Title
Win(e)d up about beer – is the fizz worth the fuss?

I want to submit an abstract for:
Conference Presentation

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Keywords
South Africa; wine; beer; demand elasticity; macro-economics

Research Question
COVID and Russia’s war in Ukraine have impacted negatively on the SA wine industry, but the consequences of changing consumption trends in the presence of beer have not been investigated.

Methods
BFAP’s PE model will be employed. The wine model is a tool within a range of different analytical and forecasting options to provide quantitative simulations and evidence-based support to policy.

Results
Basic wines will be more affected than premium wines
Lower income consumers will switch to beer
Wine sales will decline by 12.5% by volume
More grape growers will exit

Abstract
Introduction
Whilst the impact of the Covid-19 associated lockdown measures on the South African wine industry is well documented and researched, the aftermath, which includes the impact of Russia’s war in Ukraine and the associated slowdown in global growth as governments strive to curb rising inflation, is less clear. South Africans, like many across the globe, have been severely impacted by the sharp increase in inflation and the consequent measures, such as rising interest rates (from November 2021 to January 2023, interest rates in South Africa have been increased with 375 basis points), to bring inflation under control. As a result, consumer incomes are under increasing pressure and adjustments to wine consumption trends are expected.

As we reach the one year mark since the start of the conflict in Ukraine, we reflect on the implications for consumers in South Africa and the rest of the world, and the associated implications for the South African wine industry, which supplies both domestic and international wine consumers. Locally, South Africans are currently experiencing food inflation of 13.4% year-on-year, which is well above the consumer price index (CPI) year-on-year increase of 6.9%. Also incorporated in the latter, amongst others, is increases in the price of electricity (when not hampered by loadshedding), as well as fuel costs and the cost of other imported goods that have been affected by the crude oil price hikes and extreme freight cost increases (BFAP, 2022a). South Africa is categorised as a middle income country with a mean income of R24 574 ($1336.15) per month (Ntsoane, 2023). However, a factor not considered in these measures is unemployment, which is narrowly defined as 33%, while the broader definition brings it to 43% (BFAP, 2022b). Consequently, many South Africans are forced to rethink their portfolio of expenditures. With alcohol theoretically classified as a luxury product (Statistics South Africa [StatsSA], 2017), it would be logical to assume some negative impact over the next couple of years as the global and domestic economies are weathering storms and applying mitigation strategies to recover.

Beer is the most consumed alcoholic beverage in South Africa (SAWIS, 2022). Furthermore, at an average of 5% alcohol for beer and 12% for wine, the per unit of cost of beer, measured as Absolute Alcohol, is lower than that of wine (SAWIS, 2022; Ultra Liquors, 2021).

In this paper, we want to test the implications of the current economic climate on the wine industry of South Africa using a partial equilibrium (PE) market model, which incorporates disaggregated demand functions for different price classes of wine. The extent to which the beer market and relative price expectations therein may influence the demand for lower prices wine will also be considered.

Hypothesis
Whilst the true impact of the higher cost of living is typically more severe for lower income households that for more affluent households, it is necessary to test the impact on both. This is because a shift from premium wine to basic wine by more affluent consumers can mask the shift in demand by lower income consumers who switch from wine to beer.

Consequently, the authors proposed to test two hypothesis in this paper:
1) Limited consumption shift from premium to basic wine, as more affluent consumers are assumed to be less affected by the economic slowdown
2) Considerable shift from basic wine to other, cheaper alcoholic alternatives, such as beer, as these consumers are more cash strapped in the current economic environment and beer is generally more affordable.

Research method
BFAP’s PE model will be employed to assess the impacts of both hypotheses. The wine model is a tool within a range of different analytical and forecasting options to provide quantitative simulations and evidence-based support to policy planning and decision making. This model is built on a dynamic, recursive partial equilibrium framework, based on balance sheet principles to establish equilibrium where total supply (comprising of production, stocks and imports), must equal total demand (comprising of local consumption, ending stock and export) for any given product. Model specification is generally based on well accepted structures and parameter specifications of supply and demand. Parameterisation is based on a combination of econometric estimation and elasticity assumptions. The model is strong in pulling together a combination of econometric estimates and specialist inputs into a consistent simulation structure that will be used to generate a 10-year future view, using
assumptions that are continually updated based on ground-truthing efforts and model refinements. Within the existing modelling framework, refinements will be made to the demand equations to incorporate cross price elasticities with beer.

Expected results
- White wine prices are expected to be influenced to a greater extent than red in the premium category, given that white wine typically has a shorter shelf life due to the lack of barrel preservation.
- Despite the slight decline in premium wine consumption, a much greater impact is projected for basic wine, where consumers are considered more price sensitive.
- Given that beer is cheaper per unit of alcohol than wine, it is estimated that lower income consumers would reduce wine consumption (in the basic wine categories) at the expense of beer.
- Considering per capita consumption of wine is 5.60 litres per annum (SAWIS, 2022), this shift is likely to reduce consumption. If constant per capita consumption and constant population is assumed, a one bottle per capita consumption decrease indicates a loss of over 45 million litres in sales, which is about 12.5% of total domestic sales.
- The volume of total wine sales and consumption globally and in South Africa is projected to decline – affecting both outlets of the South African wine industry.
- Given the current cost of production, the exit rate in the industry will accelerate as a result of the reduced income from wine grape sales.

Implication and conclusions
The implications can broadly be categorised as namely practical, policy, and environmental. From a practical perspective, these outcomes not only affect existing investments at farm and cellar level, but throughout the wine value chain – input suppliers, freight forwarders and marketers. The direct implication of this switch is that government will also lose out on sin taxes, thus influencing income. Lastly, depending on the choices at farm level – replacement of wine grape with other commodities – both water usage and/or the carbon footprint of production on that parcel of land may increase, increasing the environmental pressure.

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² BFAP  
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References


