TRADE AND DEVELOPMENT: GLOBAL SCENARIO AND UZBEKISTAN'S PERFORMANCE

By

Akhror Burkhanov

A THESIS

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

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Committee in charge:

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ABSTRACT

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As globalization spawned all over the world absorbing more and more countries in its economic net, many scholars in the field of economics have focused on the analysis of international trade and development from different angles. The relationship of trade and economic growth has been receiving increasing attention from governments and researchers. Many suggest different degrees of statistical correlation results between these variables ranging from weak to strong. However, there is more than one way of addressing the question of development and trade; it is obvious that development fastens with increased engagement in to the global economy through international trade. Number of developing countries including one of the two double landlocked countries, Uzbekistan, is trying to utilize the lessons from successes and failures of globalizing world economy to their benefit. There are many challenges and possible solutions in strengthening sustainable capacity of developing Uzbekistan in becoming export oriented economy.

Dedicated to my sons Babur Burkhanov and TimurTakhirov

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I. INTRODUCTION

The analysis of trade and development has been under focus of many scholars in the field of economics from different angles. Increasing globalization together with a more integrated world demands extensive attention from governments and researchers to the relationship of international trade and economic growth. A number of research papers suggest different degrees of correlation between these variables ranging from weak to strong. Different data, methodologies and approaches may serve as an explanation of existing different conclusions.

In the new global economy, international trade has become a central issue for overall development. Some trade and development economists have been claiming intensively about the importance of increased trade as an ingredient of prosperity and sustainable growth regardless of economic size, geographical position and regional factors. In most cases, countries generally benefit from trade while degrees might vary in every particular case.

Indisputably, the topic of trade and development is addressable from different perspectives. Current paper firstly evaluates one of the most comprehensive and updated methodology practiced by most modern scholars - gravity model; and analyzes the empirical evidence of the trade's impact on development. Secondly, Uzbekistan's trade performance is analyzed based on the empirical evidence with respect to global trade patterns and possible gains from country's unutilized potential is discussed.

Recent several decades have seen many transformations in politics and economics of several regions of our world. The number of independent countries has increased recently due to political changes, such as the Soviet Union collapse. Most of newly independent economies are not mature and positioned as developing countries. All of them have been pursuing the aim of economic prosperity, which demands application of global patterns of economic practice, mainly, by already developed nations. In this regard, international trade plays pivotal role.

Being relatively young country, whose independent years of economy accounts for about a quarter, Uzbekistan demonstrated recognizable economic transformations, including advancement of trade patterns, in historically short period. In this regard, the final aim of the current paper is to make a contribution in international economics field via a research of global patterns of trade's influence over economic prosperity and implement its results to Uzbekistan critically analyzing its performance in international trade. Significant part of this study is devoted to study recent achievements in economy, challenges of further economic prosperity, and potentially favorable areas in the development of Uzbekistan from trade's perspective.

II. LITERATURE REVIEW

Trade facilitation and its gains towards development are catching increasing attention by both scholars and policymakers due to rising global integration and successful cases of trading economies. Discussions on international economics and development have always been present, while the trade's role in it has been boosted since the second part of the last century. There is an increasing number of scholars researching about different aspects of trade and, respectively, the number of studies dedicated to the field is becoming more and more.

A. EMPIRICAL ANALYSIS OF THE RELATIONSHIP BETWEEN TRADE AND GROWTH

Global market advancements throughout the last century have closely stood parallel to the unseen enhancement of multilateral and bilateral trade among both developed and developing nations. The phenomenal growing trend of global economic indicators, such as Gross Domestic Product (GDP) and international trade over the last century pointed increasing focus on the topic of trade and development. The frequency of researches into this field has been enlarged dramatically with industrialization and globalization. Current existing literature explained the causality and correlation between development and trade at different positive degrees. Studies of Dollar (1992), Sachs and Warner (1995) as well as other several important researches confirm statistically significant positive association between trade and GDP growth. Facilitation of trade, through its liberalization, and stabilization of exchange rates has shown to boost Latin American economies 1.5 times and Asian economies by 2.1 times (Dollar, 1992). Comparing trade openness of developing countries Sachs and Warner (1995) suggested that 'closed economies' could be performing by 2% more, in terms of GDP increase if they would utilize more trade friendly regimes.

Increasing bargaining power with neighboring countries and cutting down transportation costs, through facilitation of secure internal and external transport corridors (Carrere &Grigoriou, 2008), reforming the legal basis for easier trade and minimizing the obstacles to traders (Abdullaev,

2009; White 2010), and focusing on production of high value-added products are considered to be fundamental mechanisms of trade in stimulating development (Hausmann, Hwang, & Rodrik, 2007). Domestic industrialization of high value-added production spheres can play an ultimate role in the long term, especially considering current global crises of oil prices (Grancay, Grancay, & Dudas, 2015), as business friendly government reforms and transportation infrastructure cannot only produce outstanding results on their own.

B. DEBATE OF TRADE'S INFLUENCE ON DEVELOPMENT

Bradford and Chakwin (1993) presented arguments to emphasize the role of investments, rather than export oriented policy, in the growth of East Asian economies. Similarly, Rodrik (1995) critically analyzed previous papers and focused on South Korea and Taiwan. In this connection, he did not agree that the export orientation policy facilitated high economic development for the above mentioned countries. In contrary, he claimed that skilled labor force, adequate government intervention and equal wealth distribution in the 1960s played major roles in economic growth of both countries. Although trade and openness of a country can play some role for the development process, Rodrik (2000) argued that the investment into the domestic economy is the main reason that drives development and further facilitates trade. Indeed, it is undeniable that better conditions for trade are likely to stimulate more investment to the domestic economy.

Additionally, researches aiming to further assess the relationship between trade and income were carried out by Bradford and Chakwin (1993), Rodrik (1995), among others. The seminal work of Frankel and Romer (1999) proposed an alternative approach on the relationship between trade and GDP relationship by using the gravity model of trade. They statistically confirmed the positive effect of the trade volume on growth with the application of geographic components as instruments for identifying the impact of trade on income. Their study concluded that "a rise of one percentage point in the ratio of trade to GDP increases income per person by at least one-half percent" (p. 394). However, this research does not show the specific mechanisms through which

trade affects income, in general it claims that income should be facilitated by a more comprehensive policy on capital that would be directed to trade promotion.

Examining the trade-income relationship over the twentieth century, Irvin and Terviö (2001) applied gravity model approach of trade suggested by Frankel and Romer (1999) and strengthened their main conclusion that countries, which are actively involved in trade, tend to have higher incomes. Whereas, the study conducted by Rodríguez and Rodrik (2001) failed to find a strong relationship that in turn indicated that trade's influence was far weaker on development than previous studies. In this connection, their arguments can be questioned due to the effect of external factors, such as logistics, industrialization and trade-barriers, sample biases, which in turn may have resulted in a weaker correlation result.

Gravity model of trade by Frankel and Romer's (Frankel and Romer, 1999) has been successfully tested in many researches. Evaluation of trade's impact on relatively poor countries by Dollar and Kraay (2002) heavily suggested that "openness to international trade should be at the center of any effective poverty reduction strategy" (p. 205). Noguer and Siscar (2005) provided a new remarkably robust evidence of trade and income relationship by constructing a more powerful instrument to estimate the volume effect of trade on income with greater accuracy. Felipe and Kumar (2010) suggesting consolidation of trade opennes to be a policy tool for promoting trade studied a decrease in formal trade barriers, which may foster trade facilitation. Their results showed that there were significant gains in and from trade because of improving trade facilitation in Central Asian countries.

B.1. Selected literature in depth

In order to have clear picture of trade's influence on economic growth we can look at selected literature more in depth. The following works by Frankel &Romer (1999), Irwin &Tervio (2002), and Noguer&Siscar (2005) analysed weather trade oriented economies benefited economically or not. Their results demonstrated robust findings with a positive relation between trade and the economic wealth of nations.

Frankel & Romer (1999) for both decompositions regressed each component of income on a constant, the trade share, and the size measures. Again, they considered both OLS and IV. Since the decompositions cannot be performed for the full sample, they considered only the 98-country sample. Their results are reported in Appendix 1[1]. The first three pairs of columns show the results for the Hall and Jones decomposition, and the remaining two pairs show the results for the decomposition into initial income and subsequent growth.

They found that trade increases income through each component of income. For the first decomposition, the estimated impacts of trade on physical capital depth and schooling are moderate, and its estimated impact on productivity is large. Results show a one-percentage point increase in the trade share to raise the contributions of both physical capital depth and schooling to output by about one-half of a percentage point, and the contribution of productivity to output by about two percentage points. For the second decomposition, trade's estimated effects on both initial income and subsequent growth are large. Here the estimates imply that a one-percentage point increase in the trade share raises both initial income and the change over the sample period by about one and a half percentage points. Further, in every case, the estimates suggest that country size, controlling for international trade, is beneficial. And in every case the IV estimates of the effects of international trade and country size are substantially larger than the OLS estimates.

Irwin & Tervio (2002) presented in Table 2[2] the complete results of the income regressions for the basic specification. With the exception of 1928 and 1938-B, the 2SLS estimates

[1]Provided in Appendices
[2]Provided in Appendices

of the effect of trade on income are larger than the OLS estimates. Frankel and Romer (1999) find that the IV coefficient is 2.3 times greater than the OLS estimate, while Irwin & Tervio (2002) found that the 2SLS estimate exceeds the OLS estimate by a factor of 2.6, averaging all cases. Thus, the magnitude of their ratio across the century is quite comparable to that found by Frankel and Romer (1999) for 1985.

If Frankel and Romer's (1999) estimates suggest that a one percentage point increase in the trade share increases per capita income by 2 or 3%. In Irwin and Tervio's (2002) samples, a one percentage point increase in the trade share increases per capita income by 3.0%, on average. Their estimated OLS effect of trade on income is somewhat larger than Frankel and Romer's (1999), which helps to account for the larger 2SLS coefficient estimates that they found.

Noguer & Siscar (2005) in appendix 3 demonstrate the results of Equation (2)[3] using two stages least squares (2SLS). Once they modified the empirical equation to control for latitude and tropics, the trade coefficient decreased from 2.59 to 1.04, but remained statistically significant at 1 percent level. The result showed 1 percent point increase in the trade share of GDP to cause a 1 percent increase in income per capita.

In Column 2 of Appendix 3 they measured tropical exposure by the percent of land in the tropics; in column 3the authors substituted latitude for absolute latitude; in column 4 included all three geographic variables (latitude, tropical area and tropical population). In column, 5 Noguer & Siscar (2005) introduced a set of regional dummies to their benchmark specification. In every case, the trade estimate remained around one (ranging from 0.84 to 1.22) and retained all of its statistical significance.

Their results confirmed that states trading more reach higher levels of income. The results indicate that a 1 percent increase in the trade share of GDP leads to about a 1 percent increase in

[3] $\ln(GDP_i/N_i) = \beta_0 + \beta_1 Trade_i + \beta_2 \ln(A_i) + \beta_3 \ln(N_i) + \beta_4 Lat_i + \beta_5 Trop_i + u_i$

income per capita. This estimate is remarkably robust to the inclusion of a wide array of geographical and institutional controls.

The above-mentioned research, presented by experts in the field of trade, clearly demonstrated the significance of trade in facilitating economic activity and promoting growth. Before proceeding to the next section, a short reference is going to be given to a more recent econometric analysis of the trade and GDP relationship carried out by Burkhanov (2012):

The study employed bilateral trade data from International Monetary Fund's Direction of Trade Statistics yearbook 2011[4], GDP of reporting and partner countries (World Bank), distances between capital cities of trading countries, their area, population and whether they share same border or not.

Findings of research demonstrated forecasted results without much difference from other worthy papers. Appendix 4 illustrates regression results, where the distance is highly negatively related to trade (-1.31, slightly more significant than of Frankel and Romer (1999) and Frankel and Rose (2000), they found it to be around -1). Whereas, some like Coe et al (2002) using nonlinear gravity model found that distance may in fact effect three times weaker than estimated with log, as generally logging makes results more accurate. Bilateral trade share slightly increases with respect to its own population size (0.05), while more than a unit increase with respect to partner's population size (1.12), which is quite logical considering the market size effect.

Area variables represent insignificant negative impact of own area (-0.08) while almost a quarter large negative impact of partner area (-0.24) towards trade. As a result of transportation and other cross-border costs, we can see that countries sharing common border tend to trade more with each other by over a unity. This is the mirror image of the distance variable showing opposite tendencies. Therefore, close neighbors experiencing less costs related to transport and possible legal issues a country trades 1.13 times more with its bordered country. Anderson and van

[4]This Yearbook can be purchased online via www.imf.org

Wincoop (2003) argues even bilateral trade can be stimulated with border country; it can also play as barrier in total trade affecting 0.25-0.5 times negatively.

Landlockedness as was suggested by most literature shows over - 1 for domestic area and less for trading partner. Moreover, as these are landlocked countries, especially Uzbekistan, foreign trade has a potential to affect them more positively than other countries that are not so much landlocked and have access to the seaports.

Secondly, regarding to the effect of bilateral trade towards income unlike the work of Frankel and Romer (1999) Burkhanov (2012) estimated not the trade/GDP ratio, but Ln Trade. The reason for doing so is avoiding misleading produced by GDP on both sides of the equation, which is pointed out in the work of Feyrer (2009) too. Appendix 5 shows results of OLS regression in which under 42 % explained model (R2=0.42) a unity increase in Ln trade causes 0.36 increase *in income per capita.*

All regressed variables show significant t-statistics which supports the previous assumption of them being significant. It is clear that own population, border and partner income illustrates noticeable negative impact, while partner population and both areas express minor negative influence on domestic per capita income. Ln trade's impact on GDP per capita is positive 0.36 with OLS regression. It explains that trade impacts wealth of individuals significantly all over the world.

However, particular regional estimates might present various reasons than the global number. For instance, some might expect different results from East Asian countries in comparison to European countries. Noticeable result can be seen that apart from Ln Trade and Ln area (country i) represent negative impact. Ln Population of own country much negatively affects the GDP per capita (-0.46). This can be explained through the direct relation of population size.

On the other hand, Cyrus (2002) notes out OLS estimations overstate the income effect and problem of endogeneity. As a result, the Instrumental Variables will produce more accurate results. She says that existing problem of Endogeneity in Gravity models should be eliminated or made insignificant when using instrumental variables. Thus, Burkhanov (2012) used instrumental variable two stages least squares regression. We can see that trade of a country can influence income per capita of a country quite significantly on global level (107,193 observations on 178 countries), Coeffecient=0.24 (Appendix 6 in appendices).

Gravity model of trade can explain only 11.5 % of GDP per capita variation (2% higher than of Frankel and Romer (1999) for six-year period up to 2010. From the IV regression we can see that trade is statistically significant and represents almost a quarter (0.24) coefficient with regard to population income.

In summary, the econometric analysis represented the impact of trade in explaining the GDP of a respective country, even though the results of the different papers were not identical (and they cannot due to various factors). Moreover, the findings demonstrated the need for countries to improve the trade defining factors, which in turn will benefit the whole economy. These findings have consistency with the theoretical part of the economic theory that explains the benefit of engaging in trade.

C. THE GEOGRAPHICAL FACTOR OF TRADE

The global scenario of trade's benefit is undisputed; however, the regional and geographical conditions can increase or decrease this global pattern for a particular region or country. Many developing countries that are geographically landlocked, such as Uzbekistan, may be hindered in terms of trade due to the lack of transport corridors to seaports. Furthermore, going beyond the trade and income relationship, Carrere and Grigoriou (2008) analysed the factors influencing trade. On the one hand, their research found that internal factors, such as building roads

or infrastructure development, did not strongly influence international trade. On the other hand, overland transportation costs, bargaining power and infrastructure of transport corridor countries facilitated or limited international trade of landlocked countries. The works of Abdullaev et al, (2009), Mazhikeyev, Edwards, and Rizov (2015), White (2010) have been of high value after studying the region's specific trade barriers.

Likewise, after observing Central Asian economies' trade patterns, based on World Bank's Trading Across Borders dataset, White (2010) stated that trade costs in the region were "one of the world's most expensive, time consuming, and bureaucratically encumbered" (p. 51). However, considering the geographical landlocked location as given and unavoidable, the stimulation of trade, through legal and industrial reforms, has a big potential to facilitate economic development (White, 2010).

The existing academic literature illustrates at a different degree the potential of trade in global scenario and the possible gains for all countries in the world. As the degree of globalization, sometimes arguably, and modernization is increasing rapidly, new technological facilities to improve trade logistics are constantly entering to the market, therefore, no single country should be left aside from international trade and global economic interactions. Worldwide empirical evidence calls to engage into trade more actively, as a natural process of modern international economics.

Equipped with the global scenario of trade's positive impact on the prosperity of nations the next part of this thesis will be dedicated to analysis of Uzbekistan's performance in utilizing trade's potential for its development track. In-depth investigation covers whether the country has been utilizing its potential of trade or not, as well as what political and economic conditions have been supporting or hindering Uzbekistan to reach its potential.

III. COUNTRY ANALYSIS: UZBEKISTAN AND CHALLENGES TO TRADE

Literature discussed in previous section on international trade issues demonstrated its importance in a global scenario case. Moving away from the quantitative evaluation of trade and income relation in the first part, this part will focus on the performance of an economy in Central Asia that is undergoing transitional changes, Uzbekistan, and the role of trade for its current development policy.

In a nutshell, Uzbekistan can be described as a developing country, with over 30 million people; it has economy of 67 billion USD[5] with GDP growth of 8% on average for the last decade. Efforts to shift exports from commodity to non-commodity have been made with government support lead to industrialization and localization programs. Overall, it has been showing signs of healthy economic transition but it is also a country with a number of challenges hindering the realization of trade potential: both internal and external.

This analysis aims to start looking at challenges that influence trade performance of Uzbekistan directly and indirectly. Regional challenges, low trade facilitation, corruption perception, and trade openness issues can be considered as core topics underlying trade limitations.

A. Regional challenges

The country is located in a surrounding of landlocked countries, which earn their export revenue mainly from commodity exports[6]. In accordance to the World Trade Organization (WTO) statistics, we can see that the largest economy in the region, Kazakhstan, generated 86.6 % of its 84.5 billion worth export revenue from fuels and mining products in 2014, having traded mainly to the European Union 57.1 % of all its exports, 12.5% to China, and 6.6% to Russia (6.6%). Kyrgyz Republic and Tajikistan are two smallest economies in the region, with total exports of 2.5 and 1.5 billion USD respectively, without heavy dependence on fuel and mining like their

[5]In Official exchange rate for 2015
[6]See appendices 7-11: WTO country profiles for 2014.

neighbors, and with better regional trade proportionate figures in terms of their economic sizes but rather insignificant to the region's whole economic size. WTO does not possess the export breakdown of Turkmenistan, stating the total merchandise exports at 17.5 billion USD. Alternatively, The Atlas of Economic Complexity by the Center for International Development at Harvard University[7] (2016) published that about 93% of Turkmenistan's exports were from petroleum gas and oil products. Considering that the Uzbekistan's export basket is worth over 15 billion USD, fuels and mining products accounted 44.6 %, manufactures 24.1% and agricultural products 20.9 % accordingly for the year of 2014, it can be addressed as relatively healthier pattern.

Considering the fact that the goods portfolio in which a country specializes for exporting can derive a picture of its long-term growth (Hausmann et. al, 2007), more value-added or sophisticated "export basket" tends to facilitate potential growth faster (Felipe and Kumar 2010). Nations with no direct access to water transportation routes scan cause more positive or negative externalities, depending on their complexity of exports in goods and services. For instance, natural resources exporting countries provide low levels of spillover effects than those trading with sophisticated goods, especially in a landlocked condition. In this regard, little technological advancement and level of sophisticated export basket of Uzbekistan's neighbours do not contribute much to the country's and region's export market development. Nonetheless, some people can argue that it may be a good opportunity for Uzbekistan to specialize in more sophisticated products and sell them to neighbouring countries, the statistics of intraregional trade illustrated the different scenarios.

Figure 1. Intraregional share of trade. *Source: ADB, found in Linn (2012).*

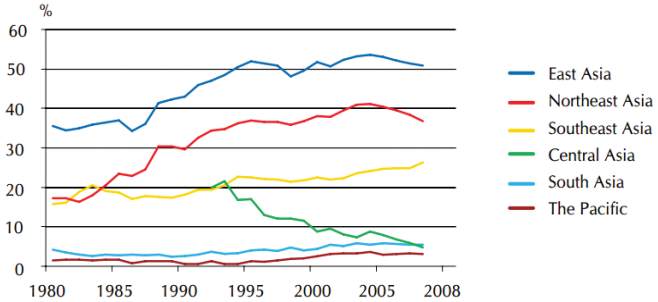


Figure 1 clearly illustrates decreasing intraregional share of trade over the period in Central Asia, while opposite is true for

[7]Available from: <http://atlas.cid.harvard.edu/explore/tree_map/export/tkm/all/show/2014/>

other regions, and it has been approaching to a level of 5% of total trade in Central Asia. Moreover, the share of manufacturing goods in the intraregional trade share was about one-third of the total trade, which can be answered via the situation when countries generate significant export revenues from natural resources trading to other regions while underutilizing the regional potential of trade development (Felipe and Kumar, 2010).

The Central Asian countries export policies may not be oriented to utilize the regional potential much, because clear evidence has been the declining regional trade share between the countries. Furthermore, main exports from the largest economy of the region, Kazakhstan, were based on fuels. Even though governments, especially in Uzbekistan, have been trying to diversify their economies and increase the share of manufactures, Kazakhstan and Turkmenistan's fuel based exports and the small economies of Kyrgyzstan and Tajikistan cannot generate competitive and healthy economic environment in the region.

Uzbekistan may benefit much from the further development of the neighboring countries; however, it must work on the export promotion globally. The recent economic situation and currency depreciations in Russia, which have affected severely the automobile exports of Uzbekistan to its biggest consumer, the Russian Federation, is a clear signal to work on the further diversification of the export market. On the other hand, a double landlocked[8] country faces the issue of high transportation costs in trading, which in turn makes the position of Uzbekistan in global trade most disadvantaged from the perspective of transportation costs. According to government's official sources, the country utilizes eight transport corridors to export and trade[9].

[8]Adouble landlocked country is surrounded by landlocked (almost or entirely surrounded by land) neighbors. There are currently only two such countries: Liechtenstein in Central Europe and Uzbekistan in Central Asia.
[9]Available on official webpage of Ministry of foreign economic relations, investments and trade [http://mfer.uz/en/export/transportation/], Map format illustration is provided in Appendix 12.

It is a positive phenomenon to diversify the transport corridors for a global net of the trade, especially considering geopolitical issues. Over the last 24 years of the independence, the traders of Uzbekistan have been facing inconveniences due to economic impact of security issues from Afghanistan, political instability or sanctions leading controversial situations of the other regional players. Due to this fact, it has not been easy to establish very reliable trade routes to any port. In this connection, this is the difficulty not considering the infrastructure which is to be discussed separately. Current activeness of Uzbek government in sustainable development and securing the trade routes via high level negotiations with respective governments (Kazakhstan, China, Turkmenistan, Iran, Russia and others) should undoubtedly stimulate further trade increase.

B. INTERNATIONAL COMPARISON

The comparisons of the country's performance to other partners allow generating a better picture to understand the position between countries in the development race. The following section is dedicated to the analysis of trade facilitation and openness as well as the corruption perception index.

B.1. Trade facilitation

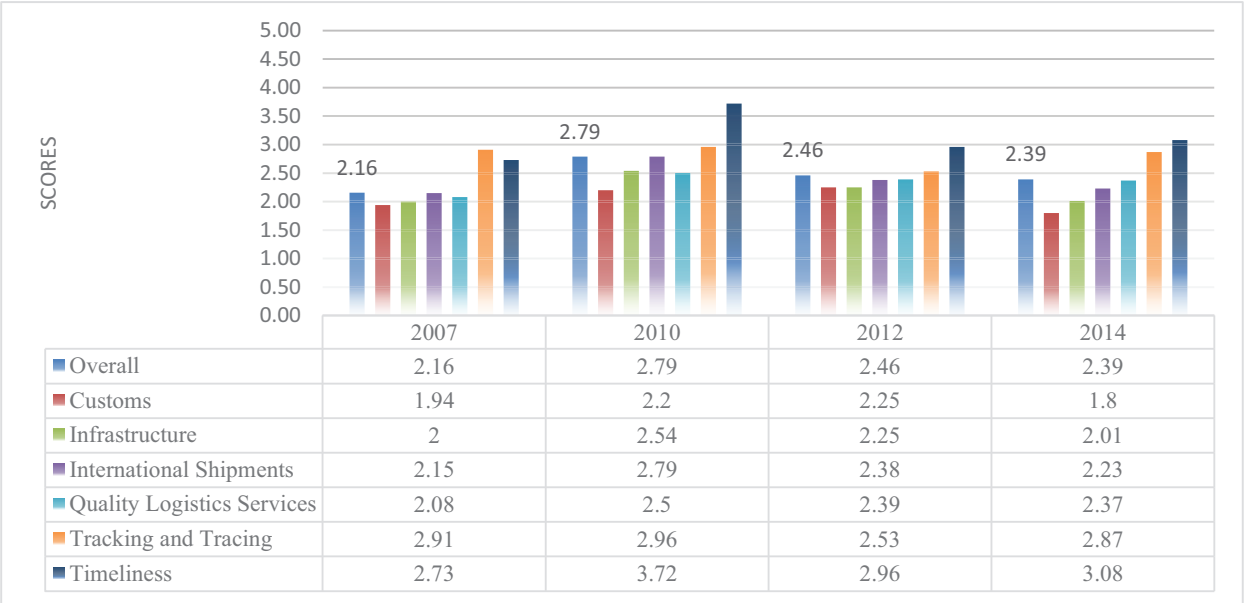
Many developing countries possess poor infrastructure and institutional capabilities to facilitate trade within and out of their borders. Central Asian countries, once being a part of the

Union of Soviet Socialist Republics (USSR), without any borders among them, faced numerous political and economic issues in early years of their independence. As the economy of the whole region went down taking at least ten years to recover from the pre USSR collapse condition, there was a lack of necessary investment to facilitate trade until the beginning of the new millennium. Yet, there have been several improvements in institutional capabilities and infrastructure in countries of Central Asia, Uzbekistan along with Turkmenistan and Tajikistan have been evaluated as low performers by the World Bank in the Logistics Performance Index (LPI), which in turn can address the trade facilitation.

In order to clarify these arguments, we can refer to the WTO (1998) to define trade facilitation as "the simplification harmonization of trade procedures, including the activities, practices, and formalities involved collecting, presenting, communicating, and processing data and other information required for the movement of goods in international trade".

In Figure 2 it can be seen that Uzbekistan scored 2.39 out of 5 in overall LPI in 2014, which is higher than in 2007 (2.16) but significantly lower than in 2010 (2.79). From the six dimensions of the LPI, timeliness looks relatively better at around 3 while the customs contribute to the downgrading of the index with its value of about 2. Moreover, infrastructure is the second dimension that the facilitation of trade lacks in the Uzbekistan.

Figure 2. LPI by different dimensions, Uzbekistan 2007-2014.



	2007	2010	2012	2014
Overall	2.16	2.79	2.46	2.39
Customs	1.94	2.2	2.25	1.8
Infrastructure	2	2.54	2.25	2.01
International Shipments	2.15	2.79	2.38	2.23
Quality Logistics Services	2.08	2.5	2.39	2.37
Tracking and Tracing	2.91	2.96	2.53	2.87
Timeliness	2.73	3.72	2.96	3.08

Source: World Bank. Constructed by author.

The improvement in all of the six dimensions will certainly facilitate trade. Additionally, it can play an important role considering the fact that this country is land locked as a given factor. For this reason, respective government authorities should provide serious attention to the improvement of all dimensions, especially customs procedures and infrastructure, focusing on the efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) at border control agencies and the quality of trade and transport related infrastructure. Felipe and Kumar (2010) estimated significant gains, ranging from 28% to 63% of international trade and by 100% of intraregional trade in Central Asian region, from trade facilitation. They underlined the infrastructure improvement as the most influencing factor in this matter.

It is easily notices that Uzbekistan since its independence has been focusing on the development of the industrial and service sectors. Likewise, the export portfolio of the country shows that more high value added products are being produced and thus decreasing the share of raw cotton, which has been historically known as the main export commodity, and natural

resources. In this regard, trade facilitation can benefit Uzbekistan more significantly, compared against its natural resource exporter neighbors, considering that bilateral trade of more sophisticated goods would boost the economy with relatively higher speed than less sophisticated goods (Felipe and Kumar, 2010).

B.2. Trade openness

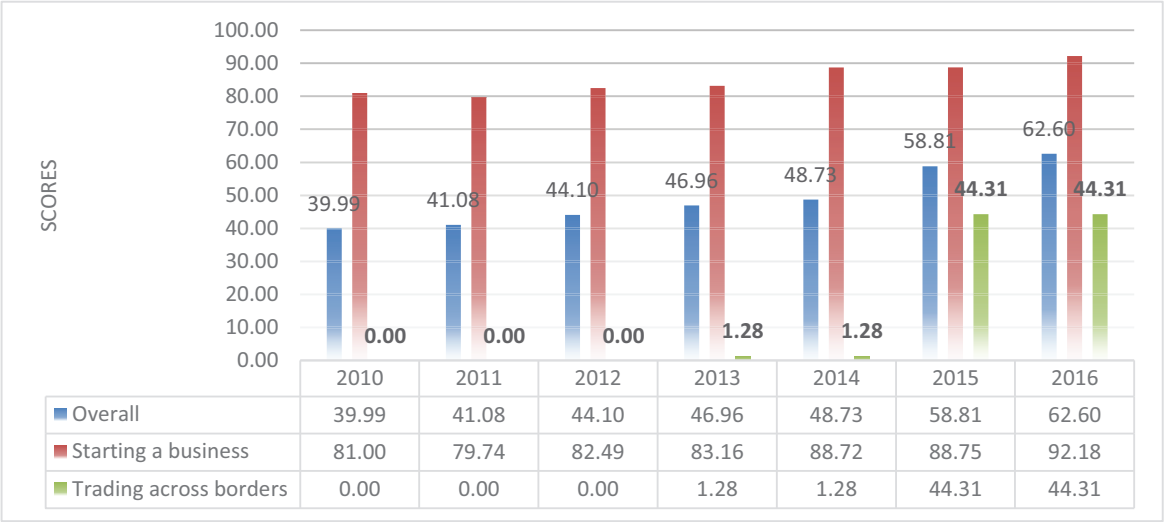
The recent Doing Business 2016[10] Report ranked Uzbekistan as the 87th easiest country to do business out of 189 countries covered all over the world. Even though, this ranking system cannot create complete picture of business environment, it can illustrate overall economic conditions. There has been a remarkable increase by 50 places in Uzbekistan's performance during the last decade from the 147th place in 2007[11]. Moreover, the region's ranking is also quite positive as the biggest neighboring economy, Kazakhstan, is ranked as the 41th, and Kyrgyz Republic-67thwhile Tajikistan-132th.

Even though, starting business indicator scores are known to categorize the best business practices globally (92/100[12]), other indicators also illustrate relatively better points as well. The indicator of trading across borders measures the easiness of both exporting and importing goods to/from Uzbekistan, and it demonstrated that the country had the lowest score among all other assessments (Figure 3). In addition, even more devastating results could be found from the Trading across borders indicator, which could not be lower since the country was ranked the 189 out of 189 countries in 2014. This situation suggested that the trading across borders is the least attractive

[10]Available from Word Bank Group's project called 'Doing Business'[http://www.doingbusiness.org/]
[11] Doing Business started ranking Uzbekistan since 2004, however, it was not able to provide overall score until 2010 when it could carry analyses of all components necessary to produce complete study and rank considering all the indicators involved in Doing Business survey.
[12]Every country scores from 0 to 100, 100 – is the best score.

considering the following factors: number of documents to export and import, time to export and import, cost to export and import. In particular, despite the fact that there has been a mild progress since 2010, since the indicator shifted from 0 to 1.28 in 2014 and the country has been better performing until reaching 44.31 in 2016, this indicator remains significantly low, with respect to entire world, as Uzbekistan at its best has so far achieved only the 159th place out of 189 countries in representing its trading opportunities.

Figure 3. Doing Business selected indicators 2010-2016.



	2010	2011	2012	2013	2014	2015	2016
Overall	39.99	41.08	44.10	46.96	48.73	58.81	62.60
Starting a business	81.00	79.74	82.49	83.16	88.72	88.75	92.18
Trading across borders	0.00	0.00	0.00	1.28	1.28	44.31	44.31

Source: World Bank. Constructed by author.

The collective work of government and international organizations, like United Nations Development Programme (UNDP), can be addressed as progressive movements that are generating better opportunities for trading and doing overall business in Uzbekistan. In a recent analysis of the expected change of trade patterns in Uzbekistan, for the upcoming years 2016/2017, we can observe the positive changes in the patters of commerce. For instance, documents required to export will decrease from 11 to 4; total days to export will decrease from 54 to 22; and the cost to export will go down from US $ 5,090 to US $ 1,890. Considering import procedures, documents to import will decrease from 13 to 4, total days to import will decrease from 104 to 26, and the

cost to import will go down from 6,450 USD to 2,250 USD. Although the final result of the reforms cannot make Uzbekistan as attractive as in top rank countries, the progress is been significant[13], considering the time in which they are to be implemented.

B.3. Corruption Perception Index

Last but not least, one factor that has been an obstacle for effective trade and development of Uzbekistan is the level of perceived corruption. According to Transparency International, Uzbekistan holds the 166th[14] place out of 175 by Corruption Perception Index (CPI) in 2014. Even though, there was an improvement over the last 5 years by marginal scores, one can say that the perception of corruption in the country became worse. For instance, Uzbekistan was perceived the least corrupt country among its Central Asian neighbors (Kazakhstan, Kyrgyzstan, Tajikistan, and Turkmenistan) in 2004, while later it went to the most in 2011 and by the last survey it was considered as the second most corrupt country among Central Asian and whole Commonwealth Independent States.

However, corruption cannot be linked directly to trade promotion, it effects the investment and business which produce tradable goods that are supposed to be attractive in the global market via their comparative advantage. For this reason, we can highlight "perceived corruption" as a serious problem of Uzbekistan's trade and economic development.

The current reforms target the elimination of corruption through new legal mechanisms which have focused on more open and responsible government capable of providing expectations

[13]The progress shown is significant due to joint effect of country improvements and updated methodology of conducting Doing Business analysis (Methodology changes are available from http://www.doingbusiness.org/methodology/methodology-note).

[14] The last is the worst. 1st is perceived as the least corrupt.

of better conditions where business activities can prosper. The global economic history outlines that corruption is an issue that can be eliminated within few generations. For instance, Canada serves as a good example. Morck and Steier (2005) claim that Canada was able to transform its 'remarkably corrupt' governance to one of the most clean system within a few generations due to economic factors and institutional development.

To sum up, our analysis of direct and indirect obstacles related to trade and development, from perspectives of LPI, Doing Business, and the Corruption perception, reveals us a number of hindrances and Uzbekistan's current conditions compared to other economies globally. In contrast to other global players, Uzbekistan was ranked below average by LPI and CPI, while Doing Business shifted Uzbekistan's economic rank as above average category. Actual scores have encouraged the government to put strong efforts to improve many economic aspects discussed above in order to utilize trade's potential in further development. The changes over time in most of the rankings have demonstrated the willingness and dedication of uzbek government to follow a sustainable development path.

IV. UZBEKISTAN'S TRADE PERFORMANCE

Together with observing relatively unattractive position of Uzbekistan in international arena regarding the global rankings in trade, we have to examine its actual performance. Previously, Uzbekistan was considered to have a good geographical location due to its placement in Central Asia, where the Great Silk Road passes. Nevertheless, with the invention of modern logistics and the fast revolution of the shipping industry, the geography of Uzbekistan is believed to be hindrance rather than stimulus with regard to trade activity. A double landlocked position of the country puts great pressure to achieve higher comparative advantage in trade, since transportation costs are around ten times more expensive via land than by water (White, 2010).

After the collapse of the USSR, it took around a decade for former USSR countries to recover from pre-collapse economic conditions. Uzbekistan is considered to be one of the most successful economies to recover after this collapse among other neighbors given the country's specific economic conditions. In this regard, Popov (2014) illustrated through his research about the perspectives of development for Uzbekistan and stated, "Uzbekistan has had the most successful economy in the former Soviet Union (FSU)" (p. 4).

Some of the main factors of such conclusion come from following (Popov, 2014):

1) In 2013, the GDP of the country exceeded the 1989 level by more than two times[15];

2) External and domestic public debt in Uzbekistan are low - 17% of GDP;

[15]Popov (2014): "Among countries of Eastern Europe and the former Soviet Union only Turkmenistan and Azerbaijan could increase GDP more than two times, but they are large resource exporters, whereas Uzbekistan is not, though it exports gas and gold. Among transition economies, only China and Vietnam had more impressive growth".

3) Gold and foreign exchange reserves are large – 11% of GDP;

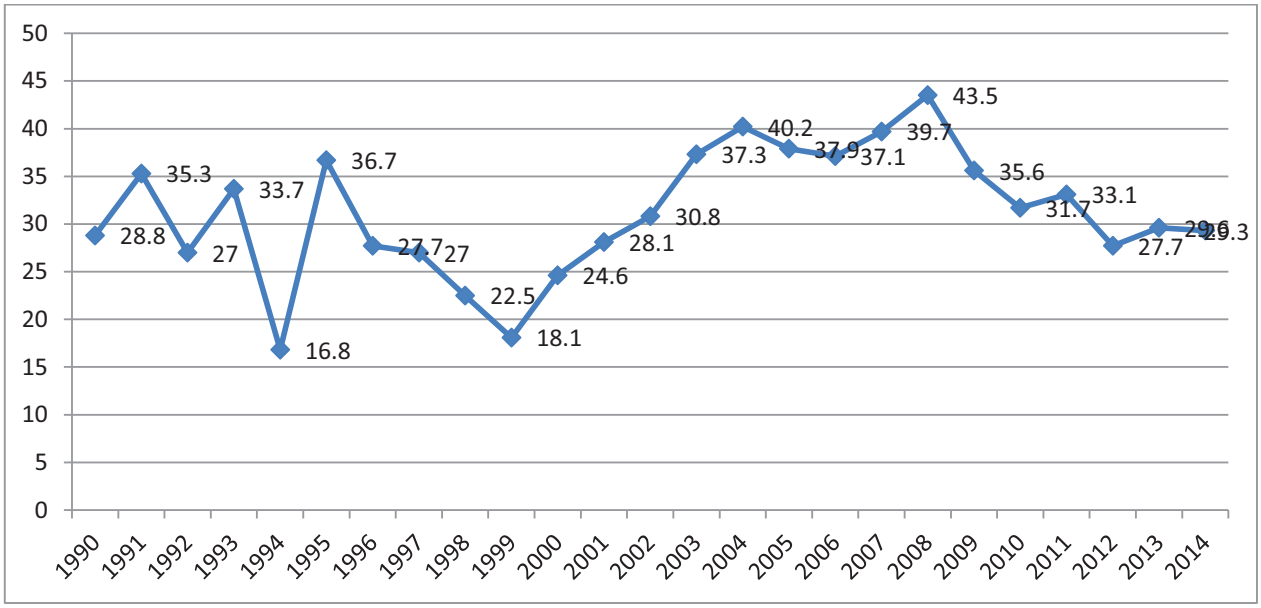
4) Strong industrial policy;

5) Large-scale progressive structural shifts: energy and food self-sufficiency, the share of industry in GDP, as well as the share of machinery and equipment in total industrial output and export increased;

6) New branches of industries were born: automotive industry was created from scratch, which became competitive and exports half of its products. For instance, in 2013 Uzbekistan sold abroad about 100 thousand cars, almost as much as Russia, whose GDP is 25 times larger.

Based on official statistics, exports of goods and services have increased 4.6-fold from US$3.3 billion in 2000 to US$15.0 billion in 2011 (Anderson, B., and Klimov, Y., 2012). Although above mentioned economic developments have shown significant progress in the economy, the export to GDP ratio (Figure 4) shows similar percentage on average (30%) and not much of an increasing trend, considering the last 24 years. Generally, this volatility can be explained by the increasing world prices of Uzbekistan's main export products, cotton and natural resources, during the mid-2000s. Moreover, regarding the annual GDP increase of over 8% on average over the last decade, we can claim that Uzbekistan’s economy has been performing progressively.

Figure 4. Uzbekistan's Export to GDP ratio.



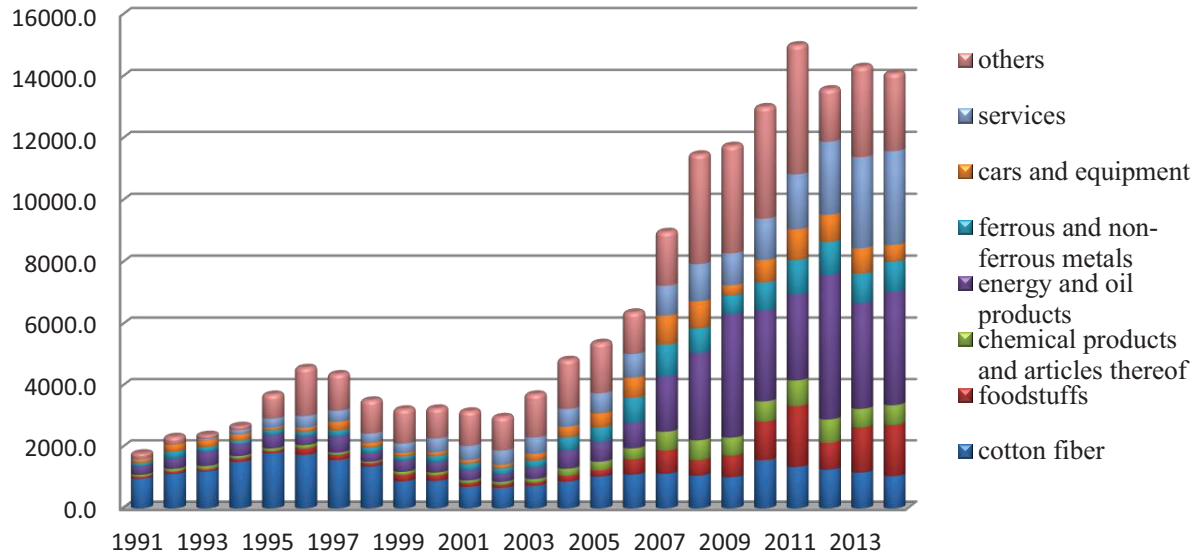
Source: World Bank

In order to have a more valid understanding of Uzbekistan's export performance, we have to consider components in the portfolio. For instance, looking at the illustrative data from The Observatory of Economic Complexity of Massachusetts Institute of Technology, there has been a tremendous shift in export diversification since 1995. Looking at the Illustration 1 in appendices we can see that the total exports in 1995 accounted 1.32 Billion USD, in which over 72% of share belonged to raw cotton and over 13% to gold. As Illustration 2 in appendices shows, the total exports in 2005 accounted 3.63 Billion USD, in which the share of raw cotton decreased about three times and gold's share about two times, respectively. Additionally, in 2013 (Illustration 3 in appendices), the total exports accounted 5.86 Billion USD, the share of raw cotton and gold decreased even more while not being the only main items in export revenues. This phenomenal change happened due to the industrialization policy of the government and diversification of

economy. Currently, a significant share of exports is accounted for car manufacturing, chemicals and agricultural products altogether with cotton and textile manufacturing. Likewise, the promising indicator of better economic performance can be seen through the sub categories of each individual industry in export shares. Looking at the changes on industry composition from 1995 to 2013, we can see that there have been significantly more sub-clusters within the export-oriented industry. Therefore, we can claim that Uzbekistan has achieved progress in its export policy, through more industrialization and diversification.

Similarly, official statistics provide us with the increasing export figures and a broader portfolio over time. Figure 5 shows export statistics ranging from 1991 to 2014 in different periods of increase. If there was a stable increase during 1991-1996, the decline that happened since 1997 continued up until 2002. This trend since 2003 until present demonstrates the highest increasing figures over time with a peak point laying in 2011, with approximately 15 billion USD export value.

Figure 5. Uzbekistan's Export portfolio 1991-2014



Source: Government official data

Some of the main trending sectors between 1991 and 2014 were services (increased by 153 times), foodstuffs (26.6), and energy and oil products (13.4). The leading products that were exported in 1991 were cotton fiber (54%), energy and oil products (15%), cars and equipment (6%) together with ferrous and non-ferrous metals; whereas in 2014 we can see that energy and oil products (26%), services (21%), and foodstuffs took the lead while leaving the once biggest exporting commodity, cotton fiber, with 7% share of exports.

Table 1. Export portfolio components change in times respective to 2014

	Since 1991	*Since 2001*
Cotton fiber (8)	1.08559	1.49907
Foodstuffs (2)	26.6391	13.4155
Chemical products and articles thereof (5)	9.94745	7.44907
Energy and oil products (3)	13.2713	11.3766
Ferrous and non-ferrous metals (6)	8.78187	4.40874
Cars and equipment (7)	5.15377	4.46324
Services (1)	153.045	6.56904
Others (4)	13.1953	2.22117

Source: Government official data

Since the independence of Uzbekistan in 1991, the government focused on developing healthy trade policy which allows sustainable growth of whole economy. Main criteria of the development were smooth and step-by-step transition from resource based to industrialized economy. It can be argued that both good policy-making and favourable external conditions played its positive role in Uzbekistan's overall increase of trade. The resource based economy has been able to start the transition to industrialization of its economy through modernizing existing infrastructure and attracting foreign companies to establish new sectors of economy together with government bodies.

Even though, there have been institutional and financial challenges in fostering export oriented manufacturing, joint efforts of public and private sectors increased the diversity of exports. Over the years of transition, which is not finished yet, the products and foreign markets of their consumption significantly expanded. It can be easily noted that, main orientation of the economy is together with traditional exports to gain comparative advantage in producing non-traditional to its economy products like automobiles, electronics, garments and other high value-added goods. In this regard, Table 2 shows the results of colossal efforts to modernize the export oriented capacity of Uzbekistan economy.

Table 2. Uzbekistan's trade performance 1991-2014 in million USD

	1991	**1995**	**1999**	**2003**	**2007**	**2010**	**2014**
Export	**1797.2**	**3719.9**	**3235.8**	**3725.0**	**8991.5**	**13023.4**	**14109**
Cotton fiber	965.1	1798.9	883.7	739.1	1127.4	1572.7	1047.7
Foodstuffs	62.9	64.1	206.7	102.1	761.0	1260.5	1675.6
Chemical products and articles thereof	64.7	91.2	101.8	114.9	613.4	661.3	643.6
Energy and oil products	276.8	435.4	371.5	364.4	1818.2	2973.8	3673.5
Ferrous and non-ferrous metals	111.4	173.0	138.9	239.8	1029.7	894.4	978.3
Cars and equipment	106.0	76.2	103.2	218.3	932.0	715.4	546.3
Services	19.8	287.7	308.0	534.9	965.3	1335.5	3030.3
Others	190.5	793.4	1122.0	1411.5	1744.5	3609.8	2513.7
Import	**1473.6**	**2892.7**	**3110.7**	**2964.2**	**6728.1**	**9175.8**	**13984.3**
Foodstuffs	635.1	526.3	408.1	293.5	483.0	963.2	1509.9
Chemical products and articles thereof	123.8	269.2	363.0	380.0	882.8	1265.7	2229.6
Energy and oil products	181.3	54.0	66.6	79.8	236.5	654.6	865.5
Ferrous and non-ferrous metals	134.1	164.4	245.4	235.3	504.8	742.1	1113.6
Cars and equipment	221.0	1386.3	1393.5	1315.0	3340.0	4032.5	5521.5
Services	10.3	144.9	269.6	300.7	388.7	490.4	1120.2
Others	168.0	347.6	364.5	359.9	892.3	1027.3	1624.0
Total trade	**3270.8**	**6612.6**	**6346.5**	**6689.2**	**15719.6**	**22199.2**	**28093.3**
Trade balance	**323.6**	**827.2**	**125.1**	**760.8**	**2263.4**	**3847.6**	**124.7**

Source: Government official data

A. TRADE REGIME

The trade regime that has been formulated since the independence of Uzbekistan in 1991 is crucial for understanding the topics covered in this section. In accordance with the President of the Republic of Uzbekistan, Karimov (1998), the development priorities of government have shaped current trade regime which was formulated since the independence in 1991.

The main priorities related to the formulation of trade regime were the following:

• Achieving sustainable economic independence by ensuring adequate domestic supply of essential goods, including energy and food products, keeping positive trade balance, modernizing the existing and developing new import-substituting industries;

• Introducing new technologies and modernizing the capacity of domestic industries;

• Developing the long-term export potential;

• Diversifying the composition of exports decreasing the share of primary commodities and increasing high value-added finished goods;

• Pursuing mutually beneficial economic cooperation with other countries.

For this reason, the trade regime held a high level of protection to import-substituting industries and controlled the adequate supply of food products in domestic market. There were tax privileges for import-substituting industries and exporters of manufactured products. It was relatively easy to import capital goods, especially for state sponsored investment projects and for manufacturing needs, while imports of consumer goods and others, especially for local alternatives, faced high-tariff barriers. The government of Uzbekistan has not shown any particular interest to build regional economic integration arrangements with a particular country.

As part of stimulation package to exporters tax privileges can play important role. For instance, the exporters selling 15-30% of their goods overseas are taxed by 30% less profit and

property tax than other non-exporting companies. Moreover, if textile producers export over 80% of their goods, they do not pay the property tax. Most domestically produced goods subject to an excise tax were exempt from this tax when they were exported; some imports were exempt from tariffs, excise taxes and/or the value added tax (VAT). Imports of equipment not produced in Uzbekistan and used in producing import-competing goods and imports of goods that are used as inputs for exports by companies in free economic zones, such as Navoi Free Industrial Economic Zone, were exempt from tariffs; imports of equipment for scientific and innovative projects financed by foreign organizations on a grant basis were exempt from excise taxes and VAT; imports of equipment approved by the government were exempt from VAT (Anderson & Klimov 2012).

In addition, there are number of tax privileges for industries engaged in import-substitution production. Companies operating under so called localization programs, which stimulates the production of goods domestically rather than importing, are exempt from profit tax. Technological foundation and building infrastructure are not taxable if they are utilized in import-substituting production.

To summarize the trade regime of the country, it is clear that Uzbekistan has been generally following the import-substituting policy. As discussed in previous part, the trade performance of Uzbekistan reflects the positive effects of trade policy of government. Uzbek economy has been facing rapid industrialization over the last two decades, the driving force of which is the import-substituting policy of government.

B. COUNTRY CASES: SOME LESSONS FROM EXPORT FACILITATION POLICIES

The degree and mechanisms of government interventions in trade are very ambiguous when defining either their success or failure. Recent economic history presents several cases of government efforts in different countries to boost exports, facilitate local production and stimulate economic growth. Meanwhile some countries succeeded others failed. Undoubtedly, there are reasons behind both the realization and failure of government programs. Usually, there are general provisions and logical understanding on how a particular government is expected to stimulate trade, especially exports. More often, the theoretical principles of free trade and liberal market mechanisms may not be reflected on real conditions as they are proposed in the economics literature. There are about two hundred countries in the world, and it will not be mistake to claim that every country case deserves special consideration, and none of the mechanisms of trade stimulation will uniformly suit every player in the market.

In this regard, Dani Rodrik (1993) analyzed several failure and success cases of export facilitation and concluded that there has been contradicting evidence to logical understanding on how proper policy intervention should be. On the other hand, he found that the "state autonomy"[16] and "policy coherence"[17] were essential in determining success in policy implementation. As evidential support of Rodrik's (1993) conclusions there have been case studies on export subsidization policies of Korea, Brazil, Kenya, and Bolivia.

[16]Rodrik (1993): the degree to which the state and administrative apparatus of a society is insulted from organized private interests and, consequently, can exercise discipline over them.
[17]Rodrik (1993): clearly articulated, stable, and non-conflicting set of policy priorities.

Korea's experience on export facilitation policies was target-oriented and strong institutions, with distinctive organizational framework, were leading this process successfully. Furthermore, "weakness of social classes" (Amsden, 1989, p.54), meritocracy, and the transition of public sector's leading role to the private sector, were part of the backbone in this rapid process of development. On the one hand, Brazil's experience was quite successful in terms of results achieved and government autonomy. On the other hand, they did not have the same kind of target for industries.

The Korean and Brazilian case aforementioned in brief, which may be in depth studied in Rodrik's (1993) and others respective works, the government of Uzbekistan must learn: 1) the importance of the state's autonomy in formulating trade policy for the benefit of entire country's economy; 2) the need to monitor actively the performance of exporting sectors with the aim of finding weaknesses and assisting in their elimination; 3) to adopt transparent and up-to-date meritocracy to stimulate the productivity and efficiency.

In contrast, the experience for Kenya and Bolivia was quite different since they implemented unanimous export facilitation policies along with a weak supporting government. For this reason, interactions between stakeholders were not effective, and thus, this policy was doomed to fail (Rodrik, 1993).

Moreover, trade policy should cover a 'broad space instead of only focusing on a general scope such as tariffs, export promotion agency activities, and so forth, but rather with obligatory presence of competition, effective institutions, and good infrastructure (Were et al, 2009).

From above brief descriptions of cases in Korea, Brazil, Kenya, and Bolivia, which may be in depth studied in Rodrik's (1993) article and other respective works, the government of

Uzbekistan must learn: 1) the importance of state's autonomy in formulating trade policy for the benefit of entire country's economy; 2) the need to monitor actively the performance of exporting sectors with the aim of finding weaknesses and assisting in their elimination; 3) to adopt transparent and up-to-date meritocracy to stimulate the productivity and efficiency; 4) the necessity of maximizing the efficiency of intuitional framework; 5) to create well-functioning infrastructure which can attract and stimulate traders to be more active.

V. FUTURE ORIENTATION

It is not easy to estimate the potential increase in international trade in figures due to the lack of official prognosis and long term-goals. Government's official speeches represent the best available source of government future prospects.

During the International Investment Forum in November 2015 in Tashkent, the First Deputy Prime Minister, Minister of Finance of the Republic of Uzbekistan Rustam Azimov mentioned[18] the aim to increase exports 1.5 times up to 25 billion USD until 2020 from the level in 2015. Moreover, he pointed out that the current reforms lead the economy to grow on average by 8% annually, and the manufacturing sector grows at 9% for the coming five years period. It is expected that the share of manufactures in export will increase from current 24% to 30% by 2020. His forecast was supported by arguments related to (i) deepening the reforms with respect to modernization and diversification of manufacturing sector, (ii) accelerated development of private ownership, (iii) decreasing the government's role in economy, (iv) deepening the localization of production, (v) modernization of communication and transportation infrastructure, and (vi) increasing energy efficiency in the economy.

In the long run, the Minister of Foreign Affairs of Uzbekistan Abdulaziz Kamilov during his speech at the General Debates of the 69th Session of the UN General Assembly[19] in 2014, mentioned that the GDP per capita will increase up-to USD 9,300 by 2030 from current 2,000 and during The United Nations Summit on Sustainable Development Goals in 2015 he mentioned that

[18]Available in Russian language, retrieved from: http://www.review.uz/index.php/novosti-main/item/5414-rustam-azimov-uzbekistan-do-2020-goda-uvelichit-ob-em-eksporta-do-25-mlrd
[19]Retrieved from Ministry of Foreign Affairs of Uzbekistan's official web-page: http://www.mfa.uz/en/press/news/2015/09/5376/

"A major guideline for us will be Uzbekistan's joining by 2030 the ranks of states with an income level of more than world average".

Referring to an even longer period until the year 2050, the more reliable and comprehensive projection can be provided by Global Research Department of HSBC Bank[20] in their report titled "The World in 2050", which was published on January 11, 2012. According to the report, Uzbekistan along with its neighbors Kazakhstan and Turkmenistan are forecasted to be fast growing economies in the first half of 21st century reaching the size of 51st, 54th, and 87th economies of the world in 2050. It is estimated that Uzbekistan is going to be the second best performer after Philippines in Asia over the forecasted period moving up by 22 places in rank in terms of economic size and increasing GDP 12.56 times and GDP per capita 9.92 times. Moreover, HSBC predicts two scenarios with government making complete progress in improving economic infrastructure and without. Interestingly, Uzbekistan's average GDP per capita is expected to increase by 4.95 % annually in four decades until 2050 without any government progress while by 6.625% in a successful government reforms scenario.

The most recent economic roadmap can be obtained from the Report[21] of the President of Uzbekistan Islam Karimov at enlarged meeting held in the beginning of 2016 in the Cabinet of Ministers dedicated to the socio-economic development in 2015, and to the most important priorities of economic program for 2016. According to the report, the core future direction of exports is the increase of modern production of final goods with high value-added which must be competitive in global market. Moreover, H.E. President Karimov pointed out the necessity of a radically new comprehensive approach to generate concrete plans until 2030 in order to identify

[20]Retrieved from: https://www.research.hsbc.com/midas/Res/RDV?ao=20&key=hCmm8WiQC0&n=317638.PDF
[21]The full report on Uzbekistan Government's official wep-page: https://www.gov.uz/ru/news/view/4238

potentially attractive commodities. In this regard, government has estimated over two times the increase of GDP in 15 years with a 40% of production share in comparison to 33.5% in 2015 as well as with decreasing agriculture's share from 16.6% to 8-10% until 2030.

From the agriculture perspective, we can see a slight decrease of cotton production from 3.35 tons to 3 tons, while other agricultural products are supposed to increase significantly from 16.4% to 250%. In addition, production surplus coming from increased agricultural capacity will be entering foreign markets.

During the cabinet of ministers' meeting, there was a particular attention given to the promotion of export-oriented production, not only for large companies but also small and Medium Enterprises (SMEs). It is a very positive signal that there are discussions carried out at high political level about export orientation and to foster sales of Uzbekistan's goods, to find more foreign markets and increase the export share of sales by different sized companies, to demonstrate the high motivation from the government. The reforms that aim to support producers, especially export-oriented, and the rise of questions at the highest political level demanding critical measures to support and stimulate exports, once again demonstrate the healthy focus of government's orientation with respect to the export sector and the whole economy.

The analysis of available official information suggests that Uzbekistan, similarly to many other fast developing countries, focuses on creating sustainable diversified economic potential by focusing on developing competitive industrial bases and supporting domestic enterprises with different forms of economic initiatives to produce import-substituting and export oriented products. Based on the trade and development performance of Uzbekistan and the global scenario together

with the consideration of future policy objectives, following sectors of economy has strong potential to lead Uzbekistan's future export portfolio:

1) Auto industry: car production (GM-Uzbekistan), truck production (MAN), and bus production (Mercedes-Benz and Isuzu) in the country have already created an industry and should actively modernize and keep up to date to be more competitive and demanded (around a quarter of production was exported in 2014). In this regard, Uzbekistan has recently developed its own automobile brand and starting in 2016 scheduled to sell three cars in foreign market under its own brand. Furthermore, there are several government plans to expand this sector, while originally most of the production has been oriented into domestic market for import substituting. Government-controlled auto industry of Uzbekistan must utilize its cheap labor cost based production and relatively cheap products to promote products more widely and globally. The recent economic situation in Russia and Kazakhstan have demonstrated that focusing in only one or few markets may have devastating effects for exports.

Considering automobile industry development in different countries including India (since 1928), China (since 1953), Turkey (since 1954) and others, Uzbekistan (since 1994) has recently joined the 'auto producer's club', yet has achieved notable results. For instance, if Uzbekistan produced 25,344 cars and exported 880 in 1996, the production capacity increased up to 245,000 with 80,000-100,000 of them being exported annually in recent years. Moreover, the country used to produce three models of cars and one model of bus in 1996, while nowadays it produces and exports nine different models of cars and similar number of diverse buses, trucks, and special heavy machines.

Therefore, we can see undeniable progress and increasing comparative advantage capacity of Uzbekistan in automobile industry, which should be given further strategic importance to be one of the leading sectors of economy.

2) Textile and clothing (light manufacturing): this sector is the second largest industry and its potential has not been fully utilized. Manufacturers should be encouraged to produce not only cheap but likewise high value added products so as to be able to create brands. Natural comparative advantage in cotton production and surplus of cheap labor are a good basis for the emergence of the strong garments sector in Uzbekistan. Decreasing the sales of cotton fiber, to countries like China and Turkey, and adopting the best practices of the garment industries around the world, to produce final products, would enhance the well-being of the whole working class population. Global experience from Bangladesh, China, and Turkey are good examples to understand that it is never too late to start the creation of the strong garments industry.

In this regard, the development of garment sector in Bangladesh can be a good example of a successful case of an emergence of particular industry from scratch. However, the initial government lacked sign of strong promotor of industrial policy, key laws and regulations adopted were enough for the hyperactive private sector to take the maximum advantage. The increased garment manufacturers' class in Bangladesh was able to transform almost non-existing sector to the giant engine of the exports of the country. Due to the active entrepreneurs and collaborative government Bangladesh became the second largest garment exporter in the world. Even though, there is high competition from China and other apparel producing countries in today's globalizing world, Bangladesh has significant unutilized potential to sustain and increase its presence in the global garment industry due to factors like cheap labor, potential productivity, and government's export support.

Overall, annually organized Cotton and Textile Fairs, new designer shows, promotion of garment industry, and government support in production of final textile products must bring fruitful results in future of Uzbekistan's textile and garment industry.

3) Oil-gas and chemical industries, with focus on Green Energy (fuel, gas and other chemical productions) as Uzbekistan is dependent on revenue of chemicals, and thus, should invest in this sector, but not for the long run as these are finite resources. Therefore, there should be a shift that rather focuses more on alternative energies, such as solar energy.

Over the last two decades, these industries have been increasing their share in economy bringing more export revenues. However, petroleum exports of gas account significant amount of around a quarter, there is strong understanding of further modernization of the sector. Nowadays, policymakers are concerned about the deep processing of chemical, oil, and gas products to gain high value-added.

There are clear signs that Uzbekistan can be successful in promoting these sectors of economy. For instance, over the period of 2001-2015 Uzbekistan established the same number (8) of production facilities as Kazakhstan and Turkmenistan combined together. Considering much more dependence of Kazakhstan and Turkmenistan economies on oil, gas, and chemical sectors, Uzbekistan has done notable progress in this sector if we pay attention to diversification policy in exports. Further enhancement and upgrade of chemical, oil, and gas sectors will allow not only the increasing export capacity within the sector but also will facilitate other sectors to grow through locally available ingredients.

In addition, the development of solar energy sector can pay high dividends too. Uzbekistan is considered to be rich in sunshine, which is present about 300 days in a year.

4) Agriculture, as it is one of the most significant GDP and export generators within the economy. Currently, foodstuffs share (12%) is significant in the export basket. The regional economic situation and natural endowments of Uzbekistan allow the country to export highly competitive agricultural products to diverse markets. Government should stimulate representatives of the sector to gain the highest possible efficiency and productivity of resources from current low levels and adopt global safety, packaging, and other respective standards to market their products globally. Despite the fact that industrialization is the main focus of the economy, there is still much unutilized gain from the combination of modern industrialization and agriculture.

Improvement of packaging standards, adoption of the best experiences in the field, and education of modern agricultural technologies in Uzbekistan will provide good opportunity to increase this sector's share in foreign markets. Cheap labor resources, relatively favorable natural conditions and traditional organic production are good bases for further development.

5) Electronics, as country has a good potential in the region since it has been pioneering in this field. For instance, within the last 5 years there have been significant investments in this sector. As a result, household appliances, modern electronics (TVs, mobile technology, computers and others), and many others have started to be produced in Uzbekistan. As the electronics industry is absent as a strong sector in most countries of the Central Asian and CIS region, a current wave of technological capacity building in Uzbekistan must be boosted with the adoption of the experience of leading countries in this field, like South Korea and China. Given the current economic condition, there is a good potential for Uzbekistan to forward the electronics sector at least in Central Asia.

VI. CONCLUSION

Comprehensive analysis of scholarly researches in trade and development field and study of widespread methodology - gravity model of trade in testing trade and growth relationship allowed fulfilling the aim of this paper in addressing the issue to a developing country. The precious work of scholars in analyzing the trade's effect on economic growth provided robust results underlying the trade's important effect on a country's development. More importantly, the developing nations of the world can utilize empirical evidence to promote their trade oriented industry potential. In the era of globalization, topics like trade openness and facilitation, industrialization and manufacturing oriented economies, together with gradual implementation of free-market principles, and market liberalization aiming at attracting both domestic and foreign investments, are becoming central issues of the future development agenda at the domestic as well as the international level.

Successful and failure cases of developing world have demonstrated the absence of exact and uniform mechanisms of sustainable development. We have seen that similar export promotion and facilitation programs may produce controversial results in different economies. It has been shown to be risky to import any development program from other countries but rather there is a need to adopt a global development practice to domestic economy with full consideration of internal and regional market specifics.

The government of Uzbekistan has created its own way of development transforming from central to free-market economy. Import-substitution manufacturing, which is aimed to serve as basis for export-oriented production, is taking the core role in further development of the country. Even though growth factors are persistent, the government cannot relax its efforts due to

international, regional and internal challenges. Furthermore, the government should continue to boost trade oriented industrialization and to increase productivity, therefore these steps can be referred as necessary oxygen for sustainable development. Undoubtedly, the political will towards achieving further economic development attracts more economic activity.

In conclusion, Uzbekistan has been making recognizable progress in its development track towards improving its economic conditions. There are still a number of potentially beneficial industries that need more focus. Moreover, investing in their further development and building comparative advantage for them may deliver significant results in the long-run. Natural endowments and economic stimulation of above-mentioned five industries, while providing a serious consideration of promoting the linkage effect within industry and inter-industry, promise to bring export-generating production that will lead to economic prosperity. Further steps should focus on connecting the national transport network with other international routes of transportation, the creation of business friendly trading facilities via institutional reforms, the optimization of legal aspects of trading, which suit global practice and diverse initiatives to support rising export-oriented companies regardless of their size.

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APPENDICES

Appendix 1. Table 1. Frankel and Romer (1999)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Dependent variable	$\frac{\alpha}{1-\alpha}\ln(K_i/Y_i)$		$\phi(S_i)$		$\ln A_i$		$\ln(Y/N)_{1960}$		$\Delta \ln(Y/N)$	
Estimation	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
Constant	−0.72	−1.29	0.10	−0.37	7.47	3.05	7.45	4.27	−0.50	−2.65
	(0.34)	(0.93)	(0.30)	(0.81)	(0.74)	(2.84)	(1.03)	(3.07)	(0.39)	(1.66)
Trade share	0.36	0.59	0.18	0.37	0.27	2.04	0.38	1.66	0.45	1.31
	(0.10)	(0.36)	(0.08)	(0.31)	(0.21)	(1.10)	(0.29)	(1.19)	(0.11)	(0.65)
Ln population	0.02	0.04	0.06	0.07	0.21	0.32	0.09	0.17	0.12	0.18
	(0.03)	(0.04)	(0.03)	(0.03)	(0.06)	(0.11)	(0.09)	(0.12)	(0.03)	(0.06)
Ln area	0.04	0.07	−0.01	0.01	−0.13	0.08	−0.02	0.13	−0.03	0.07
	(0.02)	(0.05)	(0.02)	(0.04)	(0.05)	(0.14)	(0.07)	(0.15)	(0.03)	(0.08)
Sample size	98	98	98	98	98	98	98	98	98	98
R^2	0.13	0.13	0.09	0.08	0.14	0.06	0.03	0.02	0.24	0.20
SE of regression	0.32	0.33	0.28	0.29	0.69	0.92	0.96	1.06	0.36	0.47
First-stage F on excluded instrument		8.45		8.45		8.45		8.45		8.45

Note: Standard errors are in parentheses.

Appendix 2. Table 2. Irwin &Tervio (2002)

Relationship of trade and income											
	1913-A	1913-B	1928-A	1928-B	1938-A	1938-B	1954	1964	1975	1985	1990
A. OLS											
Trade share	0.18	0.44	2.83*	2.98*	3.80	6.54*	0.73	1.11*	1.21*	1.13*	0.99*
	(0.31)	(0.42)	(0.81)	(0.80)	(2.45)	(1.86)	(0.53)	(0.37)	(0.31)	(0.30)	(0.36)
Log of population	−0.16	−0.10	0.09	0.02	0.07	−0.00	0.01	0.21*	0.24*	0.22*	0.24*
	(0.13)	(0.10)	(0.13)	(0.09)	(0.19)	(0.10)	(0.10)	(0.07)	(0.08)	(0.07)	(0.09)
Log of area	0.17	−0.05	0.31*	−0.04	0.16	−0.01	0.03	−0.05	−0.04	−0.07	−0.08
	(0.10)	(0.08)	(0.08)	(0.06)	(0.09)	(0.06)	(0.08)	(0.05)	(0.06)	(0.06)	(0.07)
Constant	−1.46	−0.87	−5.12*	−1.87*	−3.64	−1.78*	5.38*	4.41*	4.74	5.98*	6.25*
	(1.26)	(0.92)	(1.45)	(0.89)	(2.11)	(0.97)	(1.16)	(0.77)	(0.82)	(0.77)	(0.93)
N	23	36	29	41	29	41	69	124	131	146	113
R^2	0.01	0.09	0.36	0.34	0.06	0.37	0.01	0.07	0.10	0.10	0.07
MSE	0.71	0.66	0.58	0.52	0.70	0.51	0.88	0.89	0.95	0.99	1.04
B. 2SLS											
Trade share	0.65	1.68*	2.37	1.28	7.62	2.70	4.91*	3.54	2.24	2.85*	3.30*
	(0.69)	(0.86)	(3.93)	(2.61)	(7.24)	(3.76)	(2.62)	(3.13)	(0.96)	(0.91)	(1.33)
Log of population	−0.15	−0.03	0.05	−0.08	0.29	−0.13	0.30	0.45	0.36	0.40*	0.43*
	(0.14)	(0.12)	(0.33)	(0.18)	(0.43)	(0.14)	(0.22)	(0.32)	(0.13)	(0.12)	(0.14)
Log of area	0.23	0.00	0.29	−0.04	0.18	−0.01	0.26	0.01	−0.00	0.00	0.02
	(0.13)	(0.09)	(0.17)	(0.06)	(0.10)	(0.06)	(0.18)	(0.09)	(0.07)	(0.07)	(0.10)
Constant	−2.15	−2.34*	−4.49	−0.47	−6.39	−0.20	−1.96	0.42	2.54	2.37	1.69
	(1.61)	(1.35)	(5.43)	(2.24)	(5.35)	(1.67)	(4.70)	(5.16)	(2.11)	(1.98)	(2.72)
N	23	36	29	41	29	41	69	124	131	146	113
Hausman F	0.70	4.13*	0.02	0.55	0.44	0.68	6.25	0.88	1.48	5.62*	5.10*
(P-value)	(0.41)	(0.05)	(0.90)	(0.46)	(0.51)	(0.20)	(0.20)	(0.35)	(0.23)	(0.02)	(0.03)
MSE	0.75	0.75	0.58	0.55	0.73	0.54	1.23	0.95	0.99	1.10	1.22
Ratio of 2SLS/OLS Coefficients on trade	3.6	3.8	0.8	0.4	2.0	0.4	6.7	3.2	1.9	2.5	3.3

Dependent variable: log of per capita GDP (standard errors in parentheses).
*Indicates significant at the 10% level.

Appendix 3. Table 3. Noguer&Siscar (2005)

	Dependent variable: log GDP per capita in 1985									
Specification	1	2	3	4	5	6	7	8	9	10
Trade Share ($\hat{T}$)	1.04**	1.02**	0.84**	0.89**	1.22**	0.79**	0.82**	1.00**	1.08**	1.23**
	(0.29)	(0.31)	(0.22)	(0.24)	(0.36)	(0.33)	(0.31)	(0.29)	(0.31)	(0.33)
Log Population	-0.03	0.05	-0.01	-0.03	0.05	-0.13**	-0.10*	-0.04	0.01	0.01
	(0.07)	(0.08)	(0.06)	(0.07)	(0.09)	(0.06)	(0.06)	(0.08)	(0.07)	(0.09)
Log Area	0.22**	0.02	0.14**	0.15**	0.17**	0.24**	0.23**	0.20**	0.23**	0.26**
	(0.06)	(0.07)	(0.06)	(0.06)	(0.07)	(0.08)	(0.08)	(0.06)	(0.07)	(0.07)
Latitude	0.54**	0.11		0.22	0.44	0.45*	0.55**	0.44**	0.41	0.33
	(0.25)	(0.29)		(0.23)	(0.38)	(0.23)	(0.23)	(0.22)	(0.26)	(0.32)
Tropics (I): Pop	-2.07**		-1.62**	-1.61**	-1.31**	-1.83**	-1.89**	-1.51**	-1.76**	-2.07**
	(0.19)		(0.22)	(0.24)	(0.30)	(0.20)	(0.20)	(0.22)	(0.24)	(0.22)
Tropics (II): Area		-1.53**		-0.62**						
		(0.18)		(0.21)						
Dist. to Equator			1.77**							
			(0.38)							
S-Saharan Africa					-0.74**					
					(0.35)					
East Asia					-0.59*					
					(0.33)					
Latin America					0.26					
					(0.32)					
ICRG Index						1.27**				
						(0.40)				
Corruption							0.86**			
							(0.29)			
Exec. Constraints								0.17**		
								(0.03)		
Eth-Ling Fraction.									-0.78**	
									(0.31)	
Legal Origin										0.19*
										(0.11)
Est. Method	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
Sample Size	97	97	97	97	97	89	89	93	95	89
R^2	0.62	0.52	0.68	0.66	0.69	0.69	0.68	0.72	0.64	0.57

Notes: Robust standard errors appear in parentheses. Intercept included but not reported. (**) Indicate statistical significance at 95% level; (*) indicate statistical significance at 90% level.

Appendix 4. Table 4. Burkhanov (2012)

Table 4

Ln(T_{ij}/GDP_i)	*Coefficients*	*Std. Err.*
Constant	*10.74185*	*(0.1176076)*
Ln distance	*-1.314173*	*(0.0108426)*
Ln population (country i)	*0. 0530636*	*(0.0072154)*
Ln population (country j)	*1. 122924*	*(0.0072753)*
Ln area (country i)	*-0.0819189*	*(0.0059461)*
Ln area (country j)	*-0. 2404581*	*(0.0059376)*
Border	*1.137409*	*(0.0582133)*
Landlockedness (country i)	*-1.591668*	*(0.0186457)*
Landlockedness (country j)	*-0.431276*	*(0.0102581)*
CA	*0.27*	*(0.0312387)*

```
Number of obs =  107193
F(  6,107186) = 9846.43
Prob > F      =  0.0000
R-squared     =  0.3553
Adj R-squared =  0.3553
Root MSE      =  2.6694
```

Appendix 5. Table 5. Burkhanov (2012)

Ln(GDP_i/pop_i)	*Coefficients (OLS)*	*Std. Err.*
Constant	*6.470196*	*0. 0554762*
Ln trade	*0. 3612791*	*0. 0013788*
Ln population (country i)	*-0. 4548562*	*0. 0035861*
Ln population (country j)	*-0. 044871*	*0. 0072753*
Ln area (country i)	*-0. 0213129*	*0. 0026902*
Ln area (country j)	*0. 0618457*	*0. 0026854*
Ln GDP (country j)	*-0.4466428*	*0.0027102*
Border	*-0. 7493541*	*0. 0262456*

```
Number of obs =  107193
F(  8,107184) = 9740.76
Prob > F      =  0.0000
R-squared     =  0.4210
Adj R-squared =  0.4209
Root MSE      =  1.2009
```

Appendix 6. Table 6. Burkhanov (2012)

```
Instrumental variables (2SLS) regression          Number of obs =  107193
                                                  Wald chi2(1)  =19399.57
                                                  Prob > chi2   =  0.0000
                                                  R-squared     =  0.0115
                                                  Root MSE      =  1.5691
```

lrgdpc	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ltrade	.2419654	.0017372	139.28	0.000	.2385604	.2453703
_cons	8.004514	.0063193	1266.68	0.000	7.992129	8.0169

App

September 2015

Kazakhstan

BASIC INDICATORS

Population (thousands, 2014)	17 289
GDP (million current US$, 2014)	212 248
GDP (million current PPP US$, 2014)	418 477
Current account balance (million US$, 2013)	- 118
Trade per capita (US$, 2012-2014)	8 721
Trade to GDP ratio (2012-2014)	68.8

Rank in world trade, 2014	Exports	Imports
Merchandise	45	60
excluding intra-EU trade	31	42
Commercial services	70	57
excluding intra-EU trade	44	40

		Annual percentage change		
	2014	2010-2014	2013	2014
Real GDP (2010=100)	125	6	6	4
Exports of goods and services (volume, 2010=100) a	105	2	0	...
Imports of goods and services (volume, 2010=100) a	131	10	6	...

TRADE POLICY

WTO accession	Observer
Trade Policy Review	-
GPA accession	-
Tariffs and duty free imports	
Tariff binding coverage (%)	-

MFN tariffs	Final bound	Applied 2014
Simple average of import duties		
All goods	-	8.6
Agricultural goods (AOA)	-	11.6
Non-agricultural goods	-	8.1
Non *ad-valorem* duties (% total tariff lines)	-	9.8
MFN duty free imports (%, 2013)		
in agricultural goods (AOA)		12.0
in non-agricultural goods		32.5

Services sectors with GATS commitments	-
Contribution to WTO budget	-
Import duties collected (%, 2011-2013)	
in total tax revenue	7.1
to total imports	5.6
Number of notifications to WTO and measures in force	
Outstanding notifications in WTO Central Registry	-
Goods RTAs - services EIAs notified to WTO	10 - 1
Anti-dumping	-
Countervailing duties	-
Safeguards	-
Number of disputes (complainant - defendant)	
Requests for consultation	-
Original panel / Appellate Body (AB) reports	-
Compliance panel / AB reports (Article 21.5 DSU)	-
Arbitration awards (Article 22.6 DSU)	-

MERCHANDISE TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Merchandise *exports*, f.o.b. (million US$)	78 238	7	-2	-8
Merchandise *imports*, c.i.f. (million US$)	41 213	7	5	-16

Share in world total exports	2014 0.41	**Share in world total imports**	2014 0.22
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By main commodity group (ITS)		By main commodity group (ITS)	
Agricultural products	3.5	Agricultural products	10.8
Fuels and mining products	86.6	Fuels and mining products	7.5
Manufactures	9.6	Manufactures	81.6
By main destination		By main origin	
1. European Union (28)	57.1	1. Russian Federation	33.3
2. China	12.5	2. European Union (28)	21.0
3. Russian Federation	6.6	3. China	17.9
4. Switzerland	5.8	4. United States	4.9
5. Turkey	2.9	5. Ukraine	2.9

COMMERCIAL SERVICES TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Commercial services *exports* (million US$)	6 270	13	10	24
Commercial services *imports* (million US$)	12 627	3	-5	5

Share in world total exports	2014 0.13	**Share in world total imports**	2014 0.26
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By principal services item		By principal services item	
Goods-related services	0.9	Goods-related services	2.1
Transportation	62.0	Transportation	19.1

http://stat.wto.org/CountryProfiles/KZ_e.htm

endix 7-11 Table 7. WTO statistical indicators of Central Asian CountriesAppendix 7-11

Kyrgyz Republic

BASIC INDICATORS

Population (thousands, 2014)	5 834
GDP (million current US$, 2014)	7 404
GDP (million current PPP US$, 2014)	19 382
Current account balance (million US$, 2014)	- 1 788
Trade per capita (US$, 2012-2014)	1 659
Trade to GDP ratio (2012-2014)	133.3

Rank in world trade, 2014	Exports	Imports
Merchandise	141	125
excluding intra-EU trade	114	98
Commercial services	133	130
excluding intra-EU trade	106	103

		Annual percentage change		
	2014	2010-2014	2013	2014
Real GDP (2010=100)	122	5	11	4
Exports of goods and services (volume, 2010=100)	97	-1	12	-7
Imports of goods and services (volume, 2010=100)	131	7	4	-3

TRADE POLICY

WTO accession	20 December 1998	
Trade Policy Review	19, 21 November 2013	
GPA accession	Observer	
Tariffs and duty free imports		
Tariff binding coverage (%)		99.9
MFN tariffs	Final bound	Applied 2014
Simple average of import duties		
All goods	7.5	4.6
Agricultural goods (AOA)	12.6	7.6
Non-agricultural goods	6.7	4.1
Non *ad-valorem* duties (% total tariff lines)	0.5	0.3
MFN duty free imports (%, 2013)		
in agricultural goods (AOA)		40.1
in non-agricultural goods		57.8
Services sectors with GATS commitments		136

Contribution to WTO budget (%, 2015)	0.019
Import duties collected (%, 2011-2013)	
in total tax revenue	17.3
to total imports	3.3
Number of notifications to WTO and measures in force	
Outstanding notifications in WTO Central Registry	43
Goods RTAs - services EIAs notified to WTO	9 - 1
Anti-dumping (30 June 2015)	...
Countervailing duties (30 June 2015)	...
Safeguards	2
Number of disputes (complainant - defendant)	
Requests for consultation	0 - 0
Original panel / Appellate Body (AB) reports	0 - 0
Compliance panel / AB reports (Article 21.5 DSU)	0 - 0
Arbitration awards (Article 22.6 DSU)	0 - 0

MERCHANDISE TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Merchandise *exports*, f.o.b. (million US$)	1 650	-2	-5	-8
Merchandise *imports*, c.i.f. (million US$)	5 732	15	13	-6

	2014 a		2014 a
Share in world total exports	0.01	**Share in world total imports**	0.03
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By main commodity group (ITS)		By main commodity group (ITS)	
Agricultural products	14.6	Agricultural products	15.7
Fuels and mining products	12.9	Fuels and mining products	22.5
Manufactures	28.4	Manufactures	60.4
By main destination		By main origin	
1. Switzerland	28.9	1. Russian Federation	33.2
2. Kazakhstan	21.6	2. China	23.9
3. United Arab Emirates	12.5	3. European Union (28)	10.6
4. Uzbekistan	9.0	4. Kazakhstan	9.3
5. Russian Federation	8.6	5. Japan	4.3

COMMERCIAL SERVICES TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Commercial services *exports* (million US$)	890	11	8	-13
Commercial services *imports* (million US$)	1 218	11	-16	11

	2014		2014
Share in world total exports	0.02	**Share in world total imports**	0.03
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By principal services item		By principal services item	
Goods-related services	...	Goods-related services	...
Transportation	17.8	Transportation	50.0

http://stat.wto.org/CountryProfiles/KG_e.htm

Tajikistan

BASIC INDICATORS

Population (thousands, 2014)	8 409
GDP (million current US$, 2014)	9 242
GDP (million current PPP US$, 2014)	22 322
Current account balance (million US$, 2014)	- 640
Trade per capita (US$, 2012-2014)	815
Trade to GDP ratio (2012-2014)	79.1

Rank in world trade, 2014	Exports	Imports
Merchandise	153	131
excluding intra-EU trade	126	104
Commercial services	145	146
excluding intra-EU trade	118	119

		Annual percentage change		
	2014	2010-2014	2013	2014
Real GDP (2010=100)	132	7	7	7
Exports of goods and services (volume, 2010=100) a	119	6	6	...
Imports of goods and services (volume, 2010=100) a	120	6	6	...

TRADE POLICY

WTO accession		2 March 2013
Trade Policy Review		...
GPA accession		Observer
Tariffs and duty free imports		
Tariff binding coverage (%)		100
MFN tariffs	Final bound	Applied 2014
Simple average of import duties		
All goods	8.1	7.7
Agricultural goods (AOA)	11.4	10.7
Non-agricultural goods	7.6	7.2
Non *ad-valorem* duties (% total tariff lines)	0.4	0.5
MFN duty free imports		
in agricultural goods (AOA)		...
in non-agricultural goods		...
Services sectors with GATS commitments		111

Contribution to WTO budget (%, 2015)	0.015
Import duties collected	
in total tax revenue	...
to total imports	...
Number of notifications to WTO and measures in force	
Outstanding notifications in WTO Central Registry	28
Goods RTAs - services EIAs notified to WTO	4 - 0
Anti-dumping (30 June 2015)	...
Countervailing duties (30 June 2015)	...
Safeguards	0
Number of disputes (complainant - defendant)	
Requests for consultation	0 - 0
Original panel / Appellate Body (AB) reports	0 - 0
Compliance panel / AB reports (Article 21.5 DSU)	0 - 0
Arbitration awards (Article 22.6 DSU)	0 - 0

MERCHANDISE TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Merchandise *exports*, f.o.b. (million US$)	1 078	-3	-15	-7
Merchandise *imports*, c.i.f. (million US$)	4 500	14	10	8

	2014		2014
Share in world total exports	0.01	**Share in world total imports**	0.02
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By main commodity group (ITS)		By main commodity group (ITS)	
Agricultural products	...	Agricultural products	...
Fuels and mining products	...	Fuels and mining products	...
Manufactures	...	Manufactures	...
By main destination		By main origin	
1. ...	...	1. ...	...
2. ...	...	2. ...	...
3. ...	...	3. ...	...
4. ...	...	4. ...	...
5. ...	...	5. ...	...

COMMERCIAL SERVICES TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Commercial services *exports* (million US$)	496	6	-1	-33
Commercial services *imports* (million US$)	790	11	20	-26

	2014		2014
Share in world total exports	0.01	**Share in world total imports**	0.02
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By principal services item		By principal services item	
Goods-related services	12.6	Goods-related services	...
Transportation	36.8	Transportation	75.5

http://stat.wto.org/CountryProfiles/TJ_e.htm

Turkmenistan

BASIC INDICATORS

Population (thousands, 2014)	5 307
GDP (million current US$, 2014)	47 932
GDP (million current PPP US$, 2014)	82 121
Current account balance (million US$, 2014)	...
Trade per capita (US$, 2012-2014)	...
Trade to GDP ratio (2012-2014)	...

Rank in world trade, 2014	Exports	Imports
Merchandise	74	102
excluding intra-EU trade	52	77
Commercial services	77	76
excluding intra-EU trade	50	53

		Annual percentage change		
	2014	2010-2014	2013	2014
Real GDP (2010=100)	155	12	10	10
Exports of goods and services (volume, 2010=100)	...	...	...	...
Imports of goods and services (volume, 2010=100)	...	...	...	...

TRADE POLICY

WTO accession Non-member and non-observer

Trade Policy Review -

GPA accession -

Tariffs and duty free imports

	Final bound	Applied
Tariff binding coverage (%)		-
MFN tariffs		
Simple average of import duties		
All goods	-	...
Agricultural goods (AOA)	-	...
Non-agricultural goods	-	...
Non *ad-valorem* duties (% total tariff lines)	-	...
MFN duty free imports		
in agricultural goods (AOA)		...
in non-agricultural goods		...

Services sectors with GATS commitments -

Contribution to WTO budget -

Import duties collected

in total tax revenue	...
to total imports	...

Number of notifications to WTO and measures in force

Outstanding notifications in WTO Central Registry	-
Goods RTAs - services EIAs notified to WTO	5 - 0
Anti-dumping	-
Countervailing duties	-
Safeguards	-

Number of disputes (complainant - defendant)

Requests for consultation	-
Original panel / Appellate Body (AB) reports	-
Compliance panel / AB reports (Article 21.5 DSU)	-
Arbitration awards (Article 22.6 DSU)	-

MERCHANDISE TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Merchandise *exports*, f.o.b. (million US$)	17 500	28	2	4
Merchandise *imports*, c.i.f. (million US$)	10 300	16	1	3

	2014		2014
Share in world total exports	0.09	**Share in world total imports**	0.05
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By main commodity group (ITS)		By main commodity group (ITS)	
Agricultural products	...	Agricultural products	...
Fuels and mining products	...	Fuels and mining products	...
Manufactures	...	Manufactures	...
By main destination		By main origin	
1. ...	...	1. ...	...
2. ...	...	2. ...	...
3. ...	...	3. ...	...
4. ...	...	4. ...	...
5. ...	...	5. ...	...

COMMERCIAL SERVICES TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Commercial services *exports* (million US$)	...	...	...	...
Commercial services *imports* (million US$)	...	...	...	...

	2014		2014
Share in world total exports	...	**Share in world total imports**	...
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By principal services item		By principal services item	
Goods-related services	...	Goods-related services	...
Transportation	...	Transportation	...

http://stat.wto.org/CountryProfiles/TM_e.htm

Uzbekistan

BASIC INDICATORS

Population (thousands, 2014)	30 743	**Rank in world trade**, 2014	Exports	Imports
GDP (million current US$, 2014)	62 644	Merchandise	80	89
GDP (million current PPP US$, 2014)	171 416	excluding intra-EU trade	55	64
Current account balance (million US$, 2014)	...	Commercial services	102	138
Trade per capita (US$, 2011-2013)	1 008	excluding intra-EU trade	75	111
Trade to GDP ratio (2011-2013)	58.8			

		Annual percentage change		
	2014	2010-2014	2013	2014
Real GDP (2010=100)	137	8	8	8
Exports of goods and services (volume, 2010=100)	113	3	11	-10
Imports of goods and services (volume, 2010=100)	124	6	7	-22

TRADE POLICY

WTO accession		Observer	**Contribution to WTO budget**	-
Trade Policy Review		-	**Import duties collected** (%, 2011-2013)	
GPA accession		-	in total tax revenue	3.5
Tariffs and duty free imports			to total imports	...
Tariff binding coverage (%)		-	**Number of notifications to WTO and measures in force**	
MFN tariffs	Final bound	Applied 2014	Outstanding notifications in WTO Central Registry	-
Simple average of import duties			Goods RTAs - services EIAs notified to WTO	4 - 0
All goods	-	14.8	Anti-dumping	-
Agricultural goods (AOA)	-	18.8	Countervailing duties	-
Non-agricultural goods	-	14.2	Safeguards	-
Non *ad-valorem* duties (% total tariff lines)	-	5.9	**Number of disputes** (complainant - defendant)	
MFN duty free imports			Requests for consultation	-
in agricultural goods (AOA)		...	Original panel / Appellate Body (AB) reports	-
in non-agricultural goods		...	Compliance panel / AB reports (Article 21.5 DSU)	-
Services sectors with GATS commitments		-	Arbitration awards (Article 22.6 DSU)	-

MERCHANDISE TRADE

	Value	*Annual percentage change*		
	2014	2010-2014	2013	2014
Merchandise *exports*, f.o.b. (million US$)	13 300	3	13	5
Merchandise *imports*, c.i.f. (million US$)	13 900	12	8	7

	2014 a		2014 a
Share in world total exports	0.07	**Share in world total imports**	0.07
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By main commodity group (ITS)		By main commodity group (ITS)	
Agricultural products	20.9	Agricultural products	...
Fuels and mining products	44.6	Fuels and mining products	...
Manufactures	24.1	Manufactures	...
By main destination		By main origin	
1. ...	...	1. ...	...
2. ...	...	2. ...	...
3. ...	...	3. ...	...
4. ...	...	4. ...	...
5. ...	...	5. ...	...

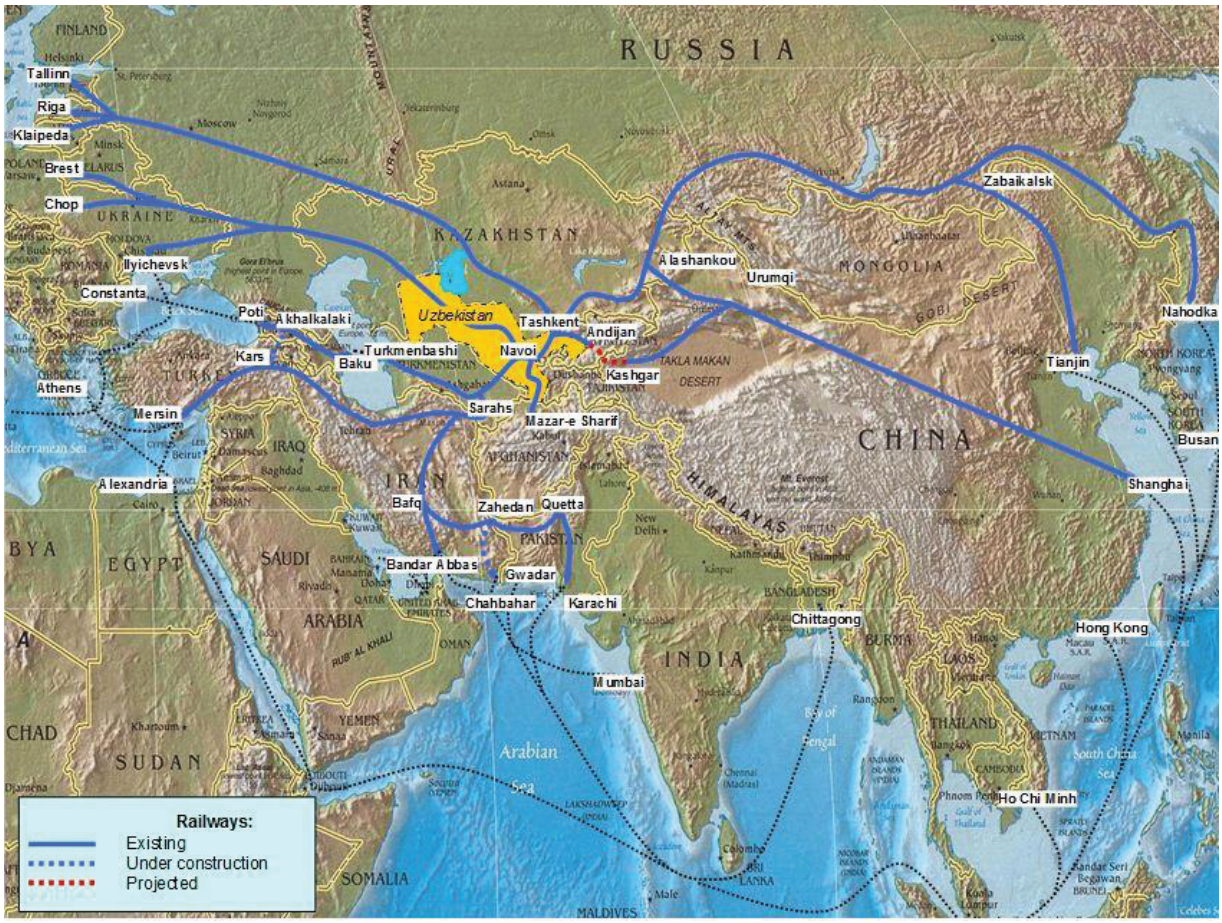
COMMERCIAL SERVICES TRADE

	Value	*Annual percentage change*		
	2013	2010-2013	2012	2013
Commercial services *exports* (million US$)	2 526	24	32	8
Commercial services *imports* (million US$)	1 032	28	69	9

	2013		2013
Share in world total exports	0.05	**Share in world total imports**	0.02
Breakdown in economy's total exports		**Breakdown in economy's total imports**	
By principal services item		By principal services item	
Goods-related services	...	Goods-related services	...
Transportation	...	Transportation	...

http://stat.wto.org/CountryProfiles/UZ_e.htm

Appendix 12. Map 1. Transport corridors utilized by Uzbekistan.



Corridor 1 – to the ports of the Baltic states (in transit through Kazakhstan and Russia) - Klaipeda (Lithuania), Riga, Liepaja, Ventspils (Latvia), Tallinn (Estonia);
Corridor 2 - through Belarus and Ukraine (in transit via Kazakhstan and Russia) - border crossings Chop (Ukraine) and Brest (Belarus), followed by Europe;
Corridor 3 - to the Ukrainian port of Ilyichevsk (transit through Kazakhstan and Russia), exit to the Black Sea;
Corridor 4 - in the direction of Trans-Caucasian corridor (in transit through Turkmenistan, Kazakhstan and Azerbaijan), exit to the Black Sea, which is also known as the TRACECA corridor;
Corridor 5 - to the Iranian port of Bandar Abbas (in transit through Turkmenistan) with access to the Persian Gulf;
Corridor 6 - in an easterly direction through the Kazakh-Chinese border crossing (Dostyk / Alalshankou) to the eastern ports of China and the Far Eastern port of Nakhodka, Vladivostok etc.;
Corridor 7 – to the Chinese ports (in transit through Kyrgyzstan) with the access to the Yellow, East China and South China Sea.

Corridor 8 – with resolving the Afghan problem opens up new perspectives for the development of south alternative transport corridors to Iranian and Pakistani ports of Bandar Abbas, Chahbahar (IRI), Gwadar and Karachi (PRI) through Afghanistan.

Appendix 13. Uzbekistan export facts

Figure 1[22]**.** Intraregional share of trade

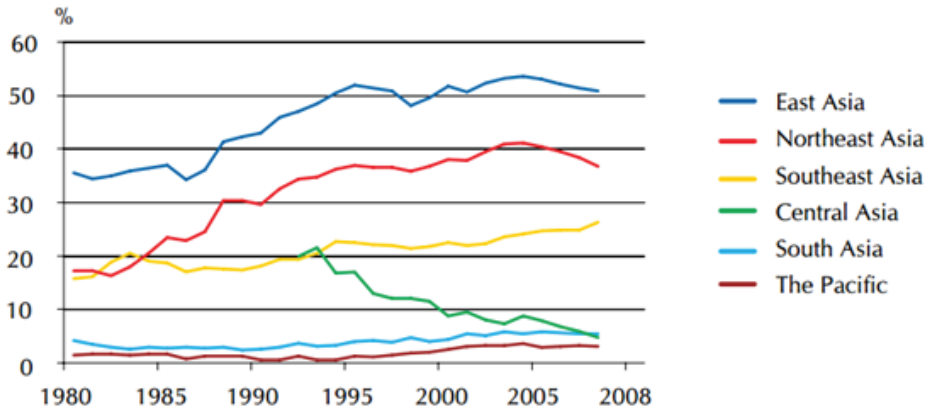
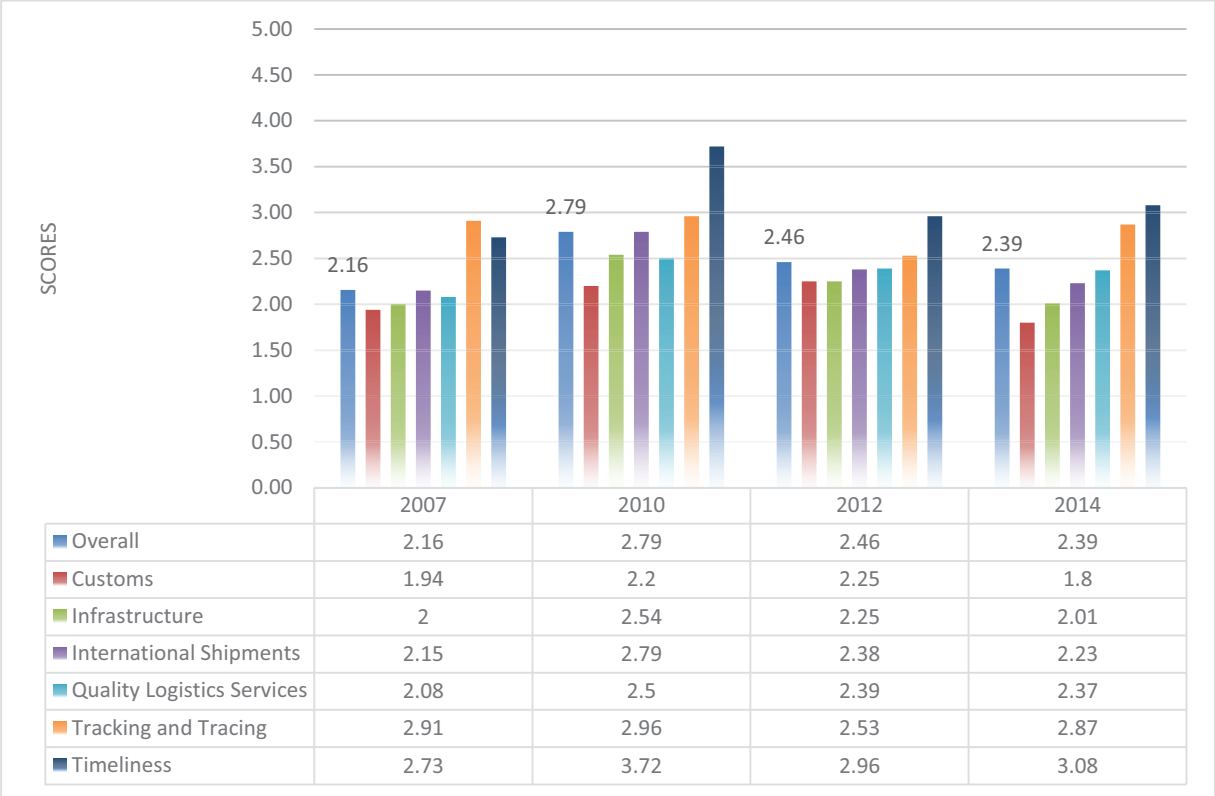


Figure 2. LPI by different dimensions, Uzbekistan 2007-2014

[22] Figure 1; source: ADB (http://www.brookings.edu/~/media/research/files/papers/2012/10/regional-integration-and-cooperation-linn/10-regional-integration-and-cooperation-linn.pdf)



	2007	2010	2012	2014
Overall	2.16	2.79	2.46	2.39
Customs	1.94	2.2	2.25	1.8
Infrastructure	2	2.54	2.25	2.01
International Shipments	2.15	2.79	2.38	2.23
Quality Logistics Services	2.08	2.5	2.39	2.37
Tracking and Tracing	2.91	2.96	2.53	2.87
Timeliness	2.73	3.72	2.96	3.08

Figure 3. Doing Business selected indicators 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Overall	39.99	41.08	44.10	46.96	48.73	58.81	62.60
Starting a business	81.00	79.74	82.49	83.16	88.72	88.75	92.18
Trading across borders	0.00	0.00	0.00	1.28	1.28	44.31	44.31

Illustration 1. Uzbekistan's export cluster in 1995 [retrieved from: https://atlas.media.mit.edu/en/explore/tree_map/hs/export/uzb/all/show/1995/ (accessed: June25th, 2015)].

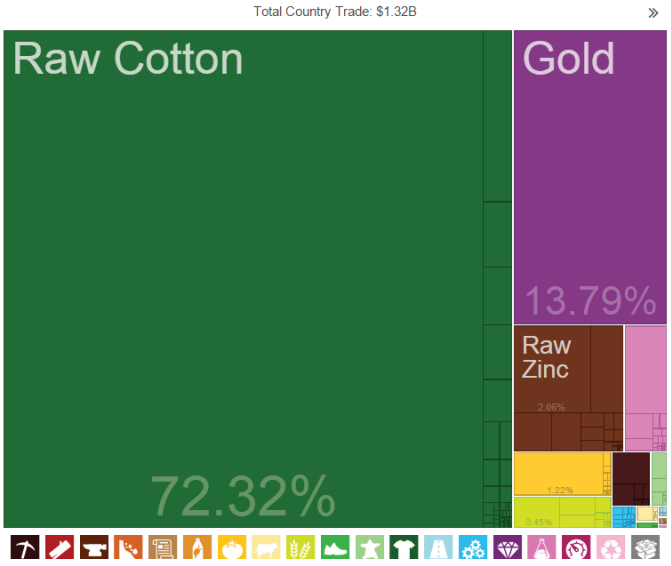


Illustration 2. Uzbekistan's export cluster in 2005 [retrieved from: https://atlas.media.mit.edu/en/explore/tree_map/hs/export/uzb/all/show/2005/ (accessed: June25th, 2015)].

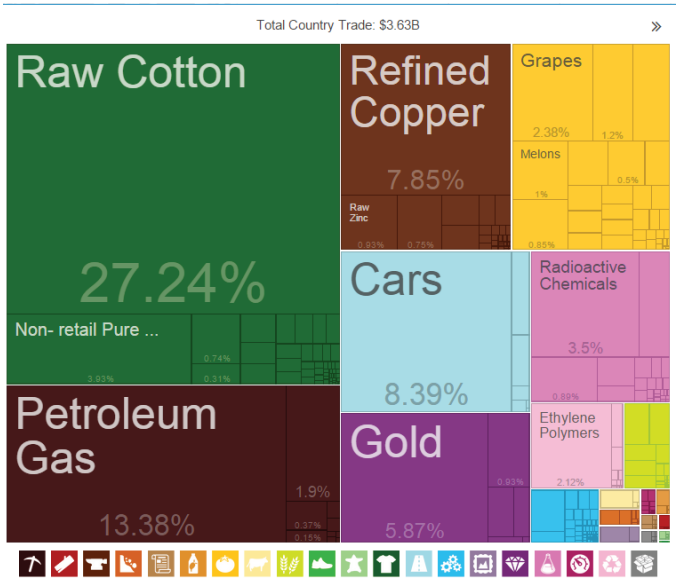


Illustration 3. Uzbekistan's export cluster in 2013 [retrieved from: https://atlas.media.mit.edu/en/explore/tree_map/hs/export/uzb/all/show/2015/ (accessed: June25th, 2015)].