

Occasional Analytical Note

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Explaining Inflation Differentials between Lesotho and South Africa

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1. Introduction

The COVID-19 pandemic and the consequent containment measures such as mobility restrictions, lockdowns and social-distancing regulations, have led to undeniable changes in consumer expenditure patterns in almost any country. For example, consumers spent less on transport, recreation, hotels and restaurants as these non-essential services were almost shut down while they spent more on food, due to no-restrictions on essentials as stipulated in COVID-19 rules since March 2020. The changing consumer spending patterns have implications for the measurement of such economic indicators such as inflation, inter alia. Therefore, if the expenditure patterns are not taken into account as COVID-19 and its containment measures unfold, inflation figures would be difficult to interpret and this could have serious repercussions for the conduct of monetary policy for most countries.

2. Context

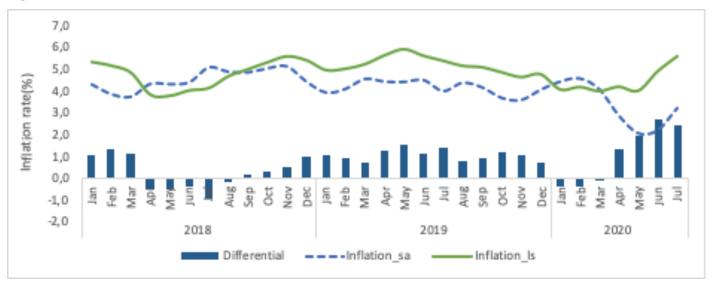
The primary goal of the Central Bank of Lesotho (CBL) is to achieve and maintain price stability as stipulated in section 5 of the CBL Act 2000. The CBL achieves price stability by ensuring the peg between Loti and South African Rand through maintaining adequate Net International Reserves (NIR). Since Lesotho has pegged its currency to that of South Africa (SA) and they are in a monetary union, it imports inflation from the latter. While inflation differentials are a normal phenomenon in a currency union, any persistent deviation of the inflation rates between the two counties may be

detrimental as it would lead to loss of external competitiveness and can create internal imbalances. Since March 2020, inflation rate in Lesotho slightly increased or remained constant while that of South Africa fell. The divergence, if sustained, may create problems for the conduct of economic policy in Lesotho but little is known about whether the demand and supply shocks that have affected inflation in both countries are persistent or temporary. Understanding the cause of the differentials is key to informing economic policy.

3. Developments in inflation differentials between Lesotho and South Africa

Figure 1 below depicts the evolution of inflation rates between Lesotho and South Africa from January 2018 to July 2020. The bars represent the gap between inflation rates in both countries. Overall, the figure shows that Lesotho's inflation rate had mostly been increasing faster than that of South Africa. Nonetheless, the latter's rate surpassed that of the former in the second guarter of 2018 and over most of the third quarter of the same year. Again, the first quarter of 2020 was characterised by SA inflation rate surpassing that of: Lesotho. From the first quarter of 2018 to the first quarter of 2020, the inflation differentials averaged 0.6 percentage points. Nonetheless, the percentage points difference widened to an average of 2.1 per cent in the second guarter of 2020, the period when COVID-19 intensified its grip on the global economy.

Figure 1: Evolution of inflation rates in Lesotho and South Africa

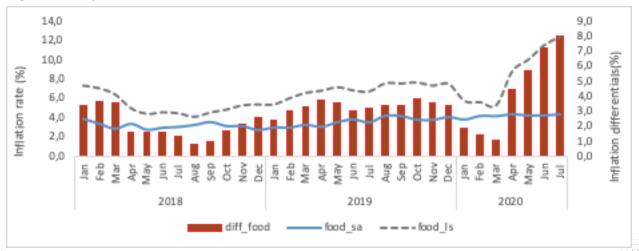


Source: BOS and STATSA

During the review period, average inflation for the duo has been 4.5 per cent, the center of the inflation target range of the South Africa Reserve. As Figure 1 above depicts, the extent of the inflation differentials has been quite below this average. As such, this may be regarded as the indication of the temporary nature of the inflation deviations from each other. This is so despite the fact that Lesotho's inflation rate has been consistently higher than of SA in 2019. Nonetheless, robust econometric methodologies can shed light on the extent to which the inflation gap between the two countries is temporary or persistent. The inflation differentials between Lesotho and SA is not only observed in the overall

CPI inflation, but also in its sub-indices. Most notably is the gap between food inflation in both countries as shown in figure 2 below. It should be noted that food inflation share in the overall index is 36.1 per cent in Lesotho while it is 17.2 per cent in SA. The gap has been consistently been positive during the review period, indicating that Lesotho's food inflation rate rose faster than that of SA. The figure depicts that the gap between the food inflation rates in both countries is mainly (largely) driven by developments in that of Lesotho. In fact, the correlation between the gap and Lesotho's food inflation rate is 0.97, while it is 0.49 for SA rate and the gap .

Figure 2: Gap between food inflation in Lesotho and South Africa

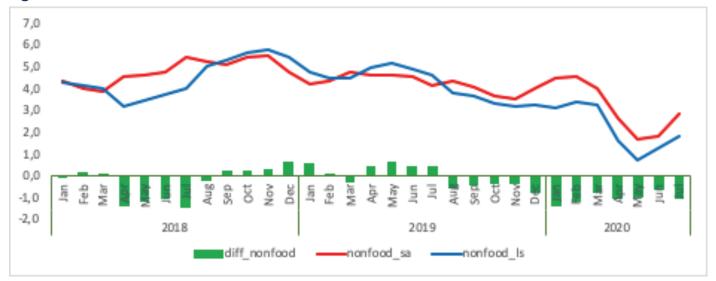


Source: BOS & STATSA

Nonetheless, the gap is not as large as that of food inflation when non-food inflation is considered in the two countries as shown in figure 3 below. The differentials observed below shows that since August 2019 to July

2020, Lesotho non-food was slower than that of SA. The non-food component in Lesotho constitutes 63.9 per cent while it is 82.8 per recent in SA.

Figure 3: Evolution of nonfood inflation in Lesotho and South Africa



Source: BOS & STATSA

It should be noted that Lesotho's inflation rate is mostly driven by food inflation while that of SA is driven largely by non-food component (Appendix 1). This emanates from the weights assigned to some of the sub-indices in the non-food component in the respective countries as shown in table 1 below. For example, share of the consumers' expenditure in the representative basket of goods and services

in Lesotho is 4 times that of SA in clothing & footwear, while for hosing and utilities SA is two times larger than Lesotho. Moreover, SA relies more on transport (3 times larger) than Lesotho. This shows that goods inflation is the major driver of Lesotho's inflation more than services inflation, as services' share is only 20.0 percent in Lesotho while services share in

Table 1: CPI basket weights for Lesotho and South Africa (percentages)

| CPI components | Lesotho | South Africa |
|----------------------------------|---------|--------------|
| Food and non-alcoholic beverages | 36.1 | 17.2 |
| Alcoholic beverages and tobacco | 3.3 | 5.8 |
| Clothing and footwear | 13.1 | 3.8 |
| Housing and utilities | 12.4 | 24.6 |
| Household contents and equipment | 8.5 | 4.4 |
| Health | 1.5 | 1.4 |
| Transport | 4.8 | 14.3 |
| Communication | 2.1 | 2.6 |
| Recreation and culture | 5.7 | 5.2 |
| Education | 4.2 | 2.5 |
| Restaurants and hotels | 1.0 | 3.1 |
| Miscellaneous goods and services | 7.3 | 15.1 |

Source: BOS & STATSA

4. Possible sources of inflation differential in Lesotho and South Africa

While patterns of inflation differentials have been observed during the review period in this note, the underlying factors that have caused them are myriad especially in a currency union like that of Lesotho and SA. These range from the underlying differences in the long-lasting national economic structures, policyinduced factors and changing consumption expenditure patterns (which may be either temporary or permanent).

In this regard, it should be noted that one of the possible sources of the recent inflation differentials between Lesotho and South Africa is the variation in households' consumption expenditure patterns, induced by the recent COVID-19 lockdown in these two countries. Sudden and profound changes in consumption expenditure can introduce the bias in the consumer price index that is used to measure inflation in both countries. The CPI is compiled on the basis of expenditure weights that are kept constant for a year or at most five years in some countries. This practice is reasonable in normal times but falls off in times like this of the COVID-19 pandemic, which had severely affected the consumer expenditure patterns.

For South Africa, there have been changes to the collection and compilation of the CPI resulting from the COVID-19 lockdown starting from April 2020, while nothing has been done on the side of Lesotho. Special imputation methods have been used for South Africa to account for the absence of consumer expenditure of certain basket of items. In

some cases, there has been online while the in-store collections continued for some items as lockdown restrictions were lifted in May 2020. This weighting bias can distort the inflation figures as documented above by the size of inflation rates differentials in CPI components in the face of common shocks to both demand and supply.

First, the demand for food and essential goods and services rose during the time of COVID-19 mobility restrictions and lockdown in both countries, thus leading to the increase in price. The share of food component in CPI in Lesotho is 36.1 per cent, almost twice that of South Africa. Thus, the contribution to the overall inflation of this category in Lesotho was three times that of the food in South Africa. This then has led to the high inflation, and more so for Lesotho relative South Africa.

Second, the price of oil fell significantly as demand for oil plummeted due to COVID-19 rules across the globe. The weight of energy in South Africa's consumption basket is higher than that of Lesotho. For example, the weight of fuels and lubricants as well as well as other energy components is higher for South Africa relative to Lesotho. In the face of the negative shock in oil price, the magnitude of the decline will be significant for South Africa than Lesotho. Thus while high food prices contributed to the rise in inflation in both countries, the larger magnitude of the fall in energy prices in South Africa has led to wide differentials between the two inflation rates. This is why for May 2020, the inflation rate in Lesotho is twice that of South Africa. As to whether this differential will be temporary

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or permanent depends on how long the

COVID-19 lasts.

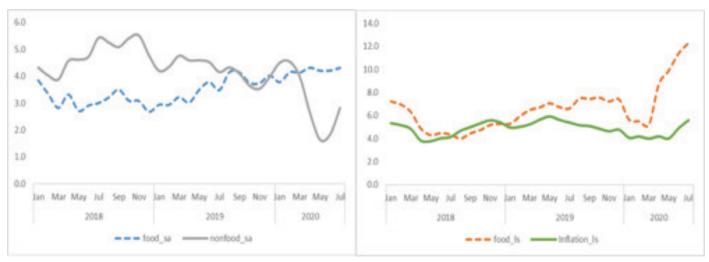
5. Conclusion

Despite the common shocks (demand supply) to both Lesotho and South Africa, differences in the CPI weights and methodologies used to compile the CPI data especially during these uncertain times of COVID-19, can lead to divergence in the inflation rates. If these differentials persist, there may be serious repercussions for the economy of Lesotho as any country in a currency union whose

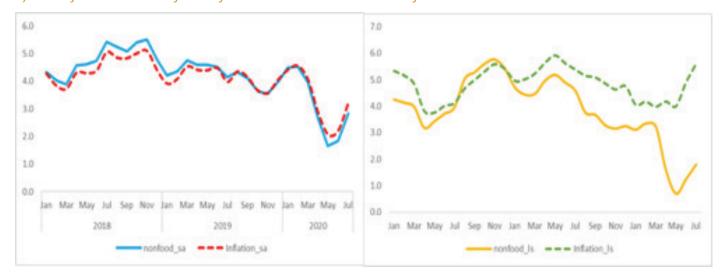
inflation is persistently high will be out of business due to the loss in international competitiveness. While the persistence of these effects is yet to be seen, the changes in consumer spending patterns during the few months of the COVID-19 pandemic have already produced significant differences in inflation dynamics for countries in monetary or currency unions.

Appendix 1: Other CPI components for Lesotho and South Africa

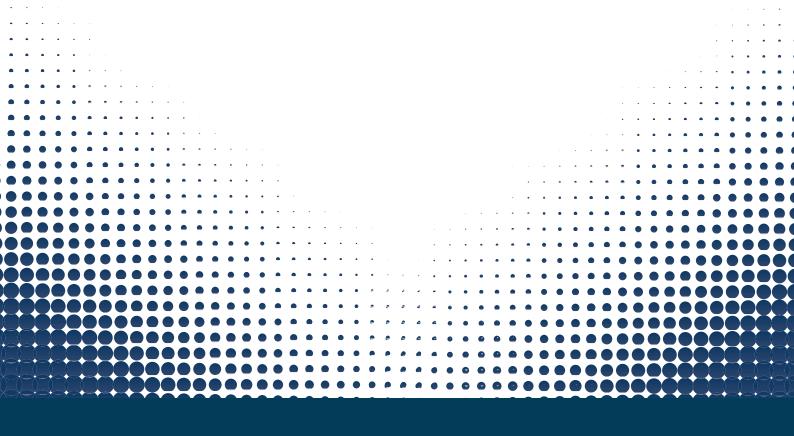
a). CPI Inflation and food inflation in Lesotho and South Africa



b). CPI inflation and non-food inflation in Lesotho and South Africa







Central Bank of Lesotho, Corner Moshoeshoe and Airport Roads, MASERU 100