

Regional Integration and Poverty - What do we know?

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Summary

- Not much empirical evidence on regional integration and poverty narrowly defined, ditto for RI and FDI/migration/growth; and even less for material focused on the EAC
- important to be clear about different poverty measures and their strengths and weaknesses
- In terms of the impact both conceptual and empirical literature tells us ... **"it depends"** i.e. you could have negative or positive effects, depending on:
 - patterns of income generation and consumption
 - structure of employment
 - the nature of the RI process
 - the nature of the constraints faced by the poor
- We need to map out more clearly what **"it depends"** on
- Perhaps which are the more critical factors
- Use this to inform recommendations for possible quantitative approaches

Key transmission channels

- First order, most immediate, direct effects of changes in trade policy on poverty are the induced changes in relative prices
 - This is because a household's / individual's poverty status is mainly determined by how the poor earn their income and by their expenditure patterns
 - changes in trade policy hence lead to differential impact on consumers and producers
 - on different groups within society (eg. by gender, region, ethnicity)
 - and likely to result in changes in government revenue
- Second order (medium run) effects are the impact on structural change / transformation
 - expansion of 'competitive' sectors; contraction of 'uncompetitive' sectors
 - ... with consequent impacts on wages and employment
 - and may also impact on migration
- There may be longer term, third order effects on economic growth and FDI

Trade & Poverty: Transmission I: Relative prices

Trade liberalisation has first-order effects on prices which may change because eg. tariffs / trade costs have gone down or because of increased competition.

- Consumers: gains more likely where previously there was more domestic monopoly power, or lack of access to products
- Producers: price effects may be complex.
 - Increased competition in both export markets and domestic markets may drive prices down and therefore reduce incomes.
 - Increased access to export markets
 - Improved access and reduced cost to a greater variety / quality of intermediate inputs.
- Role of transport costs:
 - Dampen the transmission of lower prices on imports
 - Exacerbate the transmission of lower prices on exports

Trade & Poverty: Transmission II: Structural Change

- Labour is key asset of the poor, hence importance of trade in providing new employment opportunities in expanding sectors.
- Poor largely concentrated in agricultural/rural areas, so reductions in poverty more likely where:
 - agricultural (productivity) growth.
 - ability to move to other activities within same geographical area;
 - greater possibilities of migration
- As demand for eg. unskilled-labour increases one would expect wages (for those in employment) to rise
- Incomes may rise if productivity rises.

However,

- Liberalisation likely to lead to declining employment in other sectors.
- Hence structure of growth will matter for poverty reduction.
- The poor tend to be unskilled therefore growth which reduces demand for unskilled labour more likely to increase poverty.

- Increase in factors of production (capital and labour):
 - investment population growth, reductions in excess labour, increased participation of women, migration, or education
- Using existing resources more efficiently
 - inter-sectoral specialisation
 - intra-sectoral specialisation (eg value chain integration)
 - reallocation of production between firms within a sector
- increasing technical efficiency:
 - economies of scale, inventions and innovations, from copying or learning from best technological or managerial practice in other markets, positive spillovers

Regional Integration in the EAC

- EAC with Kenya, Tanzania, & Uganda established in 2000; Rwanda and Burundi joined 2007
- Customs Union came into force in 2005; common market in 2010; monetary signed in 2012
- maximum duty rate of 25% except for sensitive items
- considerable evidence regarding non-tariff barriers, frequently related to infrastructure and logistics (see eg. CUTS, 2012; Walkenhorst, 2012)
- well documented rise in intra-EAC trade, and high-levels of intra-regional trade in comparison to other African regional economic communities

- Regional integration:
 - reductions in impediments to goods and services
 - reductions in obstacles to cross-border investment and capital flows
 - reductions in the barriers to movement of labour between countries.
- The preceding focuses on the formal nature of the "agreement" but RI typically goes beyond the reduction of barriers
 - political drivers and aspects of integration
 - political economy of integration – who are the key actors influencing the negotiations, ratification, implementation, the exceptions, additional features / clauses...
 - how does civil society engage with the RI process

Regional integration may be specific in several dimensions.

- 1 Which prices and sectors are impacted upon will depend on the regional specificities and on which sectors are liberalised.
 - substantially all trade (Article XXIV)
 - complete freedom under the enabling clause
 - importance of political economy of RI
 - issues surrounding implementation
- 2 RI often goes beyond tariff reductions, dealing with behind the border measures + well as intra-regional infrastructure issues
 - May have different impacts on movement of capital (investment) and labour (migration).
- 3 Implications for government revenue
- 4 Regional infrastructure schemes
- 5 May have explicit social policies designed to impact upon poverty reduction
- 6 Role of cross-border trade and policies addressing that trade

Measuring poverty: what do we mean by poverty?

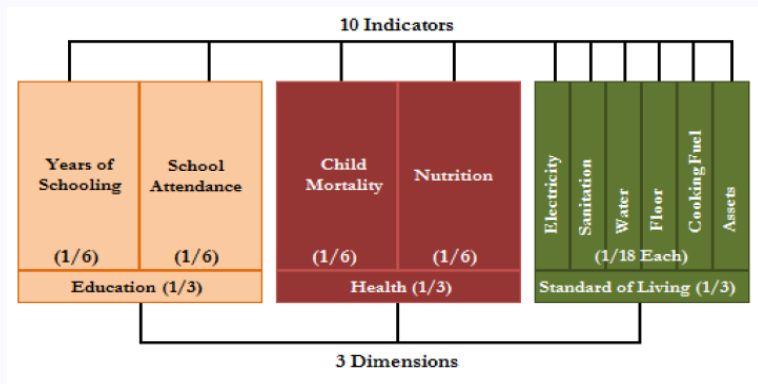
- Poverty line (\$/day): headcount ratio – how many people are below the the poverty line as a proportion of the total population
 - Does not capture depth of poverty nor distribution
- Poverty gap: on average how far away are you from the poverty line, as a percentage of the poverty line
 - Measures average depth, but insensitive to the distribution of poverty
- Dashboard of indicators: capture more than one indicator but fail to capture the joint incidence of those factors
- Multidimensional measures: combine several measures (eg. income, health, education) into a single measure which capture the joint incidence of those measures
 - Can be used to focus on sub-groups: region, urban / rural...
 - Which are the appropriate dimensions to consider?
 - How to aggregate / weight the dimensions to create single index?

Poverty measures for the EAC

- Headcount = % of people below the poverty line
- Poverty Gap = on average what is the extent of poverty
- Gini = measure of inequality where 0 is no inequality; 100 = maximum inequality

	Year	Headcount	Poverty Gap	Gini
Burundi	2006	77.65	32.88	33.36
Kenya	2005	33.6	11.7	48.51
Rwanda	2010	60.25	23.7	51.34
Tanzania	2011	46.6	14.35	37.78
Uganda	2012	22.24	10.13	42.37

OPHI: Global Multidimensional Poverty Index



- A person is multidimensionally poor if they are deprived in at least one third of the weighted indicators.
- The MPI is the product of the % of people identified as poor and the average intensity, or average deprivation score among the poor.

Poverty in the EAC

- MPI = Multidimensional Poverty Index
- H = proportion of the population that are multidimensionally poor.
- OPHI single out Rwanda and Uganda as particular success stories

	Burundi		Kenya		Rwanda		Tanzania		Uganda	
	MPI	H	MPI	H	MPI	H	MPI	H	MPI	H
National	0.45	80.8	0.3	60.1	0.46	82.9	0.33	65.6	0.42	77.9
			0.24	51.2	0.33	66.1			0.34	66.8
Urban	0.21	43.1	12	26.3	0.3	58.7			0.2	42.4
			0.07	17.5	0.19	40.5			0.12	26.6
Rural	0.48	84.9	0.34	68.4	0.49	87.2			0.45	83
			0.29	59.4	0.35	70.2			0.38	73.9

Source: OPHI various publications; Where there is more than one row for a given category (eg. national) this is because there is data for two year: Kenya - 2003, 2009; Rwanda - 2005,2010; Uganda: 2006,2011. For Burundi and Tanzania the data was only available for 2010

- This has been concurrent with EAC regional integration process
- However little evidence of causality

Who are the poor

- How useful is something like the MPI?
- If we want to understand how regional integration might impact on poverty we also need to understand who the poor are:
 - Rural poor (largely agriculture)
 - Informal sector (subsistence farming, household-based production, unregistered firms in manufacturing / urban area; service sector workers in urban areas)
 - Women
 - Those in fragile and conflict-afflicted states
- What factors make them poor?
- And therefore on how regional integration might impact on those factors?

What makes the poor poor?

Common elements:

- Lack of income and/or employment
- Vulnerability to shocks and ability therefore to insure against risk
- Access to social security, education, health, finance
- Lack of outside options eg. migration

Rural	Informal Sector	Women	Those in conflict
Low productivity	Lack of employment rights	Position in household	Weak rule of law
Internal mkt barriers	uncertainty	Lack of asset ownership	Low levels of security
Access to infrastr.	Poor working conditions	Time constraints	Uncertainty
Access to utilities & services		Greater risks eg. cross-bdr trade	Capture of institutions
Weather		Lack of contact with markets	
Compliance with standards		And with distribn networks	
Lack of knowledge & info.			
Produ subsidies lowering prices			
Export taxes lowering prices			
Incentives for diversification			

And how does this relate to trade / RI?

- Some of the common elements and some of the specific constraints (in bold) have a direct link to the first and second order impacts of trade / regional integration

Rural	Informal Sector	Women	Those in conflict
Low productivity	Lack of empl.rights	Position in h/hold	Weak rule of law
Internal mkt barriers	Uncertainty	Poor asset ownership	low levels of security
Access to infrastr.	Poor working conds	Time constraints	Uncertainty
Access to utils/servcs		Risks (x-border trade)	Capture of institutns
Weather		Poor info on mkts	
Standards compliance		And distribn networks	
Lack of knwldge/info			
Prod subs lowering prices			
X taxes lowering prices			
Weak divrsfctn incentives			

- Ex-post analyses (what do we know happened in the past):
 - Regressions on determinants of poverty: trade, migration, fdi
 - Regressions on (wage)inequality and also on churning
 - Firms level regressions eg w.r.t productivity or churning
 - Growth regressions – i.e. what are the determinants of growth?
 - Gravity regressions – i.e. what are the determinants of trade?
- Ex-ante analyses: (simulating what may happen in the future)
 - Partial equilibrium models
 - CGE models + micro-simulation
- Almost entirely based on income / expenditure measures of poverty
- Absence of treatment of multi-dimensional poverty measures
- Absence of any integrated treatment of the factors / constraints identified earlier

What is the evidence – RI and poverty

- effects very heterogenous - "it depends"
 - Porto (2006) using household data on Mercosur finds a pro-poor effect; Borraz et.al (2012) finds positive effects for Uruguay, negative for Paraguay
 - Nicita (2009) on Mexico (NAFTA), using household data finds the effects on poverty were negative but small
 - Nicita et al (2014) look at the structure of protection in six african countries and argue that the high levels of agricultural protection suggest that liberalisation would have a negative impact on poverty
 - Maertens & Swinnen (2009) show how increase standards reduced poverty among rural farmers as it increased the ability to export and for rural farmers to become wage earners.
 - Bustos (2011) using firm level data suggests that Mercosur increased wage inequality in Argentina
 - Gender impacts: Aguayo-Tellez, 2010 and Juhn, 2014 on Mexico; Gaddis & Peters, 2014 on Brazil – each of which find positive impact on women's labour outcomes, while Peri & Poole, 2013 on Brazil find little effect.

What is the evidence – trade and welfare?

- CGE / PE models (ex-ante) - impact on welfare often positive but size of effects small
 - CEPR (2013) impact on EU and US GDP respectively of TTIP: 0.48% and 0.39% and two-thirds of this from reduction in NTBs
 - UNDP (2011) look at various integration schemes in Africa and suggest the possibility of positive welfare gains, especially with improvements in transport infrastructure.
 - Khorana et.al (2009) use a PE model to look at the impact of the EAC transitional arrangement on Uganda. They obtain different results depending on the level of aggregation, with small / negative overall welfare effects
 - Castro et.al (2004) use a PE model with a focus on (tariff) revenue implications. They suggest that tariff revenues would decline by 11% on average, with Kenya and Tanzania gaining in terms of welfare, and Uganda losing – which is driven by the changes in tariff rates (see also Stahl, 2005)

What is the evidence – simulation models?

- Typically assess overall welfare, and capture changes in specialisation from the changes in relative prices, but often do not capture:
 - impact on different categories of households unless linked to micro-simulation models
 - impact on investment or migration
 - impact on firms be this pro-competitive effects or productivity effects
 - not very good at capturing NTBs

What is the evidence – factors of production?

- FDI and growth
 - Aggregate data shows mixed evidence, positive effects more likely the higher is the stock of human capital, and the higher the quality of domestic institutions
 - Firm-level data generally positive though much more so for high income as opposed to lower income countries
- Migration
 - Increases real incomes of migrants as they move to more productive activities (poverty reduction for people as opposed to places)
 - Remittances
 - Remittances may increase income and thus alleviate poverty
 - Adams & Page (2005) look at 71 LDCs and suggest that a 10% increase in the share of international migrants leads to a 2.1% decline in the number of people living on less than \$ a day.
 - but little evidence of positive impact on growth

What is the evidence – growth?

- Regional integration and growth
 - small literature, with a strong focus on EU integration
 - most studies find evidence of positive impact on growth, similarly to the general trade and growth literature, with estimates of growth effects typically between 0.5% to 1%.
 - importance of institutions, and therefore lower impact for poorer countries with weaker institutions
 - mixed evidence from firm level studies (self selection v learning by doing)

Conclusions: So what do we know, or not know?

- Impact on poverty mixed
- Majority of ex-ante work focuses on aggregate "welfare" effects
 - To capture poverty / inequality CGE models need to be linked to micro-simulation models and require household data
 - Typically looks at impact on households overall without decomposing (eg. gender), though sometimes with a regional decomposition
- Ex-post work typically more detailed and frequently based on household data or firm-level data
- consequently relative absence of work which focuses on other dimensions of poverty, or on multi-dimensional poverty
- Data, data, data
 - latest available household survey data: Burundi (2008) Kenya (2005-06); Uganda (2012-13 but not publically available); Rwanda (2010-11); Tanzania (2011-12)
 - other data - firm level, employment, migration, fdi typically much more limited

Conclusions: So what could we (perhaps) do better?

- Qualitative analysis (danger of only relying on numeric data)
 - Map out more clearly the "it depends"
 - Understand better the political economy of RI in the EAC
 - Examine the consistency / coordination policies and instruments used with the poverty effects
- For ex-post work
 - more work on other trade-related dimensions of poverty and constraints that the poor face
 - instead of using multidimensional poverty indices, construct "multidimensional constraint indices" and see how they RI impacts on these, and how these impact on poverty
- for ex-ante work
 - for 'simple' bottom line numbers hard to step outside the CGE framework, even though its limitations are well known
 - link partial equilibrium models to h/hold data (?)
 - better use of rules of thumb and descriptive statistics