

COMMON CURRENCY, INTRA-REGIONAL TRADE FLOWS AND ECONOMIC GROWTH: EVIDENCE FROM CEMAC CUSTOMS UNION

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ABSTRACT

The debate on the merits and demerits of a monetary union and common currency continues to gain momentum among trade experts and policy makers given the referendum “yes” vote by Britain and its almost complete exit from the European Union. Most empirical studies—on developed market economies confirm that the benefits of regional currency outweigh the costs. There have been several attempts by African regional trade blocs to form monetary unions; magnitude of benefits from these remain largely unquantified though. Africa is home to four monetary unions and two existing common currency unions using the West African and the Central African francs CFA, respectively.

This dissertation focusses on the effects of common currency on economic growth and intra-regional trade in the Central African Economic and Monetary Community (CEMAC) customs union. It begins with an introductory chapter that briefly outlines the research problems and objectives. The objectives are three-fold; each of which is addressed in a chapter. In chapter two, we examine the first objective which aims at analysing the relationship between common currency and economic growth. The third chapter investigates the effects of common currency on intra-regional trade—second objective, while the third objective is on CEMAC intra-industry trade flow and this is examined in chapter four.

In chapter two, the regression discontinuity design model is adopted to analyse the effects of common currency on economic growth in the CEMAC customs union. The sharp design method is used as it deals with deterministic function which occurs when a single variable is solely responsible for the treatment effects as opposed to the fuzzy design that has to do with stochastic function. Firstly, the data used in the regression is presented in the form of a diagram. In the sharp regression discontinuity model, graphical analysis acts as a means to visualise the detection

problem and increases transparency of the research design. Both parametric and non-parametric methods are used with different bandwidths in the estimation techniques to reconcile between precision and bias in the analysis. Using the per capita gross domestic product as proxy for economic growth, the findings show a negative relationship between common currency and economic growth in the CEMAC region. After performing different tests to take into consideration the sensitivity of the analysis, the results are still statistically significant.

Chapter three empirically examines the effect of common currency on CEMAC intra-regional trade flow. We apply the sample split threshold model developed by Hansen (1996; 2000). The approach adopted allows the classification of the observation in relation to whether or not there exists a threshold value that allows for the effects of common currency on bilateral trade to be established. It also captures the dynamic behaviour of the time series data used in the analysis—sufficiently highlights regime switching created by events or jump phenomena which linear models do not capture. A bootstrap method is also applied to test the presence of threshold and strong evidence is found of the presence of a single threshold in the regression corresponding to the year when the common currency was adopted by CEMAC member states. The regime is determined by a set of observable variables at a given time and each regime is estimated in such a way that allows for the asymptotic properties to be controlled. This also allows for the estimation of the threshold, confidence interval and the level of statistical significance. As a test of sensitivity, the difference-in-difference method of analysis is applied where countries in the CEMAC customs union are considered the treatment group and countries that are not members of CEMAC, but are members of the ECCAS, make up control group. The difference between intra-regional trade flow before and after 1994 in CEMAC and the difference between intra-regional trade flows before and after 1994 in the ECCAS area is calculated. The results show a negative relationship between the common currency and intra-regional trade flow. The implication is that the creation of the common currency in 1994 may not have contributed to intra-regional trade flow in the CEMAC region.

Chapter four examines the third objective by empirically analysing the nature and flow of CEMAC intra-industry trade at the different sectors and product categories using the Standard International Trade Classification (SITC). An augmented gravity model of trade is adopted to analyse changes in the different sectors and product categories from 1995 to 2015; this is the time span for which consistent and useable time series data is available. A time fixed effect variable is included in a

fixed effects panel data model to control for unpredictable change in exogenous factors. A within estimator is also included in order to capture heterogeneity of the sample over time. The explanatory variables were regressed against each trade sector of the SITC 1 classification to indicate how each trade sector in the CEMAC region has been affected. The results are contrary to the Rose effect which stipulates that common currency among member states in a trade bloc increases the flow of trade three to four fold. Our results also show that prior to the formation of the CEMAC customs union, the growth in intra-industry trade was higher than that of CEMAC customs union with the exception of very few sectors.

Chapter five concludes the study with a summary of findings and policy recommendations. The finding provides additional empirical evidence to the ongoing debate of whether the central bank of the CEMAC member states should continue to peg the franc CFA to the Euro. Results from the study reveal that prior to the formation of the CEMAC customs union, the growth rate and intra-regional trade were higher and more significant than that experienced by the region after the common currency was established. Countries of the CEMAC region have not realised the expected gains from the establishment of the common currency. The CEMAC customs union has performed on average poorly compared to its predecessor UDEAC and its regional counterpart such as UEMOA that uses a similar currency with similar exchange rate. The results also show that the exploitation and export of fuel and related minerals generate a significant portion of export revenue and therefore a key driver of trade in the region. An important lesson from the analysis for policy makers is that given the shift of the trade pattern over the years, from having the EU countries as CEMAC's main trading partners to having China and India as their main trading partners implies a need to revisit the initial arrangement. It is advisable for policy makers to pay particular attention to the real value of the currency. Careful study needs to be carried out to determine if there is reason to relax the value of the fixed pegged to a basket of currencies. This will further avoid a situation where continuous deterioration of the trade balance will force member states to bring about deflationary fiscal policies.