# Industrialization and Economic Diversification â€" Keys to Unlocking the Full Potential of the AfCFTA â€" A Case Study for Central Africa

Topic: Methodological and Statistical Challenges for Analyses of Integration of Developing Countries in Regional and Global Value ChainsÂ - II
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While natural resource abundance can provide opportunities for economic growth, natural resource dependency is often associated with stagnated growth. Within the African continent, the level of dependence on natural resources and, inversely, the level of economic diversification is variable across regions. Measuring output across subregions from the GTAP Database, Central Africa is the subregion with the highest production dependence on extraction, accounting for 26% of total output, compared with an average of 10% across the rest of the continent. Further, manufacturing output is the lowest amongst subregions, accounting for 14% of total output, in contrast to an average of 25% across all other subregions.

On 29 September 2017, Central African member states adopted the Douala Consensus, committing to spurring economic diversification through industrialization and trade, with the aim to increase subregional production of higher-value products. In parallel, all Central African member states ratified the African Continental Free Trade Area (AfCFTA), under which free trade began on 1 January 2021. The AfCFTA is a key opportunity for Central African governments to build upon regional integration strategies, aligning their national trade strategies as well as industrial strategies, to enhance intra-regional trade as well as trade with continental partners. However, only by achieving the objectives of the Douala Consensus will Central African states be able to unlock the full potential of the AfCFTA.

In this paper, we assess the impact of economic diversification and industrialization in combination with the implementation of the AfCFTA for Central Africa with a Computable General Equilibrium (CGE) model. Several CGE studies have analyzed the AfCFTA at the continental level, including the European Commission, the World Bank, the IMF, UNCTAD, and UNECA. Ekobena et al. (2021) specifically analyze the effects of the AfCFTA on Central Africa, presenting macro-level findings at the country level for Cameroon, the Central African Republic, the Democratic Republic of Congo, Gabon and Chad. The present paper expands upon this field of research with the ambition to be the most comprehensive CGE model study of AfCFTA implementation in Central Africa to-date. We implement a new GTAP Database version with increased coverage for members of the Economic Community of Central African States (ECCAS) based on our continent-wide project for official IO data collection to expand GTAP Database coverage in Africa. Further, in the CGE model, we innovate by simulating both trade policy as well as economic diversification and industrialization plans.

We implement the GTAP Model, a CGE model with up to 65 sectors for each of the 141 countries and regions in the corresponding GTAP Database, compiled from national IO tables. In our paper, we exploit the aforementioned new GTAP Database, featuring updated IO data for Cameroon as well as newly introduced IO data for Chad, the Congo, Gabon, Equatorial Guinea, and the Central African Republic. Data for Rwanda is already in the standard release of the GTAP Database version 10, and data collection for Burundi has been completed under this project. Data collection for the Democratic Republic of Congo, Angola, and SÃ£o TomÃ© and Principe is underway in a sub-regional initiative of the continental project collecting official IO tables and national statistics to expand both GTAP and TiVA Databases for Central Africa.

We implement the following sequential simulations (a combination not previously exploited) in the GTAP Model to simulate the AfCFTA in combination with economic diversification and industrialization plans: (1) tariff removal, (2) non-tariff barrier reduction, (3) manufacturing growth, and (4) services growth. Simulations (3) and (4), which are linked to exogenous structural change, are implemented via calibration of primary factor efficiency as well as the intensification of intermediate demand. We additionally explore calibrating import sourcing preferences.

Preliminary results from the AfCFTA simulation demonstrate overall increases in trade among ECCAS member countries across all products, except for extraction products which decrease. Trade between ECCAS members and the rest of the continent increases across all products. Extra-continental trade decreases. The most important increases in trade for ECCAS as a subregion occur for heavy and light manufacturing as well as processed food. While the largest current increases in trade for the ECCAS subregion represent import substitution (Rest of World imports replaced by Rest of Africa imports), structural change simulations illustrating the implementation of economic diversification and industrialization plans are anticipated to increase trade within the ECCAS subregion as well as boost exports to the rest of the continent.