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# **SOUTH AFRICA'S PROPOSED VAPING EXCISE TAX IN PERSPECTIVE**

**A Review of the Appropriateness of the  
Excise Rate Proposed in the Draft Taxation  
Laws Amendment Bill**

**August 2022**

# KEY TAKEAWAYS AND RECOMMENDATIONS

This report, in response to the Draft Taxation Laws Amendment Bill and supporting documents, focuses mainly on the level of the proposed excise rate to be applied to nicotine and non-nicotine solutions and is aimed at investigating the appropriateness thereof especially when viewed from an international perspective.

The assessment entails three broad focus areas, namely: 1) the level of excise rates when viewed from an international perspective; 2) the impact of excise duties on product prices, and; 3) the implications thereof on product affordability. Below are the main takeaways from each of these focus areas and the accompanying analysis:

- **KEY TAKEAWAY 1: BENCHMARK EXCISE RATE ANALYSIS**

*The analysis investigates South Africa's proposed excise rate of R2.90/ml on e-liquids from an international perspective, in order to gauge how the level of South Africa's proposed rate compares to those implemented in other countries. While the assessment utilising nominal exchange rates already suggested South Africa's proposed e-liquid excise rate is too high, the analysis utilising Purchasing Power Parity (PPP) Adjusted exchange rates not only confirms this finding but also highlights that this gap between South Africa's proposed rate compared to the international experience is significantly wider.*

*Utilising the median as an assumed balanced and representative rate from an international perspective, a corresponding e-liquid excise rate of R1.45/ml should be seen as an upper limit in South Africa's case.*

- **KEY TAKEAWAY 2: IMPLICATIONS FOR PRODUCT PRICES**

*Taking purchasing power into account, South Africa's current e-liquid pricing seems close to the median of the sample of countries included in this report. However, this is before accounting for the possible introduction of proposed excise taxes at R2.90/ml. Should these taxes come into effect, e-liquid prices will rise substantially – based on the sampled product of a 60ml e-liquid containing 3mg of nicotine, the price could rise by a substantial 145%.*

*This substantial once-off price increase could hold major implications for consumers and the industry, with possible adverse consequences. Furthermore, on a PPP basis, this means South Africa's Purchasing Power Parity-adjusted price will be roughly 2.7 times higher than the median of the sample of countries – the third highest price among the sample of 20 countries.*

*Even when using the lower quartile of R0.70/ml from the sample of country excise rates instead of the proposed R2.90/ml duties, South Africa's PPP-Adjusted product price rises to \$PPP22.77, which is roughly on par with the upper quartile of sampled product prices.*

*This highlights the substantial impact the introduction of excise duties will have on product prices in South Africa, also when viewed from an international perspective. In general, then, the product price assessment in isolation suggests that e-liquid excise rates closer to R0.70/ml may be more appropriate.*

- **KEY TAKEAWAY 3: AFFORDABILITY CONSIDERATIONS**

*As already suggested previously, the introduction of vaping excise taxes will increase product prices substantially, and this will adversely affect affordability. Even when considering average monthly wages, which are to some extent pushed higher due to high-income earners, the introduction of the proposed R2.90/ml excise taxes will see South Africa's share of e-liquid costs to average monthly earnings rise to 1.24%, more than double the median share and closer to the upper quartile of 1.31%. This highlights that affordability will be adversely affected.*

*The lower quartile excise rate of R0.70/ml, meanwhile, translates to a share of e-liquid costs to average monthly earnings of 0.69%, much closer to the median sample share of 0.51%. Again, this suggests that from an affordability perspective – when viewed as the share of e-liquid costs to average monthly earnings – an excise rate closer to R0.70/ml may be more appropriate.*

*This affordability effect is significantly more pronounced for low-income earners – South Africa's share of e-liquid costs to minimum wages will rise to 8.40% if excise taxes of R2.90/ml are implemented, almost five times higher than the sample median. Thus, low-income earners will find it significantly more difficult to purchase and gain access to traditional tobacco substitutes. Even when excluding excise duties, South Africa's share of e-liquid costs to minimum wages is already higher than the median. Hence, it is not a surprise then that the R0.70/ml nominal excise rate has the least significant impact on affordability when viewed from a minimum wage perspective.*

Taking a more holistic view of the findings highlighted in this report, it is clear that when simply considering e-liquid excise rates from an international perspective, **a rate of R1.45/ml should be seen as an upper limit in South Africa's case.** However, **when also considering the implications of excise duties on product prices and affordability, an excise rate closer to the lower quartile of R0.70/ml seems more appropriate.**

Various other factors also play role in respect to the level of excise duties introduced. The broad array of options available to consumers in terms of product types, how these can be combined and the product interchangeability suggest that policy regulation may be faced with particular challenges. This also raises the risk that inappropriate interventions on the part of government, such as through possible excessive excise taxes, may incentivise non-compliance to such regulations, more so if appropriate monitoring and enforcement structures are not in place.

Subsequently, such actions could lead to increased illicit activity, whereby the benefit to government (irrespective of authorities' objectives or goals in adopting regulations) may be adversely affected. Another possible consequence might relate to the possibility of consumers switching back to traditional tobacco products.

# 1. INTRODUCTION

The Draft Taxation Laws Amendment Bill (TLAB) as published on 29 July 2022 proposes the addition of tariff items and subheadings related to the taxation of electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS) as follows:

- Subheading 2404.12 – Other, containing nicotine: R2.90/ml.
- Subheading 2404.19.10 – Containing nicotine substitutes: R2.90/ml.

Meanwhile, in the accompanying Draft Explanatory Memorandum on TLAB 2022, National Treasury highlights that *“government proposes to apply a flat excise duty rate of at least R2.90 per millilitre (ml) to both nicotine and non-nicotine solutions.”*

This report, in response to the Draft TLAB and supporting documents, focuses mainly on the level of the proposed excise rate to be applied to nicotine and non-nicotine solutions and is aimed at investigating the appropriateness thereof especially when viewed from an international perspective.

The outline of the report is as follows:

**1) Benchmark Excise Rate Analysis**

Comparing excise rates being applied in a sample of countries to interpret the appropriateness of South Africa's proposed rate.

**2) Implications for e-liquid Product Prices**

An investigation of the possible implications for e-liquid product prices should South Africa's proposed excise tax be implemented. The broad approach involves assessing e-liquid prices from an international perspective.

**3) Affordability Considerations**

Assessing the possible impact of the introduction of the proposed e-liquid excise tax in terms of affordability and considering product costs from an international perspective when viewed against earnings and minimum wages.

The report concludes with a summary of the key findings from each of the sections above and the accompanying analysis.

## 2. BENCHMARK EXCISE RATE ANALYSIS

This section aims to compare excise rates being applied in a sample of countries to interpret the appropriateness of South Africa's proposed R2.90/ml rate within this context<sup>1</sup>. The first step in the exercise involved gauging the excise rates being applied by the countries in the sample.

The intention was to establish which excise rates are currently in place to prevent a significant lag between the excise rates applied in the sample of countries and South Africa's proposed intention to implement e-liquid excise taxes in 2023. In some cases, however, the rates applicable currently (2022) could not be determined. That said, the countries with longer data lags should not materially affect the results of the analysis. The table below provides an overview of the sample countries along with the applicable excise rates for each country, in local currency units (LCU):

**Table 1: E-liquid excise rates (LCU/ml) applicable in the sample of countries**

Country	Year	Nicotine liquids	Non-nicotine liquids	Currency
Albania	2019	10.00	10.00	Lek (ALL)
Azerbaijan	2022	0.10	0.10	Manat (AZN)
Cyprus	2019	0.12	0.12	Euro (EUR)
Denmark	2022	2.00	2.00	Krone (DKK)
Finland	2022	0.30	0.30	Euro (EUR)
Georgia	2019	0.20	0.20	Lari (GEL)
Germany	2022	0.16	0.16	Euro (EUR)
Greece	2021	0.10	0.10	Euro (EUR)
Hungary	2022	31.50	31.50	Forint (HUF)
Italy	2022	0.13	0.08	Euro (EUR)
Kyrgyzstan	2020	1.00		Som (KGS)
Lithuania	2022	0.15	0.15	Euro (EUR)
Norway	2022	4.79		Krone (NOK)
Poland	2022	0.55	0.55	Zloty (PLN)
Portugal	2021	0.32		Euro (EUR)
Romania	2022	0.60		Leu (RON)
Russia	2019	13.00		Ruble (RUB)
Serbia	2021	6.00	6.00	Dinar (RSD)
Slovenia	2022	0.18	0.08	Euro (EUR)
South Africa	2023	2.90	2.90	Rand (ZAR)
Sweden	2021	3.00		Krona (SEK)

*Sources: Official government sources, media outlets, representative bodies and third parties*

<sup>1</sup> The decision regarding the countries included in the sample was guided by those referred to in the 'Taxation of ENDS & ENNDS Workshop' presentation delivered by National Treasury on 22 April 2022. Additional countries were also added to enlarge the sample.

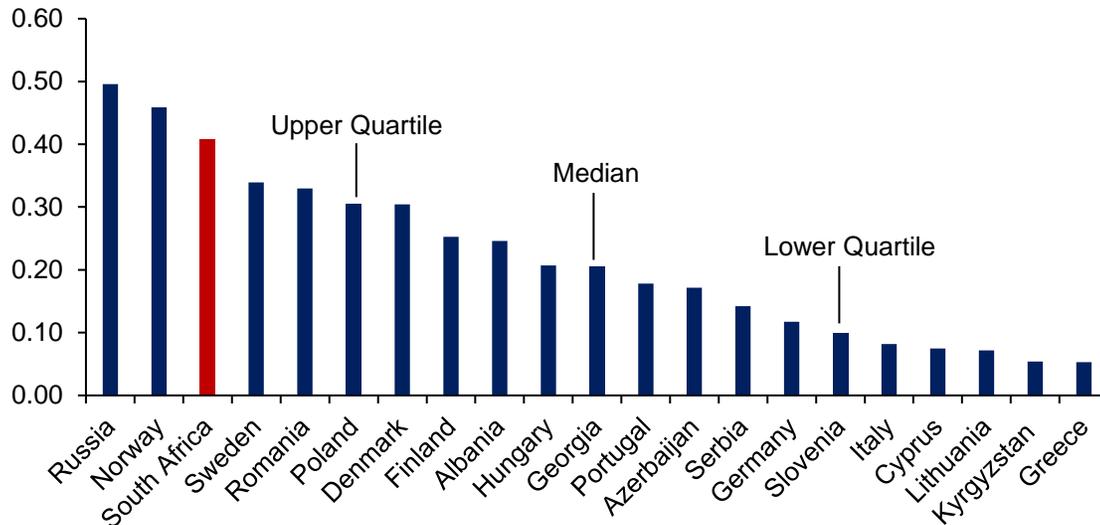
The next step entails comparing the excise rates being applied by the sample of countries with the rate being proposed by South Africa<sup>2</sup>. Firstly, all the excise rates per millilitre are converted to US dollar equivalents using average annual exchange rates for the applicable year – all exchange rate data is obtained from Oxford Economics.

If the simple nominal exchange rates are used as conversion factors, the results indicate that South Africa's proposed excise rate (\$0.18/ml) falls near the upper quartile (Russia: \$0.20/ml) and is significantly higher than the median (Romania: \$0.13/ml). **Should South Africa align its proposed excise rate with the of the median rate applied by Romania in this case, the excise rate will be lower in LCU terms at R2.08/ml.**

While this assessment is informative and already hints at the proposed excise rate being too high from an international perspective, using nominal exchange rates as conversion factors fails to take into account factors such as inflation, costs of living and importantly Purchasing Power Parity (PPP).

Hence, utilising PPP-Adjusted exchange rates – a standard practice for cross-country comparisons in most cases – may provide improved insights. Following a similar approach as above, but utilising PPP-Adjusted exchange rates as conversion factors yields the results depicted in the figure below:

**Figure 1: E-liquid excise rates (\$PPP/ml) per country**



Source: Oxford Economics Africa

<sup>2</sup> As is shown in table 1, not all countries apply a flat rate across both nicotine-containing solutions and non-nicotine solutions, while some countries only apply excise taxes to nicotine-containing liquids. For simplicity, this report utilises the latter rates for analysis purposes.

**As is evident from the figure above, South Africa's proposed excise rate in \$PPP-Adjusted terms is significantly higher than for the majority of the other countries.** In fact, South Africa ranks as the country with the third highest e-liquid excise rate out of the sample of 21 countries.

The upper quartile is represented by Poland, with an excise rate of \$PPP0.31/ml, significantly lower compared to South Africa's currently proposed rate of \$PPP0.41/ml. The median value is represented by Georgia in this instance with an excise rate of \$PPP0.20/ml. **To put this number into perspective, South Africa's proposed rate is more than two times higher than the median value.** The lower quartile, meanwhile, is represented by Slovenia with a rate equal to \$PPP0.10/ml. **South Africa's proposed rate is more than four times higher than the lower quartile.**

If it is assumed that South Africa's proposed excise rate is aligned with the upper quartile, the median or the lower quartile, the country's e-liquid excise rates in local currency terms would be as follows:

- Upper quartile: R2.17/ml
- **Median: R1.45/ml**
- Lower quartile: R0.70/ml

While the assessment utilising nominal exchange rates already suggested South Africa's proposed e-liquid excise rate is too high from an international perspective, the analysis utilising PPP-Adjusted exchange rates not only confirms this finding but also highlights that this gap between South Africa's proposed rate compared to the international experience is significantly wider.

Utilising the median as an assumed balanced and representative rate from an international perspective, **a corresponding e-liquid excise rate of R1.45/ml should be seen as an upper limit in South Africa's case** – also considering factors such as initial implementation (other countries in the sample have introduced excise rates earlier which thus currently include subsequent increases) as well as other factors discussed subsequently in this report.

#### **Key Takeaway 1:**

*The analysis above investigates South Africa's proposed excise rate of R2.90/ml on e-liquids from an international perspective, in order to gauge how the level of South Africa's proposed rate compares to those implemented in other countries.*

*While the assessment utilising nominal exchange rates already suggested South Africa's proposed e-liquid excise rate is too high, the analysis utilising PPP-Adjusted exchange rates not only confirms this finding but also highlights that this gap between South Africa's proposed rate compared to the international experience is significantly wider.*

*Utilising the median as an assumed balanced and representative rate from an international perspective, **a corresponding e-liquid excise rate of R1.45/ml should be seen as an upper limit in South Africa's case.***

### 3. IMPLICATIONS FOR E-LIQUID PRODUCT PRICES

The intention of this section is to investigate the possible implications for e-liquid product prices should South Africa's proposed excise tax be implemented. The broad approach again involves assessing e-liquid prices from an international perspective.

The first step in the investigation involved obtaining a random sample of prices for e-liquids sold in the various countries in the sample as outlined in table 1. In this regard, prices were sourced mostly from in-country vendors of e-liquids who facilitated online sales of these products or at least advertised these products online.

The pricing data, specifically captured in local currency terms – was gathered during mid-August 2022. In an attempt to compare like-for-like, only e-liquids with a volume of 50ml – 60ml were used. Also, the most frequently sold product, or main offering was used as a reference point when collecting the data.

It must be noted, however, that the wide array of options available is immediately apparent across the various countries, ranging from different flavours and also different products. The latter refer to options such as e-liquid bases (flavoured or not) to which nicotine shots (nicotine liquid) can be added as per the user's requirements, to e-liquid solutions that already contain a certain amount of milligrams (mg) of nicotine (ranging from 3mg up to 12 mg in most cases)<sup>3</sup>. This clearly highlights the difficulties posed in attempting to regulate the market.

The broad array of options available to consumers across the sample of countries in terms of product types, how these can be combined and the product interchangeability suggest that policy regulation may be faced with particular challenges.

This also raises the risk that inappropriate interventions on the part of government, such as through possible excessive excise taxes, may incentivise non-compliance to such regulations, more so if appropriate monitoring and enforcement structures are not in place.

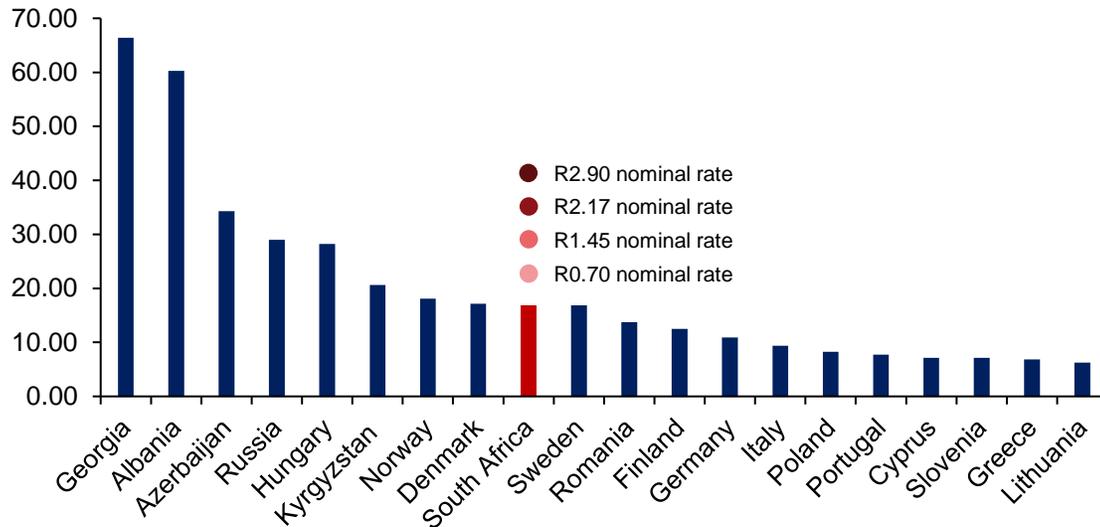
**Subsequently, such actions could lead to increased illicit activity**, whereby the benefit to government (irrespective of authorities' objectives or goals in adopting regulations) may be adversely affected.

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<sup>3</sup> The sample constructed only contains liquids with a volume of 50ml - 60ml, while the nicotine content was either zero (requiring a nicotine shot) or already contained 3mg of nicotine. In the EU, for example, the Tobacco Product Directive (TPD) restricts nicotine containing e-liquid bottle sizes to 10ml – hence, vendors often sell nicotine-free 'short fills' in for example a 60ml bottle but only containing 50ml of non-nicotine liquid, thereby requiring a 10ml shot. This may have price comparison implications, but a lack of data prevented compiling a completely homogeneous dataset. Admittedly, this analysis can be strengthened by a broader and more in-depth sampling study.

The next step in the analysis involves converting the collected prices for each country using PPP-Adjusted exchange rates. This allows for comparing e-liquid product prices across the sample of countries – data could not be obtained for Serbia and hence the country is excluded from the sample. The results are shown in figure 2 below:

**Figure 2: E-liquid prices (\$PPP Adjusted: 50ml - 60ml) in the sample of countries**



Source: Country online vendors or advertising products online

From figure 2 it is clear that South Africa's sampled e-liquid price in \$PPP-Adjusted terms is fairly close to the median price. More specifically, South Africa records a price of \$PPP16.87 for a 60ml e-liquid solution, marginally higher than the median price of \$PPP15.29.

Importantly, however, e-liquid excise taxes have already been implemented for the vast majority of the countries in the sample, and these taxes would have inflated the product prices as added costs are passed on to the consumer. Hence, to get a better sense of the impact of e-liquid excise taxes in South Africa, these taxes would need to be added to the product price. In South Africa's case, the price of the sampled product with a volume of 60ml containing 3mg of nicotine was R120.00.

**Adding the proposed excise rate of R2.90/ml raises this price by a substantial 145% to R294.00.**

This is already a significant once-off increase in the price on offer to consumers. Adjusting this price using the PPP exchange rate conversion sees South Africa's PPP-Adjusted price rising to \$PPP41.33. In turn, **this means South Africa's Purchasing Power Parity-adjusted price will be roughly 2.7 times higher than the median of the sample of countries** – the third highest price among the sample of 20 countries.

To provide additional insight in this regard, the South African nominal excise rates corresponding to the median, upper and lower quartiles from the sample of country excise rates – derived from the previous section – are also added to the sampled product price assessment.

The corresponding product prices are subsequently converted to \$PPP-Adjusted terms. This yields the following \$PPP-Adjusted prices, also plotted on figure 2 above:

- Upper quartile: R2.17/ml – \$PPP35.17 product price.
- Median: R1.45/ml – \$PPP29.10 product price.
- Lower quartile: R0.70/ml – \$PPP22.77 product price.

At this stage it is not surprising that all the \$PPP-Adjusted prices above remain higher than the median price of \$PPP15.29, seeing as South Africa's price assuming no excise duties was already marginally higher than the median. Nonetheless, it does reflect that the R0.70/ml excise rate, which represents the lower quartile from the sample of country excise rates, has the least impact on product prices from a country-comparison perspective.

That said, even at this nominal excise rate of R0.70/ml, South Africa's PPP-Adjusted product price rises to \$PPP22.77, which is roughly on par with the upper quartile of sampled product prices. This highlights the substantial impact the introduction of excise duties will have on product prices in South Africa, also when viewed from an international perspective.

In general, then, the product price assessment suggests that excise rates closer to R0.70/ml may be more appropriate.

#### **Key Takeaway 2:**

*Taking purchasing power into account, South Africa's current e-liquid pricing seems close to the median of the sample of countries included in this report. However, this is before accounting for the possible introduction of proposed excise taxes at R2.90/ml. Should these taxes come into effect, e-liquid prices will rise substantially – based on the sampled product of a 60ml e-liquid containing 3mg of nicotine, the **price could rise by a substantial 145%**.*

*This substantial once-off price increase **could hold major implications for consumers and the industry, with possible adverse consequences.** Furthermore, on a PPP basis, this means **South Africa's Purchasing Power Parity-adjusted price will be roughly 2.7 times higher than the median of the sample of countries – the third highest price among the sample of 20 countries.***

*Even when using the lower quartile of R0.70/ml from the sample of country excise rates instead of the proposed R2.90/ml duties, South Africa's PPP-Adjusted product price rises to \$PPP22.77, which is roughly on par with the upper quartile of sampled product prices. This highlights the substantial impact the introduction of excise duties will have on product prices in South Africa, also when viewed from an international perspective.*

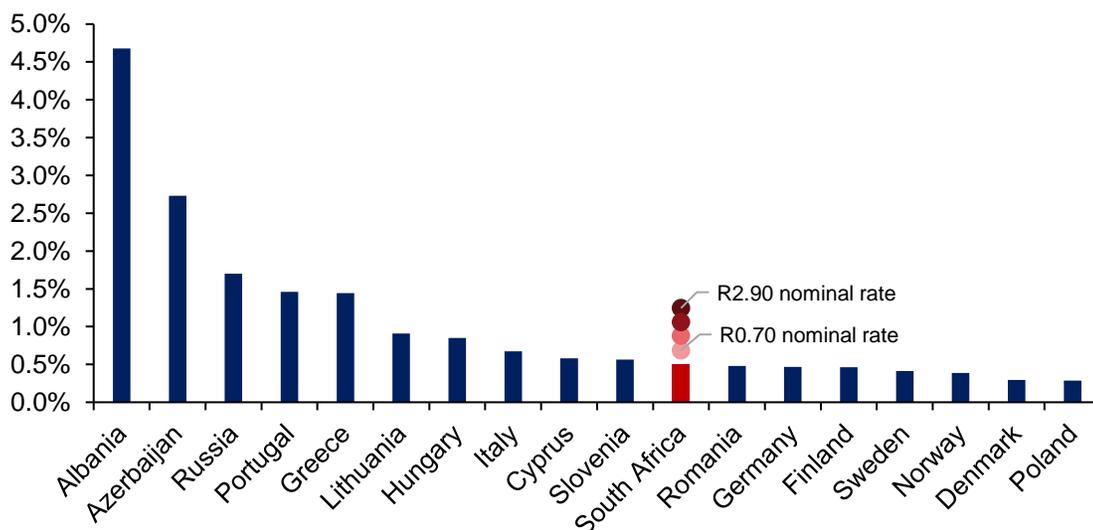
***In general, then, the product price assessment in isolation suggests that excise rates closer to R0.70/ml may be more appropriate.***

## 4. AFFORDABILITY CONSIDERATIONS

Another factor to consider relates to the possible impact of the introduction of the proposed e-liquid excise taxes in terms of affordability seeing as prices are likely to rise substantially as a result thereof. This section attempts to investigate this impact, considering product costs from an international perspective when viewed against earnings and also minimum wages.

Utilising the PPP-Adjusted prices calculated as highlighted in the previous section and expressing this as a share of the average monthly earnings per employee – sourced from the International Labour Organization (ILO) – for each of the countries in the sample<sup>4</sup> provides insights in terms of the affordability of e-liquids from a cross-country comparison perspective. These results are illustrated in the figure below:

**Figure 3: E-liquid prices as a share of average monthly earnings**



Source: Country online vendors or advertising products online, ILO

At first glance, South Africa performs relatively well, with the share of e-liquid costs to average monthly earnings (0.51%) falling just below the median of the sample (Slovenia: 0.57%). This suggests that affordability in South Africa's case is currently roughly similar to the median of the sample group of countries. However, should the proposed R2.90/ml excise rates be implemented, the picture changes substantially. In this case, **South Africa's share of e-liquid costs to average monthly earnings rises to 1.24%, more than double the median share and closer to the upper quartile of 1.31%.**

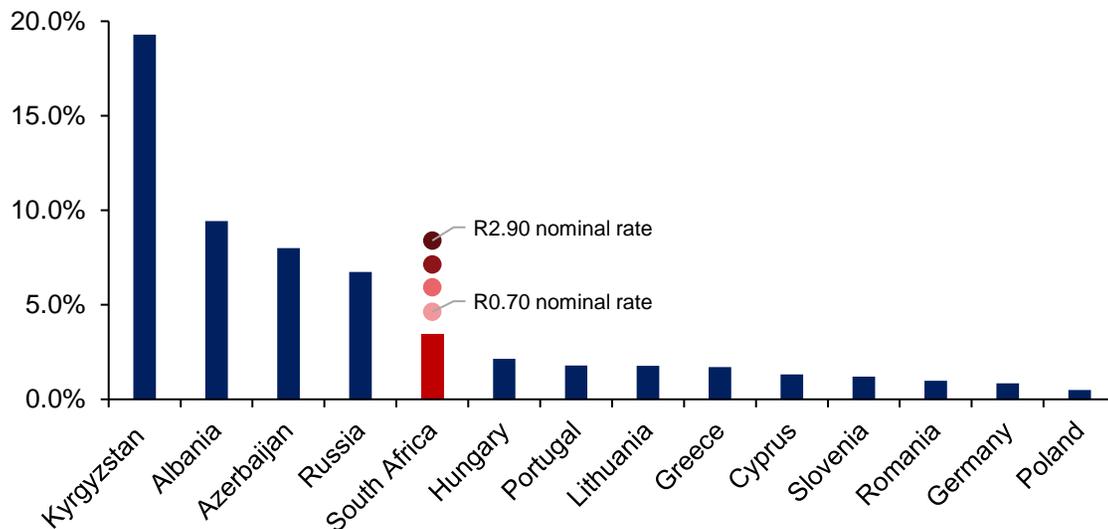
<sup>4</sup> The sample of countries in the section is generally smaller due to data limitations and also factors relating to certain countries not having adopted minimum wages.

**This shows that affordability will be adversely impacted, especially when viewed from an international context, when vaping excise tax is implemented at currently envisaged rates.**

Again, the South African excise rates corresponding to the median, upper and lower quartiles from the sample of country excise rates – derived from section 2 – are also added to the assessment. Interestingly, the lower quartile excise rate of R0.70/ml translates to a share of e-liquid costs to average monthly earnings of 0.69%, much closer to the median share of 0.51%. **Again, this suggests that from an affordability perspective – when viewed as the share of e-liquid costs to average monthly earnings – an excise rate closer to R0.70/ml may be more appropriate.**

Next, due to South Africa's elevated inequality levels, one would expect the country to perform worse compared to the sample of countries when affordability is viewed from a narrower perspective by focusing on lower income groups. In this regard, the minimum wages in place in the sample of countries are used as approximations for earnings of low-income individuals. Using this approach yields the results depicted below:

**Figure 4: E-liquid prices as a share of minimum wages**



Source: Country online vendors or advertising products online, ILO

South Africa's share of e-liquid costs to minimum wages is equal to roughly 3.43%, which is almost double the sample median (Portugal: 1.79%). **The situation, however, again changes substantially if it is assumed that the proposed excise legislation will come into effect.**

In this case, South Africa's share of e-liquid costs to minimum wages will rise to 8.40%, **almost five times higher than the median and placing South Africa as the country with the third highest share within the sample.** Once again, the South African excise rates corresponding to the median, upper and lower quartiles from the sample of country excise rates – derived from section 2 – are added to the assessment.

Even when excluding excise duties, South Africa's share of e-liquid costs to minimum wages is already higher than the median. **Hence, it is not a surprise then that the R0.70/ml nominal excise rate has the least significant impact on affordability when viewed from a minimum wage perspective.**

**Key Takeaway 3:**

*As already suggested previously, the introduction of vaping excise taxes will increase product prices substantially, and this will adversely affect affordability. Even when considering average monthly wages, which are to some extent pushed higher due to high-income earners, the introduction of the proposed R2.90/ml excise taxes will see South Africa's share of e-liquid costs to average monthly earnings rise to 1.24%, more than double the median share and closer to the upper quartile of 1.31%. **This highlights that affordability will be adversely affected.***

*The lower quartile excise rate of R0.70/ml, meanwhile, translates to a share of e-liquid costs to average monthly earnings of 0.69%, much closer to the median share of 0.51%. **Again, this suggests that from an affordability perspective – when viewed as the share of e-liquid costs to average monthly earnings – an excise rate closer to R0.70/ml may be more appropriate.***

*This affordability effect is significantly more pronounced for low-income earners – South Africa's share of e-liquid costs to minimum wages will rise to 8.40% if excise taxes of R2.90/ml are implemented, almost five times higher than the sample median. Thus, low-income earners will find it significantly more difficult to purchase and gain access to traditional tobacco substitutes. Even when excluding excise duties, South Africa's share of e-liquid costs to minimum wages is already higher than the median. **Hence, it is not a surprise then that the R0.70/ml nominal excise rate has the least significant impact on affordability when viewed from a minimum wage perspective.***

## 5. CONCLUSION

This report, in response to the Draft TLAB and supporting documents, focuses mainly on the level of the proposed excise rate to be applied to nicotine and non-nicotine solutions in South Africa and is aimed at investigating the appropriateness thereof especially when viewed from an international perspective.

The first step entailed comparing excise rates being applied in a sample of countries to interpret the appropriateness of South Africa's proposed e-liquid excise rate. Specifically, the investigation focused on South Africa's proposed excise rate of R2.90/ml on e-liquids from an international perspective, in order to gauge how the level of South Africa's proposed rate compares to those implemented in other countries. When utilising nominal exchange rates as conversion factors, the findings already suggest that South Africa's proposed e-liquid excise rate is too high from an international perspective.

The analysis utilising PPP-Adjusted exchange rates not only confirms this finding but also highlights that this gap between South Africa's proposed rate compared to the international experience is significantly wider. Utilising the median as an assumed balanced and representative rate from an international perspective, **a corresponding e-liquid excise rate of R1.45/ml should be seen as an upper limit in South Africa's case.**

The next step involved an investigation of the possible implications for e-liquid product prices should South Africa's proposed excise tax be implemented. The broad approach entailed assessing e-liquid prices from an international perspective. Taking purchasing power into account, South Africa's current e-liquid pricing seems close to the median of the sample of countries included in this report. **However, this is before accounting for the possible introduction of the proposed R2.90/ml excise duties in South Africa.**

Should these taxes come into effect, e-liquid prices will rise substantially – based on the sampled product of a 60ml e-liquid containing 3mg of nicotine, the price could rise by a substantial 145%. This substantial once-off price increase could hold major implications for consumers and the industry, with possible adverse consequences. Furthermore, on a PPP basis, **this means South Africa's Purchasing Power Parity-adjusted price will be roughly 2.7 times higher than the median of the sample of countries – the third highest sampled product price among the group of 20 countries.**

Even when using the lower quartile of R0.70/ml from the sample of country excise rates instead of the proposed R2.90/ml duties, South Africa's PPP-Adjusted product price rises to \$PPP22.77, which is roughly on par with the upper quartile of sampled product prices. This highlights the substantial impact the introduction of excise duties will have on product prices in South Africa, also when viewed from an international perspective.

Another factor to consider relates to the possible impact of the introduction of the proposed e-liquid excise taxes in terms of affordability seeing as prices are likely to rise substantially as a result thereof. This impact was assessed through considering product costs from an international perspective when viewed against earnings and also minimum wages.

The results reflect that the introduction of vaping excise taxes will see South Africa's share of e-liquid costs to average monthly earnings rise to 1.24%, more than double the median sample share and closer to the upper quartile of 1.31%. **This highlights that affordability will be adversely affected.** The lower quartile excise rate of R0.70/ml, meanwhile, translates to a share of e-liquid costs to average monthly earnings of 0.69%, much closer to the median share of 0.51%. **Again, this suggests that from an affordability perspective – when viewed as the share of e-liquid costs to average monthly earnings – an excise rate closer to R0.70/ml may be more appropriate.**

This effect is significantly more pronounced for low-income earners – South Africa's share of e-liquid costs to minimum wages will rise to 8.40% if excise taxes are implemented, almost five times higher than the sample median. **Hence, low-income earners will find it significantly more difficult to purchase and gain access to traditional tobacco substitutes.** Even when excluding excise duties, South Africa's share of e-liquid costs to minimum wages is already higher than the median. Hence, it is not a surprise then that the R0.70/ml nominal excise rate has the least significant impact on affordability when viewed from a minimum wage perspective.

Taking a more holistic view of the findings highlighted in this report, it is clear that when simply considering e-liquid excise rates from an international perspective, **a rate of R1.45/ml should be seen as an upper limit in South Africa's case.** However, **when also considering the implications of excise duties on product prices and affordability an excise rate closer to the lower quartile of R0.70 may be more appropriate.**

Various other factors also play role in respect to the level of excise duties introduced. The broad array of options available to consumers in terms of product types, how these can be combined and the product interchangeability suggest that policy regulation may be faced with particular challenges. This also raises the risk that inappropriate interventions on the part of government, such as through possible excessive excise taxes, may incentivise non-compliance to such regulations, more so if appropriate monitoring and enforcement structures are not in place.

Subsequently, such actions could lead to increased illicit activity, whereby the benefit to government (irrespective of authorities' objectives or goals in adopting regulations) may be adversely affected. Another possible consequence might relate to the possibility of consumers switching back to traditional tobacco products.

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ECigIntelligence

European Commission

Foundation for a Smoke-Free World

Government of South Africa

International Labour Organization

KPMG

Ministry of Finance of Lithuania

Ministry of Finance of Poland

Ministry of Finance of Slovenia

National Treasury South Africa

Norwegian Tax Administration

PwC

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