



# REGIONAL INTEGRATION 2017

**Rethinking Regional Integration  
for Landlocked Developing Countries**

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### Abstract

This paper began as a small-scale technical assistance project in October, 2014. There was a lot of interest in how landlocked and fragile states were faring in an economy where the organization of trade was changing dramatically.

Asia and the Pacific has been increasingly defined by regional and global supply chains. This was an important development for developing states located near large markets or ports. But this left a question mark about how landlocked countries and those with limited or high cost connectivity would be able to benefit. Both faced the same headwinds in a world where your geographic location mattered more than ever.

The International Think Tank for LLDCs in Mongolia stepped forward as a local partner in fulfillment of their mandate to consider solutions to the problems facing LLDCs globally. The Institute dedicated research staff and a keen understanding of how trade challenges played out domestically and in communities.

In addition the lead researchers Erdenetsogt Odbayar and Enkhbold Vorshilov, junior research staff Ms. Onon Sukhbaatar and Mr. Dulguun Damdin-Od also contributed their energy and ideas.

By looking into the question of how LLDCs in general and Mongolia in particular can gain from trade, this publication seeks to shine a spotlight on the importance of trade even where it is most difficult.

Our objective was to give the reader a look into how trade happens in LLDC and how it might change in the future. The bottom line is that while headwinds are strong for LLDCs, they can play an important role in the development of trade standards globally.

## Acknowledgements

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A team consisting of Alisa DiCaprio, research fellow of the Asian Development Bank Institute, Dr. Enkhbold Vorshilov, Independent trade consultant and M.A. Erdenetsogt Odbayar, Ambassador-at-Large and Interim Director of ITT for LLDCs, provided substantive and technical input to the final outcome of the project.

The cover page for this paper was designed by John Gehringer, a graphic designer and art director who has dedicated time and effort to collaborate with the ITT for LLDCs on this project through the United Nations Volunteer (UNV) Programme. We would like to thank John for the excellent design of the cover page.

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## Abbreviations

ADB	Asian Development Bank
APTA	Asia Pacific Trade Agreement
EEC	European Economic Community
EU	European Union
FCAS	Fragile and Conflict affected states
FDI	Foreign direct investment
FTA	Free Trade Agreement
GDP	Gross domestic product
GSP	Generalized system of preferences
GSTP	Global System of Trade Preferences among Developing Countries
ITT	International Think Tank
LLDC	Landlocked Developing Country
OECD	The Organization for Economic Co-operation and Development
RCI	Regional cooperation and integration
SDT	Special and differential treatment
SME	Small and medium-sized enterprises
SPS	Sanitary and phytosanitary agreements
TAA	Trade Agreement Acts
TIFA	Trade and Investment Framework Agreement
TTA	Transit and trade agreement
UNCTAD	United Nations Conference on Trade and Development
UN-OHRLLS	United Nations Office of High Representative for Least developed countries, Landlocked developing countries and Small island developing states
WITS	World integrated trade solution
WTO	World Trade Organization

## Rethinking Regional Integration for Landlocked Developing Countries

**Alisa DiCaprio, Enkhbold Vorshilov, Odbayar Erdenetsogt**

Traditional regional integration strategies have had uneven developmental outcomes in Asia and the Pacific. While the potential benefits of regional integration are great, landlocked developing countries (LLDCs) have struggled to realize them. LLDCs are set apart because this group of states faces trade costs that are among the highest in the world due to their geography. Recent changes in the international trading system have opened a space for innovation in the way that regional integration is designed. In this paper, we identify the impact of existing trade and transit agreements for Mongolia, and use that to understand how landlocked developing countries like Mongolia might adapt existing regional integration tools and introduce new instruments to promote trade-driven economic development.

### 1. INTRODUCTION

While regional integration has driven trade growth for Asia in general, its development impacts on LLDCs have been weak. The potential for increased trade, reduced trade frictions, and higher economic productivity are clear. However, the trade outcomes of LLDCs are not independent from their coastal neighbors. The dependence on transit trade to reach markets beyond their neighbors makes regional integration critical, but also mutes its potential benefits.

This paper offers a fresh perspective on the future of regional integration. Using Mongolia's experience as a case study, we offer suggestions on how the international community can move in a direction that brings in countries that have sat on the periphery of traditional regional integration and missed out on many of its benefits. In particular, we identify two new dimensions of regional integration that have expanded over the past decade and which can even out its benefits. These are: integration that promotes value creation and integration that tightens the trade-development nexus.

Mongolia presents an interesting case for regional integration. It has been a member of the WTO since 1997. But until 2015, it was the only WTO member country that was not a signatory of any comprehensive free trade agreements (FTA). This did not mean that it was not pursuing regional integration. In fact, Mongolia has introduced a number of more limited trade and transit agreements (TTAs) with various trading partners since 1992. We use this progression to look at

the “traditional” impact of trade agreements for LLDCs and suggest how future integration agreements might be designed to address the frictions that limit gains.

High trade costs in LLDCs are driven by both exogenous and endogenous factors. These elevated costs of moving goods across borders are detrimental to states’ competitiveness in world markets (Arvis, Raballand, and Marteau 2007). It has been estimated that LLDCs are on average 20% less developed than they would be if they were not landlocked (UN-OHRLLS 2013).

The productivity challenges facing LLDCs differ from their regional partners in that they are largely supply-side driven. It is clear that facilitating trade for LLDCs requires special attention to their specific needs and challenges. But in the current international trading system, there is no special consideration for these states. In order for regional cooperation to promote productivity LLDCs we need to promote regional integration that exploits the new trade space with technologies that both decrease search costs and promote better design of institutions.

The next section details the changes in the international economy that offer LLDCs the opportunity to redirect RCI in ways that better meet their needs. It then details two new directions that regional integration can take. Section 3 uses the experience of Mongolia to illustrate the particular challenges LLDCs face and the efforts Mongolia has made to overcome them. And section 6 concludes.

## 2. CHANGES IN THE GLOBAL ECONOMY OPEN THE WINDOW TO RCI INNOVATION

There are three changes in the global economy that open a new space for innovation around regional cooperation. These changes have affected both the diversity of opportunities and the support structure for international trade. For states which have traditionally been on the periphery of international trade, this can signal a new focus for RCI which sharpens the trade-development nexus for all countries in a region.

The first development was the conclusion of the WTO's Ministerial Conference in Bali in 2013. This shined the global spotlight on the need for trade facilitation to make trade work for all. The OECD (Moise and Sorescu, 2013) has estimated that the potential trade cost reductions for LLDCs from the trade facilitation measures negotiated in the WTO would amount to 16.4 per cent of total trade costs. Greater global attention has been focused on the fact that the physical infrastructure of trade does not automatically connect states on the periphery to the international trading system. If local firms do not have access to labs which test for required SPS standards, building a port will not solve the constraints local exporters face.

The second change was the global financial crisis of 2008. This highlighted two issues for LLDCs – the fragility of trade finance and the resilience of South-South trade. Emerging economies have been increasingly driving trade patterns across the globe. Traditionally, developing countries depended on trade preferences offered by industrial countries (e.g. GSP). South-South preferential programs existed (e.g. GSTP) but these have not been widely used. Special and differential treatment also is increasingly seen as a tit-for-tat way to get developing countries to sign onto agreements they might not be able to implement. But it doesn't differentiate much between developing countries.

The third change was the increase in the modularity of trade. Over the past decade, this has changed the way that we interpret the trade-development nexus. In general, it has led to a broader conception of the importance of one's neighbors. LLDCs in Asia are seen as having much to gain from the opportunity to plug into the trading system because of their neighbors' success as core producers in manufactured goods. In addition, modularity of trade has refocused the methodology we use to interpret the contribution of a country's basket of exports to its expected developmental outcomes.

So, how do these three changes affect the potential LLDCs to link into the international trading system in a way that will positively impact economic development? In the introduction, we suggested that these changes have "opened a space for innovation" in regional cooperation strategies. What we mean by this is that in the trade community, regional cooperation is no longer seen as simply getting countries to trade more with each other. There is a greater recognition that regional cooperation means improving the conditions under which countries trade with each other.

The increased use of technology has also opened up new markets that are not bounded by the traditional barriers to trade.

The next two sub-sections turn to two concrete directions that regional integration can take that will make the potential developmental benefits of trade more accessible to LLDCs. In each, we describe both the reasons we need to take RCI in a different direction, and the types of projects that these new approaches can yield.

### 2.1 Approach I: Enabling value creation

The primary constraint for both FCAS and LLDCs is on the supply-side of trade. Many FCAS states do not have much production nor do they have sufficient population to attract manufacturing FDI. While LLDCs often have productive capacity, they are too distant to attract traditional manufacturers. In both groups, trade is a very high cost activity as a result of their physical distance from major market centers. Yet, trade is still seen as a weak, but important engine of economic growth and development. By moving RCI forward with a value creation focus, FCAS and LLDCs can directly address several of these supply-side constraints.

#### 2.1.1. Why it is needed: Trade growth is slow and diversification is limited

Levels of LLDC exports have increased rapidly, but growth has slowed in recent years. Table 1 shows that Mongolia's exports substantially rose from US\$ 875 million in 2004 to US\$ 2050 million in 2008. The global financial crises brought the rapid increase to a halt. Total exports of Mongolia declined in 2009, but have since recovered.

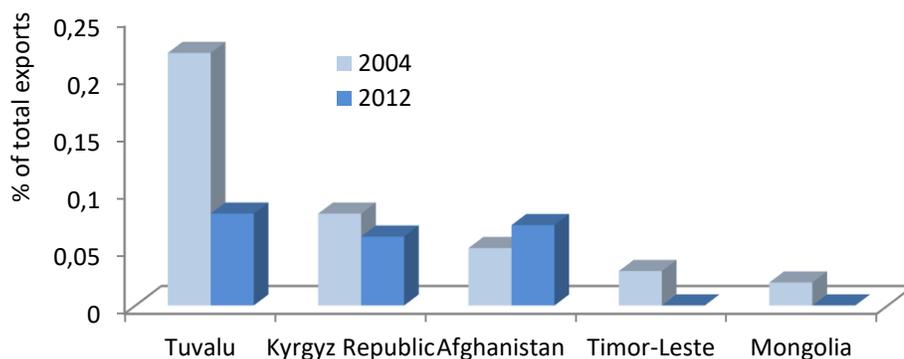
**Table 1: Exports of selected LLDCs (millions of USD)**

	Afghanistan	Kyrgyzstan	Mongolia
2004	210	454	875
2005	265	463	949
2006	256	537	1,600
2007	409	694	1,850
2008	509	934	2,050
2009	1,290	656	1,680
2010	612	1,140	3,100
2011	546	819	4,320
2012	457	791	4,430

*Source:* Author's calculation using data from UNComtrade.

The structure of exports also has important implications for growth and development. LLDCs have seen a downgrade in their export baskets in the past decade. The incidence of medium and high technology products in total exports has decreased notably in LLDCs (Figure 1). Mongolia recorded a tiny share of medium and high technology products in 2012, falling from about 0.2-0.3% in 2004.

**Figure 1: High and medium technology exports, % of total exports**



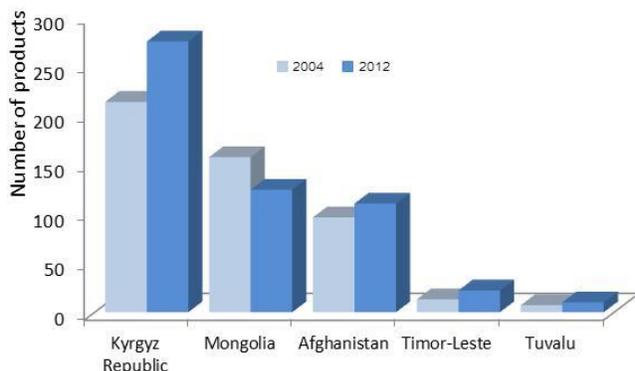
Source: World Integrated Trade Solution (2014).

LLDCs have made some progress in export diversification over the period 2004–2012. Countries’ diversification of investments into new activities plays a crucial role in the production of new goods, which generate positive spillover into the society. Export diversification is conducive to higher per capita income growth (Hausmann and Rodrik 2003; Hausmann, Hwang, and Rodrik 2006; Hausmann and Klinger 2007).

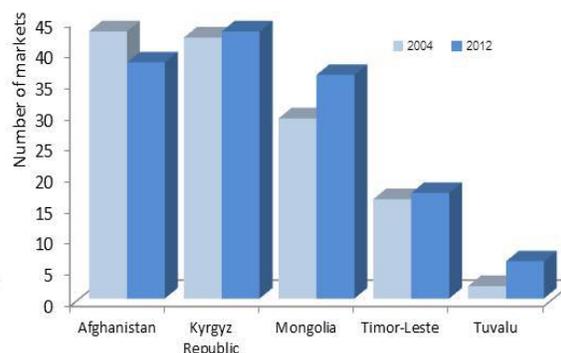
An analysis of export diversification in Central Asia’s LLDCs shows that countries that have experienced product diversification include Kyrgyz Republic and Afghanistan. The most notable product diversification is seen in Kyrgyz Republic, where the number of export products rose from 213 in 2004 to 274 in 2012. Mongolia, however, lags behind others; the number of Mongolian export products fell from 157 in 2004 to 124 in 2012. The most notable geographical diversification is seen in Mongolia, where the number of export markets rose from 29 in 2004 to 36 in 2012 (Figure 2).

**Figure 2: Product and geographical diversification in fragile and landlocked states**

a. Number of products



b. Number of markets



Source: World Integrated Trade Solution (2014).

The difficulty countries face in diversifying exports stems from a history of commodity exports and limited domestic capacity to explore new sectors. Yet anecdotal evidence shows that some LLDCs have had success with niche markets – beans in Kyrgyz Republic for example. The new trade environment reminds us that trade infrastructure alone does not result in captured gains. The new organization of trade flows opens the opportunities to firms in these countries who can supply inputs for more complex goods. For these reasons we suggest that by supporting RCI that enables value creation we can refocus RCI efforts to better use the strengths of FCAS and LLDCs.

### 2.1.2. Projects to promote this new direction

Enabling value creation for FCAS and LLDCs is another way of saying that we are looking for projects that enable entrepreneurship and are scalable. This is in line with the increased focus building private sector capacity and connectivity. For entrepreneurs projects would need to remove the constraints they face that result from underdeveloped financial systems and small domestic markets. The goal of RCI then is to introduce tools that reduce the search costs for appropriate export sectors by identifying and improving existing production capacity.

Projects that reduce the cost and risk of trade might include **the introduction of venture capital via crowdfunding**. Venture capital is rare in low income and developing countries, but can play a critical role where search costs and high and traditional financing is unavailable. This can enable bottom-up solutions rather than depending on FDI and help to grow the domestic financial system which remains in the early stages

Globally we have seen the rise of sites such as Kickstarttr (general), Mosaic (solar projects), and IndieGoGo (general) which have identified and introduced some important new products to the marketplace. They attract investors who may have a higher risk appetite than traditional banks which, in any case, have difficulty pricing products for small and medium-sized enterprises (SMEs). While many crowdfunding sites are tied closely to the US market, increasingly there are sites focused on development. Zidisha and Kiva both enable peer-to-peer micro-lending in deleted developing countries. Watsi funds medical treatments for people in developing countries.

Another way to create value is to introduce **information promotion measures that facilitate niche markets**. Many FCAS countries in the Pacific use environmentally sustainable fishing techniques for example. There is demand in developed countries for these types of goods, but often certification is cost-prohibitive and information barriers to farmers are high. Regional agreements already recognize the importance of harmonization of sanitary and phyosanitary measures. Building in information-sharing mechanisms is a straightforward step. One example of where information has create a niche is eco-labelling for tuna where Pacifical is a project that includes QR codes on tuna farmed from Parties of the Nauru Agreement which enables consumers to “trace the journey of their tuna” with data such as the ship that caught the tuna and the fishing method used.

The introduction of a value creation approach is one which all countries in a regional can participate in and which can reduce search costs and the risk of investing in peripheral countries.

### **2.2. Approach II: Enhancing the trade-development nexus**

Much of traditional regional integration assumes trade will be growth promoting. This is a reasonable assumption for countries where shocks are rare and information flows relatively freely. The result is that the activity of trade itself increases incomes, living standards and growth. Thus the traditional institutions of trade generally focus on taking down barriers (both tariff and otherwise) to trade as well as harmonizing standards between member states.

In keeping with this logic, regional integration via formal trade arrangements seems a clear means to offer LLDCs the opportunity to consolidate trade and economic relationships with neighboring transit countries and thereby, improving welfare of member countries. Empirical testing of the FTA-welfare nexus focuses on variables that capture the extent to which FTA partners trade more or less than would otherwise be expected. Previous studies (e.g., Carrère, 2006; Frankel, Stein, & Wei, 1995; Lee & Shin, 2006) suggest that trade creation dominates trade diversion, implying that regionalism is pushing trade in the right direction. Nonetheless, a concern is that the estimates of the creation effect may be implausibly large, as well as too dependent on the sample of countries and variables included (Haveman and Hummels 1997).

There is only limited acknowledgement that some countries will not benefit as much as others. One example is the exceptions allowed by special and differential treatment (SDT). SDT is incorporated into both regional and multilateral trade arrangements and allows for extended compliance timelines and may facilitate some additional resources for compliance.

A second new approach to RCI that would benefit LLDCs is to build formal institutions of trade that more accurately reflect the contribution trade can make to their development strategies. Increasingly we are seeing LLDCs expressing greater voice in negotiating matters, but the tools they have to work with cannot fully meet their needs.

#### **2.2.1. Why the new approach is needed**

The process of trade opening in LLDCs is relatively slow. The export/GDP ratio, the standard measure of revealed openness, is presented in Table 2. Exports are preferable to total trade (or imports) as the numerator in calculating this ratio because restrictiveness of a given country's policy regime is presumably better captured by export performance (Athukorala 2012). According to this measure, only Mongolia has shown a continuous improvement in trade openness, rising from 5% in 1989/1990 to 46% in 2011/2012. This is in sharp contrast with Afghanistan and Kyrgyz Republic which show stagnating trade openness over the period 1989-2012. As of 2011/2012, the degree of openness in Mongolia is higher than the average degree of openness in developing countries (32%).

**Table 2: Trade-orientation of selected LLDCs 1989/1990–2011/2012 (percent) <sup>a</sup>**

	1989/1990	1994/1995	1999/2000	2004/2005	2011/2012
Afghanistan	4	4	5	4	3
Kyrgyz Republic	–	12	28	20	13
Mongolia	5	19	37	41	46
Developing countries <sup>b</sup>	21	23	27	34	32

Source: United Nations, UNcomtrade database and UNCTADstat database.

Notes:

Figures in the table are two-year average.

– Data not available.

<sup>a</sup> Exports of goods relative to GDP (at current prices), two year averages.

<sup>b</sup> Low and middle income countries as per the World Bank country classification.

**Table 3: Average applied tariff rates in selected LLDCs (simple mean all products)**

Country	2006	2007	2008	2009	2010	2011	2012
Afghanistan	6.2	6.2	6.2	–	–	–	6.5
Kyrgyz Republic	3.0	2.9	3.6	3.6	3.3	3.3	3.3
Mongolia	4.2	4.9	4.9	4.9	–	4.9	5.0
Developing countries	10.0	10.0	9.9	10.1	8.3	9.0	8.4

Source : World Bank's WITS.

The slow progress in trade opening is also confirmed by applied tariff rates. Not all LLDCs have reduced their tariff barriers over the period 2006–2012 (Table 3). But they are broadly open. They have maintained lower tariff rates than the average for developing countries.

Trade facilitation is critical for LLDCs. The premise of an analysis of key trade facilitation issues from the landlocked states' perspective is that trade facilitation has a significant relationship to greater trade flows (e.g., Shepherd and Wilson 2009; Helble, Mann, and Wilson 2011; Portugal-Perez and Wilson 2012). For instance, Helble, Mann, and Wilson (2011) show that 1% increase in aid for trade facilitation leads an increase in exports from the aid receiving countries by US\$ 290 million.

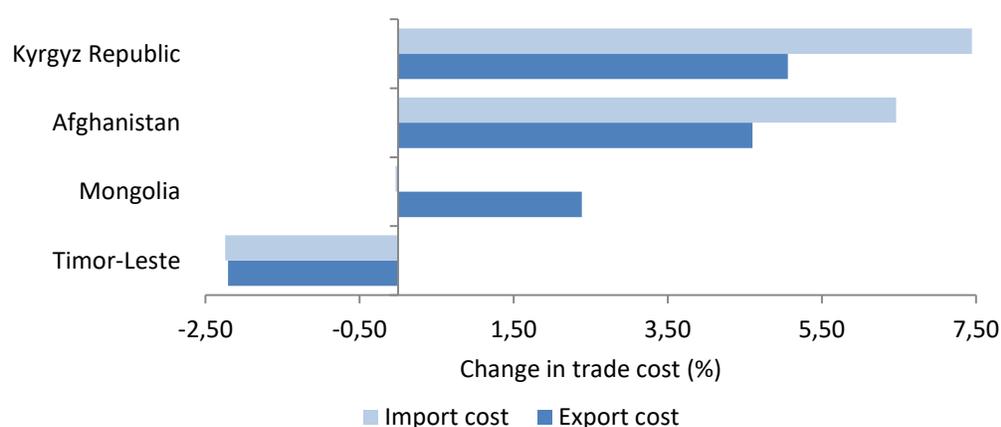
**Table 4: Transaction costs in international trade, country and regional average in 2012**

	Documents to export (number)	Time to export (days)	Cost to export (US\$ per container)	Documents to import (number)	Time to import (days)	Cost to import (US\$ per container)
Afghanistan	10	74	3,545	10	77	3,830
Kyrgyz Republic	8	63	4,160	10	75	4,700
Mongolia	10	49	2,555	11	50	2,710
East Asia & Pacific	6	21	923	7	22	958

Source: World Bank's Doing Business database.

Fragile and landlocked states maintain high trade costs (Table 4). First, documentary requirements are particularly burdensome by international standards. There are at least eight documents necessary for export and import in most countries. The most burdensome country is Mongolia where the number of documents for exports and imports is 10 and 11, respectively. Second, exporting and importing activities are unduly disadvantaged in LLDCs. The export of one standard container takes at least 49 days and costs higher than US\$ 2,500. This compares to 21 days and US\$ 923 in East Asia and Pacific. The assessment for export cost holds true for imports. The import of one standard container takes at least 50 days and costs higher than US\$ 2,700. This compares to 22 days and US\$ 958 in East Asia and Pacific.

**Figure 3: Change in trade costs relative to the world average, 2006-2012**



*Source:* World Bank's Doing Business database.

*Note:* Data on Tuvalu is not available at the World Bank's Doing Business database.

'change in export (import) cost relative to the world average' is the percentage change in the ratio of export (import) cost to the average world export (import) cost.

In addition to the cross-country pattern of trade-related costs, it is insightful to analyze their evolution over time. At a global level, between 2006 and 2012 import/export costs have increased by 2.8% in nominal terms. A similar upward tendency has taken place also in LLDCs, namely Kyrgyz Republic, Afghanistan, and Mongolia. For instance, Kyrgyz Republic has observed an increase in export and import costs relative to the world average by 5.1% and 7.4%, respectively, over the period 2006-2012. The reviewed evidence highlights the different incidence of transaction costs distinguishing between exports and imports flows, and underscores cross-country variability.

### 2.2.2. Projects to promote this new direction

The new global focus on trade facilitation has highlighted the need for a more effective mapping of the trade opportunities that are created and that are possibly under the existing trade structure.

One key project is to develop a **template for FTAs that directly links the development priorities of LLDCs to the trade opportunities** created by FTAs. This goes beyond SDT and moves into areas such as labor migration and transit issues. Both of these can naturally be folded into FTA negotiations and both are of key interest to FCAS and LLDCs, yet traditionally they have not been included in the FTA text. Such a project will require both a global mapping of best practices in FTAs with LLDC members as well as a more extensive understanding of the development priorities.

A second way to bring trade closer to development is to consider how to expand SME production. In Latin America and the Caribbean, a **social networking platform for SMEs** has sought to increase their internet presence and enable them to grow and link into international production chains. This platform both eases the export process (by sharing customs documents and requirements) as well as facilitating matchmaking between buyers and suppliers.

In the next section, we look in some depth at the experience of Mongolia. We seek answers to two questions – what efforts has Mongolia made to improve trade, and to what extent do trade and transport costs affect the pattern of trade?

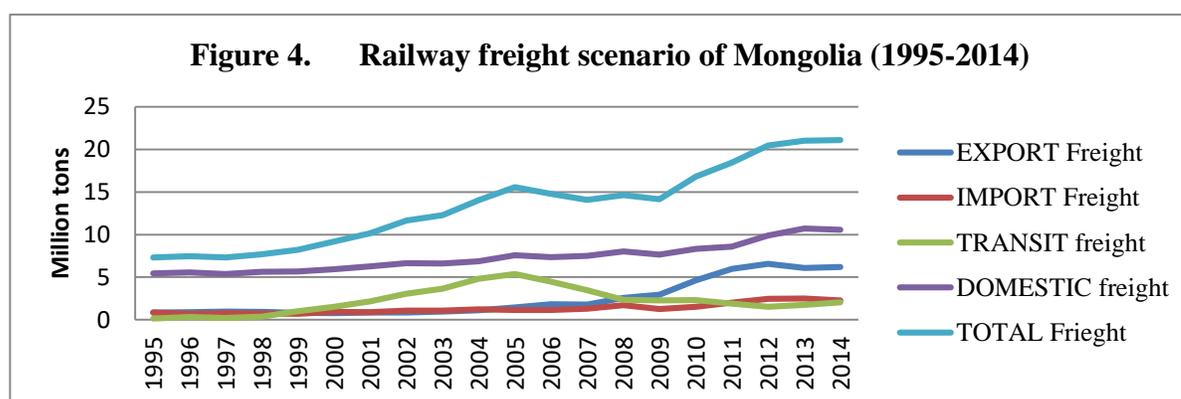
### 3. MONGOLIA'S TRADE COSTS AND TRADE OUTCOMES

#### 3.1 Mongolia's efforts to promote trade

After acceding to the WTO in 1997, Mongolia bound all its tariffs in *ad valorem* terms, with an average bound rate of 17.3%, but the average applied rate is maintained at 5% for almost all goods.

Mongolia's main trading partners are its neighbors. While Russia supplies a majority of petroleum products, the PRC supplies the majority of foodstuffs and consumer goods. Though, Japan and the South Korea are of increasing importance for Mongolian exports, trade volumes remain limited.

Being landlocked means that Mongolia's trade flows are closely tied to access to its neighbors. Mongolia currently uses the Tianjin sea port in PRC for most of its overseas imports and exports. Railway transport is most important mode of transport of trade and transit good in and through Mongolia, though most is domestic use (fig 4)



enormous efforts were made by Mongolian government to obtain a facilitated access to sea ports seeking diversified markets for its export products. Mongolia signed TIFA agreement with USA in 2005; and negotiated General Preferential Scheme (EU GSP+) for Mongolian export goods in 2006. Also, it has successfully concluded the negotiations with the Asia Pacific Trade Agreement (APTA) and completed bilateral Economic Partnership Agreement (FTA) with Japan in 2014. (Table 1)

Mongolia signed transit and road transport agreements with Russia and Kazakhstan in 1990s. Meantime, Mongolia, Russia and China launched the negotiations for Tripartite Transit Transportation Agreement in 1999, under the auspices of UNCTAD.

However, negotiations were stalled in 2008 and lately restored again in 2013. Consequently, Mongolia has negotiated separate bilateral agreements with each neighboring country in September 2014. According to the agreements, China agreed to grant Mongolia, the facilities in accessing to and from the sea at designated ports in China; and facilitate transit transport and customs; clearance of cargo and Mongolian goods transported through its territory; and Russia agreed to modernize and extend Mongolia's rail network, which is managed by Mongolia-Russia Joint State owned company.

**Table 5. List of Mongolia's trade and transit agreements**

No.	Trade & transit agreements	Year	Coverage	Partners
1	Agreement between Russia and Mongolia on access to sea for Mongolia across territory of Russia	1992	Transit Railway transport	Russia
2	Agreement between Kazakhstan and Mongolia on international transport of goods by road.	1993	Transit Road transport	Kazakhstan
3	Agreement between the government of Mongolia and the EEC on Trade in Textiles	1997	Applies to trade in textile products originating from Mongolia	EU members
4	Agreement between the Mongolia and the USA concerning the Development of Trade and Investment Relations/TIFA	2004	Establishes Joint Trade and Investment Council to further develop trade and investment relations.	USA
5	The EU GSP+ arrangement	2006	Duty Free access for Mongolian export goods (7200 tariff lines); S&D	EU members
6	Bilateral agreements and protocols on cooperation of veterinary and quarantine services (SPS)	2000-2014	SPS; Conformity assessment; technical cooperation; Establishing Sub committees	Kazakhstan, Indonesia, Russia, Lao, Qatar, China, Tajikistan, Vietnam, Belarus, Kyrgyzstan and Turkmenistan.
7	Asia Pacific Trade Agreement (APTA) <sup>1</sup>	2013	Tariff concessions	Bangladesh, China, India, Lao, Republic of Korea and Sri Lanka.
8	Japan-Mongolia EPA/FTA <sup>2</sup>	2014	Tariffs (Duty free access for 90 % of all tariffs), NTB, Services and Investment.	Japan

<sup>1</sup> UNESCAP - Standing Committee of APTA at its forty-second session reached a consensus officially welcoming Mongolia as the seventh member of the Agreement. However Parliament of Mongolia should approve its accession to APTA.

<sup>2</sup> The negotiations are over and Agreement is expected to be ratified by Parliaments of respective countries

9	Bilateral transit transport agreement	2014	Transit rail transport, access to sea ports, opening border cross points.	China
10	Bilateral transit transport agreement	2014	Promoting transit goods.	Russia

Source: Authors compilation

### 3.2 Have existing trade and transit agreements impacted trade?

In order to estimate the significance of different variables in Mongolia's overall trade cost, we first had to solve the issue of data. In UNCTAD's Comtrade database, Mongolian trade data is incomplete. Therefore, Mongolian trade (export/import) data for time series of 10 years was taken from Mongolian customs statistics. Trade and transport data for time series of 20 years (1995-2014) were used for Mongolian trade and transport scenario.

In addition, authors used different indexes for each 16 countries. Time and costs for export and import of 20 foot containers, Logistics Performance, Port Container Traffic Indexes are taken from the World Bank dataset, Shipping Liner Index from UNCTAD dataset and trade facilitation indicators are from OECD methodology, Tariffs from the WTO.

Anderson and Van Wincoop (2004) suggested that total trade costs in rich countries are 170% ad valorem tax equivalent. This number is based on following numbers: 21 % transport costs, 44% border related trade barriers, and 55% wholesale and retail distribution costs ( $2.70=1.21*1.44*1.55$ ). All numbers are based on representative evidence for developed countries. Given the all-inclusive nature of this classification, trade costs in the developing world should be significantly higher than those for rich economies.

To investigate the effects of trade costs for Mongolian trade, we applied 2 methods: 1) a regression function to estimate effects for transport cost; and 2) a gravity model to estimate effects of trade costs for Mongolian trade volume.

Using these models, we find two features of Mongolia's existing trade and transit agreements. First, the regression model shows that trade and transit agreements did not play a substantial role in reducing the transport costs for Mongolia (negative coefficient). This suggests that although Mongolia has signed many agreements with partner countries, they do not have much of an impact on trade and transport costs.

Second, the gravity model shows positive effects from the Mongolian GDP and dummy for trade and transit agreements. A positive TAA dummy suggests that there is potential to increase trade flows using this channel. This analysis relates back to our earlier framework that regional integration is critical for LLDCs, but has not, to this point, been used in an effective way.

## 4. CONCLUSIONS

This paper seeks to consolidate the ideas around how RCI can be better focused to address the needs of LLDCs. We introduced two approaches in particular that these states might reformat regional integration to increase productivity of existing businesses, introduce new firms to the export market and lock in these benefits through institutional participation.

The first approach is an enabling value creation. The primary constraint for LLDCs is on the supply-side of trade. By moving regional integration forward with a value creation focus, these states can directly address several of these supply-side constraints. The goal of regional integration then is to introduce tools that reduce the search costs for appropriate export sectors by identifying and improving existing production capacity. Projects that promote value creation in LLDCs might include the introduction of venture capital via crowdfunding and the promotion of information that facilitates niche markets.

The second approach is to enhance the trade-development nexus. Slow progress in trade openness and high trade costs in LLDCs highlight the need for a more effective mapping of the trade opportunities. The second approach to regional integration that would benefit these states is to build formal institutions of trade that more accurately reflect the contribution of trade. Projects to promote this new direction include the development of a template for FTAs that directly links the development priorities of LLDCs to the trade opportunities created by FTAs; and the introduction of a social networking platform for SMEs.

The case of Mongolia underscores the importance of the neighborhood for LLDCs. A comprehensive and effective reduction in trade costs can only be done through regional cooperation. This is particularly true of states like Mongolia where export must go via sea port rather than airport. Mongolia also highlights one other very positive outcome. The recent EPA with Japan has several features – e-commerce among them – that set the global standard. Though older, Paraguay was the first LLDC to implement a trade agreement with specific provisions for LLDCs. LLDCs have limited exports, but are able to leverage this into exploration of innovative trade measures.

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