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DOUBLE THE PAIN

THE BURDEN OF UNPREDICTABLE
EXCISE TAXES & HIGH INFLATION ON
BEER PRODUCERS & CONSUMERS
IN SOUTH AFRICA

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ABBREVIATIONS

ABV	Alcoholic strength by volume
ATO	Australian Taxation Office
AUD	Australian dollar
CAD	Canadian dollar
CAGR	Compound annual growth rate
CPI	Consumer price index
CRA	Canada Revenue Agency
GBP	British pound
GDP	Gross domestic product
HMRC	His/Her Majesty's Revenue & Customs
LAA	Litres of absolute alcohol
ml	Millilitre
MRA	Mauritius Revenue Authority
MUR	Mauritian rupee
ONS	UK Office for National Statistics
p.a.	Per annum
PDI	Personal disposable income
PED	Price elasticity of demand
PMI	Purchasing managers' index
PPI	Producer price index
ppt	Percentage point
RPI	Retail price index
SAB	South African Breweries
TRA	Tanzania Revenue Authority
TZS	Tanzanian shilling
USD	United States dollar
VAT	Value-added tax
WARSP	Weighted average retail selling price
WHO	World Health Organization
ZAR	South African rand

EXECUTIVE SUMMARY

In 1643, the UK was the first country to introduce excise duties on beer to help fund government expenses during the English Civil War. These indirect taxes have become standard practice in many countries ever since. Excise duties, in addition to value-added tax (VAT), comprise the overall tax burden that is shifted to consumers through higher retail prices. Although these levies aim to increase fiscal revenues and discourage the harmful use of products with negative externalities, they generally raise producer expenses and can potentially accelerate market inflation in most countries.

South Africa imposes an alcoholic-content-based specific excise on beer production as a fixed percentage of the beverage's weighted average retail selling price (WARSP). The government levies and raises these duties on beer in South African rands (ZAR) per litre of absolute alcohol content (LAA) towards official targets as per the National Treasury's guidelines every year. The guideline tax burden for beer emanates from the National Treasury's 2014 excise policy discussion document, which reviewed the taxation of alcoholic beverages from its 2002 excise targets. These tax burden targets are also confirmed and adjustments to the level of duties made during the annual delivery of the national budget.

The country's excise regime and overall tax burden target for beer have been altered four times since 1994/95. The previous overall tax burden target for beer was 35% in excise plus VAT, which was last changed in 2015/16 to 23% of WARSP in excise duties only. Regardless, the government adjusts excise duties on beer annually by projected retail prices for the next fiscal year or by the expected consumer price index (CPI) inflation rate, whichever is higher, with the virtue to maintain the overall tax burden aligned with the National Treasury's official guidelines.

The principle of maintaining the overall tax burden has, however, been negated amid several **excise duty escalations on beer that have persisted above projected and actual inflation outcomes, as well as retail price increases**. Without retrospective corrections for CPI outcomes, rising excise taxes on beer have created considerable uncertainty and expense pressures for producers. At the same time, these duties, along with VAT, impair consumer affordability, especially during periods of high inflation. This has been evident over the past three fiscal years when headline CPI inflation accelerated by an average of 6.3% p.a., notwithstanding that prices of specific basic necessities and inputs costs rose faster than those reflected in overall inflation numbers. Correspondingly, persistent above-inflation increases in duties add additional pain to the beer industry and consumers in challenging macroeconomic and inflationary circumstances.

TAXES, INFLATION, AND ECONOMIC GROWTH

Economic growth positively affects government tax revenues, although the relationship between taxes and economic output is more contentious. While taxation can support fiscal stability and the funding of public investments, excessive or poorly managed taxes that are not strategically reinvested can distort economic activity, discourage investment, reduce disposable incomes, and increase deadweight losses associated with tax collection and administration. High inflation similarly harms economic activity, with consumption-based taxes being more inflationary than income-based taxes. Therefore, prudent monetary and

fiscal policies are needed to manage inflation without stifling economic growth and industrial activity, which includes carefully governing tax burdens. Although beer excise revenues accounted for only 1.1% of South Africa's aggregate fiscal income between 2012/13 and 2023/24 on average, **elevated duties on the beverage have an outsized adverse influence on the sustainability of the beer value chain, the people employed therein, and the economic activity it supports.**

Excise revenues from beer have been more responsive to economic growth than other taxes, with an average buoyancy ratio of 1.8 from 2013/14 to 2023/24 when the distortive impact of the Covid-19 lockdown restrictions is removed. This implies that **for every 1% increase in economic growth, excise tax receipts on beer rose by an average of 1.8%**. Notwithstanding, excise buoyancy dropped notably in 2023/24 due to high inflation and weak economic growth, which eroded the inflation-adjusted value of excise revenues and resulted in a negative real excise tax buoyancy ratio. This suggests that **sharp increases in excise duties during periods of high inflation and weak economic growth can dampen consumption, productive potential, and fiscal receipts.**

INFLATION AND THE SUPPLY AND DEMAND OF BEER

Rising input costs, production expenses, supply chain disruptions, and regulatory changes such as increased excise duties drive supply-side inflation with significant impacts on the cost and availability of manufactured goods. In South Africa, higher excise duties on beer have compounded expenses for beer producers due to the high share of excise payments (i.e., around 38%) in their total operational costs. **This pressure is exacerbated by excise duties rising faster than inflation and most other operating expenses for firms in the beer industry.** Likewise, above-inflation increases in excise taxes, combined with the addition of VAT, have driven up consumer prices and future expectations thereof. This has, in turn, amplified demand-side inflation, affected consumer spending, and reduced the affordability of excisable products like beer. Despite increasing nominal household incomes since 2012/13, inflation has outpaced real wage growth, **weakening consumer spending power on beer.**

Higher production costs, excise duties, and inflation in South Africa have increased beer prices substantially, with a 500ml bottle more than **doubling in both price and taxes** over the past decade. Rising beer prices have weighed on demand, with beer consumption increasing by a mere 0.8% p.a. on average between 2012/13 and 2023/24 when the disruptive effects of the lockdown restrictions are removed. After constructing a regression model to control for varying income levels over the same timeframe, the average price elasticity of demand (PED) for beer in response to the impact of above-inflation price increases on the consumption of the beverage is estimated at -0.88. This indicates that **a 1% increase in beer prices above inflation results in a 0.9% decline in demand for the beverage.** Compared to previous PED estimations, it further demonstrates that consumers continue to be increasingly sensitive to changes in beer prices and underscores the complex interplay between excise duties, inflation, and consumer behaviour, besides the unintended consequences of undue tax and price increases when inflation is high.

EXCISE DUTIES LEVIED ON BEER IN SOUTH AFRICA

Since 2012/13, excise tax collections from beer have grown significantly, by 159%, to reach ZAR 21.9bn in 2023/24. The beverage represented a share of 34.7% of total excise revenues in 2023/24, the largest of all excisable product categories. As a result, **the government is disproportionately reliant on the beer industry for excise revenues. The trajectory in excise duties on beer has also evolved significantly, often increasing above projected inflation, CPI inflation outcomes, and retail prices, which has led to higher prices for consumers, elevated production expenses, and unpredictability for beer producers in the absence of ex-post corrections.** Specifically, excise duties on beer rose by 114.6% between 2012/13 and 2023/24 (CAGR 7.2%), which was 1.5 times faster on average than the growth rates in both headline and beer CPI inflation of 74.8% (CAGR 5.2%) and 78.3% (CAGR 5.4%), respectively, over the same period.

Although the government's excise collections from beer have grown remarkably amid above-inflation duty escalations, this approach has begun to show **diminishing returns**. While nominal excise receipts increased by an average of 9.0% p.a. from 2012/13 to 2023/24, real excise revenues have grown more slowly by 3.5% p.a., and rate-adjusted collections by just 1.7% p.a. (i.e., if historical duties on beer remained constant at current levels). Nominal excise revenues from beer managed to increase by only 2.4% y/y in 2023/24, implying that expectations for higher tax receipts from beer may not materialise. This indicates that **persistent above-inflation duty hikes have become less effective over time, leading to reduced responsiveness in fiscal income. Ongoing sharp escalations in duties can adversely affect revenue collections** and consumer behaviour, driving some people towards other excisable products or the illicit alcohol market.

South Africa's overall tax burden (i.e., excise duties plus VAT) on beer has risen acutely since 2012/13: by 161.3% (CAGR of 9.1%) to ZAR 33.4bn in 2023/24. Consequently, the share of this burden climbed from a low of 32.0% of WARSP in 2015/16 to 37.8% of WARSP in 2023/24. In other words, South Africa's overall tax burden on beer was 2.8 percentage points (ppts) above the previous overall target of 35.0% of WARSP due to sustained above-inflation duty increases and higher VAT (since 2018/19, South Africa's VAT rate was raised to 15%).

In particular, adjustments to excise duties have raised the excise tax burden on beer to 24.8% of WARSP in 2023/24, from a low of 19.8% of WARSP in 2015/16. In that regard, the **excise burden on beer has continued to trend above the National Treasury's target of 23% of WARSP over the past six years and was 1.8 ppts above that threshold in 2023/24**. Put differently, of every beer bought, 24.8% of the final price comprise excise taxes paid into the fiscus, which rises to 37.8% of the retail price when VAT is included. Excise duties on beer have therefore diverged from the officially targeted guidelines, while the overall tax burden has also grown faster than domestic beer sales, by an annual average of 1 ppt over the past decade, amid above-inflation duty escalations and a higher VAT rate, disproportionately affecting low-income consumers. This trend raises concerns about the impact of excise taxes on beer producers and consumers alike in a high-inflationary environment.

BENCHMARKING SOUTH AFRICA'S EXCISE DUTIES ON BEER TO GLOBAL COMPARATORS

Five countries were chosen against which to compare South Africa's excise regime: Australia, Canada, Mauritius, Tanzania, and the UK. These countries were selected based on the comparability of their excise regimes, beer industries and consumption patterns, health policies, and, particularly, data availability to enable the benchmarking analysis. While the excise regimes of the benchmark countries vary in magnitude, method, and complexity, all acknowledge the need to preserve real duties by lifting levies at or near inflation. In practice, however, the implementation of these regimes has differed. **Australia and Canada** use automatic CPI indexation to adjust excise duties on beer to actual inflation outcomes, which maintains the real value of these taxes. They have also kept increases in duties below inflation when price pressures are high, after which retroactive adjustments ensure that the level of these duties remains aligned with or below long-term CPI inflation trends.

In **Mauritius**, excise taxes on beer are manually altered in response to economic circumstances and often left unchanged, while ex-post increases have maintained duties on beer slightly above CPI outcomes. Likewise, **the UK** modifies excise duties on beer in consideration of economic conditions, public health objectives, and fiscal needs broadly in line with changes in the retail price index (RPI). Even so, the country has often reduced or frozen excise taxes to support consumers and industries by allowing a large erosion in real duties. Like South Africa, **Tanzania** relies on manual adjustments in excise duties on beer based on projected inflation, albeit also in view of the country's overall economic performance. Tanzania, too, has often left duties unchanged, followed by infrequent levies above inflation. Yet, the country has maintained increases in beer taxes notably below past inflation trends. Notwithstanding their different excise regimes, total taxes collected from beer producers by all of the benchmark governments have grown, even in those countries where the real value of duties has diminished over time in consideration of inflation outcomes.

Since 2012/13, South Africa has endured the **most significant upward disparity between beer excise duties and inflation** outcomes among the benchmark countries. Without retrospective corrections, idiosyncratic adjustments to duties based on projected inflation have resulted in sizeable deviations from actual price pressures and amplified CPI expectations, especially in periods of high inflation. Conversely, automatic CPI-indexed mechanisms lead to reliable and predictable changes in excise duties, averting the erosion of real duties, fostering policy certainty, promoting trust among the public and private sectors, easing consumer and firm budgeting, and minimising market disruptions.

South Africa is highly reliant on the beer industry to augment fiscal receipts from excisable products. By 2023/24, the country depended on the beer industry for 34.7% of total excise revenues, exceeding the respective shares in overall beer excise collections in Tanzania (22.3%), Australia (8.8%), the UK (6.2%), Mauritius (6.1%), and Canada (3.8%). This highlights a heavy concentration on beer duties compared to the other countries' more diversified excise revenue structures. Moreover, **South Africa's reliance on beer taxes has grown**, contrasting with more stable or declining dependence in the other nations. It is important to support the viability of beer producers by avoiding excessive duty escalations, especially given the feedback loops between manufacturers and the wider economy.

Aggressive duty increases in South Africa have far outpaced more moderate changes in the other countries, which has thus far resulted in a relatively faster expansion in excise revenues from beer. However, South Africa's excise receipts are unlikely to expand indefinitely given above-inflation duty increases. The growing gap between nominal and rate-adjusted excise revenues indicates a progressively weak response to duty escalations

versus the benchmark countries, risking long-term fiscal stability. **South Africa may reach an inflection point in the near future, where the burden of unpredictable duty increases stifles industry growth and exacerbates socio-economic challenges.** The government, therefore, needs to consider alternative mechanisms for adjusting excise duties on beer to balance the tax burden and support broader developmental objectives, such as the enhanced excise duty predictability and market certainty offered by the benchmark countries by preserving the level of real duties in consideration of prevailing price pressures.

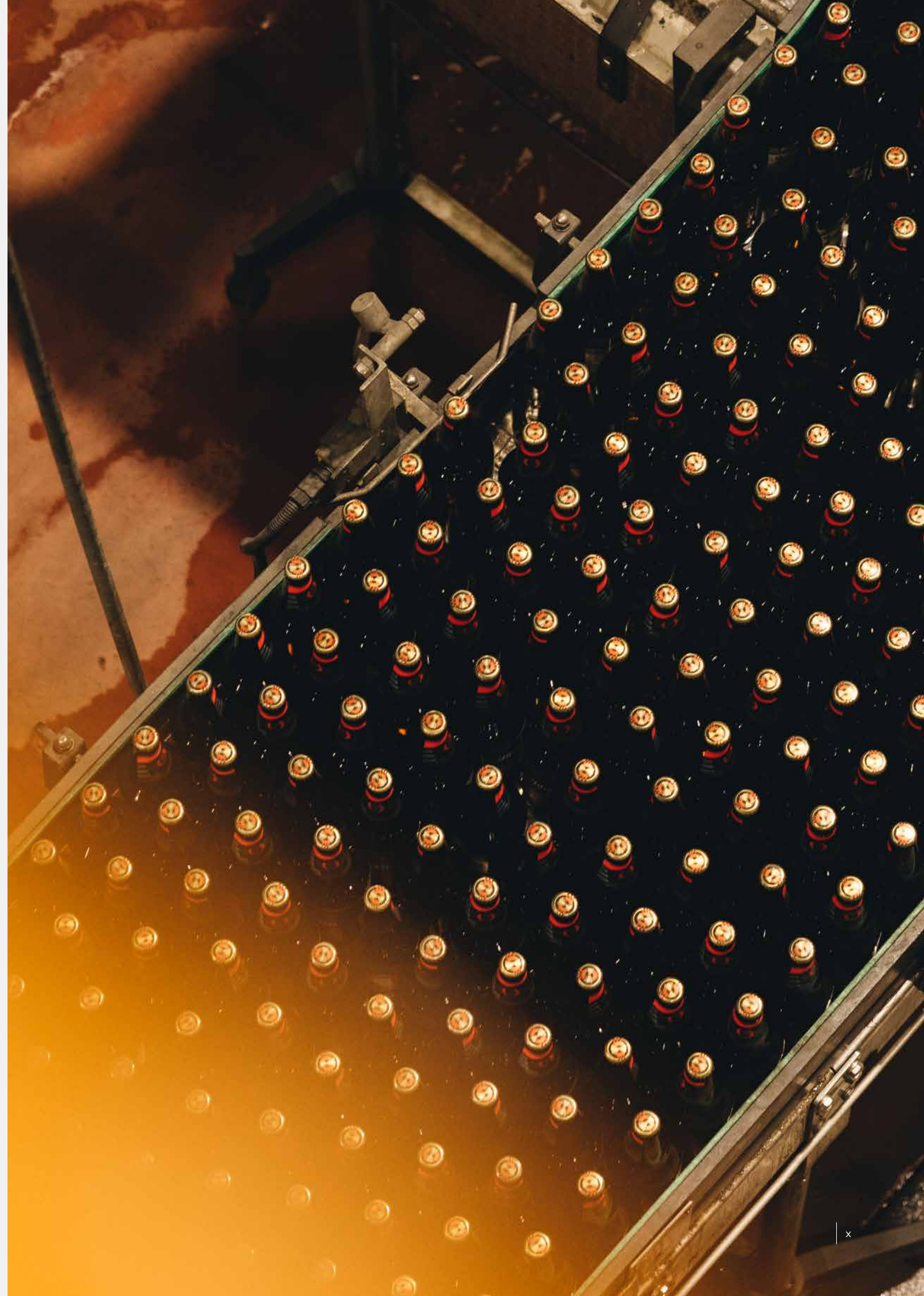
BALANCING THE BRUNT OF THE BURDEN

South Africa's excise and overall tax burdens on beer have been significantly higher than those of Australia, Canada, Tanzania, and the UK. Although Mauritius has a higher tax burden on beer, this has declined from previous highs, while Australia, Canada, and the UK have also moderated their beer tax burdens by keeping increases in beer duties at or below realised inflation. In contrast, **South Africa's excise and overall tax burdens have expanded much faster than in all the benchmark countries**, mostly driven by above-inflation duty escalations. The difference between South Africa's excise and overall tax burden has also widened after the VAT rate was raised by 1 ppts in 2018/19, while this gap has remained constant in the benchmark countries. This suggests that above-inflation excise duty escalations on beer in South Africa without ex-post corrections are not only hampering producers but, along with a widening VAT differential, is also adversely affecting beer consumers.

Beer consumption per person has reduced in all of the benchmark countries aside from Mauritius, where tourism plays a role, whereas the corresponding rate of decline has been slower in South Africa. Particularly, per capita beer consumption declined in the comparator states even as their overall tax burdens on beer have eased. In this respect, the benchmark countries are reducing per capita consumption levels despite their tax burdens on beer being relatively lower and their duties rising by less than average inflation outcomes, while growing their nominal excise receipts from beer at the same time. It further reveals that **South Africa's mounting overall tax burden and above-inflation excise levies on beer** may not be the primary mechanism to reduce excessive alcohol use.

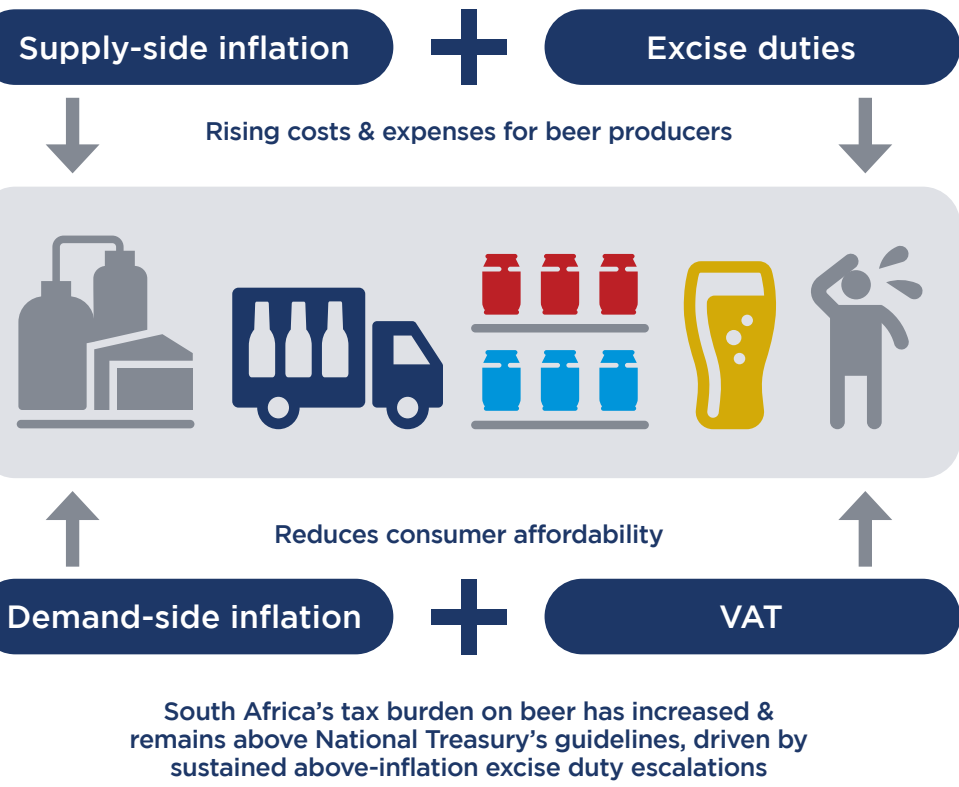
In light of the findings throughout this study, the National Treasury should consider adjusting its excise regime on beer to better support the excise principles that it purports, the interactions that beer producers and consumers have with the broader macroeconomic environment, and the long term-impact on fiscal receipts. This can be achieved by **moving from a guideline-targeted beer taxation regime to a structured framework** for governing excise duty escalations that promotes more predictable excise taxes, especially in periods of high inflation.

Market certainty on the supply and demand sides of the economy can be improved by **automatically indexing excise duties on beer to inflation outcomes** of the previous fiscal year as opposed to manual amendments in response to anticipated retail prices for beer or expected CPI inflation. This excise adjustment framework should also accommodate for fluctuations in economic growth, meaning that increases in **excise duties on beer can be kept below inflation when price pressures are high and be raised ex-post to maintain duty neutrality**. An alternative, albeit less conducive, consideration is to raise excise duties according to projected inflation, but to correct ensuing increases in duties if anticipated price pressures are not realised in practice.

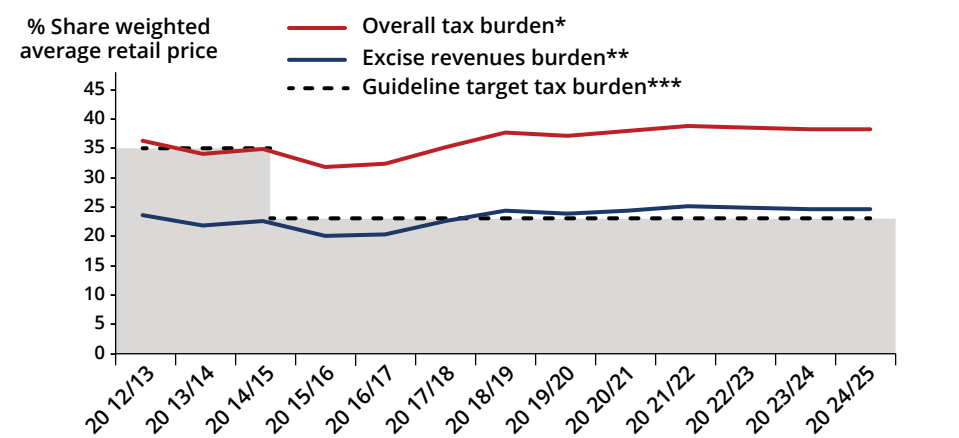


THE BURDEN OF UNPREDICTABLE EXCISE TAXES & HIGH INFLATION ON BEER IN SOUTH AFRICA

BEER PRODUCERS FACE RISING COSTS & TAX BURDENS, WHILE CONSUMERS ENDURE HIGHER PRICES & AN EROSION OF REAL INCOMES

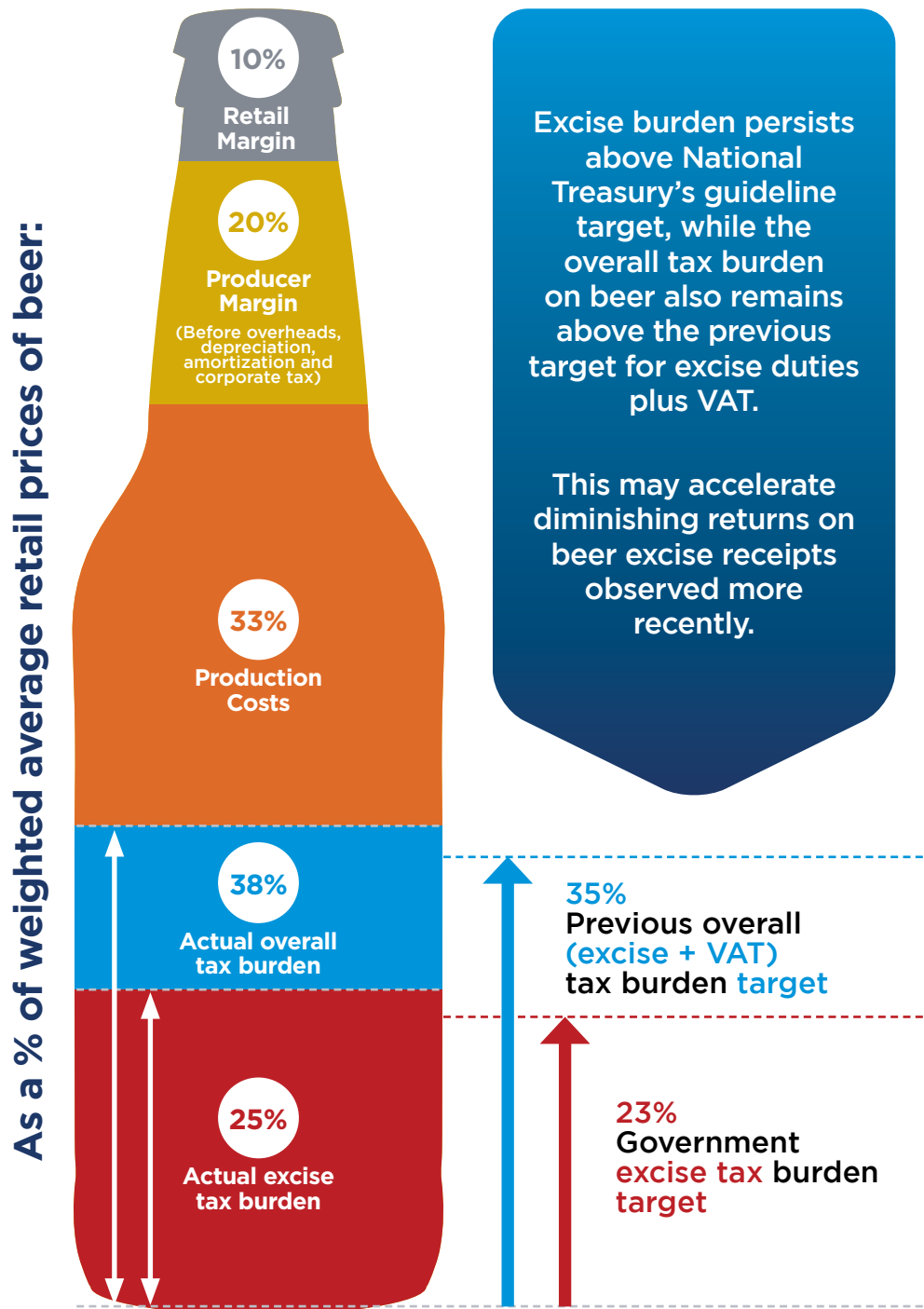


$$\frac{\text{Excise duties + VAT}}{\text{Weighted average retail prices}} = \text{Overall tax burden on beer}$$



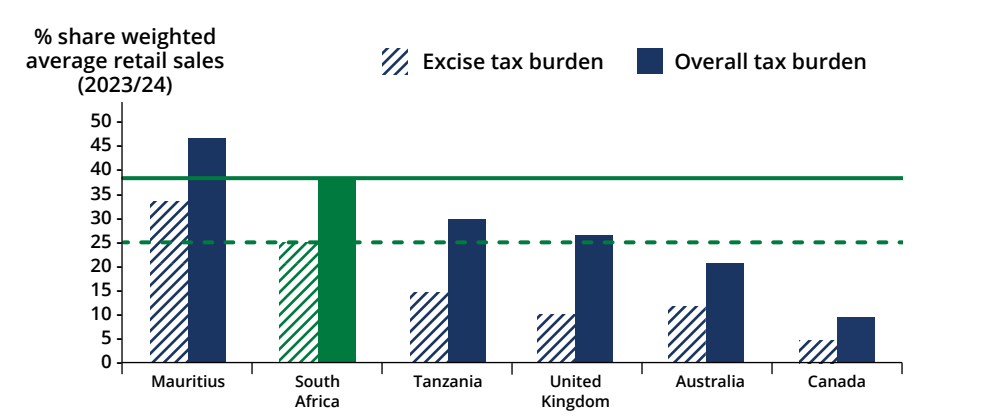
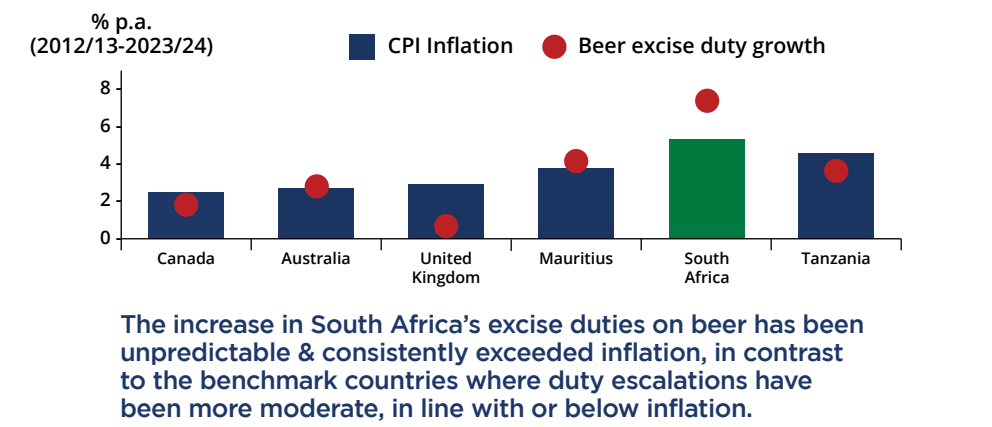
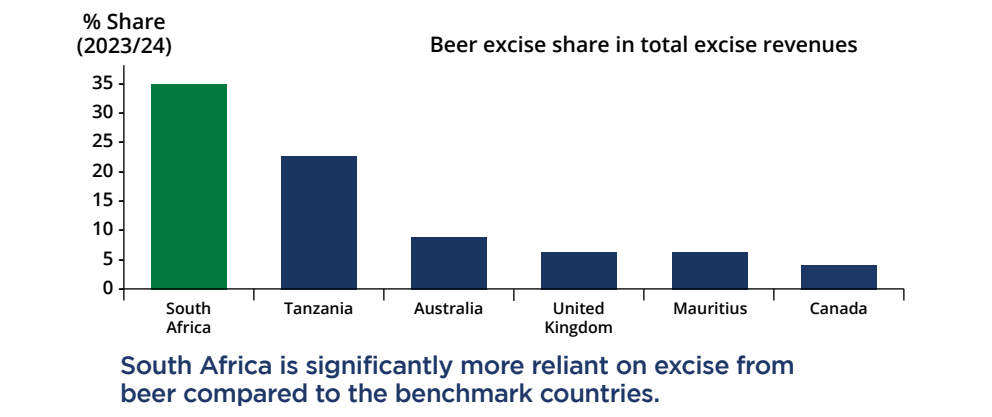
Note: * Beer VAT + excise duties. ** Excise duties only. *** In 2015/16 targeted tax burden was changed from VAT + excise, to excise duties only as a % of weighted average retail sales prices.

SOUTH AFRICA'S TAX BURDEN ON BEER HAS INCREASED & IS ABOVE GOVERNMENT'S THRESHOLDS AS PER NATIONAL TREASURY'S GUIDELINES



Note: South Africa's tax burdens on beer were calculated using retail prices for beer supplied by SAB, which also provided the remaining cost composition in the final beer price.

COMPARED TO THE BENCHMARK COUNTRIES, SOUTH AFRICA'S TAX BURDEN ON BEER IS RISING FASTER, WHILE EXCISE REVENUES ARE SLOWING



The benchmark countries are enlarging excise revenues from beer even as their tax burdens are diminishing. Conversely, South Africa's beer excise revenues are progressively less responsive to the degree of duty increases.

THE WAY FORWARD FOR THE EXCISE REGIME ON BEER IN SOUTH AFRICA

TO BALANCE THE BRUNT OF THE BURDEN

National Treasury should consider adjusting its excise regime on beer to better support the excise principles that it purports, the interactions that beer producers and consumers have with the broader macroeconomic environment, and the long-term impact of fiscal receipts. This can be achieved by moving from a guideline-targeted beer taxation regime to a structured framework for governing excise duty escalations that promotes more predictable excise taxes, especially in periods of high inflation.

- Government should strive to limit deviations from the excise burden target as per National Treasury's guidelines.
- Automatically index excise duties on beer to actual CPI outcomes as opposed to projected inflation or anticipated retail prices for beer.
- Adjust excise duties on beer below CPI inflation outcomes when price pressures are high & make ex-post corrections to maintain duty neutrality.

1. INTRODUCTION

An excise tax is any duty levied on manufactured goods at the moment of production rather than upon the sale of the products. The main function of these taxes is to ensure a constant stream of fiscal revenue while discouraging the consumption of goods with negative externalities by internalising the external costs associated with using or producing excisable products. Regardless, higher excise taxes increase consumer costs and subsequently market inflation by raising expenses for beer producers if such duties are not adjusted in consideration of macroeconomic circumstances.

South Africa's excise regime on beer is governed through the annual budget process. While this regime has undergone changes since 1994/95, the current excise system has its roots in the National Treasury's 2014 excise policy discussion document, which reviewed the taxation of alcoholic beverages in the country from the excise targets set out in 2002 (National Treasury, 2014). The government imposes an alcoholic-content-based specific excise on beer production. This duty, in addition to value-added tax (VAT), comprises the overall tax burden that is passed on to consumers in the final retail price of beer. Annual adjustments in beer excise duties are calculated based on tax burdens derived from projected retail prices for the next fiscal year or the expected consumer price index (CPI) inflation rate, whichever is higher. In doing so, the government aims to maintain the total tax burden by raising beer duties towards the official excise target of 23% of weighted average retail sales prices (WARSP).

The government has, however, frequently increased excise duties on beer beyond projected and actual inflation outcomes without any ex-post corrections if realised price pressures are lower. Consequently, the principle of maintaining the total tax burden may have been negated through above-inflation escalations in beer excise duties. In turn, these duties and VAT can increase the overall tax burden on beer above the targeted tax incidence amid greater inflation expectations, while adversely affecting producers and consumers alike by driving up this burden beyond levels informed by price pressures in practice. Moreover, manual excise adjustments in anticipation of foreseen CPI inflation and/or retail prices without retrospective corrections have created significant uncertainty for beer producers. Persistent above-inflation increases in duties also runs the risk of reaching a point where excisable income from beer becomes less responsive to the level of duties imposed.

To garner additional insight into unpredictable excise taxes and high inflation, the South African Breweries (SAB) commissioned Oxford Economics Africa to assess how excise tax increases have adversely affected beer producers and consumers in South Africa's historically high inflation and low growth environment since 2012/13. The evaluation further considers the officially targeted tax burden and compares the performance of South Africa's excise regime against that of key international benchmark countries. In doing so, this report is structured into six chapters.

Chapter 1 introduced the study.

Chapter 2 unpacks the effects of cost-push inflation on the supply side of the economy, including on beer manufacturing and investment. It similarly outlines the repercussions of inflation on the demand for beer, considering household disposable incomes and spending patterns.

Chapter 3 describes the interplay of taxes, inflation, and economic growth in high-inflationary environments. It also determines South Africa's total and excise tax buoyancy on beer and estimates the country's consumer price elasticity of demand (PED) for beer.

Chapter 4 investigates excise duties and revenues in South Africa by dissecting fiscal receipts from excisable products and analysing the evolution of duties on beer while accounting for projected and actual inflation. Subsequently, the responsiveness of excise payments and beer consumption to above-inflation duty escalations are assessed in addition to evaluating the tax burden on beer against the government's targets.

Chapter 5 benchmarks South Africa's excise duties, receipts, and tax burdens on beer relative to those of Australia, Canada, Mauritius, Tanzania, and the UK. The chapter compares South Africa to the benchmark countries on their excise duty practices and fiscal receipts versus CPI inflation outcomes, as well as their excise and overall tax burdens against beer consumption and excise payments per capita.

Chapter 6 concludes the study.





2. INFLATION AND THE SUPPLY AND DEMAND OF BEER

2.1 EFFECTS OF INFLATION ON THE SUPPLY OF BEER

Supply-side inflation, or cost-push inflation, occurs when the market supply of goods and services declines, absent a decrease in the demand for these goods and services, which can result from higher production costs, supply chain disruptions, and/or regulatory changes (Pasimeni, 2022; Charaia & Papava, 2023). Production costs are determined by the inputs embedded in the manufacturing process. Higher raw material, labour, inputs, and energy prices increase production costs and are critical drivers of supply-side inflation (Shapiro, 2024). Similarly, regulatory changes in the form of taxes, new regulations, or additional quality controls also increase supply-side inflation by raising manufacturing expenses. On the other hand, supply chain disruptions reduce input goods availability and increase the cost of these inputs, adding to inflationary pressures (Stiglitz & Regmi, 2022). These supply chain disruptions can occur in various stages of the production process, ranging from the initial sourcing of inputs to the delivery of the final product to retailers. Ultimately, this increases production costs and decreases the supply of manufactured products, leading to higher supply-side inflation (Konczal, 2023).

High supply-side inflation signals that production costs are rising excessively, ultimately squeezing manufacturers and reducing goods production. Higher inflation forces firms to increase sales, while the lower number of goods produced raises prices further (Pasimeni, 2022). Moreover, cost-cutting measures to lower the impact of supply-side inflation risks reducing the quality of goods produced. Higher production costs adversely affect firms' profits, wages, and economic output, leading to lower productive activity. High supply-side inflation could discourage new firms from entering the market, stifling economic growth and employment prospects (Nowzohour & Stracca, 2017). Ultimately, supply-side inflation filters through to the end consumer, raising prices throughout the economy.

2.1.1 EXCISE DUTIES AND COST-PUSH INFLATION

South Africa's excise duties on beer are governed through the annual budget process, with the current excise regime having its roots in the National Treasury's 2014 excise policy discussion document, which reviewed the taxation of alcoholic beverages. The South African government imposes an alcoholic-content-based specific excise tax on beer production as a fixed percentage of the beverage's retail selling price (WARSP). In this respect, the government levies and raises excise duties on beer in the national budget in South African rands (ZAR) per litre of absolute alcohol (LAA), meaning that higher alcohol content products are taxed at a higher rate compared to lower alcohol content products (National Treasury, 2014).

Annual adjustments in beer excise duties are calculated based on tax burdens derived from projected retail prices for the next fiscal year or the expected CPI inflation rate, whichever is higher¹. The government aims to maintain the total tax burden by raising beer duties towards official targets as per the National Treasury's guidelines. These targets were last

¹ If beer prices rise faster than CPI inflation, in principle excise taxes increase with beer prices (i.e., positive real excise tax). If CPI inflation outpaces retail beer prices, excise taxes are adjusted using CPI inflation (i.e., neutral real excise duty).

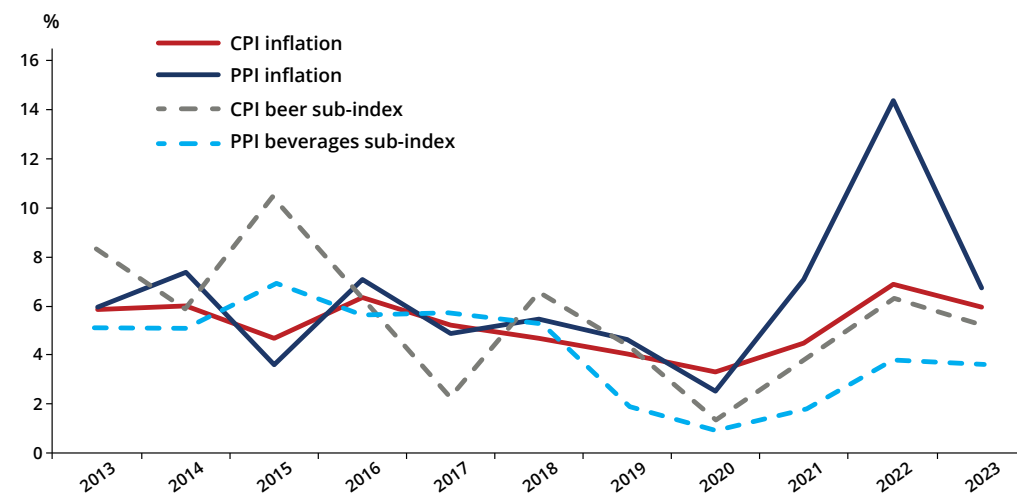
modified in 2014/15, when the overall tax burden on beer was changed from 35% of WARSP in excise duties plus VAT to the current excise tax burden target of 23% of WARSP in excise duties only (National Treasury, 2014). Excise duties, in addition to VAT, comprise the overall tax burden that is passed on to consumers in the final price of beer, while adding to the inflationary pressures faced by beer producers (refer to **Chapter 4**). Ultimately, higher excise taxes may increase consumer costs and market inflation (Mozdzierz, 2017).

South Africa's current excise duty structure has three major flaws. Firstly, tax adjustments are made using inflation expectations and are not corrected retroactively if expectations exceed reality. Secondly, since the annual excise tax adjustments depend on retail beer price movements or CPI inflation, beer manufacturers have a limited influence in mitigating these tax increases. Finally, excise taxes may be shifted to consumers, which negatively affects affordability to the degree to which these taxes are translated into higher retail prices (Russel & van Walbeek, 2016).

Excise taxes levied during the production process directly impact supply-side inflation (Customs and Excise Act 91 of 1964). Cost-push inflation is best represented by the PPI, which indexes price changes in domestically produced goods between different periods.

Figure 1 shows the historical PPI, CPI, and beer CPI price inflation movements from 2013 to 2023. During this period, PPI inflation on manufactured goods averaged 6.3% per annum (p.a.), exceeding CPI inflation, recorded at 5.2% p.a. from 2012 to 2023. During the same period, PPI inflation in the beverages sub-index averaged only 4.2% p.a., which was the lowest in the PPI basket of items.

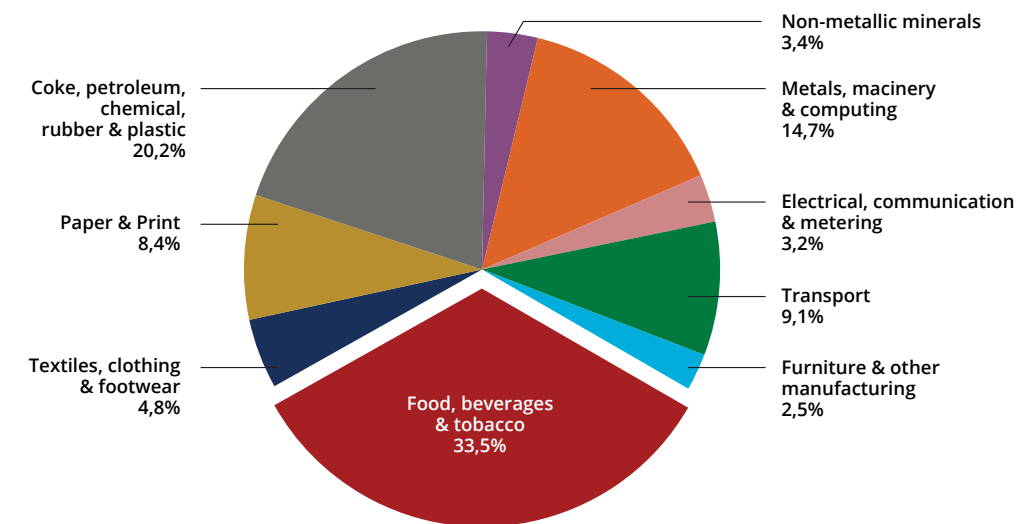
Figure 1: Inflation in the beer price sub-index has trended below CPI and PPI inflation



Sources: StatsSA, Oxford Economics Africa

PPI consists of various sub-indices as presented in **Figure 2**. The largest sub-index between 2012 and 2023 were food, beverages, and tobacco products (weighting of 33.5%), with beverages alone having a 7.6% weight in the overall PPI basket. Consequently, beverage products carry more weight than many other sub-indices and accounted for 0.3 ppt of total PPI inflation between 2012 and 2023.

Figure 2: The weights of the PPI categories have remained about the same from 2012 to 2023



Sources: StatsSA, Oxford Economics Africa

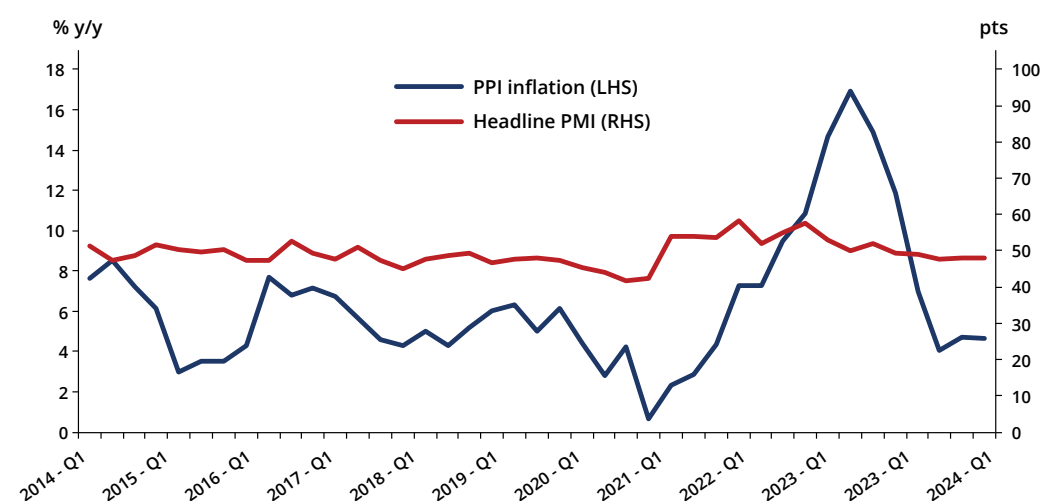
2.1.2 IMPLICATIONS OF SUPPLY-SIDE INFLATION FOR MANUFACTURING AND INVESTMENT

Inflation has a marked impact on South Africa's manufacturing sector, including the beer industry. High inflation erodes consumer spending power, meaning fewer goods and services are purchased and reducing economic output. During periods of high inflation, labour and operational costs rise notably, increasing manufacturing costs. Furthermore, elevated inflation shapes expectations of future prices. This creates a feedback loop and self-fulfilling prophecy with high inflation expectations begetting high inflation (Richards & Verstraet, 2016). In turn, it reduces economic activity and can result in the scaling back of business operations and potentially job layoffs (Stiglitz & Regmi, 2022).

High inflation has a detrimental impact on business confidence and investment in the manufacturing sector, including the beer industry. Declining sales and revenues stifle industrial growth, production, and employment, ultimately reducing output growth in the sector and the broader economy (Kilci, 2020). Moreover, due to market uncertainty and cost-cutting measures, firms tend to hold back on new investments and innovations, potentially leading to stagnation in the sector and a loss of international competitiveness (Nowzohour & Stracca, 2017).

Figure 3 shows how the purchasing managers index (PMI) and PPI inflation have fluctuated over the past decade. The PMI measures production changes in the domestic manufacturing and services sectors. A PMI print above 50 points indicates an expanding manufacturing or services sector, whereas a PMI below 50 points indicates that private sector activity contracted. There is an inverse relationship between PMI and PPI inflation. Stubbornly high inflation necessitates interest rate hikes, which increases operational costs, raises debt servicing fees, and worsens business sentiments (Nowzohour & Stracca, 2017). This relationship is robust in the beer industry, where rising input costs, higher excise duties, and interest rates can adversely affect investment and commercial expansion activities.

Figure 3: Investor confidence and private sector activity improve when PPI inflation is low

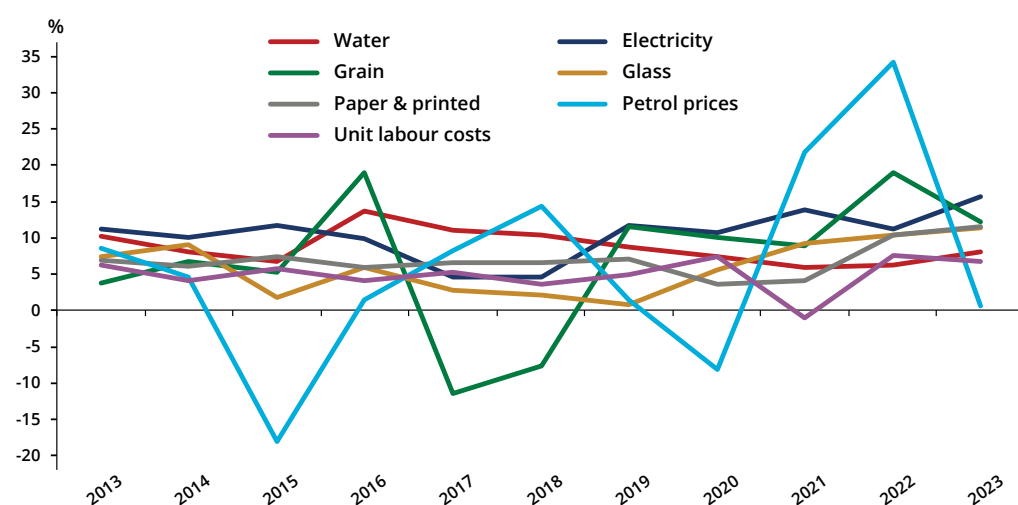


Sources: StatsSA, BER, Oxford Economics Africa

While inflation has a bearing on consumer and business activities throughout the economy, different sectors are asymmetrically affected. Considering the food and beverages sector, high inflation distorts consumption patterns and alters preferences. Rising costs, inflation, and taxes have reduced household purchasing power over time and consequently increased the price elasticity of demand for beer (refer to **Chapter 3**), shifting consumption patterns for the beverage (Macedo et al., 2020). Ultimately, during periods of high inflation and excise duty escalations, both consumers and producers of beer are adversely impacted to the detriment of the whole economy (Pasimeni, 2022). Beer manufacturers are inextricably linked with various industries in the South African economy. Consequently, price fluctuations in these industries affect costs and inflation for beer producers.

Figure 4 details the price movements in the PPI sub-indices associated with beer production, most of which have outpaced headline PPI inflation. Between 2013 and 2023, electricity and water prices rose sharply, by an average of 10.5% p.a. and 8.8% p.a., respectively.

Figure 4: Rising input cost pressures remain pronounced in the beer sector



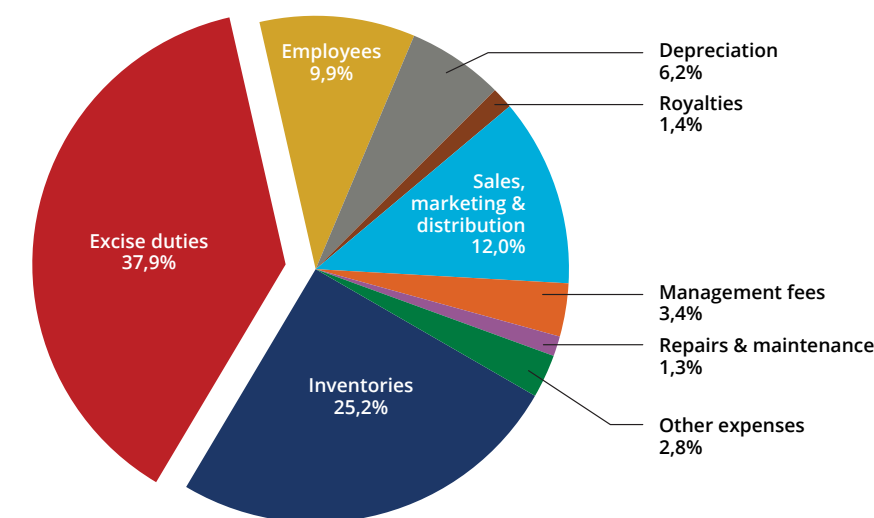
Sources: StatsSA, Oxford Economics Africa

The price increases in other input products like grains (7.0% p.a.), paper and print (6.9% p.a.), and coal and petroleum (7.2% p.a.) also trended above the PPI inflation average of 6.3% p.a. over the same period. Rising glass prices (6.0% p.a.) and manufacturing unit labour costs (4.9% p.a.) experienced more moderate inflation than the other input items. Nevertheless, these price increases remain high compared with the CPI and demand-side inflation (refer to **Section 2.2**).

Figure 5 displays the typical composition of expense pressures facing a beer producer in South Africa. At 37.9%, excise duties represent an outsized portion of net operating expenses, exceeding the combined spending on inventories (25.2%) and sales, marketing, and distribution (12.0%), which are the next highest expenditures. This pressure is exacerbated by excise duties rising faster than inflation and most other operating expenses of firms in the industry.

Because excise taxes are levied during the production process and are among the largest outlays for beer producers, they directly impact supply-side inflation. Furthermore, in South Africa, excise taxes on beer are calculated using projected CPI and anticipated retail beer prices, making demand-side factors and inflation vital considerations in the cost- and inflationary dynamics of the beverage.

Figure 5: Excise duties have a disproportionate share in beer producers' expenses



Source: Oxford Economics Africa

2.2 EFFECTS OF INFLATION ON THE DEMAND FOR BEER

Demand-side inflation, or demand-pull inflation, occurs when consumer demand for goods and services increases faster than the market supply of the same goods and services. This, in turn, allows firms to raise prices above equilibrium levels as consumers are willing to pay more to secure a limited amount of goods and services available. Three fundamental causes of high demand-side inflation are expansionary fiscal policy, dovish monetary policy, and greater consumer spending (Stiglitz & Regmi, 2022). Expansionary fiscal policy occurs when governments increase public spending or cut taxes, which spurs the demand for goods and bolsters short-term economic growth (Baqae et al., 2023). However, prices will rise without a corresponding increase in the supply of goods, leading to higher demand-

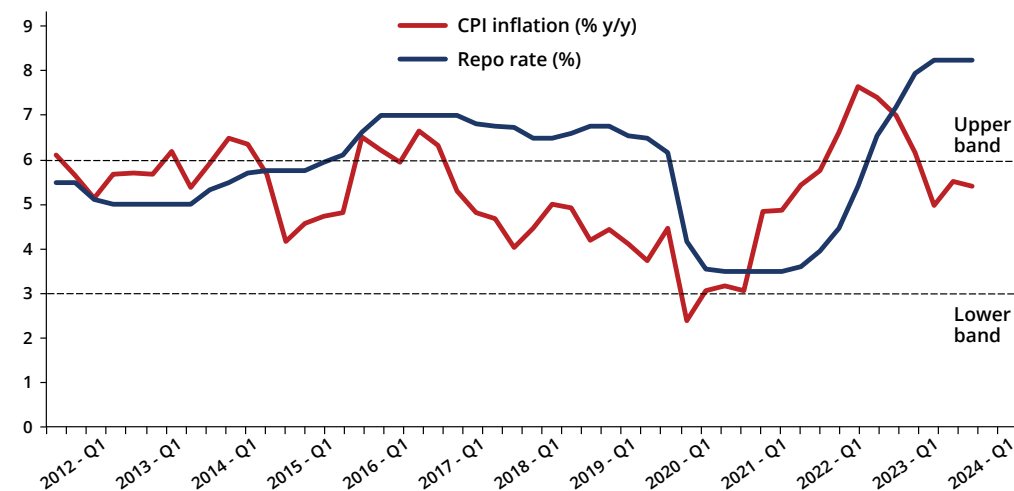
side inflation. Secondly, dovish monetary policy, in the form of lower interest rates or an increase in money supplies, reduces borrowing costs and thereby spurs consumers to buy more goods, which leads to higher demand side inflation barring a similar rise in goods supplied (Jain et al., 2022). Additional causes of demand-pull inflation include technological innovation, marketing strategies, brand loyalty, and structural changes to economic growth.

High demand-side inflation may lead to short-term gains in economic activity and growth; however, if left unchecked, it risks overheating the economy, creating out-of-control inflation (Shapiro, 2024). Consequently, during periods of excess demand-side inflation, central banks typically hike interest rates to bring consumer demand and market supply back into check (Stiglitz & Regmi, 2022). As with high supply-side inflation, rising demand-push inflation squeezes consumers through rising prices, which erodes the real purchasing power of their money (Schwarzer, 2018). This could alter consumer preferences and reduce demand for certain goods, such as excisable products (Bajaj & Mangin, 2024).

Demand-side inflation is best represented by the CPI, which indexes the change in prices consumers pay for goods and services. **Figure 6** shows how CPI inflation and interest rates in South Africa evolved from 2012 to 2024. The South African Reserve Bank (SARB) targets inflation between 3% and 6%, the lower and upper bands, with 4.5% being the midway point. Between 2012 and 2023, CPI inflation averaged 5.2% p.a. and has often necessitated interest rate hikes to rein in inflation.

After the coronavirus-induced economic downturn, CPI inflation rose from an average of 4.5% in 2021 to 6.9% in 2022. Consequently, the SARB progressively raised interest rates from 3.5% in 2021 to 8.25% by mid-2023 (the repo rate was 8.0% in September 2024), increasing borrowing costs, softening consumer demand, and cooling the economy. Inflation dropped to an average of 5.9% in 2023 and continues to trend lower in 2024 (CPI inflation was 4.4% y/y in August 2024). Still, high CPI inflation remains a concern, while elevated debt repayment and operational costs, along with declining consumer spending, adversely impact manufacturers by reducing profits and potential output (Manasseh, 2018).

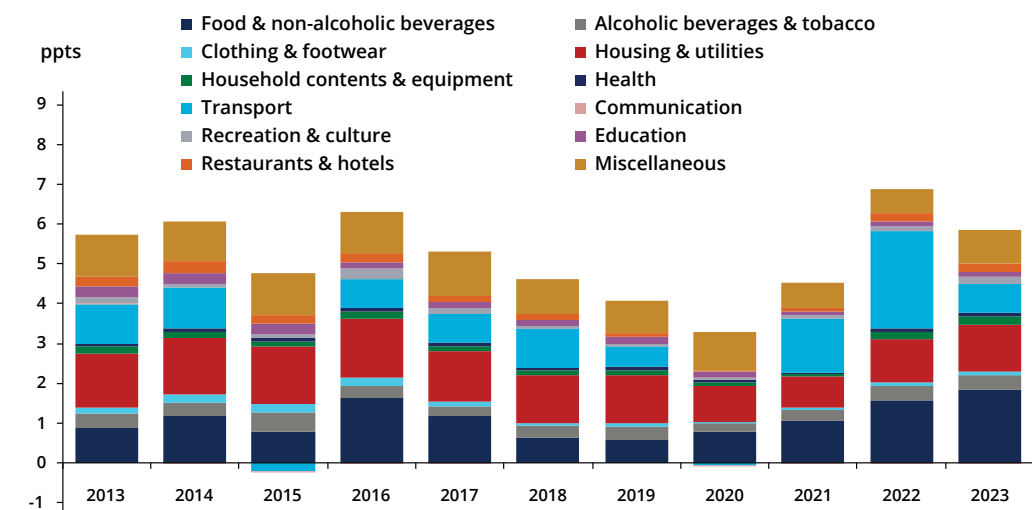
Figure 6: Above target inflation may necessitate monetary policy action by the SARB, with high interest rates squeezing consumers and producers alike



Sources: StatsSA, SARB

The CPI consists of various sub-indices, each carrying different weights depending on their relative contribution to inflation. **Figure 7** details the 12 CPI sub-indices' relative contribution to headline inflation between 2012 and 2023. Over this period, alcoholic beverages contributed 0.2 ppts to headline CPI inflation. Although alcoholic beverages represent only 4% of the overall CPI basket, beer's weighting of 2.2% is far larger than those of other alcoholic beverages. Nevertheless, the alcoholic beverages sub-index is bigger than several other key sub-indices, meaning that fluctuations in alcohol prices have a substantial impact on headline inflation in South Africa. While inflation in the other alcoholic beverages sub-indices (6.2% p.a.) outpaced that of beer (5.5% p.a.), all had a faster acceleration in prices relative to the headline CPI print of 5.2% p.a. from 2012 to 2023.

Figure 7: CPI basket item's relative contribution to annual inflation



Sources: StatsSA, Oxford Economics Africa

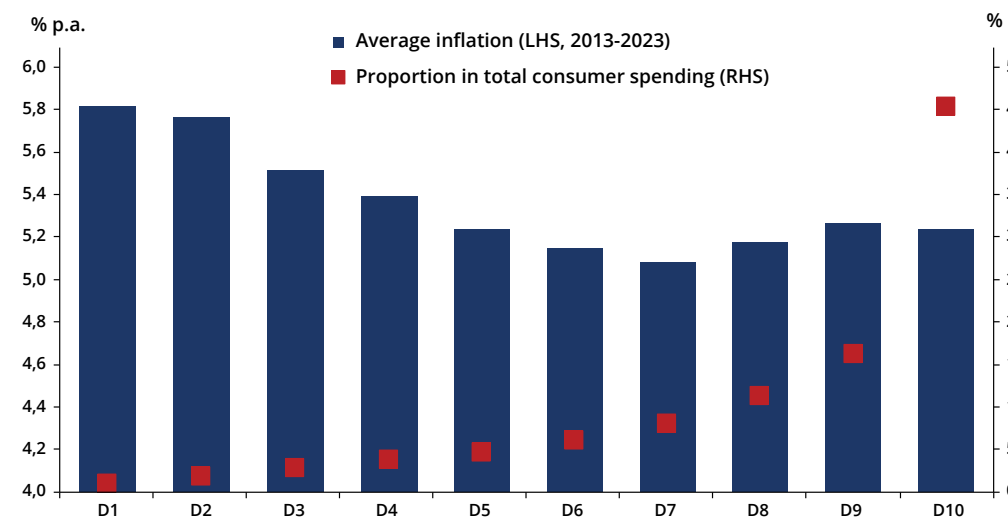
2.2.1 EFFECTS OF INFLATION ON HOUSEHOLD DISPOSABLE INCOMES AND SPENDING PATTERNS

According to StatsSA, in 2023, the wealthiest 10% of households spent more than ZAR 312,200 monthly, accounting for 45.3% of total consumer spending in South Africa. Households in the poorest decile spent around ZAR 20,100 monthly, representing 0.9% of consumer spending in the country. The highly skewed income and spending patterns in South Africa result in a situation where the wealthiest 20% of households account for 61.4% of all consumer spending, while the poorest 80% form the remaining 38.6%.

Consumer spending patterns vary notably between the different expenditure deciles. Poorer households spend much of their income on basic necessities and, consequently, they are more vulnerable to price changes and inflation, as there are few alternatives for essentials like food and transport (Chai et al., 2014; Bentley, 2016). **Figure 8** details the inflation level experienced per expenditure decile relative to total consumer spending.

Although national CPI inflation averaged 5.2% p.a. from 2013 to 2023, the two poorest deciles experienced inflation of 5.8% p.a. While spending patterns differ markedly between income groups, outlays on alcoholic beverages and tobacco remains fairly consistent, with the bottom decile spending 4% of its income on this sub-index and the top decile spending 6%.

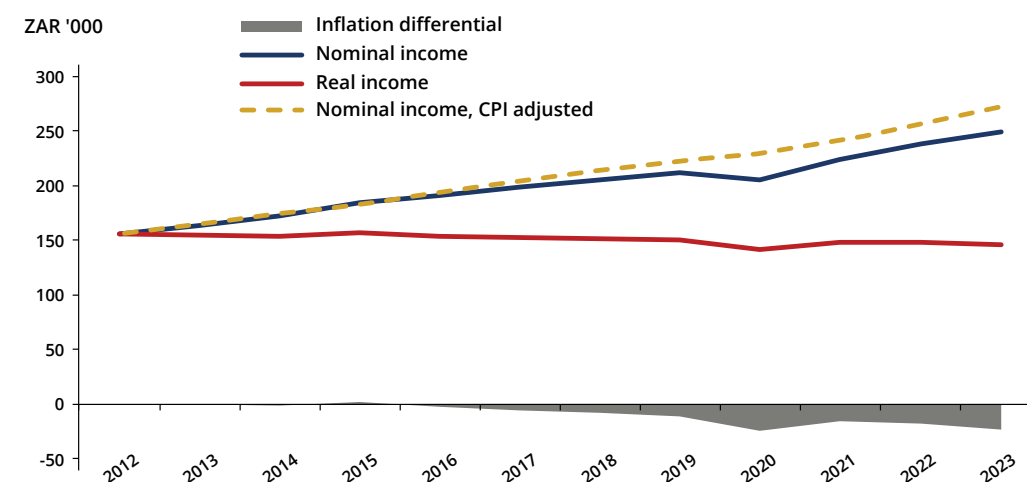
Figure 8: Inflation in the poorest expenditure deciles is markedly higher than in richer deciles



Sources: StatsSA, Oxford Economics Africa

Figure 9 shows the evolution of real, nominal, and CPI-adjusted nominal household personal disposable income between 2012 and 2023. Nominal income is the average earnings households receive each year, whereas real income accounts for inflation, with a base year of 2012. CPI-adjusted nominal household income is a measure of what nominal earnings should have been to keep up with inflation. Since 2012, nominal disposable income expanded by an average of 4.4% p.a. (60% in total) to ZAR 248,630 in 2023. However, considering the impact of inflation, household income declined by an average of 0.6% p.a. (6.2% in total) in real terms over the same period. In other words, nominal disposable income should have increased to ZAR 271,840 in 2023, or an additional ZAR 23,210 per household, to have kept up with price pressures and maintain consumers' purchasing power.

Figure 9: Disposable income growth remains weak and struggles to keep pace with inflation



Sources: StatsSA, Oxford Economics Africa

High inflation, therefore, has a markedly negative impact on disposable income and spending. It reduces real wages and incomes, erodes consumer expenditure and household buying power, and shifts consumption patterns along with the impact of higher excise duties (refer to **Section 2.1**). Considering the interplay between inflation and expenditure, real household spending decreased by an average of 1.0% p.a. from 2012 to ZAR 143,400 in 2023, despite nominal spending having increased by 3.9% p.a. to ZAR 244,550 over the same timeframe. This suggests that consumer spending should have averaged ZAR 281,500 in 2023, or ZAR 37,000 more per household, to have kept pace with inflation.

Consumer spending on alcoholic beverages specifically had to be ZAR 11,333 per year by 2023, or ZAR 1,255 higher per household on average, to have remained in step with inflation. While the lockdown limitations during the Covid-19 pandemic had a detrimental impact on alcoholic beverage industries, inflation and excise duties compounded these disruptive effects. Between 2012 and 2023, average spending alcoholic beverages represented 4% of total consumption spending per adult, of which outlays on beer represented 3.3%. Following a rebound in alcohol consumption after the lockdowns associated with the Covid-19 pandemic ended, spending by individual adults on beer declined by 2.6% in 2022/23. Overall, supply-side inflation and excise duties increases costs and expenses for beer producers, while demand-side inflation and VAT reduces consumer affordability and erodes real incomes amid the high cost of living in South Africa.



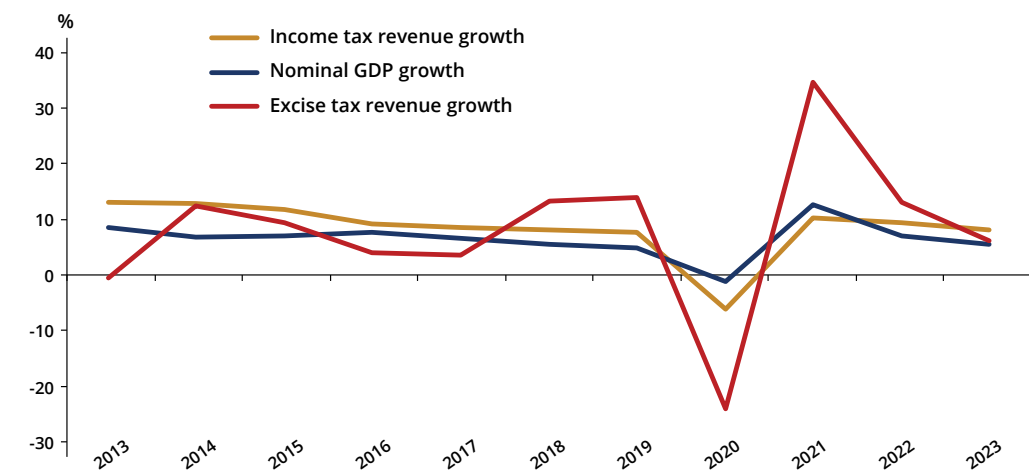


3. THE NEXUS OF TAXES, INFLATION, AND ECONOMIC GROWTH

3.1 INTERACTIONS BETWEEN EXCISE TAXES, INFLATION, AND MACROECONOMIC GROWTH

Economic growth positively impacts taxes, with income taxes being more closely correlated to growth than excise taxes, as shown in **Figure 10**. Higher real growth in gross domestic product (GDP) improves consumer spending, business profits, and economic activity. As an economy grows, its tax base expands, increasing the total fiscal revenues collected by the government. While there is consensus on the impact of economic growth on taxes, there is still some debate about the inverse: the impact of taxes on economic growth, especially if the fiscal receipts are not productively and structurally re-invested back into the economy (Riba, 2016).

Figure 10: Government tax receipts and economic growth in South Africa

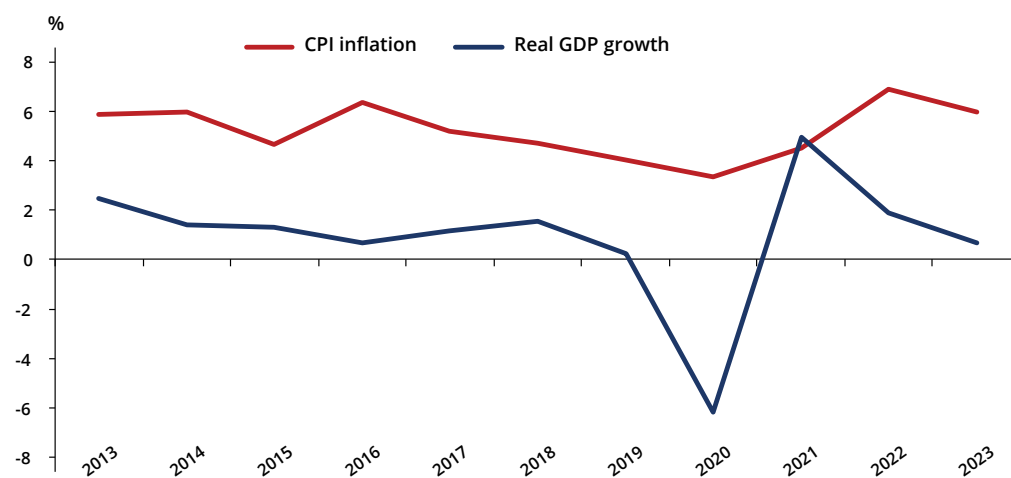


Sources: StatsSA, Oxford Economics Africa

Taxes, including excise duties, can distort economic activity, discourage investments, reduce disposable incomes and consumption spending, and shift consumer preferences (Riba, 2016; Stoilova, 2017). They also increase deadweight losses associated with tax collection and administration, meaning that total fiscal expenditures will be less than the collected taxes, reducing overall economic output (Zellner & Ngoie, 2015; Aghion et al., 2016; Khumbuzile & Khobai, 2018). Even so, taxes allow for fiscal stability and a strong state, while fiscal receipts used for public investments into infrastructure, healthcare, and education benefit society with positive economic spillovers (Brys et al., 2016). Taxes could help to correct markets, reducing negative externalities in the economy and promoting more efficient use of resources (Riba, 2016). While taxation's distortionary impact and deadweight loss remain unavoidable, its potential economic growth benefits depend on country-specific economic contexts, prevailing tax rates, and related taxation structures.

Figure 11 indicates that there is also an inverse relationship between inflation and economic growth. As described in **Chapter 2**, price increases and inflation erode purchasing powers, reduce real consumption spending, and stifle investments. High inflation increases input and production costs, weakens purchasing power, and decreases consumer spending (Akinsalo & Odhiambo, 2017). This reduces firm profits, restrains new investments, and weakens economic activity. Studies have shown that a one percent increase in CPI inflation is associated with a 0.45 ppt reduction in economic growth in South Africa (Sekwati & Dagume, 2023). These adverse effects are amplified amid higher overall tax burdens being passed on to consumers.

Figure 11: South Africa is plagued by high inflation and weak economic growth



Sources: StatsSA, Oxford Economics Africa

Negative inflation, or deflation, is also detrimental to economic growth. During periods of deflation or a deflationary spiral, falling prices prompt consumers and investors to delay purchases and investments in anticipation of lower future prices. Falling prices and consumer spending create a self-fulfilling prophecy which reduces business revenue, investment activity, and economic growth (Kesha, 2016). Furthermore, during deflationary spirals, real debt repayment costs rise while unemployment increases, worsening macroeconomic conditions (Munyeka, 2014).

Ultimately, low inflation levels are conducive to sustained real GDP growth, private sector expansion, employment, and consumer spending (Leonid & Andrey, 2019). Sustained increases in long-term output can only occur in stable, predictable, and low-inflationary environments (Akinsola & Odhiambo, 2017). There is no consensus on the optimal inflation threshold, although advanced economies prefer inflation closer to 2%, while developing countries have higher targets (i.e., 3% to 6% in South Africa).

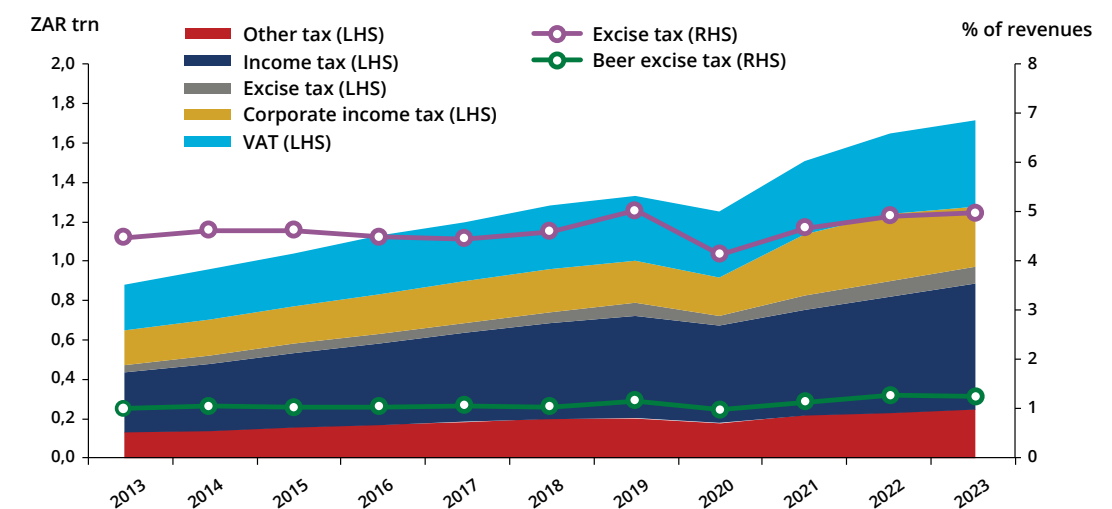
While economic growth causes some inflation, higher growth does not necessarily cause faster inflation or vice versa (Ryska, 2017). If a country's economic growth exceeds its output potential, inflation will rise as the economy overheats. Conversely, if economic growth drops below potential, other things being equal, inflation will decline as firms reduce prices to encourage spending.

The relationship between taxes and inflation is bidirectional. Imposing new taxes or increasing existing tax rates raises inflation (Mozdzierz, 2017). Consumption-based or indirect taxes, such as excise duties, are more inflationary than income-based taxes due to their direct impact on the final price of goods and services (Romer & Romer, 2010). Inflation can also raise taxes by pushing income earners into higher tax brackets (i.e., 'bracket creep'). Nevertheless, inflation generally increases tax collections but reduces the real value of these taxes (Elshqirat, 2024). Lastly, inflation erodes the value of money and serves as an additional levy called "inflation tax" (Anbarci et al., 2015).

Excise taxes have a similar relationship with economic growth and inflation, although the associated deadweight loss can be more pronounced than other taxes (Anbarci et al., 2015). Since the South African government adjusts excise duties on beer by projected CPI inflation of anticipated retail prices, whichever is highest, these indirect taxes raise costs above market-based prices and consequently drive excess inflationary pressures (Russel & Van Walbeek, 2017).

Figure 12 indicates South Africa's main sources of fiscal income. Over the past decade, total excise tax receipts accounted for 4.6% of aggregate fiscal revenues, while excise duties on beer averaged 1.1%. Despite having a fairly small share in overall government revenues, elevated beer duties have an outsized adverse influence on the sustainability of the beer value chain, the people employed therein, and the economic activity it supports. Sharp increases in excise taxes during periods of high inflation and weak economic growth can dampen consumption, investment, productive potential, and job creation.

Figure 12: Excise taxes have a small share in total fiscal income, but a wide economic reach

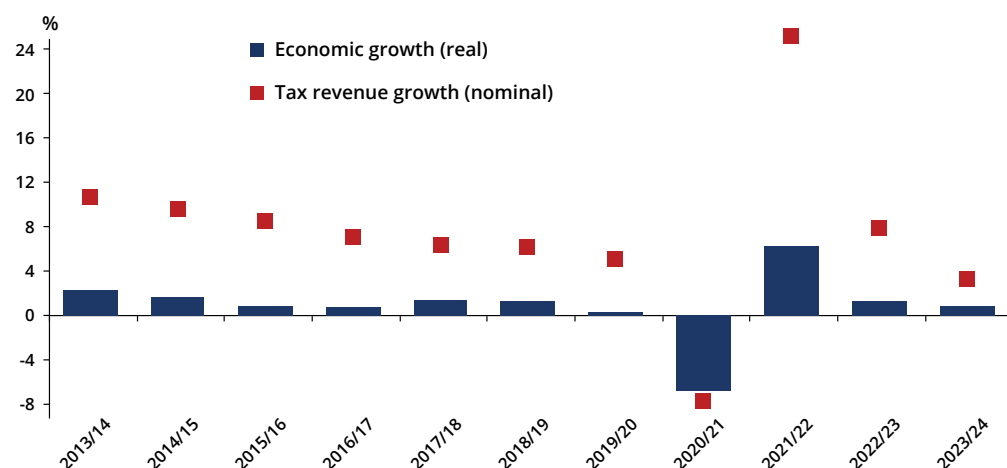


Sources: StatsSA, National Treasury, Oxford Economics Africa

3.2 SOUTH AFRICA'S TAX BUOYANCY

Tax buoyancy is the sensitivity of tax revenues to economic growth. It is estimated by comparing the percentage change in tax revenues to the GDP growth rate (Mandela & Olukuru, 2016). **Figure 13** compares South Africa's real GDP and tax revenue trends between 2013/14 and 2023/24. Generally, there is a positive relationship between economic growth and tax revenues, with fiscal receipts rising faster in a growing economy and vice versa.

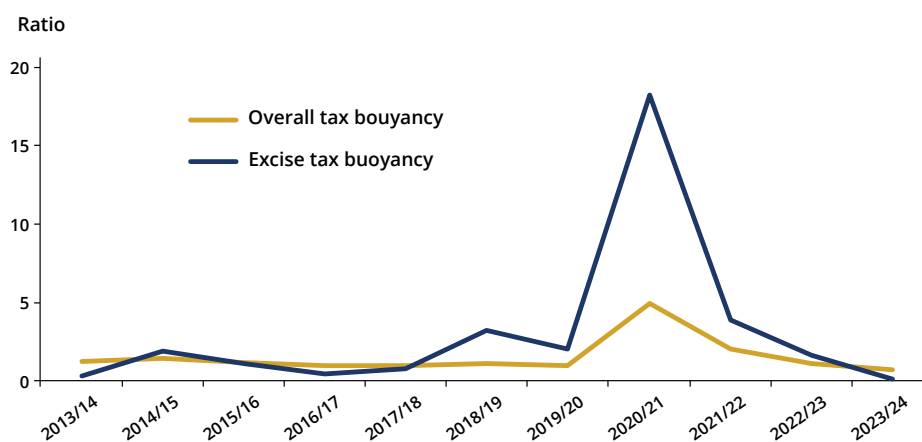
Figure 13: Nominal tax revenue growth has exceeded real GDP growth over the past decade



Sources: StatsSA, National Treasury, Oxford Economics Africa

Figure 14 demonstrates that excise tax buoyancy ratios are much higher than those of total tax revenues in South Africa. Between 2013/14 and 2023/24, excise tax buoyancy averaged 3.3, which declines to 1.5 when the disruptive effects of the Covid-19 lockdown restrictions in 2020/21 are removed. Therefore, for every 1% increase in economic growth, excise taxes rose by an average of 3.3% (or 1.5% in non-outlier years), which suggests that excise taxes are highly responsive to changes in economic growth compared to other taxes in South Africa.

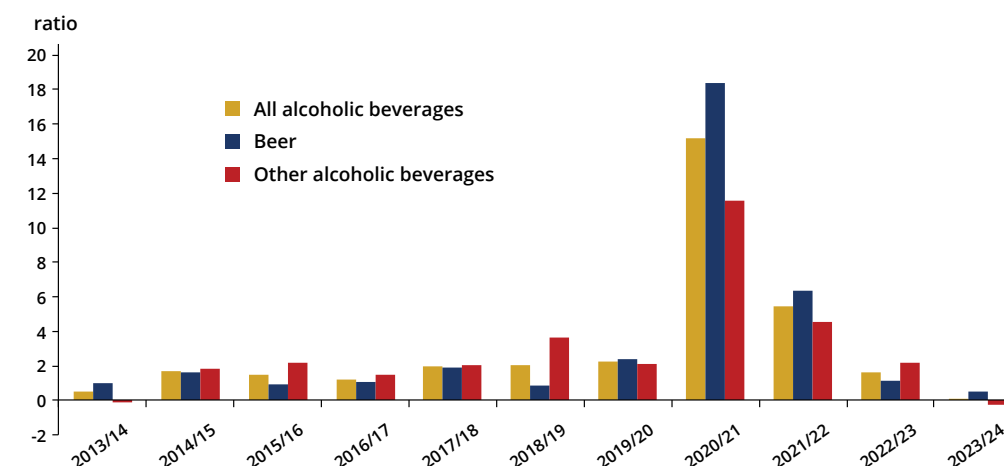
Figure 14: Excise tax buoyancy has exceeded the buoyancy ratio of total tax receipts since 2018



Sources: StatsSA, National Treasury, Oxford Economics Africa

Figure 15 indicates the tax buoyancy ratios of total excise revenues from beer versus excise taxes for other alcoholic beverages from 2013/14 to 2023/24. Over this period, the excise tax buoyancy of beer averaged 3.5 (or 1.8 when excluding 2020/21), which was above the overall excise tax buoyancy and that of other alcoholic beverages of 3.1 (or 2.0 when excluding 2020/21). Excise taxes on alcoholic beverages are therefore highly responsive to changes in economic growth, with beer being the most responsive.

Figure 15: Excise tax buoyancy of alcoholic beverages is highly responsive to economic growth



Sources: StatsSA, National Treasury, Oxford Economics Africa

In 2023/24, though, excise tax buoyancy dropped notably, indicating that excise tax receipts became less responsive to changes in economic growth. This can largely be ascribed to high inflation and weak growth. Nominal excise taxes rose marginally in 2023/24; however, sharply rising inflation eroded the real value of these revenues. In real terms, excise tax receipts declined while real GDP growth expanded by a muted 0.7% in 2023, compared with 1.9% in 2022. This resulted in a negative real excise tax buoyancy rate, demonstrating the tenuous relationship between excise taxes and economic growth. It further suggests that sharp escalations in excise duties can weigh on producers and consumers of alcoholic beverages, thereby contributing to lower fiscal revenue receipts from these products during periods of high inflation and slow economic growth.

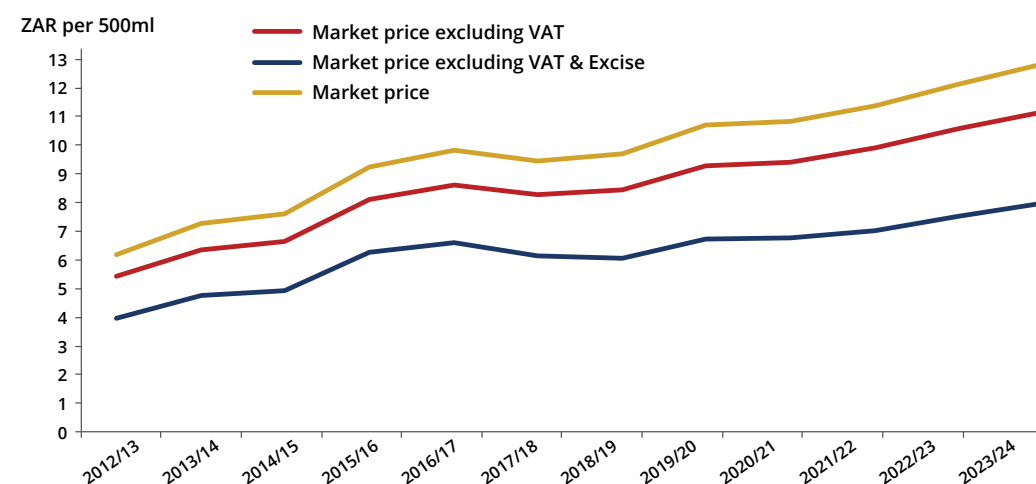
3.3 CONSUMER PRICE ELASTICITY OF DEMAND FOR BEER

Higher production costs, excise duties, and inflation put notable upward pressure on beer prices. **Figure 16** plots the evolution of the average price of a 500ml bottle of beer in South Africa². Beer prices, exclusive of VAT and excise (i.e., WARSP), rose to ZAR 8.00 per 500ml in 2023/24, from ZAR 3.90 per 500ml in 2012/13.

Over the same timeframe per 500ml of beer, VAT doubled to ZAR 1.70, from ZAR 0.80, while excise duties on the beverage more than doubled to ZAR 3.20, from ZAR 1.50. These indirect taxes exacerbate price pressures on beer, with the final average retail price of a 500ml beer rising to ZAR 12.80 in 2023/24, from ZAR 6.20 in 2012/13. Given the pass-through of increased excise duties into retail prices, consumer budgets become strained, and the demand for excisable goods, therefore, increasingly depressed.

² South Africa's retail prices for beer were supplied by SAB.

Figure 16: Beer prices have risen markedly over the past decade

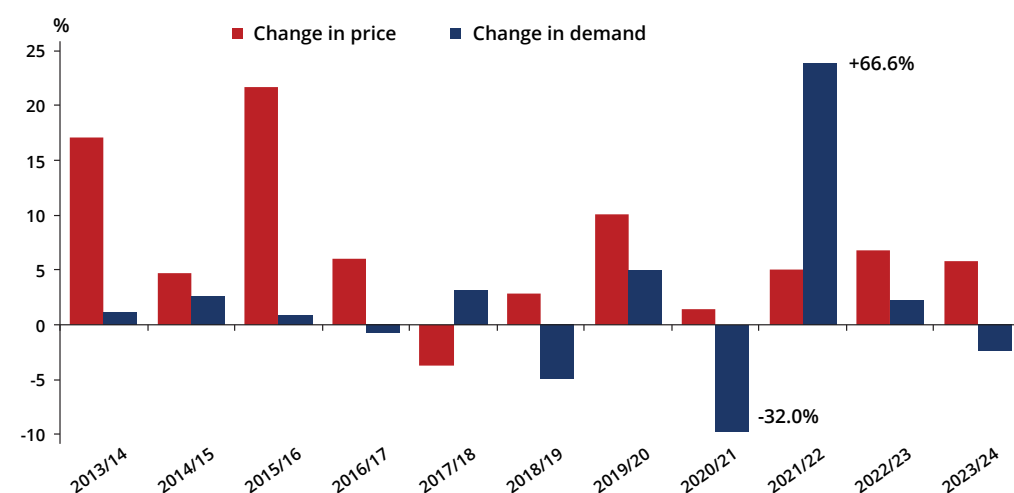


Sources: StatsSA, National Treasury, SAB, Oxford Economics Africa

Figure 17 compares the market price and demand for beer in South Africa between 2013/14 and 2023/24. During this period, beer prices rose by an average of 7.1% p.a. while demand for beer climbed by a weaker 3.8% p.a. Demand for the beverage declined by 32.0% in 2020/21 amid the Covid-19 restrictions but rebounded strongly by 66.6% after the lockdown was lifted in 2021/22.

If the distortionary effects of the lockdown restrictions during the height of the Covid-19 pandemic are excluded, consumer demand for beer increased by a mere 0.8% p.a. on average. Consumer sensitivity to price changes is captured through the PED, which is calculated by comparing the relative change in demand for goods given a change in the price thereof (Nelson, 2014).

Figure 17: Sharply rising beer prices stifle demand in South Africa

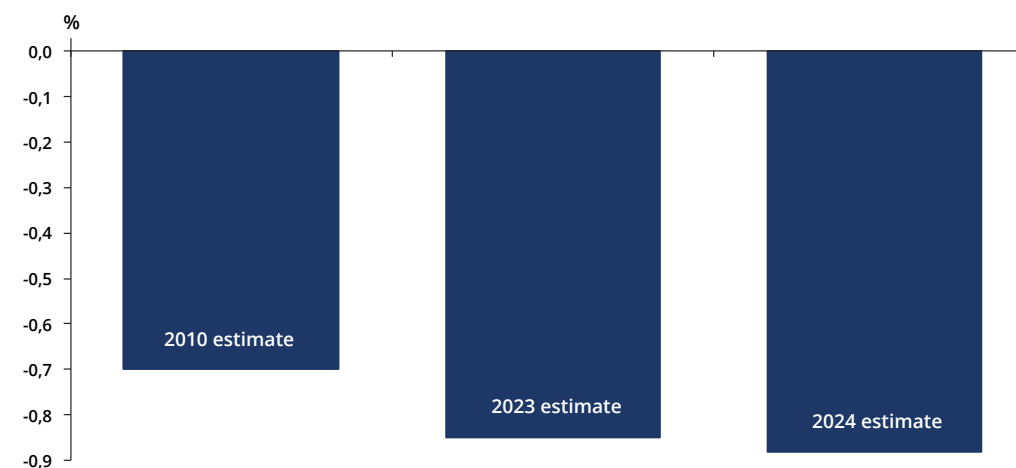


Sources: StatsSA, BarthHaas, SAB, Oxford Economics Africa

Figure 18 shows the average PED for beer in South Africa since 2012/13 in response to the impact of above-inflation beer price increases on demand. An ordinary least squares regression model was constructed using annual frequency data for 2012/13 to 2023/24 to account for varying income levels.

The results were verified by comparing the findings of the regression analysis to previous estimates by the Bureau for Economic Research (BER, 2023). Although the BER's estimates relied on quarterly data, it was limited up to 2019, whereas the current modelling uniquely accounted for the Covid-19 pandemic, despite relying on annual frequency data.

Figure 18: PED for beer regression results in relation to previous findings



Sources: StatsSA, National Treasury, SAB, Oxford Economics Africa

Controlling for income levels, the regression analysis establishes the inverse relationship between beer prices and consumer demand, with above-inflation price increases moderating demand. Specifically, the modelling resulted in a PED for beer of -0.88 inclusive of the impact of Covid-19 lockdown limitations.

In other words, a 1% increase in beer prices above inflation is associated with a 0.9% decline in demand for beer in South Africa on average, which is larger than the 2010 estimate of -0.7 and marginally above the 2023 estimate of -0.85. This, in turn, demonstrates that consumers are becoming increasingly sensitive to changes in beer prices, with above-inflation duty escalations and VAT playing a role.

These results validate the degree to which above-inflation beer price increases reduce demand for the beverage. The analysis, however, only accounted for legal beer sales, while illicit markets were not considered. Even so, excessive beer price increases in high-inflation environments may incentivise substitution to other illicit alcoholic products (Witt & Nagy, 2022).

The sale of illegal alcohol is associated with worse health outcomes and become more prevalent in markets with weak regulation, smuggling, and high taxes (Skehan et al., 2016). Above-inflation duty escalations or higher tax burdens disrupt market demand and supply, opening a gap for consumers to purchase illicit goods sold at lower prices. Due to a lack of regulation and quality control, these products harm public health and disproportionately affect less affluent individuals.



4. EXCISE DUTIES LEVIED ON BEER IN SOUTH AFRICA

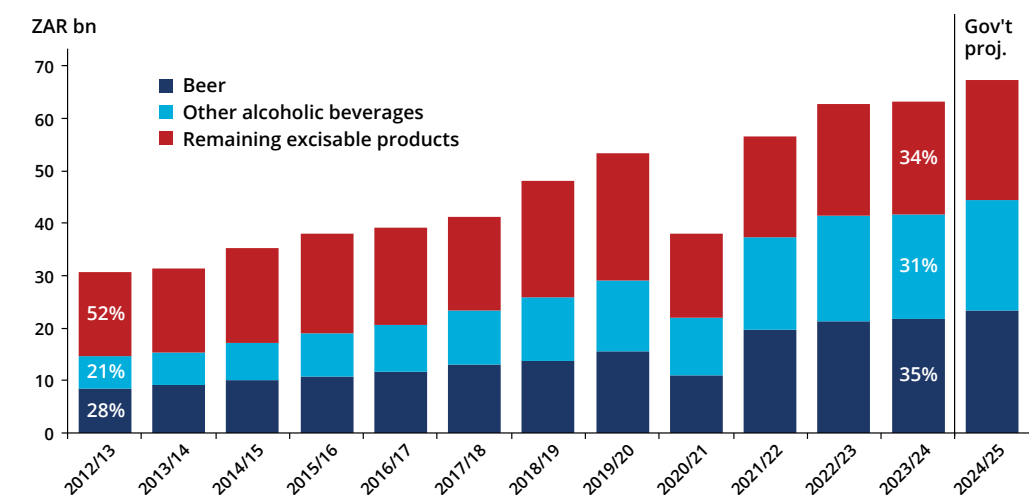
As described in **Chapter 2**, South Africa's excise duties on beer are governed through the annual budget process, with the current excise regime having its roots in the National Treasury's 2014 excise policy discussion document. This chapter investigates South Africa's fiscal receipts from excisable products, the historic progression of the country's duties on beer, the sensitivity of excise payments to the levels of duties imposed, and the tax burden on beer against the government's targets.

4.1 DISSECTING FISCAL RECEIPTS FROM EXCISABLE PRODUCTS

The National Treasury of South Africa imposes duties on and collects excise tax revenues from manufacturers of products with adverse health, social, economic, and/or environmental externalities (SARS, 2024a). In principle, these duties aim to raise added fiscal revenues and internalise the socio-economic risks associated with using excisable products by reassigning these costs to the relevant producers and increasing the final prices of goods for consumers to discourage harmful behaviour (National Treasury, 2014).

Figure 19 shows the total fiscal revenues collected by the government from the production of excisable products relative to beer. In 2012/13, the largest share of excise receipts was collected from non-alcoholic products (51.7%), followed by beer (27.6%) and other alcoholic beverages (20.7%). Over time, excise revenues from beer manufacturing surpassed those gathered from all other excisable product categories and represented a prodigious 34.7% of total excise receipts in 2023/24.

Figure 19: Nominal excise revenues from beer versus other alcoholic and taxable products

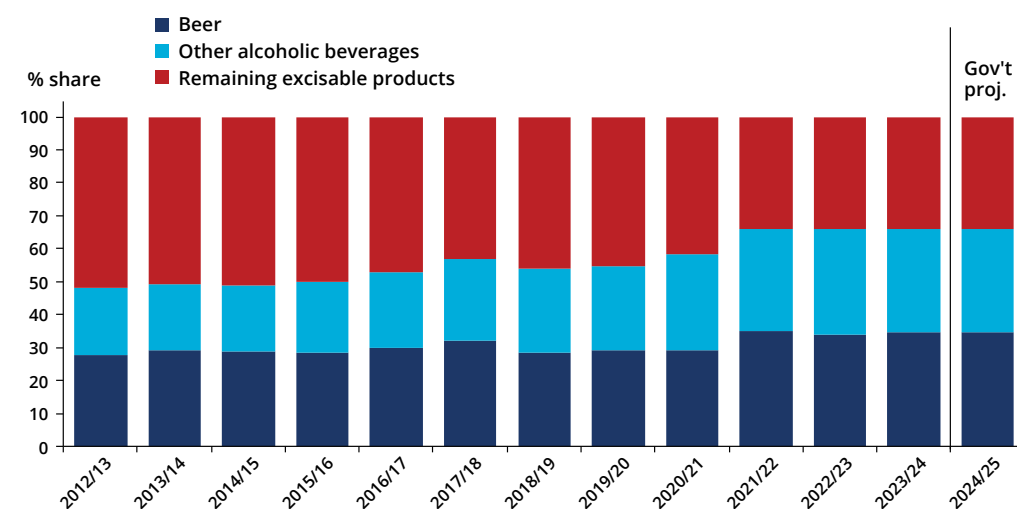


* Note: Percentages (%) in bars indicate shares in total excise revenues.

Sources: National Treasury, Oxford Economics Africa

Figure 20 illustrates the advancement of beer excise tax receipts compared to alternative alcoholic beverages and other excisable products since 2012/13.

Figure 20: Share of beer and other alcoholic beverages in overall excise tax revenue collections



Sources: National Treasury, Oxford Economics Africa

Between 2012/13 and 2023/24, excise revenue collections from beer increased by a compound annual growth rate (CAGR) of 9.0% (or 159.0% in absolute terms), whereas excise receipts from other alcoholic beverages rose at a faster pace of 10.9% p.a. on average (212.9% in absolute terms). Yet, total excise taxes of ZAR 21.9 billion (bn) received from beer in 2023/24 alone still surpassed the combined ZAR 19.8bn collected from other alcoholic beverages by 10.3%. Similarly, in per capita terms for adults, excise revenues from beer increased to ZAR 466 in 2023/24 from ZAR 220 in 2012/13, significantly exceeding the combined excise taxes collected from other alcoholic beverages of ZAR 423 in 2023/24 and ZAR 165 in 2012/13.

Alcoholic beverages as a collective steadily accounted for a greater portion of total fiscal excise receipts to reach a share of 66.1% in 2023/24, while such taxes from the remaining excisable product categories grew at a notably slower average rate of 2.8% p.a. (or 35.3% in absolute terms). Even so, the share of excise receipts from beer has gradually given way to other types of alcohol. Nonetheless, the beverage still represents more than half (52.4%) of total excise duties collected by the government from alcoholic beverages in 2023/24.

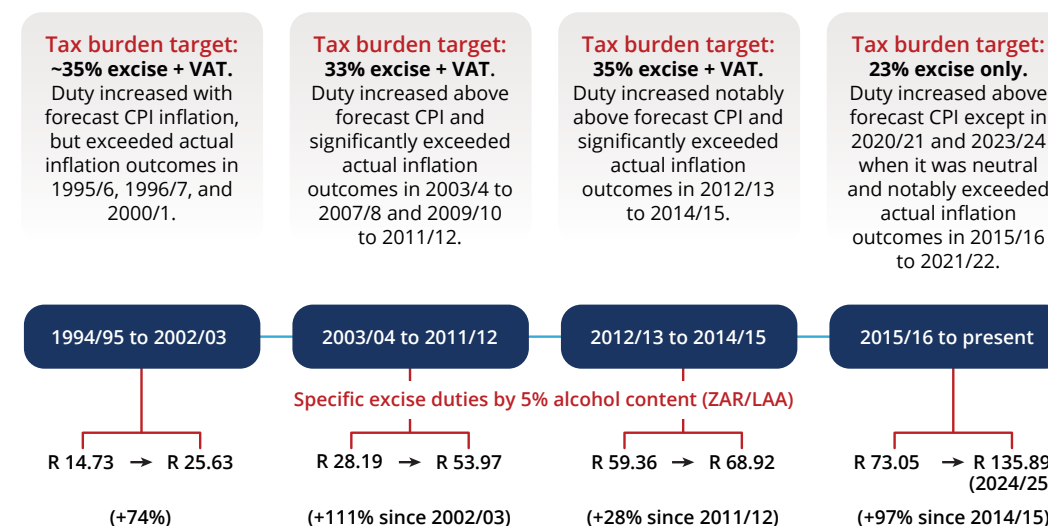
4.2 EVOLUTION OF EXCISE DUTIES ON BEER IN SOUTH AFRICA VERSUS CPI INFLATION

South Africa imposes a uniform alcoholic-content-based specific excise on the production of beer. This duty, along with VAT levied on the net domestic market price of beer, comprises the overall tax burden that producers and retailers pass on to consumers in the final retail price of beer (WHO, 2024a). The National Treasury sets excise duties in ZAR per LAA as a fixed percentage of the WARSP of beer. Therefore, excise duties are based on the alcohol content of products, with beverages containing greater

levels of pure alcohol subject to higher excise taxes than lower-alcohol products. This practice aligns with international taxation standards (National Treasury, 2014).

Excise duties are increased annually during the delivery of the national budget in February to take effect in the coming fiscal year (i.e., April to March). South Africa's duty structure has been altered over time, with the evolution in the country's beer excise regime summarised in **Figure 21** (National Treasury, 2014; National Treasury, 2024).

Figure 21: Timeline of changes in South Africa's excise tax regime on beer



Sources: National Treasury, Oxford Economics Africa

Between 1994/95 and 2002/03, the total tax burden target in excise duties and VAT on beer was about 35% of WARSPs as the government sought to align with international benchmarks, such as France, Germany, Italy, Portugal, Spain, and the US. Over this period, excise duty escalations were below CPI inflation outcomes only in 1998/99, 1999/2000, and 2002/03, while they also exceeded expected retail beer price increases of around 2% p.a. in the 1990s. In 2003/04, the overall tax burden target for beer in excise duties plus VAT was reduced to 33% of WARSPs, while the related duty escalations were below CPI inflation outcomes only in 2008/09 over the 2003/04 to 2011/12 period (National Treasury, 2024).

In 2012/13, the total targeted tax burden for beer was raised to 35% of retail prices. Excise duty escalations on the beverage were persistently raised above projected and actual inflation between 2012/13 and 2014/15. Since 2015/16, the National Treasury has excluded VAT from the tax burden calculation for alcoholic beverages. Consequently, it lowered the tax burden benchmark for beer to 23%, referred to as the targeted excise tax burden as a percentage of beer's average retail prices (National Treasury, 2024). However, excise duties and VAT are shifted to consumers, suggesting that the overall beer tax burden is higher following the 1 ppt increase in the VAT rate to 15% in 2018/19.

As shown in **Figure 22**, since 2012/13, excise duties on beer have increased consistently above projected inflation, except in 2020/21 and 2023/24 when they were raised by expected inflation. Yet, the excise duty increases on beer were significantly higher than inflation outcomes between 2012/13 and 2021/22. Notwithstanding, excise duties on beer are expected to outpace forecast inflation yet again in the current fiscal year (National Treasury, 2024).

Ever since the targeted overall tax burden for beer (i.e., excise duties plus VAT) was lowered to 33% of WARSPs in 2003/04, the tax incidence for the first nine months of a current fiscal year has served as a reference point for the annual adjustments in excise duties as per the National Treasury's guidelines. Actual adjustments in excise duties are, however, calculated based on tax burdens derived from the government's projected retail prices for the next fiscal year or the expected CPI inflation rate, whichever is higher (National Treasury, 2014). The following formula is used to calculate excise duties on beer liable for payment by beer producers (SARS, 2024).

$$\text{Excise duty payable} = \left[V \times \left(\frac{A}{V} \right) \right] \times R_d$$

$$= \text{LAA} \times R_d$$

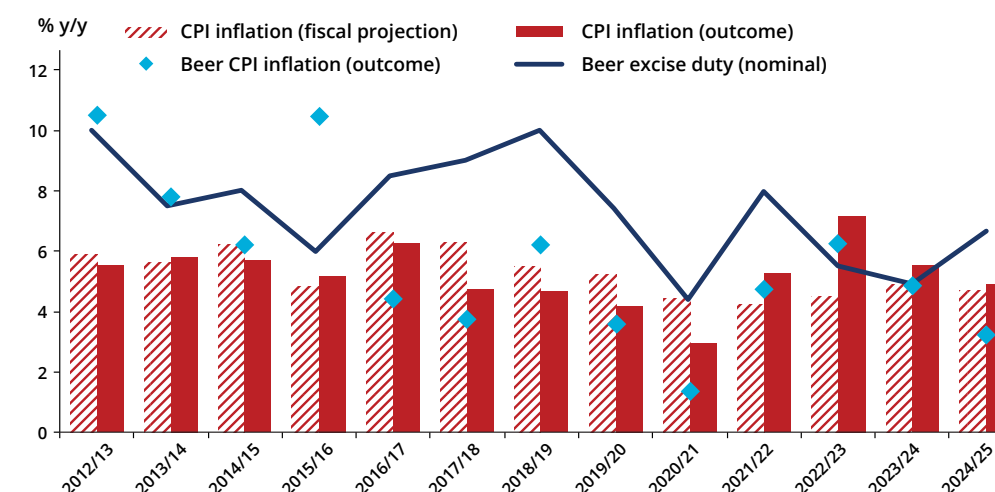
Where: V = Bulk beer volume in litres
 $\frac{A}{V}$ = Alcoholic strength by volume (ABV)
 $\left[V \times \left(\frac{A}{V} \right) \right] = \text{LAA}$
 R_d = Rate of duty per LAA, with the escalation of R_d subject to forecast inflation or projected increase in the WARSP of beer, whichever is highest

In other words, if it is projected that retail beer prices would rise faster than forecast CPI inflation, then excise duties increase with anticipated beer prices with the aim to maintain the total tax burden (i.e., positive real price increase). Conversely, if forecast inflation outpaces retail beer prices, excise taxes are adjusted to projected CPI inflation (i.e., neutral real excise duty). Regardless, if actual retail beer prices and/or CPI inflation turn out to be lower than the projected levels after the excise duty has been implemented, then these duties can be deemed excessive, as they drive up the overall tax burden for consumers beyond levels informed by realised price pressures. The production expenses associated with such taxes are typically passed on to consumers, albeit partially, who consequently endure a lower purchasing power of their money spent on beer since the prices they pay for the alcoholic beverage will be higher than the consumer inflation or retail prices realised in practice.

Consequently, the National Treasury has often negated the principle of maintaining the total tax burden by effectively increasing the excise duty on beer by more than the anticipated inflation rate for a coming fiscal year, including in periods when average retail prices have increased by a lesser degree relative to prevailing inflation. The government has also not compensated producers for undue duty escalations or overestimations through lower increases in subsequent periods to reflect actual price developments. Inflation-plus adjustments in excise duties can result in major deviations from the targeted beer consumption tax guidelines (National Treasury, 2014).

Figure 22 indicates the progression of South Africa's excise duties on beer since the National Treasury increased the tax burden on the beverage in 2012/13. By implementing excise duties above inflation and/or retail prices of beer without ex-post corrections, the overall excise tax burden has essentially increased to a level above the targeted tax incidence over the past decade.

Figure 22: Nominal excise tax rates on beer vs CPI inflation and retail price outcomes



Sources: National Treasury, StatsSA, Oxford Economics Africa

The precariousness associated with future retail beer prices or CPI inflation rates creates business and market uncertainty for beer producers. The adverse effects of excessive excise tax increases may potentially be reduced, market certainty improved, and price fairness towards consumers enhanced if such duties are raised by realised CPI inflation outcomes or, as a minimum, by the anticipated inflation rate for a given fiscal year (as was the case before 2003/04). It would enhance tax predictability for beer producers and help ensure that the tax burden is maintained. At the same time, the shifting of excise duties to consumers would align with actual retail price movements.

4.3 RESPONSIVENESS OF EXCISE REVENUES TO ABOVE-INFLATION DUTIES ON BEER

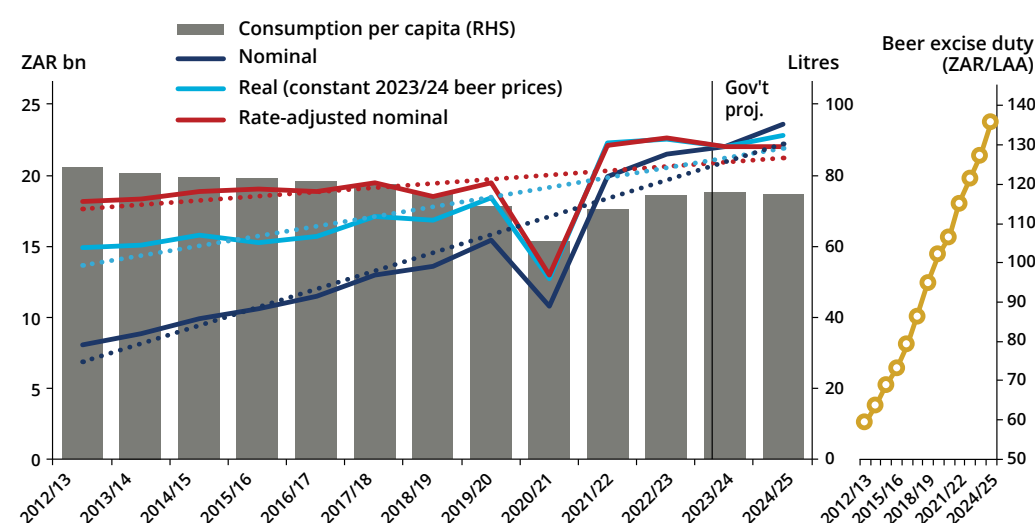
While the government's excisable revenue collections from beer have increased with the imposition of positive real excise duties, the responsiveness of these revenues has been suppressed over time as duty escalations have persistently been raised above inflation.

Figure 23 translates the nominal excise revenue collections in both real (i.e., adjusted to beer CPI) and rate-adjusted (i.e., if historical duties on beer remained constant at current levels) terms, along with the per capita beer production patterns for adults in South Africa since 2012/13. The corresponding excise duties imposed on beer producers that resulted in the related nominal revenue collections are shown in the adjacent graph.

Excise duties on beer increased by 114.6% to ZAR 127.40 per LAA in 2023/24 from ZAR 59.36 per LAA in 2012/13 (i.e., CAGR of 7.2%) and is set to grow by a further 6.7% y/y to ZAR 135.89 per LAA in 2024/25 (National Treasury, 2024). Concurrently, total beer production volumes improved by 11.4% to 3.5bn litres in 2023/24 from 3.2bn litres in 2012/13 (i.e., CAGR of 1.0%) (BarthHaas, 2024), suggesting that the degree of duty escalations in ZAR/LAA has discouraged beer consumption.

Coupled with augmented overall beer consumption volumes, the imposition of excise taxes has also maintained a constant income stream for the government. The value of nominal

Figure 23: Nominal, real, and rate-adjusted excise revenues from beer vs output per capita



Sources: National Treasury, BarthHaas, Oxford Economics Africa

fiscal revenues received from beer producers rose considerably by 159.0% to ZAR 21.9bn in 2023/24 from ZAR 8.4bn in 2012/13 (i.e., CAGR of 9.0%). Nominal excise collections from beer are projected to rise further to ZAR 23.4bn in 2024/25. However, this may not materialise in practice, as the growth in excise revenues has started to slow, increasing by only 2.4% between the past two fiscal years (National Treasury, 2024).

Given that the growth in excise duties on beer has significantly outpaced both headline CPI and beer CPI inflation over the 2012/13 to 2023/24 period, respectively by 2 ppts and 1.8 ppts, excise revenues have effectively exceeded nominal collections in real terms. Specifically, real excise revenues refer to total nominal excise tax collections adjusted for the beer CPI sub-index with 2023/24 as the base year (i.e., in constant 2023/24 terms).

The resulting effect is that the gap between nominal and real revenues narrows as tax collections progress towards the base year, where nominal and real excisable income are equal. In consideration of the impact of beer-specific CPI inflation as a reflection of retail price increases, excise collections by the government have slowed by over 3.5 times in real terms relative to nominal receipts, but still expanded by 45.3% over the 2012/13 to 2023/24 period (i.e., CAGR of 3.5%). Moreover, while nominal excise revenues grew in 2023/24, this fiscal income stream contracted in real terms by 2.4% y/y amid rising beer CPI inflation.

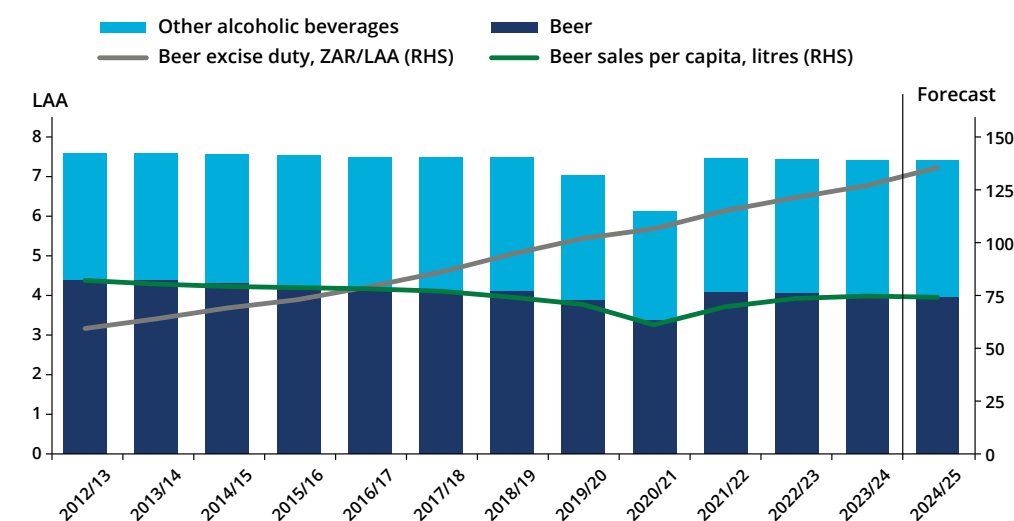
Additionally, to adequately test the responsiveness of nominal excise revenues to above-inflation duties on beer, it is worth considering the level of such fiscal receipts if they had remained constant at current levies. Rate-adjusted excise revenues from beer are calculated by apportioning the nominal duty escalations since 2012/13 to the absolute level of duties implemented in 2023/24 via indexation (i.e., 2023/24 = 100). In other words, rate-adjusted excise revenues represent the hypothetical value of tax collections should historical duties on beer have been imposed at the same levels as in 2023/24. In practice, however, these revenues are unlikely to have materialised since they would have imposed an acute shock on beer producers and consumers alike, diminishing the economic, structural development, and fiscal benefits arising from the beer industry.

Nonetheless, whereas nominal excise revenues expanded by 159.0% (or 9.0% CAGR) between 2012/13 and 2023/24, rate-adjusted excise revenues would have expanded by only 20.7% (or 1.7% CAGR) over the same period. While average growth of 1.7% p.a. is notable, it also suggests that fiscal income derived from beer production has become less responsive to sharp duty escalations. Viewed from this perspective, persistent excise duty escalations above prevailing inflation rates not only adversely affect beer producers and the beverage's affordability for consumers, but also harm fiscal revenue collections if left unchecked. The resulting effect is for excise revenues to fall below potential in real and rate-adjusted terms. The enduring imposition of above-inflation excise taxes has also started to show in consumption patterns. While the volume of total beer sales has generally improved, per capita consumption by adults has begun to wane, especially during periods of above-inflation duty escalations.

In weight-based terms, beer consumption has contracted by an average rate of 0.8% p.a. to 74.8 litres per person in 2023/24 from 82.0 litres per person in 2012/13. Per capita consumption of beer declined sharply in 2018/19 and 2019/20 by an average of 4.1% y/y following the pointed escalation in excise duties by an average of 8.7% p.a. over those years. Following the lockdowns associated with the Covid-19 pandemic, beer consumption recovered to 69.9 litres per person in 2021/22. Beer consumption per capita is expected to remain at relatively low levels given above-inflation excise tax increases. A similar pattern emerges in volumetric terms, as indicated in **Figure 24**.

Expressed in litres of pure alcohol, beer consumption also declined by a CAGR of 0.8% (or by 8.8% in total) to 4.0 LAA in 2023/24 from 4.4 LAA in 2012/13. Over the same period, though, per capita consumption of other alcoholic beverages has collectively increased by an average rate of 0.7% p.a. (or 7.4% in total) since 2012/13. In that regard, the overall tax burden in excise duties plus VAT affects the affordability of beer for consumers and may result in substitutionary effects to other types of alcohol or influence them to turn to the illicit market (National Treasury, 2014).

Figure 24: Alcohol consumption per adult versus beer excise duty escalations



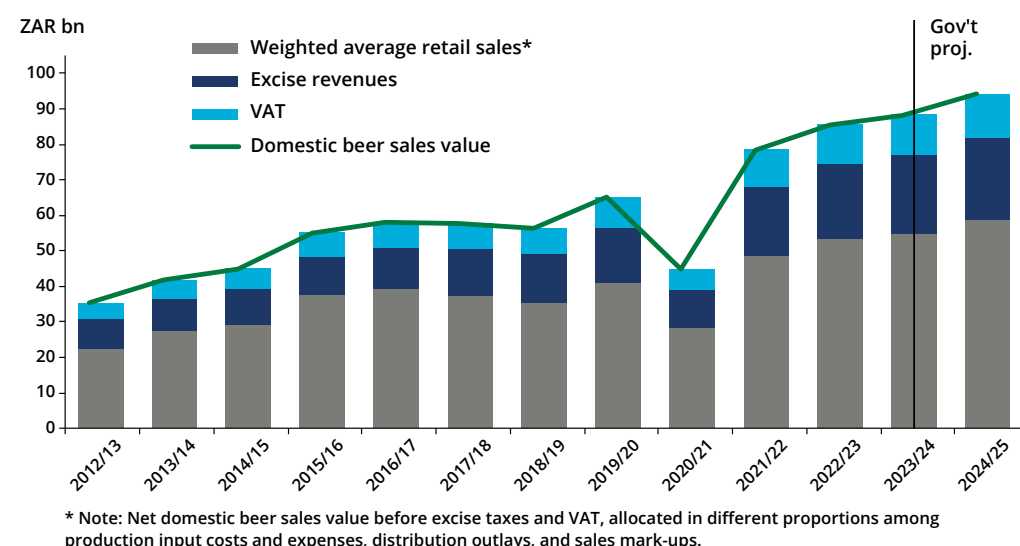
Sources: WHO, BarthHaas, National Treasury, Oxford Economics Africa

4.4 TRACKING SOUTH AFRICA'S TAX BURDEN ON BEER IN RELATION TO THE EXCISE TARGETS

As detailed in **Section 4.2**, the South African government's previous overall tax burden target for beer was 35% of retail prices in excise duties plus VAT, which was last changed in 2015/16 to 23% of WARSP in excise taxes only. Accordingly, the National Treasury raises beer producers' payable excise duties each fiscal year towards the excise tax burden target of 23% of average retail selling prices as per official guidelines. However, the way in which these excise duties are enacted, along with VAT, effectively comprise the actual overall tax burden on beer that is shouldered by consumers.

Figure 25 shows the evolution of South Africa's aggregate tax burden since 2012/13 in consideration of nominal excise and VAT revenues collected by the government from total beer sales³. Domestic beer sales for each fiscal year were estimated as the value of retail volumes sold at market prices in ZAR per litre. The beer volumes in litres were determined as a function of sales in LAA at an average alcoholic strength by volume (ABV) of 5% as per National Treasury guidelines (National Treasury, 2014). In turn, the volume of domestic beer sales in LAA were calculated from the government's excise revenues from beer and the prevailing duties in each fiscal year per level of pure alcohol. Subsequently, VAT was removed from final domestic beer sales in order to obtain the net sales value. The overall tax burdens on beer were consequently estimated by expressing the sum of total VAT and excise income received by the government from beer as a percentage of the average retail selling prices of the beverage (i.e., WARSP).

Figure 25: Nominal domestic beer retail sales and its overall tax burden in excise plus VAT



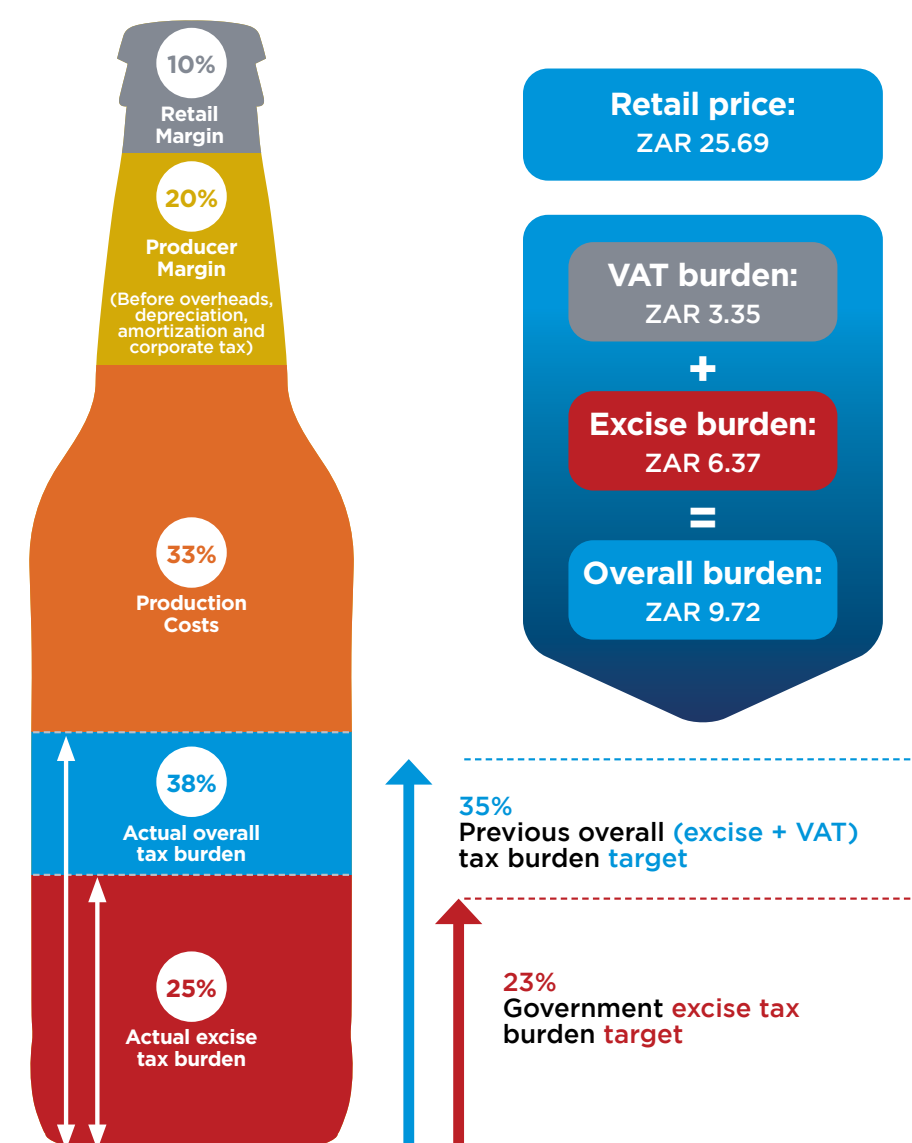
Sources: National Treasury, Oxford Economics Africa

South Africa's overall tax burden on beer has increased to ZAR 33.4bn in 2023/24 at an average growth rate of 9.1% p.a. or by 161.3% in total, from ZAR 12.8bn in 2012/13. Over time, the share of the overall tax burden (i.e., excise plus VAT) borne by beer producers and passed on to consumers of the beverage has correspondingly grown to 37.8% of WARSP in

2023/24, from the low of 32.0% of WARSP in 2015/16 amid persistent above-inflation excise duty escalations. Of this, beer excise payments to the government represented a burden of 24.8% of WARSP in 2023/24, up from the low share of 19.8% of WARSP in 2015/16.

Figure 26 illustrates the composition of the tax burden for one litre of beer containing 5% ABV at the prevailing VAT rate of 15% and an excise duty of ZAR 127.40 per LAA imposed in 2023/24. The average retail price of one litre of beer in 2023/24 was ZAR 25.69. The excise tax per LAA equates to ZAR 6.37 per litre of beer sold after accounting for the ABV in the beverage, which represented 24.8% of WARSP. The VAT rate of 15% levied on the net market price per unit of beer was equivalent to ZAR 3.35 per litre, which corresponded to 13.0% of WARSP (and 15% of the net sales price). This implies that the overall tax burden per unit of beer sold, in excise duties plus VAT, was ZAR 9.72, equivalent to 37.8% of WARSP in 2023/24.

Figure 26: Composition of taxes and costs in WARSP of one litre beer sold in 2023/24



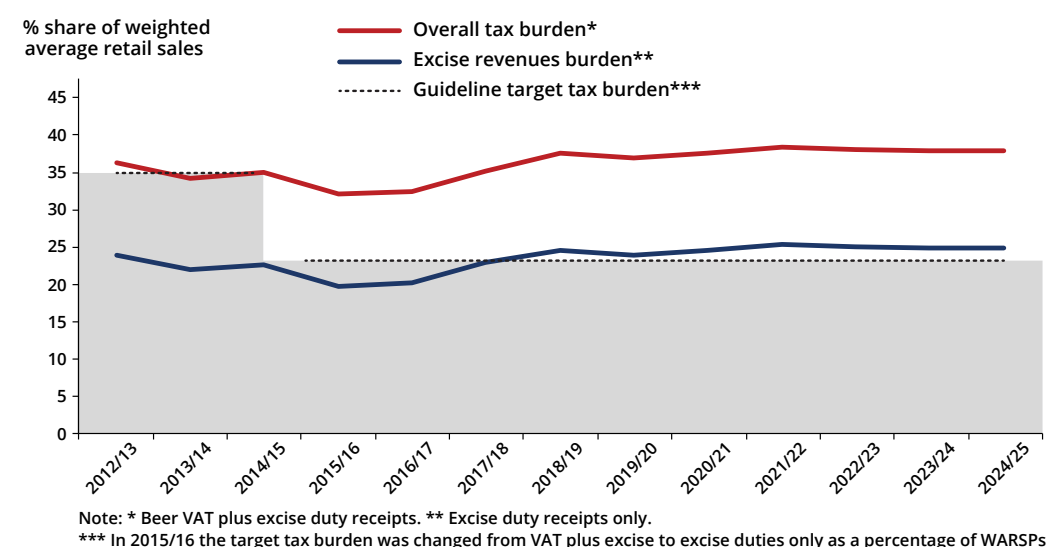
Sources: National Treasury, SAB, Oxford Economics Africa

³ South Africa's tax burdens on beer were calculated using retail prices for beer supplied by SAB, which also provided the remaining cost composition of the final beer price.

Stated differently, of every beer bought, about a quarter of the final price comprise excise taxes paid by beer producers into the fiscus, which rises to nearly 38.0% in taxes when VAT is included. Moreover, production costs account for around 33.0% in the average retail price of one litre of beer, leaving a margin of approximately 20% for beer producers before accounting for overheads, depreciation, amortisation, and corporate taxes. Above-inflation adjustments to excise duties and a higher VAT rate without ex-post corrections have therefore raised prices for consumers already struggling with high costs of living, while squeezing beer producers facing increasing input costs and overheads.

Figure 27 compares South Africa's fiscal receipts from excise taxes and VAT on beer as a share of the WARSP to the government's previous and current targeted tax burdens. Between 2012/13 and 2014/15, the total targeted tax burden was 35% of WARSP in excise duties and VAT.

Figure 27: Overall and excise tax burdens on beer versus government targets



Sources: National Treasury, Oxford Economics Africa

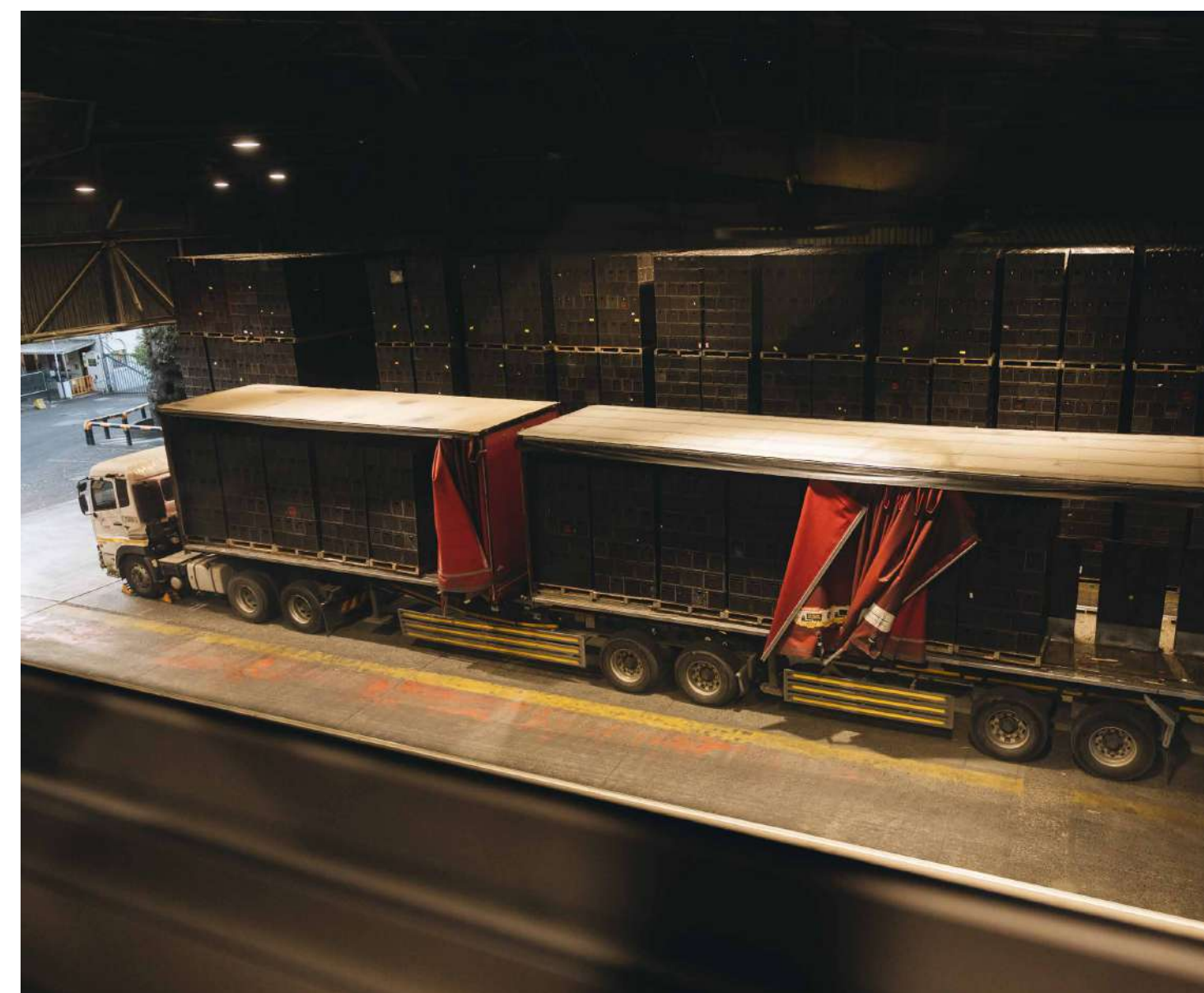
Across these three fiscal years, the overall tax burden on beer oscillated around the targeted benchmark, although it was 2 ppt above the 35% threshold of retail prices on average. This was driven by excise duties on the beverage being raised substantially above projected and actual inflation, respectively by 2.6 ppts and 2.8 ppts p.a. on average from 2012/13 to 2014/15. On average, increases in excise duties over these years were also 0.3 ppt above realised beer price inflation.

Over this period, the value of beer sales also rose sharply as retailers increased prices for final consumers at margins exceeding the growth in production and sales taxes. By 2023/24, the overall tax burden on beer was 37.8% or 2.8 ppts above the government's previous overall target of 35.0% of WARSP due to sustained above-inflation beer duty increases and a higher VAT rate.

Since the government excluded VAT from the tax burden calculation in 2015/16 and enforced a new excise tax target of 23% of average retail prices, excise revenues from beer rose steeply on an annual basis and exceeded the 23% of WARSP benchmark since 2018/19. These revenues rose amid duty escalations on beer outpacing projected and prevailing inflation rates, respectively by 1.9 ppts and 2.0 ppts p.a. on average between 2015/16 and 2023/24 (refer to **Section 4.2** and **Section 4.3**).

By 2023/24, the excise payment burden of beer producers was equivalent to 24.8% of WARSP. In other words, the excise tax burden on beer has continued to trend above the National Treasury's target of 23% of WARSP over the past six years and was 1.8 ppts above that threshold in 2023/24.

Excise duties on beer have therefore diverged from the officially targeted guidelines, while the overall tax burden has also grown faster than domestic beer sales, by an annual average of 1 ppt over the past decade. The diversion from official targets has been accentuated by persistent above-inflation excise duty escalations on beer and a higher VAT rate, disproportionately affecting low-income consumers. Therefore, the principle of maintaining the overall tax burden has not been adhered to, as it has risen faster than the targeted tax incidence. This trend raises concerns about the impact of excise taxes on beer producers and consumers alike in a high-inflationary environment, while the responsiveness of excise receipts from beer for the government has also been reduced below potential as observed more recently.





5. BENCHMARKING SOUTH AFRICA'S EXCISE DUTIES ON BEER

Five countries were selected with which to compare South Africa's excise regime on beer and the related performance in revenues to evaluate the degree of the government's duty escalations on beer relative to those of the international benchmark countries. These are Australia, Canada, Mauritius, Tanzania, and the UK. Although several sovereigns were considered, these countries were ultimately selected based on factors such as the comparability of their excise regimes, beer industries and consumption patterns, health-related policy goals, and the requisite data availability.

5.1 EXCISE REGIMES AND INFLATION IN THE SELECTION OF BENCHMARK COUNTRIES

Section 5.1.1 to Section 5.1.5 review the excise frameworks of the benchmark countries in consideration of duty escalations within their distinct inflation environments, as well as how these duties have influenced excise revenues for their governments and retail prices of beer. For each sovereign comparator state, **Figure 28 to Figure 32 in Box 1** encapsulates the benchmark countries' excise duty escalations, the related fiscal receipts since 2013/14, and the level of such duties in real terms given prevailing inflation and final beer retail prices. The corresponding excise duties imposed on beer producers that influenced the related nominal revenue collections are shown in the adjacent graphs for each country in **Box 1**.

5.1.1 AUSTRALIA

Australia levies a tiered alcohol content-based specific excise tax on beer, with the rate increasing with the strength of the beverage (Wall et al., 2017; WHO, 2024a). Duties are imposed on LAAs above 1.15% by volume in the final product through the following formula (Australian Taxation Office or ATO, 2024): Total volume (litres) of product x (alcohol strength - 1.15%) x current excise duty rate. Australia's excise taxes on beer are indexed and automatically adjusted biannually each fiscal year to actual inflation outcomes of the prior period (Anderson, 2019).

Figure 28 in Box 1 shows Australia's excise duties on beer increased by a CAGR of 2.7% (or 33.4% overall) to AUD 59.38 per LAA in 2023/24, from AUD 44.52 per LAA in 2012/13. These escalations align with the country's actual inflation outcomes over the same timeframe due to its CPI-indexed excise duty regime, thus creating cost and price certainty for beer producers and consumers. ATO has also kept duty increases below inflation outcomes when price pressures were high (e.g., 2021/22), after which it would retroactively modify excise duties to maintain their real values, while being cognisant of the adverse impact of excessive duty escalations during periods of high inflation.

Despite upholding neutral real excise duties since 2012/13, aggregate excise payments by beer producers rose by a CAGR of merely 1.4% (or 16.5% in total) to AUD 2.6bn in 2023/24. This suggests that excisable fiscal income from beer may have weakened further had excise duties been raised above inflation. Regardless, between 2012/13 and 2023/24, final beer retail prices increased by an average rate of 4% p.a. as the tax burden was shifted to consumers, largely driven by the comparatively higher absolute increases in duties over the past two fiscal years.

5.1.2 CANADA

Canada levies a volume-based specific excise tax on beer under different tiers based on production quantities and the alcohol contents within those volume ranges per hectolitre (Canada Revenue Agency or CRA, 2024). Like Australia, beer excise duties for a given fiscal year are automatically adjusted to the preceding year's inflation rate via CPI-indexation, albeit once per annum, in order to maintain the real value of these taxes under normal inflationary conditions (WHO, 2024a).

Figure 29 in Box 1 indicates Canada's excise duties on beer increased by a modest average annual rate of 1.7% (or 19.8% in total) to CAD 0.31 per litre in 2023/24, from CAD 0.26 per litre in 2012/13. Despite being indexed to inflation outcomes, the country's CAGR in excise duties was 0.7 ppt below prevailing inflation rates over the same period, which, along with a stable duty hike trajectory, has supported beer manufacturers through lower production taxes and consumers via weaker price transmission. Moreover, when inflation trended above historical levels, CRA capped excise duty escalations on beer at rates reflecting past long-term averages to foster market certainty and provide financial relief to consumers and producers alike. For example, in the relatively high inflation conditions since 2021/22, the revenue agency capped excise adjustments at 2.0% from 2023/24 to 2024/25, while also halving duty rates on the first 15,000 hectolitres of beer brewed domestically and exempting excise taxes on beverages containing less than 0.5% ABV (CRA, 2024).

Apart from having negative real duties since 2012/13, total excise payments collected from beer producers remained fairly even, increasing by a marginal CAGR of 0.9% (or 9.0% overall) to CAD 696.2m in 2022/23⁴. This implies that excise revenues from beer may have contracted in the event of above-inflation duty escalations. On average and regardless of large swings, Canadian retailers have also been cognisant of consumers and kept increases in beer prices broadly aligned to inflation rates, with a pass-through of only 0.4 ppt above CPI inflation between 2012/13 and 2023/24.

5.1.3 MAURITIUS

Mauritius levies a uniform volume-based specific excise tax on beer per litre above and below 9.0% ABV thresholds (WHO, 2024a). Unlike Australia and Canada, the Mauritian Revenue Authority (MRA) does not automatically adjust excise duties on beer for inflation. Still, they are manually determined by the island's revenue authority in response to economic conditions and updated through budgetary decisions or other legislative measures as necessary (MRA, 2024).

Figure 30 in Box 1 indicates Mauritius's excise duties on beer increased by an average annual rate of 4.0% (or 54.4% overall) to MUR 52.80 per litre in 2023/24, from MUR 34.20 per litre in 2012/13. In an attempt to prevent real excise duty erosion, these escalations have been a mere 0.3 ppt above CPI inflation outcomes on average over the same period. In doing so, the government has often kept duties on beer unchanged (e.g., 2017/18

to 2019/20 and 2023/24), aiding producers and consumers by allowing for negative real excise taxes. Such pauses in duty increases have often coincided with subsequent adjustments in excise taxes above prevailing inflation rates (e.g., 2013/14 to 2016/17 and 2020/21 to 2022/23), resulting in positive levies in beer duties in order to maintain long-term excise duties on beer slightly above actual CPI outcomes (Sobhee et al., 2015).

Being a prominent tourist destination, Mauritius has imposed quite high excise taxes, as passing these on to final retail prices generally does not influence demand for beer from foreign visitors with greater purchasing power compared to a large portion of the domestic populace whose consumption patterns are more responsive to higher prices. Total excise revenues have therefore marginally outpaced the imposition of duties, expanding by a CAGR of 4.2% since 2012/13 (or 56.7% in total) to MUR 1.4bn in 2023/24. The island's excise revenues have risen more sharply since the steep adjustments in excise duties of around 10.0% p.a. in 2021/22 and 2022/23, resulting in an increase of 17.0% in excise revenues over the subsequent two fiscal years. The expansion followed a contraction in excisable income for the government between 2019/20 and 2020/21. After passing taxes on to consumers, Mauritian retailers increased beer prices by an average of 2.9 ppts above CPI inflation over the 2012/13 to 2023/24 period.

5.1.4 TANZANIA

Tanzania levies a tiered volume-based specific excise tax on beer per litre (WHO, 2024a). As in Mauritius and South Africa, the Tanzania Revenue Authority (TRA) does not automatically align beer duties with inflation outcomes. Instead, it manually adjusts these taxes with projected inflation during the annual budget process, given the country's overall macroeconomic performance.

Until 2020/21, TRA imposed a standard excise duty on all domestically produced beer. As of 2021/22, lower relative duties have been levied on beer produced from locally grown barley to stimulate the domestic industry (TRA, 2024). The nominal excise duty levels in **Figure 31 in Box 1** have therefore been calculated as the average of the different rates charged by TRA over time on domestically produced beer, domestically produced beer from locally grown barley, and domestically produced beer from imported barley.

Tanzania's excise duties on beer increased by a CAGR of 3.5% (or 46.5% overall) to TZS 769 per litre in 2023/24, from TZS 525 per litre in 2012/13. While TRA aims to curb the erosion of real duties through controlled calibration, it has often left duties unchanged (i.e., in 2015/16, 2018/19 to 2020/21, and 2021/22 to 2024/25) for beer produced from local barley. This has led to negative real excise duties of 0.9 ppt below inflation outcomes over the 2012/13 to 2023/24 period, despite TRA having periodically increased duties in excess of inflation rates (e.g., in 2014/15 and 2023/24). By raising duties below inflation over time, Tanzania has effectively supported producers and consumers of beer in a country where realised CPI inflation can be both volatile and high.

Even though excise duties have not kept pace with inflation, total taxes collected by the government from beer producers have grown markedly, by an average rate of 8.1% p.a. (or 135.5% in total) to TZS 423.3bn in 2023/24. These excise receipts have outperformed actual CPI inflation by 3.6 ppts since 2012/13 and signify the responsiveness of higher revenue collections in developing-country circumstances when above-inflation duty escalations are averted. This, in turn, also safeguards producers and consumers by avoiding the transmission of excise taxes into higher prices. Average beer retail prices have expanded by a CAGR of 1.5% since 2012/13, remaining 3.0 ppts below inflation. Accordingly, it alleviated strained household budgets and reinforced the positive socio-economic spillovers of Tanzania's beer industry and its encompassing value chains.

⁴ At the time of writing, Public Accounts of Canada have not reported on excise revenues from beer for 2023/24.

BOX 1: BEER EXCISE DUTIES AND REVENUES VS CPI INFLATION AND RETAIL PRICES IN THE BENCHMARK COUNTRIES

— Duty (nominal) — CPI outcome - - - Duty (real) — Retail price ■ Revenue (RHS)

Figure 28: Australia

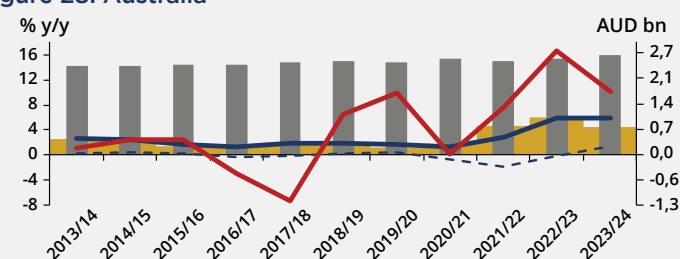


Figure 29: Canada

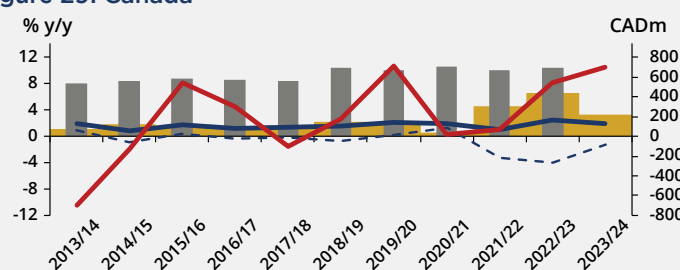


Figure 30: Mauritius

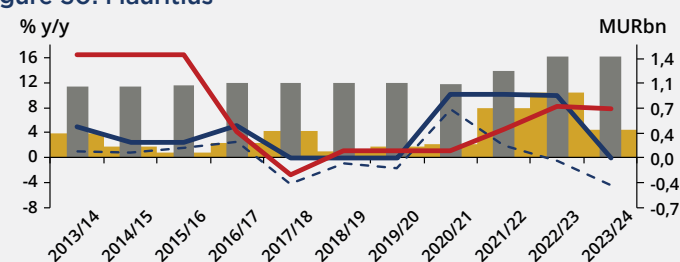


Figure 31: Tanzania

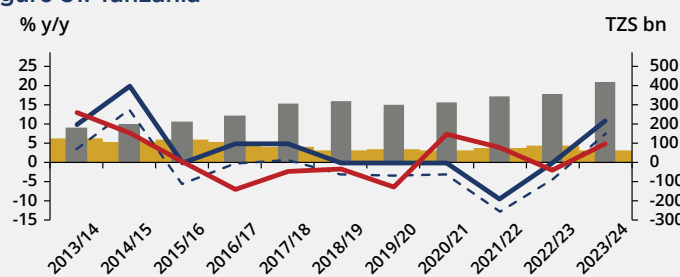
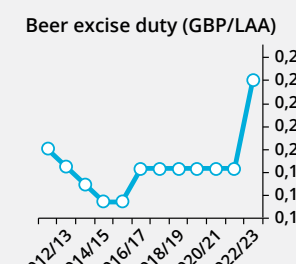
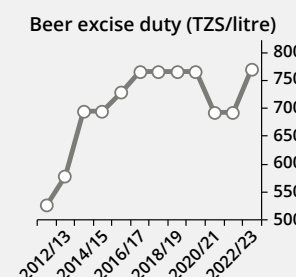
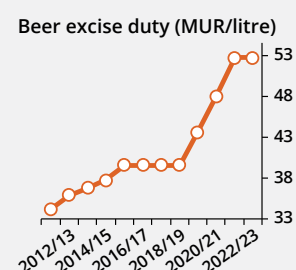
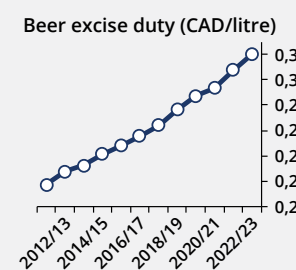
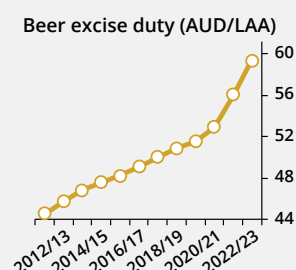
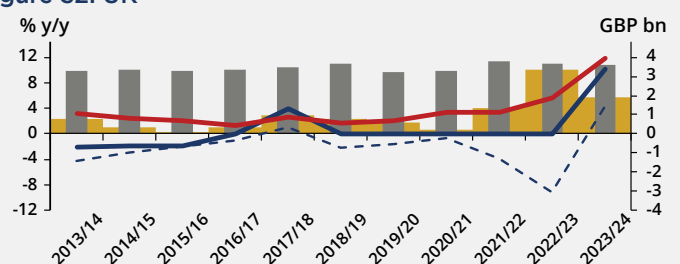


Figure 32: UK



5.1.5 UK

The UK levies an alcoholic content-based specific tiered excise tax on beer per LAA, with higher rates levied on stronger ABVs per unit produced (WHO, 2024a). Before 2023/24, the UK imposed excise duties on beer for each 1% ABV per hectolitre. Since then, duties have been levied per LAA, resulting in a sharp increase in the level of duties (His/Her Majesty's Revenue & Customs or HMRC, 2024). Similar to Mauritius, Tanzania, and South Africa, excise taxes in the UK are not automatically adjusted nor indexed to the CPI. During the annual budget process, the country manually adjusts excise taxes broadly in line with actual changes in the retail price index (RPI), which prevents the erosion of real duties and provides certainty for beer producers in their financial planning. Even so, the UK has often reduced or frozen excise taxes on beer to support producers, consumers, tourism, and the hospitality sector in consideration of economic conditions, public health objectives, and fiscal needs (Yeomans, 2018).

Figure 32 in Box 1 shows the UK's beer excise duties increased by an average rate of just 0.7% p.a. (or 7.7% in total) to GBP 0.21 per LAA in 2023/24, from GBP 0.20 per LAA in 2012/13. In real terms, however, excise duties declined by a CAGR of 2.1% over the same timeframe. Moreover, nominal excise duties were consistently reduced between 2012/13 and 2016/17, while they remained constant from 2018/19 to 2022/23, before rising by 10.1% y/y under the revised excise regime. This demonstrates HMRC's resolve to support beer manufacturers through lower production taxes and, thereby, consumers by limiting the pass-through effects on retailers. Regardless of the erosion in real duties, total excise payments from beer producers have generally grown since 2012/13, rising by an average rate of 0.8% p.a. (or 8.6% overall) to GBP 3.6bn in 2023/24. On the other hand, beer retail prices increased by 0.7 ppt above realised inflation over the same period, suggesting that consumer budgets may have been more squeezed if higher excise duties had been imposed.

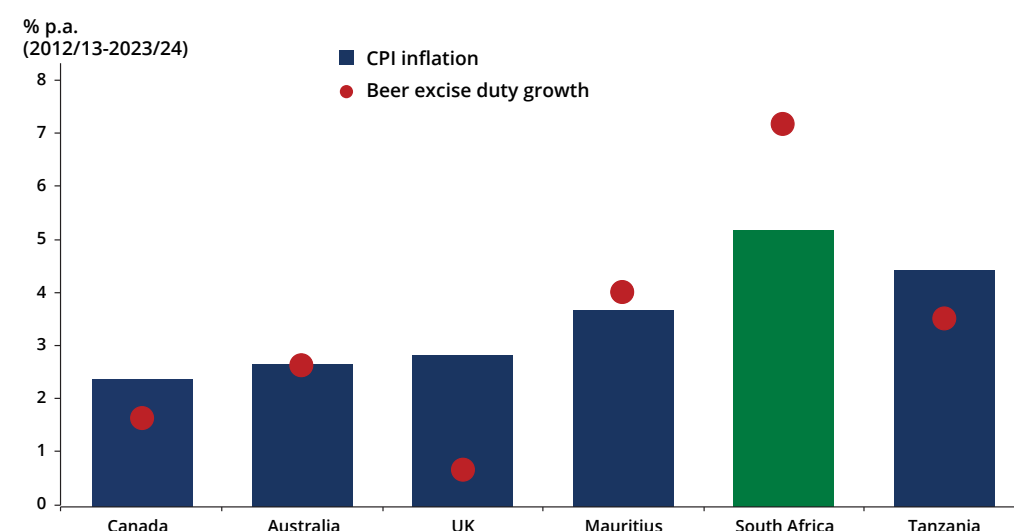
5.1.6 SUMMARY

Linking excise duties to inflation is common practice among countries using a specific excise duty regime. This practice is driven by several factors. Firstly, raising excise duties by inflation keeps the real value stable. Without this modification, the real value of excise duties would decrease (Neneman, 2021). Secondly, adjusting excise taxes by a predictable margin allows for greater stability in public financial projections. Furthermore, this predictability also filters down to the private sector and firms in excisable goods industries. Thirdly, an automatic inflation adjustment mechanism allows excise duties to increase without introducing new legislation or changes to tax policies.

While the benchmark countries and South Africa all acknowledge the need to preserve real excise duties by raising levies at or near inflation, the implementation of this practice varies. The countries are split between indexing excise duty increases to inflation outcomes and manually adjusting levies between years for projected inflation. Indexing excise taxes prevents inflation-driven excise duty erosion while creating policy certainty. Conversely, manually determining and adjusting excise duties during the budget process could cause significant disparities between actual inflation levels and excise duty increases, notably during periods of high inflation.

Figure 33 compares the benchmark countries' average CPI inflation and excise duty increases on beer between 2012/13 and 2023/24. On average, Australia's biannual automatic indexation of excise duties to realised consumer price increases has been on par with actual inflation outcomes of 2.7% p.a. Although Canada also links excise duties to CPI inflation outcomes, the country's CAGR of 1.7% in duties has been kept below average inflation of 2.4% p.a. from 2012/13 to 2023/24. In Tanzania and the UK, excise tax increases were well below inflation, meaning real excise duties similarly decreased over the same period. This was primarily driven by the idiosyncratic adjustments to levies, which are not indexed to inflation. South Africa is the worst-performing country in the sample, with excise taxes rising by an average of 7.2% p.a. while CPI inflation averaged above the midpoint target at 5.2% p.a.

Figure 33: South Africa's excise duties have risen sharply due to above-inflation increases



Sources: Official revenue authorities, finance ministries, and statistics agencies; Oxford Economics Africa

The second difference between the sample countries is their use of realised or projected inflation. Developed countries, like Australia and Canada, adjust excise duties on beer using the previous year's inflation. Developing countries, such as South Africa and Tanzania, use projected inflation as a benchmark. This discrepancy is likely attributed to inflation variability. Inflation in developed countries does not vary much between years, meaning there should not be a substantial difference between using actual or projected figures. In developing countries, however, inflation could differ significantly between years. Therefore, developing countries use projected inflation to prevent the erosion of real levies, although this is infrequently realised in practice.

Adjusting excise duties using projected inflation is fraught with difficulty. Firstly, these inflation expectations risk becoming a self-fulfilling prophecy. Firms expecting higher inflation increase prices to recoup potential losses. Higher prices filter through to the rest of the economy, leading to greater-than-expected inflation. Secondly, the government authority tasked with setting excise taxes is incentivised to overestimate projected inflation to raise excess revenue. Using historical inflation figures mitigates this risk. Thirdly, without an ex-post correction mechanism when inflation is either over or underestimated, excise duties risk fluctuating between years and deviating from expectations.

Excise duty adjustments must be reliable, verifiable, and follow a predictable pattern to minimise market disruption. Moreover, for public policy to succeed, there needs to be trust between the public and private sectors, government institutions, and companies. Indexing excise duty increases to actual inflation outcomes of the previous year achieves both goals. Rates are increased in a reliable and predictable pattern, allowing firms and public entities to conduct more accurate financial forecasts. Furthermore, by automatically adjusting rates, this system removes the burden on the government to recalculate excise duties each year. These are critical reasons developed countries employ CPI-indexed inflation mechanisms to adjust excise duties.

5.2 EVALUATING SOUTH AFRICA'S EXCISE REVENUE AGAINST THE BENCHMARK COUNTRIES

Taking into account South Africa's excise regime on beer and the sensitivity of the government's fiscal income to the imposition of this indirect tax as assessed in **Chapter 4**, the country's excise revenue performance can be measured against those of the benchmark states given the imposition of the excise duty levels in relation to CPI inflation outcomes as described in **Section 5.1**. In that regard, **Figure 34** to **Figure 39** in **Box 2** compares the nominal and rate-adjusted excise tax receipts from beer of the select governments by way of indexation, while considering the share of overall tax revenues derived from beer production.

Indexing previous nominal excise revenues to current absolute receipts and duty levels on beer enables fiscal income performance and the impact of tax policy changes to be compared across countries by accounting for varying inflation rates, currency fluctuations, and different stages of economic development. It allows for meaningful benchmarking to assess excise taxes across countries over time in order to analyse trends and the effectiveness of distinct excise regimes. Rate-adjusted excise revenues from beer are calculated by apportioning the nominal duty escalations in South Africa and its comparator countries since 2012/13 to the absolute level of duties implemented in 2023/24. The results illustrate the notional value of tax collections should historical duties on beer have remained constant at current levels. Concerning the benchmarking of South Africa's excise practices on beer, three fundamental observations emerge from **Box 2**.

Firstly, **Figure 37** demonstrates South Africa's primary and ever-increasing reliance on taxing the beer industry to augment total fiscal receipts from excisable products relative to the comparator countries. By 2023/24, South Africa depended on the beer industry for 34.7% of total excise revenues, far exceeding Tanzania as the second-most reliant on beer taxes (22.3% of overall excisable receipts). Furthermore, the country overshadows the share in total beer excise in Australia (8.8%), the UK (6.2%), Mauritius (6.1%), and Canada (3.8%). Therefore, South Africa's excise revenues are disproportionately concentrated on duties imposed on beer producers, whereas the other countries' excisable product balances are significantly more diversified.

Most predominantly, South Africa's overreliance on beer to generate fiscal income has worsened. In the advanced economies and Mauritius, this share has remained low and constant, while declining notably from a relatively high share in the less developed market of Tanzania. Therefore, it is vital to safeguard the viability of beer producers in South Africa by avoiding persistent above-inflation duty escalations, especially given the feedback loops between beer manufacturers and the wider economy.

BOX 2: COMPARISON OF EXCISE REVENUES PERFORMANCE FROM BEER AMONG THE BENCHMARK COUNTRIES

— Nominal (LHS) - - Rate-adjusted (LHS) ♦ % in total excise (RHS)

Figure 34: Australia

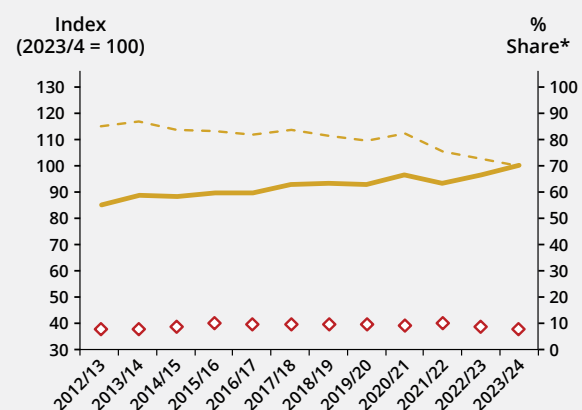


Figure 35: Canada

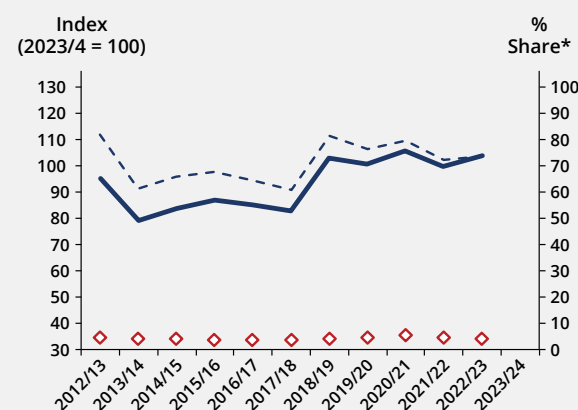


Figure 36: Mauritius

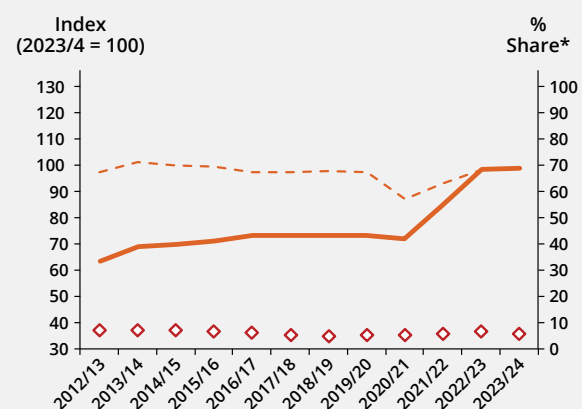


Figure 37: South Africa

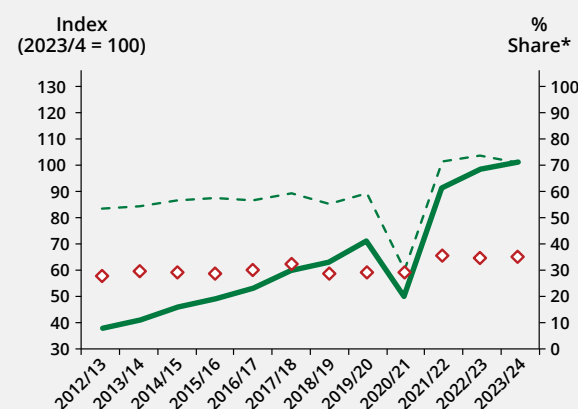


Figure 38: Tanzania

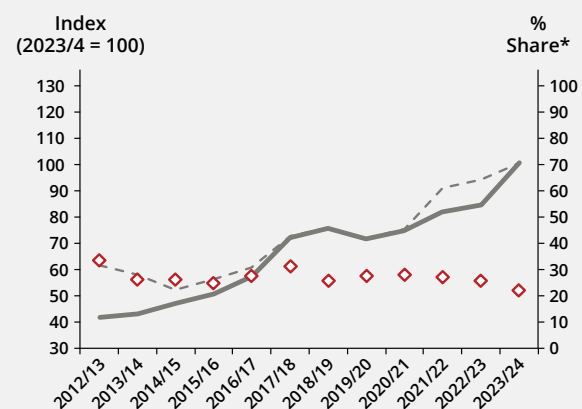
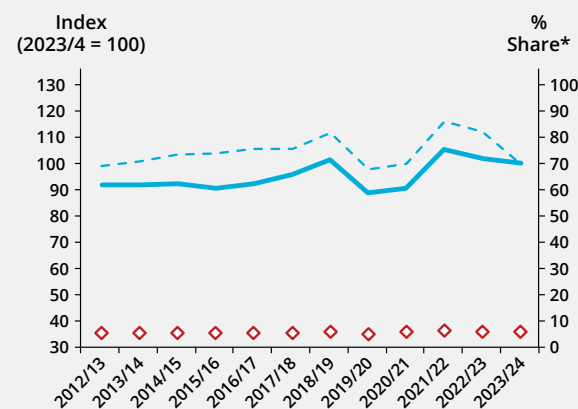


Figure 39: United Kingdom



*Note: Solid lines (—) indicate indexed nominal excise revenues, while dashed lines (---) illustrate the responsiveness of historical nominal excise revenues adjusted to the level of duties in 2023/24. At the time of writing, Public Accounts of Canada have not reported on excise revenues from beer for 2023/24.

Sources: National Treasury of South Africa, TRA, CRA, HMRC, ATO, MRA, Oxford Economics Africa

Secondly, between 2012/13 and 2023/24, South Africa experienced faster growth in excise revenues from beer versus the benchmark countries in average annual and absolute growth terms. Over that timeframe, South Africa's nominal excise tax receipts from beer increased by a CAGR of 9.0% (or 159.0% in absolute terms), followed by Tanzania with a CAGR of 8.1% (or 135.5%), and significantly faster than the average growth rates in excise collections in Mauritius of 4.2% p.a. (or 56.7%), Australia of 1.4% p.a. (or 16.5%), Canada of 0.9% p.a. (or 9.0%), and the UK of 0.8% p.a. (or 8.6%).

The expansion in South Africa's excise tax revenue collections from beer has been driven by above-inflation escalations in excise duties. Since 2012/13, these increases in South Africa exceeded CPI inflation by 2.0 ppts on average, while such escalations in Australia and Mauritius were aligned to inflation outcomes but below realised inflation rates in Tanzania, Canada, and the UK. Moreover, the degree of duty increases in South Africa far exceeds those in the comparator states, with excise duties on beer growing by an average rate of 7.2% p.a. versus an average CAGR of 2.5% in the benchmark countries combined.

Thirdly, when apportioning the historical excise revenues of the benchmark countries to duty levels imposed in 2023/24, the differential between nominal and rate-adjusted excise revenues is the widest for South Africa. Specifically, the difference between the average annual growth rates in nominal and rate-adjusted excise payments by beer producers is 7.3 ppts for South Africa, followed by Mauritius (4.0 ppts), Tanzania (3.7 ppts), Australia (2.6 ppts), Canada (1.6 ppts), and the UK (0.7 ppt). This implies that the responsiveness of excise taxes to the degree of duty escalations in the benchmark countries has been the weakest in South Africa. It further suggests that the levels of duties imposed in Canada, the UK, and Australia have produced more sustainable fiscal revenues in comparison to South Africa and Tanzania.

As described in **Chapter 4**, higher excise revenues are unlikely to continue expanding indefinitely in South Africa amid unpredictable duty increases above CPI inflation without ex-post corrections. This is especially the case during periods of high inflation when the relative growth in duty levels must be contained or risk causing inflationary spillovers. The reduced responsiveness of excise revenues to the degree of duty increases in South Africa is becoming apparent, with year-on-year growth in nominal excise revenue collections slowing compared to duty escalations since 2022/23, risking such duties' proportional contribution to overall excise revenues.

An inflection point may be reached in South Africa in the near future where the cost burden of unpredictable duty escalations hampers expansion plans in the beer industry and its encompassing value chains through a tough excise tax environment. The growth in these duties above prevailing inflation rates may also result in unfavourable substitutionary effects from a socio-economic perspective, especially among poorer households. Consumer affordability becomes increasingly strained amid the high cost of living in South Africa, coupled with the passing of taxes on to retail prices. In that regard, the South African government needs to investigate alternative mechanisms for adjusting excise duties on beer to balance the brunt of the overall tax burden on producers and consumers alike, thereby bolstering the country's socio-economic development potential.

5.3 BALANCING THE BRUNT OF THE BURDEN

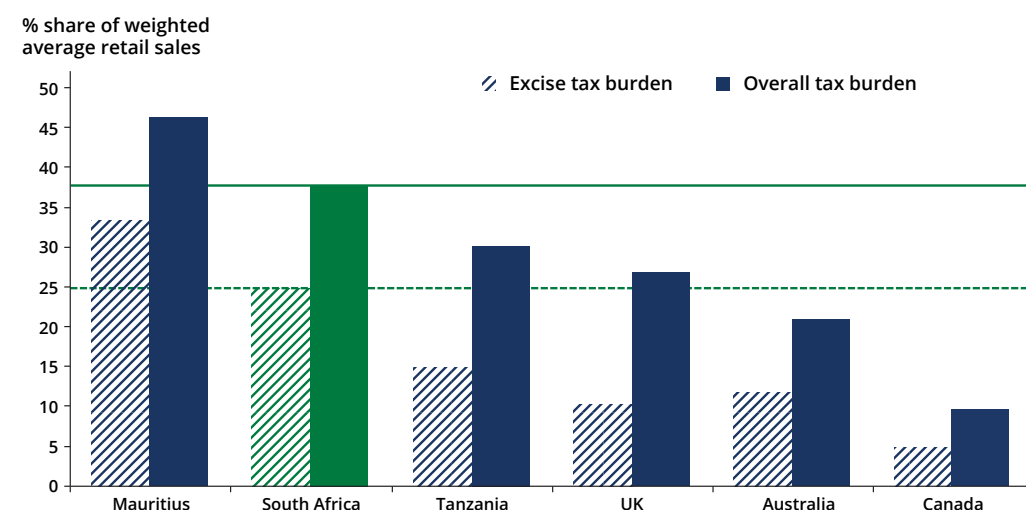
Chapter 4 assessed South Africa's excise and overall (i.e., excise plus VAT) tax burdens on beer in relation to the targeted guidelines for these indirect taxes imposed by the government. The appraisal confirmed the extent to which the country's beer tax burden has trended above the National Treasury's official targets for several years. It additionally described how these burdens are calculated as fixed percentages of the WARSP of beer, which also applies to determining the benchmark countries' excise and total tax burdens. Moreover, for the benchmarking analysis, the relevant excise duties for each country are converted into weight-based (i.e., per litre) terms from volumetric (i.e., per LAA) terms with the overall tax burden per litre of beer calculated as follows as a percentage of WARSP:

$$\text{Overall tax burden} = \frac{[(\text{duty per LAA} \times \text{ABV}) + (\text{VAT rate} \times \text{retail price per litre exclusive of VAT})]}{\text{WARSP}}$$

$$= \frac{(\text{excise duty payable per litre} + \text{VAT per litre})}{\text{WARSP}}$$

Developed countries are often associated with higher tax burdens compared to developing countries. Advanced economies generally have more sophisticated, extensive, and efficient tax systems; larger formal sectors; higher income levels; greater social welfare systems and related public service needs; and elevated government expenditures (Kumar, 2022; Benitez et al., 2023). However, as shown in **Figure 40**, South Africa's excise and overall tax burdens as a share of WARSP far exceeds those of the developed countries.

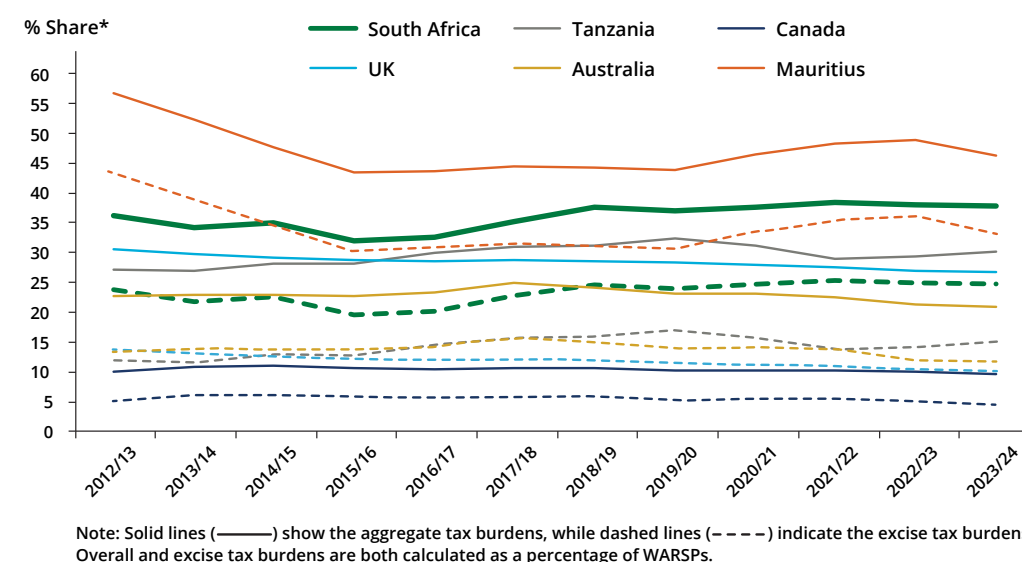
Figure 40: South Africa's beer tax burdens compared to the benchmark countries in 2023/24



Sources: Official revenue, finance, and statistics authorities, SAB, Numbeo, WHO, Oxford Economics Africa

As demonstrated in **Figure 41**, South Africa's excise and overall tax burdens on beer as a share of the beverage's WARSP have been significantly higher than those of Australia, Canada, Tanzania, and the UK. Although Mauritius has had higher tax burdens on beer, these have declined from previous highs, while Australia, Canada, and the UK have also moderated their beer tax burdens by keeping increases in beer duties at or below inflation outcomes (refer to **Section 5.1**). In contrast, South Africa's excise and overall tax burdens on beer have expanded at a much faster pace than in all of the benchmark countries, mostly driven by above-inflation duty escalations.

Figure 41: Progression of overall and excise tax burdens on beer in the benchmark countries



Note: Solid lines (—) show the aggregate tax burdens, while dashed lines (---) indicate the excise tax burdens. Overall and excise tax burdens are both calculated as a percentage of WARSPs.

Sources: Official revenue, finance, and statistics authorities; SAB; Numbeo; WHO; Oxford Economics Africa

Figure 42 to Figure 47 in Box 3 evaluates South Africa's excise and overall tax burden on beer against those of the benchmark countries between 2012/13 and 2023/24 as a share of each nation's WARSP for one litre of beer. The figures also reveal the per capita excise revenues on beer received by the countries' governments in response to duties, as well as beer consumption per adult over the same period. Four main observations emerge from **Box 3**.

The first observation relates to South Africa's excise tax burden on beer compared to the benchmark countries. South Africa's beer excise burden of 24.8% of WARSP in 2023/24 was the second highest among the group, outstripping that of Tanzania by 9.9 pts, Australia by 13.0 pts, the UK by 14.7 pts, and Canada by 20.0 pts. At 33.2% of WARSP, Mauritius has the heaviest excise tax burden on beer. Regardless, South Africa's excise burden is rising rapidly in absolute, local currency terms versus that of the benchmark states. The country's excise burden has increased by a CAGR of 7.2% (or 114.6% overall) between 2012/13 and 2023/24 amid persistent above-inflation duty escalations, followed by Mauritius (4.0% p.a. or 54.4% overall), Tanzania (3.5% p.a. or 46.5% overall), and the advanced economies (an average of 1.7% p.a. or collectively by 20.3% overall).

South Africa's excise burden has furthermore risen sharply – 2.0 pts faster than CPI inflation outcomes – while growth in these tax burdens in the other countries has been around (i.e., Australia and Mauritius) or below (i.e., Tanzania, Canada, and the UK) realised inflation rates over the same period. Besides South Africa, Tanzania is the only other country in the group that has seen its beer excise burden rise, from 12.0% of WARSP in 2012/13 to 14.9% of WARSP in 2023/24. Although Mauritius has the highest beer excise tax

BOX 3: BEER TAX BURDENS AND PER CAPITA CONSUMPTION AND EXCISE REVENUES IN THE BENCHMARK COUNTRIES

■ Consumption per capita (litres, RHS) — Excise + VAT (LHS) - - Excise (LHS) ◆ Excise per capita (PPP\$, RHS)

Figure 42: Australia

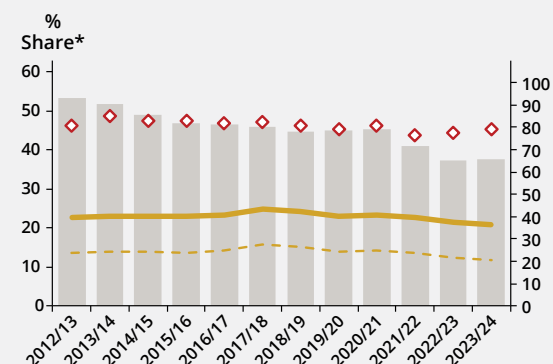


Figure 43: Canada

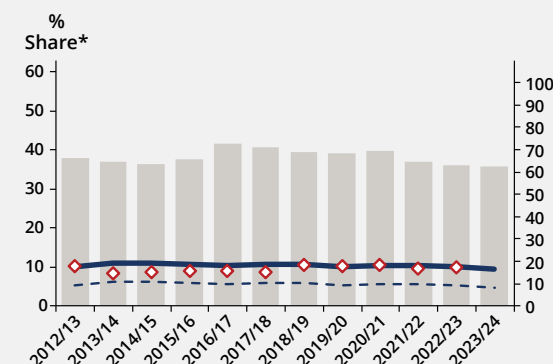


Figure 44: Mauritius

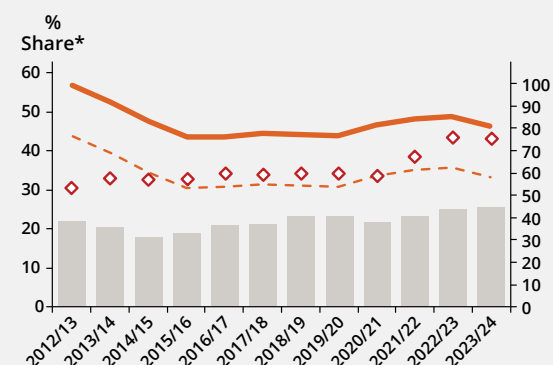


Figure 45: South Africa

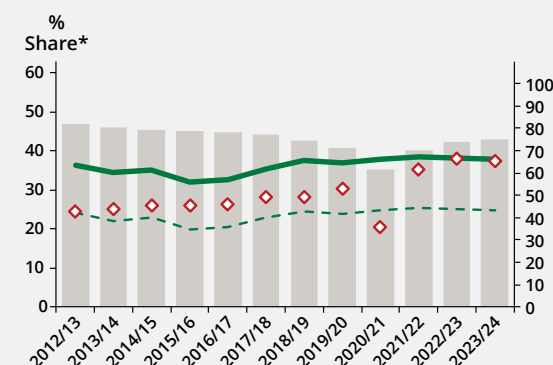


Figure 46: Tanzania

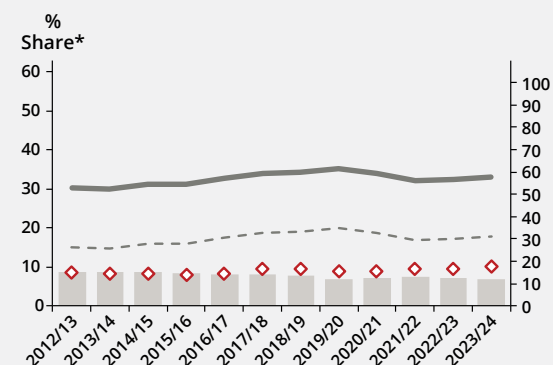
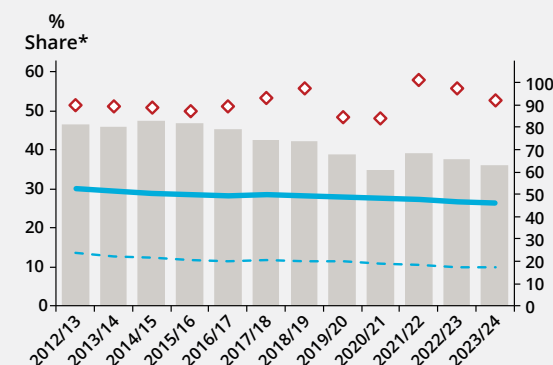


Figure 47: United Kingdom



*Note: Solid lines (—) show the aggregate tax burdens, while dashed lines (---) indicate the excise tax burdens. Overall and excise tax burdens are both calculated as a percentage of WARSPs.

Sources: National Treasury of South Africa, TRA, CRA, HMRC, ATO, MRA, Oxford Economics Africa

burden among the comparator countries, the island's excise burden on the beverage has eased to 33.2% of WARSP in 2023/24, from 43.6% of WARSP in 2012/13. Likewise, the UK's excise burden on beer has waned to 10.1% of WARSP, from 13.8% of WARSP, and Australia's to 11.8% of beer retail prices, from 13.6% of WARSP, over the same period. These countries' excise burdens on beer may continue to diminish going forward, which should reduce cost pressures on producers and improve affordability for final consumers. Conversely, South Africa's advancing excise tax burden on beer will continue to diverge from the government's targeted 23% guideline if above-inflation duty escalations are not reined in (refer to **Chapter 4**).

The second finding pertains to South Africa's overall tax burden on beer in excise duties plus VAT compared to the benchmark countries. Similar to excise tax growth, South Africa's overall tax burden on beer expanded faster than the comparator states in absolute, local currency terms. Between 2012/13 and 2023/24, South Africa's overall tax burden has increased by an average annual rate of 7.3% (or 116.5% in total), notably higher than the 4.7% CAGR (or 65.5% in total) experienced in Mauritius and 2.5% CAGR (or 32.0% in total) on average in the remaining benchmark countries.

The faster growth in South Africa's overall tax burden relative to the benchmark countries has been driven by persistent above-inflation duty escalations and a 1.0 ppt increase in the VAT rate. This, in turn, has seen South Africa's overall tax burden increase to 37.8% of the WARSP in 2023/24 (refer to **Chapter 4**). Tanzania is the only other benchmark country aside from South Africa with a higher overall tax burden on beer in 2023/24 (30.1% of WARSP) than in 2012/13 (27.2% of WARSP). Still, Tanzania's most recent beer burden is below the high it endured in 2019/20 (32.2% of WARSP). Since 2012/13, Mauritius's aggregate tax burden on beer has declined by 10.3 ppts to 46.3% of WARSP, the UK's by 3.7 ppts to 26.8% of WARSP, Australia's by 1.9 ppts to 20.9% of WARSP, and Canada's by 0.6 ppt to 9.6% of WARSP in 2023/24.

Moreover, even though the gap between South Africa's excise and overall tax burden is still the fourth widest among the countries, this differential has expanded since 2012/13 in average annual and absolute growth terms. In particular, the spread between South Africa's excise and overall tax burden on beer has broadened by 6.2% between 2012/13 and 2023/24 (0.5% CAGR), while the related differentials in the comparator countries have remained constant. The implications are twofold: firstly, above-inflation excise duty escalations on beer in South Africa in the absence of retrospective corrections are hampering producers, and secondly, alongside a widening VAT differential, adversely affecting consumers of the beverage, which hurts poor households the most (refer to **Chapter 2**).

The third inference involves the impact of South Africa's excise and overall tax burdens on beer on its excise revenues in comparison to the benchmark countries. South Africa's fiscal income from beer has responded fairly well since 2012/13, despite above-inflation increases in excise duties relative to the benchmark countries (refer to **Section 5.1**). Even so, the responsiveness of South Africa's total excise receipts to the level of duties imposed has weakened over the same period (refer to **Section 5.2**). A corresponding pattern emerges when South Africa and the benchmark countries' excise revenues are expressed in terms of PPP\$ to enable comparisons by accounting for variations in currencies, prices, wellbeing, and purchasing power of money.

South Africa's excise revenues from beer per adult have performed comparatively well in PPP\$ terms versus the benchmark countries. Between 2012/13 and 2023/24, excise revenues per capita from beer consumers increased by a CAGR of 4.0% in South Africa in PPP\$ terms, which is 0.8 ppt above the CAGR of 3.2% recorded for Mauritius and double the CAGR of 2.0% in Tanzania. In PPP\$ terms, per capita excise receipts from beer rose by a mere 0.2% p.a. on average in the UK, while this fiscal income stream contracted by 0.2% p.a. per capita in both Australia and Canada.

In 2022/23, however, excise revenues in South Africa from per capita beer consumption dwindled, declining by 1.1% in PPP\$ terms and lifting by a meagre 0.7% per capita in local currency terms. This reinforces the finding that a tipping point could be reached soon, as the cost burden of unpredictable, persistent above-inflation excise duty escalations in addition to VAT may be key drivers behind slowing growth in nominal excise revenues from beer more recently. While the extent of increases in excise duties places more pressure on beer production expenses, the overall tax burden in excise plus VAT adversely affects spending behaviours through reduced affordability. Even though beer consumption volumes in litres and per LAA have been declining steadily since 2012/13 in South Africa and in the benchmark countries (other than Mauritius), the extent of excise duty escalations in South Africa above CPI inflation outcomes without ex-post corrections, in addition to VAT, may begin to affect fiscal revenue collections from beer negatively.

The final reflection concerns the proportional impact of overall tax burdens in South Africa and the benchmark countries on beer consumption. All countries aside from Mauritius have experienced declining beer consumption levels per adult since 2012/13. These drinking patterns have, however, varied in relation to the overall tax burdens on beer among the benchmark countries. In South Africa, the rising overall tax burden and retail prices has contributed to an average decline of 0.8% p.a. (or -8.7% overall) in beer consumption per adult to 74.8 litres in 2023/24, from 82.0 litres in 2012/13.

A similar trend emerged in Tanzania, where the gradual increase in the overall tax burden on beer, despite below-inflation duty escalations, has, on average, assisted a 2.0% p.a. decline in beer consumption per capita since 2012/13. However, a sharp reduction in Tanzania's tax burden since 2019/20 still corresponded with a decline in per capita beer consumption. Notably, in the advanced economies of Australia, Canada, and the UK, beer consumption per adult contracted by a combined average of 2.0% p.a. (or -19.2% in total) to 63.7 litres in 2023/24, from 80.1 litres in 2012/13, even as the overall burdens in these countries on beer have progressively declined over the same period.

These findings suggest that the benchmark countries are attaining their health objectives to reduce excessive alcohol use while their overall tax burdens on beer have declined at the same time, their imposition of duties has been at levels below inflation outcomes on average, and their nominal excise revenues from beer have grown. It demonstrates that South Africa's mounting overall tax burden and above-inflation excise levies on beer may not be the primary mechanism to reduce excessive alcohol use, especially given the recent weaker growth rates recorded in aggregate and per capita excise revenue collections from beer.

5.3.1 RECOMMENDATIONS FOR EXCISE DUTIES ON BEER IN SOUTH AFRICA

In light of the findings throughout this study, the South African government can consider adjusting its excise regime on beer to better support the excise principles that it purports, interactions that beer producers and consumers have with the broader macroeconomy, and the long-term sustainability of fiscal excise receipts from beer. This entails moving from a guideline-targeted beer taxation regime to a structured framework governing excise duties for beer in order to promote more predictable excise taxes, especially in periods of high inflation.

Tax certainty and the associated market outcomes on the supply and demand sides of the economy can be significantly improved by automatically indexing excise duties on beer to actual inflation outcomes of the previous fiscal year in order to maintain neutral real excise duties and alleviate the unpredictability of excise taxes for producers. This framework should also be implemented given broader economic conditions, meaning that increases in excise duties on beer can be kept below inflation when price pressures are high and subsequently be raised by greater degrees to maintain duty neutrality. It would further safeguard the excise and overall tax burdens around the official government targets.

An alternative but less conducive consideration is to raise excise duties to the same degree as projected inflation for a given fiscal year (as was the case before to 2003/04) but to correct subsequent increases in excise duties if anticipated price pressures fail to correspond with realised, ex-post inflation outcomes. Additionally, adjusting excise duties to projected retail prices for beer should be avoided, since this practice can influence higher inflation expectations. These price expectations, in turn, risk becoming a self-fulfilling prophecy as higher retail prices beget higher duties, creating a negative feedback loop where elevated inflation feeds further price accelerations to the detriment of the South African economy. Retail prices and/or inflation-plus duty escalations would cause further deviations from the current targeted tax burden on the consumption of beer (National Treasury, 2014).





6. CONCLUSION

This report analysed the evolution of South Africa's excise regime on beer and the performance thereof since 2012/13 within domestic inflationary circumstances, in relation to the government's tax burden targets, and against key global counterparts. In doing so, the adverse impact of unpredictable excise taxes on beer producers and consumers within high-inflation environments were assessed, while South Africa's duties, excise revenues, and overall tax burdens on beer were evaluated and benchmarked to a selection of international comparator countries.

Specifically, the effects of inflation on the demand and supply of excisable alcoholic goods in South Africa were unpacked in respect of beer producers and consumers, excise duties, and household disposable incomes and spending patterns. Interactions between taxes, inflation, and economic growth in high-inflationary environments were also reviewed within the country's macroeconomic circumstances, complemented by an analysis of South Africa's excise tax buoyancy and consumer PED for beer.

This background was reinforced by contextualising South Africa's fiscal receipts from excisable products and the evolution of beer excise duties since 1994/95. The responsiveness of beer excise revenues and consumption trends to above-inflation excise duty escalations were tested in addition to evaluating the country's tax burden on beer in view of the government's targeted guidelines. South Africa's excise regime, duties, revenues, and tax burdens on beer were also benchmarked to those of Australia, Canada, Mauritius, Tanzania, and the UK to assess the impact of duty escalations further.

Overall, the following findings emerged from the study:

1. EXCISE PAYMENTS BY BEER PRODUCERS ARE RESPONSIVE TO ECONOMIC CONDITIONS

South Africa's excise receipts from beer are more vulnerable to changes in economic growth versus overall tax and total excise tax collections. The average buoyancy ratio of 1.8, barring the distortive impact of the lockdown restrictions, suggests that for every 1% increase in economic growth, excise tax receipts on beer rise by an average of 1.8%. In 2023/24, however, real excise buoyancy turned negative, which indicates that sharp increases in excise duties during periods of high inflation and weak economic growth can dampen consumption, productive potential, and fiscal receipts.

2. CONSUMERS CONTINUE TO BE INCREASINGLY SENSITIVE TO CHANGES IN BEER PRICES

Excise duties, along with VAT, are transferred to consumers through higher retail prices by raising producer expenses and accelerating market inflation. A 500ml bottle of beer more than doubled in both price and taxes over the past decade. Moreover, CPI inflation has outpaced real wage growth, weakening consumer spending power on beer, with rising prices and increased excise duties further straining consumer budgets. Beer consumption increased by a mere 0.8% p.a. on average between 2012/13 and 2023/24, excluding the effects of the lockdown restrictions. Over the same timeframe, the PED for beer is estimated

to be -0.88 after controlling for income levels and inflation, indicating that a 1% increase in beer prices above inflation results in a 0.9% decline in demand. This underscores the complex interplay between excise duties, inflation, and consumer behaviour, besides the unintended consequences of undue tax and price increases when inflation is high.

3. ABOVE-INFLATION ADJUSTMENTS IN EXCISE DUTIES HAVE PERSISTED RELENTLESSLY

Over the past 13 fiscal years, the government has increased excise duties on beer significantly beyond projected and actual inflation outcomes on 11 occasions without any ex-post corrections if realised price pressures were lower. In contrast, most benchmark countries have allowed an erosion in real duties through adjustments below prevailing price pressures. The South African government's manual excise adjustments to beer duties in anticipation of foreseen CPI inflation and/or retail prices have created considerable uncertainty and expense pressures for beer producers, while raising prices for consumers already struggling with high costs of living.

4. TAX BURDEN ON BEER CONTINUES TO DIVERGE FROM THE GOVERNMENT'S TARGETS

South Africa's overall and excise tax burdens on beer has risen acutely and remains above the National Treasury's targeted guidelines. The overall tax burden on beer in excise duties plus VAT has climbed from a low of 32.0% of WARSP in 2015/16 to 37.8% of retail prices in 2023/24, which is 2.8 ppts above the government's previous overall target of 35.0% of WARSP due to sustained above-inflation duty increases and higher VAT. Similarly, adjustments to excise duties have raised the excise tax burden on beer from a low of 19.8% of WARSP in 2015/16 to 24.8% of average retail prices in 2023/24, which is 1.8 ppts above the National Treasury's current target of 23% of WARSP.

This trend raises concerns about the impact of excise taxes on beer producers and consumers in a high-inflationary environment, while the sensitivity of excise receipts from beer for the government has also been reduced below potential as observed more recently. As a result, the principle of maintaining the overall tax burden has been negated amid several excise duty escalations on beer that have persisted above projected and actual inflation outcomes, as well as retail price increases.

Additionally, South Africa's excise and overall tax burdens on beer have been significantly higher than those of Australia, Canada, Tanzania, and the UK, while Mauritius's beer tax burden has declined from previous highs. Australia, Canada, and the UK have also moderated their beer tax burdens by keeping increases in beer duties at or below realised inflation. In contrast, South Africa's excise and overall tax burdens have expanded much faster compared to the benchmark countries. Moreover, despite having distinct excise regimes, excise receipts from beer have grown in the benchmark countries, even as the real value of their beer duties and tax burdens have diminished over time.

5. DISPROPORTIONATE AND RISING RELIANCE ON EXCISE COLLECTIONS FROM BEER

Excise taxes comprise around 38.0% in total expenses by beer producers, and the South African government is exceptionally reliant on these duties in total excise receipts and compared to the benchmark countries. Excise revenues from beer increased by 159.0% between 2012/13 and 2023/24, surpassing excisable receipts from all other product categories to account for 34.7% of total excise receipts versus an average of 9.4% in the comparator countries.

6. EXCISE REVENUES ARE BECOMING LESS RESPONSIVE TO THE LEVEL OF BEER DUTIES

The persistence of above-inflation increases in duties has started to show diminishing returns, where excise revenues are becoming progressively less responsive to the degree of duty escalations, including relative to the benchmark countries. South Africa may reach an inflection point in the near future where the cost burden of unpredictable duty increases on beer stifle industry growth, diminish excise revenue collection potential, and exacerbate socio-economic challenges.

7) BALANCING THE BRUNT OF THE BURDEN

The South African government should strive to limit deviations from the excise burden target and consider adjusting its excise regime on beer to better support the excise principles that it purports, interactions that beer producers and consumers have with the broader economy, and the long-term sustainability of fiscal excise receipts from beer. This can be achieved by moving from a guideline-targeted beer taxation regime to a structured framework for governing beer excise duty escalations in order to promote more predictable excise taxes, especially in periods of high inflation.

Market certainty on the supply and demand sides of the economy can be enhanced by automatically indexing excise duties on beer to inflation outcomes of the previous fiscal year as opposed to manual adjustments in response to projected inflation or anticipated retail prices for beer. This framework should also be implemented given broader macroeconomic conditions, meaning that increases in excise duties on beer be kept below inflation when price pressures are high and subsequently be corrected to maintain duty neutrality. An alternative, albeit less conducive, consideration is to raise excise duties in accordance with projected inflation, but to correct ensuing increases in duties if anticipated price pressures are not realised in practice.



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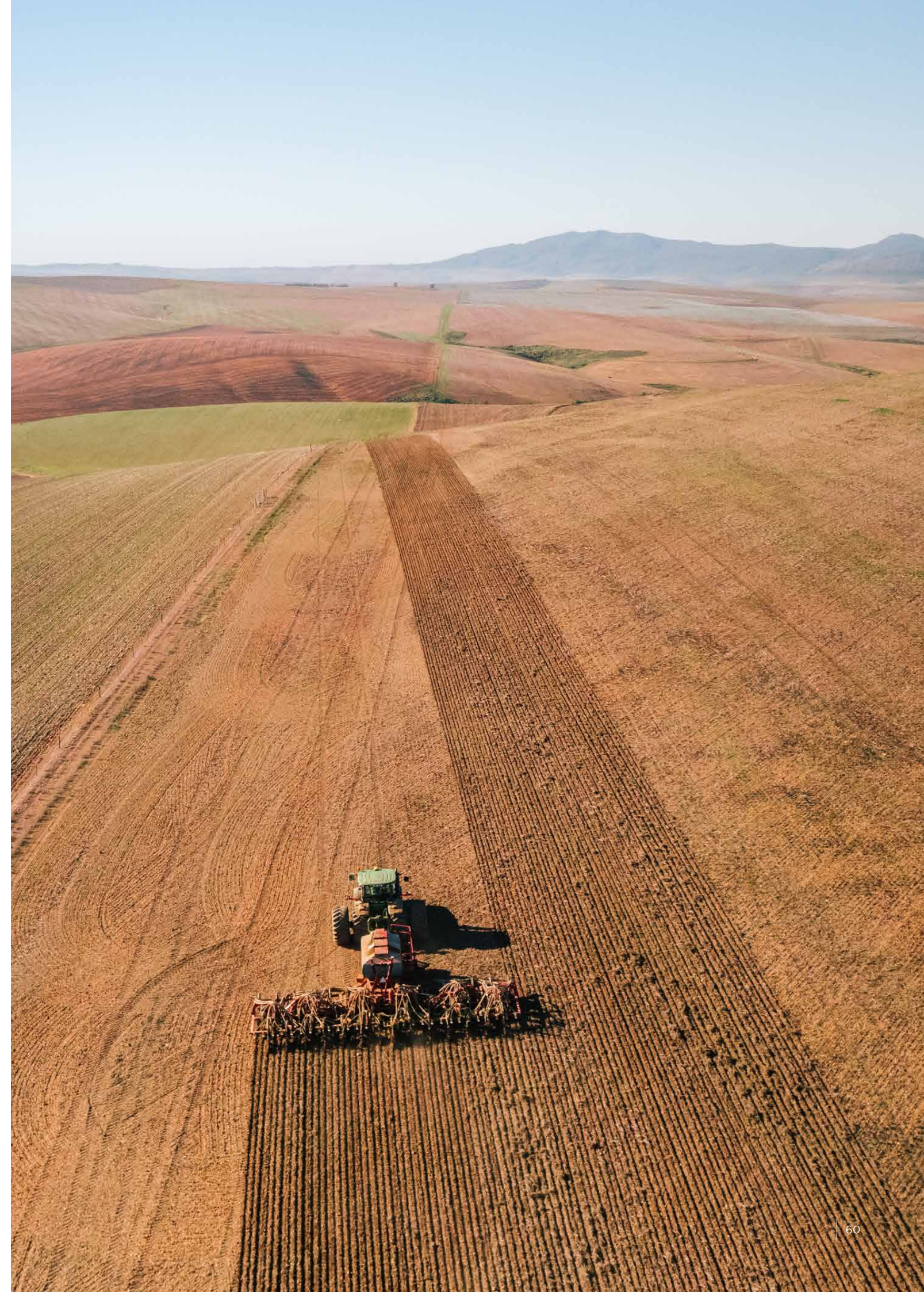
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