

Guatemala

Overview of

TOBACCO USE, TOBACCO CONTROL LEGISLATION, AND TAXATION

World Bank Group
Global Tobacco Control Program
Country Brief

Table of contents

Executive summary	3
Acknowledgments.....	4
Introduction	5
Tobacco control legislation	5
Tobacco use among adults.....	6
Tobacco growing	7
Tobacco consumption	7
Cigarette production, external trade, and sales	7
Tobacco taxation	9
Tobacco excise revenue	10
Cigarette prices	11
Comparison of cigarette prices and taxes in Guatemala and neighboring countries.....	12
Cigarette smuggling.....	13
Discussion.....	14
Conclusions and recommendations.....	16
References.....	18

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Overview of Tobacco Use, Tobacco Control Legislation, and Taxation A Country Brief

Executive summary

Information on smoking prevalence rates among the adult population in Guatemala is not consistent, and smoking trends among adults currently cannot be estimated. Surveys among adolescents aged 13-15 years old conducted in Guatemala in 2002, 2006, 2008, and 2015 have not shown any substantial changes in smoking prevalence over those years.

Reliable information on cigarette sales in Guatemala is also not available; apparently, there were no large changes in cigarette consumption in Guatemala over the last years. The only tobacco factory in the country was closed in 2012. The tobacco industry claimed that the closure had been caused by the increased cigarette smuggling. However, there are no independent estimates of illicit cigarette share on the market, while the tobacco industry usually exaggerates the volumes of smuggled cigarettes. The cigarette price difference between Guatemala and neighboring countries is rather small to encourage large smuggling, and the observed illicit cigarette sales are likely caused by the factors, which are not directly related to tobacco taxation.

Tobacco excise rates were almost not changed in Guatemala for the last 40 years. In 2010, British American Tobacco brought a constitutional claim against the existing tobacco tax legislation, and the Constitutional Court ruled in favor of BAT. The application of the tax law was suspended, and in 2011, tobacco excise revenue substantially decreased.

In 2012, the new tax law was adopted which claimed that the excise *cannot be less than 75% of the retail price*. However, the base for calculation of this 75% rate is calculated by subtracting VAT and excise in monetary terms. Eventually, the effective ad valorem rate is only 38.27% of the retail price, which is lower than in previous years (41.07%).

Cigarette excise revenue in Guatemala gradually increased in 1990-2017 more than 4-fold in nominal terms; however, real (inflation-adjusted) revenue decreased over those years by 42%.

In 2009-2018 combined, the increase in cigarette prices was 91% which much exceeded the inflation in those years (44%). The price growth was caused by the tobacco industry pricing policy as the excise tax rates were actually decreased in those years. The increase in cigarette prices reduces their affordability, consumption, and sales. The decrease in cigarette sales with unchanged excise rates reduces the excise revenue first in real terms and eventually in nominal terms.

It is recommended to change the current ad valorem excise system for cigarettes to a specific excise system with a uniform excise rate in monetary terms. Then the specific excise rate should be annually increased to ensure the reduction in tobacco affordability and the increase in the excise revenues.

The tobacco taxation policy should be based on the careful analysis provided by institutions independent from the tobacco industry. Tobacco use surveillance and monitoring should be developed, including a regular collection of information on cigarette sales, prices and other economic indicators. Smoking prevalence surveys need to be regularly conducted in line with the international guidelines.

Effective policies to counteract tobacco smuggling and other kinds of illicit tobacco sales should be implemented in line with the provisions of the FCTC Protocol to Eliminate Illicit Trade in Tobacco Products, which is recommended to be ratified by the country.

Acknowledgments

This country brief was prepared by a team from the World Bank Group Global Tobacco Control Program led by Patricio V. Marquez, including Konstantin Krasovsky, and Tatiana Andreeva.

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Introduction

The Objective of the Country Brief

This country brief presents an overview of current tobacco control legislation, tobacco use, and taxation policy in Guatemala. Data and information were collected from various sources. The brief is intended to serve as the context for complementary assessments on different aspects of tobacco taxation in the country to be shared with government teams and other national and international stakeholders.

Tobacco control legislation

Guatemala became a Party to the WHO Framework Convention on Tobacco Control on February 14, 2006.

Tobacco advertising

In Guatemala, advertising (written, graphic, radio, television, films, and other electric or electronic media) requires the prior authorization of the Ministry of Public Health and Social Aid [1]. In addition, tobacco billboards are banned within 500 meters of entrances and exits of pre-school, elementary or high schools. Moreover, the tobacco industry (Philip Morris (PM) and British American Tobacco (BAT)) has voluntarily removed radio and television advertising. As observed in 2008, very few stores in Guatemala had exterior tobacco ads, but most shops had interior ads and tobacco products in close proximity to confectionary [2].

Smoke-free policies

In 2006, a study revealed high SHS exposure in public spaces. The risk to be exposed to SHS was highest in bars and restaurants, where nicotine concentrations were 710 and 114 times higher as compared to those found in a public hospital. The support for smoke-free environments rendered by employees was high (70%) [3]. In 2008¹ a smoke-free law was adopted and in 2009 the implementation regulations² were issued. Smoking is prohibited anywhere in workplaces and closed public places. There is one limited exemption to the complete indoor smoking ban for hotel and motel guest rooms. Smoking is also prohibited on all public transportation. In addition, the law mandates businesses to have a visible “No smoking” sign and prohibits smoking sections in all hospitality venues. The Ministry of Health is responsible for overseeing compliance and to penalize businesses violating the law. Six months later, a significant reduction in SHS exposure was documented in bars and restaurants, although compliance was better in restaurants than in bars [4]. In 2010, however, an observational study reported that 86% of bars and restaurants were non-compliant with the law ranging from allowing smoking indoors to inappropriate “No smoking” signage [5, 6].

In 2014, SHS exposure was assessed using airborne nicotine monitors in bars and restaurants in Guatemala using the same protocol as in 2006 and in 2009 [7, 8]. Most (71%) venues still had a smoking section which was a violation of the law. The percentage of samples with detectable nicotine concentrations was 100%, 85% and 43% in 2006, 2009 and 2014, respectively, so the situation was gradually improving, while the law was not yet fully respected. In bars, median nicotine concentrations were 4.58 µg/m³ in 2006, 0.28 in 2009 and 0.59 in 2014. In restaurants, the corresponding medians were 0.58 µg/m³, 0.04 and 0.01. The support for the law among bar and restaurant employees kept being high (88 %). Most employees reported no economic impact of the law.

¹ <https://www.tobaccocontrolaws.org/files/live/Guatemala/Guatemala%20-%20Decree%20No.%2074-2008.pdf>

² <https://www.tobaccocontrolaws.org/files/live/Guatemala/Guatemala%20-%20Govt%20Agreement%20No.%20137-2009.pdf>

Tobacco Packaging and Labeling

One of five text health warnings is required to occupy 25 percent of the front surface of the pack. The warning “Use of this product causes serious health damage” must be printed on the side of the pack. The size of the side panel warning is not specified [1].

As of 2015 [9], tobacco control policies in Guatemala were assessed at 15 out of 37 points.

Tobacco use among adults

In 1971 [10, 11], the prevalence of current smoking was measured as 36% among men and 10% among women; 11% of men and 9% of women were reported to be former smokers. Several surveys conducted between 1982 and 1989 estimated the prevalence of smoking among men as 34-53% and among women 18-38% [10].

The only available representative survey (World Health Survey) on tobacco use among the adult population in Guatemala was conducted in 2003³. It documented that 23.9% of men and 3.4% of women were current smokers, while the prevalence of daily smoking was much lower: 8.3% and 0.9% respectively. Similar estimates were reported by Hammond [12] with 24.8% of men and 3.9% of women being current smokers and 7.8% of men and 0.8% of women daily smokers.

According to published international estimates [13], the age-standardized adult smoking prevalence in Guatemala decreased from 8.3% in 1980 to 6.6% in 2006-2012. In 2012 the prevalence was 11.7% among men and 2.1% among women.

According to the STEPS conducted in the Metropolitan area in 2015, 25.4% of men were current (19.1% daily) smokers and 5.0% and 2.3% of women respectively [14].

Among women of reproductive age (15-44 years) the prevalence of smoking in 1983 was 6.6% [10] and in 1987 4% [10, 15].

The survey of women aged 15-49 in Guatemala in 2002 revealed that the prevalence of current smoking among them was 2.6% [16]. According to a survey among women of reproductive age conducted in 2014-2015 [17] 98% of them do not smoke. Non-indigenous women smoke more than indigenous women (2 percent versus 1 percent, respectively). The highest percentage of women who smoke was found among those with higher education and in the top wealth quintile with the prevalence of smoking reaching 4% in these two groups.

A small survey of 77 randomly selected clinical attendees (mean age 38, range 13-87) was conducted in 2001 in the village Chimaltenango [18]: 68% of surveyed men and 17% of women reported ever smoking a cigarette, and 21% of males and 2% of females were current smokers.

Tobacco use among youth

In a study conducted in 1994 [19], 13.3% of adolescents aged 12-19 years were found to be ever tobacco smokers.

According to the surveys conducted among adolescents aged 10-18 years in 1999-2000 within PACARDO research project [20], 22% of study participants in Guatemala were tobacco users (probably at least once in their lifetime).

In 2002 [21], 12.44% of boys and 9.32% of girls were reported to be current smokers.

³ http://untobaccocontrol.org/impldb/wp-content/uploads/reports/guatemala_2014_report_import%20_final.pdf

The Global Youth Tobacco Survey (GYTS) was conducted in Guatemala in 2002 [21, 22], 2006⁴, 2008⁵ and 2015⁶.

Table 1. Prevalence of current tobacco use (at least once during the last 30 days) among adolescents aged 13-15 years in Guatemala, %, GYTS

	2002	2006	2008	2015
Currently used any tobacco product		20,5	16,6	17,1
<i>boys</i>		25,0	19,7	19,5
<i>girls</i>		15,8	13,3	14,4
Currently smoked cigarettes	14,3	13,3	11,4	12,9
<i>boys</i>	17,3	15,0	13,7	14,7
<i>girls</i>	11,2	11,5	9,1	11,1
Lived in homes where others smoked in their presence		25,8	23,1	21,6
Had at least one parent who smoke		23,6	25,5	

Tobacco use and cigarette smoking among young people declined between 2006 and 2008 but increased in 2015. Percentage of teenagers, who lived in homes where others smoke in their presence, gradually decreased from 25.8 % in 2006 to 21.6% in 2015, and this can be considered an indirect indicator of smoking behavior among adults.

Tobacco growing

According to the FAO database [23], raw tobacco production in Guatemala increased from 2,200 tons in 1961 to almost 30,000 tons a year in 2016 and the area harvested to tobacco increased over those years from 3,100 hectares to 14,000 hectares. However, in 2009-2016 raw tobacco production was rather stable: about 28,000 tons annually.

Tobacco consumption

Per capita cigarette consumption among adults (>15 years of age) in Guatemala was estimated as 660 cigarettes per year in 1970-72 [24], 640 in 1980-82 [24], 550 in 1985 with a decline of 26% in 1970-1985 [10], and 340 in 1990-92 [24].

The estimated cigarette consumption per capita in 2016 was 199 pieces, which is 6.4% above the level documented in 1990⁷.

According to published international estimates [13], the estimated annual cigarette consumption increased from 1.1 billion cigarettes in 1980 to 2.2 billion cigarettes in 2006-2012. Estimated mean daily cigarette consumption per smoker was about 10.5 cigarettes in 2012.

Cigarette production, external trade, and sales

Only two companies are registered to manufacture, import and sell cigarettes in Guatemala: Tabacalera Centro Americana, S.A. (TACASA) and Tabacalera Nacional, S.A. (TANASA), subsidiaries of Philip Morris International and British American Tobacco, respectively.

⁴ <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=243>

⁵ <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=244>

⁶ http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=43116&Itemid=270&lang=en

⁷ <https://www.marketresearch.com/GlobalData-v3648/Cigarettes-Guatemala-11013550/>

In 2012, TACASA closed its plant in Boca del Monte, where for 50 years it produced such cigarette brands as Marlboro, Rubios, and L&M. About 60% of its production was exported to El Salvador, Honduras, and Panama. According to UN database⁸, in 2007-2011 cigarette export from Guatemala was about 1,800 tons a year, while annual import was about 800 tons.

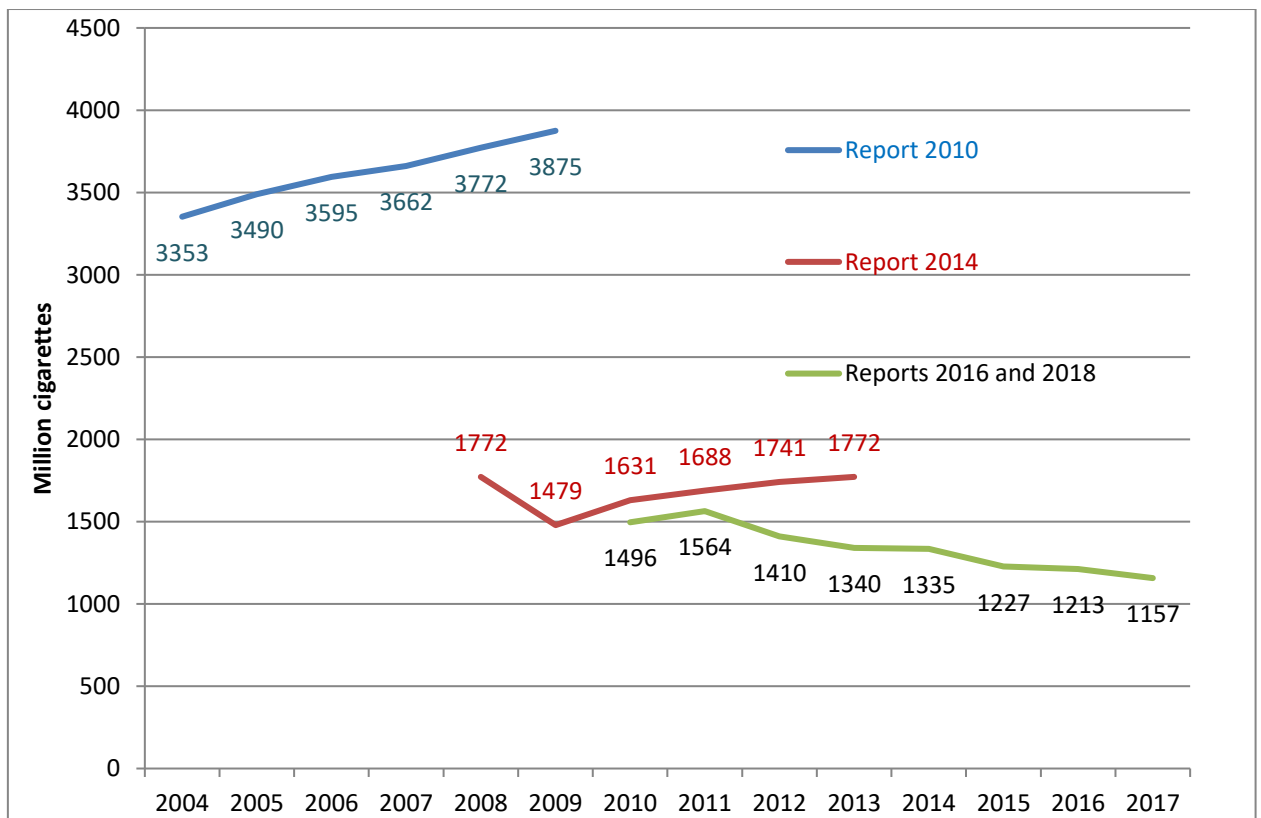
From 2013 the cigarette market in Guatemala is supplied through imports. According to UN database⁹, cigarette import to Guatemala in 2013-2017 was in the range 1,676-1,941 tons or about 1,800 tons annually.

A.Ramos (2014) [25] estimated annual cigarette sales in Guatemala in 2012 as 82.8 million packs or 1.65 billion cigarettes.

KPMG Project Frost study [26] (commissioned by British American Tobacco) reported that legal cigarette sales in Guatemala decreased from 1.5 billion cigarettes in 2010 to 1.2 billion in 2012 and then increased to 1.3 billion in 2014.

Euromonitor International regularly issues reports on cigarettes in Guatemala (Cigarettes in Guatemala. August 2010; August 2014; August 2016; August 2017; July 2018). However, the reports issued in various years show inconsistent estimates of cigarette sales (Figure 1).

Figure 1. Cigarette sales in Guatemala, Euromonitor reports of various years.



Reported volumes of cigarette sales for 2009 differ almost 3-fold in reports of 2010 and 2014. Not only volumes of sales but their trends are different. According to the report of 2014, in 2011-2013, cigarette sales in Guatemala increased, but according to the report of 2016, sales decreased over those years.

⁸ http://data.un.org/Data.aspx?q=cigarettes&d=ComTrade&f=_l1Code%3a25%3bcmdCode%3a240220

⁹ http://data.un.org/Data.aspx?q=cigarettes&d=ComTrade&f=_l1Code%3a25%3bcmdCode%3a240220

Recently, the World Bank (2019) [27] admitted that Euromonitor estimates fluctuate tremendously and are not consistent across reports published in different years. This casts serious doubt on the reliability of the Euromonitor estimates.

Tobacco taxation

Tobacco taxation rates are set by the Law on Tobacco and its products (Decree 61-77) adopted in 1977¹⁰. Article 22 of this law set that tax imposed for machine-made cigarettes is equivalent to 100% of the factory sale price without tax. Article 30 stipulated that importers should pay a tax equal to 100% of the cigarettes CIF value. Article 27 of the law declared that both for domestic and imported cigarettes the tax cannot be less than 46% of the declared retail sale price. The retail price must be reported by the manufacturer or importer to the Tax Administration, deducting the Value Added Tax. In 1995 the rate was reduced from 46% to 44%, but in 2001 it was increased again back to 46%.

The Value Added Tax in Guatemala is 12%, so the effective ad valorem excise rate was $46 \cdot (1-12/112) = 41.07\%$.

In April 2010, British American Tobacco brought a constitutional claim against the existing tobacco tax legislation (approved 27 years earlier) noting that tax calculated on that basis is unconstitutional as it implies "double taxation" since the value-added tax is also imposed. The Constitutional Court ruled in favor of BAT in September 2010¹¹. The decision by the highest court in Guatemala repealed the second paragraph of Article 27 of the Tobacco Law which sets that the calculated tax should be no less than 46% of the retail price. The application of the tax law was suspended (until the problem was fixed with another law) and consequently in 2011 tobacco excise revenue decreased to 259 million Quetzals (GTQ), while in 2010 it was 347 million GTQ.

The new law was adopted in January 2012¹². The second paragraph of the Article 27 was amended, as follows: *In any case, both for domestically manufactured and imported manufactured cigarettes, the tax base cannot be less than seventy-five percent (75%) of the suggested retail price to the consumer. The manufacturer, the importer, the distributor or the intermediary, depending on who makes the sale to the consumer, must report through a sworn statement to the Tax Administration the suggested retail price, deducted by the Value Added Tax and the specific tax established in this Law. The price invoiced to the distributor or intermediary by the manufacturer or importer is not considered the suggested retail price to the consumer.*

At the first glance, the amendment looks good as it sets that the excise is to be 75% of the retail price. However, the base for calculation of this 75% rate should be reduced by VAT and "specific tax". But the law does not set any specific excise rate. The "specific tax established in this Law" is actually the ad valorem excise in monetary terms. The Tax Administration provides an example of the cigarette excise calculation¹³. The detailed calculation is presented in Table 2. It shows that the effective ad valorem rate is only 38.27% of the retail price, which is lower than in previous years (41.07%).

¹⁰ <http://www.mspas.gob.gt/images/files/saludambiente/regulacionesvigentes/tabaco/Decreto61-77.pdf>

¹¹ https://www.centralamericadata.com/en/article/home/Guatemala_Court_Ruling_Against_Tobacco_Tax

¹² <https://transdoc.com/assets/images/users/pau/DECRETO%20DEL%20CONGRESO%204-2012%20DISPOS%20P%20FORTALECIMIENTO%20DEL%20SISTEMA%20TRIBUTARIO%20Y%20EL%20COMBATE%20A%20LA%20DEFRAUD%20Y%20AL%20CONTRAB.doc>

¹³ <https://sites.google.com/site/elabcdelosimpuestossat/el-abc-de-los-impuestos-1/08-impuesto-al-tabaco-y-sus-productos>

However, the scheme used in the taxation law is misleading as the actual tax-free part of the retail price is not the E part but the D and thus it constitutes not the 12.76% of the price but 51.02%. Actual total tax share is just 48.98% =38.27% (excise) + 10.71 (VAT) of the retail price and the excise constitutes just 38.27% of the price.

Table 2. Example and formulas of the cigarette excise calculation (adapted from what is presented in the law)

A	Price	Formula	100,00
B	VAT	$B=A*12/112$	10,71
C	Base 1 (Price-VAT)	$C=A-B$	89,29
D	Base 2 (Price - VAT - "specific excise")	$D=C/1,75=E+F$	51,02
E	"Tax-free" part of Base 2	$E=D*0,25$	12,76
F	"Specific" excise	$F=D*0,75$	38,27

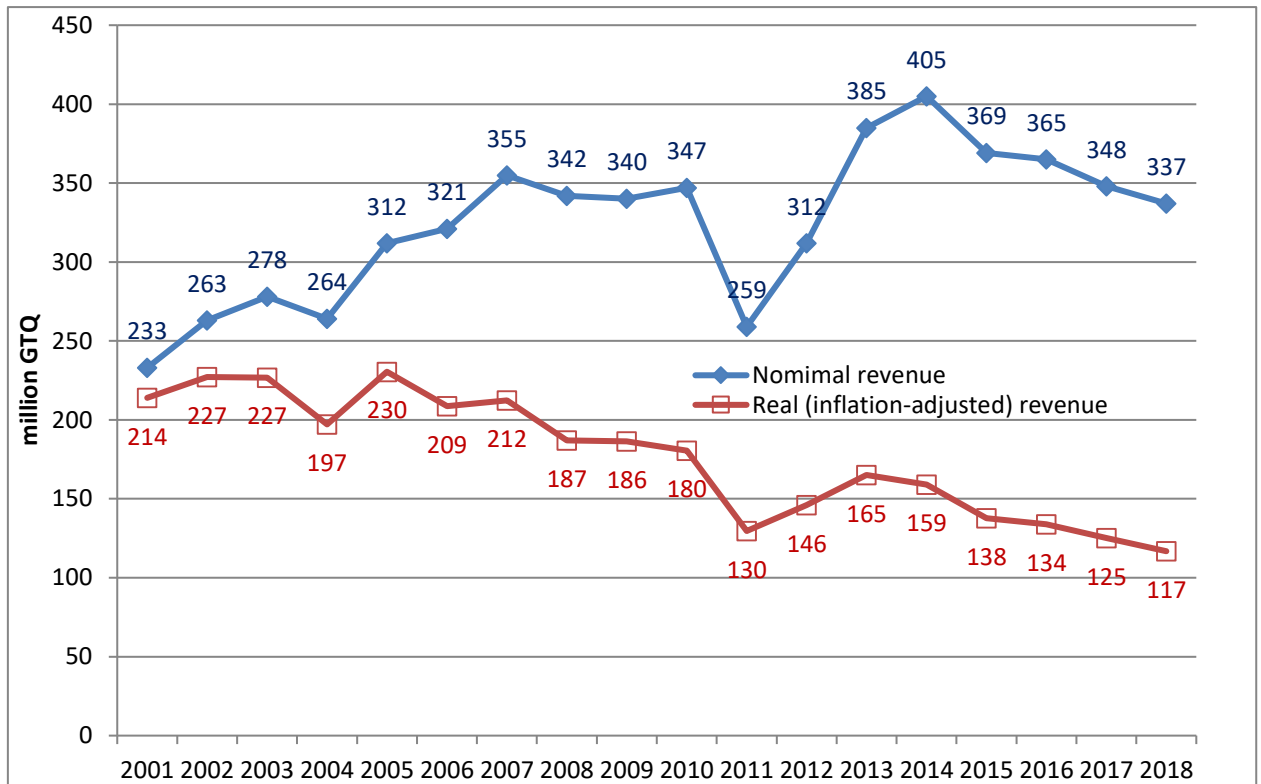
Article 25 of the Tobacco Law of 1977 requires that 100% of collected ad valorem tax is allocated to health programs. However, according to the estimates by A.Ramos (2014) [25], who used the methodology from the World Bank, tax revenues from tobacco taxes in Guatemala do not compensate health expenses derived from diseases associated with smoking. The fiscal collection of the year 2012 would only reach to compensate 50% of the health expenses.

Tobacco excise revenue

According to the OECD database¹⁴, cigarette excise revenue in Guatemala gradually increased from 76 million GTQ in 1990 to 205 million GTQ in 2000. In 2001-2018, tobacco excise revenue in nominal terms increased from 233 to 337 million GTQ, however real (inflation-adjusted) revenue decreased from 214 million to 117 million GTQ (Figure 2). In 2005-2018 real revenue decreased by 49%.

¹⁴ <https://stats.oecd.org/Index.aspx?DataSetCode=REVGTM>

Figure 2. Tobacco excise revenue in Guatemala.



Source: Nominal revenue OECD and Guatemalan Internal Revenue Service (SAT) reports¹⁵. Real revenue – authors’ calculations with inflation rates from the National Institute of Statistics reports¹⁶.

Cigarette prices

According to the WHO Global tobacco control reports, the price of a pack of the most popular cigarette brand in Guatemala (Pall Mall) increased from 10 Quetzals (GTQ) in 2008 to 13.59 GTQ in 2010, 14 GTQ in 2012, then to 16 GTQ in 2014 and 16.5 GTQ in 2016. In 2010-2016, the price increased by 21%, while the inflation rate for those four years was 38%.

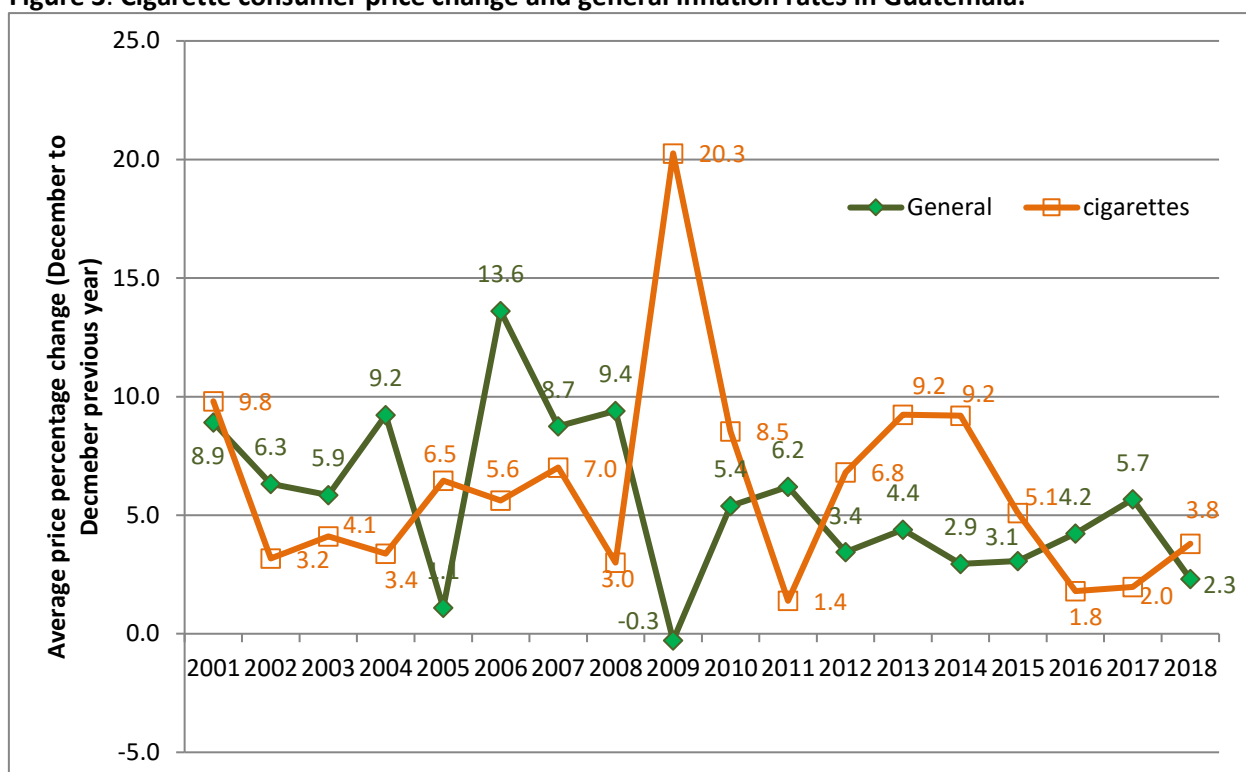
According to the database of the National Institute of Statistics,¹⁷ the largest increase in cigarette price (20%) was observed in 2009, while general prices did not increase that year (Figure 3). However, in 2001-2008 cigarette prices increased by 51%, while the inflation rate in that period constituted 83%, so, in those years real (inflation-adjusted) cigarette prices decreased. During the next decade, the situation changed. In 2009-2018 combined, cigarette prices increased by 91%, while inflation was 44%. Real cigarette prices increased, and this discouraged their consumption.

¹⁵ <https://portal.sat.gob.gt/portal/estadisticas-tributarias-sat/>

¹⁶ <https://www.ine.gob.gt/index.php/estadisticas-continuas/indice-de-precio-al-consumidos>

¹⁷ <https://www.ine.gob.gt/index.php/estadisticas-continuas/indice-de-precio-al-consumidos>

Figure 3. Cigarette consumer price change and general inflation rates in Guatemala.



Source: National Institute of Statistics database

Cigarette price increase exceeded the inflation rates in 2012-2014, despite the fact that the effective excise rate decreased in 2012. As Guatemala has only ad valorem excise the cigarette price increase was mainly caused by the pricing policy of the tobacco industry, but not by the government taxation policy.

Comparison of cigarette prices and taxes in Guatemala and neighboring countries

The WHO Global Tobacco Report, 2017, contains information on cigarette prices and taxes in Guatemala and other countries of the WHO Americas Region (AMRO) in 2016 [28] (Table 3).

Cigarette prices and taxes (in monetary terms) in Guatemala are lower than in all countries of the region except El Salvador, Honduras, and Nicaragua. In terms of affordability, cigarettes are more affordable in Guatemala than in Belize, Honduras, and Nicaragua. In the 2010-2016, cigarettes became more affordable in Guatemala as the percentage of GDP per capita required to purchase 2000 cigarettes of the most popular brand decreased from 5.9% to 5.2%.

Table 3. Cigarette prices and taxes in Guatemala and some neighboring countries in 2016, WHO report data [28]

Country	Price of a 20-cigarette pack of the most sold brand			Taxes as a % of the price of the most sold brand						% of GDP per capita required to purchase 2000 cigarettes of the most popular brand
	In reported currency	Currency reported	In US\$ at official exchange rates	Specific excise	Ad valorem excise	Total excise	Value added tax/sales tax	Total tax	Total tax, US\$	
Belize	5.00	BZD	2.50	26.0%	0.0%	26.0%	11.1%	37.1%	0.93	5.4%
Canada	10.29	CAD	7.89	57.2%	0.0%	57.2%	9.0%	66.2%	5.22	1.8%
Costa Rica	1 700	CRC	3.09	26.6%	31.2%	57.9%	11.5%	69.4%	2.14	2.7%
El Salvador	2.00	USD	2.00	22.5%	18.5%	41.0%	11.5%	52.5%	1.05	4.6%
Guatemala	16.50	GTQ	2.18	0.0%	38.3%	38.3%	10.7%	49.0%	1.07	5.2%

Honduras	44.00	HNL	1.92	19.1%	0.0%	19.1%	15.3%	34.3%	0.66	7.3%
Mexico	47.39	MXN	2.51	14.8%	38.7%	53.5%	13.8%	67.3%	1.69	3.0%
Nicaragua	50.00	NIO	1.74	22.1%	0.0%	22.1%	13.0%	35.1%	0.61	8.2%
Panama	4.25	PAB	4.25	0.0%	43.5%	43.5%	13.0%	56.5%	2.40	3.1%
United States of America	6.43	USD	6.43	37.8%	0.0%	37.8%	5.2%	43.0%	2.77	1.1%

Cigarette smuggling

According to the Industry Chamber of Guatemala, illegal cigarettes sales increased from 8.9% of the market share in 2010 to 12% in 2011¹⁸.

In 2012, two trained research assistants purchased cigarettes in 22 traditional markets in the country asking for “imported cigarettes” (how vendors refer to illegal cigarettes) [29]. One pack of each brand was purchased to get as many brands as possible. All markets but one sold illegal cigarettes. A total of 104, 79 illegal and 25 legal cigarette packs were purchased, but the method used could only estimate the qualitative composition of the brands legally and illegally imported to the Guatemalan market but not the share of illicit cigarettes on the market.

In May 2015, KPMG agency issued a report called “Project Frost” [26] funded by British American Tobacco (BAT). The purpose and scope of this study were established through an agreement with the BAT. The study had to consider the smuggling and the counterfeit segments of the tobacco market in 16 Latin American markets (including Guatemala) and Canada (with a focus on Ontario). According to this agreement, KPMG had to show the country-specific preliminary results for each of the markets included in the study to the BAT administration teams in order to obtain feedback and comments before finalizing the results. Most data for the study (sales, prices, taxes) were provided by the BAT. The estimates of illicit sales were based on so-called empty pack surveys (EPS). The results of EPS were provided to KPMG by the BAT.

According to the EPS results shown in the 'Project Frost' report [26], contraband cigarettes accounted for 18% of cigarettes consumed in Guatemala in 2014. Most (62%) contraband cigarettes in Guatemala were labeled Panamanian. In 2014, the average price of a legal tobacco pack in Guatemala was \$2.04 compared to \$4.08 in Panama. However, the report claims that the empty Panamanian packs found in Guatemala were Chinese brands from the free zone of Panama and arrived through Belize. Smuggled cigarette brands from India, China, and Ukraine were also found in Guatemala. No counterfeit packs were identified in the EPS.

The number of collected packs for the EPS in Guatemala is not disclosed, but 62% of all illicit empty packs were just one Chinese brand “Modern” from Panama. Such results make us suspect that the number of empty packs collected by BAT team was very small and their collection was limited to some areas, where consumption of illicit cigarettes was most probable.

According to the Euromonitor reports of 2017 and 2018, illicit cigarette sales in Guatemala increased from 268 million in 2011 to 383 million in 2017. However, Euromonitor also reports that total (licit + illicit) cigarette consumption decreased from 1831 million cigarettes in 2011 to 1540 cigarettes in 2017, or by 16% in six years. So, the decline in legal cigarette sales was only partly replaced by illicit ones.

The World Bank (2019) [27] reports that the cases of several country show that the tobacco industry used exaggerated estimates of illicit trade to argue against the tobacco tax increases. Even at relatively high

¹⁸ Guatemala Chamber of Industry: Corozal, La Capital del Contrabando de Cigarrillos, Industria y Negocios; 2012. <http://www.revistaindustria.com/?p=7954>

levels of tobacco illicit trade, the overwhelming majority of smokers will still be purchasing cigarettes at the official market and pay full taxes, while some smokers will quit (or non-smokers will not initiate smoking) as a result of a tobacco tax reform.

Police in Guatemala regularly seized smuggled cigarettes. For example, on April 15, 2016, agents of the National Civil Police (PNC) carried out a raid and confiscated 10 boxes of cigarettes of various brands. Among the seized, there were cigarettes from South Korea, which, according to the agents, are sold in nightclubs and their price is about GTQ40 per pack¹⁹. However, the price of licit Marlboro cigarettes in Guatemala is only 20-25 GTQ²⁰. According to a recent report [30], the median price of illicit cigarettes in poor countries is higher than the median price of licit cigarettes and price is not the main factor of cigarette smuggling.

In December 2017, Guatemalan authorities conducted 35 raids to curb the contraband down and have arrested 24 persons, including five military officers for being a part of the contraband network circle²¹. Millions of contraband cigarettes were bought in Belize and smuggled to Guatemala, Honduras, and El Salvador by boats. This was organized with the help of law enforcement officers²².

Guatemala is also used as a transit country for cigarette smuggling. On April 6, 2018, four subjects who tried to smuggle cigarettes from Guatemala were arrested in El Salvador²³. The detainees were seized with a total of 4,650 packages containing 10 packs of cigarettes of Chinese origin.

Discussion

Tobacco excise rates were almost not changed in Guatemala for 40 years and in 2012 the rate was even decreased. The increase in cigarette prices in 2009-2014 exceeded the inflation rates and was caused by tobacco industry pricing policy.

Smoking prevalence among adolescents increased in 2008-2015. There were no large changes in cigarette consumption in Guatemala over the last years. The only tobacco factory in the country was closed in 2012. Tobacco industry claimed²⁴ that the closure had been caused by increased cigarette smuggling. However, there are no independent estimates of illicit cigarette share on the market while the tobacco industry used to exaggerate the volumes of smuggled cigarettes. The cigarette price difference between Guatemala and neighboring countries is rather small to encourage large smuggling and the observed illicit cigarette sales are likely caused by the factors, which are not related directly to tobacco taxation.

Tobacco excise revenue in real (inflation-adjusted) terms decreased almost two-fold in 2005-2017, while there were no major changes in cigarette consumption in the country. Such a situation dictates the strong necessity of tobacco taxation reform in Guatemala in line with the FCTC Guidelines on Article 6 adopted in 2014.

During 2011, there was a strong push for raising tobacco taxes in Guatemala by the civil society with technical assistance from consultants A. Ramos and H. Vallarino [25].

The consultants proposed to change ad valorem system to a full specific type of excise tax with tax per pack increasing in 4 years [25]: 0.4 GTQ per 1 cigarette in the first year, and respectively 0.50; 0.55 and

¹⁹ <http://s21.gt/2016/04/15/incautan-10-cajas-cigarrillos-ilicitos-en-izabal/>

²⁰ https://www.numbeo.com/cost-of-living/country_result.jsp?country=Guatemala

²¹ <http://www.reporter.bz/front-page/guatemalans-say-contraband-cigarettes-originated-in-belize/>

²² <http://lovefm.com/cigarette-smuggling-ring-linked-to-belize/>

²³ <http://diario1.com/nacionales/2018/04/detienen-a-cuatro-sujetos-por-contrabandear-cigarrillos-en-frontera-con-guatemala/>

²⁴ https://www.centralamericadata.com/en/article/home/Smuggling_in_the_Guatemalan_Economy

0.60 GTQ in the 2nd, 3rd and 4th years. A four-year simulation was performed using the previously calculated price and income elasticity estimates (long-term price elasticity of demand were -0.68 and income elasticity 1.08). The simulation model also used the baseline fiscal revenue, consumption and estimated average cigarette prices and a 2.5% annual increase in real income. They also assumed that tobacco companies would not only increase prices by the amount of the tax but also raise them higher to maintain profits. The specific tax per 20 cigarette pack would increase in year 3 by 127% and the price per pack was expected to increase by the same percentage. Estimated consumption decrease in three years was 40% and the increase in fiscal revenue 67%.

The initiative was supported by the Ministry of Health and tobacco control organizations²⁵. *"If the proposal is accepted we would be able to raise about \$66 million a year"*, said the congresswoman Zury Rios. *"The new estimate is higher than the target proposed by the Tax Administration (SAT) to raise GTQ356 million (\$ 46.8 million)"*.

The draft bill on tax increases promoted by the civil society was under Parliament discussion through 2011 and was finally discarded when the new President came to office in January 2012 (an industry-backed bill was passed).

Two years later, in May 2013, a second attempt was made to change the existing legislation on cigarette taxes [25]. A draft law on tax increase was prepared by A.Ramos and his colleagues and presented to Parliamentarians by the NGO "Observatorio del CMCT". It aimed at raising taxes through a three-year tax increase to push the retail price level (at year 4) for the bestselling brand to around 3.21 dollars per 20 cigarette pack. However, this time there was no progress either. The economic and tax authorities of the new Government coming to office in January 2012 did not show any interest in moving on with the tax. The priorities for tax reform of the new government were not directed to excise taxes (tobacco among them). A.Ramos concluded in 2014 that *"Guatemala does not seem a good prospect for tax increases"* [25].

It should be noted that retired general Otto Pérez Molina was elected President of Guatemala in 2011 along with Vice-president Roxana Baldetti; they began their term in office on 14 January 2012. In April 2015, international prosecutors, with help from the UN, presented evidence of a customs corruption circle ("La Línea") in which discounted tariffs were exchanged for bribes from importers. On April 16, 2015, an operation with a total of 23 operatives with 250 Civil National Police officers resulted in extensive information collection and 20 suspects captured, among them SAT (Tax Administration) personnel, including SAT Chief director²⁶. Vice President Roxana Baldetti resigned on May 8 and was arrested for her involvement on August 21, 2015. On August 21, Guatemalan prosecutors presented evidence of Pérez's involvement in the corruption circle. Congress stripped Pérez Molina of prosecutorial immunity on September 1, 2015, and, on September 2, he presented his resignation from the Presidency. On September 3, after a court hearing in which charges and evidence against him were presented, he was arrested and sent to the Matamoros prison in Guatemala City²⁷. In June 2016, a United Nations-backed prosecutor described the administration of Pérez Molina to a criminal syndicate.

Jimmy Morales serves as President of Guatemala since January 2016. The president named a new superintendent and board of directors to SAT at the beginning of 2016 and they began the work aimed to improve human capital and IT systems to reduce tax evasion²⁸. Additionally, in July 2016 the Congress

²⁵ https://www.centralamericadata.com/en/article/home/Guatemala_New_Tabaco_Tax

²⁶ https://en.wikipedia.org/wiki/La_L%C3%ADnea_corruption_case

²⁷ https://en.wikipedia.org/wiki/Otto_P%C3%A9rez_Molina

²⁸ <https://www.businesswire.com/news/home/20160823005876/en/Fitch-Guatemala-Tax-Rise-Success-Relies-Tax>

approved a reform of the SAT that would strengthen the institution. In August 2016, Morales asked the president of Congress, Mario Taracena to consider the bill on the proposed tax reform²⁹. The Minister of Public Finance, Julio Héctor Estrada, explained that this reform was proposed considering the suggestions of various sectors of civil society, research centers, academics, and new actors and leaders. However, he did not rule out that changes could be made to other taxes that had not been considered initially, such as taxes on firearms, on alcoholic beverages and on **cigarettes can be increased in order to strengthen the health component**, among others.

The IMF mission to Guatemala issued MISSION CONCLUDING STATEMENT in March 2018³⁰. Among others, it recommended the following: *Revenue mobilization efforts need to continue, within the context of an integral fiscal reform. A comprehensive tax reform is needed to raise revenues to at least 15 percent of GDP. A variety of tax policy changes will be needed including ... higher indirect taxes.*

The following simple model can help to estimate the potential of cigarette excise tax increase in Guatemala. As of 2018-19, the excise rate for cigarettes of the most popular price category was about 300 GTQ per 1000 cigarettes or 6 GTQ per pack (16 GTQ (price) * 0.38 (excise rate)). Over recent years, the annual revenue in Guatemala was about 360 million GTQ (see Figure 2). So, (360 million GTQ/ 6 GTQ * 20 sticks) = 1.2 billion cigarettes were taxed.

It was already proposed to change the cigarette excise system in Guatemala from ad valorem to a specific one. If the specific excise rate in 2020 is set as 400 GTQ per 1000 cigarettes or as 8 GTQ per pack (25% increase of excise rate), the average price of a cigarette pack could increase from 16.5 GTQ to 19 GTQ, or by 15%. Taking into account price elasticity, which was estimated earlier (-0.68), cigarette sales might decrease by 10%. So, if the volume of cigarette sales declines to 1.1 billion cigarettes, the projected revenue will be 400 GTQ*1.1 = 440 million GTQ. However, the price elasticity of cigarette demand might be smaller as estimated in a systematic review based on the studies from Latin America and the Caribbean (pooled elasticities, short-run: -0.31; long-run: -0.43) [31]. This will result in a smaller decrease of cigarette sales and, thus, greater revenues.

Over the next years, the specific tax can be annually increased by 100 GTQ per 1000 cigarettes: 500 in 2021; 600 in 2022, and so on. Such an increase is able to ensure both the reduction in tobacco consumption and revenue growth.

Conclusions and recommendations

Tobacco taxation policy practiced in Guatemala over the last 40 years did not contribute to the reduction of tobacco consumption. It also caused the reduction of real tobacco excise revenue.

It is recommended to consider the proposal to change the current ad valorem excise system for cigarettes to a specific excise system with a uniform excise rate for all cigarettes in monetary terms. Then the specific excise rate for cigarettes should be annually increased to ensure the reduction in tobacco affordability and the increase in the excise revenues.

The tobacco taxation policy should be based on careful analysis of previous results of tax increase provided by institutions independent from the tobacco industry. To conduct such analysis, tobacco use surveillance and monitoring should be developed in Guatemala, including a regular collection of information on cigarette sales, prices and other economic indicators. Smoking prevalence surveys need to be regularly conducted in line with international guidelines.

²⁹ <http://s21.gt/2016/08/26/presidente-retira-polemica-iniciativa-reforma-fiscal/>

³⁰ <https://www.imf.org/en/News/Articles/2018/03/20/ms031918-guatemala-staff-concluding-statement-of-the-2018-article-iv-mission>

Effective policies to counteract tobacco smuggling and other kinds of illicit tobacco sales should be implemented in line with the provisions of the FCTC Protocol to Eliminate Illicit Trade in Tobacco Products, which is recommended to be ratified by the country. While cigarette smuggling is a problem, it should not be overestimated and used as an argument against further excise increases. The FCTC Article 6 Guidelines state [32]: *The development, implementation and enforcement of tobacco tax and price policies as part of public health policies should be protected from commercial and other vested interests of the tobacco industry, including tactics of using the issue of smuggling in hindering implementation of tax and price policies.*

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