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What Price Level Data Tells Us About Consumer Price Rigidity in Zimbabwe. Evidence from New Data

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Introduction

Sometimes countries adopt new currencies which are not their own as a medium of exchange. The reasons for this vary but often this is as a response to a macroeconomic crisis. In January 2009, Zimbabwe adopted a new currency after experiencing a decade of hyperinflation and economic crisis. The change in currency had positive effects for inflation – Zimbabwean inflation dropped to -3.4 percent two months after the change, but came with other challenges. The most obvious is a loss of monetary policy control. A less obvious one has to do with the stickiness of prices. In most cases the adopted currency is 'strong' in value but less fine in terms of denominations (the face value of the currency). The 'coarseness' of the new currency denominations means that prices are likely to be more sticky as retailers have limited scope to change prices as a response to smallish economic shocks, especially for lower priced products. This matters because it introduces another source of rigidity into the economy and may have distributional effects if it impacts certain groups of consumers more than others (for example the poor who may disproportionally buy goods with low face-values). This type of challenge has been overlooked in the literature.

In this study, we address 'stylised facts' of price setting for Zimbabwe and compare them to similar countries where price based studies have been done, Lesotho and Sierra Leone. Firstly, we investigate whether prices become more flexible or rigid in Zimbabwe after the introduction of the multi-currency system and compare it to Lesotho and Sierra Leone. Secondly, we investigate the magnitude of price changes and explore the adjustment process as Zimbabwe moved further away from the day the new currency system was introduced. We also examine the dynamic features of price changes in a new currency system since they may have implications on business cycles and transmission into monetary policy.

Methodology and Results

The study uses weekly product level data collected at the retail outlet level over the period January 2012 and February 2015. Our results show that prices are stickier in Zimbabwe than other similar countries, with retailers on average changing their prices every 3.9 months compared to Lesotho (2.7 months) and Sierra Leone (2.0 months). There is a non-linear time-trend in the frequency of price changes – the frequency of price changes initially increases but then fall after 23 months (October 2013) suggesting that prices became more flexible as Zimbabwe moved further away from the date the new currency was introduced. As in many other countries, a larger proportion of products do not change prices between months, however, for those that do change the magnitude of the change is relatively large. There is evidence that variance in inflation

is strongly correlated with the size of price changes rather than the frequency of price changes implying that pricing in Zimbabwe follows staggered contracts as in time dependent pricing models.

The results in this paper suggests that the adoption of a new currency system restored price signals which were lost during the hyperinflation period. However, even though inflation fell drastically after the new currency system, there was higher price stickiness for lower priced commodities, which maybe because of the coarseness of the new currency denominations. Since many countries may opt to move to stable and convertible currency whenever they face a macroeconomic crisis, the results in this paper provide information on the effects of a new currency system particularly on price setting behaviour of firms at a disaggregated level. The analysis can also be used to illustrate medium to long term effects of adopting a new currency system on inflation dynamics and price adjustment mechanisms.