

THE WORLD BANK GROUP

2018 GTAP Advisory Board Report

Macroeconomics, Trade & Investment Global Practice

Global Macro and Debt Analytics

CEMAC Country Economic Memorandum

The project used GTAP 9 data to inform a dynamic global CGE model, ENVISAGE over 2015-2030. The team incorporated the 6 CEMAC countries (Cameroon, Central African Republic, Chad, Congo, Gabon, Rest of Central Africa) into the , 6 countries of the CEMAC GTAP 9 data. The model was used to assess the reduction of petty harassments (tracasseries), which is identified as a major problem in Cameroon, both at the border and in the neighboring CEMAC countries. The “tracasserie” related costs are modelled as a traditional “iceberg effect”, that is, treated as an exogenous source of friction that is proportional to the value shipped. Two policy scenarios are considered: First, we simulate iceberg transaction costs based on a 14 percent reduction in the price of agriculture and manufacturing products imported from Cameroon in 2018. This simulation assumes that only Cameroon makes reforms to address the tracasseries. Second, we simulate iceberg transaction costs based on a 14 percent reduction in the price of all agriculture and manufacturing products trade among CEMAC countries. This scenario assumes that all CEMAC countries implement reforms to reduce petty harassment affecting intra-regional trade.

Central America migration modelling project

The project used GTAP 9 data to inform a dynamic global CGE model, ENVISAGE over 2015-2030. The model allow to assess the impact of international migration and remittance flows on the Central American economies (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama), including: (i) the potential for remittances to Central America to impede trade through the pressure on the exchange rate (via a Dutch disease effect) and the reduction of the incentives for the Central American residents to work; (ii) the possibility that the return of migrants from the US might put downward pressure on wages in Central American economies; and (ii) the impact of the remittance from the US on growth and other macro indicators in Central America.

Slovakia

We are utilizing the GTAP Power database to calibrate a CGE model designed to analyse policies which support sustainable growth in Slovakia. The CGE model used is ENVISAGE, a multi-sector, multi-regions model developed by Van der Mensbrugghe (2015). The CGE model is linked to a detailed energy-market model for Slovakia. This allows the modelling framework to estimate the economy-wide effects (including the effects on emissions) of detailed energy market policies. The Slovak Ministry of Environment will use the tools to design policies which assist Slovakia in meeting its GHG abatement targets.

Trade and Regional Integration Unit

Maliszewska, Maryla; Olekseyuk, Zoryana; Osorio-Rodarte, Israel. 2018. Economic and distributional impacts of comprehensive and progressive agreement for trans-pacific partnership : the case of Vietnam (English, Vietnamese). Washington, D.C. : World Bank Group.

<http://documents.worldbank.org/curated/en/530071520516750941/Economic-and-distributional-impacts-of-comprehensive-and-progressive-agreement-for-trans-pacific-partnership-the-case-of-Vietnam>

The LINKAGE model and GTAP Database V9 were used to assess the impacts of Comprehensive and Progressive Agreement for Trans-Pacific Partnership on Vietnam. The analysis evaluated the impact of the removal of tariffs and non-tariff measures on key macro variables and trade flows. The impacts of trade policy liberalization were supplemented with the analysis of impacts on poverty. The analysis was presented to the government of Vietnam and was an important input in their decision to sign the CPTPP.

Similar analysis was presented to the government of Malaysia, who also mentioned this analysis as an important input in their decision to join the CPTPP agreement.

Strengthening Argentina's Integration into the Global Economy: Policy Proposals for Trade, Investment, and Competition, 2018, World Bank;

Jobs and Growth: Brazil's Productivity Agenda, 2018, World Bank.

The GTAP Database V9 was used to assess the impact of several different unilateral trade policy reforms and regional trade agreements involving Argentina and Brazil. The database was adjusted with the latest trade flow and protection data, as well as with latest IO tables for Argentina and Brazil. The database was disaggregated to 80+ sectors, to allow for careful analysis of particular subsectors of interest for these countries and the benchmark year was updated to 2015. Scenarios considered include unilateral tariff liberalizations on specific high-tariff sectors, removal of certain NTMs such as import licenses, and liberalization of export restraints. Regional integration scenarios include possible agreements between the Mercosur and the EU and the Pacific Alliance, as well as a scenario of a deeper Mercosur. The analysis is being used to help inform a policy path forward for greater integration into the global economy.

Unlocking the Productive Potential of Sri Lanka through Trade and Investment

The LINKAGE model and GTAP Database V9 were used to consider different trade policy options for Sri Lanka. The analysis evaluated the impact of the removal of tariffs and para-tariffs based on detailed customs data covering all taxes and fees. The analysis also considered impacts of Free Trade Agreements with China, India and full implementation of the Trade Facilitation Agreement. The impacts of trade policy liberalization were supplemented with the analysis of impacts on poverty. The results were presented to the Prime Minister and the Ministry of Trade of Sri Lanka.

Development Prospects Group

The impacts of US trade policy uncertainty on Central American countries

Given the size of the US economy and its importance for Central American countries, changes in US trade policy could have a significant effect on Central America's economies. The Macroeconomics, Trade and Investment Global Practice in partnership with the Development Prospects Group have worked on estimating the impact of changes in US trade policy on Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The GTAP model and database were used to consider the following scenarios: unilateral withdrawal of US trade preferences under the Central American Free Trade Agreement (CAFTA) and the US-Panama Trade Promotion Agreement (PANTPA); CAFTA's complete dissolution and potential spillovers from NAFTA dissolution.

Enhancing the effectiveness of Saudi Arabia's existing trade agreements

The Ministry of Commerce and Industry of the Kingdom of Saudi Arabia commissioned an analysis of the effectiveness of their trade agreements with EFTA countries and Singapore. Using the LINKAGE CGE model and the GTAP database updated with the latest Social Accounting Matrix for Saudi Arabia, this analysis quantified the economy-wide impacts of preferential market access under these two agreements.

Kutlina-Dimitrova, Z. and C. Lakatos. 2017. "The Global Costs of Protectionism." Policy Research Working Paper 8277, World Bank: Washington DC.

This paper quantifies the wide-ranging costs of potential increases in worldwide barriers to trade in two scenarios using the dynamic GTAP model and database. First, a coordinated global withdrawal of tariff commitments from all existing bilateral/regional trade agreements, as well as from unilateral preferential schemes coupled with an increase in the cost of traded services, is estimated to result in annual worldwide real income losses of 0.3 percent or US\$211 billion relative to the baseline after three years. The impact on global trade is estimated to be more pronounced, with an annual decline of 2.1 percent or more than US\$606 billion relative to the baseline if these barriers stay in place for three years. Second, a worldwide increase in tariffs up to legally allowed bound rates coupled with an increase in the cost of traded services would translate into annual global real income losses of 0.8 percent or more than US\$634 billion relative to the baseline after three years. The distortion to the global trading system would be significant and result in an annual decline of global trade of 9 percent or more than US\$2.6 trillion relative to the baseline in 2020.

Laborde, D., Lakatos, C. and W. Martin. Forthcoming 2018. "The impact of food prices and insulating policies on poverty." In "Frontiers of Inflation" by edited by Kose, A. and Ohnsorge, F. World Bank: Washington DC.

In the event of large swings in world food prices, countries often intervene to dampen the impact of international food price spikes on domestic prices and to lessen the burden of adjustment on vulnerable population groups. While individual countries can succeed at insulating their domestic markets from short-term fluctuations in global food prices, the collective intervention of many

countries will exacerbate the volatility of world prices. Insulating policies introduced during the 2010-11 food price spike accounted for more than half of the increase in the world price of wheat and one-third of the increase in the world price of maize. Using the MIRAGE-HH CGE model calibrated on the GTAP database, in this chapter we estimate that as a result of the 2010-11 food price spike, poverty increased by 0.8 percent or 7.7 million, despite wide-spread government intervention.