

THE WORLD BANK GROUP

Development Research Group (DECRG)

Missed Opportunities: Economic Effects of Potential Deep Trade Integration in the Levant

Maros Ivanic and Elena Ianchovichina

An upcoming paper on the missed opportunities of trade integration in the MENA region based on the standard model and Version 8 Database improved to include several smaller nations of the Middle East. This work estimates the implications of the missed opportunities of the Levant countries to integrate for the welfare of the region. The results from the paper will be presented at a high level conference in Beirut, Lebanon on June 12-13. The conference is organized jointly with the Levant Business Union and will include the President of the Council of Ministers in Lebanon, the Governor of the Central Bank of Lebanon, the President of the Levant Business Union, the Bank's chief economist, the regional chief economist, country directors in the Levant countries, and many others.

Poverty Impacts of the Volume-Based Special Safeguard Mechanism

Maros Ivanic and Will Martin

An upcoming paper on the issue of special safeguards. This paper uses the standard GTAP model with Version 8 database to support a stochastic simulation of agricultural yields and to estimate their implications for the rate of imposition of SSM's in developing countries and the resulting global poverty impacts.

Short- and Long-run Impacts of Food Price Changes on Poverty (in progress):

Maros Ivanic and Will Martin

The authors use country versions of the GTAP model and data to estimate the long- and short-run implications of changes in food prices for price and income changes and poverty.

Sectoral Productivity Growth and Poverty Reduction: National and Global Impacts (in progress)

Maros Ivanic and Will Martin

The authors use the standard GTAP model and version 8 database the estimate the implications of various types of agricultural and non-agricultural productivity growths for prices, incomes and global poverty.

Economic Implications of a Free Trade Agreement between India and the United States

Emiko Fukase and Will Martin

The authors analyzed the economic implications of a potential U.S.-India Free Trade Agreement. The paper will be forthcoming in Policy Research Working Paper (PRWP) series and as a book chapter of Fred Bergsten and Arvind Subramanian, eds. *Breaking Ground, Breaking Barriers: An Economic Partnership of the Largest Democracies*, Peterson Institute for International Economics. Findings were cited in a Congressional Testimony.

Evaluation of the EU-Turkey Customs Union, World Bank (2014), Report N°: 85830-TR, Chapter on Agriculture.

Don Larson (WB), Will Martin (WB), Sebnem Sahin (WB - SASDC) and Marinos Tsigas.

The report was disseminated widely including Turkish Deputy Prime Minister, Trade Policy Committee (Brussels) and the International Trade Committee of the European Parliament as well as to EU Enlargement Commissioner Fuele; along with press conferences and in Istanbul, a series of in-depth briefing to leading economic journalists in both Brussels and Turkey.

Development Prospects Group (DECPG)

The coming wave of educated workers: size and impact on global inequality.

Maurizio Bussolo, Amer Ahmed, Marcio Cruz, Maryla Maliszewska, Delfin Go and Israel Osorio Rodarte.

This paper analyzes the effect of the education wave from developing countries on growth, poverty and inequality. It uses and extends a modeling framework that combines results from the global LINKAGE CGE-model with microsimulation exercises from the Global Income Distribution Dynamic (GIDD) model. The preliminary results have been presented at numerous venues, including at an internal World Bank seminar for the Poverty and Equity community of practice. This paper has been accepted to the GTAP Conference on Global Economic Analysis 2014, to be presented in Dakar. This paper is expected to be revised and ready for the policy research working paper series by the end of FY 14.

Demographic Dividend in Africa

S. Amer Ahmed, Marcio Cruz, Delfin Go, Maryla Maliszewska, and Israel Osorio-Rodarte

The paper focuses on the impact of demographic change on growth and poverty in Sub-Saharan African countries under high and low future growth scenarios. In addition to deconstructing the economic implications of demographic change as captured in the LINKAGE model, this paper responds to recent work by Martin Ravallion and Kaushik Basu on the feasibility of reaching the Bank's Twin Goals by 2030. Amer Ahmed will be presenting this paper twice in June 2014; first at the Big Ideas for Africa conference organized by the Africa Region's Office of the Chief

Economist at World Bank HQ; and second at the GTAP Conference on Global Economic Analysis 2014 in Dakar. This paper is expected to be revised and ready for the policy research working paper series by the end of FY 14.

GIDD Sectoral Wage Bill Database by workers' skill level

Marcio Cruz and Israel Osorio Rodarte

This paper describes the GIDD sectoral wage bill database, which can be combined with information from GTAP dataset to be used as an alternative to disaggregate labor payments by different level of education in CGE models. This data has been used in the current version of the Global Income Distribution Dynamic (GIDD) model.

Does input tariff reduction impact export performance?

Marcio Cruz and Maurizio Bussolo

This paper analyzes the impact of input tariff reduction on Moroccan exporting firms through the channel of intermediate goods. It uses information from input-output matrix available in the GTAP database to build an input tariff to Morocco.

Estimating Parameters and Structural Change in CGE Models Using a Bayesian Cross-Entropy Estimation Approach

Delfin S. Go, Hans Lofgren, Fabian Mendez Ramos, and Sherman Robinson

The GTAP Database Version 9 pre-release is also being used to extract Social Accounting Matrices for Sub-Saharan Africa (and other regions) for the 2004, 2007, and 2011 benchmark year versions of the V9p database. These are used with the Maximum Cross-Entropy approach developed in the paper. This paper is being presented at the GTAP Conference in Dakar.

Implications of a Changing China for Brazil: A New Window of Opportunity?

Maurizio Bussolo and Maryla Maliszewska

Our research formed a substantial part of two chapters of a report for the Latin American and Caribbean Region (LAC), discussing the impact of rebalancing and slowdown of growth in China on economic growth, investment and trade opportunities for Brazil.

Africa stress-testing of recent economic and poverty performance (PRWP6517)

Shantayanan Devarajan, Delfin S. Go, Maryla Maliszewska, Israel Osorio-Rodarte, and Hans Timmer

This paper was updated with additional simulations on the slowdown in BRICS for the Africa Pulse in October 2013. The paper was featured in the Fall issue of the World Bank Research Digest. Maryla Maliszewska presented this paper at the Annual conference of the Center for the

Study of African Economies in March 2014. She will be also presenting it the Big Ideas for Africa conference organized by the Africa Region's Office of the Chief Economist at World Bank HQ.

Rebalancing in China and Developing Countries' Trade

Delfin Go, Maryla Maliszewska and William Shaw (ongoing)

Based on the set of simulations published in the "China 2030" (World Bank, 2013) report this paper examines the implications of a changing growth model in China on the structure and volume of developing countries' international trade.

Regional Integration in Africa: Good for the Bottom 40 percent?

Delfin Go, Maryla Maliszewska and David Tarr (ongoing)

This study focuses on economic and poverty implications of a Tripartite FTA in Africa (COMESA, EAC and SADC). Apart from looking at the tariff changes we also analyze the impact of the reduction of Non-Tariff-Measures (NTMs), trade facilitation and liberalization of services. The economic impacts will then be translated into poverty estimates using the GIDD. Preliminary results of this research will be presented at the GTAP Conference on Global Economic Analysis 2014 in Dakar.

CGE Based Industry Growth Projections

Syud Amer Ahmed, Delfin Go, Maryla Maliszewska

DECPG was requested by Frank Sader (Principal Strategist) of the IFC to prepare an analysis on future industrial trends by country using the LINKAGE model. This cross-support A forward looking analysis of industrial growth using LINKAGE and GTAP Database focusing on 8 sectors and 20 regions. The results will be shared with management of the different units of the IFC, especially Competitive Industries. The report is expected to be completed this FY and is to inform the IFC's corporate strategic planning process.

Other uses of GTAP Database

The GTAP Database Version 8.2 was also used to provide input to a forthcoming report from Africa Region's Environment Department on African drylands agriculture, led by Raffaele Cervini (AFTEN). The land use version of the database was used to calculate the contributions of individual livestock sectors to GDP and the cost structures of the sectors with emphasis on the contributions of land by AEZ.

Latin American and Caribbean Region

The New Trade Environment and Opportunities for the Poor in the Caribbean

Calvin Djofack and Maros Ivanic

An upcoming report on trade issues in the Caribbean region based on Version 8 of the database, augmented to include smaller Caribbean nations, and the standard model. This report, in addition to other analyses, estimates the implications of a set of envisioned trade reforms for regional incomes, prices and poverty.

Eastern Europe and Central Asia Region

Economic effects of the proposed 2030 climate and energy policy framework on Poland and other EU regions

Leszek Kasek

http://www.mg.gov.pl/files/upload/20681/Report%202030_CCPA_Apr25%202014_final.pdf

GTAP8 database was used to construct a global CGE model, called PLACE, for a report summarizing a comprehensive analysis on the European Commission proposal, published in January 2014, on the 2030 climate and energy policy framework for the Polish economy and seven EU regions. The PLACE model is a static, multi-sector, multi-region general equilibrium model. For the purposes of the analysis, data from the original GTAP dataset of 129 regions and 57 sectors were aggregated to 18 regions (8 for the EU and 10 for the non-EU regions) and 20 sectors. Among the 20 sectors in the model, distinction is made between the EU ETS (EU Emissions Trading Scheme) and non-ETS sectors – a subset of these sectors, which are energy-intensive and trade-exposed (EITE) and thus potentially most affected by emission control policies are explicitly taken into account.

South Asia Region

Greening India's Growth: Costs, Valuations and Trade-offs (World Bank, 2014)

Muthukumar Mani (WB), Anil Markandya, Aarsi Sagar, Sebnem Sahin (WB)

The authors used the GTAP-CGE model regarding Green Growth in India. The report was launched at InfoShop by the SAR VP and disseminated widely both in US and India. The CMU, numerous blogs and articles by local and international newspapers cited the study at several occasions.

Reforming Electricity Subsidies in Pakistan: Measures to Protect the Poor (World Bank, 2014)

Kristy Mayer, Sebnem Sahin (WB), Mohammad Saqib (WB), Thomas Walker (WB)

The GTAP-E model was used to feed into several components of the Pakistan Electricity Subsidy such as:

- (i) Contribution to Pakistan Growth and Energy DPCs – We conducted a PSIA and wrote the Economic Analysis for the Pakistan Power Sector Reform DPC (P128258). Preliminary results were shared with the Government of Pakistan during the pre-appraisal mission.
- (ii) Technical paper - This paper looks in depth at the welfare impacts and policy options associated with the reform, and will be developed as a working paper. The results were presented at various forums (Pakistan in February 2014, SASHD KEG in February 2014, AFR/SAR Social Protection Learning Forum in April 2014).
- (iii) Policy Note (P149465) - The team has drafted a just-in-time policy note, which has been peer reviewed and will be delivered by end of this FY. Results of the analysis were presented on a number of occasions within the Bank, and will be disseminated to the Government of Pakistan in June 2014.
- (iv) GTAP-E model simulations on improved energy capacity and economic growth were also cited by the IMF Country Report No 13/287.

In progress:

Low Water High Growth in South Asian Economies

Chandra Sinha (WB), Thomas Hertel, Badri Narayan, Sebnem Sahin (WB), Farzad Tahiripour The authors have worked on a regional study regarding interactions between biophysical factors (climate change and water) and economic variables within an integrated modeling framework for India, Bangladesh, Nepal. The findings of the report aim to support the decision makers from the central and local governments in prioritizing investments, and designing policy interventions to encourage a more efficient use of water resources- while increasing productivity.

Food Price Transmission and Effectiveness of Price Stabilization Policies in South Asia

Madhur Gautam (WB), Nelson Villoria, Elliot Mghenyi (WB), Sebnem Sahin (WB)

The authors have worked on a regional study using the GTAP model regarding commissioned by the SAR Chief Economist's unit.

Climate change impact on agriculture in the Sava River Basin

Sebnem Sahin and David Meerbach (WB)

The authors have worked on modelling the using the GTAP and CROPWAT models. The first draft report was submitted to internal/external reviews.