Ebola Virus Disease (EVD) Outbreak and Price Dynamics in Guinea, Liberia and Sierra Leone

Ebola, through its impact on prices, is reducing people’s purchasing power and is increasing their vulnerability

Containing the EVD in Guinea, Liberia and Sierra Leone still remains a serious concern. The total number of confirmed cases was 11,428, with Liberia accounting for more than half of the cases, Sierra Leone, one third, and Guinea, just above one tenth – as of 27 October 2014. Figure 1 provides the breakdown of cases, deaths and fatalities. The average fatality rate is around 41.6 percent (compared to 70 percent of infected people three months ago); it is highest in Guinea, at around 57.4 percent. The fatality rate among health workers is highest in Sierra Leone (79.5 percent) and lowest in Guinea (53.1 percent), which calls for an urgent need to ensure that they are adequately protected against the disease. There is evidence that the rate of infection has started to decline in Guinea and Liberia, but continues to rise exponentially in Sierra Leone.

EVD could affect prices in several ways. The most affected communities and regions are the food baskets of the epicentre countries; which result in an impending agricultural production shortfall, which could cause a dramatic drop in food prices. Also, the closure of ports with an associated decrease in the number of containers and vessels, and the increase in marine insurance premiums affected the landed costs of imported food and non-food items. Moreover, foreign aid from the international community could lead to a depreciation of local currencies, thereby raising the local prices of imported goods and services. And finally, the risk of fiscal deficit financing arising from pressure on spending and a decline in revenue collection could also put pressure on prices. The combined effects of the above together with epidemiology and risk aversion behaviours could weaken the purchasing power of the populations and reduce their income. This could
have a serious impact on their living conditions and livelihoods, thereby increasing poverty and vulnerability.

This Policy Brief examines the depth and dimension of the impact of EVD on price movements in Guinea, Liberia and Sierra Leone.

The reduction in purchasing powers is stronger in Liberia and Sierra Leone than in Guinea.

The response to the outbreak of the Consumer Price Index, a measure of overall price changes, varies across the three countries. Due to different policy initiatives and responses of governments and the reaction of international communities to the affected countries, the Index was relatively volatile in Liberia and Sierra Leone, yet relatively stable in Guinea.

As a result of the EVD in Liberia, the annual overall price movement (headline inflation rate) rode from 8.0 percent at the end of the fourth quarter of 2013 to 8.2 percent at the end of March 2014. This further jumped to 10.3 percent at the end of the second quarter. A similar trend was also observed in Sierra Leone. As shown in Figure 2, in contrast to the downward trend since the last quarter of 2011, the overall price level increased consistently from 6.39 percent in April to 7.51 percent in September 2014. With income remaining constant, the quantity of goods and services that could be purchased fell by about one fifth in Sierra Leone and by more than one quarter in Liberia. The rising trend of prices in these countries can be explained by: the disruption in agricultural activities (Kailahun and Kenema in Sierra Leone and Nimba, Bong, Grand Bassa and Lofa in Liberia); the closure of Guinea’s borders where substantial food imports originate; less commercial trade flows from the main trading partners; iii pressure on the national currency resulting in a depreciation of the exchange rate; and partly due to the fiscal deficit.

Figure 2: Overall inflation and seasonally adjusted inflation in Sierra
The aggregate money supply also rose, including credit to governments to finance the deficit. For instance, money supply rose by 121.6 percent in Sierra Leone between May and September 2014. Furthermore, depreciation of the national currency became pronounced from March in Liberia and from June in Sierra Leone. To a large extent, this reduces the purchasing power of the local currencies in these countries. The cost of transport, which more than doubled in affected regions, also contributed to the hike in prices.

In Guinea, the general Consumer Price Index rose by 4.1 percent between March and September 2014: the decline in purchasing power was marginal. This trend is consistent with the seasonal rise at this time of year (Figure 3) and is within the projected annual inflation rate set at 8.5 percent, which is also consistent with the macro-economic targets for 2014. Between January and September, the corresponding monthly inflation rates in 2013 were generally higher than in 2014. This is an indication that EVD has no discernible impact on prices in Guinea.

Rural communities felt the burden of price movements more than their urban counterparts. Rural communities feel the effects of price movements due to the impact of EVD on prices more than urban communities. For instance, the overall price change was less than 10.0 percent in Freetown compared to almost 18.0 percent nationally — an indication that the situation in rural areas is worse than the national
In Sierra Leone, there is also regional variation: the trend of price movement was upward in the northern, eastern and southern regions, whereas it declined in the western region. Figure 4 shows that the increase in prices is highest in the southern region – the province with the least number of infected cases. Quarantine actions and restrictions of movements have weakened access to food. Depressed demand partly accounts for deflation (i.e. fall in prices) in the western region in the context of a supply of agricultural products that surpasses what could be locally consumed due to a restriction of movement of goods and people – lack of market access creates a glut. A similar trend was also observed between Monrovia and other parts of Liberia. For instance, the price of a 25 kg bag of Bellaluna rice in Monrovia, which was US$17.5 in October, was sold for US$21.28 in the southeastern region. This implies that the price that southeasterners paid for 25 kg of Bellaluna rice was enough to secure Monrovians around 30 kg of the same rice. Most remote communities were quarantined, and the restricted movement of goods and people did not allow imported items to reach marginalized communities, which resulted in a high impact of EVD on prices in rural areas. The increase in prices has worsened livelihoods, increased vulnerabilities and deepened inequalities among individuals, groups and communities.

**Proactive management matters in reducing the impact on the people.**

The domestic production of rice, the most consumed staple, dropped by 10.0 percent, largely due to a 35.0 percent decline in harvest from the Guinea Forest region, where around three quarters of EVD infection cases occurred. Domestic rice production covers 80.0 percent of national rice production. How did the Government of Guinea respond to such a heavy drop in local production? Importing large quantities of rice was the winning strategy: 512,000 tonnes of rice imported between January and September 2014 against 396,000 tonnes for the corresponding period for 2013. This stemmed the possible impact of a shortfall in local production on prices. In Sierra Leone, there was mere 1.21 percent rise in the amount spent on food items between May and September. The closure of Liberia’s and Sierra Leone’s borders also substantially reduced export of local rice from Guinea to these two contiguous countries. However, the heavy imports of food items are taking a toll on Guinea’s foreign reserves, which requires some policy attention. Is the impact of EVD on prices similar across commodities in these three countries?

**The price effect is more severe on food items than on non-food items**

Price changes are more pronounced on food items than non-food items in the three epicentre countries. Sierra Leone serves as an interesting example of diametrically opposed trends in price movement for food and non-food items; in contrast to the rise in prices of around one fifth for food items, non-food items (excluding fuel) such as tobacco and narcotics, clothing and footwear declined by more than one quarter. During the EVD outbreak, people focus more on basic items, thus depressing demand for non-essential items such as electronics. For instance, in Sierra Leone, the price of an imported brand of
rice (50 kg) rose from Le130,000.00 before the outbreak to Le170,000.00 during the outbreak, i.e. approximately a 30.8 percent increase.

A similar trend was observed in Liberia. Prices of food items between March and June increased by 67.3 percent compared to just 13.1 percent for non-food items. The price of a 25 kg bag of Bellaluna rice in Monrovia increased from US$14.5 by the end September to US$17.5 in October, a 20.68 percent increase in just one month. The prices of local staples such as cassava, farina (gari) and oil rose by 150 percent, 100 percent and 53.8 percent, respectively, from September to October alone. There has been a similar trend for meat, flour and sugar, and the prices of health items are also on a rising trend.

In Guinea, although price changes are marginal, in general, when they do occur, the changes in prices of food items are higher than non-food items. Several factors account for the relative stability in prices in Guinea: the decline in trade with the rest of the country, the restriction of trade with the countries of the sub-region, and the distribution of large quantities of food to affected households and communities by the international community. In spite of the price stability, the high cost of local rice relative to imported rice, which almost doubled, deserves some policy consideration.

In these three countries, the panic purchase of food items and non-food products often used to fight against EVD, such as chlorine, buckets and infrared thermometers, also contributed to the diametrically opposed inflationary trends in Liberia and Sierra Leone. The opposite is the case for non-essential items such as electronics, which declined by 40.0 percent in Liberia between June and September 2014. The effect of rising prices vis-à-vis constant or plummeting incomes of the active labour force narrows people’s consumption choices and reduces the quality of their standard of living.

**Stemming the tide of EVD on future prices is doable.**

Some of the strategic interventions to achieve this include:

- In Guinea, Liberia and Sierra Leone, price shocks increase the vulnerability of the poor and the marginalized communities, especially rural areas experiencing the outbreak. This calls for a well-targeted social protection for people and communities heavily affected by price hikes.
- The closure of borders reduces the supply of imported commodities that could compensate for the shortfall in domestic production. Countries should desist from closing their borders to avert the inflationary impact of such actions on the epicentre countries.
- The Governments of these three countries should strategically support local farmers to prepare for the next planting season to avoid food shortages in 2015 and beyond. This includes the provision of improved seedlings, fertilizers and
finances. It is also important to address all impediments that make locally produced rice more expensive than imported rice.

- The ministries of finance and central banks of these countries should effectively coordinate fiscal and monetary policies to ensure that exchange rates and domestic borrowing do not distort the price system.
- Given that EVD affected the planting seasons of these countries, the international community should scale up support for the provision of food and related items to cushion the effect of food shortages and the associated price hikes.

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1 The fatality rate among health workers varies across countries. For instance, as of 27 October 2014, 101 health workers died out 127 cases in Sierra Leone and 43 out of 81 in Guinea.

2 In Guinea, for instance, the average daily rate of infection, which has been rising consistently since June – from 1.5 to 16.8 in September – fell to 12.0 in October. According to the World Health Organization (WHO) data revision based on new evidence as of 27 October 2014, cumulative deaths fell from 2,705 to 2,413 in Liberia. The disease is heavily concentrated in one location in Guinea, the Guinea Forest region (67%), and in the northern region of Sierra Leone (34.5%).

3 In Liberia, most informants, based in 14 out of 15 countries, indicated that relative to last year, there are fewer trucks in 13 out of the 15 counties and fewer retailers in 11 out of the 15 counties, and that prices are higher now than last year.

4 In Sierra Leone, for example, the local currency depreciated by around 6.7 percent between May and September 2014. It depreciated from Le 4384.02/US$1 in May to Le4700/US$1 in September.
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