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Regional trade agreements, integration and development

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Abstract

Developing countries have become more active participants in regional trade agreements, which raise questions about how the benefits of integration are distributed. A key concern is whether countries at the low end of the income spectrum are able to capture development gains from integration. Historically, such impacts have been difficult to identify with precision. This paper contributes to the understanding of such issues by analysing the impact of regional integration on growth and within country inequality. The investigation develops two measures of regional integration using trade agreement participation as a proxy for preferential trade access. The analysis shows that regional integration leads to higher economic growth and lower within-country inequality in member countries. The direct development effects can be further enhanced by a second transmission channel whereby a country captures indirect benefits from any agreements to which its trading partners are party. The ability to capture gains from integration varies across developing country regional groups with developing Asia benefiting on par with the developed world.

Key words: Free trade agreements, regional integration, panel data, low-income countries, least developed countries

Contents

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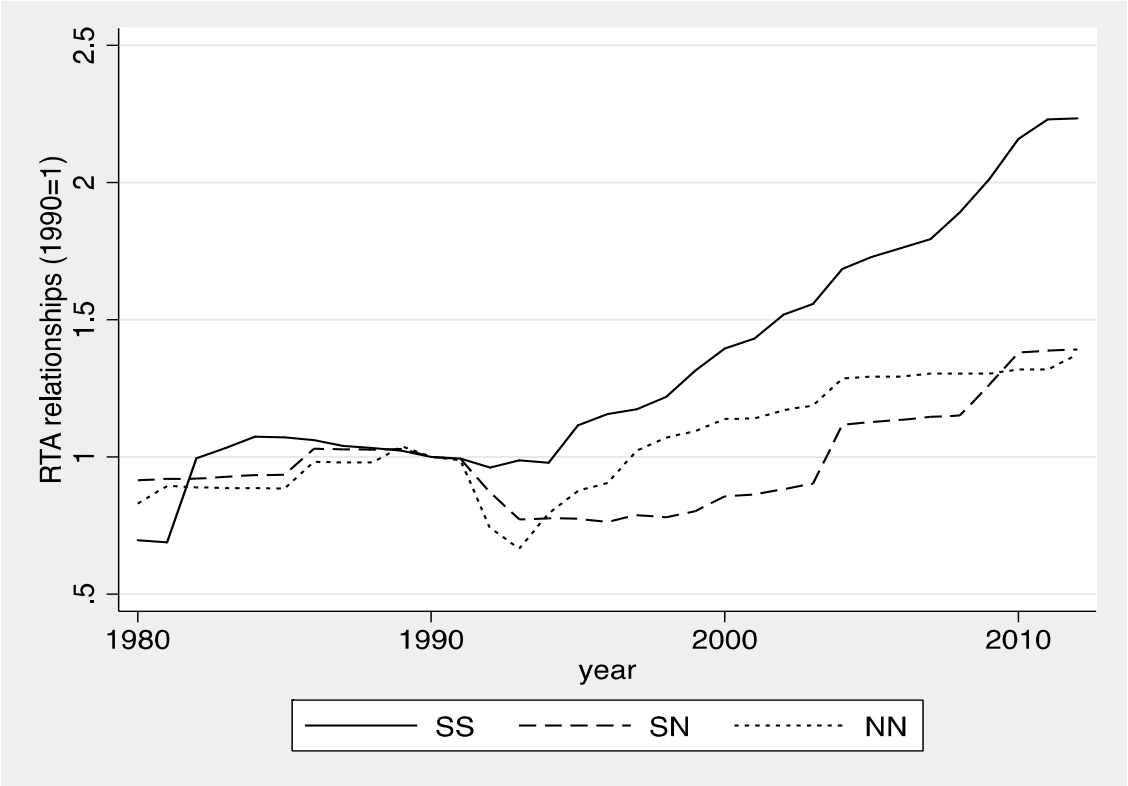
1. Introduction

Regional trade agreements (RTAs) can be a useful tool in promoting growth.[1] RTAs structure trade in a way that can increase domestic productive capacity, promote upward harmonization of standards, improve institutions, introduce technical know-how into the domestic market and increase preferential access to desirable markets. These are outcomes that could benefit developing economies in general and particularly the least developed countries (LDCs) and other low-income countries. However, most studies of regional integration agreements show that, on average, low-income countries benefit less (see for example Ariyasajjakorn et al., 2009; Feenstra, 1996).

Despite the relatively low benefits for LDCs, every country in the LDC category is a member of at least one RTA. The agreements range from partial scope agreements to economic integration agreements targeting political union. Most RTAs involving LDCs are South–South agreements (figure 1), which are generally poorly implemented and not known to be particularly beneficial for the industrialization of partner countries. There is also an increasing, albeit small, number of agreements in which LDCs are part of North–South agreements (for example the European Union-Caribbean Forum (CARIFORUM) Economic Partnership Agreement). The expected impact of LDC participation in North–South agreements is larger, but few studies have sought to quantify the impact.

Figure 1. Regional trade agreements by trading partner type (1990-2015)



Source: Authors' calculations based on IMF data and Bergstrand (2015).
Note: SS represents South–South; SN, South–North; and NN, North–North RTA relationships.

The paper's motivation is rooted in the Sustainable Development Goals. The Goals clearly recognize the role of trade as a potential development tool. In particular, they highlight the role inequality plays in holding States

[1] Regional trade agreements are defined as any agreement involving tariffs lower than most-favoured nation rates.

back (Goal 10 concerns reduced inequalities) and the potential role trade can play in addressing this (Goal 2 targets zero hunger and Goal 8 targets decent work and growth). In 2016, RTAs were the de facto way to access the global trade regime. As a result, a clear understanding of whether RTAs promote developmental outcomes such as reducing inequality is paramount.

This paper explores the question of how trade agreements affect inequality using two levels of analysis. The first is at the national level. A sovereign State can join an existing RTA or create a new one with its trading partners. The introduction of new trade relationships will affect between-household inequality in member States mostly through the impacts on the labour markets and wage earnings, akin to the general links between trade and poverty, although the direction is unclear.

The second level is regional. Not all neighbouring States have RTA relationships. Yet where an RTA exists, even non-member States are impacted by changes in trade flows. That is, there are potential impacts for a country that is not in a formal RTA but trades extensively with countries that are highly exposed to regional agreement with other countries. This feature is incorporated into the analysis by estimating the effects of RTAs enacted by trading partners of a country with third parties. To differentiate this from the direct benefits of being a party to an RTA, this indirect measure is referred to as external exposure to regionalization.

The literature on the impact of RTAs on non-member countries has focused largely on trade outcomes (see for example Winters and Chang, 2002) and growth rates (Hur and Park, 2012). Trade, on average, improves a country's growth and such an impact is expected to be higher in less developed countries. However, trade has multidirectional impacts on inequality and development.

This level is particularly critical for LDCs, which would have the most to gain if RTAs narrowed regional gaps in inequality. Yet, while LDCs often receive the most preferential treatment, their vulnerability to shocks makes the benefits from openness (both direct and indirect) less evident. While RTAs can lead to convergence, some show that the poor countries in a region are more likely to diverge (see for example Venables, 1999).

This paper attempts to capture both growth and development effects by considering whether lower levels of within-country inequality can be attributed to RTAs, controlling for the impact on low-income countries and other regional groups.

Two new measures of regional integration are introduced. The first measure is based on bilateral trade between RTA members and captures the ability of a country to have a self-determined regional trade policy. The second relates to the situation when a country is engaged in the regional networks of other countries. The results show that both a country's own regionalization and its exposure to the regionalization of others positively contribute to economic growth globally. However, the results vary according to developing country clusters, with some areas such as sub-Saharan Africa having experienced relatively lower growth as a result of internal regionalization and exposure to regionalization.

In addition, growth results in positive distributional outcomes in the developing country clusters that are involved in more regionalization, compared with the rest of the world. For example, in developing Asia, a 10 per cent increase in internal regionalization resulted in a nearly 3 per cent reduction in income inequality. This suggests that location in a region that is characterized by noodle bowl regional trade policy activities observes a lesser increase in inequality.[2] The paper also addresses the impact of various types of regionalization on inequality through its impact on gender.

Liberalization increases trade by lowering the tariffs that distort markets. Going one step further, trade has been shown to increase growth (see for example Frankel and Romer, 1999). However, the evidence about how openness impacts development-relevant indicators is less conclusive. This has been recognized at the multilateral level, and policymakers have introduced policy guidelines aimed at making trade more inclusive for all participants. One of the most prominent examples is the European Commission's Sustainability Impact Assessment that was first developed for the World Trade Organization (WTO) Doha Development Agenda

[2] Baldwins (2006), referred to the well-known puzzle of overlapping RTAs described by Bhagwati (1991) as 'spaghetti bowl','noodle bowl', to describe the proliferation of trade agreements in Asia.

negotiations. It promotes corporate social responsibility, which has been shown to translate into more socially sustainable trade (Vidal-Leon, 2013).

The literature shows a number of transmission channels for welfare gains from trade. The lessons from the trade literature are great, especially the contribution of various elements to changes in income. However, Arokolakis, Costinot and Rodriguez-Clare (2013) suggest that the welfare gains from trade may vary by input, that is, imports of intermediate inputs and supply networks, yet overall can be estimated by looking at standard trade statistics.

The literature that explores the impact of liberalization on household inequality has tended to show mixed impacts in developing countries. Over time, even as globalization has progressed, inequality has increased by many measures (Harrison et al., 2010). Goldberg and Pavcnik (2007) show that inequality increases since gains from trade are directed mainly to skilled workers. Both Chang et al. (2009) and Dollar and Kraay (2004) show that increasing openness leads to faster growth and less absolute poverty in poor countries, but with ambiguous impacts on household inequality.

Other studies focus on demand forces to explain cross-country differences in income or welfare as a result of trade, showing a strong positive relationship between prices and the country's income per capita (see for example Feenstra and Romalis, 2014). Fajgelbaum et al. (2011) suggest that income inequality within a country matters for trade patterns and the pricing of traded goods.

Of course, RTAs are not purely about liberalization (see for example Grossman, 2016), and lower average tariff rates are only one element. They are also characterized by limitations on policy space, preferential market access to partner countries and behavioural changes to firms in impacted sectors. Thus, while this paper is related to the literature on welfare impacts of liberalization, the effects shown are related but not parallel. The paper aims to contribute evidence on the potential of trade to benefit all populations, at a time when the gains from trade are being questioned on a global scale.

Section 2 presents the empirical approach to measuring the impact of regional integration on development and describes the data. Section 3 presents the results of the empirical estimations. Section 4 concludes.

2. Channels linking trade integration and development

2.1 Impacts and channels of regional trade agreements on trade

Regional integration has long been a tool in trade promotion; increased trade flows and evolving commercial links within RTAs have been forged within and between regions in the last two decades. In developing countries, trade agreements help determine national trade policy and thus potentially could amplify the impact of trade on development. RTAs have the potential to promote higher standards in terms of labour, environment, transparency and other progressive reforms and non-economic policy objectives. Even if such benefits are realized, there are concerns about policy sovereignty and the balance between commitments and flexibility.[3]

There is a large body of literature on the impact of RTAs and preferential trade agreements, particularly on trade patterns. However, the empirical evidence is not conclusive; see for example, Estevadeordal et al. (2008) for a related discussion. There are many micro-level characteristics that are simultaneously impacted under the political and commercial effects of an RTA. Many of these are affected by the underlying reasons for the implementation of an RTA (for example commitment, foreign aid and integration) and are therefore endogenous. However, the aggregate trade impact is generally independent of the motivation for an RTA.

This paper does not distinguish between types of trade agreements. While there are different and distinct regional and income-based patterns of integration, the analysis explores impacts rather than drivers and, therefore, extrapolates from the typology. Some trade arrangements are non-reciprocal (for example,

[3] See Bagwell and Staiger (2001) for a related discussion about national policies in the context of international economic institutions.

Everything but Arms or the African Growth and Opportunities Act). These agreements most often function as a foreign aid tool and may not have strong trade impacts. There are also differences in the content of agreements – RTAs in Asia tend to forego dispute settlement, while United States of America-based agreements tend to include rules on intellectual property that go beyond what is required by WTO. The scope of RTAs also differs. While RTAs notified under Article XXIV of WTO must ultimately cover substantially all trade, partial scope and South–South agreements do not have this requirement and may cover only a very limited selection of goods and services.

From the earliest iterations of the RTA literature (Viner, 1956) it has been acknowledged that in addition to direct impacts on RTA members, RTAs also have impacts on countries that have existing trading relationships with new RTA members. This has developed into discussions on whether the proliferation of RTAs promote freer global trade (see for example Summers, 1991; Maggi, 2014) or disrupt the natural process of global liberalization (Bhagwati 1991; 1993; 1995).

Thus, within-RTA and outside-RTA effects, referred to in this paper as internal regionalization and exposure to regionalization, must be differentiated. A key contribution of the paper is the construction of two indices of regionalization, measuring trade between countries and trade with partners that are connected under different agreements to other countries. Internal regionalization (Reg1) is determined within a country, as a result of domestic policies. Exposure to regionalization (Reg2) gauges the weighted regionalization of the trading partners, or the third market effect. Both measures are aggregates built on RTA activity either by the member country or by its trading partners. Aggregation of the information allows for the measurement of the effect of general engagement in globalization policies, without concerns about the nature or involvement of such engagement.

2.1.1 Internal regionalization

RTAs drive international trade and promote stronger ties between countries. They do this through the elimination or reduction of barriers to trade such as import tariffs, export duties and quantitative restrictions. Trade liberalization benefits both members and non-members through preferential market access and internal commitments to lower domestic barriers to trade. Thus, an RTA may amplify the development impact of trade by increasing trade flows and access to goods and services, improving institutional and policy environments and improving distributional outcomes.

Regionalization refers to trade between several countries, connected under different agreements to other countries. This bilateral trade linkage, internal regionalization (Reg1), is measured as follows:

$$Reg1_i = \frac{trade_{ij} * RTA_{ij}}{\sum_J trade_{ij}} \quad (1.1)$$

where the regionalization of a country i in relation to bilateral trade with partner country j (Reg1), is measured as trade covered under any type of RTA as a percentage of total trade, and RTA is a preferential trade agreement of any type. Reg1 is bounded (0 and 1). If a country does not participate in RTAs of any type, the measure equals 0. The closer the value is to unity, the larger the share of a country's total trade that is conducted under various RTAs. The measure Reg1 is directly influenced by the number of members of an RTA and the volume and value of trade among them. Thus, this is defined as an endogenous variable in growth regressions.

2.1.2 External exposure to regionalization

The previous studies have focused on direct impacts of regionalization through trade creation and diversion. However, from a development perspective, the potential for neighbourhood spillovers introduces an additional development channel. This can be thought of as indirect RTA participation. That is, there are potential benefits from exposure to integrated markets, even if a country is excluded from a formal RTA.

In this case, the development channel is the possibility of opening up a large export market for country k (alternative destinations), particularly in the presence of strong intermediate trade linkages through supply chains to the country j that signs an RTA. In addition to the prospects for market diversification, a measure of indirect participation effect potentially captures the impact in regional and global markets of larger players, such as China. There are also potential costs arising from a country's exposure to the regionalization of its trading partners, particularly in terms of growth and distributional effects.

The measure of indirect participation (Reg2) gauges the weighted regionalization of trading partners. That is, the focus of Reg2 is third-country effects, not the bilateral trade partner of country i but the trade partners of country j. The index of exposure to regionalization (Reg2) is defined as follows:

$$Reg2_i = \sum_J \left(\frac{trade_{ij}}{\sum_J trade_{ij}} * Reg1_{j,-i}\right) \quad (1.2)$$

where $\frac{trade_{ij}}{\sum_J trade_{ij}}$ is the share of trade ij in the total trade of country i; and $Reg1_{j,-i}$ is the same as Reg1 for country j, calculated without taking into account the trade between country pair ij.

If the trade between country pair *ij* constitutes 50 per cent of the trade of *i* and 70 per cent of the trade of *j* is performed under some form of regional trade agreements with countries other than *i.* then Reg2 for *ij* is 0.5 x 0.7 = 0.35. Similar to Reg1, Reg2 is bounded between 0 and 1. If country *i* is isolated from secondary regional integration, then Reg2 = 0. The more a country is connected to countries that are integrated regionally, the higher the value of the measure. Thus, this value is highest for countries located in bowls of regionalization. It should be noted that Reg2 is not a measure of trade diversion of an RTA. In its calculation, the exposure to regionalization of country *i*'s own RTA partners is not excluded - with the exception of country *i* itself.

Reg1 is a measure of domestic policy, as it is a decision made explicitly by each country involved. However, in the current economy, RTAs are rarely concluded between two countries that have no other RTAs. Reg2 captures this effect. Reg2 is effectively an indicator of the development spillovers country *i* captures from its location in an area of higher intensity regionalization.

2.2 Estimating the effect of regional integration on development

This paper seeks to empirically quantify the growth and distributional impacts of regional integration. Particularly, it examines whether growth and inequality fare differently in low-income countries and the least developed countries, as well as in other developing country clusters.

The following growth equation is estimated:

$$GrowthGDPpc_{it} = \beta_0 + \beta_1 Reg1_{it} + \beta_2 AreaDummy{\times}Reg1_{it} + \beta_3 \ln(gdppc_{it-1}) + \\ + \beta_5 \ln(Educ_{it}) + \beta_5 \ln(lagHHineq_{it}) + \beta_6 lnInvest_{it} + \beta_7 \ln(GovExp_{it}) + \beta_8 \ln(M2_{it}) + \\ + FE_i + FE_t + \varepsilon_{it} \quad (2.1)$$

Following Iradian (2005), the specification on the inequality effects of growth and trade is augmented to analyse the impact of regionalization:

$$\ln(HHineq_{it}) = \beta_1 Reg1_{it} + \beta_2 AreaDummy{\times}Reg1_{it} + \beta_3 \ln(gdppc_{it}) + \\ + \beta_4 \ln^2(gdppc_{it}) + \beta_5 \ln(Educ_{it}) + \beta_6 \ln(lagHHineq_{it}) + \beta_7 \ln(GovExp_{it}) + \beta_8 \ln(FinOpen_{it}) + \\ + FE_i + FE_t + \varepsilon_{it} \quad (2.2)$$

where $AreaDummy$ represents either a region or a set of regional dummies. If $\beta_1 < 0$, it implies that the impact of participation in RTAs or regionalization reduces growth or inequality, on average. If $\beta_2 < 0$, then a developing country region is experiencing the inequality and/or growth decreasing impact of higher regionalization. An analogous regression is estimated for secondary exposure to regionalization (Reg2). The standard controls from the literature included in the analysis are as follows: level of human capital as measured by enrolment of school-age children, robust to Barro-Lee measure (*Educ*); government consumption as share of Gross Domestic Product (GDP) (*GovExp*); financial openness (*FinOpen*); share of investment in GDP (*invest*); M2 as a share of GDP (*M2*); inequality as measured by the Gini coefficient (*HHineq*); growth of GDP per capita (*Growth*); and GDP per capita of the previous period (*LagGDPpc*). All measures are in logarithms (*ln*) to represent the elasticities between parameters.

Development cluster dummies take several values, as LDC dummy, regional dummies (sub-Saharan Africa, dummy for Sub-Saharan Africa (SSA); developing for Asia (all non-high-income countries in the Asian region), dummy DevAs; for Latin America and the Caribbean, dummy LA) and income-related dummies according to World Bank classifications (low-income countries, dLIC; lower middle-income countries, dLMIC).

2.3 Data definition and sources

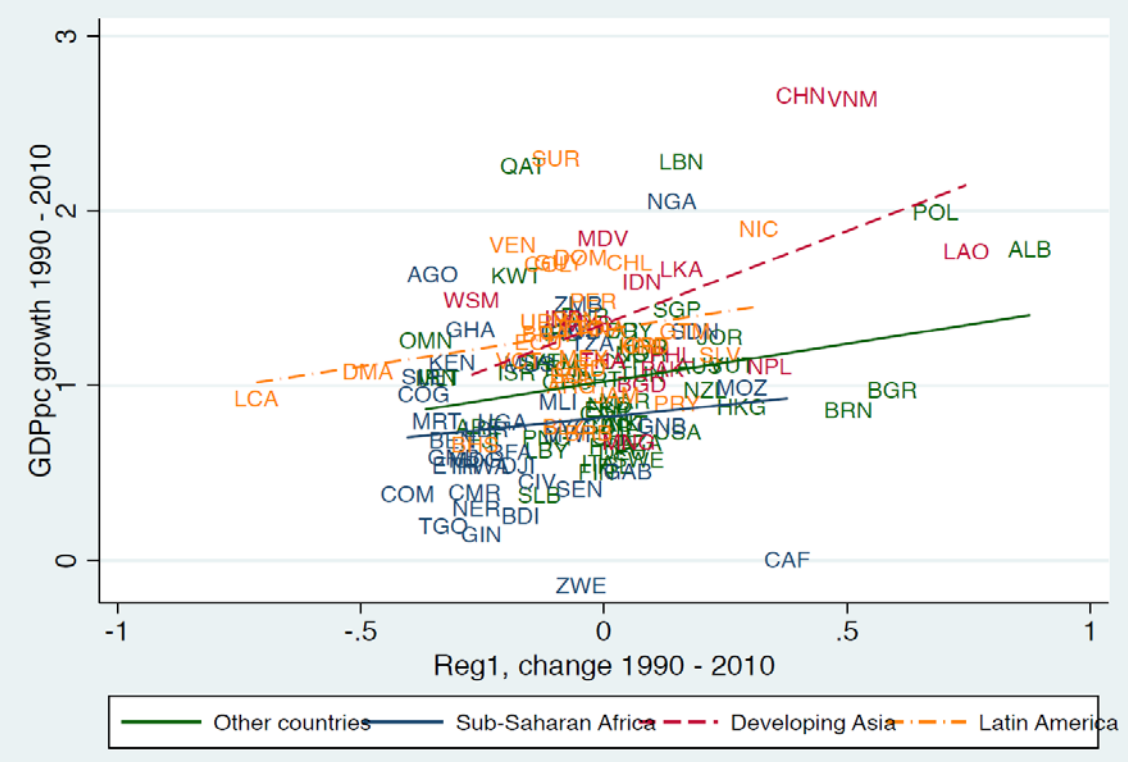
The sample covers over 100 countries (101–176, depending on specification and data availability) for the period 1990–2010 (5-year averages). RTA data is drawn from Bergstrand (2015), and the developing country clusters for the empirical analysis are sub-Saharan Africa, developing Asia, and Latin America and the Caribbean. The analysis also controls for income levels, namely LDCs and low and middle-income countries. Bilateral trade flows are from the IMF Direction of Trade Statistics. Other control variables described above are from the World Bank Worldwide Development Indicators database (WDI). The financial openness indicator is from the Chinn-Ito index (2014)[4] and income inequality is from WDI and the United Nations World Institute for Development Economics Research (UNU-WIDER)'s World Income Inequality database (WIID). Based on the availability of data, the sample of countries varies by estimation. Complete data descriptions and sources are provided in the annex.

3. Empirical Results

3.1 Internal and external exposure to regionalization

The key premise of this paper is that, in the aggregate, participation in RTAs (Reg1) is associated with higher economic growth and lower inequality (figures 2 and 3). The impact is strongest in developing Asia and also evident in Latin America.

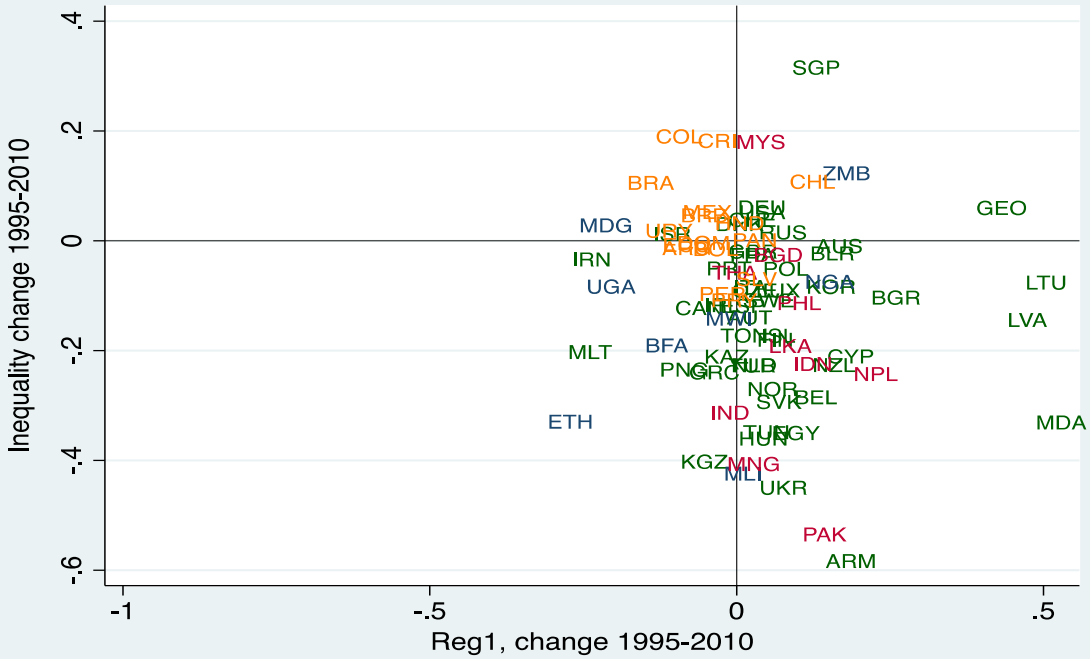
Figure 2. Regionalization 1 and Economic Growth



Source: Authors' calculations based on WDI, IMF data. Central African Republic omitted as an outlier, three-year averages used due to data availability.

[4] See also Chinn and Ito (2006).

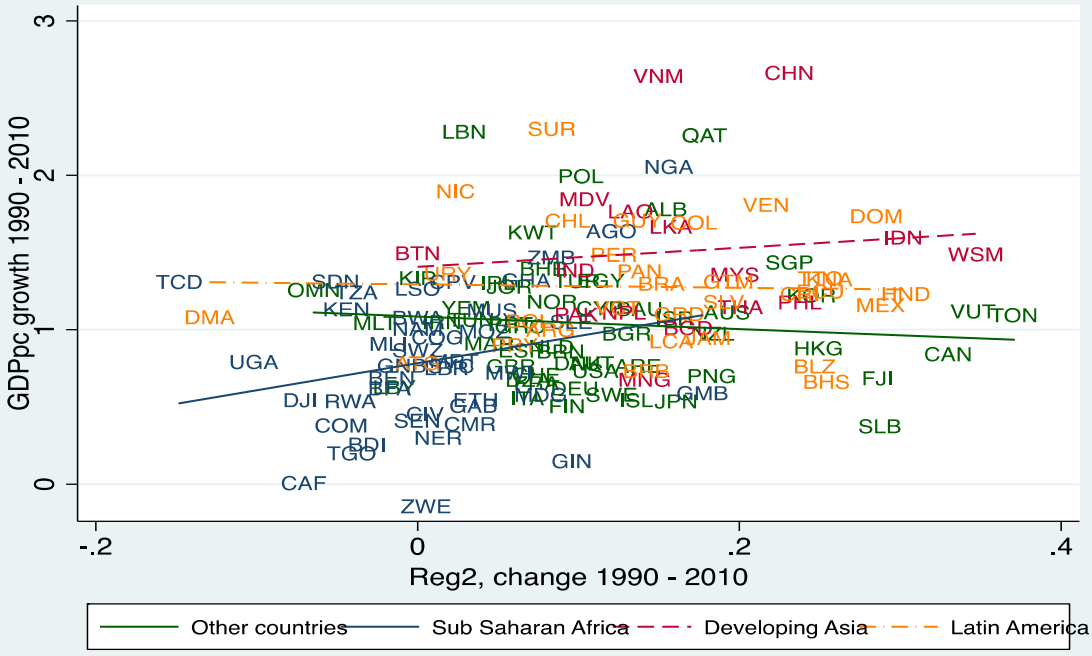
Figure 3. Regionalization 1 and Inequality



Source: Authors' calculations based on WDI and UNU-WIDER data. Central African Republic omitted as an outlier, three-year averages used due to data availability.

Figures 4 and 5 show the same correlations of integration, growth and distribution for the external regionalization measure (Reg2). Regional statistics for the Reg1 and Reg2 are provided in the annex.[5]

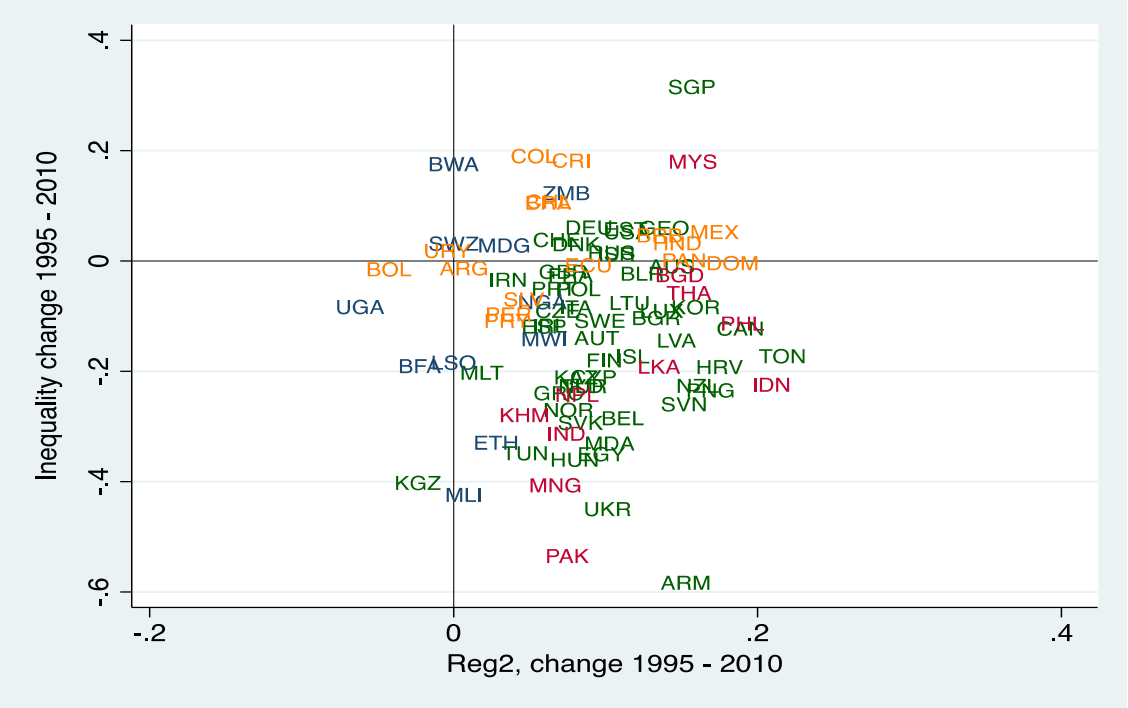
Figure 4. Regionalization 2 and Economic Growth



[5] Bilateral trade flows are from the IMF Direction of Trade Statistics.

Source: Authors' calculations based on WDI, IMF data. Central African Republic omitted as an outlier, three-year averages used due to data availability.

Figure 5. Regionalization 2 and Inequality



Source: Authors' calculations based on WDI and UNU-WIDER data. Central African Republic omitted as an outlier, three-year averages used due to data availability.

3.2 Econometric results

Tables 1 and 2 show the estimation results of the growth of GDP per capita as a dependent variable and various specifications with the two measures of regionalism. The empirical estimations are based on standard Ordinary Least Squares (OLS) and Generalised System of Moments (GMM) panel data techniques. The potential bias resulting from OLS estimations due to the endogeneity between regressors and the error term in the dynamic specification are well known. The system GMM is therefore applied (see Arellano and Bover, 1995; Arellano and Bond, 1991; 1998).

Table 1. Growth regression with Regionalization 1

	Dependent variable: Growth in gross domestic product per capita							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	OLS	OLS	OLS	GMM	OLS	GMM	OLS	GMM
Reg1	0.38**	0.29**	0.46**	0.51***	0.83***	0.54***	0.24**	0.61***
	(0.15)	(0.15)	(0.18)	(0.18)	(0.26)	(0.18)	(0.12)	(0.19)
LDC×Reg1			-0.58**	-0.89**				
			(0.22)	(0.38)				
DevAs×Reg1					-0.53*	-0.36**		
					(0.32)	(0.15)		
LA×Reg1					-0.94***	-0.13		
					(0.33)	(0.23)		
SSA×Reg1					-1.08***	-0.40**		
					(0.30)	(0.18)		
dLIC×Reg1							-0.48**	-0.96
							(0.18)	(0.60)
dLMIC×Reg1							0.47	-0.10
							(0.36)	(0.24)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	633	317	317	317	317	317	317	330
R-squared	0.05	0.33	0.35		0.41		0.37	
Hansen test				0.4		0.1		0.44
Number of countries	167	101	101	101	101	101	101	101

Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1; full tables with all controls are in the annex; data is in five-year periods over 1990–2010; GMM is performed with Instruments (IV)on-year dummies and education levels; Gini is treated as fully endogenous since it is calculated through income.

The econometric results illustrate that regional integration, in general, leads to increased GDP per capita growth, both through bilateral channels: 10 per cent higher internal regionalization results in a 2.9 per cent higher GDP per capita growth in full OLS specifications (table 1, column 2); and through third-party channels: 10 per cent greater external regionalization leads to a 5.6 per cent higher GDP per capita growth in full OLS specifications (table 2, column 2).

Table 2. Growth regression with Regionalization 2

	Dependent variable: Growth in gross domestic product per capita							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	OLS	OLS	OLS	GMM	OLS	GMM	OLS	GMM
Reg2	0.39***	0.55***	0.56**	-0.51	1.16***	0.84	0.37**	0.28
	(0.13)	(0.20)	(0.21)	(0.33)	(0.38)	(0.66)	(0.16)	(0.34)
LDC×Reg2			-0.13	-1.18***				
			(0.29)	(0.44)				
DevAs×Reg2					-0.36	-0.51		
					(0.36)	(0.54)		
LA×Reg2					-0.80**	-0.95*		
					(0.39)	(0.48)		
SSA×Reg2					-1.13***	-2.33**		
					(0.39)	(1.16)		
dLIC×Reg2							-0.12	-1.56***
							(0.28)	(0.45)
dLMIC×Reg2							0.84**	-0.69***
							(0.36)	(0.21)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	671	330	330	330	330	330	330	330
R-squared	0.03	0.34	0.34		0.40		0.39	
Hansen test				0.11		0.27		0.44
Number of countries	176	105	105	105	105	105	105	105

Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1; full tables with all controls are in the annex; data is in five-year periods over 1990–2010; GMM is performed with IV on-year dummies and education levels; Gini is treated as fully endogenous since it is calculated through income.

The analysis controls for additional growth determinants, including investment, education and other macroeconomic controls, where the coefficients are significant and with the expected signs. However, the positive impact of education on economic growth cannot be empirically confirmed. The coefficient of education, as a proxy for human capital, is negative and significant across the different specifications. This might reflect human capital levels and heterogeneous achievements across countries, as well as a possible negative effect from population growth, in tandem with decreasing education expenses (see for example, Belke and Wernet, 2015).

The growth regression is ultimately a dynamic panel regression, thus the standard GMM approach may be used to test the hypothesis. As the specifications vary (area dummies include LDCs, regions and income groups), a common framework that fits best all specifications is selected. This includes treating the level of education as an exogenous variable (as in Saidi and Aloui, 2010). In addition, consumption-based inequality generally uses GDP (of which gross national product is a subset) and, therefore, in the GMM estimations, Gini is treated as an endogenous variable.

Table 3. Inequality and Regionalization 1 and 2

Panel 1: Dependent variable Inequality					Panel 2: Dependent variable Inequality				
Variables	(1) OLS	(2) OLS	(3) OLS	(4) OLS	Variables	(1) OLS	(2) OLS	(3) OLS	(4) OLS
Reg1	0.09*	0.15**	0.21***	0.21***	Reg2	0.26***	0.28***	0.72***	0.31***
	(0.05)	(0.07)	(0.08)	(0.07)		(0.09)	(0.09)	(0.13)	(0.10)
LDC×Reg1		-0.18			LDC×Reg2		-0.36		
		(0.11)					(0.24)		
SSA×Reg1			0.02		SSA×Reg2			-0.62***	
			(0.15)					(0.18)	
DevAs×Reg1			-0.34***		DevAs×Reg2			-0.38**	
			(0.12)					(0.16)	
LA×Reg1			-0.26		LA×Reg2			-0.68***	
			(0.21)					(0.15)	
dLIC×Reg1				-0.33***	dLIC×Reg2				-0.54*
				(0.12)					(0.32)
dLIC×Reg1				-0.09	dLIC×Reg2				-0.09
				(0.13)					(0.15)
Controls	YES	YES	YES	YES	Controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	Year FE	YES	YES	YES	YES
Observations	363	363	363	363	Observations	374	374	374	374

Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1; full tables with all controls are in the annex; data is in five-year periods over 1990–2010; no constant regression is performed and R-squared is uninformative; within regions, higher initial inequality values are observed.

Difference-in-Hansen and Arellano-Bond tests for existence of the AR(2) correlation are reported in table A2. In general, the tests show that the estimations perform well, although the presence of too many instruments may be of concern. System GMM is performed, as it is more suitable for the economic growth regressions (the orthogonality assumption between regressors and errors). Since large N, low T samples may suffer from over-identification, the collapse function is used to instrument the variables with their cross-time averages and limit the number of instruments. The number of instruments is reported.

The empirical results show that a higher intensity of regionalism, on average, increases within-country inequality. This is in line with a number of findings that show that higher levels of trade can provoke inequality of wages and income (see for example Feenstra and Hanson, 1997; Goldberg and Pavnick, 2007; 2016; Foellmi and Oechslin, 2010; Borraz et al., 2012; and, Autor et al., 2015). An increase in Reg1 by 10 per cent leads to an average 9 per cent increase in income inequality (table 3, panel 1, column 1). Similarly an increase in Reg2 is associated with a 26 per cent increase in inequality (table 3, panel 2, column 1). The developing country clusters start from higher inequality rates, yet experience a lower inequality increasing effect of regionalism, as shown in table 3, panels 1 and 2, column 3. Developing countries benefit more through external regionalism, that is, through being connected through noodle bowl regional activities.

This is in line with existing evidence that while most developing country regional activity is South–South, the benefits of this pattern of partnership are inconsistent, particularly for countries at the lower end of the income spectrum (Venables, 2003) or with less exposure to world markets (Krishna et al., 2010), and among partners where factor endowments are similar (Fugazza and Vanzetti, 2007). The exposure to broader regional activity through direct trading partners – external regionalization – brings development gains to developing countries. The inclusion of developing countries in regional networks that include developed economies has a positive effect not only on income (growth results), but also on income distribution.

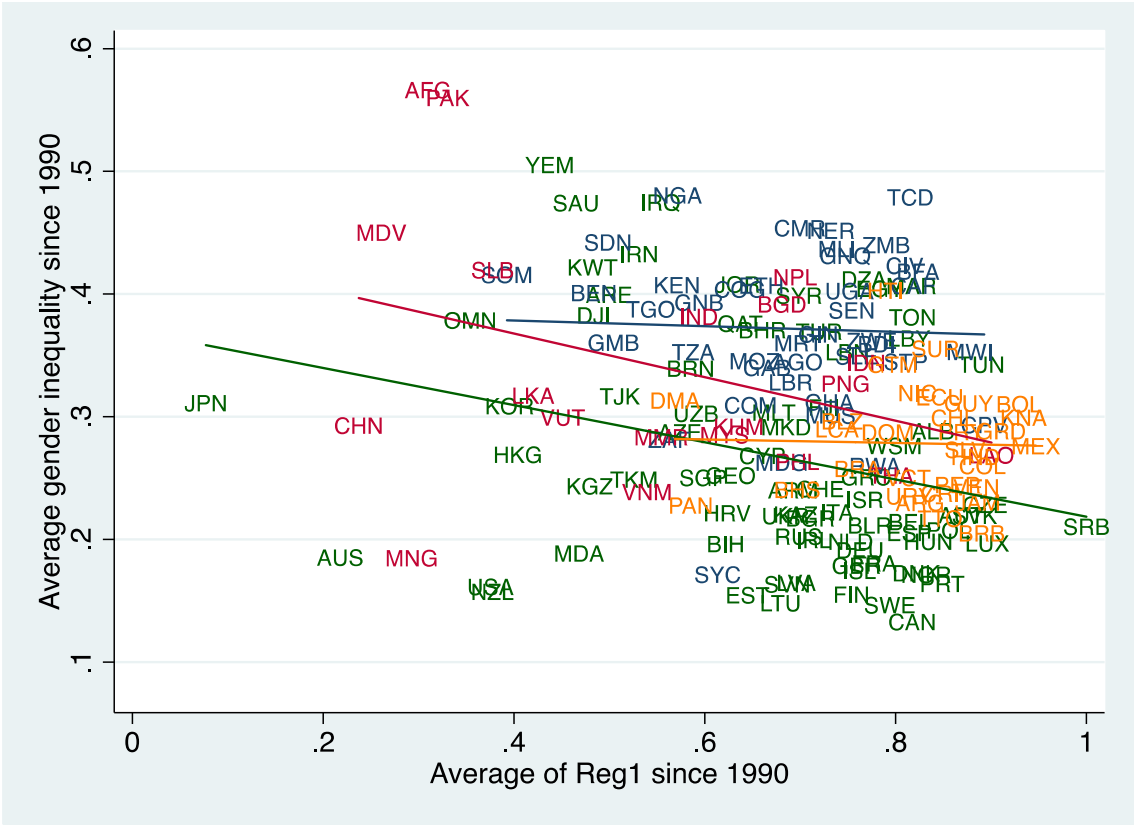
Developing Asia is the only region where internal regionalization (Reg1) has an inequality decreasing effect: a 10 per cent increase in regionalism lessens inequality by 1.3 per cent. This suggests that developing Asia's trade and regional integration policies are improving the overall distribution of income. When the sample is broken down by income group (table 3, panels 1 and 2, column 4), it can be observed that the inequality reducing effect of regionalism is sourced from low-income economies. An increase of 10 per cent in Reg1 lessens inequality in a low-income country by 1.2 per cent, while an increase in external regionalism (Reg2) lessens it by 2.3 per cent.

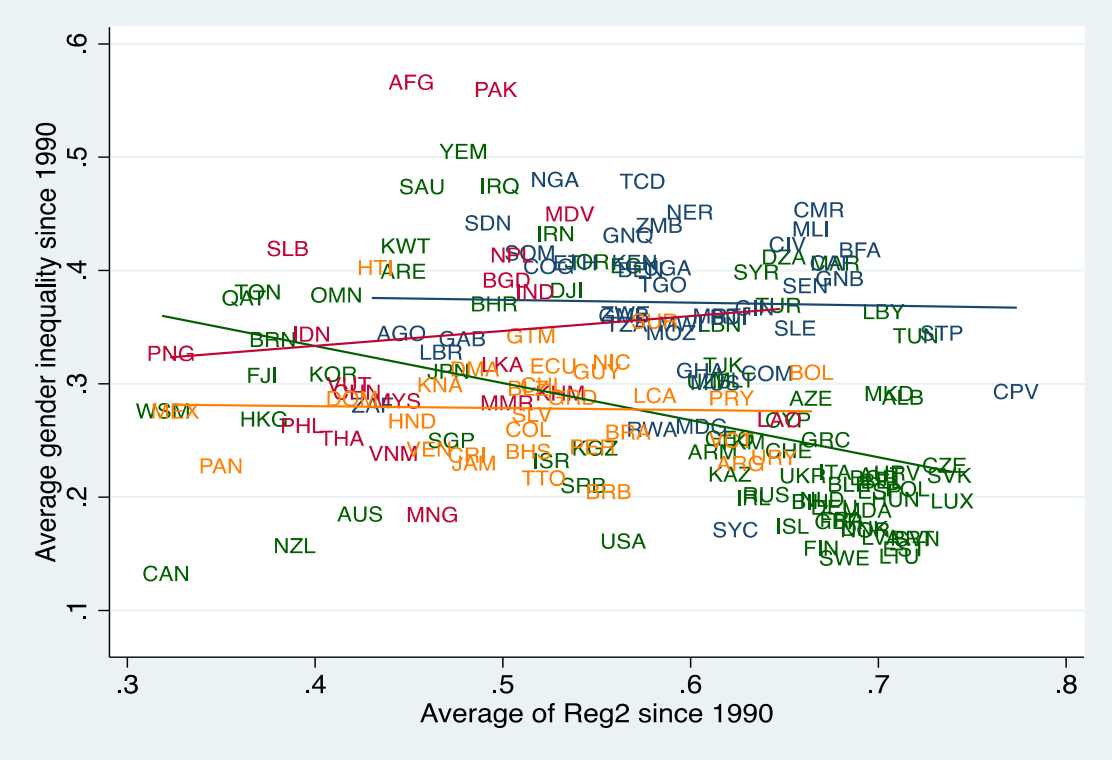
3.3 Further discussion

This section has discussed the effect of regionalization on income inequality. However, inequality is a multidimensional concept. That is, it should not be treated only vertically – across different population groups – but also horizontally – across variables within the same population.

The channels highlighted in this paper may also influence horizontal inequality, albeit in an unknown manner. While such a detailed discussion is beyond the scope of this paper, further research may be motivated by the suggestive results presented in figures 6–9. The figures were generated using data on gender equality from the indices of social development database of Erasmus University.

Figure 6 and 7. Gender inequality and Regionalization 1 and 2 (average gender inequality)

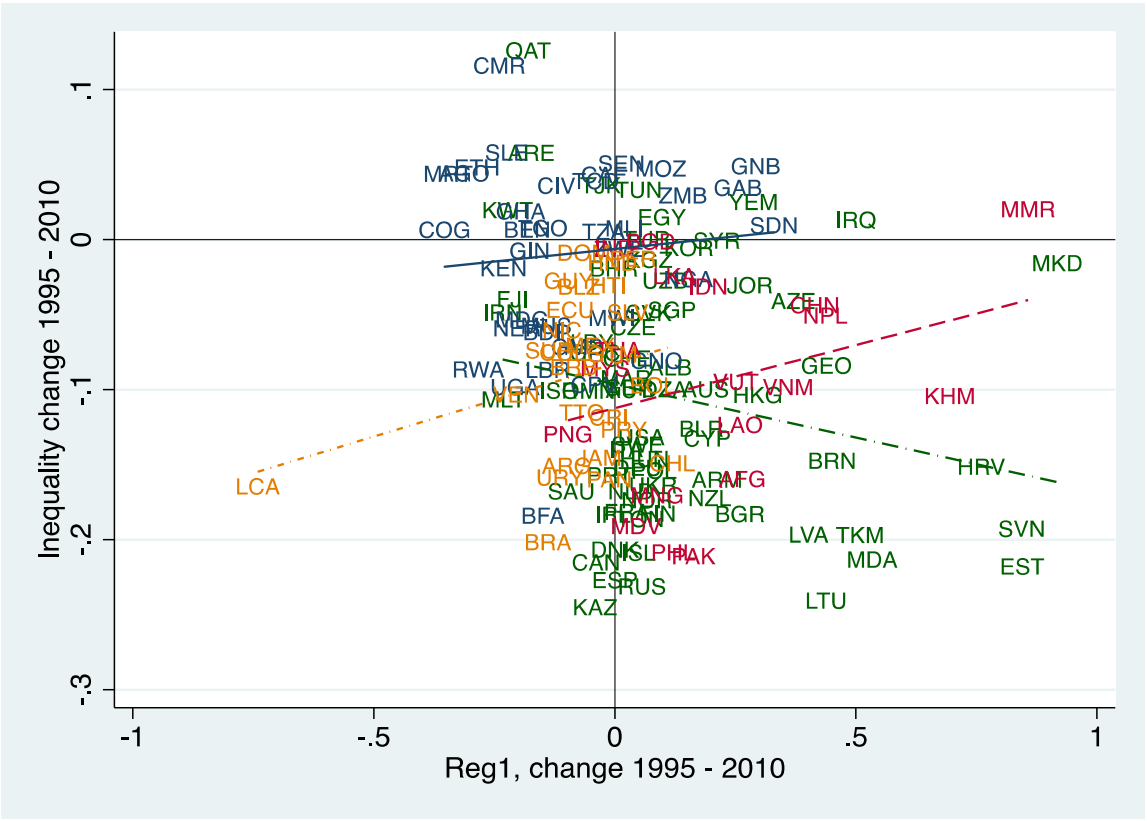


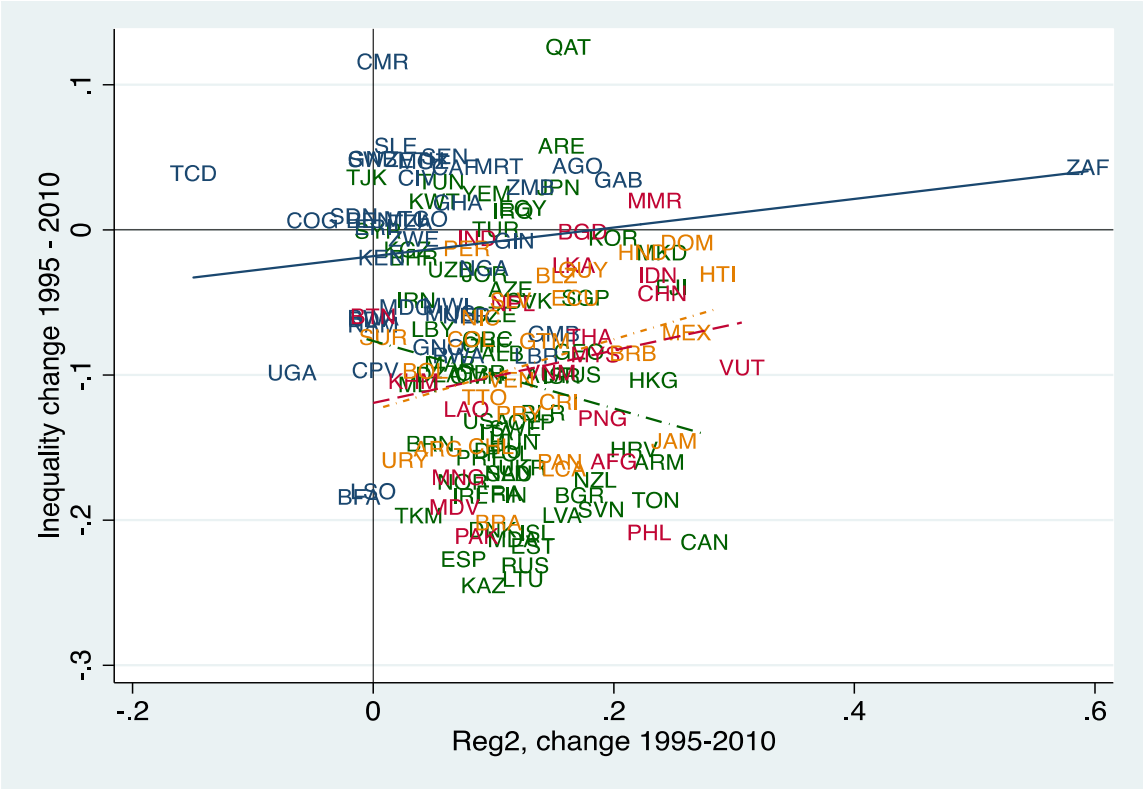


Source: Authors' calculations based on WDI, UNU-WIDER and Gender Equality Data. Central African Republic omitted as an outlier, three year averages used due to data availability.

Figures 6 and 7 suggest that country-specific characteristics are likely to dominate. While there is a similar relationship between regionalization and horizontal (gender) inequality as there is with vertical (income) inequality, there is no distinct pattern in any of the development clusters. This implies that within developing country clusters, trade can act as a policy tool for addressing gender inequality, but has country-specific reactions. Thus, the regionalization of trade lessens gender inequality, but it is not possible to select a cluster of developing countries that have a more gender inequality-reducing regional policy.

Figure 8 and 9. Gender inequality and Regionalization (changes in gender inequality)





Source: Authors' calculations based on WDI, UNU-WIDER and Gender Equality Data.

This is confirmed by the regional trend comparison shown in figures 8 and 9. The majority of the observations are in the bottom right-hand quarter – implying an overall negative elasticity between gender inequality and regionalization policy. However, region-specific trends indicate an increasing pattern. For example, while all countries in developing Asia experience a decrease in gender inequality associated with higher regionalization levels, when aggregated at the regional level, a higher degree of regional integration can be observed, associated with lesser reduction in gender inequality.

This evidence implies that regional trade policy may be a useful tool for gender equality promotion. However, such policies not only have to be suited to address issues for country-specific conditions (since no common pattern within regions can be observed) but that the degree of such policy application also has to be adjusted for each country (different elasticities for each country).

4. Conclusion

RTAs have become the instrument of choice to increase trade. Yet their development impacts are indirect and difficult to untangle. For low-income countries and the least developed countries, trade agreements determine national trade policy and thus have a direct impact on development prospects. Yet beyond policy harmonization, is there evidence that poorer partners are catching up to more developed neighbours? On average, trade positively impacts growth, yet has ambiguous impacts on inequality.

As a contribution to the growing literature on the development impacts of trade, this paper introduces two new measures of regionalization. This innovation helps simplify the complicated impacts of regionalism into two measures, namely direct bilateral preferential trade and indirect exposure to the trade effects of neighbours' preferential trade. The analysis shows that the level of within-country inequality can be attributed to RTAs, and that this effect is particularly strong for certain country groupings.

Empirical results show that regional integration leads to increased bilateral trade, decreased intrahousehold inequality and increased GDP per capita growth, where the channels are bilateral preferential trade and third-party preferential trade. Thus, preferential trade (with participation in RTAs as a proxy) on aggregate increases growth, decreases within-country inequality and has a direct and indirect effect through the participation of others. The impacts of regionalization shown in the paper are particularly strong among countries in developing Asia. Using participation in RTAs as a proxy for preferential trade access, the analysis shows that regional integration leads to positive development outcomes, including higher economic growth and lower within-country inequality. The benefits are not limited to parties to bilateral agreements.

In addition, there is a second transmission channel, whereby third parties experience gains. These effects vary across developing country clusters, with developing Asia benefiting on par with the developed world. While protectionism has been rising in recent years, this paper highlights that trade plays an important role in reducing inequality and poverty in the developing world. In previous years, this analytical framework might have been applied for better understanding of the implications of megaregional trade agreements. However, there are three discrete areas that this research might aid in future, namely, a more in-depth consideration of the following: within-population inequality impacts of regionalization; LDC experiences in RTAs; and whether inequality improving impacts are affected by participation in the global value chain of trade. Taken together, a more development-centric vision of regionalization may be created.

ANNEX TABLES

Table A1. Full results of Ordinary Least Squares growth regressions

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
						Growth				
Reg1	0.38**		0.29**		0.46**		0.83***		0.24**	
	(0.15)		(0.15)		(0.18)		(0.26)		(0.12)	
Reg2		0.39***		0.55***		0.56**		1.16***		0.37**
		(0.13)		(0.20)		(0.21)		(0.38)		(0.16)
LDC×Reg1					-0.58**					
					(0.22)					
LDC×Reg2						-0.13				
						(0.29)				
DevAs×Reg1							-0.53*			
							(0.32)			
LA×Reg1							-0.94***			
							(0.33)			
SSA×Reg1							-1.08***			
							(0.30)			
DevAs×Reg2								-0.36		
								(0.36)		
LA×Reg2								-0.80**		
								(0.39)		
SSA×Reg2								-1.13***		
								(0.39)		
dLIC×Reg1									-0.48**	
									(0.18)	
dLMIC×Reg1									0.47	
									(0.36)	
dLIC×Reg2										-0.12
										(0.28)
dLMIC×Reg2										0.84**
										(0.36)
LagGDPpc			-0.25***	-0.29***	-0.25***	-0.29***	-0.26***	-0.31***	-0.24***	-0.29***
			(0.07)	(0.07)	(0.06)	(0.07)	(0.06)	(0.06)	(0.06)	(0.06)
LnLagHHineq			-0.20	-0.22*	-0.22*	-0.23*	-0.24*	-0.26**	-0.23*	-0.24**
			(0.14)	(0.13)	(0.13)	(0.13)	(0.13)	(0.12)	(0.13)	(0.12)
LnInvest			0.18***	0.15***	0.18***	0.16***	0.17***	0.18***	0.19***	0.14***
			(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
LnM2			0.22***	0.19***	0.23***	0.19***	0.22***	0.17***	0.21***	0.18***
			(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.06)	(0.07)	(0.06)
LnEduc			-0.06***	-0.05**	-0.06***	-0.05**	-0.05**	-0.05**	-0.06***	-0.06***
			(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Constant	-0.06	-0.01	1.68***	2.20***	1.71***	2.21***	1.98***	2.40***	1.72***	2.33***
	(0.11)	(0.07)	(0.63)	(0.66)	(0.59)	(0.66)	(0.61)	(0.64)	(0.59)	(0.63)
Observations	633	671	317	330	317	330	317	330	317	330
R-squared	0.05	0.03	0.33	0.34	0.35	0.34	0.41	0.40	0.37	0.39
Number of										
Number of countries	167	176	101	105	101	105	101	105	101	105

Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table A2. Full results of growth GMM results

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
						Growth				
Reg1	1.00**		0.37**		0.51***		0.54***		0.61***	
	(0.39)		(0.18)		(0.18)		(0.18)		(0.19)	
Reg2		0.81*		0.42		-0.51		0.84		0.28
		(0.42)		(0.43)		(0.33)		(0.66)		(0.34)
LDC×Reg1					-0.89**					
					(0.38)					
LDC×Reg2						-1.18***				
						(0.44)				
DevAs×Reg1							-0.36**			
							(0.15)			
LA×Reg1							-0.13			
							(0.23)			
SSA×Reg1							-0.40**			
							(0.18)			
DevAs×Reg2								-0.51		
								(0.54)		
LA×Reg2								-0.95*		
								(0.48)		
SSA×Reg2								-2.33**		
								(1.16)		
dLIC×Reg1									-0.96	
									(0.60)	
dLMIC×Reg1									-0.10	
									(0.24)	
dLIC×Reg2										-1.56***
										(0.45)
dLMIC×Reg2										-0.69***
										(0.21)
LagGDPpc	-0.20**	-0.05	-0.07	0.00	-0.25**	-0.29**	-0.21***	-0.27***	-0.24***	-0.42***
	(0.09)	(0.06)	(0.06)	(0.09)	(0.10)	(0.12)	(0.05)	(0.09)	(0.08)	(0.11)
LnLagHHineq			-0.60***	-0.67**	-0.18	-0.29	-0.29	-0.72**	-0.26	-0.34
			(0.15)	(0.31)	(0.20)	(0.21)	(0.25)	(0.31)	(0.18)	(0.22)
LnInvest			0.15	0.14	0.31***	0.32***	0.23***	0.26***	0.12	0.32***
			(0.12)	(0.12)	(0.10)	(0.11)	(0.08)	(0.10)	(0.07)	(0.11)
LnM2			0.09	0.10	0.08	0.05	0.23***	0.38***	0.24***	0.10
			(0.10)	(0.10)	(0.08)	(0.08)	(0.06)	(0.08)	(0.08)	(0.08)
LnEduc			0.01	0.04	-0.03	-0.04	-0.00	-0.02	-0.04	-0.05**
			(0.02)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)
Constant	1.32**	0.20	2.00***	1.60	1.72**	2.93*	1.34	2.42	1.82**	3.84***
	(0.63)	(0.66)	(0.66)	(1.02)	(0.81)	(1.49)	(1.00)	(1.57)	(0.86)	(1.28)
Observations	633	671	317	330	317	330	317	330	317	330
Number of of countries	167	176	101	105	101	105	101	105	101	105
Hansen test	0.14	0.14	0.09	0.05	0.4	0.11	0.1	0.27	0.44	0.44
Sargan difference	0.55	0.65	0.4	0.07	0.38	0.14	0.06	0.15	0.34	0.57

Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table A3. Inequality results

Panel 1 Variables	(1)	(2)	(3)	(4)
	Inequality			
Reg1	0.09*	0.15**	0.21***	0.21***
	(0.05)	(0.07)	(0.08)	(0.07)
LDC		0.80***		
		(0.14)		
LDC×Reg1		-0.18		
		(0.11)		
SSA			0.64***	
			(0.16)	
SSA×Reg1			0.02	
			(0.15)	
DevAs			0.54***	
			(0.10)	
DevAs×Reg1			-0.34***	
			(0.12)	
LA			0.56**	
			(0.21)	
LA×Reg1			-0.26	
			(0.21)	
dLIC				0.73***
				(0.12)
dLIC×Reg1				-0.33***
				(0.12)
dLMIC				0.74***
				(0.15)
dLIC×Reg1				-0.09
				(0.13)
LnEduc	-0.02*	-0.02	-0.02*	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)
LnGDPpc	0.46***	0.46***	0.48***	0.46***
	(0.06)	(0.06)	(0.06)	(0.06)
LnGDPpc^2	-0.02***	-0.02***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
LnFinOpen	0.04	0.04	0.04*	0.04
	(0.03)	(0.03)	(0.03)	(0.03)
LnLagHHineq	0.26***	0.25***	0.23***	0.24***
	(0.06)	(0.06)	(0.06)	(0.06)
LnGovExp	0.06*	0.06*	0.06*	0.06*
	(0.03)	(0.03)	(0.03)	(0.03)
Observations	363	363	363	363
Observations in the dummy subgroup	363	44	86	86
Countries in subgroup	109	18	21	21

Notes: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Panel 2 Variables	(1)	(2)	(3)	(4)
	Inequality			
Reg2	0.26***	0.28***	0.72***	0.31***
	(0.09)	(0.09)	(0.13)	(0.10)
LDC		0.92***		
		(0.19)		
LDC×Reg2		-0.36		
		(0.24)		
SSA			1.10***	
			(0.16)	
SSA×Reg2			-0.62***	
			(0.18)	
DevAs			0.65***	
			(0.11)	
DevAs×Reg2			-0.38**	
			(0.16)	
LA			0.82***	
			(0.12)	
LA×Reg2			-0.68***	
			(0.15)	
dLIC				0.83***
				(0.21)
dLIC×Reg2				-0.54*
				(0.32)
dLMIC				0.74***
				(0.15)
dLIC×Reg2				-0.09
				(0.15)
LnEduc	-0.02	-0.02	-0.02	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)
LnGDPpc	0.43***	0.44***	0.43***	0.45***
	(0.06)	(0.06)	(0.05)	(0.06)
LnGDPpc^2	-0.02***	-0.02***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
LnFinOpen	0.04*	0.04*	0.06**	0.05*
	(0.03)	(0.03)	(0.03)	(0.03)
LnLagHHineq	0.26***	0.24***	0.21***	0.24***
	(0.06)	(0.06)	(0.06)	(0.06)
LnGovExp	0.05	0.05	0.06*	0.05
	(0.03)	(0.03)	(0.03)	(0.03)
Observations	374	374	374	374
Observation in the dummy sub-group	374	47	86	86
Countries in subgroup	113	19	21	21

Notes: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Table A4. Summary statistics, by development region

	LA							
	Number of countries	*GDPpc growth*	*Gini*	*Education*	*GovExp*	*PopGr*	*M2*	*Invest*
1990	15		49.29	48.17	11.62	9.35	34.52	18.15
1995	20	21.25	51.53	46.1	11.28	8.92	36.91	18.82
2000	18	13.78	53.46	42.55	12.12	7.75	43.33	18.99
2005	17	28.55	51.08	40.1	11.95	6.99	46.64	20.7
2010	16	23.19	48.74	39.42	12.96	6.39	50.54	20.91
	SSA							
	Number of countries	*GDPpc growth*	*Gini*	*Eeducation*	*GovExp*	*PopGr*	*M2*	*Invest*
1990	4		42.32	28.11	14.89	15.53	20.2	11.46
1995	10	12.62	45.08	33.43	13.9	12.58	26.08	12
2000	8	14.72	45.02	36.08	14.85	14.01	25.44	14.66
2005	12	26.32	45.54	39.16	15.44	13.23	27.2	19.1
2010	12	20.17	44.43	40	13.04	13.54	37.69	26.01
	Developing Asia							
	Number of countries	*GDPpc growth*	*Gini*	*Education*	*GovExp*	*PopGr*	*M2*	*Invest*
1990	6		38.3	35.75	10.38	11.07	51.55	23.12
1995	9	25.97	38.71	38.21	9.42	10.06	53.26	20.87
2000	14	22.96	38.18	32.46	10.25	8.43	52.32	20.92
2005	13	37.58	38.33	32.35	9.79	7.35	66.15	25.26
2010	11	32.26	36.99	29.41	9.63	6.08	72.66	26.81

Table A5. Summary statistics

Region	Reg1, 1990	Reg1, 1995	Reg1, 2000	Reg1, 2005	Reg1, 2010
Developing Asia	0.46	0.45	0.52	0.55	0.66
East Asia and the Pacific	0.56	0.53	0.40	0.51	0.60
Europe and Central Asia	0.66	0.57	0.73	0.81	0.79
Latin America and the Caribbean	0.84	0.87	0.84	0.82	0.78
Middle East and North Africa	0.69	0.61	0.64	0.66	0.62
North America	0.51	0.58	0.62	0.60	0.59
Sub-Saharan Africa	0.79	0.74	0.69	0.69	0.64

Region	Reg2, 1990	Reg2, 1995	Reg2, 2000	Reg2, 2005	Reg2, 2010
Developing Asia	0.36	0.36	0.35	0.47	0.48
East Asia and the Pacific	0.29	0.30	0.30	0.41	0.43
Europe and Central Asia	0.62	0.61	0.63	0.72	0.71
Latin America and the Caribbean	0.46	0.51	0.49	0.54	0.52
Middle East and North Africa	0.53	0.53	0.51	0.58	0.55
North America	0.34	0.43	0.36	0.55	0.49
Sub-Saharan Africa	0.50	0.50	0.52	0.55	0.51

Table A6. List of countries

Developing Asia	Latin America and the Caribbean	Sub-Saharan Africa	Rest of world	
Bangladesh*	Belize	Benin*	Albania	Kazakhstan
Cambodia*	Bolivia (Plurinational State of)	Burundi*	Algeria	Kyrgyzstan
China	Brazil	Cameroon	Armenia	Latvia
Fiji	Chile	Central African Republic*	Australia	Lithuania
India	Colombia	Congo*	Austria	Luxembourg
Indonesia	Costa Rica	Côte d'Ivoire	Belgium	Malta
Lao People's Democratic	Dominican Republic	Gabon	Bulgaria	Morocco
Republic*	Ecuador	Gambia*	Canada	Netherlands
Malaysia	El Salvador	Ghana	Croatia	New Zealand
Maldives	Guatemala	Kenya	Cyprus	Norway
Mongolia	Haiti*	Liberia*	Czech Republic	Poland
Nepal*	Honduras	Malawi*	Denmark	Portugal
Pakistan	Jamaica	Mali*	Egypt	Republic of Korea
Philippines	Mexico	Mauritania*	Estonia	Russian Federation
Sri Lanka	Nicaragua	Mauritius	Finland	Singapore
Thailand	Panama	Mozambique*	France	Slovakia
Viet Nam	Paraguay	Nigeria	Germany	Slovenia
	Peru	Rwanda*	Greece	Spain
	Trinidad and Tobago	Senegal*	Hungary	Sweden
	Uruguay	Sierra Leone*	Iceland	Switzerland
	Venezuela	South Africa	Iran (Islamic Republic of)	Tajikistan
	(Bolivarian Republic of)	Sudan*	Iraq	Tunisia
		Togo*	Ireland	Turkey
		Uganda*	Israel	Ukraine
		United Republic of Tanzania	Italy	United Kingdom of Great
		Zambia*	Japan	Britain and Northern
				Ireland
				United States of America

Note: * denotes a Least Developed Country (LDC)

References

Arellano, M., and S. Bond (1991) Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2):277–297.

Arellano, M., and O. Bover (1995) Another Look at the Instrumental Variable Estimation of Error-Components Models. *Journal of Econometrics*, 68(1):29–51.

Ariyasajjakorn, D., Gander, J., Ratanakomut, S., and Reynolds, S. (2009) ASEAN FTA, distribution of income and globalization, *Journal of Asian Economics*, 20:327–335.

Autor, D.E., D. Dorn, G.H. and Hanson (2015) Untangling Trade and Technology: Evidence from Local Labour Markets, *Economic Journal*, 584:621–646.

Baldwin, R. E. (2006) Multilateralising regionalism: Spaghetti bowls as building blocs on the path to global free trade, World Economy, 29(11): 1451–18.

Belke, A. and Wernet, A. (2015) Poverty Reduction through Growth and Redistribution Policies – a Panel Analysis for 59 Developing Countries. *Review of Development Economics*, 19(1):143–162.

Bhagwati, J.N. (1991) The World Trading System at Risk. Princeton University Press, Princeton.

Bhagwati, J.N. (1993) Regionalism and multilateralism: an overview. In: De Melo, J., Panagariya, A. (Eds.), New Dimensions in Regional Integration. Cambridge University Press, Cambridge.

Blundell, R. and S. Bond (1998), Initial Conditions and Moment Restrictions in Dynamic Panels Data Models. *Journal of Econometrics*, 87(1):115–143.

Borraz, F., Rossi, M., and Ferres, D. (2012) Distributive Effects of Regional Trade Agreements on the Small Trading Partners: Mercosur and the case of Uruguay and Paraguay, *Journal of Development Studies*, 48:1828–1843.

Chang, R., L. Kaltani, and N. Loayza (2009), Openness can be Good for Growth: The Role of Policy Complementarities. *Journal of Development Economics*, 90(1):33–49.

Chinn, M.D. and H. Ito (2006) What Matters for Financial Development? Capital Controls, Institutions, and Interactions, *Journal of Development Economics*, 81(1):163–192.

Chinn, M.D. and H. Ito (2014) The Chinn-Ito Index – A de jure measure of financial openness, http://web.pdx.edu/~ito/Chinn-Ito_website.htm.

Estevadeordal, A., C. Freund, and E. Ornelas (2008) Does Regionalism Affect Trade Liberalization Toward Non-members?, *Quarterly Journal of Economics*, 123(4):1531–1575.

Feenstra, R. (1996), Trade and uneven growth. *Journal of Development Economics*, 49(1):229–256.

Foellmi, R. and M. Oechslin (2010)Market imperfections, wealth inequality, and the distribution of trade gains, *Journal of International Economics*, 81(1):15–25.

Fugazza, M. and D. Vanzetti. (2007) "A South–South Survival Strategy: The Potential for Trade among Developing Countries." *World Economy*, 31(5): 663–685.

Gender Equality Data (2006) Indices of Social Development, URL: http://www.IndSocDev.org.

Goldberg, P. and N. Pavcnik (2007) Distributional Effects of Globalization in Developing Countries, *Journal of Economic Literature*, 45(1):39–82.

Goldberg, P. and N. Pavcnik (2016) The Effects of Trade Policy, Working Paper 21957. National Bureau of Economic Research.

Grossman, G. (2016) The Purpose of Trade Agreements, Working Paper No. 22070. National Bureau of Economic Research.

Hur, J., and C. Park (2012) Do Free Trade Agreements Increase Economic Growth of the Member Countries? *World Development*, 40(7):1283–-1294.

Iradian, G. (2005), Inequality, Poverty, and Growth: Cross-Country Evidence, IMF Working Paper 05/28.

Krishna, P.; Mitra, D.; and A. Sundaram (2010) Trade, Poverty and the Lagging Regions of South Asia, Working Paper No. 16322. National Bureau of Economic Research.

Panagariya, A. (2000), Preferential trade liberalization: the traditional theory and new Developments, *Journal of Economic Literature*, 38(2):287–331.

Saidi and Aloui (2010), Capital Account Liberalization and Economic Growth, International *Journal of Economics and Finance*, 2 (5):122–131.

Venables, A. (2003), Winners and Losers from Regional Integration Agreements, *Economic Journal*, 113(490):47–61.

Venables, A. (1999), Regional Integration Agreements: A force for convergence or divergence? World Bank Policy Research Working Paper No. 2260.

Vidal-León, C. (2013), Corporate Social Responsibility, Human Rights, and the World Trade Organization, *Journal of International Economic Law*, 16(4):893–920.

Winters, L. and Chang, W. (2002), How regional blocs affect excluded countries: The price effects of Mercosur, *American Economic Review*, 92(4):889–904.