United Nations
Economic Commission for Africa

Report on the Use of the Global Trade Analysis Project (GTAP) Tools
Period 2019-2020

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Introduction

As a leading think-tank based in the African continent, the United Nations Economic Commission for Africa (ECA) is mandated to produce and disseminate high quality research on emerging issues and key priorities for Africa. In this context, the tools made available by the Global Trade Analysis Project (GTAP) to carry out various policy analyses are frequently used by the ECA. These allow the Commission to provide its member States as well as Regional Economic Communities (RECs), often on a demand-driven basis, with evidence-based policy recommendations. The use of GTAP tools can indeed go a long way in influencing policy decisions. For instance, over the last few years, ECA's research has been particularly instrumental to drive the African Continental Free Trade Area (AfCFTA) processes, including to assist the African Union and its member States in the negotiations.

At ECA, GTAP tools are used not only at its headquarter, based in Addis Ababa, Ethiopia, but also in several of its sub-regional offices (SROs) located in Africa's five main regions, for sub-regional analyses, as well as at the African Institute for Economic Development and Planning (IDEP) - training arm of ECA - situated in Dakar, Senegal.

ECA is also committed to work closely with the GTAP network to improve data coverage for African countries in order to enhance the quality of policy analysis on issues of interest to Africa.

Main activities, in relation to GTAP tools/network, undertaken by ECA can be summarized as follow:

1) Research on AfCFTA-related issues;
2) Online course on economic modeling, with a focus on the AfCFTA;
3) Special session at the 2019 Annual Conference on Global Economic Analysis to promote trade-related modeling work by African researchers.

It should also be highlighted that ECA has officially announced its candidacy to co-organize the 2022 Annual Conference on Global Economic Analysis in Africa.

I. Research on AfCFTA-related issues and COVID-19

ECA has produced, through the African Trade Policy Centre (ATPC) and SRO for Eastern Africa, several research pieces about the AfCFTA as well as a piece on COVID-19, using GTAP tools. Those are briefly presented thereafter.

a) *An empirical assessment of AfCFTA modalities on goods: country case studies*

Undertaken by ATPC using MIRAGE CGE model, in 2018 (and reported in last year's report by ECA) the study "An empirical assessment of AfCFTA modalities on goods" was utilized in coming up with 18 country and 2 regional case studies throughout 2019 and in early 2020.

The case studies, that were produced following requests received from member States and RECs, essentially provide assessments of expected impacts of the AfCFTA at country or regional level on GDP, trade, tariff revenues and welfare. Those studies have also been used to feed into relevant national AfCFTA implementation strategies being

developed by member States with the support of ECA, through funding from the European Union.

b) *Country briefs on AfCFTA impacts: focus on Eastern Africa*

ECA's SRO for Eastern Africa, in collaboration with Trade Mark East Africa (TMEA), produced 6 country briefs (namely for Burundi, Comoros, Kenya, Rwanda, Tanzania and Uganda).

Those country briefs, informed by several analyses conducted with CGE models or partial equilibrium models, propose a set of actionable policies for the various countries to better take advantage of the AfCFTA reform.

c) *Emergence of Mega-Regional Trade Agreements and the Imperative for African Economies to Strategically Enhance Trade-Related South-South Cooperation*

A Chapter by ATPC on the "Emergence of Mega-Regional Trade Agreements and the Imperative for African Economies to Strategically Enhance Trade-Related South-South Cooperation" was published on 2019 in a Book on "Innovating South-South Cooperation: Policies, Challenges and Prospects" by University of Ottawa Press (https://press.uottawa.ca/innovating-south-south-cooperation.html).

The analysis from the Chapter relies on CGE modeling. It emphasizes the importance of the AfCFTA, as Africa's own Mega-Regional Trade Agreement (MRTA), to effectively mitigate possible negative impacts that the other main envisaged MRTAs could have on Africa, through preference erosion and increased competition on other MRTAs' markets.

d) *Africa's diversification and its trade policy transformation*

ATPC has contributed to a policy brief on "Africa's diversification and its trade policy transformation" for the Think-20 (T20) under the Task Force on "Trade Investment and Growth". The T20 is a research and policy advice network for the G20. In 2020, the G20 Presidency is assumed by Saudi Arabia (https://t20saudiarabia.org.sa/en/Pages/default.aspx).

The policy brief demonstrates, through an analysis conducted using MIRAGE CGE model, that the AfCFTA can help to bring policy coherence in Africa and to lead to the creation of a robust African economic market. Not only the AfCFTA could help supporting Africa's much needed transformation but also it represents a vast and attractive market to tap into for external partners, including members from the G20. It is therefore recommended that G20 members support Africa's efforts to establish the AfCFTA. Looking forward, it is in their interest to engage Africa as one unified partner, at the level of the African Union for global win-win partnerships, rather than deepening trade relations with individual countries-which risks undermining both Africa's integration aspirations.

e) *In-depth analysis of the socioeconomic impact of COVID-19 in Uganda*

The "In-depth analysis of the socioeconomic impact of COVID-19 in Uganda", prepared by the UN Country Team, is informed by simulations undertaken by ECA's SRO Eastern Africa using the Standard GTAP CGE model.

In brief, the modelling exercise is based on a number of assumptions relating to the spread of COVID-19 and how it is foreseen to affect the population and industry (e.g. reductions in income, labor market participation, transport thereby affecting trade, etc.).

II.   Online course on economic modeling, with a focus on AfCFTA

Following the signing of a Memorandum of Understanding (MoU) between ECA and IFPRI for collaboration framed around economic integration and diversification, a joint ECA-IFPRI initiative on trade policy modeling for Africa was launched.

The first activity (implemented in 2019) of this initiative, consisted of an online course on trade policy modeling, with a focus on AfCFTA. Precisely, 2 curricula of 8 weeks long each were organized for both a Massive Open Online Course (MOOC) and a Small Private Online Course (SPOC). In total, 234 stakeholders (79 females and 155 males) from 37 African countries were trained. The online course implemented by ECA (through ATPC and IDEP) and IFPRI was financially supported by the European Union.

Following successful completion of the 2 curricula, a face-to-face training-workshop was held on 9-11 December 2019 at IDEP in Dakar, Senegal. The 20 most committed trainees (6 females and 14 males representing 12 African countries) of the SPOC, along with CGE experts (including from Agrodep), were invited. This event offered an opportunity to discuss project proposals from each of the 20 invited trainees and to start building a network of African modelers.

Moving forward, it is envisaged that a 3rd "advanced" curricula of the online course will be organized and followed by mentoring of trainees' research projects.

III. Special session at the 2019 Annual Conference on Global Economic Analysis to promote trade-related modeling work by African researchers

At the 2019 Annual Conference on Global Economic Analysis, which took place on 19-21 June 2019 in Warsaw, Poland, ECA (through ATPC and IDEP) and IFPRI organized a joint Special session on the online course on economic modeling, with a focus on the AfCFTA.

This Special session offered an opportunity to provide an overview of the online course as well as to discuss project proposals from 4 selected trainees. Presented projects were about the following topics: 1) *African Continental Free Trade Area (AfCFTA) and youth*

labour market in Senegal: analysis of the impact on the demand for youth labour using a microsimulation computable general equilibrium approach; 2) *Assessing the impacts of Non-Tariff Barriers in the African Continental Free Trade Area*; 3) *Investigating how realizing export potential through regional trade can contribute towards economic development in Africa*; 4) *Potential Effects of the African Continental Free Trade Area on Agricultural Development and Poverty Reduction in Ghana.*

Looking forward

ECA has officially announced its candidacy to co-organize the 2022 Annual Conference on Global Economic Analysis in Africa. Proposal has been made to hold the Conference in Kigali, Rwanda, with either "Structural transformation, poverty reduction and increased prosperity" or "(Accelerating) Economic transformation, diversification and job creation" as suggested tagline. The Proposal is certainly to be discussed further at upcoming 2020 GTAP Advisory Board meeting.