

# Review of: "Exchange Rate Pass-Through and Inflation on Unemployment in Nigeria"

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## Introduction

A well written paper. I would not indulge for long on E-views, given its huge limitations, but it appears to me the article is on its good way to publication. I might expect in the future more attention to the discussion on the IRFs and on the final policy implications, since as for now the article does much justice to the methodology (given its exhaustive use of ARDL, NARDL and SVAR methodologies) but still falls a little bit short of policy discussion.

#### Motivations

The paper contributes well to the literature field related to exchange rate pass through, and through structural modelling of a vector autoregression model tries to build a convincing model which embodies real and monetary effects of sudden shock to the Nigerian open economy.

On the literature side, besides the well-known literature on pass though effects, and considering the composition of the Nigerian Exports, I might suggest the authors to cite and explore the idea of pegging the exchange rate to the price of the most exported/set of the most exported commodities, as in:

Frankel, J. A., 2005. Peg the export price index: a proposed monetary regime for small countries *Journal of Policy Modeling*, 27(4), pp. 495-508. https://doi.org/10.1016/j.jpolmod.2005.04.013

Frankel, J. and Saiki, A., 2002). A proposal to anchor monetary policy by the price of the export commodity *Journal of Economic integration*, 17(3), pp. 417-448. https://doi.org/10.11130/jei.2002.17.3.417

This would allow the authors to offer not only more consistence to the literature review, but also to their conclusion, which, being politically oriented, might go beyond the suggestion of "suitable monetary policy", going to the point of effectively suggesting a change in the exchange rate stance.

### Contributions

Following from the above considerations, targeting, especially into the structural VAR application, some different kind of inflation measure, related to a set of the most exported commodities, or the most exported one, might prove an interesting alternative/robustness application to show how internal changes in prices affect trade composition and the exchange rate. You might for instance refer, in a panel context, to:



Bodart, V., Candelon, B., and Carpantier, J. F., 2012. Real exchange rates in commodity producing countries: a reappraisal. *Journal of International Money and Finance*, 31(6), pp. 1482-1502.

https://doi.org/10.1016/j.jimonfin.2012.02.012

To get an idea of how composition of the internal production of a country can effect in a nonmarginal way its external trade behavior and its reaction to sudden changes in trade terms.

#### Methodology

You have used a sound methodology, but, besides the problems related to the length of the time series at your disposal, I would not refrain from checking for the existence of cointegration and nonlinear cointegration with standard analysis of the residuals from Equation (3). An augmented Dickey Fuller run taking into account the Mac Kinnon Critical values (the two step Engle-Granger Procedure if you wish), might be a good start. This does not mean that the Shin et al (2014) application is invalid, but is just a consideration of the fact that the model per se is heavily parametrized, and before using the term "ecm" in the ARDL you might want to study it a little bit, perhaps in the appendix of the article.

Besides a potential deeper study on cointegration, you apply the Zivot-Andrews to test for one possible deterministic break, which is fine. You might want to either:

1-Add a test for stationarity, like the KPSS test (basically the Hadri test in a time series context).

2-Allow for the possibility of an additional break (this is just a possibility, as your data length might prevent it) to allow for the model to detect a potential systematic change in the series that a single break could not, thus pushing to the limit the possibility that you see the null of unit root rejected when instead the series is indeed nonstationary. You could go for the Lumsdain-Papell Test (basically the Zivot-Andrews extended to two breaks) or the Lee-Strazicich test (which by the way is an LM test, so it might also be an option as a mean of consistency test).

Kwiatkowsky, D., Phillips, P. C. B., Schmidt, P., and Shin, Y., 1992. Testing the null hypothesis of stationarity against the alternative of a unit root: how sure are we that economic time series have a unit root? *Journal of Econometrics*, 54(1-3), pp. 159-178. https://doi.org/10.1016/0304-4076(92)90104-Y

Lumsdaine, R. L. and Papell, D. H., 1997. Multiple trend breaks and the unit-root hypothesis. *The Review of Economics and Statistics*, 79(2), pp. 212-218. https://doi.org/10.1162/003465397556791

Junsoo Lee, Mark C. Strazicich, Minimum Lagrange Multiplier Unit Root Test with Two Structural Breaks, *The Review of Economics and Statistics*, Vol. 85, No. 4 (Nov., 2003), pp. 1082-1089 (8 pages)

# MINOR REMARKS:

In Equation (5), notation is not consistent with the notation below on the null hypothesis for nonlinear cointegration.

