THE IMPACT OF COVID-19 ON HOUSEHOLD CONSUMPTION EXPENDITURE IN SOUTH AFRICA: A MACROECONOMIC PERSPECTIVE

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Abstract:
The study was motivated by how the Coronavirus (Covid-19), potentially, affected household spending in South Africa. This is because, firstly, final consumption expenditure by households accounts for the largest share of Gross Domestic Product (GDP) in South Africa, and therefore is a significant driver for economic growth. Secondly, expenditure by households is often used as a proxy of ascertaining the standard of living. The analysis drew data from the Household and Income and Expenditure Survey (HEIS), focussing on the period between 2010 and 2020. The results show that the Covid-19 pandemic had a negative impact on disposable income growth and spending of households at a macro-level. Coupled with other triggers, the contraction of the local economy resulted in job losses, with the unemployment level rising above 30% since the third quarter of 2020.

Keywords:

INTRODUCTION

Households and individuals alike spend on goods and services to fulfil their basic needs (such as food, clothing, energy, communication, shelter) and wants (entertainment for example). The level of household spending and affordability is mainly affected by disposable income, access to credit, interest rates, level of education and household size, and access to unemployment benefits, among other factors (Ganong & Noel, 2019; Aladangady, 2017; Varlamova & Larionova, 2015). Notwithstanding the importance of saving, expenditure by households is one of the indicators used to measure well-being and wealth of households (Aitken, 2020; Nad’a, Jana, & Veronika, 2015; Herciu & Ogrean, 2015). Notwithstanding the importance of saving, expenditure by households is one of the indicators used to measure well-being and wealth of households (Aitken, 2020; Nad’a, Jana, & Veronika, 2015; Herciu & Ogrean, 2015). In other words, households with sustainable livelihoods and better income opportunities are more likely to be food secure, have access to clean water and better sanitation, and afford specialised health services (Russell, Lechner, Hanich, Delisle, & Karen, 2018).

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Economic theory suggests complementary and divergent views on how income affects decision making on spending (Juhro & Iyke, 2020; Muellbauer, 2016). The Absolute income hypothesis (AIH), also known as the Keynesian consumption function, asserts that consumption spending by households is determined by current income (Bokana & Kabongo, 2018). This view was later modified by the Permanent income hypothesis (PIH). The PIH stipulates that it is more practical for households to consider future expectations of income and risk when making consumption and saving decisions (Friedman, 1957). Friedman (1957) argued that household income can be split into two components: permanent (past and future income) and transitory, which is unexpected additional income (Jorgensen & Druedahl, 2020; Zheng, Xia, Hui, & Zheng, 2018; Ezeji & Ajudua, 2015). It follows that household spending would also depend on the two income components (Fernandez-Corugedo, 2004), though permanent income is a major determinant to consumptions decisions (Fama, 2021; Friedman, 1957).

The third theory, termed the life-cycle hypothesis (LCH) holds the view that individuals consume a consistent percentage of the present value of their income, influenced by earnings and preferences (Chimeri, 2015). The LCH further asserts that consumption (relative to saving) is comparably higher in households that are dominated by young and elderly persons – due to either borrowing against future income or spending savings accumulated overtime, respectively (Rancan, 2019; Ando & Modigliani, 1963; Modigliani & Ando, 1957).

Apart from being a yardstick of a decent standard living and wealth accumulation, expenditure by households is a component of aggregate demand in economy (Dynana & Sheiner, 2018). According to Keynesian economics, increased aggregate demand is likely to increase output (goods and services and products): converting to more income in the economy (Chimeri & Oluwatayo, 2020). The Keynesian view is more relevant in the South African economy since the local economy has not reached full employment (Chimeri & Oluwatayo, 2020; Mohr & Fourie, 2015).

Growth in income, increased profitability for suppliers of goods and services, and increased consumption consequently enhances the tax base from which the government can collect more revenue (Alvarez-Martinez, et al., 2021). In turn, improved profitability by businesses is likely to create more employment opportunities and therefore somewhat extend the personal income tax base (Rezai, Taylor, & Foley, 2018). The conceptual framework below illustrates how consumption expenditure positively contributes to the growth of the local economy. Again, it should be noted that while acknowledging the positive effect of consumption by households on the economy, saving is still an important practice that should be fostered among South Africans (Stanlib, 2020).
Figure 1. Conceptual framework for analysing contribution of consumption expenditure to the economy.

Source: Own illustration adapted from Chimeri and Oluwatayo (2020)

Table 1 shows the biggest contributors to aggregate demand in the South African economy.

Table 1. Expenditure by households and general government in recent years

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Gross Domestic Product (GDP) (R million, current prices)</th>
<th>Final expenditure by households (R million, current prices)</th>
<th>Expenditure by general government (R million, current prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>5 603 696</td>
<td>3 576 750</td>
<td>1 099 018</td>
</tr>
<tr>
<td>2020</td>
<td>5 525 410</td>
<td>3 437 068</td>
<td>1 140 111</td>
</tr>
</tbody>
</table>

Source: Own illustration from Quantec EasyData (2021a)

The gross domestic product (GDP) of South Africa was valued at R5.5 trillion in 2020 (at current prices), lower than the GDP in 2019 (valued at R5.6 trillion, in current prices). Final consumption expenditure by households accounted for 64% of the GDP in 2019 and 62% of the GDP in 2020. Expenditure by general government was about 20% of GDP in the last two years, with the residual share of GDP attributable to investment expenditure and net exports. The figure below shows the structure of South African GDP using the expenditure since 1993.
Figure 2. Structure of GDP in South Africa using the expenditure approach.

Figure 2 shows the values of household expenditure, government expenditure and total GDP at current prices. Final consumption expenditure by households has been the largest contributor to aggregate demand, accounting for more than 60% of the total GDP since the data was recorded and published by Statistics South Africa (Stats SA).

The outbreak of Coronavirus (Covid-19) resulted in the declaration of a national state of disaster by the national government in March 2020, after the first confirmed case was reported on March 5 (IMF, 2021). Despite a number of containment measures introduced with the purpose of slowing down the spread of the virus – encouraging social distancing and school closures etc., the government eventually enacted a nationwide lockdown, effected from midnight March 2020. The lockdown allowed for persons in ‘key’ sectors and industries (such as health workers, transporters, bankers, food and medicine manufacturers, and retailers) to continue operating in a business-as-usual environment (IMF, 2021). Although a phased lifting of the lockdown began in May 2020, to allow some sectors to operate, the government had employed several mechanisms to limit the spread of different and newly discovered Covid-19 variants (IMF, 2021). It is also important to mention that the government implemented a number of fiscal interventions to lessen the burden of the pandemic on citizens:

- Using of the Unemployment Insurance Fund (UIF) to assist distressed employees
- Implementing special programmes with the Industrial Development Corporation (IDC) to assist affected workers
- Small tax subsidies for workers that earned income below a determined threshold
- Higher social grants provided to the most vulnerable families
- A new Covid-19 temporary grant, offered to unemployed persons who did not receive UIF benefit
- Distributing food parcels
- Funding provided to distressed Small, Medium and Micro Enterprises (SMMEs)
- Government guaranteed loans provided to eligible businesses to assist with operational expenses

Source: Own illustration from Quantec EasyData (2021a)
- Supporting the provision of emergency water supply, sanitation used in public transport, and food and shelter for homeless persons through a special purpose vehicle, known as the solidarity fund, where the private sector and other non-governmental organisations were contributing to
- Fast-tracking reimbursements and tax credits, allowing SMEs to defer some tax liabilities
- Issuing a list of goods deemed essential, for a full rebate of customs duty and import Value Added Tax (VAT) exemption, and
- A four-month skills development levy tax holiday implemented.

According to the IMF (2021), the government, through the Department of Trade, Industry and Corporation (the dtic), also prohibited unfair pricing and limited export control measures of essential goods. In addition, the South African Reserve Bank (SARB) implemented several monetary and macro-financial measures to stimulate economic activity (IMF, 2021). For instance, progressively reducing the repo rate to ensure there is enough (and not too much) liquidity in the economy. Despite the efforts made by government and other role players, the pandemic hugely affected livelihoods of households and businesses that rely on the openness of the economy, due to the lockdown that limited quantum of economic activity (Ataguba, 2020). The pandemic has also put a strain on the ability of South Africa and other developing countries in attaining their Sustainable Development Goals (SDGs) by 2030 (Dong & Truong, 2022; Erokhin & Gao, 2020; Barber, 2020). According to the 2020 Social Progress Index estimates, it is likely that South Africa will achieve its SDG targets until at least 2092 (Trialogue, 2020). However, the lag can be reduced if there is increased effort in the collective impact, requiring at least double the effort from major key stakeholders (the private sector, civil society, not-for-profit organisations, among others).

DATA

The study used data from the Household Income and Expenditure Survey (HIES), extracted from Quantec EasyData (2021b). The analysis was based on real values in order to make a more meaningful assessment. However, the HEIS data from 1993 to 2020 still uses 2010 as the base year. The approach involved analysing growth trends in income, spending and saving of households from 2010, until earliest date where such data is available (2020). The start year, 2010, was chosen because it is the earliest year after South Africa (and the rest of the world) had recovered from one of the most severe and well-known recessions, known as the global financial crisis.

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2 It is always advisable to use real (and not nominal) economic values of time series data for better analysis when determining growth trends, since real values are adjusted for inflation.
3 During 2021, Statistics South Africa changed the base year from 2010 to 2015 in measuring national accounts (Stats SA, 2021a).
4 The idea here is to avoid any major structural breaks and give a better reflection of the trends in economic variables under analysis.
RESULTS AND DISCUSSION

The time period was split into two-time intervals: from 2010 until 2019 (a ten year-period before Covid-19) and from 2019 and 2020 (during Covid-19). In calculating the compounded annual growth rates (CAGRs), the pre-Covid-19 period yields nine intervals, with the latter having one. The following table shows the summary calculations for the CAGRs of the variables of interest.

Table 2. Growth trends in income, consumption and saving by households

<table>
<thead>
<tr>
<th>Time period</th>
<th>Household disposable income</th>
<th>Consumption expenditure by households</th>
<th>Saving by households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Covid-19 (2010 to 2019)</td>
<td>2.14%</td>
<td>2.11%</td>
<td>2.13%</td>
</tr>
<tr>
<td>During Covid-19 (2019 to 2020)</td>
<td>-3.64%</td>
<td>-5.43%</td>
<td>52.24%</td>
</tr>
</tbody>
</table>

Source: Own calculations from Quanetc EasyData (2021b)

Table 2 shows that, on average, disposable income of households has grown at a CAGR of about 2%, during the ten-year period before Covid-19. Growth in household spending and savings was similar to the trend of household income growth (2.1%). However, the trend changed between 2019 and 2020. While disposable income contracted by 3.6% at the end of 2020, consumption expenditure also decreased by 5.4%, slightly more than the contraction in disposable income. Interestingly, saving by households grew by more than 50% between 2019 and 2020.

Intuitively, increased saving rates were achievable as a result of either an increase in income (without a proportionate increment in spending), or when a decrease in income is less than the corresponding decrease in spending. As a result, an individual/household will have more money to save. While it is not part of the aims of this paper to investigate the impact on savings by households, it is likely that the commendable growth rate in the savings rate was a result of several factors: such as subsidies and tax reductions and/or holidays, resulting in some individuals/households having more disposable income and possibly channelling part of it into savings.

Further analysis (Table 3) was done to ascertain which types of expenditure groups were most affected during the 2019 to 2020 period. Thus, the table below firstly defines/describes the main expenditure groups in accordance with the Classification of Individual Consumption According to Purpose (COICOP), which is an international system of classifying goods and services based on individual consumption by purpose (Stats SA, 2015).

Table 3. Description of expenditure groups

<table>
<thead>
<tr>
<th>Expenditure groups</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable goods</td>
<td>“Household items that last for a long time, such as kitchen appliances, computers, radios, televisions, cars and furniture, usually acquired once in several years.”</td>
<td>Stats SA (2015, p. 66)</td>
</tr>
<tr>
<td>Semi-durable goods</td>
<td>“Items that last longer than non-durable goods but still need replacing more often than durable goods, for example clothing, shoes and material for clothing.”</td>
<td>Stats SA (2015, p. 67)</td>
</tr>
<tr>
<td>Non-durable goods</td>
<td>“Household items that do not last long, for example food and personal care items. Households usually acquire these items on a daily, weekly or monthly basis.”</td>
<td>Stats SA (2015, p. 67)</td>
</tr>
</tbody>
</table>
While Figure 3 shows the patterns of the main expenditure groups and their respective contribution to final household expenditure, Table 4 shows the individual trends in the expenditure classes.

**Figure 3.** Trends in final consumption expenditure during the 2010 to 2020 period

![Graph showing trends in final consumption expenditure by households from 2010 to 2020.](image)

*Source: Own illustration from Quantec EasyData (2021b)*

As indicated in Figure 3, consumer spending has been on the rise from 2010 until 2019. Between 2010 and 2019, on average, 44% of consumer spending was allocated towards services. Expenditure on non-durable items was the second-largest contributor to consumer spending (37%), while there was a fairly even split between durable (10%) and semi-durable goods (9%). Despite consumption spending declining in 2020, the composition of consumption spending remained unchanged (in 2020).

Table 4 depicts the sparklines that demonstrate trends for the individual expenditure items between 2010 and 2020. This is to show how spending in each expenditure class grew over the years. Although spending on durable goods was more volatile compared to the other categories, consumption spending in all segments reached its highest level in 2019 before dropping in 2020 – similar to the finding shown in Figure 3, at aggregate level.

**Table 4.** Individual expenditure group trends during the ten-year period

<table>
<thead>
<tr>
<th>Expenditure group</th>
<th>Trend*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durable_goods</td>
<td><img src="image" alt="Graph of Durable_goods trend" /></td>
</tr>
<tr>
<td>Semi-durable_goods</td>
<td><img src="image" alt="Graph of Semi-durable_goods trend" /></td>
</tr>
<tr>
<td>Non-durable_goods</td>
<td><img src="image" alt="Graph of Non-durable_goods trend" /></td>
</tr>
<tr>
<td>Services</td>
<td><img src="image" alt="Graph of Services trend" /></td>
</tr>
</tbody>
</table>

*Source: Own illustration from Quantec EasyData (2021b)*

*Note: The black marker denotes the highest point (maximum value) in each trend/sparkline.*
According to the conceptual framework, it is possible that suppliers of goods and services at an aggregate (industry) level faced a negative demand shock. Further, it is plausible to suggest that the (negative) demand shock was the major contributor to reduced income growth for businesses and households and consequently a reduction in the tax base. As a result, coupled with other multiplier effects, this led to reduced profitability, salary cuts, and job losses in cases where jobs could not be retained by salary cuts only (Ranchhod & Daniels, 2021). Unemployment, poverty, and inequality are some of the key concerns that the democratic government is striving to address (NPC, 2012). The official unemployment rate has been at least 24% and below 30% since 2010 and at the last quarter of 2019 (Stats SA, 2021b). However, the unemployment rate has consistently stayed above 30% since the third quarter of 2020, reaching 34.4% at the second quarter of 2021 (Stats SA, 2021b) – showing higher levels of unemployment in the history of South Africa.

Apart from the direct negative effects, the recent pandemic has also worsened socio-economic statuses of poor and marginalised people in South Africa. For instance, females employed in informal and labour-intensive sectors are more likely to work fewer hours and are paid less compared to their male counterparts – implying vulnerability and less job security for women (Chitiga, Hensler, Mabungu, & Maisonnnave, 2021; Kikuchi, Kitao, & Mikoshiba, 2021). The welfare and livelihoods of women with no job security were more likely to be harshly impacted due to disruptions in the sectors that employ/empower them, notwithstanding worsening the gender inequality gap that already existed before the pandemic (Chitiga, Hensler, Mabungu, & Maisonnnave, 2021). Poverty and inequality are expected to increase in female-headed households, at least in the short-term, with the possibly of worsening for households that are not supported by the safety net.

CONCLUSION AND RECOMMENDATIONS

This paper investigates the impact of Covid-19 on household consumption in South Africa, by analysing and comparing consumption patterns of households in two periods: before the emergence of the pandemic (from 2010 to 2019) and in 2020 when South Africa and the rest of the world were exposed to Covid-19. The interest on consumption expenditure is as a result of households’ spending being a major contributor to the GDP of South Africa’s economy, and thus being a key determinant of economic growth of the local economy.

The analysis shows that real disposable income and spending by households declined in 2020, where the decline was more than the average growth in income (and spending) between 2010 and 2019. Despite the government and other key players (such as the SARB) providing safety nets and easing liquidity, respectively, the GDP declined in 2020. The decline in economic activity coupled with other triggers have driven the official unemployment rate above 30% since the third quarter of 2020. Considering the slowdown in economic activity, salary cuts, rising unemployment and contraction of the tax base, challenges of poverty and inequality are likely to worsen, at least in the short-term, making it impractical to achieve some of the SDGs by 2030 – unless efforts are at least doubled to offset to negative outcomes that have been realised.

While the South African government has a budget for the safety net as part of its national priorities, a clear thought process should be followed on how the government can continue to fund its projects without increasing the tax burden on its citizens, as this may further worsen the inequality situation. It is interesting to see how households will adjust spending and saving decisions in the medium to long-term, considering the effect of the pandemic on current income, future expectations and stock of wealth held by households.
Lastly, the paper recommends at least two areas for further research. Firstly, since the paper was based on highly aggregated data, we suggest a similar study to be undertaken by comparing spending by households according to their living standards – perhaps using the widely used ten Living Standard Measure (LSM) groups, or across different age groups or races. Secondly, it is worthwhile analysing the impact of Covid-19 on household saving, and further explore other aspects such as wealth accumulation.

REFERENCES


UTICAJ COVID-19 NA POTROŠNJU DOMAČINSTAVA U JUŽNOJ AFRICI: MAKROEKONOMSKA PERSPEKTIVA

Rezime:

Ključne reči: