

# Domestic Industry Protection. Lessons from a Multiple Currency and a Cash Budget Economic System

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# Introduction

- The literature on trade protectionism is pertinent as it is linked to economic growth (Edwards, 1998; Frankel and Romer, 1999; Fischer, 2000; Rodriguez and Rodrik, 2000; Johnson and Robinson, 2001; Rodrik, et al., 2004; Rodrik, 2004).
- Except for Hong Kong no country has developed its industry base without the use of infant industry protection, Shafaeddin (1998).
- Infant industry protection may be met with some operational inefficiencies and rent-seeking behaviour (Cheng et al., 2019b).
- Whether domestic industry protection is good or bad is debatable among trade economists.
- The existing economic condition, government policies can influence the success of failure of protectionism.

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- A review of the literature reveals limited studies of the effects, import tariffs have on domestic industry protection in the case of a country using the multiple currencies and a cash budget system economics (Stechrer, 2012; Shafeaddin, 2000; Greenaway and Milner, 1993).
- There is also limited literature, which break down the contributions of each component used in determining the effective protection rates after estimating effective protection rates.
- The objective of the paper were to estimate EPR and to analyse the EPR constituent components in order to assess the main drivers of the EPR for policy purposes.
- Dataset: import tariffs data from the Zimbabwe Revenue Authority and input-output tables from Eora

# Overview of Zimbabwe

- Zimbabwean government adopted a multiple currency and a cash budget economic system in 2009.
- The US dollar, the South African rand, and the Botswana pula among other currencies.
- The government was not issuing bonds, borrowing from the domestic or other sources to finance its expenditure.
- Zimbabwe had relatively high nominal tariffs rate during this period

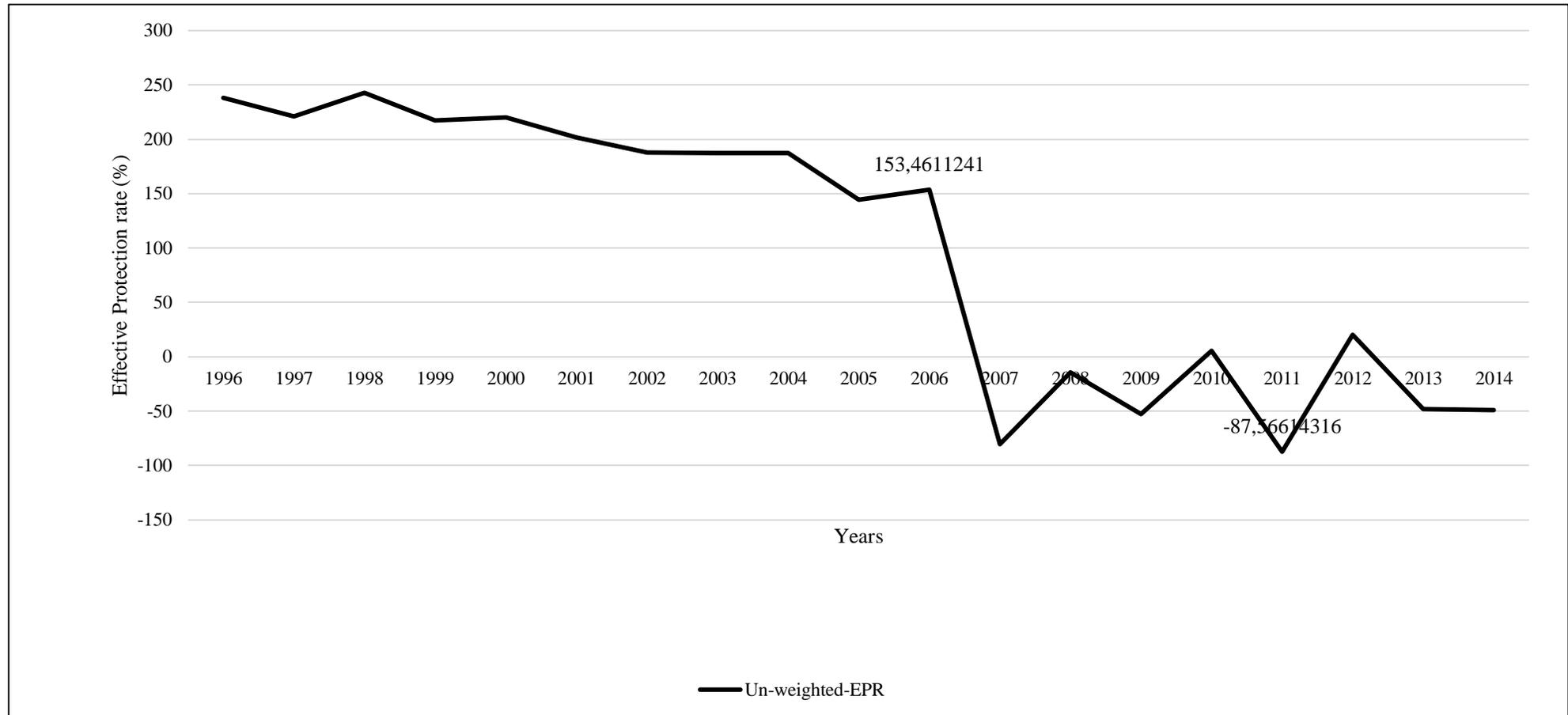
Variable	Average	Average	Average
Year	1996-1999	2000-2008	2009-2014
Other food products	15.94	6.34	<b>22.40</b>
Beverages and tobacco products	14.41	7.18	<b>35.84</b>
Wearing apparel	21.76	13.37	<b>25.72</b>
Footwear	20.13	16.64	<b>43.89</b>
Glass and glass products	22.84	14.83	<b>27.58</b>

# Methodology

- $r_k = \frac{t_k - \sum_{i=1}^n a_{ik} t_i}{1 - \sum_{i=1}^n a_{ik}}$  .....1.1 (Fedderke and Vase, 2001; Edwards, 2005; Kusum, 2003; Pandey, 2004).
- where  $t_k$  is import tariff on kth finished good
- $a_{ik}$  is the input-output coefficient of the ith input used to produce kth output (or the quantity of the intermediate input good i used in the production of one unit of k)
- and  $t_i$  is the import tariff on the ith intermediate good (Fedderke and Vase, 2001).
- In breaking down the EPR components the study used the Principal Component Analysis (PCA) and the Factor Analysis (FA).

# Effective Protection Rate trends

- Findings



# Findings

- From 1996 to 2005 we see a general decline in the EPR
- Over the period 2009-2014, the EPR were mostly negative (except for a few points).

	1996-1999	2000-2008	2009-2014
EPR	94.23	33.79	-1.54

- 1996-1999 the Zimbabwean economy was stable and the country was using its own currency.
- 2000-2008 economic crisis period of; hyperinflation was about 231 million percent, budget and balance of payments deficits were unsustainable, shortages in foreign exchange and low industrial capacity.
- 2009-2014 the country adopted the multiple currency and cash budget system in quest to stabilise the economy.

# Effective Protection Rates at Industrial Level

- Selected industries

	1996-1999	2000-2008	2009-2014
Processing and preserving of fish and fish products	123.69	109.93	-8.17
Beverages and tobacco products	16.84	-0.03	-6.59
Textiles, knitted, crocheted fabrics articles	12.39	12.48	-6.39
Footwear	18.22	18.68	-2.48
Sawmilling and planing of wood	235.74	57.42	-7.03
Building materials and construction parts of civil engineering	87.78	15.29	-47.36

# Analysing the Effective Protection Rate's Components

- All the variables have middling KMO values under both PCA and FA except for tariffs on finished goods with a meritorious KMO value.
- The KMO values for PCA (FA) are 0.7271 (0.7673), 0.8305 (0.787) and 0.7795 (0.7684) for input-output coefficient, tariffs on finished goods and tariffs on intermediate inputs respectively.
- PCA,FA shows that the tariffs on intermediate inputs have the largest absolute weight of 0.7018(0.9768), followed by the input-output coefficient at 0.6338(0.7865) and finished goods at 0.5886 (0.7129).
- Correlation coefficient showed that, tariffs on intermediate inputs have a greater correlation with EPR of 0.4431 followed by the input-output coefficient with a correlation coefficient of 0.3274 and lastly tariff on finished goods with a correlation coefficient of 0.3073

# Conclusion

- From 1996 to 2007, the domestic industrial protection for Zimbabwe was on a decline.
- After 2007, the industries were being taxed as shown by mostly negative domestic industrial protection rates.
- Industries with negative effective protection rate include key manufacturing industries such as food products, beverage and tobacco, textile, footwear, sawmilling and planing wood, building and construction industries.
- An analysis of the components of EPR showed that import tariffs on intermediate goods dominating the input-output coefficient and the tariffs on finished goods.
- Countries opting to use multiple currencies and cash budget should thus be very cautious of their use of the tariff system in generating revenue and the impact it will have on domestic industries.

THE END: THANK YOU

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