**Neil Rankin and Joseph Simumba** 



### Exports, imported intermediate input, and exchange rate volatility in Zambia

# **In brief** • Zambia's export revenue is heavily dependent on the price of copper. A key challenge for the Zambian economy is the diversification of exports.

- This study aims to understand in more detail the import and export behaviour of firms in Zambia and how this may be affected by exchange rate volatility.
- Findings show that approximately 80% of export value is accounted for by a small group of continuous exporters.
- Surprisingly, a more volatile currency does not decrease the entry of exporters into the market but rather increases it.
- Researchers identify two areas where policymakers should focus to diversify exports: building a pool of firms that can become continuous exporters and stabilising the exchange rate.

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### Introduction

A key challenge for the Zambian economy is the diversification of exports and growing non-traditional exports (NTEs). Zambian exports are currently highly concentrated and Zambia's export revenue is heavily dependent on the price of primary products, predominantly copper. Consequently, the Zambian kwacha is affected by the copper price and this, and exchange rate volatility, may in turn hamper the development of NTEs.

This paper uses micro-data on both imports and exports at the firm-countryproduct level to understand in more detail the import and export behaviour of firms and how this may be affected by exchange rate volatility. An understanding of this behaviour is essential to designing policies that promote NTEs.

## Few Zambian firms participate in the export market

The study's results confirm that Zambian trade values are highly concentrated and dominated by a small number of firms that participate continuously in the international market, for example approximately 80% of export value is accounted for by a small group of continuous exporters. However, there are a large number of firms (and varieties or country-product combinations) that export sporadically. This suggests that transforming sporadic exporters (or varieties) to continuous ones is one way to increase NTEs. This requires knowing more about how the characteristics of these two groups differ.

Both sporadic import and export varieties are, on average, of lower product quality than continuous varieties. This is not fully explained by destination – for example only half of this observed difference in quality is because sporadically exported varieties go to low-quality destinations. The results show that certain firms export higher quality products, rather than both high and lower quality product varieties being exported within the same firm. These results also indicate that there are certain types of firms specialising in the (sporadic) trade of these low quality varieties.

Importing is not associated with higher product quality for exporters. Generally, firm-level studies (on countries other than Zambia) find that firms that both export and import are more productive than non-traders. Although not directly comparable, since our data does not capture firm-level characteristics beyond trade, we would expect access to imports to be associated with higher product quality. This suggests that Zambian exporters are not importing the types of products that enable them to improve their product quality. This may be because factors in the global or regional value chains which facilitate these relationships are far from the activities of the traders in Zambia.

#### Effects of exchange rate volatility

Higher exchange rate volatility increases churn (entry and exit) in both the import and export market. Surprisingly, a more volatile currency does not decrease export variety entry but rather increases it. The relationship between export variety churn and exchange rate volatility is higher amongst firms that import too. This suggests that sporadic trade participation may be a response by firms to exchange rate volatility as they seek out short-term arbitrage opportunities rather than long-term stable trading relationships.

### Conclusion

The results in this paper suggest two areas where policy should focus.

- The first is to build a pool of firms that can become continuous exporters. New firms, either local or through foreign direct investment (FDI), are one source of this pool. The other is by encouraging sporadic exporters to become continuous, although this is unlikely to be easy given that these firms are, on average, different to continuous exporters. These new continuous exporters will need to have the types of characteristics that successful exporting firms in other countries exhibit – higher productivity, higher capital intensity, and access to imported intermediate inputs. Policies need to focus on the conditions, such as the business environment and productivity improvements, which facilitate this.
- 2. The second area is exchange rate volatility. The results in this paper indicate that volatility encourages a group of 'arbitragers' firms that take advantage of this volatility to trade sporadically. The concerns with volatility of the kwacha amplifies the macro-industrial sectoral linkages of the economy, showing how a seemingly macro issue has a profound impact on the micro productivity of firms, and ultimately their export performance. It therefore follows that growing NTEs would require a stable macroeconomic environment augmented by productivity enhancing policies for firms. A more stable exchange rate could encourage these firms to become fuller participants in the export market. Furthermore, a more developed financial market could help hedge against exchange rate risk and thus enhance fuller participation of firms in the export market.