



ESCWA

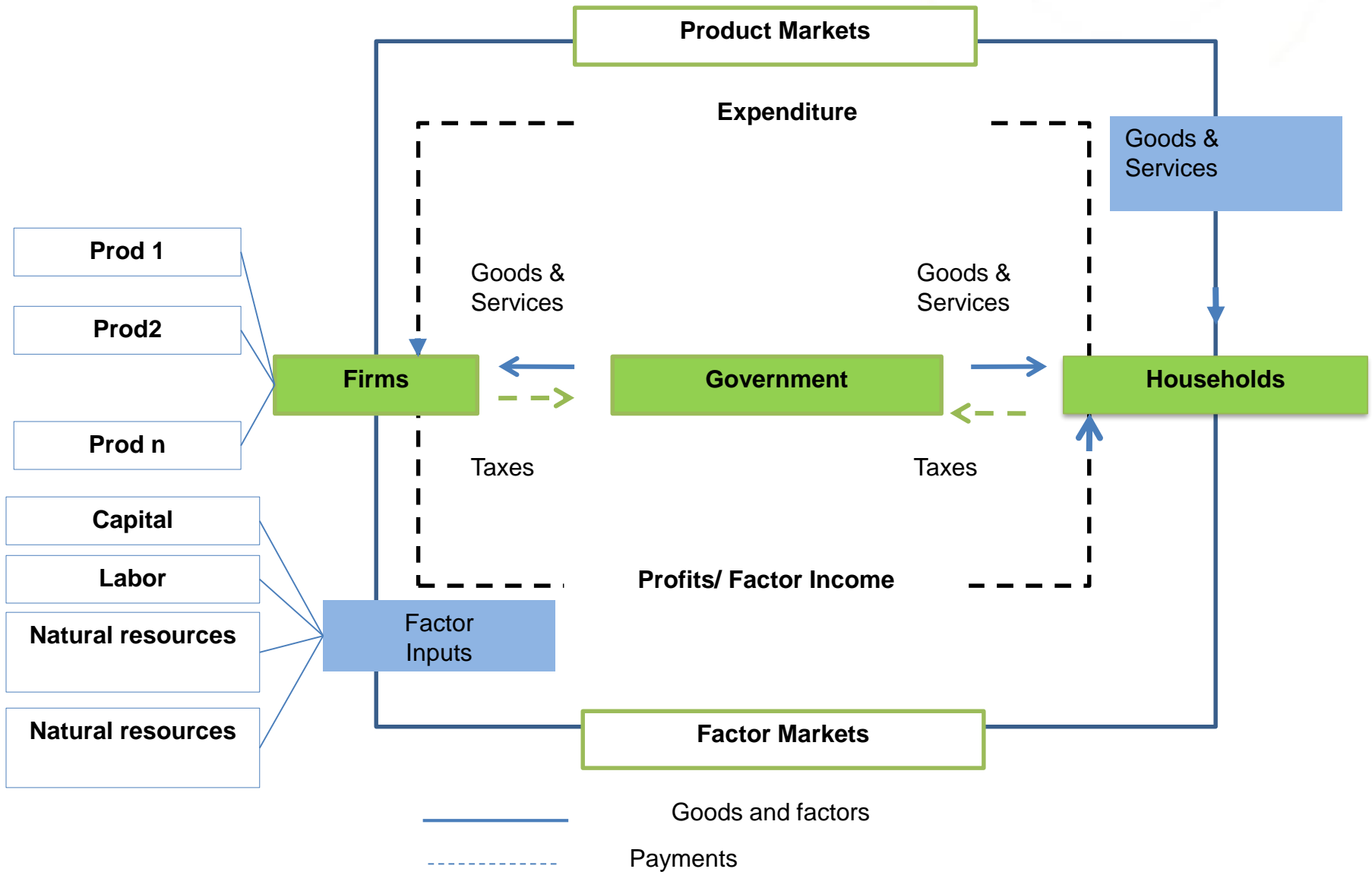
United Nations Economic and Social Commission for Western Asia

UNESCWA quantitative tools

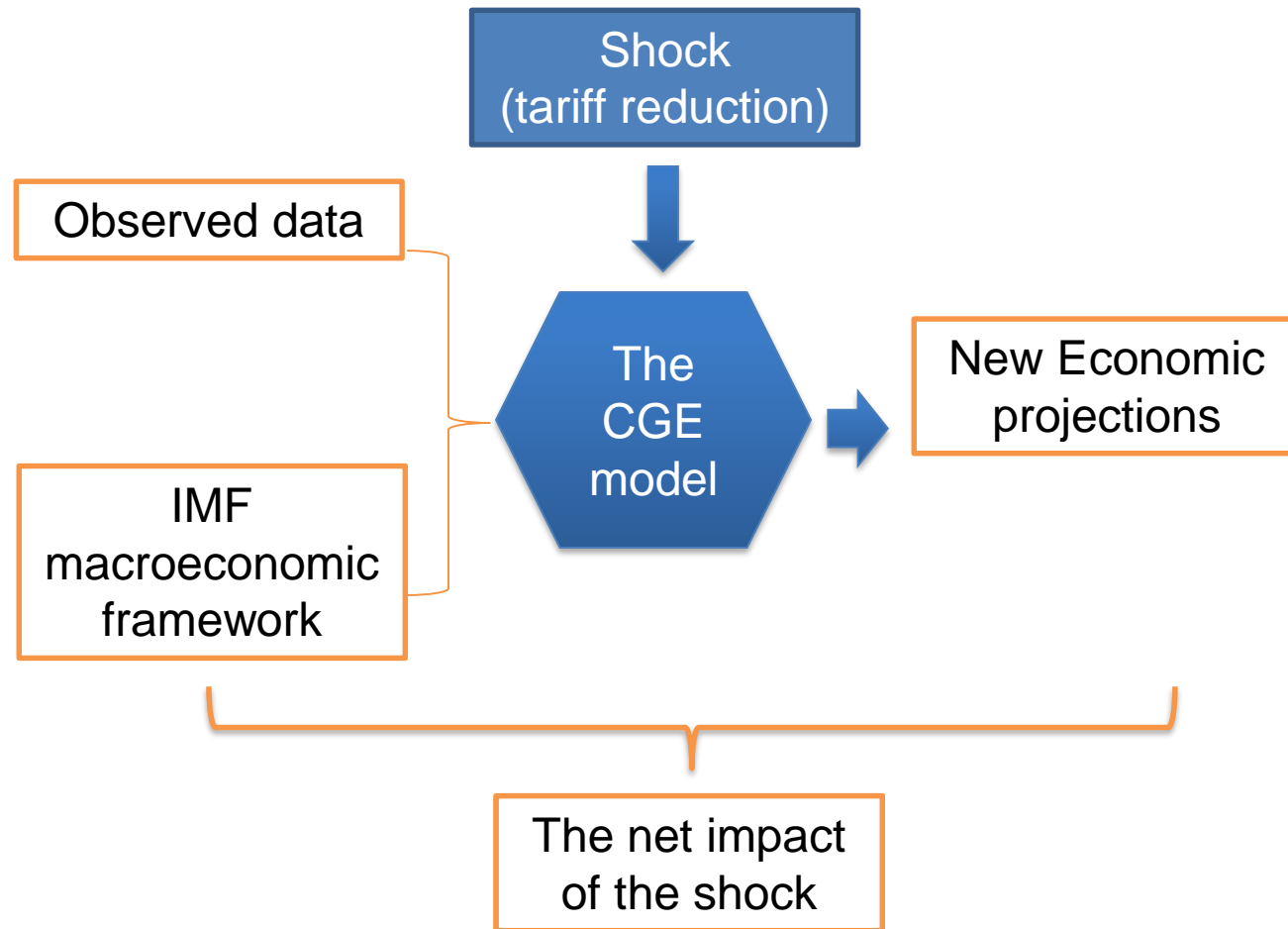


- UNESCWA is developing a package of quantitative tools to help member countries assessing the impacts of various macroeconomic and fiscal shocks.
- Changes in tariff structure is among these shocks.
- Tools are finetuned to respond to specific question
- Each question has its own tool.
 - Global/regional trade Agreements: Global CGE
 - Fiscal: single country CGE model
 - Pension: OLG model
 - Forecasting: econometric model.

What is a single country CGE model

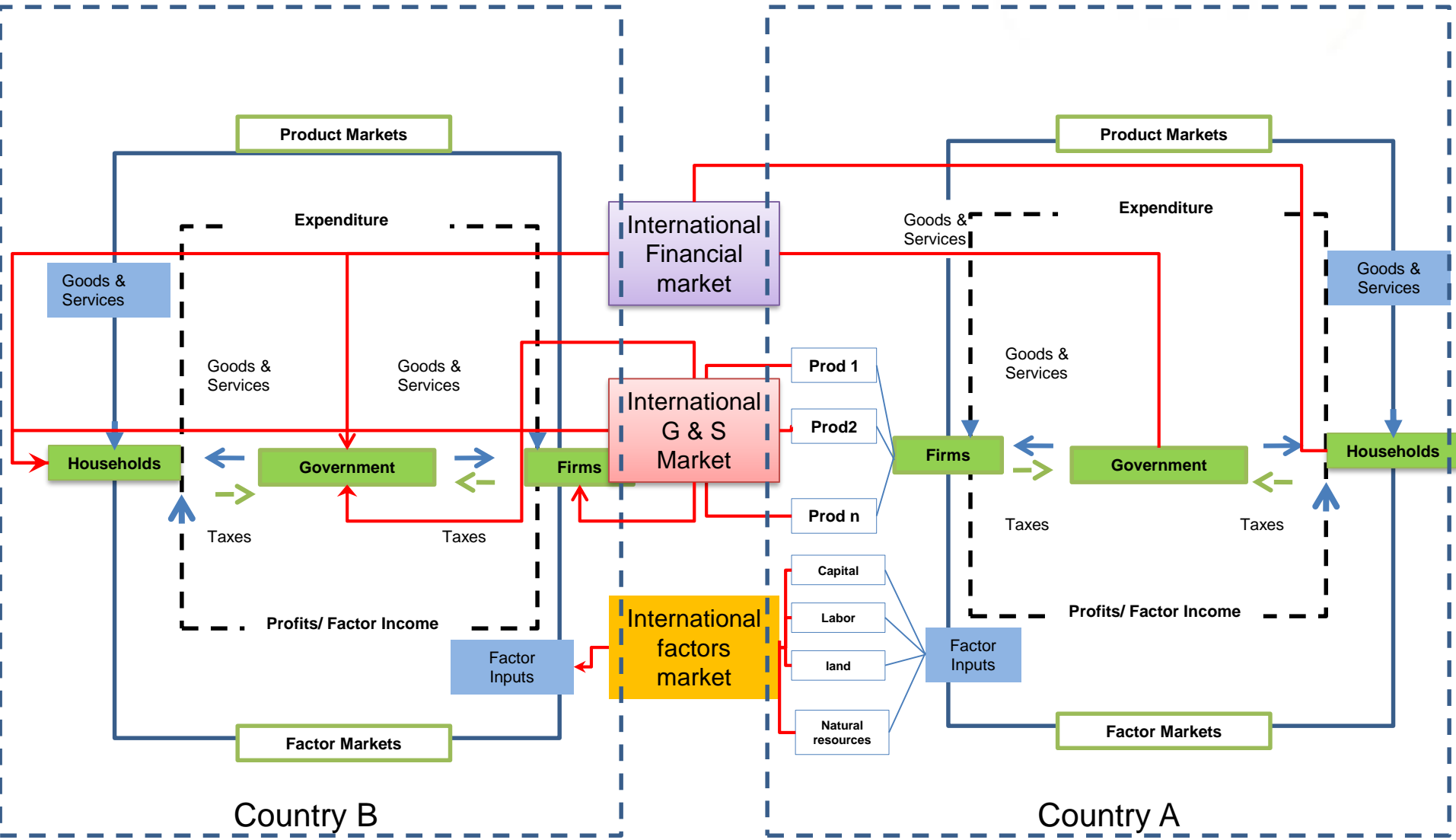


The methodology



Global CGE model

What is a Global CGE model: A 2 countries model

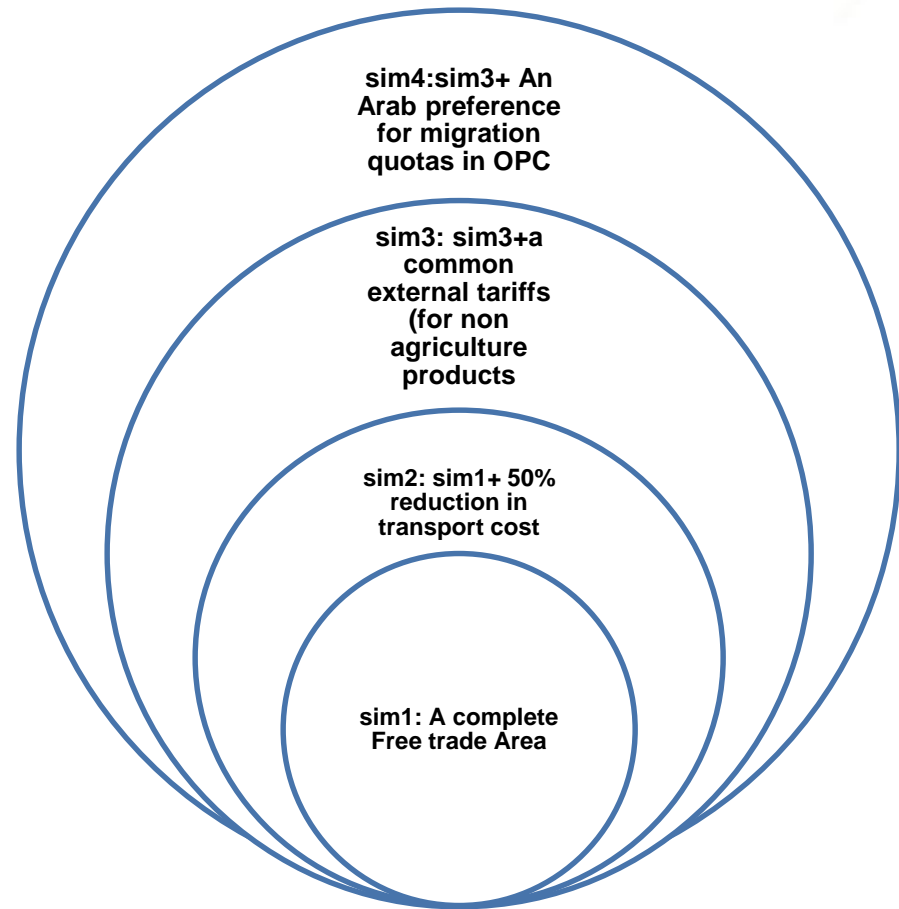


Sim 1 (FTA): A full implementation of intra-Arab FTA

Sim2 (TR) =Sim1+ a 50% reduction of intra-Arab transport costs

Sim3 (CU) : Sim2+ a customs union for non agricultural products. The Common external tariffs is supposed to be equal to the minimum tariff applied by non oil producing countries. Countries that have a lower tariff are supposed to maintain their current tariffs.

Sim4 (Migration): Sim3+the replacement of 20% of non Arab migrant stock by Arab migrants



Simulations results: Impacts on trade

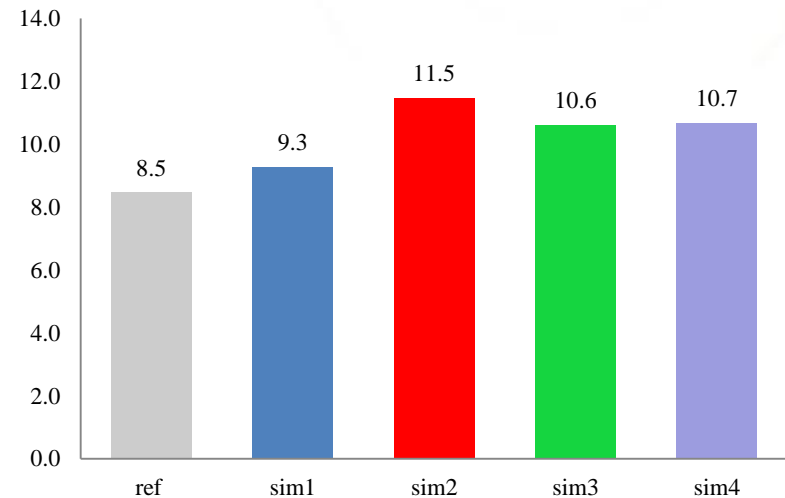


A full implementation of the FTA increases intra-Arab trade increase by around 10 per cent. If 50 per cent transport cost is reduced intra-Arab trade could increase by 38.5%.

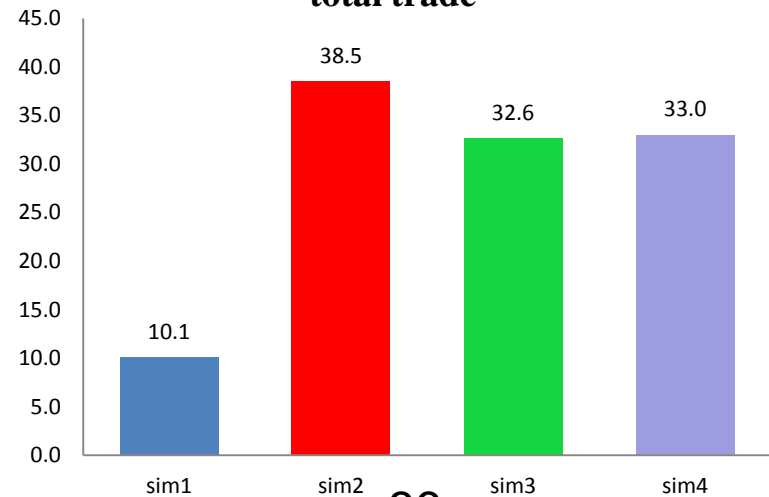
The application of common external tariff increases trade with non-Arab partners as the market access will increase in both directions.

The business as usual (BaU) scenario will lead to 8.5 per cent share of intra-Arab trade. If scenario 2 is implemented, the share of intra-regional trade will increase by 3 points

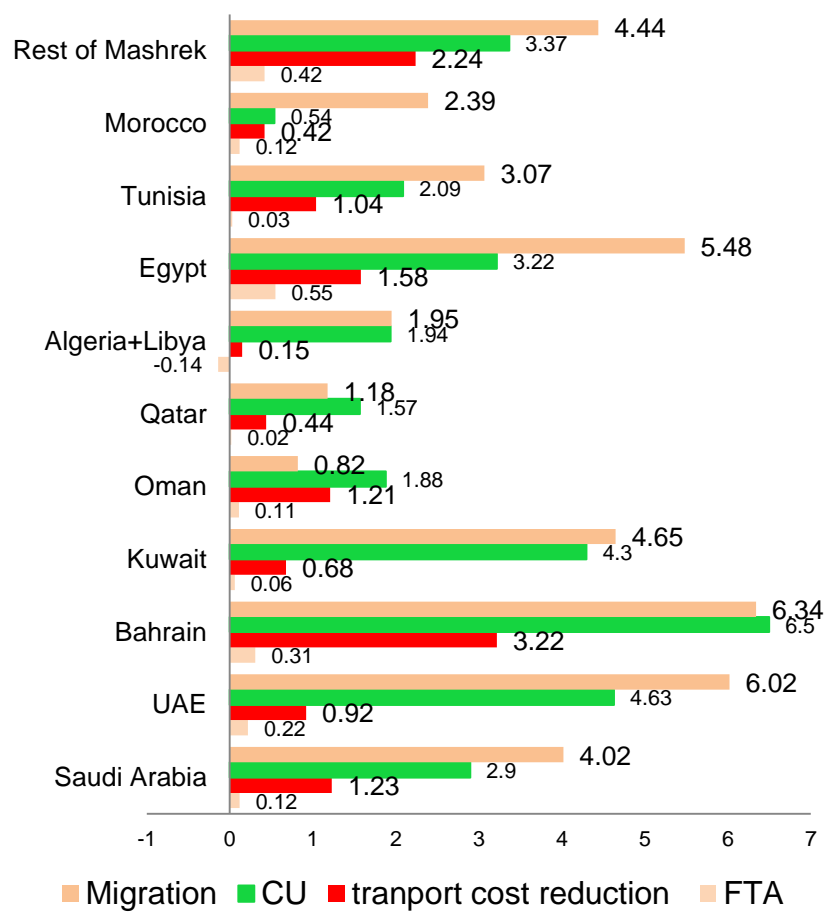
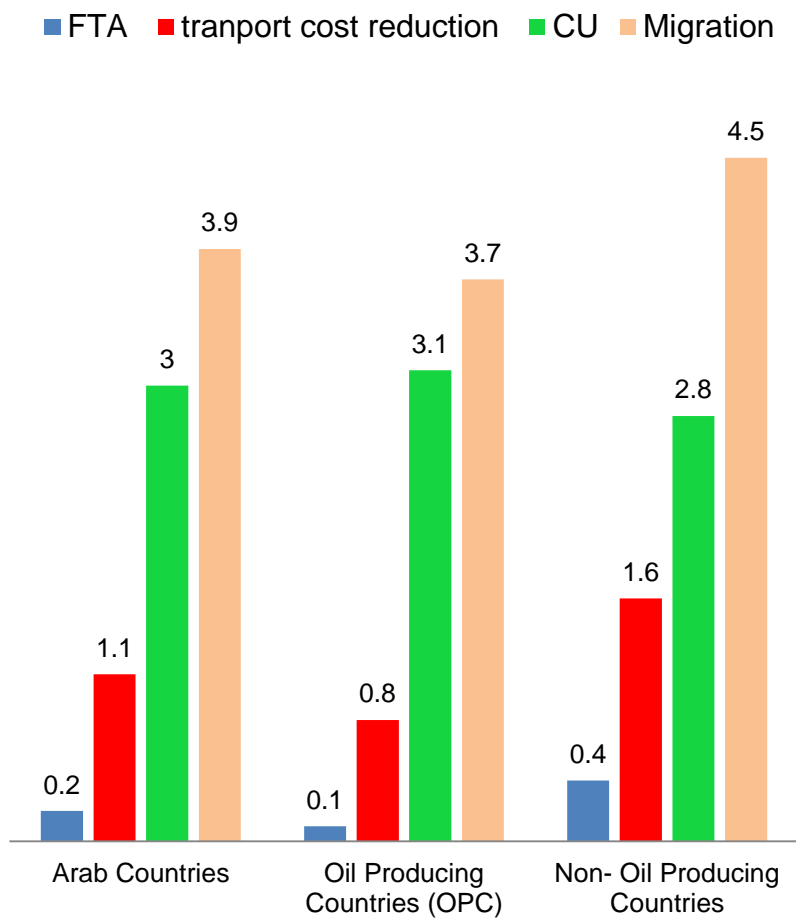
Share of the intra-Arab trade in total trade



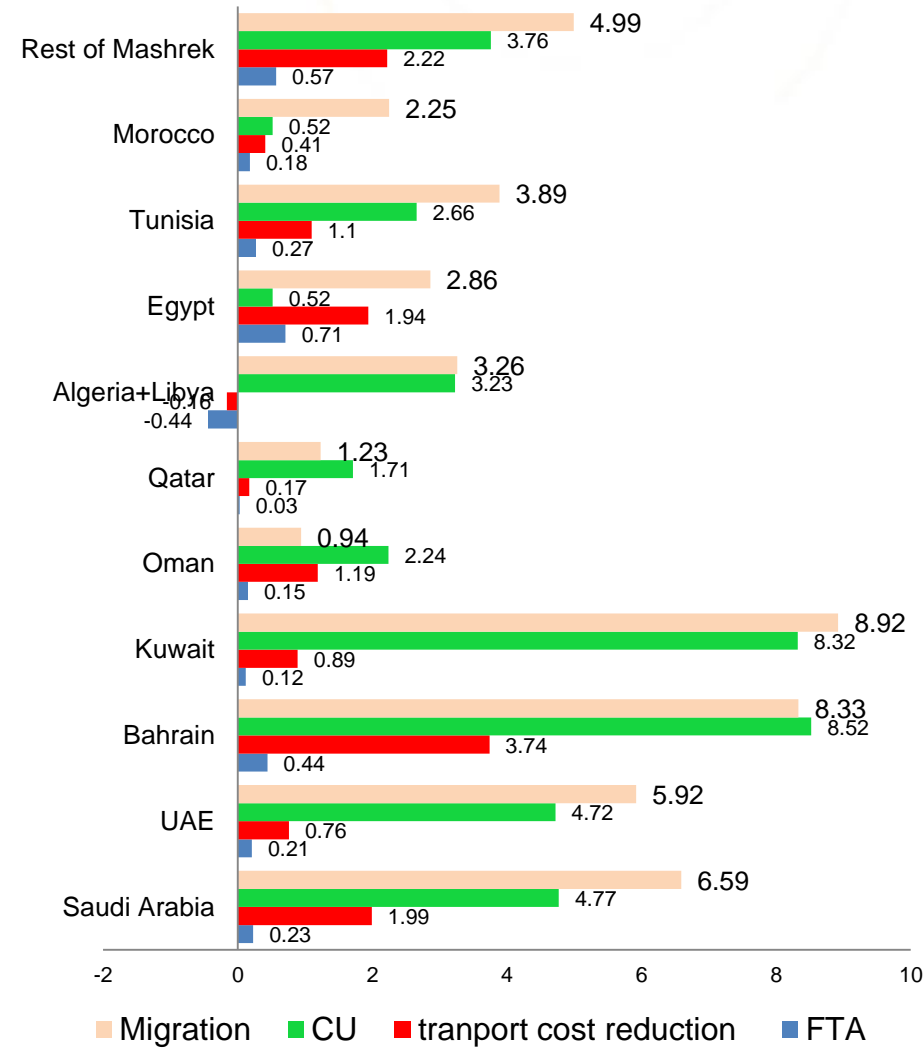
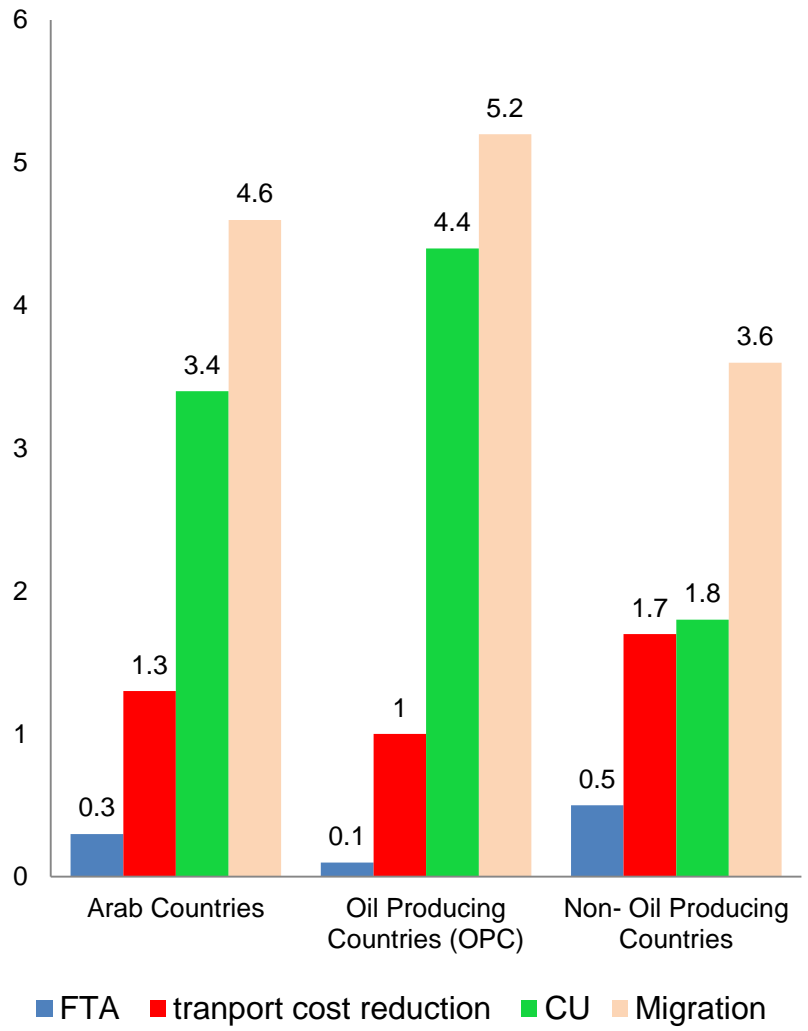
Share of the intra-Arab trade in total trade



Simulations results: Impacts on GDP



Simulations results: Impacts on Households Revenue



Simulations results: Impacts on unemployment

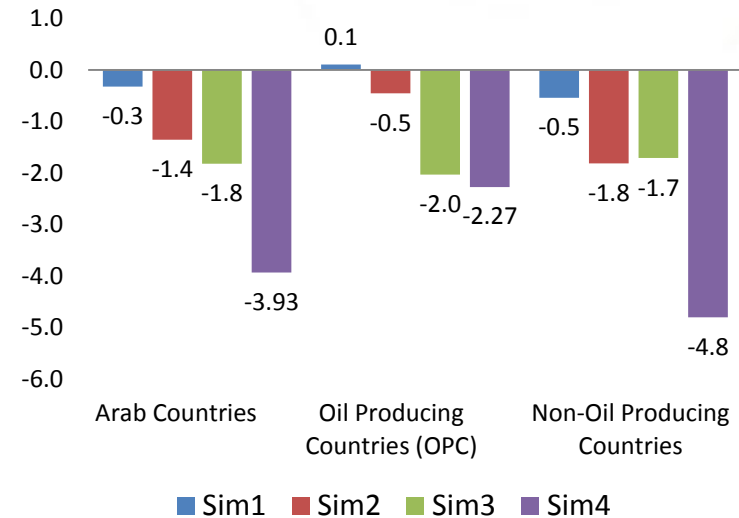


both skilled and unskilled unemployment rate can be reduced significantly, by around 4 basis points in the Arab region as a whole.

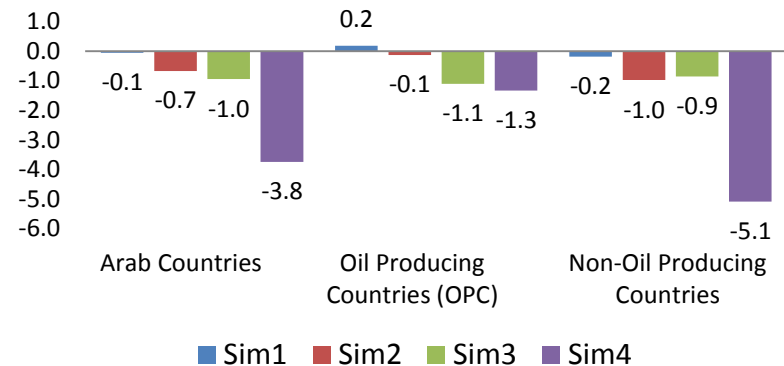
As expected, the impact is most important in the non-oil producing countries that will experience a reduction in both unskilled and skilled unemployment by around 5 basis points.

Scenario 4 will contribute greatly reduce unemployment in most Arab countries. At the country level, Egypt, Tunisia and Morocco could register around a 5 basis points reduction of unskilled and skilled unemployment. This would reduce both their unskilled and skilled unemployment rate reduced by around 40 per cent.

Absolute variation of unskilled unemployment



Absolute variation of skilled unemployment



- Computable General Equilibrium Model of the World economy
- Able to carry out simulations for more than 90 regions and 60 sectors
- The model could be fine-tuned for several purposes
- Sequential dynamics setting
 - Capital accumulation
 - Exogenous labour, population and TFP growth
- Exogenous labour supply & unemployment
- Based on GTAP 8 database, MAcMap and other data sources (ILO, IMF, ...)
- UNESCWA became a member of MIRAGE consortium since 2011. And will be member of GTAP consortium in 2012.