6.38	6.43	6.43	6.44	6.41	6.38	6.67	6.70	7.50	8.00	8.00
Macroeconomic data [1]											
GDP at market prices (Current TTD million)	141,268.3	163,007.8	165,203.2	170,317.6	167,764.3	150,246.6	140,939.0	139,493.0	142,931.0	148,169.0	154,654.0
Real GDP growth rate	3.3	(0.3)	1.3	2.7	(0.6)	(0.6)	(5.4)	(3.2)	1.9	2.2	1.6
GDP per capita growth (annual % – constant local currency terms) [2]	2.8	(0.8)	0.8	2.1	(1.0)	(1.0)	(5.8)	(3.6)	1.4	1.7	1.2
Inflation rate (Inflation, annual average %)	10.5	5.1	9.2	5.3	5.7	4.6	3.1	3.2	3.2	3.7	3.3
CPI (annual average – Base year 2010),	100.0	105.1	114.8	120.8	127.7	133.6	137.7	142.1	146.7	152.1	157.1
Population (Million)	1.33	1.34	1.34	1.35	1.35	1.36	1.37	1.37	1.38	1.39	1.39

[1] Source: Central Bank of Trinidad and Tobago & MOF projections 2017-2020

[2] IMF WEO October 2017.

**ANNEX I – TABLE 2: TRINIDAD AND TOBAGO: SIMULATION ASSUMPTIONS: PRICE (-0.5/-0.3 RANGE) AND INCOME ELASTICITY (0.8/0.4 RANGE)**

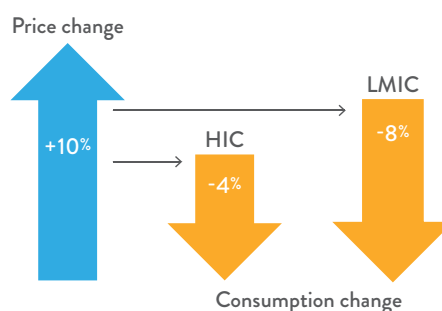
**To estimate the impact of the change in the retail price on consumption, the crucial parameters are:**

- **Price elasticity of demand:** The greater the price elasticity, the greater the decrease in the consumption of cigarettes in response to a given percentage change in the price (price elasticity falls in the inelastic range, but closer to -1 than zero).
- **Income elasticity of demand:** The greater the income elasticity may lead to greater consumption of cigarettes in response to a given percentage change in income (income elasticity tends to be unit elastic or somewhat more elastic).
- VAT (12.5%) is equivalent to 11.11% of final retail price;
- It is assumed that Profit margins of the producers, importers and distributors due to the tax increase are passed on to consumer’s price increase.

**Price elasticity**

Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low- and middle-income countries. (LMIC) (IARC, 2014)

Meta-analyses of the relationship between tobacco prices and use suggest that the overall elasticity of demand for adults lies between -0.3 and -0.7 (CBO 2012, IARC 2011, Gallet and List 2003, Chaloupka and Warner 2000)



**Assumptions**

Price elasticity for economy cigarettes	Value (must be negative)	-0.5
Price elasticity for medium cigarettes	Value (must be negative)	-0.4
Price elasticity for premium cigarettes	Value (must be negative)	-0.3
Income elasticity for economy cigarettes	Value (typically positive)	0.8
Income elasticity for medium cigarettes	Value (typically positive)	0.6
Income elasticity for premium cigarettes	Value (typically positive)	0.4

Note: Price and income elasticity adopted for HIC, based on the fact that Trinidad and Tobago is the wealthiest country in the Caribbean as well as the third richest country by GDP (PPP) per capita in the Americas after the United States and Canada. Furthermore, it is classified as a high-income economy by the World Bank.

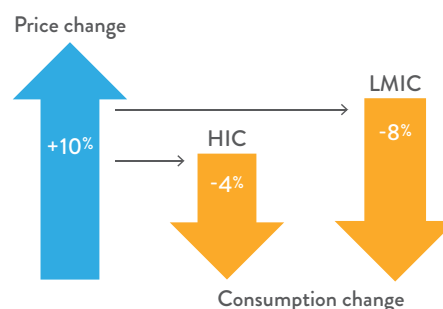
**ANNEX I – TABLE 3: TRINIDAD AND TOBAGO: SIMULATION ASSUMPTIONS:  
PRICE (-0.6/-0.4 RANGE) AND INCOME ELASTICITY (0.9/0.5 RANGE)**

**To estimate the impact of the change in the retail price on consumption, the crucial parameters are:**

- **Price elasticity of demand:** The greater the price elasticity, the greater the decrease in the consumption of cigarettes in response to a given percentage change in the price (price elasticity falls in the inelastic range, but closer to -1 than zero).
- **Income elasticity of demand:** The greater the income elasticity may lead to greater consumption of cigarettes in response to a given percentage change in income (income elasticity tends to be unit elastic or somewhat more elastic).
- VAT (12.5%) is equivalent to 11.11% of final retail price;
- It is assumed that Profit margins of the producers, importers and distributors due to the tax increase are passed on to consumer's price increase.

**Price elasticity**

Price elasticity of demand for high-income countries (HIC) is estimated to be -0.4 and between -0.6 and -0.8 in low- and middle-income countries. (LMIC) (IARC, 2014)



**Assumptions**

Price elasticity for economy cigarettes	Value (must be negative)	-0.6
Price elasticity for medium cigarettes	Value (must be negative)	-0.5
Price elasticity for premium cigarettes	Value (must be negative)	-0.4
Income elasticity for economy cigarettes	Value (typically positive)	0.9
Income elasticity for medium cigarettes	Value (typically positive)	0.7
Income elasticity for premium cigarettes	Value (typically positive)	0.5

Note: For the sensitivity analysis to determine how different values of price and income elasticity impact tobacco consumption, retail price and tax revenue, this assumption adopts the ranges found in a study carried out on price and income elasticities of demand in Jamaica in 2004 (*"Economics of tobacco control in Jamaica: will the pursuit of public health place a fiscal burden on the government?"*; Article • January 2004; Corné van Walbeek, University of Cape Town):

- "likely range for the true value of the price elasticity of demand is between -0.3 and -0.6"
- Van Walbek found statistically significant ranges for income elasticity in Jamaica between 0.51 and 0.89

**ANNEX I – TABLE 4: TRINIDAD AND TOBAGO: SENSITIVITY OF TOBACCO CONSUMPTION, RETAIL PRICE AND REVENUE TO PRICE AND INCOME ELASTICITY SELECTION (2019–2020)**

POLICY OPTION SCENARIO	SCENARIO 1		SCENARIO 2	
	HIC	UMIC	HIC	UMIC
Parameters based in HIC and UMIC [1]				
Price elasticity range	-0.5/-0.3	-0.6/-0.4	-0.5/-0.3	-0.6/-0.4
Income elasticity range	0.8/0.4	0.9/0.5	0.8/0.4	0.9/0.5
CHANGES RELATIVE TO PRIOR YEAR SIMULATION OUTPUTS (2018)	2019			
	SCENARIO 1		SCENARIO 2	
Simple Specific Excise Tax (TTD/per 20 cigarettes pack)		TTD 13.14		TTD 21.90
PERCENTAGE CHANGES (%)				
Increase in specific excise tax (%)	100%	100%	100%	100%
Increase in average retail price for a 20 cigarette Pack	28.7%	28.7%	42.1%	42.1%
Percentage increase in total excise tax revenue (%)	15.9%	12.5%	62.9%	56.6%
Percentage change in total cigarette sales taxed (%)	-10.3%	-12.9%	-13.1%	-16.5%
Total tobacco tax increase in GDP contribution (%)	0.20%	0.18%	0.29%	0.25%
SIMULATION OUTPUTS (2019)				
Total 20 cigarette packs taxed (million)	50.2	47.9	44.9	41.6
Total excise tax revenue (US\$ million)	\$ 82.39	\$ 78.68	\$122.86	\$113.75
Total government revenue (import duty, excise, and VAT, US\$ million)	\$107.89	\$103.02	\$154.07	\$142.64
Average cigarette price (US\$ per pack)	\$4.54	\$4.54	\$6.22	\$6.22
CHANGES RELATIVE TO PRIOR YEAR SIMULATION OUTPUTS (2019)	2020			
	SCENARIO 1		SCENARIO 2	
Simple Specific Excise Tax (TTD/per 20 cigarettes pack)		TTD 26.28		TTD 43.80
PERCENTAGE CHANGES (%)				
Increase in specific excise tax (%)	100%	100%	100%	100%
Increase in average retail price for a 20 cigarette Pack	55.5%	55.5%	67.6%	67.6%
Percentage increase in total excise tax revenue (%)	72.0%	64.9%	68.2%	54.9%
Percentage change in total cigarette sales taxed (%)	-14.0%	-17.6%	-15.9%	-19.9%
Total tobacco tax increase in GDP contribution (%)	0.35%	0.30%	0.50%	0.41%
SIMULATION OUTPUTS (2020)				
Total 20 cigarette packs taxed (million)	43.15	39.5	37.8	33.3
Total excise tax revenue (US\$ million)	\$141.74	\$129.74	\$206.70	\$182.16
Total government revenue (import duty, excise, and VAT, US\$ million)	\$175.81	\$160.93	\$250.69	\$220.93
Average cigarette price (US\$ per pack)	\$7.06	\$7.06	\$10.42	\$10.42

Source: WBG Staff estimate







