



**Botswana Institute for  
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*BIDPA Policy Brief No. 14*

# **Consumer Expenditure Inequality in Botswana**

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## CONSUMER EXPENDITURE INEQUALITY IN BOTSWANA

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The Botswana Institute for Development Policy Analysis (BIDPA) is an independent trust, which started operations in 1995 as a non-governmental policy research institute. BIDPA's mission is to inform policy and build capacity through research and consultancy services.

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# 1. INTRODUCTION

For over three decades, Botswana has achieved a fast growing economy, with an annual growth in real Gross Domestic Product (GDP) averaging 10.9 percent in the period 1981-90, faster even than the East Asian Tigers or China (Good and Hughes, 2002). Between 2000 and 2001 financial year, Botswana's economy recorded higher growth rates of 9.1 percent, an increase from 8.1 percent recorded between 1999 and 2000, which was mainly attributed to the growth in the mining sector (BIDPA Briefing, 2002). To emphasise on the desire to continue growing, Botswana has adopted Vision 2036, and other development strategies and policies to improve the implementation of interventions tackling unsatisfactory social indicators. Botswana has also subscribed to both continental and international frameworks, such as the Africa Agenda 2063 and United Nations (UN) Millennium Declaration and its Eight Millennium Development Goals, and further signed up for the UN Sustainable Development Goals (SDGs) of 2030. Regardless of the afore-mentioned positive growth, and immense efforts, the country has not achieved the desirable results it sought with regard to some of the social indicators, such as employment, unemployment, inequality and poverty.

The national unemployment rate was estimated at 17.6 percent in 2015/16 and has increased to about 20.7 percent in 2019 (Statistics Botswana, 2019). The youth labour force increased by 12.7 percent, from 427, 089 in 2015/16 to 481, 441 in the third quarter of 2019, accompanied by an increase of 1.6 percentage points increase in youth unemployment rate, from 25.1 to 26.7 percent. This high level of unemployment maybe due to issues such as the failure of the labour market to respond adequately to an increase in the supply of labour as a result of changes in the demographic profile and skills mismatch, resulting from, among others, the labour force's inability to acquire the necessary training and skills required in the labour market.

Further, despite the recognisable reduction in extreme poverty from 6.4 percent in 2009/10, to 5.8 percent in 2015/16, pockets of poverty still surface, especially in the rural areas. In the rural areas, the average poverty incidence was estimated at 24.2 percent in 2015/16. The poverty level is higher among female-headed households than male-headed households, at 55 percent and 45 percent, respectively. The incidence of poverty is also high amongst children, with that for the children aged 0-4, 5-9 and 10-14 estimated at 16.9 percent, 14.5 percent and 12.3 percent, respectively.

Besides issues of unemployment and poverty, Botswana has recorded high income inequality over the past four decades. The high income Gini Coefficient of 0.666 recorded in 2015/16 puts Botswana as the world's third most unequal country, after South Africa and the Seychelles. Consumption inequality estimates also remain high at 0.522 in 2015/16, a rise from 0.495 in 2009/10 (Statistics Botswana: 2013, 2018; and World Bank, 2015).

The main objective of this brief is to discuss the levels of consumer expenditure inequality in food and non-food components based on the 2015/16 Botswana Multi-Topic Household Survey (BMTHS), and the 2009/10 Core Welfare Indicator Survey (BCWIS). This allows for identification of the components that account for most household consumption expenditure, and also allows for an understanding of how a change in consumption of a particular component affects overall consumption inequality. The latter is particularly useful to evaluate the effectiveness of social policies, such as those of education and health to reduce consumption inequality.

## 2. CONSUMER EXPENDITURE INEQUALITY IN BOTSWANA

Based on the 2009/10 BCWIS, and the BMTHS of 2015/16 data sets, the consumption expenditure Gini coefficient rose from 0.498 to 0.533 (See Table 1).

**Table 1: Inequality Effects by Budget Component**

2009/10 Inequality Effects by Budget Component				2015/16 Inequality Effects by Budget Component		
Component	Contribution To Total Inequality ( $C_k$ )	Component Gini ( $G_k$ )	Relative Marginal Effect	Contribution to Total Inequality ( $C_k$ )	Component Gini ( $G_k$ )	Relative Marginal Effect
Food	0.039	0.421	-0.089	0.005	0.224	-0.098
Alcohol and Tobacco	0.010	0.732	-0.061	0.013	0.880	-0.013
Clothes and Footwear	0.027	0.623	-0.022	0.025	0.652	-0.014
Housing	0.047	0.733	-0.031	0.146	0.864	0.082
Household Goods and Services	0.050	0.793	0.013	0.029	0.831	0.005
Health	0.001	0.987	0.000	0.021	0.864	0.005
Transport	0.180	0.884	0.127	0.161	0.770	0.063
Communication	0.022	0.675	-0.009	0.031	0.631	-0.014
Recreation and Culture	0.034	0.904	0.018	0.018	0.862	0.004
Education	0.003	0.983	0.001	0.026	0.871	0.004
Restaurant and Hotels	0.028	0.992	0.025	0.017	0.796	-0.005
Miscellaneous	0.057	0.808	0.023	0.042	0.749	-0.018
<b>Total</b>	<b>0.498</b>	<b>0.498</b>	<b>0.00</b>	<b>0.533</b>	<b>0.533</b>	<b>0.00</b>

Source: Author's Calculations from the 2009/10 BCWIS and 2015/16 BMTHS

Component Gini<sup>1</sup> coefficients for the two periods are high in non-food items like health, education, transport, and recreation and culture, which implies that there is a high probability that these components are highly unequally distributed compared to other components. This is a policy concern because, for sectors like education and health, Government for a very long time has been providing free (and/or subsidised) education, and health to vulnerable, or low income groups in society. Lower Gini coefficients are observed for food, clothing and footwear, and communication for the two periods. These are commodities that households consider very important to have. The relatively low food's Gini indicates that food expenditures are fairly equally distributed among the population. The contribution of each component ( $C_k$ ) to the total inequality for the two periods is dominated by transport expenditure.

However, these results also show that in 2009/10 amongst those components with lower Gini coefficients ( $G_k$ ), such as food and housing, contributed

more to the total consumption expenditure Gini. On one hand, while health, education, recreation and culture, restaurants and hotels contributed less to the total consumption expenditure Gini coefficient. These results suggest that regardless of the low component Gini total value, commodities such as food and housing cannot be ignored, as they are very important and are a better indicator of inclusive inequality.

Another important factor of these results is the relative marginal effects. The results imply that any increase in the expenditures for transport, recreation and culture, restaurants and hotels, household goods and services, miscellaneous, housing, education and health will increase the Gini consumption inequality. However, a rise in the expenditures of food, alcohol and tobacco, clothing and footwear, and communication will bring a decrease in the Gini of consumption expenditure.

### 3. POSSIBLE IMPACTS OF INEQUALITY

It is clear that inequality is on the increase and remains a development policy challenge in Botswana. This section highlights possible effects of inequality. Research has proven that inequality matters, and has a direct/indirect link to poverty and growth. For instance, Keynes (1936) indicated that “outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes”.

The analysis of the growth-inequality link has a long tradition in the economics literature. Countries have had difficulties in making policy decisions on whether to make the trade-off between reducing inequality and improving growth performance, or whether there exists a virtuous circle in which growth leads to lower inequality, with lower inequality, and in turn, leading to faster growth.

Among others, Francois Bourguignon (2004) suggests that poverty reduction in a given country, at a given point in time is fully determined by the rate of growth of the mean income of the population and the change in the distribution of income. This proves that poverty is very sensitive to distributional changes, thus redistribution is essential for the attainment of the 2030 Agenda for Sustainable Development at national and international levels.

Ravallion (2004) tests the relationship between the growth elasticity of poverty and the initial inequality and suggests that, depending on the initial level of inequality, a 1.0 percent increase in income levels could result in a poverty reduction of as much as 4.3 percent in very low inequality countries or as little as 0.6 percent in high inequality countries. These findings suggest that inequality has a direct/indirect influence on poverty.

Furthermore, higher levels of inequality have been argued to lower the income elasticity of poverty. The emphasis is that, at the initial level, inequality affects

the poverty reducing capacity of growth, as a more equitable distribution of income and assets provides the poor with more means and opportunities to improve their standard of living. Instinctively, the worse the distribution of income, the lower the share of current and additional income going to the poor, and therefore, the smaller the poverty reducing effect of growth (DFID, 2002).

Even though, the link between growth, poverty, and inequality has been under-studied in Botswana, there are some signs that, though growth has been on the rise and contributed very much to the country's development, the rising inequality had counteracted the impact of growth on poverty eradication efforts.

Amongst the few studies, International Poverty Centre (IPC) and BIDPA (2005) found that growth has played a critical role in poverty reduction in Botswana. According to the findings, between 1985/86 and 1993/94, a 1.0 percent growth rate in per-capita consumption led to a reduction of 1.33 percent in the poverty gap and 1.60 percent in the severity of poverty. This implies that over this period economic growth was pro-poor. The study also found that between 1993/94 and 2002/03 this trend was reversed, and the severity of poverty increased, suggesting that the very poor might have suffered a decrease in their standards of living despite the good annual economic growth rate during that period. IPC and BIDPA (2005) also found out that the Gini index of per capita consumption rose from 0.581 in 1985-86 to 0.647 in 2002-03, and concluded that inequality increased, and the benefits of economic growth in Botswana were not shared equally among population groups; economic growth benefited the non-poor proportionally more than it did the poor.

All these discussions and findings emphasise that inequality matters in its own right, and it is key to poverty reduction, and also influences the poverty elasticity of growth<sup>2</sup>.

### 4. CONCLUSIONS AND POLICY IMPLICATIONS

Inequality remains a policy issue as it hurts societies, weakens social cohesion, and hinders the achievement of different development aspirations; for example, Botswana's Vision 2036 and the 2030

UN Agenda for Sustainable Development. Based on the decomposition analysis of the 2009/10 BCWIS and 2015/16 BMTHS, the consumption expenditure Gini coefficient has increased. These results deepen

policy concerns regarding inequality in Botswana, because, consumption expenditure here measures how much people spend on food, shelter, transportation, and other goods and services, which provides a more accurate picture of their circumstances and wellbeing. Thus, tackling inequality remains vital to Botswana's development process in order to achieve better human development. Both economic growth and declining inequality are found to be key drivers, as the economic growth may expand the country's income, while the declining inequality might ensure all individuals have access to this wealth or, equivalently, that nobody is excluded from the benefits of growth.

This brief, therefore, concludes that a fruitful strategy for poverty eradication in Botswana must have, at its core, measures to promote rapid and sustained economic growth and inclusive development. This should combine growth promoting policies that allow the poor to participate fully in the opportunities unleashed and so contribute to that growth. These can include policies that promote labour markets that function better, increase financial inclusion, promote access to better health and education, and the removal of gender inequalities. This can be doubly beneficial for the poor, and the achievement of the domesticated poverty SDG, as well as the objectives of the National Poverty Eradication Strategy.

The brief therefore, also emphasises the importance of knowledge of the effects on non-income dimensions of both poverty and inequality, because the determinants of the high inequality in the country are insufficiently understood. Thus, there is a need for further country-based work on the nature, extent and determinants of various dimensions of inequality, and their effects on different dimensions of poverty.

### ***Key Policy Messages***

Based on the above conclusions, it is essential for policy makers to make sure that comprehensive strategies are created for inclusive development and better wealth distribution:

1. Policies reforming tax and benefits are essential to increase the desired and fair level of redistribution. There might be a need to cut taxes on necessities such as food or basic products and services (or provide for their exemption from the

tax base), in order to increase their expenditures. Further, while both tax and Government cash and non-cash transfers play a critical role, it wouldn't be effective and sustainable to use the two alone as redistributive strategies. Therefore, policy modifications are needed as a supplement to tax-based redistribution, particularly to enable and encourage access to employment, quality education, health, business opportunities, assets and wealth for the under-privileged groups.

2. There is definitely a need for active labour market policies that promote the employment. This should include further investment in education and re-qualification of employees of all ages to facilitate their transition from declining industries to new emerging sectors. These effective policies that invest in the workforce's human capital will also promote up-to-date, better education and training opportunities, to promote the up-skilling, and education for the low-skilled workforce too. These reforms should conform with industries' needs to address the skills mismatches in the labour force.
3. Government also has to promote policies that effectively increase building assets for working families. This includes reinforcement of policies and programmes that encourage higher savings rates and lower the cost of building assets for working and middle class households. This will provide better economic security for struggling and/or vulnerable families as well. Further, in some countries policies that improve access to fair, low-cost financial services and home ownership have been considered as pathways to building wealth, thus reducing inequality.



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## NOTES

$$1 \quad G = \sum_{k=1}^K S_k G_k R_k = \sum_{k=1}^K C_k$$

Where,  $R_k$  is the correlation between expenditures of the  $k^{th}$  component with total expenditures,  $G_k$  is the Gini coefficient for each one of the expenditure components and  $S_k$  is the contribution to total expenses of the  $k^{th}$  component.  $C_k$  on the other hand is the product of the three decomposed elements for the  $k^{th}$  component. The above equation indicates that any change in the variables  $R_k$ ,  $G_k$ , or  $S_k$  will be mirrored by changes of  $C_k$ . The higher the value of one of these components, the more  $C_k$  increases, and the more the expenditure inequality increases

- 2 ***Growth elasticity of poverty*** is the percentage reduction in poverty rates associated with a percentage change in mean (per capita) income.





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