Lesotho: Estimated Revenue Impact of Proposed Tobacco and Alcohol Levy
Final Report by World Bank Group Team, January 25, 2017[1]
Executive Summary

Background

1. **Tobacco and alcohol can be addictive, and those who become dependent on it bear a significant portion of the burden of ill health associated with tobacco and alcohol, but with important social consequences.**

2. **"Sin taxes"** on tobacco and alcohol are non-distortionary taxes which have a dual benefit: (i) raise fiscal revenue; and (ii) reduce health hazards associated with tobacco-related diseases and alcohol abuse. In many countries, current tax rates are evidently far below what is feasible in terms of revenue potential.

3. **Tobacco/Alcohol Tax Harmonization in the Southern African Customs Union (SACU).** The Southern African Customs Union is a customs union of five countries in southern Africa, all bordering South Africa (Botswana, Lesotho, Namibia, South Africa and Swaziland). It is one of the oldest customs unions in the world and has resulted in a very high degree of integration between member states. Also, all of the member states with the exception of Botswana form part of the Common Monetary Area. Trade integration takes the form of free movement of goods and services, internally, and a common external tariff. **All tariff revenues form part of a common revenue pool.** Coordination of domestic taxes also occurs, with **a harmonized excise tax regime** where domestic excise taxes on products including tobacco and alcohol are set by South Africa and matched by all other member states**.**

4. **However, member states are still able to levy excise taxes independently of the customs union (e.g. fuel taxes in South Africa), or above the South African excise tax (e.g. tobacco and alcohol levies in Botswana), however, these "extra" excise taxes are termed levies and they do not form part of the common revenue pool.**

5. In the case of Botswana, the Government introduced in 2008 a levy on alcohol products of 30% as part of a set of proactive measures to combat the harmful effects of to curb excessive drinking of alcohol in society. In December 2013, it went up to 50% after a five percent increase, and in 2015 the Government imposed a further 10% on the levy, bringing it to 55%. By 2013, the application of this policy measure allowed the Government to collect a cumulative total of P 1.16 billion in revenues, and by 2014, the collected cumulative total increased to P1.441 billion. The new element brought about by the latest statutory instrument is that the levy targets production costs (e.g., and not just the alcohol component), including such elements such as labelling and canning. The levy also came with a reduction of operating hours for liquor outlets and a clamp down on homebrews which were traditionally sold from homesteads. Building upon the experience with the alcohol levy, the Government introduced in 2014 a 30% levy on tobacco

[1] Prepared by Patricio V Marquez, Lead Public Health Specialist, World Bank Group (WBG) and Alberto Gonima WBG Consultant and in consultation with Asli Senkal, and Omer Ramses Zang Sidjou, WBG. Guidance and comments provided by Janet Entwistle, WBG Country Manager, Lesotho.

products to address the growing burden of tobacco use and its negative impact on the health of the population due to the rapid growth of noncommunicable diseases, many of them tobacco related diseases.

Assumptions, Policy Option Scenarios, and Results of Simulation Work

6. On a basis of a request by the **Government of Lesotho,** a World Bank Group (WBG) team, in coordination with **Ministry of Finance (MoF) and Lesotho Revenue Authority (LRA)** teams, collected data and conducted a simulation exercise to estimate **the likely fiscal revenue impact of introducing a levy on top of the SACU-mandated excise taxes on cigarettes and alcohol products**. The objective of this proposed policy measure is to contribute to mobilization of additional domestic resources to expand the fiscal space to fund priority investments and programs over **2017-2018 and to improve the health condition of the population**.

7. **Lesotho, with 20% of daily adult smokers, has the second highest tobacco consumption rate in Africa; similar high rates in alcohol consumption are prevalent in the country**.[2]

8. Simulations were conducted to determine the reduction in consumption (**the public health impact**) and the additional tax revenue to be collected by introducing a levy on tobacco and alcohol products (**the fiscal impact**) under **three policy option scenarios over** 2017-2018 is summarized in Table 1 and presented below.

Scenario 1: On the basis of an initial suggestion by the MoF team, the impact of the introduction of a **4% levy on tobacco and alcohol products,** on top of the SACU-mandated excise tax, was estimated for the period 2017-2018. The estimated additional fiscal revenue generated under this scenario would amount close to **30 million Rand (US$ 2.1 million) or about an additional 0.08% of GDP (2017-2018 projections).**

Scenario 2: Taking into account the successful experience of Botswana with the application of a levy on tobacco and alcohol products on top of the SACU excise tax, the fiscal revenue impact of a **15% levy** (half of Botswana levy rate) was simulated. The expected additional fiscal revenue to be generate under this scenario amounts to about **105 million Rand (US$7.4 million) or about 0.3% of GDP (2017-2018 projections).**

Scenario 3: Again, taking into account the successful experience of Botswana with the application of a levy on tobacco and alcohol products on top of the SACU excise tax, the fiscal revenue impact of a **30% levy** (similar rate as in Botswana) was simulated. **The expected additional fiscal revenue to be generate amounts to close to 200 million Rand (US$14.2 million) or close to 0.6% of GDP (2017-2018 projections).**

9. Given Botswana's experience, the WBG team considers that the policy options under Scenarios 2 and 3 are feasible, and that could be adopted by the MoF and LRA to mobilize additional

[2] WHO report on Global Tobacco Endemic, December 2015.

domestic resources to expand the fiscal space and to benefit the entire population by helping to reduce the risk of tobacco and alcohol-related illnesses and injuries.

Results of Simulation Exercise Combining Levy and VAT Revenue

10. Table 1 shows actual tax revenue collected over 2015-2016, the total amount projected for 2016, and the total revenue estimated to be generated under each of the three policy option scenarios combining the additional levy revenue and VAT revenue (**the SACU-mandated specific excise tax imposed on tobacco and alcohol products is not included as the revenue flows into the SACU common revenue pool). For the purpose of the simulation exercise, the VAT rate use is 14% for 2017-2018—this reflects the decision of Parliament to reduce the** VAT rate from the current 15% rate to 14% for 2017-18.

Scenario 1: The estimated total fiscal revenue generated by the imposition of a 4% levy and the 14% VAT rate on tobacco and alcohol products would amount to **about 250 million Rand (US$17.7 million) over 2017-2018, representing an increase of only 0.01% of GDP.**

Scenario 2: The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to **329 million Rand (US$23.3 million) or an additional 0.22% of GDP**—a sufficient amount to cover the revenue loss due to the 1% VAT rate reduction adopted by Parliament (see Table 2).

Scenario 3: The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to **429 million Rand (US$30.4 million), or an estimated additional 0.5% to GDP.**

11. **Based on the results of these simulations and considering the priority of mobilizing additional fiscal revenue in the short-term to expand the fiscal space to fund priority investments and programs in Lesotho, it is recommended that the Government of Lesotho considers introducing a 30% levy on top of the excise tax for tobacco and alcohol products as discussed under Scenario 3.**

Table 3 presents the results achieved from the adoption of similar tax reforms in a sample of country across the world—**it demonstrates that tobacco and alcohol taxes are a <u>Win-Win policy measure for the improvement of the health conditions of the population and and for domestic revenue mobilization</u> to expand the fiscal space to fund priority investments and programs that benefit the entire population.**

<u>Sources of Data for the Model:</u>

- ***Simulation Model****: WHO Tobacco Tax Simulation Model (TaXSiM)* adapted to Lesotho current tax structure.
- ***Lesotho Bureau of Statistics:*** Price Statistics Department.
- ***Lesotho Revenue Authority (LRA):*** Data Analyst (Alcohol and Tobacco Imports CIF and VAT - FY 2015-2016; FY 2016-2017) and Research and Development Departments (Domestic Tobacco and Alcohol production; Excise and VAT revenues);
- ***Lesotho Ministry of Finance:*** Lesotho (draft) Tobacco and Alcoholic Products Levy Bill, 2014; Proposed Levy Tax on Tobacco products - 2017-2019.
- ***Lesotho World Bank Group Office forecast:*** Macro-economic indicators and annual average exchange rate.
- ***SACU Customs & Excise Tariff:*** SCHEDULE 1 / PART 2A (2012; 2013; 2015; 2016);
- ***Republic of South Africa: National Treasury Department***: A Review of the Taxation of Alcoholic Beverages in South Africa, A Discussion Document, May 2014, Bureau for Economic Research (BER): http://www.sars.gov.za/AllDocs/LegalDoclib/DiscPapers/LAPD-LPrep-DP-2014-02%20-%20Discussion%20Paper%20on%20Review%20of%20Taxation%20of%20Alcoholic%20Beverages%20in%20RSA.pdf

Table 1 - Assumptions and Estimated Results – MoF Policy and Alternative Policy Option

Estimated beer, RTDs, spirits, wine, cigarette and other tobacco products consumption and proposed levy revenue in FY Lesotho 2017-2018 for scenarios 1, 2 and 3										
Product Type excise Revenue	2015/2016 Actual*	Projected FY 2016-17		Scenario 1 FY 2017-18		Scenario 2 FY 2017-18		Scenario 3 FY 2017-18	
		Baseline Situation FY 2016-2017 Projected	Expected contribution to GDP (2016-17 projected)	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Expected contribution to GDP (2017-18 projected)	Policy Option Scenario 2 FY 2017-2018: 15% levy	Expected contribution to GDP (2017-18 projected)	Policy Option Scenario 3 FY 2017-2018: 30% levy	Expected contribution to GDP (2017-18 projected)
Consolidated Outputs By Senario									
* Total proposed levy revenue (billion Rand)	-	-		29.25	0.08%	105.00	0.29%	199.82	0.55%
Total proposed Levy revenue (million US$)	-	-		2.1		7.4		14.2	
Total government tax revenue (VAT and levies, billion Rand)***	204.04	223.30	0.67%	248.98	0.68%	328.66	0.90%	428.97	1.17%
Total government tax revenue (VAT and levies million US$)	16.0	15.1		17.7		23.3		30.4	

*Actual for domestic sales taxed FY 2015-16/Annualized projections from CIF and VAT revenue imports/Lesotho Revenue Authority (LRA) for FYs 2015-16/2016-17

**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);

***Excluding SACU Excise tax - SACU Common Revenue Pool;

Table 2: Estimated Tobacco and Alcohol Levy Revenue Generation by Scenario – FY 2017-18

Estimated beer, RTDs, spirits, wine, cigarette and other tobacco products consumption and proposed levy revenue in FY Lesotho 2017-2018 for scenarios 1, 2 and 3						
	Scenario 1 FY 2017-18		Scenario 2 FY 2017-18		Scenario 3 FY 2017-18	
Product Type excise Revenue	**Government Policy Scenario 1 FY 2017-2018: 4% Levy**	**Expected contribution to GDP (2017-18 projected)**	**Policy Option Scenario 2 FY 2017-2018: 15% levy**	**Expected contribution to GDP (2017-18 projected)**	**Policy Option Scenario 3 FY 2017-2018: 30% levy**	**Expected contribution to GDP (2017-18 projected)**
CIGARETTES						
Total tobacco levy tax revenue (million Rand) [1]	8.72	**0.02%**	**31.5**	**0.09%**	**60.4**	**0.17%**
Total tobacco levy tax revenue (million US$)**	**0.6**		**2.2**		**4.3**	
Total government tobacco tax revenue (VAT and levies, million Rand)***	**70.0**	**0.19%**	**96.3**	**0.26%**	**129.6**	**0.35%**
Total government tobacco tax revenue (VAT and levies, million US$)**	**5.0**		**6.8**		**9.2**	
Total expenditure on cigarettes (million Rand)			528.0		563.3	
Total cigarette expected reduction in consumption (%)	-2.9		-6.5		-10.3	
OTHER MANUFACTURED SMOKING TOBACCO						
Proposed Levy on other manufactured & smoking products imported (million Rand)	**3.0**	**0.01%**	**10.7**	**0.03%**	**20.7**	**0.06%**
Total Levy on other manufactured & smoking products imported (million US$)	**0.2**		**0.8**		**1.5**	
Other tobacco products tax revenue (VAT, import duty& levies - million Rand)	**13.6**	**0.04%**	**20.6**	**0.06%**	**30.4**	**0.08%**
Other tobacco products tax revenue (VAT, import duty& levies - million US$)	**1.0**		**1.5**		**2.2**	
Total smoking tobacco expected reduction in consumption (%)	-2.9		-6.5		-10.3	
BEER						
Total beer levy tax revenue (million rand)	11.5	**0.03%**	42.0	**0.11%**	81.0	**0.22%**
Total beer levy tax revenue (million US$)**	**0.8**		**3.0**		**5.7**	
Total government revenue (VAT and levies, million Rand)***	124.1	**0.34%**	155.9	**0.43%**	196.7	**0.54%**
Total government revenue (VAT and levies, million US$)**	**8.8**		**11.1**		**13.9**	
Total beer consumption (% change)*	-1.7		-4.3		-7.5	
High-strength Premixes RTDs/FADs						
Total RTDs/FADs levy tax revenue (million rand)	2.9	**0.01%**	10.0	**0.03%**	17.7	**0.05%**
Total RTDs/FADs levy tax revenue (million US$)**	**0.2**		**0.7**		**1.3**	
Total government revenue (VAT and levies, million Rand)**	19.0	**0.05%**	25.7	**0.07%**	33.1	**0.09%**
Total government revenue (VAT and levies, million US$)**	**1.3**		**1.8**		**2.3**	
Total RTDs/FADs consumption (% change)*	-2.4		-11.7		-21.7	
SPIRITS (Whisky, Rum, Gin, Geneva, Vodka, other)						
Total Proposed Levy revenue (million Rand)	1.9	**0.01%**	6.6	**0.02%**	12.2	**0.03%**
Total Spirits excise tax revenue (million $US)	**0.1**		**0.5**		**0.9**	
Total government revenue (VAT and levies, million Rand)***	11.4	**0.03%**	16.2	**0.04%**	21.8	**0.06%**
Total government revenue (VAT and levies, million US$)	**0.8**		**1.1**		**1.5**	
Total spirits consumption (change in %)	-7.9		-14.1		-21.1	
WINE (Natural & Sparkling) and Vermouth						
Total Proposed Levy revenue (million Rand)	1.2	**0.003%**	4.2	**0.01%**	7.8	**0.02%**
Total Wine excise tax revenue (million US$)	**0.1**		**0.3**		**0.6**	
Total government revenue (VAT and levies, million Rand)***	10.9	**0.03%**	13.8	**0.04%**	17.4	**0.05%**
Total government revenue (VAT and levies, million US$)	**0.8**		**1.0**		**1.2**	
Total Wine consumption (percentage change)*	-8.5		-16.0		-22.4	
Consolidated Outputs By Senario						
*** Total proposed levy revenue (billion Rand)**	**29.25**	**0.08%**	**105.00**	**0.29%**	**199.82**	**0.55%**
Total proposed Levy revenue (millionUS$)	**2.1**		**7.4**		**14.2**	
Total government tax revenue (VAT and levies, billion Rand)* **	**248.98**	**0.68%**	**328.66**	**0.90%**	**428.97**	**1.17%**
Total government tax revenue (VAT and levies million US$)	**17.7**		**23.3**		**30.4**	

*Actual for domestic sales taxed FY 2015-16/Annualized projections from CIF and VAT revenue imports/LRA for FYs 2015-16/2016-17

**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);

***Excluding SACU Excise tax - SACU Common Revenue Pool;

[1] Proposed Levy Tax on Tobacco products - Lesotho Ministry of Finance 2017-2019

Table 3: Sample of Country Experiences: Tobacco Taxes a Win-Win for Public Health and Fiscal Revenue Mobilization to Expand Fiscal Space to Fund Priority Investments and Programs

Country	Tax Measures and Results
Botswana	**Presidential directive introduced a tobacco levy of 30% of unit cost in February 2014 on top of SACU average excise tax. The money is collected by the Botswana Unified Revenue Services of the Ministry of Finance and Development Planning and deposited in a central account managed by the Ministry of Health, in recognition of the impact of tobacco use on the health sector, which deals with the morbidity and mortality caused by tobacco. In the case of alcohol, the Government introduced in 2008 a levy on alcohol products of 30% as part of a set of proactive measures to curb excessive drinking of alcohol in society. By 2013, the application of this policy measure allowed the Government to collect an additional cumulative total of P 1.16 billion in revenues. In December 2013, it went up to 50% after a five percent increase, and in 2015 the Government imposed a further 10% on the levy, bringing it to 55%. By 2013, the application of this policy measure allowed the Government to collect a cumulative total of P 1.16 billion in revenues, and by 2014, the collected cumulative total increased to P1.441 billion.**
Brazil	**Total tobacco tax as a percent of retail price rose from 55.6% in 2006 to 60.4% in 2013. Between 2006 and 2013, revenue from tobacco excise taxes increased from 3.5 billion Reais to 5.1 billion Reais, in constant 2013 values. Revenue increased by 48% even as sales declined from 5.56 billion packs in 2006 to 3.8 billion pack in 2013.**
P R of China	**The 2015 tobacco tax reform is proving to be a win-win for both fiscal and public health. The sales weighted tax share as % of retail price increased from 52% in 2014 to 56% in 2015. The sales weighted average excise tax as % of retail price increased by 4% from 31% in 2014 to 35% in 2015. For the first time since 2001, the volume of cigarette sales decreased by 2.36% in 2015 compared to 2014. After the 2015 tax adjustment, sales continued to decrease by 4.61% over May 2015-April 2016 compared with May 2014-April 2015, and by 5.36% between October 2015-September 2016 compared with October 2014-September 2015.** **Impact on government's revenue. The tobacco industry contributed 840.4 billion RMB (about US$129.29 billion) tax revenue from tobacco products in 2015, an increase of 9% over the 2014 level. As a state-owned enterprise, it also contributed an additional 190.97 billion RMB (US$29.38 billion) profit to the central government, plus 63.6 billion RMB (US$9.79 billion) enterprise income tax to the central government. The 2015 tax increase was applied at the wholesale level, which generated an additional 57.8billion RMB (US$8.89 billion) in excise tax at the wholesale level. A preliminary estimation suggests that within 12 months followed by the 2015 tax**

Country	Tax Measures and Results
	increase, the total number of smokers would decrease by about 5 million.
China-Taiwan	**A separate Health and Welfare Surtax is levied on cigarettes; with the majority of revenues allocated towards the national insurance program.**

Country	Tax Measures and Results
Philippines	**Fundamental restructuring of the tobacco and alcohol excise tax structure in 2013 – simplification by reducing the number of tiers, indexation of tax rates to inflation and substantial tax increases—shows that is good for both fiscal and public health. About US$ 3.9 billion or 1.3% of GDP in additional revenues was generated from the Sin Tax Law in its first three years of implementation. The additional fiscal space increased the Department of Health budget threefold and increased the number of families whose health insurance premiums were paid by the National Government from 5.2 million primary members in 2012 to 15.3 million in 2015. Additional fiscal space was also generated from interest savings as the Philippines got an investment grade rating shortly after the passage of the Sin Tax Law.**
Poland	**Increased tobacco tax revenues by 109% as a result of increasing excise taxes on cigarette retail prices from 42 to 63%.**
South Africa	**Since 1994, every year, the National Treasury determines the retail price of cigarettes and adjusts the specific tax so total taxes make up approximately 52% of the retail price. Smoking prevalence among adults decreased from 32% in 1993 to 20.5% in 2008. Government Revenue from tobacco excise tax, despite the decrease in cigarette consumption increased from 1 billion Rand in 1993 to 9 billion Rand in 2009. South Africa applies a transparent alcohol excise duty rate structure that differentiates between alcoholic beverages in accordance with benchmarks determined in 2002 and adjusted in 2012. The total consumption tax burden (excise duties plus VAT) as a percentage of the weighted average retail selling price for wine, clear beer and spirits were set at 23, 33, and 43 per cent respectively in 2002. Budget 2012 increased the target tax burden for beer and spirits to 35 and 48 per cent respectively. Alcohol excise duties were increased above inflation since 2002/03 to achieve and maintain the targeted indirect tax burdens on alcoholic beverages.**

Turkey	**Tax rate rose from 58% to 65% of retail price, cigarette prices more than tripled and cigarette tax revenues more than doubled between 2005 and 2011. These tax increases and other tobacco control efforts have been successful; between 2008 and 2012, tobacco smoking prevalence fell from 31.2% to 27.1%.**
United States	**The most important public health legislation of the Obama Administration is the legislation President Obama signed in his first month in office in 2009 that raised the Federal cigarette tax from US$0.39 per pack to approximately US$1.01 per pack. Plausible estimates suggest that this increase in cigarette taxes will reduce the number of premature deaths due to smoking by between 15,000 and 70,000 for each cohort. The health benefits will be progressively distributed, representing a far larger fraction of income for lower-income families, and even more so when counting the benefits of the expansion of children's health insurance coverage that the increase funded. Indeed, federal cigarette tax revenue rose by 129%, from US$6.8 billion to $15.5 billion, in the 12 months after the tax (April 2009 to March 2010). Cigarette pack sales declined by 8.3% in 2009 –largest decline since 1932.**

Main Report

The Rationale for Taxing Tobacco and Alcohol

Besides revenue raising objectives, the rationale for excise taxes on tobacco and alcoholic beverages is to reflect their harmful external costs. The benefits of higher tobacco and alcohol taxes are obvious, both in terms of good health outcomes for individuals and entire communities, which result from reduced tobacco use, preventing the initiation of smoking among children and the youth, as well as by reducing the negative health and social consequences of alcohol abuse (e.g., deaths due to drunk driving, domestic violence). Indeed, tobacco use is a leading global disease risk factor and underlying cause of ill health, preventable death, and disability. It is estimated to kill more than 5 million people each year across the globe. If current trends persist, tobacco will kill more than 8 million people worldwide each year by 2030, with 80% of these premature deaths taking place in the developing world. In the case of alcohol, about 3.3 million deaths, or 5.9% of all global deaths, were attributable in 2012 to alcohol consumption. There are significant sex differences in the proportion of global deaths attributable
to alcohol, for example, in 2012 7.6% of deaths among males and 4.0% of deaths among females were attributable to alcohol. In 2012 139 million DALYs (disability-adjusted life years), or 5.1% of the global burden of disease and injury, were attributable to alcohol consumption.

The 2015 World Health Organization (WHO) report on tobacco taxation documents that that raising taxes on tobacco products is one of the most cost-effective measures to reduce consumption of products that kill. Besides the potential health benefits of tobacco taxation, this policy measure could also help broaden the tax base of countries and generate additional revenue to support budgetary capacity to finance priority investments and programs that benefit the entire population. Indeed, as recognized in the "Financing for Development Action Agenda" that was approved by the Heads of State and Government and High Level Representatives of countries in Addis Ababa, Ethiopia in mid-July 2015 at the Third International Conference on Financing for Development, and endorsed in September 2015 at the United Nations General Assembly (UNGA) as part of the Sustainable Development Goals (SDG) by 2030, price and tax measures on tobacco can be not only effective and important means to reduce tobacco consumption and health care costs, but represent a revenue stream for financing for development in many countries. Likewise, the Global Strategy to reduce the harmful use of alcohol (WHO, 2010) recommends that Member States establish a system for specific domestic taxation which may take into account the alcohol content of the beverage, accompanied by an effective enforcement system. It also encourages countries to review prices regularly in relation to inflation and income levels; ban or restrict sales below cost and other price promotions; and establish minimum prices for alcohol where applicable.

Indeed, as noted on a 2016 IMF note[3] for the case of tobacco, 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

[3] Petit, P., and Nagy, J. 2016. How to design and enforce tobacco excises? Washington, D.C. International Monetary Fund. Fiscal Affairs Department.

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.

If taxes are increased will smuggling increase? 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, 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, 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 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, 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. Kenya's track and tracing system is another international good practice.
- 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.

- **Rationale for Taxing Tobacco**

The scientific evidence is overwhelming. Tobacco is the only consumer product that eventually kills half of its regular users if they follow its manufacturers' recommendations.

Given this dire reality, it is clear that African countries such as Lesotho, are now at a crossroads. On one hand, the countries in this region have become an attractive and under-tapped market as tougher regulations, high taxes, and greater consumer awareness of the dangers of smoking in developed countries are "closing the door" to tobacco imports and leading to significant drops in consumption. And on the other hand, cigarettes are becoming increasingly affordable as incomes rise in several African countries due to the rapid economic growth of recent years. Indeed, African countries are experiencing the highest increase in the rate of tobacco use amongst developing countries--the number of smokers in sub-Saharan Africa is projected to increase 148 percent by 2030, to 208 million smokers or one-fifth of the total population.

If the current smoking patterns continue unabated, they will accelerate the growth of tobacco-related non-communicable chronic diseases (e.g., lung cancer, respiratory problems, heart attacks) compounding the already heavy burden imposed by communicable diseases (e.g., HIV/AIDS, tuberculosis, malaria). Besides undermining the health of the population and their productive potential and contributing to lives lost, Africa will be confronted with major health system and funding challenges to deal with these chronic diseases. The magnitude of these challenges is best illustrated by the United States, where cigarette smoking is estimated to cause annually more than 400,000 deaths and about US$200 billion in health-related economic losses, nearly half in direct medical costs.

- **Rationale for Taxing Alcohol**

For alcohol abuse, the dominant school of thought has been that the main problem was alcoholism, and that alcoholism was an addiction characterized by loss of control. It stood to reason that addicts would find a way to drink their fill even if prices went up. A tax amounting to, say, an extra dime a drink, was not going to make any difference to people who were already suffering great personal losses for the sake of sustaining their habit. The primary effect of a high tax would be to make their difficult lives even more so.

This argument has intuitive appeal but is incorrect in important ways. First, the problem of alcohol abuse is not synonymous with alcoholism. Youths and other non-alcoholic drinkers who get drunk occasionally can do a lot of damage, as reflected in statistics on highway safety, injuries, violent crime, or domestic violence.

Second, even if the direct effect of prices is on the consumption habits of relatively moderate drinkers, heavy drinkers can be affected indirectly. There is good evidence that drinking occurs in a social context, and that drinkers across the spectrum influence each other. Therefore, if alcohol prices can affect the drinking patterns at the median, then the upper tail of the distribution will shift inward. That is to say, there will be a reduced prevalence of heavy drinking.

The accumulated research findings indicate that population-based policy options – such as the use of taxation to regulate the demand for alcoholic beverages, restricting their availability and implementing bans on alcohol advertising – are the "best buys" in reducing the harmful use of alcohol as they are highly cost-effective3 in reducing the alcohol attributable deaths and disabilities at population level (Chisholm et al., 2004; Anderson et al., 2009; WHO, 2011b).

- **Are Sin Taxes Regressive?**

Contrary to the assumption that tobacco and alcohol taxes are financially regressive, international evidence shows that the sum of benefits fully offset the additional cost of taxes on consumers—tobacco and alcohol taxes disproportionately benefit lower income households because as sin taxes increase, better health ensues, less money is needed for smoking-and alcohol related healthcare services and injuries, and labor productivity improves due to reduced sickness and absenteeism. This situation as observed in different countries across the world counters the traditional finding that tobacco and alcohol tax increases, by themselves, are regressive—leading to the largest percentage reductions in pre-tax incomes for the lowest-income households. But the picture changes markedly when the benefits of reduced mortality and morbidity are included. These benefits are strongly progressive, for two reasons. First, smoking and alcohol abuse are more prevalent at lower incomes, so the reductions in smoking and in alcohol abuse are larger for those groups (not accounting the fact that they may also be more sensitive to price increases). Second, these estimates assume the dollar value of the health benefit does not vary with income and thus is proportionately more important to lower-income households, although other assumptions on this question are also possible.

The Simulation Model

This report presents the **results of a simulation model[4] that projects how a change in the excise tax structure and tax rates on cigarettes and alcohol influences, amongst others, the retail price of these products, total consumption of these products and government revenue.** The focus of the model is on raising additional government tax revenue as a measure to contribute to the required fiscal consolidation in Lesotho.

Caveat: Based on available data and information, the World Bank Group team in collaboration with the Lesotho Tax Force was able to generate a high-level estimate of the potential revenue to be collected and the expected alcohol and tobacco consumption reduction. The model validation was done based on the SACU-government excise tax, CIF and VAT revenue from partial imports data from the Alcohol and Tobacco Imports FY 2015-2016; FY 2016-2017 data repository (under implementation) made available by the LRA Data Analyst. Domestic production quantities, SACU Excise and VAT revenue data from sales taxed[5], provided valuable simulation validation of local production of cigarettes and alcohol for the FY 2015-2016. In the absence of actual data on the quantity of import cigarettes and alcohol products taxed, applying the simulation model (see box

[4] Simulation Model: WHO Tobacco Tax Simulation Model (TaXSiM) adapted to Lesotho current tax structure.
[5] Domestic quantities, excise and VAT revenues of local produced cigarettes and beer, was provided by Lesotho Revenue Authority (LRA).

below) the number was estimated from available datasets with detailed CIF, VAT revenue and average retail prices (Prices Unit/Bureau of Statistics).

> By its construction, VAT is levied at each point along the cost chain. The model calculates the
> VAT amounts on six different cost components, namely:
>
> 1) the "Ex-factory cost" (i.e. the sum of the production/ CIF and the taxes and levies imposed on the Ex-factory or CIF);
> 2) The marketing and distribution costs;
> 3) The importer/distributor's overhead costs;
> 4) The importer/distributor's profit margin;
> 5) The wholesale margin, and
> 6) The retail margin.
>
> The sum of these six VAT amounts must equal 13.04%(for current 15% VATFY 2016-2017) of the net-of-VAT retail price,thus validating the mathematical consistency of the model.

Model calibration and baseline validation gave preference to FY 2016-2017 (April to September, 2016) due to:

- FY 2014-2015 was a pilot test with limited sample size;
- FY 2015-2016 presented missing months and uneven monthly recording possible due to data entry limitations and bottlenecks.

Current Situation:

Currently cigarettes and alcohol in Lesotho are subject to an excise tax updated annually, based in the schedule 1, part 2a of customs and excise tariffs common to SACU member countries (See Annex I – Table 1). The revenues generated by this excise tax are collected in the SACU Common Revenue Pool, and are distributed to the various countries by means of the revenue sharing formula.

- The National VAT currently at 15% or equivalent to 13.04% of final retail price (the VAT will be reduced to 14% in FY 2017-2018 and thereon as part of the government tax harmonization);
- The Import duty (ID) is 25% except for European Union (EU), EFTA[6] and the Southern African Development Community (SADEC) member countries.

[6] Free Trade Association (EFTA) comprising Switzerland, Norway, Lichtenstein and Iceland.

As shown in Table 4, the WHO Global Tobacco Control Report, 2015 Lesotho total tax burden (excise, VAT, duties, and levies) for the most sold brand of 46.20%, was lower that other SACU member countries except for Namibia (32.80%). Comparing with current prices, the average retail price estimated in 36.73 Rand per 20 cigarettes pack came down from US$3.27, to US$2.48 at FY 2016-2017 average exchange rate[7], while the total tax burden increased to 49.1 from the 46.2% estimated by WHO in 2015. WHO recommends a total tax burden of 75% to have a public health impact, suggesting that there is significant potential for extracting more tax revenue that has remained untapped.

Table 4: Cigarette Package Price and Tax Burden Comparison SACU Members 2015

SACU Countries/neighbors	Price of 20-Cigarette pack of the most sold brand (US$ equivalent)	Excise tax burden (excise tax as percentage of retail price)*		Total tax burden (total tax: excise, VAT, duties, and levies as percentage of retail price)
		Specific excise	Ad valorem excise	
South Africa	**$ 2.97**	**36.52%**	**0.00%**	**48.80%**
Botswana (+30% Levy)	**$ 3.08**	**42.44%**	**9.53%**	**62.68%**
Lesotho	**$ 3.27**	**33.15%**	**0.00%**	**46.20%**
Namibia	**$ 3.74**	**29.00%**	**0.00%**	**32.80%**
Swaziland	**$ 3.27**	**33.14%**	**0.00%**	**53.14%**
Lesotho and other neighboring countries retail price 20 cigarettes pack/most sold brand **				

* SACU's uniform specific tax structure resulting in small price differentials between countries
** Source: Global Tobacco Control Report, 2015 - National retail price for a pack of 20 cigarettes of the most sold brand

According to the WHO report on the Global Tobacco Epidemic, 2015 the smoking prevalence in Lesotho (Dec. 2014), was 26.4% among male youth population and 21.7% among female youth. Smokers are increasingly favoring premium to mid-priced cigarettes, such as Dunhill and Peter Stuyvesant, and Rothman which retail average price per pack has increased in the last five years.

Beer and spirits total tax burden per average retail price is still under 35%, while premium beers, sparkling wine, and spirits categories such as brandy, cognac, and whiskies are performing well in Lesotho due to rising demand among middle-class consumers.

In such resilient market, there is a real opportunity for the Lesotho government to increase significantly the overall tax revenue in tobacco and alcohol consumption with the introduction of the levy, to increase the efficiency and the effectiveness of the tax system and to ensure sustainably higher tax revenues so that the resulting increase in the real average price, is

[7] Lesotho World Bank Group Office forecast FY 2016-2017, 1 US$ = 14.80 Rand.

sufficient to adjust for the per capita GDP growth and inflation, while helping to achieve public health objectives with respect to reduced tobacco and alcohol consumption.

- **Raising tobacco and alcohol taxes: scenarios of fiscal revenue implications**

The Lesotho Ministry of Finance may consider the following scenarios to mobilize additional fiscal revenues by reforming the tobacco and alcohol tax structure and raising tax rates:

- **Assumptions:**

- **Under Government Policy Scenario 1 the tobacco and alcohol for imports and domestic production of tobacco or alcoholic products shall pay a levy of 4 percent on the value of such goods[8] and reduce the VAT from 15% to 14% as already approved by the cabinet.** From the draft bill, it is assumed that domestic production will be charged based on the declared Ex-factory value; and imported products will be charged on the CIF inclusive of customs duty and excise according the Customs' and Excise Tax Act, 1982;

- **The Policy Option Scenario 2 assumes the increase of the levy to 15% for FY 2017-2018 and reduces the VAT to 14%;**

- **The Policy Option Scenario 3, increases the levy to 30% for FY 2017-2018 following Botswana policy model for FY 2017-2018 and reduce the VAT to 14%.**

- **The SACU excise taxes for FY 2017-2018 were estimated following past excise tax increase trend, and are subject to review once the new schedule 1, part 2a for 2017 is issued late February, 2017.**

- **Profit margins of the producer, importers, and distributors due to the tax increase are passed on to consumer's price increase.**

- **To estimate the impact of the change in the retail price on consumption, the crucial parameters are (See Annex I – Table 2):**
    - 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).

- **Consumers' income is expected to increase according to the GDP per capita growth, projected in 1.21% for FY 2016-2017 and 2.51% for FY 2017-2018[9].**

[8] Source: Lesotho (draft) Tobacco and Alcoholic Products Levy Bill, 2014;

[9] Lesotho MoF and WBG Country Office projections.

- ❖ **Tax increases should reduce the affordability of tobacco and alcohol products. In many countries, where incomes and purchasing power are growing rapidly, large price increases are required to offset growth in real incomes.**

- ❖ **Strong tax administration is critical to minimize tax avoidance and tax evasion, to ensure that tobacco tax increases lead to higher tobacco product prices and tax revenues, as well as reductions in tobacco use and its negative health consequences.**

- ❖ **Regional agreements on taxation such as SACU can be effective in reducing cross-border tax and price differentials and in minimizing opportunities for individual tax avoidance and larger scale illicit trade.**

- ➢ **Market Description and Simulation Outputs (See also Table 2):**

Beer: Currently about million 46.5 liters of beer are sold in Lesotho out of which about 95% is domestically produced. As shown in Annex I – Table 1 the SACU specific/li AA - liters absolute alcohol is for FY 2016-2017 79.29 Rand (US$5.36), which for an average alcohol content of 5.23 li/AA for domestic beer[10], and 5.0 for imported[11] gives an equivalent average excise tax of 4.15 Rand per liter (US$0.28). Current beer average excise tax burden for FY 2016-2017 is equivalent to 21.1% of the retail price (see Table 5). The total tax burden including SACU excise and VAT is equivalent to 34.7% of the average retail price of 1 liter of beer.

A run with the model for the three scenarios, presented the following results for FY 2017-2018 (see Summarized Output Table 5, and Table 2):

- **Under Scenario 1** the proposed levy at 4% and the projected SACU excise tax, shows that i) the average beer retail price is estimated at 20.4 Rand (US$1.45); ii) the average tax burden reaches 35.3%; and iii) the expected reduction in consumption is estimated in 1.7%.
- Alternatively, by adopting a 15% levy proposed in **Scenario 2** the average retail price per liter increases to 21.2 Rands (US$1.51) and the tax burden increases to 37.6% with 4.3% reduction in consumption;
- The 30% levy **in scenario 3**, increases the retail price to 22.3 Rands (US$1.58) per liter, with an average price tax burden of 40.6% and a 7.5% expected reduction in consumption.

<u>The beer levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows</u>:

Scenario 1: Under this scenario the 4% levy would generate an additional revenue of 11.5 million Rand (US$0.82 million) or about 0.03% of GDP (Table 2);

Scenario 2: The additional revenue generated by the 15% levy would be estimated in 42 million Rand (US$3.0 million) or 0.11% of GDP.

---

[10] Lesotho Revenue Authority, Research and Development Department.
[11] Source: https://businesstech.co.za/news/lifestyle/95225/south-africas-most-fattening-beers-wine-cocktails-and-shooters/

Scenario 3: The additional revenue under the 30% levy would be 81 million Rand (US$5.75 million) contributing to 0.22% increase of the GDP.

Table 5 - Lesotho Summary Beer Tax – Proposed Scenarios Output – FYs 2017-2018

Summarized output BEER	2015/2016 Actual*	Baseline Situation FY 2016-2017 Projected*	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Policy Option Scenario 2 FY 2017-2018: 15% levy	Policy Option Scenario 3 FY 2017-2018: 30%
Total beer consumption (million liters)*	44.5	45.6	44.8	43.7	42.2
Average beer price (Rand per liter)	18.5	19.5	20.4	21.2	22.3
Average beer price (US$ per liter)**	$ 1.45	$ 1.32	$ 1.45	$ 1.51	$ 1.58
Average excise tax burden (excise as percentage of price)	20.5	21.1	21.2	20.4	19.4
Average tax burden (total tax as percentage of price)	33.6	34.7	35.3	37.6	40.6
Total excise tax revenue (million Rand) (domestic beer production only)	161.9	179.0	185.3	180.7	174.8
Total Excise tax revenue (million US$)**	$ 12.69	$ 12.09	$ 13.15	$ 12.82	$ 12.40
Total beer levy tax revenue (million rand)	-	-	11.51	41.99	$ 81.00
Total beer levy tax revenue (million US$)**	$ -	$ -	$ 0.82	$ 2.98	$ 5.75
Total government revenue (VAT and levies, million Rand)***	107.3	116.0	124.1	155.9	196.7
Total government revenue (VAT and levies, million US$)**	$ 8.41	$ 7.84	$ 8.80	$ 11.06	$ 13.95
Total expenditure on beer (million Rand)	822.4	889.6	917.0	927.7	941.9
Percentage change in:					
Total beer consumption (% change)*		2.5	-1.7	-4.3	-7.5

*Actual for domestic sales taxed FY 2015-16 and Annualized projections from partial CIF and VAT revenue reported by LRA for FYs 2015-16/2016-17
**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);
***Excluding SACU Excise tax - SACU Common Revenue Pool;

<u>Government tax revenue (including the beer levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 is estimated by the model as follows</u>:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% beer levy and the 14% VAT rate on tobacco and alcohol products would amount to about 124 million Rand (US$8.8 million) (0.34% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 156 million Rand (US$11.6 million) (0.43% of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 197 million Rand (US$14 million) (0.54% of projected GDP for FY 2017-2018). **Considering that beer has the largest consumption among the alcoholic beverages, both in terms of volume and total sales, this scenario would yield the best fiscal outcome of the three scenarios analyzed.**

Cigarettes: Current cigarette sales in Lesotho, estimated in 250 million pieces (450 billion Rand sold) are mostly imported with only 2% from domestic production. The average package price (20 sticks) of premium cigarettes (Dunhill), and other mid-price cigarettes (e.g., Peter Stuyvesant, Rothman, Craven) both imported cigarettes, has been increasing year-on-year almost doubling the price of domestic packages (22.00 Rand – US$1.50) due to growing demand for more expensive cigarettes.

The average retail price per packet is close to 37 Rands (US$ 2.48). As shown in Annex I – Table 1 the SACU specific excise tax is 6.21 Rand (US$0.49) per 10 sticks pack, or 12.42 Rands (US$0.98) per 20 cigarettes pack. The average excise tax burden is equivalent to 36% of the retail price per pack for FY 2016-2017 (see Table 6). The total tax burden including SACU excise and VAT is currently 49.1% well below the 75% total tax burden recommended by WHO.

A run with the model under the three scenarios (see Summarized Output Table 6 below, and Table 2) presents the following results for FY 2017-2018:

Scenario 1: The proposed tobacco levy at 4% and the projected SACU excise tax, shows that the average retail price would reach 41.13 Rand (US$2.92) per cigarette pack, and the average tax burden would fall to 47.9% due to the limited price increase and the 1% reduction in the VAT. However, the model projects a reduced consumption estimated in 2.9% for FY 2017-2018.

Scenario 2: The proposed tobacco levy at 15% and the projected SACU excise tax, the average retail price of a 20-cigarette pack would increase to about 45.16 Rand (US$3.20) and the average tax burden would remain in 49.1% of the average retail price per pack with an estimated reduction in consumption about 6.5%.

Scenario 3: The proposed tobacco levy at 30% and the projected SACU excise tax, increases the average retail price to 50.23 Rands (US$3.56) per pack, with an estimated price tax burden of 50.7% and a 10.3% expected reduction in consumption.

<u>The cigarette levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows</u>:

Scenario 1: Under this scenario the 4% levy would generate an additional revenue of 8.7 million Rand (US$0.62 million) or about 0.02% of GDP (Table 2);

Scenario 2: The additional revenue generated by the 15% levy would be estimated in 31.5 million Rand (US$2.2 million) or 0.09% of GDP.

Scenario 3: The additional revenue under the 30% levy would be 60.4 million Rand (US$4.3 million) contributing to 0.17% increase of the GDP.

Table 6: Lesotho Summary Cigarettes Tax – Proposed Scenarios Output – FYs 2017-2018

Summarized output CIGARETTES	2015/2016 Actual	Baseline Situation FY 2016-2017 Projected	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Policy Option Scenario 2 FY 2017-2018: 15% Levy	Policy Option Scenario 3 FY 2017-2018: 30% levy
Total cigarettes taxed (million pieces)*	256.04	250.02	242.65	233.82	224.27
Average cigarette price (Rand per pack)	33.98	36.73	41.13	45.16	50.23
Average cigarette price (US$ per pack)**	$ 2.66	$ 2.48	$ 2.92	$ 3.20	$ 3.56
Average excise tax burden (excise tax as percentage of retail price)	36.6	36.0	33.9	30.8	27.7
Average excise tax (Rand per 10 pieces)	6.21	6.62	6.96	6.96	6.96
Average cigarette tax burden (total tax - excise, VAT, duties and levies as percentage of retail price)	49.6	49.1	47.9	49.1	50.7
Total tobacco excise tax revenue (million Rand) (Domestic cigarettes only)	3.17	3.22	3.29	3.23	3.17
Total tobacco excise tax revenue (million US$)**	$ 0.25	$ 0.22	$ 0.23	$ 0.23	$ 0.22
Total tobacco levy tax revenue (million Rand) [1]	-	-	8.72	31.50	60.43
Total tobacco levy tax revenue (million US$)**	$ -	$ -	$ 0.62	$ 2.23	$ 4.29
Total government tobacco tax revenue (VAT and levies, million Rand)***	56.74	59.89	69.99	96.35	129.61
Total government tobacco tax revenue (VAT and levies, million US$)**	$ 4.45	$ 4.05	$ 4.96	$ 6.83	$ 9.19
Total expenditure on cigarettes (million Rand)	434.99	459.18	498.96	528.03	563.29
Percentage change in (year to year): Total cigarette consumption (% change)		-2.4	-2.9	-6.5	-10.3

**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);
*** Excluding SACU Excise tax - SACU Common Revenue Pool;
[1] Proposed Levy Tax on Tobacco products - Lesotho Ministry of Finance 2017-2019

Government tax revenue (including the cigarette levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 estimated by the model is as follows:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% cigarette levy and the 14% VAT rate on tobacco and alcohol products would amount to about 70 million Rand (US$5.0 million) (0.19% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 96.3 million Rand (US$6.8 million) (0.26% of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 130 million Rand (US$9.2 million) (0.35% of projected GDP for FY 2017-2018).

Other Manufactured Smoking Tobacco: From the imported CIF and VAT being captured by the LRA for the period 2015-2017, it was noticeable to find that the list of products included other manufactured smoking products estimated to reach in FY 2017-2018 at least 85 million Rand in imported value (CIF+ID+VAT) (see Table 7). In the absence of total weight, it was not possible to estimate the excise tax at their point of origin (assuming being SACU member). However, considering the sizable amount of tobacco sales taxed at port of entry in Lesotho (VAT=11 million Rand – US$0.74 million) estimated for current FY 2016-2017, it was considered relevant to include such tobacco products in the estimated potential tobacco levy revenue.

If the imposition of the tobacco levy would have the same reduction in consumption effect estimated for cigarettes as indicated above, the following imported smoking tobacco levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows (see Table 7):

Scenario 1: Under this scenario the 4% levy would generate an additional revenue of 3.0 million Rand (US$0.2 million) or about 0.01% of GDP;

Scenario 2: The additional revenue generated by the 15% levy would be estimated in 10.7 million Rand (US$0.8 million) or 0.03% of GDP.

Scenario 3: The additional revenue under the 30% levy would be 20.7 million Rand (US$1.5 million) contributing to 0.06% increase of the GDP.

Government tax revenue (including the smoking tobacco levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 estimated by the model is as follows:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% on imported manufactured smoking tobacco levy and the 14% VAT rate on tobacco and alcohol products would amount to about 13.6 million Rand (US$1.0 million) (0.04% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 20.6 million Rand (US$1.5 million) (0.06% of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 30.4 million Rand (US$2.2 million) (0.08% of projected GDP for FY 2017-2018).

Table 7: Lesotho Summary Smoking Tobacco Tax – Proposed Scenarios Output – FY 2017-2018

Product Type excise Revenue	Scenario 1 FY 2017-18		Scenario 2 FY 2017-18		Scenario 3 FY 2017-18	
	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Expected contribution to GDP (2017-18 projected)	Policy Option Scenario 2 FY 2017-2018: 15% levy	Expected contribution to GDP (2017-18 projected)	Policy Option Scenario 3 FY 2017-2018: 30% levy	Expected contribution to GDP (2017-18 projected)
OTHER MANUFACTURED SMOKING TOBACCO						
Other manufactured & smoking tobacco products imported (CIF+ ID Value)	73.8		71.1		69.0	
Other manufactured & smoking tobacco products imported VAT	10.6		10.0		9.7	
Proposed Levy on other manufactured & smoking products imported (million Rand)	**3.0**	**0.01%**	**10.7**	**0.03%**	**20.7**	**0.06%**
Total Levy on other manufactured & smoking products imported (million US$)	**0.2**		**0.8**		**1.5**	
Other tobacco products tax revenue (VAT, import duty& levies - million Rand)	**13.6**	**0.04%**	**20.6**	**0.06%**	**30.4**	**0.08%**
Other tobacco products tax revenue (VAT, import duty& levies - million US$)	**1.0**		**1.5**		**2.2**	
Total smoking tobacco expected reduction in consumption (%)	-2.9		-6.5		-10.3	

High-Strength Premixes RTDs/FADs[12]**:** Currently about million 3.3 million liters of RTDs and FADs alcoholic mixers, are projected to be sold in Lesotho for FY 2016-2017[13] (available data on imported RTDs/FADs for FY 2015-2016 is incomplete and could not be fully validated). As shown in Annex I – Table 1 (Lesotho Cigarette and Alcohol Tax Structure) the SACU specific/li AA - liters absolute alcohol for mixers under the "Other mixtures of fermented beverages unfortified, with an alcoholic strength of at least 2.5 per cent by volume but not exceeding 9 per cent by volume", is for FY 2016-2017 same as beer or 79.29 Rand (US$5.36). RTD and FADs mixers with an average alcohol content of 5.5% li/AA for imported RTDs/FADs (RTDs 6 and FADs 5% li/AA)[14] gives an equivalent average excise tax of 4.4 Rand per liter (US$0.29). Current RTD/FADs average excise tax burden for FY 2016-2017 is equivalent to 11.3% of the average retail price of 1 liter of RTDs/FADs (see Table 8). The total tax burden including SACU excise and VAT is equivalent to 24.4% of the average retail price of 1 liter.

A run with the model for the three scenarios, presented the following results for FY 2017-2018 (see Summarized Output Table 8, and Table 2):

- **Under Scenario 1** the proposed levy at 4% and the projected SACU excise tax, shows that i) the average alcoholic mixer retail price is estimated at 40.7 Rand (US$2.89); ii) the average tax burden reaches 25.8%; and iii) the expected reduction in consumption is estimated in 2.4%.
- Alternatively, by adopting a 15% alcohol levy proposed in **Scenario 2** the average retail price per liter increases to 44.1 Rands (US$3.13) and the tax burden increases to 30.5% with 11.7% reduction in consumption (elasticity price between -1.25 (FADs) and -2.5 (RTDs) – see Annex I – Table 2)[15] ;
- The 30% levy **in scenario 3**, increases the retail price to 48.5 Rands (US$3.44) per liter, with an average tax burden of 36.0% as percentage of the average retail price of 1 liter, and a 21.7% expected reduction in consumption.

<u>The Alcohol levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows</u>:

Scenario 1: under this scenario the 4% levy would generate an additional revenue close to 3.0 million Rand (US$0.21 million) or about 0.01% of GDP (Table 2);

Scenario 2: the additional revenue generated by the 15% levy would be estimated in 10 million Rand (US$0.71 million) or 0.03% of GDP.

Scenario 3: The additional revenue under the 30% levy would be 17.7 million Rand (US$1.26 million) contributing to 0.09% increase of the GDP.

---

[12] Ready to drink beverages (RTD/ Spirit Coolers); and Flavored alcoholic drinks (FADs/ AFBs).
[13] The estimate is based in the annualized import CIF and VAT collected in the first 6 months of current Fiscal Year (April to September 2016).
[14] National Treasury Department, Republic of South Africa. LAPD-LPrep-DP-2014-02 - Discussion Paper on Review of Taxation of Alcoholic Beverages in RSA; May 2014
[15] Source: Republic of South Africa: National Treasury Department: A Review of the Taxation of Alcoholic Beverages in South Africa, A Discussion Document, May 2014, Bureau for Economic Research (BER)

Table 8: Lesotho Summary High Strength Premixes (RTDs/FADs) Tax – Proposed Scenarios Output – FY 2017-2018

Summarized output High-strength Premixes RTDs	2015/2016 Actual*	Baseline Situation FY 2016-2017 Projected*	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Policy Option Scenario 2 FY 2017-2018: 15% levy	Option Scenario 3 FY 2017-2018: 30% levy
Total RTDs/FADs consumption (million liters)*	2.5	3.3	3.2	2.9	2.6
Average RTD/FADs price (Rand per liter)	34.2	38.4	40.7	44.1	48.5
Average RTDs/FADs price (US$ per liter)**	$ 2.68	$ 2.60	$ 2.89	$ 3.13	$ 3.44
Average excise tax burden (excise as percentage of price)	10.7	11.3	11.3	10.4	9.5
Average tax burden (total tax as percentage of price)	23.7	24.4	25.8	30.5	36.0
Total excise tax revenue (million Rand)	-	-	-	-	-
Total Excise tax revenue (million US$)**	$ -	$ -	$ -	$ -	$ -
Total RTDs/FADs levy tax revenue (million rand)	-	-	2.95	10.01	17.74
Total RTDs/FADs levy tax revenue (million US$)**	$ -	$ -	$ 0.21	$ 0.71	$ 1.26
Total government revenue (VAT and levies, million Rand)**	11.3	16.5	19.0	25.7	33.1
Total government revenue (VAT and levies, million US$)**	$ 0.88	$ 1.11	$ 1.35	$ 1.82	$ 2.35
Total expenditure on RTDs/FADs (million Rand)	86.5	126.2	130.6	128.0	124.9
Percentage change in:					
Total RTDs/FADs consumption (% change)*		30.0	-2.4	-11.7	-21.7

*Actual for domestic sales taxed FY 2015-16 and Annualized projections from partial CIF and VAT revenue reported by LRA for FYs 2015-16/2016-17

**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);

***Excluding SACU Excise tax - SACU Common Revenue Pool;

<u>Government tax revenue (including the alcohol (RTDs/FADs) levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 estimated by the model is as follows</u>:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% alcohol levy and the 14% VAT rate on tobacco and alcohol products would amount to about 19 million Rand (US$1.35 million) (0.05% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 25.7 million Rand (US$1.8 million) (0.07 of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 33.1 million Rand (US$2.3 million) (0.09% of projected GDP for FY 2017-2018).

SPIRITS (Whisky, Rum, Gin, Geneva, Vodka, other): Currently about million 0.36 million liters of spirits, are projected to be imported and taxed in Lesotho for FY 2016-2017[16]. As shown in Annex I – Table 1 (Lesotho Cigarette and Alcohol Tax Structure) the SACU specific/li AA -

[16] The estimate is based in the annualized import CIF and VAT collected in the first 6 months of current Fiscal Year (April to September 2016).

liters absolute alcohol spirits, is for FY 2016-2017 161.47 Rand (US$10.61). Spirits mainly Whisky, Rum, Gin, Geneva, Vodka with an average alcohol content of 43% li/AA[17] according to the model, gives an equivalent average excise tax of 69.4 Rand per liter (US$4.69). Current spirits average excise tax burden for FY 2016-2017 is equivalent to 32.8% of the average retail price of 1 liter (see Table 9). The total tax burden including SACU excise and VAT is equivalent to 45.8% of the average retail price of 1 liter.

A run with the model for the three scenarios, presented the following results for FY 2017-2018 (see Summarized Output Table 9, and Table 2):

- **Under Scenario 1** the proposed levy at 4% and the projected SACU excise tax, shows that i) the average spirit retail price per liter is estimated at 236.34 Rand (US$16.76); ii) the average tax burden reaches 46.5%; and iii) the expected reduction in consumption is estimated in 2.7%.
- Alternatively, by adopting a 15% alcohol levy proposed in **Scenario 2** the average retail price per liter increases to 255.49 Rands (US$18.12) and the tax burden increases to 50.2% with 14.1% reduction in consumption (elasticity price -0.90 – see Annex I – Table 2)[18];
- The 30% levy **in scenario 3**, increases the retail price to 281.08 Rand (US$19.93) per liter, with an average tax burden of 54.4% as percentage of the average retail price of 1 liter, and a 21.1% expected reduction in consumption.

Table 9: Lesotho Summary Spirits Tax – Proposed Scenarios Output – FY 2017-2018

Summarized output SPIRITS	2015/2016 Actual*	Baseline Situation FY 2016-2017 Projected*	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Policy Option Scenario 2 FY 2017-2018: 15% levy	Policy Option Scenario 3 FY 2017-2018: 30% levy
Total spirits consumption (million liters)*	0.39	0.36	0.33	0.31	0.28
Average spirits price (Rand per liter)	191.06	212.01	236.34	255.49	281.08
Average spirits price (US$ per liter)**	14.97	14.32	16.76	18.12	19.93
Average excise tax burden (excise as percentage of retail price)	33.6	32.8	31.8	29.4	26.7
Average tax burden (total tax as percentage of price)	46.6	45.8	46.5	50.2	54.4
Total Proposed Levy revenue (million Rand)	0.0	0.0	1.9	6.6	12.2
Total Proposed Levy revenue (US$ million)**	0.00	0.00	0.13	0.47	0.86
Total government revenue (VAT and levies, million Rand)***	9.7	9.8	11.4	16.2	21.8
Total government revenue (VAT and levies, US$ million)**	0.76	0.66	0.81	1.15	1.55
Total expenditure on spirits (million Rand)	74.0	75.4	77.5	78.1	78.8
Percentage change in:					
Total spirits consumption (million liters %)		-8.2	-7.9	-14.1	-21.1

* Annualized projections from partial CIF and VAT revenue reported by the LRA for FYs 2015-16/2016-17
**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);
***Excluding SACU Excise tax - SACU Common Revenue Pool;

[17] National Treasury Department, Republic of South Africa. LAPD-LPrep-DP-2014-02 - Discussion Paper on Review of Taxation of Alcoholic Beverages in RSA; May 2014

[18] Source: Republic of South Africa: National Treasury Department: A Review of the Taxation of Alcoholic Beverages in South Africa, A Discussion Document, May 2014, Bureau for Economic Research (BER)

The Alcohol levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows:

Scenario 1: under this scenario the 4% levy would generate an additional revenue close to 1.9 million Rand (US$0.13 million) or about 0.01% of GDP (Table 2);

Scenario 2: the additional revenue generated by the 15% levy would be estimated in 6.6 million Rand (US$0.47 million) or 0.02% of GDP.

Scenario 3: The additional revenue under the 30% levy would be 12.2 million Rand (US$0.86 million) contributing to 0.03% increase of the GDP.

Government tax revenue (including the alcohol levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 estimated by the model is as follows:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% alcohol levy and the 14% VAT rate on tobacco and alcohol products would amount to about 11.4 million Rand (US$0.81 million) (0.03% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 16.2 million Rand (US$1.1 million) (0.04 of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 21.8 million Rand (US$1.5 million) (0.06% of projected GDP for FY 2017-2018).

WINE (Natural & Sparkling) and Vermouth: Currently about million 1.67 million liters of natural and sparkling wine and vermouth, are projected to be imported and taxed in Lesotho for FY 2016-2017 (available data on imported wine and vermouth for FY 2015-2016 is partially complete but could not be fully validated). Based on the import data available from the LRA data repository, the estimated market share is 88.9% natural wine, Vermouth 5.4%, and sparkling wine 5.7%. As shown in Annex I – Table 1 (Lesotho Cigarette and Alcohol Tax Structure) the SACU Specific Excise Tax for FY 2016-2017 for Unfortified (i.e. natural) wine (R/li) is 3.31 Rands (US$0.22) per liter; for Fortified Vermouth and wine with alcohol strength by volume exceeding 15% < 22% vol. (R/li) is 5.82 Rands (US$0.39) per liter; and the Specific Excise Tax for Sparkling Wine (R./li) is 10.53 Rands (US$0.71) per liter. The validated model gives an equivalent average excise tax of 4.4 3.86 Rand per liter (US$0.26). Current wine (Natural & Sparkling) and vermouth average excise tax burden for FY 2016-2017 estimated by the model is 8.3% of the average retail price of 1 liter of wine (Natural & Sparkling) and vermouth (see Table 10). The total tax burden including SACU excise and VAT is equivalent to 21.4% of the average retail price of 1 liter.

Table 10: Lesotho Summary WINE (Natural & Sparkling) and Vermouth Tax – Proposed Scenarios Output – FY 2017-2018

Summarized output WINE (Natural & Sparkling) and Vermouth	2015/2016 Actual*	Baseline Situation FY 2016-2017 Projected *	Government Policy Scenario 1 FY 2017-2018: 4% Levy	Policy Option Scenario 2 FY 2017-2018: 15% levy	Policy Option Scenario 3 FY 2017-2018: 30% levy
Total Wine and Vermouth consumption (million liters)*	1.22	1.67	1.53	1.41	1.30
Average Wine price (Rand per liter)	42.04	46.39	51.30	55.83	60.40
Average Wine price (US$ per liter)**	3.29	3.13	3.64	3.96	4.28
Average excise tax burden (excise as percentage of retail price)	9.0	8.3	8.0	7.3	6.8
Average tax burden (total tax as percentage of price)	22.1	21.4	21.8	24.9	28.9
Total Proposed Levy revenue (million Rand)	-	0.0	1.2	4.2	7.8
Total Proposed Levy revenue (US$ million)**	0.00	0.00	0.09	0.30	0.55
Total government revenue (VAT and levies, million Rand)***	6.7	10.1	10.9	13.8	17.4
Total government revenue (VAT and levies, million US$)	0.53	0.68	0.77	0.98	1.23
Total expenditure on Wine and Vermouth (million Rand)*	51.5	77.6	78.5	78.4	78.4
Percentage change in:					
Total Wine consumption (percentage change)*		36.6	-8.5	-16.0	-22.4

* Annualized projections from partial CIF and VAT revenue reported by the Lesotho Revenue Authority (LRA) for FYs 2015-16/2016-17
**World Bank Group forecast: annual average exchange rate = 2016/2017 (1 US$/ 14.80 Rand); 2017/2018 (1US$/14.10 Rand);
***Excluding SACU Excise tax - SACU Common Revenue Pool;

A run with the model for the three scenarios, presented the following results for FY 2017-2018 (see Summarized Output Table 10, and Table 2):

- **Under Scenario 1** the proposed levy at 4% and the projected SACU excise tax, shows that i) the average spirit retail price per liter is estimated at 51.30 Rand (US$3.64); ii) the average tax burden reaches 21.8%; and iii) the expected reduction in consumption is estimated in 8.5%.
- Alternatively, by adopting a 15% alcohol levy proposed in **Scenario 2** the average retail price per liter increases to 55.83 Rands (US$3.96) and the tax burden increases to 24.9% with 16% reduction in consumption (elasticity price -1.0 – see Annex I – Table 2)[19];
- The 30% levy **in scenario 3**, increases the retail price to 60.40 Rands (US$4.28) per liter, with an average tax burden of 28.9% as percentage of the average retail price of 1 liter, and a 22.4% expected reduction in consumption.

The Alcohol levy tax revenue generated under the three scenarios for FY 2017-2018 would be as follows:

Scenario 1: Under this scenario the 4% levy would generate an additional revenue close to 1.2 million Rand (US$0.0.09 million) or about 0.0003% of GDP (Table 2);

Scenario 2: The additional revenue generated by the 15% levy would be estimated in 4.2 million Rand (US$0.30 million) or 0.01% of GDP.

Scenario 3: The additional revenue under the 30% levy would be 7.8 million Rand (US$0.55 million) contributing to 0.02% increase of the GDP.

Government tax revenue (including the alcohol levy and the VAT and excluding SACU excise tax) to be reached with the three scenarios on FY 2017-2018 estimated by the model is as follows:

- **Scenario 1:** The estimated total fiscal revenue generated by the imposition of a 4% alcohol levy and the 14% VAT rate on tobacco and alcohol products would amount to about 10.9 million Rand (US$0.77 million) (0.03% of projected GDP for FY 2017-2018);
- **Scenario 2:** The estimated total fiscal revenue generated by the imposition of a 15% levy and the 14% VAT rate on tobacco and alcohol products would generate close to 13.8 million Rand (US$0.98 million) (0.04 of GDP);
- **Scenario 3:** The estimated total fiscal revenue generated by the imposition of a 30% levy and the 14% VAT rate on tobacco and alcohol products would amount to close to 17.4 million Rand (US$1.23 million) (0.05% of projected GDP for FY 2017-2018).

Based on the results of these simulations and considering the priority of mobilizing additional fiscal revenue in the short-term to expand the fiscal space to fund priority investments and programs in Lesotho, it is recommended that the Government of Lesotho considers introducing a 30% levy on top of the excise tax for tobacco and alcohol products as discussed under Scenario 3.

[19] Source: Republic of South Africa: National Treasury Department: A Review of the Taxation of Alcoholic Beverages in South Africa, A Discussion Document, May 2014, Bureau for Economic Research (BER)

Annex I - Table 1: Lesotho Cigarette and Alcohol Tax Structure – 2014-2016

Tobacco and Alcohol taxes / **Tax Description**	**2014/2015** Rand /%	**2015/2016 Actual** Rand /%	**Baseline Situation FY 2016-2017 Projected** / **2016/2017 Projected** Rand /%	**Tax Base (for calculation purposes)**
Cigarettes and Alcohol taxes				
Import Customs Duty (ID)*	25%	25%	25%	e.g., CIF (Cost, Insurance and Freight)
Levy	0%	0%	0%	CIF+SE for imports & Ex-factory for domestic
Value Added Tax (VAT)	14%	15%	15%	CIF+ID+SE for imports; and Ex-factory+SE for domestic
Cigarette Simple Specific excise tax (SE) SACU**	5.84 $ 0.54	6.21 $ 0.49	6.62 $ 0.45	per 10 sticks pack
Alcohol Specific Excise Taxes (SACU)**				
Beer Excise tax (specific/li AA - liters absolute alcohol)	R 68.43 $ 6.31	R 73.05 $ 5.73	R 79.26 $ 5.36	specific/li AA - liters absolute alcohol
Other mixtures of fermented beverages unfortified, with an alcoholic strength of at least 2.5 per cent by volume but not exceeding 9 per cent by vol.	R 3.42 $ 0.32	R 3.65 $ 0.29	R 79.26 $ 5.36	specific/li AA - liters absolute alcohol (effective FY 2016-17)
Spirits Excise tax Other (specific/li AA - liters absolute alcohol)**	R 136.02 $ 12.53	R 149.23 $ 11.70	R 161.47 $ 10.91	Specific excise Rands/li AA - liters absolute alcohol
Specific Excise Tax Sparkling Wine R./li**	R 9.02 $ 0.83	R 9.75 $ 0.76	R 10.53 $ 0.71	Specific per liter
Specific Excise Tax Unfortified (i.e. natural) wine R/li**	R 2.89 $ 0.27	R 3.07 $ 0.24	R 3.31 $ 0.22	Specific per liter
Wine/Fortified Vermouth with alcohol strength by volume exceeding 15% < 22% vol. R/li	R 5.16 $ 0.47	R 5.46 $ 0.43	R 5.82 $ 0.39	Specific per liter

* Except: EU, EFTA, SADEC

**SOURCE: SACU Customs & Excise Tariff - SCHEDULE 1 / PART 2A

Annex I - Table 2: Proposed Tobacco[20] and Alcohol Price elasticity: Price and Income Elasticity of Demand

Price elasticity for economy cigarettes	Value (must be negative)	-0.8
Price elasticity for medium cigarettes	Value (must be negative)	-0.6
Price elasticity for premium cigarettes	Value (must be negative)	-0.4
Income elasticity for economy cigarettes	Value (typically positive)	0.65
Income elasticity for medium cigarettes	Value (typically positive)	0.65
Income elasticity for premium cigarettes	Value (typically positive)	0.65

Note: South African studies on the demand for tobacco, are consistent with elasticity estimates from other low- and middle-income countries (Corne van Walbeek, Associate Professor: School of Economics, University of Cape Town)

Table 13: Elasticity estimates for alcoholic beverages (BER, 2010).

Category	Income Elasticity	Price Elasticity	Cross-price Elasticity
Malt beer	0.45	-0.70	n/a
Natural wine	0.50	-1.00	0.50 (malt beer price)
Standard priced wine	-0.80	-1.00	2.35 (malt beer price)
Flavoured alcoholic drinks (FADs / AFBs)	2.00	-1.25	n/a
Ready to drink beverages (RTD/ Spirit Coolers)	2.20	-2.50	n/a
Spirits	0.65	-0.90	1.10 (malt beer price) 0.70 (natural wine price)
Total Liquor	**0.65**	**-0.75**	**n/a**

Source: Republic of South Africa: National Treasury Department: A Review of the Taxation of Alcoholic Beverages in South Africa, A Discussion Document, May 2014, Bureau for Economic Research (BER)
http://www.sars.gov.za/AllDocs/LegalDoclib/DiscPapers/LAPD-LPrep-DP-2014-02%20-%20Discussion%20Paper%20on%20Review%20of%20Taxation%20of%20Alcoholic%20Beverages%20in%20RSA.pdf

[20] The World Health Organization's Tobacco Tax Simulation Model (WHO TaXSiM); World Health Organization, June 2013 assumes that assume that smokers of premium brands have a price-elasticity similar to that of smokers in high income countries at $\mu k1 = -0.2\ to -0.4$, while smokers of economy brands have a price-elasticity similar to that of low income countries between $\mu k3 = -0.8\ to -1.0$. The price-elasticity of mid-price brand smokers is taken to be the average of these two groups at around $\mu k2 = -0.5\ to -0.7$.