



Working Papers

www.cesifo.org/wp

Can and Should the EU's Eastern Partnership be Saved?

Thorvaldur Gylfason
Inmaculada Martínez-Zarzoso
Per Magnus Wijkman

CESIFO WORKING PAPER NO. 4869
CATEGORY 8: TRADE POLICY
JULY 2014

An electronic version of the paper may be downloaded

- *from the SSRN website:* www.SSRN.com
- *from the RePEc website:* www.RePEc.org
- *from the CESifo website:* www.CESifo-group.org/wp

Can and Should the EU's Eastern Partnership be Saved?

Abstract

In a major setback for the EU, only two of four Eastern Partnership countries actually initialed Association Agreements at the Vilnius Summit in November 2013. This paper asks what went wrong and what can be done about it. Using a gravity model to estimate the effects of deep and shallow free trade agreements for the Eastern Partnership states with Russia and the EU, the paper shows that the Eastern Partnership countries, including Ukraine, by far the largest in the group, gain significantly from free trade agreements with the EU, but gain little if anything from free trade agreements with Russia.

JEL-Code: F140, F510, F530.

Keywords: free trade agreements, Eastern Partnership, European Union.

Thorvaldur Gylfason
Faculty of Economics and Business Administration
University of Iceland
Iceland - 101 Reykjavik
gylfason@hi.is

Inmaculada Martínez-Zarzoso
Georg-August University
Göttingen / Germany
imartin@uni-goettingen.de

Per Magnus Wijkman
formerly University of Gothenburg
Sweden
per.wijkman@telia.com

June 2014

This paper was prepared for the 16th Annual Swedish Network for European Studies in Economics and Business (SNEE) European Integration Conference at the Grand Hotel in Mölle, Sweden, 20-23 May 2014. The authors thank their discussant, Hubert Fromlet, and Helga Kristjánsdóttir for helpful comments on earlier drafts.

Table of contents

1. The Eastern Partnership runs into problems at Vilnius
2. Were the EaP States prepared for Association Agreements?
 - 2.1 Democracy and free press
 - 2.2 Transition to market economy
 - 2.3 Ease of doing business
 - 2.4 Corruption
 - 2.5 Trust
 - 2.6 Summary
3. Actual Trade Patterns
 - 3.1 Level and commodity composition of exports
 - 3.2 Country composition of trade
 - 3.3 Regional conflicts preventing trade
 - 3.4 Summary
4. The size of potential trade: DCFTAs
 - 4.1 Data and summary statistics
 - 4.2 Method of estimation
 - 4.3 Main results of various regional integration agreements
 - 4.4 Summary
5. Involving Russia in the resolution of regional conflicts
6. Conclusion

Appendix

List of Agreements

List of Countries

“When goods do not cross borders, soldiers will.”

Frédéric Bastiat

1. The Eastern Partnership runs into problems at Vilnius

In July 2013 the EU announced that it had completed negotiations, started early in 2012, on Association Agreements, including deep and comprehensive free trade agreements (DCFTA), with Armenia, Georgia and Moldova. These agreements were to be initialed at the Eastern Partnership (EaP) Summit in Vilnius on 28- 29 November 2013. The DCFTA agreement with Ukraine, already initialed, was to be signed at the same time, subject to prior fulfillment by Ukraine of certain conditions concerning *inter alia* its application of ‘selective justice’.²

The conclusion of DCFTAs with these three States in the short period of 1½ years surprised many observers.³ But what was to follow was even more surprising. In September 2013, Armenia announced that it would not initial its Association Agreement in Vilnius but instead join the Eurasian Customs Union proposed by Russia. Armenia’s decision was influenced by Russia’s threat otherwise to withdraw its troops, which protected the region of Nagorno Karabakh, largely populated by Armenians, in Azerbaijan. Also Georgia and Moldova reported measures and threats by Russia to restrict their exports to Russia in an effort to persuade them to join the Eurasian Customs Union. A few days before the Summit, President Yanukovich of Ukraine, after threats by Russia to disrupt trade and oil and gas supplies as well as offers of significant loans, announced that he would not sign the Association Agreement with the EU.

President Yanukovich’s decision not to sign the Association Agreement had fateful consequences. Massive and sustained demonstrations in Maidan Square in Kiev, displaying the EU flag, bore witness to widespread popular support in Western Ukraine for signing the Association Agreement (see Campos, 2013).

² This refers most notably to the trial and imprisonment of former President Yulia Timoshenko after Viktor Yanukovich replaced her in January 2010.

³ Negotiating the DCFTA with Ukraine had taken five years and negotiations with Georgia to start negotiations on a DCFTA had taken almost four years. Armenia was a late comer to this project and had worse initial conditions than Georgia. Hence, both the decision to start negotiations in 2012 and their rapid conclusion were surprising. Compared with these countries, Moldova had a head-start through its negotiation of a regional free trade agreement with the Western Balkans (CEFTA 2006) and its Stability and Association Agreement (SAA) with the EU.

After several months of demonstrations, the President ordered military troops to open fire causing over 100 deaths. This evoked sufficient rage to lead the President to flee the country on 21 February 2014. The next day Parliament elected a provisional President and installed a new government. In early March, Russia deployed anonymous troops in Crimea, which it called self-defense groups, to protect Russian citizens.⁴ A referendum held on 16 March in the Autonomous Republic of Crimea and the self-governing district of Sevastopol voted to accede to Russia. On 21 March, President Putin signed the documents admitting Crimea and Sevastopol into the Russian Federation. Moscow time and the Russian Ruble were introduced soon thereafter throughout the Crimea. This must certainly be one of the most unintended consequences of a proposed trade agreement ever and promises further consequences. This paper considers how it could happen.

2. Were the EaP States prepared for Association Agreements?

When the Iron Curtain crumbled in 1991, the six countries of the Eastern Partnership (EaP) – Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine – were ill-prepared for economic integration with Western market economies. All countries except Moldova had been integral parts of the Soviet Union since its beginning and thus subject to its system of central planning and state ownership of the means of production. They lacked national institutions and experience of running market economies. In contrast, the countries of Central and Eastern Europe had retained their national institutions during the Cold War, although satellites of the Soviet Union. Campos (2013) describes the importance of the institutional vacuum that the EaP States suffered for over 15 years after independence.

After the dissolution of the Soviet Union, each of the newly sovereign States faced the difficult task of establishing and running a market economy. The three Baltic States, sovereign states during the interwar period, made the transition from Soviet Republics to functioning democracies and market economies faster than the six other former Soviet Republics.⁵ They acceded to the European Union

⁴ President Putin later referred to these anonymous troops as Russian.

⁵ In this paper the term the former Soviet Republics refers to those on Russia's Western border.

already in 2004 together with the countries of central Europe and joined NATO that year, along with Bulgaria, Romania, Slovakia and Slovenia. By contrast, only two or three of the six EaP States had *started* to establish functioning democracies by 2004: Georgia with the Rose Revolution in November 2003 and Ukraine with the Orange Revolution in December 2004. This section illustrates how slow and imperfect the transition both to democracy and to market economy was in most of the six EaP States.

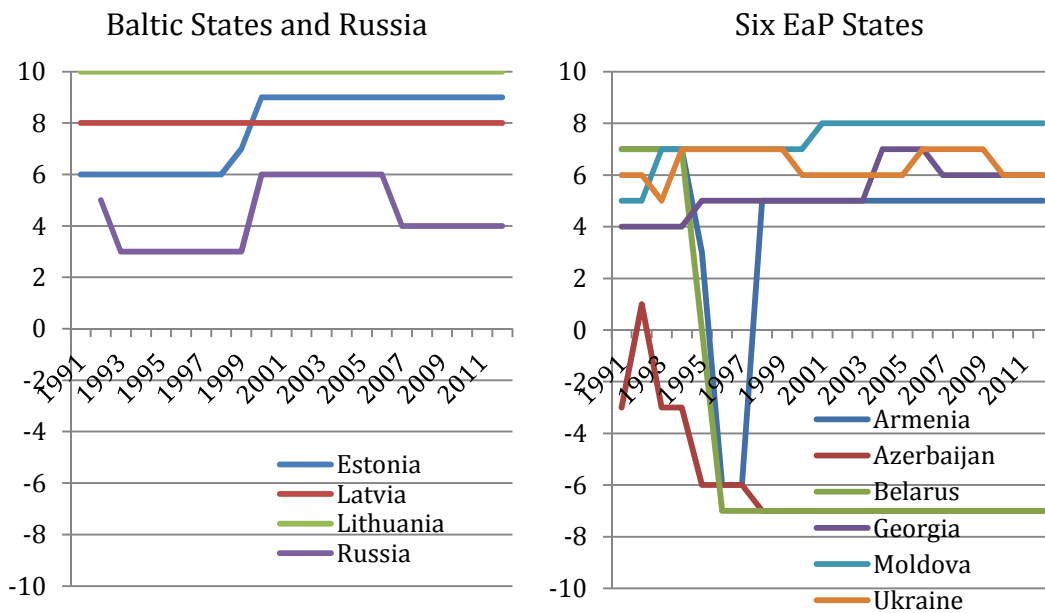
2.1 Democracy and free press

The Polity IV Project, presented on the website of the Center for Systemic Peace, provides *inter alia* ratings of various aspects of democracy in countries around the world, including the nine former Soviet Republics under review. A commonly used measure of democracy is the Polity IV Project's Polity2 variable that is designed to reflect the characteristics of democratic and autocratic authority in governing institutions rather than discrete and mutually exclusive forms of governance. The Polity2 variable spans a spectrum of governing authority from fully institutionalized autocracies through mixed authority regimes to fully institutionalized democracies. The spectrum is a 21-point scale ranging from minus ten (hereditary monarchy) to plus ten (consolidated democracy). Countries are classified as democratic if their Polity2 score is larger than or equal to plus six, as neither democratic nor autocratic if the score lies from five to minus five, and as autocratic if their score is smaller than or equal to minus six.

Five of the nine former republics have consistently high and stable scores of six or more throughout the period 1991-2012 (Diagram 1): the three Baltic States, Moldova and Ukraine, and also Georgia since 2004. For comparison, Russia scores six from 2000 to 2006 and four since then. Ukraine vacillates between five and seven, dropping to six in 2010, the year Yanukovich was elected President. Since 1998 Armenia is stable at five and, like Russia, is classified as neither democratic nor autocratic. Azerbaijan and Belarus score minus seven from the late 1990s onward and are classified as autocratic.

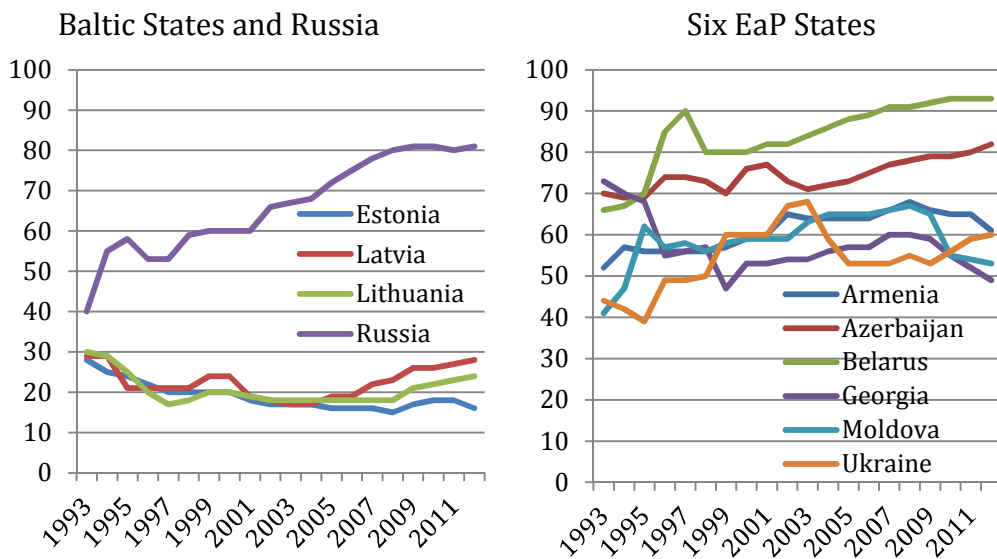
These are from North to South Estonia, Latvia and Lithuania and the six EaP States Belarus, Ukraine, Moldova, Georgia, Armenia and Azerbaijan.

Diagram 1. Democracy in former Soviet Republics 1991-2012



Source: Polity IV project, Center for Systemic Peace website.

Diagram 2. Freedom of the Press in former Soviet Republics 1993-2012



Source: Freedom of the Press, Freedom House website.

Note: Rankings above 60 denote not free press.

The freedom these countries accord their press is closely correlated with their scores on democracy. Freedom House’s classification of countries by freedom of the press divides the nine former Soviet Republics and Russia into three distinct groups (Diagram 2). The press is not free in Belarus, Russia, Azerbaijan and Armenia (rankings above 60 denote not free press). Further, the rankings of all these countries but Armenia have worsened since 2005. Ukraine, Moldova and

Georgia have had a “partly free press” during most of this period (rankings between 31 and 60). Moldova and Georgia have consistently improved their rankings during this period, albeit modestly. Only the Baltic States have had a “free press” throughout this period. In short, none of the six EaP States qualify as having had a free press since 1993.

Together these two measures reveal a significant gap between the three Baltic States and the six EaP States. For whatever reason (geographic proximity to and shared history with the ‘old EU’, collective memories of national institutions, significant return of key emigrés upon independence), the three Baltic States distinguish themselves clearly from the other former Soviet Republics. All three qualify as democracies with a free press.

Among the six EaP States, Georgia and Moldova qualify as democracies with a partly free press. Armenia and Ukraine are borderline cases, moving slowly and uncertainly towards functioning democracies with a barely free press. Azerbaijan and Belarus are in a class by themselves, being neither democratic nor having even a partly free press.

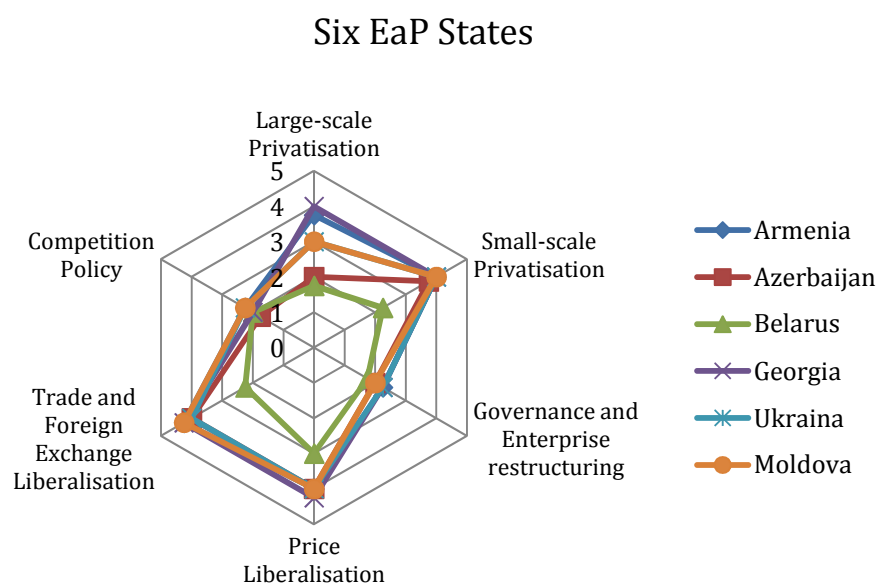
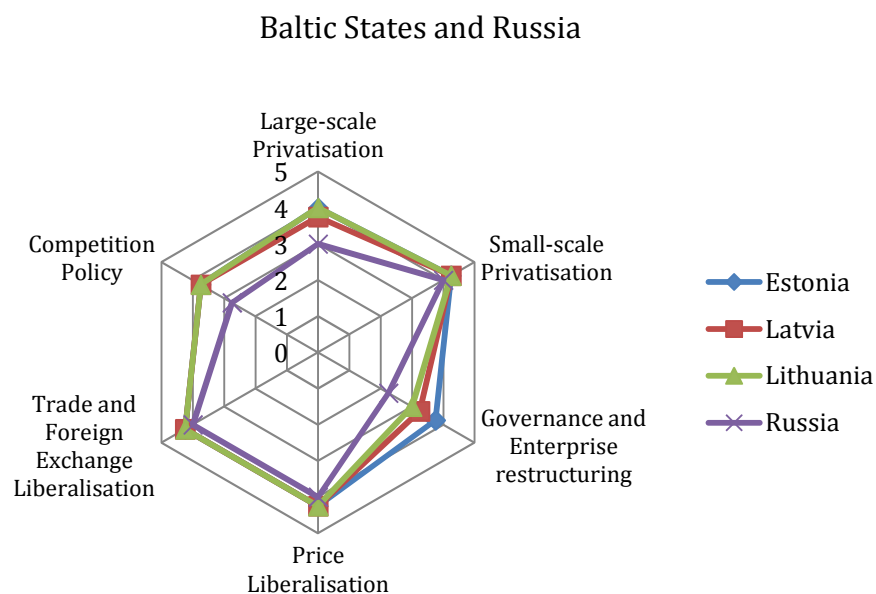
Much suggests that a democratic regime and a free press are interdependent institutions. It can also be argued that these two variables together influence the speed of transition to a market economy. The next section considers how the six former Soviet Republics have made this transition.

2.2 Transition to market economy

Transition to a functioning market economy has been slow in most of these countries, relative to the progress made by countries in Central Europe. The European Bank for Reconstruction and Development has for some time now measured the progress made by the formerly centrally planned economies to functioning market economies. The current status of their progress is summarized in Diagram 3.

Belarus remains a centrally planned economy on almost all accounts. All other EaP countries have liberalized domestic prices, foreign exchange and foreign trade dealings – the easy variables. Even so, all EaP countries have made little progress from a centrally planned economy as concerns competition policy and enterprise restructuring, both key variables for a DCFTA.

Diagram 3. Key determinants of transition to market economy in former Soviet Republics 2013



Source: EBRD, Transition Report 2013, p. 112.

Note: "Transition indicators range from 1 to 4+ with 1 representing little or no change to a rigid centrally planned economy and 4+ the standards of an industrialized market economy." Ibid. We have replaced a +sign and a - sign by adding or subtracting 0.25.

Georgia and Moldova have made slightly more progress than the others. A comparison with other countries shows that as a group the EaP countries lie below the Western Balkans and on par with Bosnia-Herzegovina, the most reluctant reformer in that group, *five years earlier*. Thus, even the most advanced EaP countries lag significantly behind the central European countries that

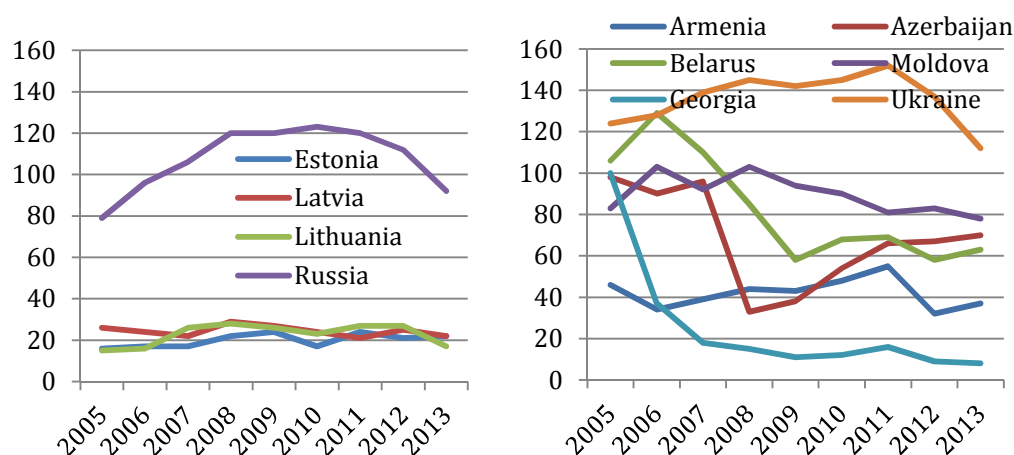
acceded to the EU in 2004 and behind the Western Balkan countries that aim at accession but are far from it.⁶ The ability to implement a DCFTA appears limited in Ukraine and Armenia. It appears a challenging task in Georgia and Moldova in the absence of significant foreign aid and technical assistance.

Two additional variables confirm the picture given here that Georgia and Moldova lead the four EaP countries that have negotiated DCFTAs.⁷ These are the ease of doing business and the level of corruption.

2.3 Ease of doing business

The World Bank assesses each year the ease of doing business in about 180 countries. According to its assessments between 2005 and 2013 the six EaP States ranked between 80th and 120th place (number 1 indicates the greatest ease of doing business). Only Georgia made dramatic improvements after 2005 and ranked as number 8 in the world in 2013, surpassing even Estonia (Diagram 4).⁸ Developments in the other two Baltic States were similar to those in Estonia – consistently low since 2005, between 15th and 20th place. Moldova is the only other EaP State to register a consistent improvement but it is slight. The other countries retained their poor positions.

Diagram 4. Ease of doing business in former Soviet Republics 2005-2013



Source: *Ease of doing Business*. This volume, published annually by The World Bank and the International Finance Corporation, estimates the ease of doing business for small and medium-sized firms in approximately 180 countries.

Note: The greater the ease of doing business, the lower the index.

⁶ Croatia acceded to the EU in 2013.

⁷ Belarus and Azerbaijan are disqualified since they are not members of WTO and not democracies.

⁸ See Gylfason and Hochreiter (2009).

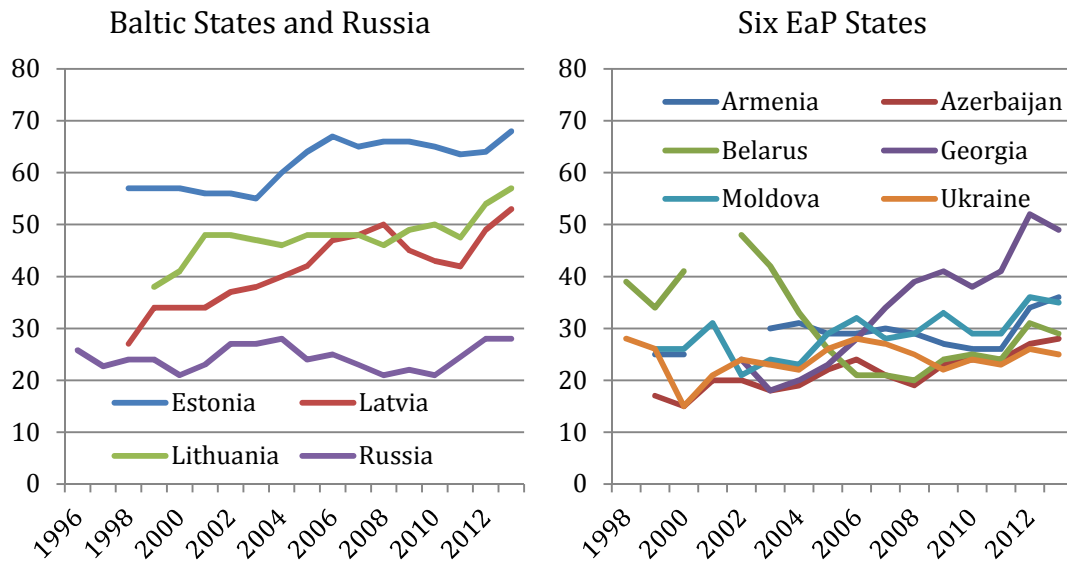
Firms in Ukraine, as in Russia, experienced *increasing* difficulties of doing business until 2011 and were no better off in 2013 than in 2005. The business environment in these two countries remained a bureaucratic nightmare. Armenia, Azerbaijan and Belarus occupied a middle position with Armenia showing a stable though modest improvement.

2.4 Corruption

Since independence in the 1990s, corruption has been rampant in the EaP states as a result of poor governance and old habits. Corruption distorts investment and production decisions. Belarus, Azerbaijan and Ukraine, like Russia, ranked consistently between a poor 100th and 140th place among the 180 or so countries examined by Transparency International. Diagram 5 shows the corruption perceptions scores compiled by Transparency on a scale from 0 (deeply corrupt) to 100 (squeaky clean). The Baltics and Georgia have made significant progress in combating corruption since 2000 as did Armenia 2012-2013.⁹ The decrease in corruption in Georgia places it close to Latvia (55th place) and Lithuania (49th place) although still far behind Estonia (28th place). Thus, the EaP States, with the exception of Georgia, have failed to reduce corruption markedly since 2005. Further progress is essential because experience shows that pervasive corruption can be a serious impediment to rapid economic growth. Strong and consistent political will is required to implement necessary and far-reaching changes in the judiciary. Developments in Bulgaria, Romania and Ukraine have shown both the importance and the difficulty of the task.

⁹ The striking increase in the corruption perceptions index in Armenia, denoting less corruption, in 2012 and 2013 can be ascribed to the then ongoing negotiations for a DCFTA and can be expected to be reversed after Vilnius (see Sekarev, 2013).

Diagram 5. International rankings of corruption in former Soviet Republics 1996-2013



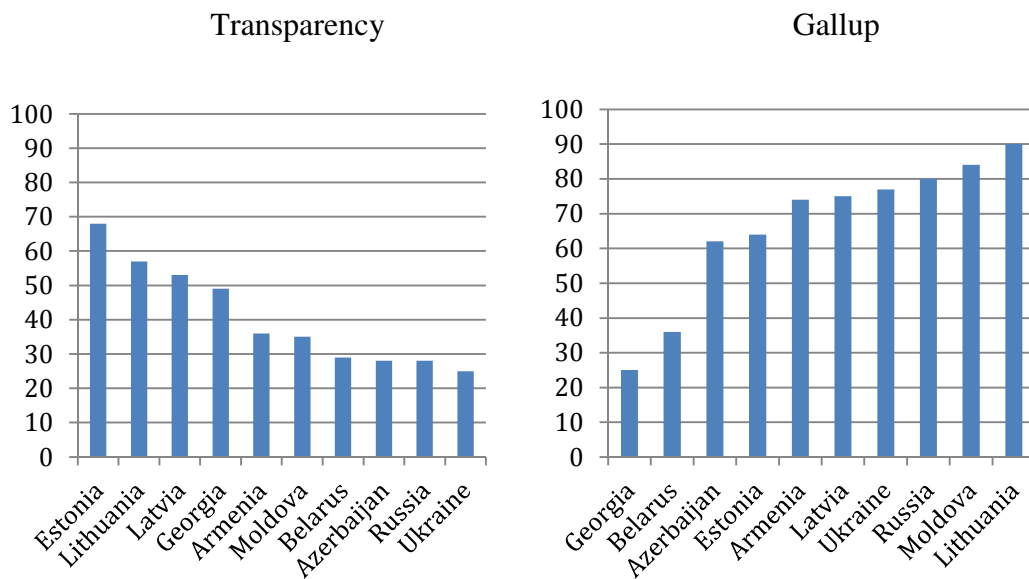
Source: [Transparency International website](http://www.transparency.org). The less corrupt the country is perceived to be, the higher the index.

Here, as in ease of doing business, only Georgia among the EaP States has moved from one world to another: from a group of countries with rampant corruption to a group with little corruption.

These two key indicators suggest that Georgia is in a class by itself among the EaP States. This illustrates that persistent political will can dramatically improve the economic environment. The combined effect of greater ease of doing business and less corruption is essential for increasing investment over time, especially foreign direct investment. Other States must make the extensive changes Georgia has made in order to improve these two indicators.

Transparency covers business corruption, bribes and such; the less corrupt the country is perceived to be, the higher the index. Diagram 6 also shows the results of a recent Gallup poll where a large sample of voters in 129 countries was asked the following question: "Is corruption widespread throughout the government of [your country], or not?" Only a quarter of the Georgian respondents consider their government corrupt compared with three quarters or more in Armenia, Latvia, Ukraine, Russia, Moldova and Lithuania.

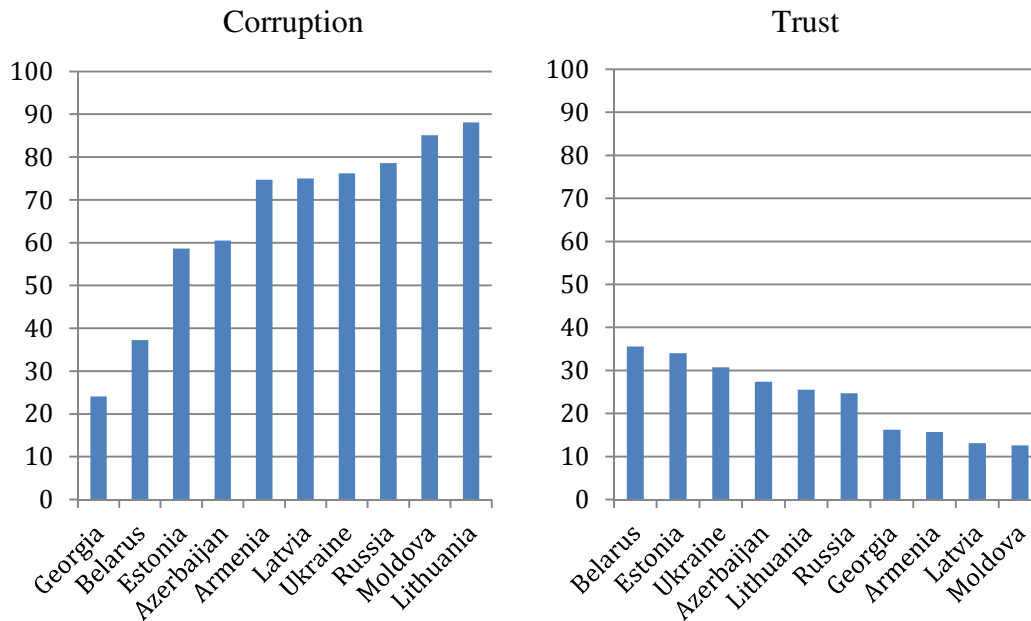
Diagram 6. Corruption in former Soviet Republics 2012
(Business corruption as measured by Transparency, political corruption as measured by Gallup)



2.5 Trust

Other sources report similar findings on corruption in business and government. On its website (www.prosperity.com), the Legatum Institute reports a variety of survey results covering many different aspects of economic performance, including governance and trust, both trust in societal institutions and interpersonal trust. Diagram 7 shows the percentage of the respondents in the former Soviet Republics under review that answer the following questions in the affirmative: “Are the businesses and government corrupt?” (left panel) and “Do you think that most people can be trusted?” (right panel). The Legatum Institute’s results on corruption shown in Diagram 7 are strikingly similar to those reported by Gallup in Diagram 6. Even more striking is the low level of interpersonal trust in the ten countries under review. For comparison, the Legatum Institute reports interpersonal trust of 30 percent or less in crisis-stricken Ireland, Portugal and Greece compared with 60 percent or more in Scandinavia.

Diagram 7. Corruption and trust in former Soviet Republics 2012 or earlier



Source: [Legatum Institute website](#).

2.6 Summary

This section shows that transition to democracy and market economy has been slow in most of the EaP States and lags far behind the progress made by the Baltic States. Georgia and Moldova are ahead of the other EaP States in terms of democracy and a free press and score well ahead of them in ease of doing business and have relatively low levels of corruption. Even so, the picture is a mixed one with low levels of interpersonal trust in Georgia and Moldova. Armenia and Ukraine are borderline cases as concerns transition to both democracy and market economy, improving only somewhat in the last couple of years. Both countries score poorly in corruption and trust. Belarus and Azerbaijan do not qualify for a DCFTA on any counts. In addition, both must first accede to the WTO to be considered. In sum, these indices suggest that it is hardly surprising that Georgia and Moldova signed their Agreements in Vilnius while Ukraine and Armenia did not.

3. Actual trade patterns

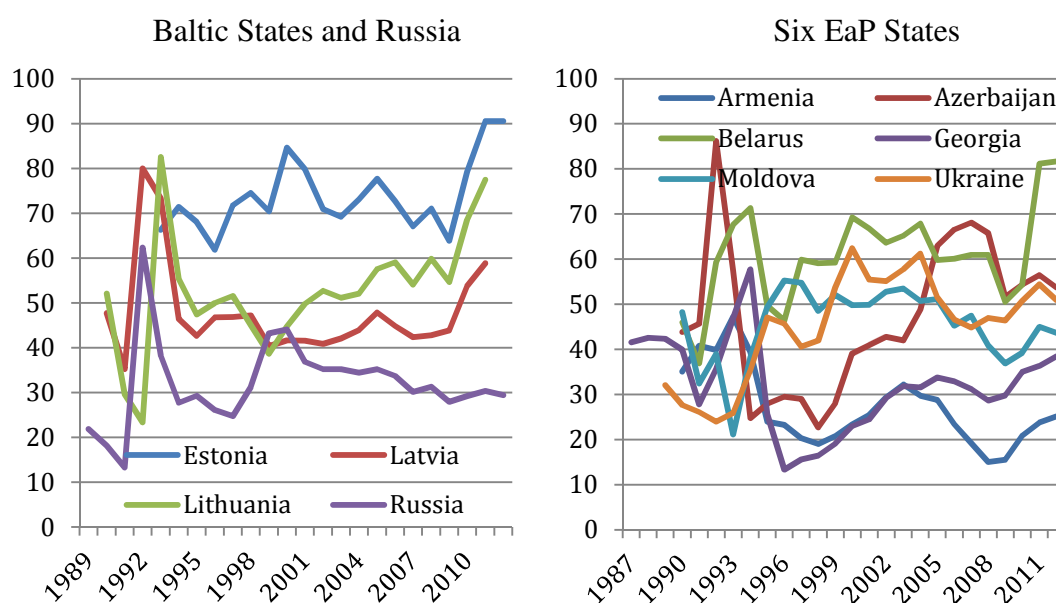
This section briefly reviews the pattern of trade in the six EaP countries in terms of openness to trade, the commodity composition of trade and its geographical

composition. It sets the stage for the estimation of the effects of the different FTAs on bilateral exports in Section 4.

3.1 Level and commodity composition of exports

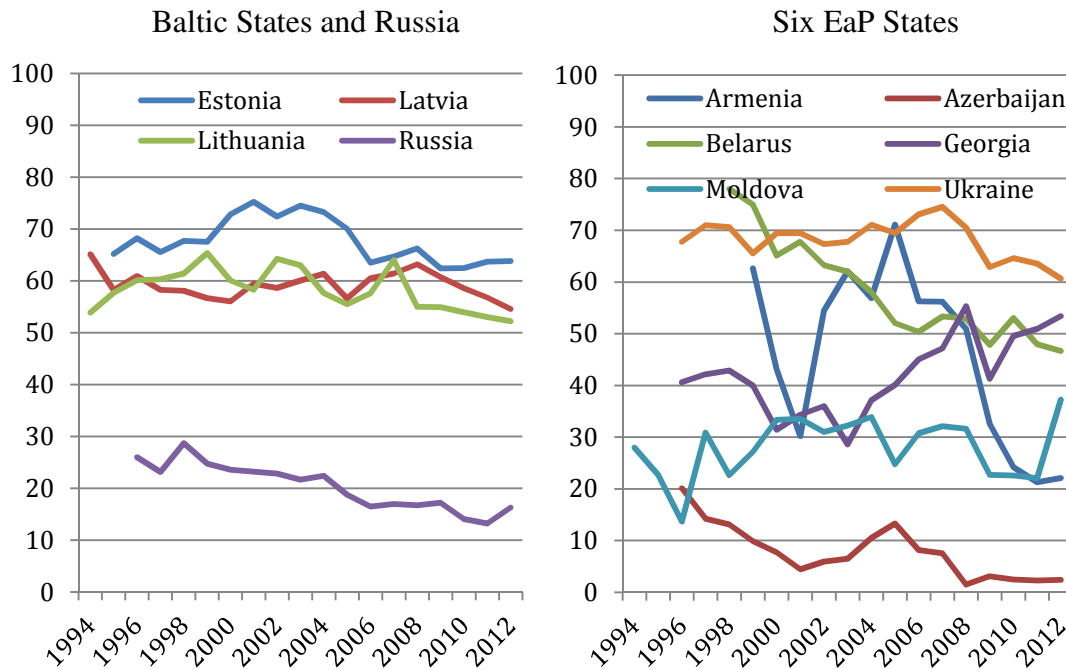
Since the early 1990s, Estonia has been one of Europe’s most open economies as measured by the share of exports of goods and services in GDP, and Lithuania is not far behind (Diagram 8). Russia, on the other hand, has seen the share of exports in GDP decline to about 30 percent. Since 1999, exports have risen relative to GDP in Georgia and Moldova as in the Baltics, while they have contracted elsewhere in the EaP region as in Russia. The ability to produce goods and services that households and firms in other countries want to buy is one of the keys to economic growth. While exports of natural-resource intensive products are dictated by a country’s resource endowments, exports of manufactures are largely determined by the industry and knowledge of its population. Since the 1990s, the share of manufactures in total exports has increased in Georgia and Moldova, but fallen elsewhere in the EaP region, as in Russia (Diagram 9).

Diagram 8. Exports of goods and services in former Soviet Republics 1989-2012 (% of GDP)



Source: World Bank, *World Development Indicators*.

Diagram 9. Exports of manufactures in former Soviet Republics 1994-2012 (% of total merchandise exports)

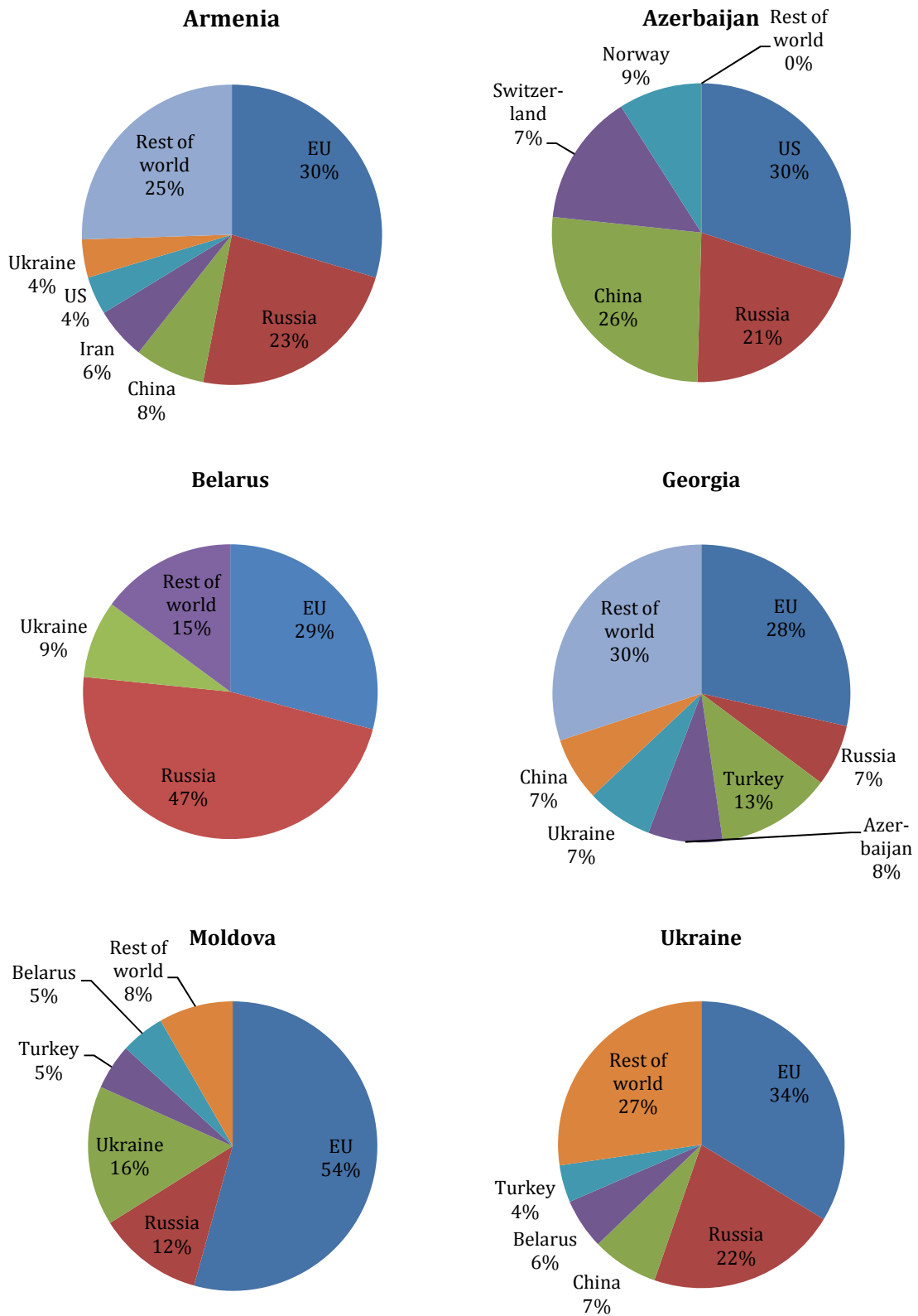


Source: World Bank, *World Development Indicators*.

3.2 Country composition of trade

Since independence, most of the EaP States have increased the share of their trade that is with the EU while reducing that with Russia. All EaP States except Belarus are now more dependent on trade with the EU than on trade with Russia (Diagram 10). Moldova conducts more than a half of its trade with the EU and Ukraine about a third, while Armenia, Belarus and Georgia each conduct less than a third of their trade with the EU. Georgia and Moldova conduct only about ten percent of their trade with Russia, while Armenia, Azerbaijan, Belarus and Ukraine conduct about 20 percent of their trade with Russia. It is clear that the trade of Armenia, Georgia, Moldova and Ukraine with each other and with the EU is significantly more important for them than trade with Russia. Even so, the failure of the export ratio to rise in the EaP States except Georgia and Moldova suggests that growth of trade with the West in these countries is largely the result of a replacement of trade with Russia rather than an addition to it.

Diagram 10. Direction of trade in former Soviet Republics 2012 (% of total)



Source: European Commission.

3.3 Regional conflicts preventing trade

The EaP States are in a region riddled with conflicts.¹⁰ It is, therefore, surprising that conflict resolution is not explicitly included in the approach taken by the EU toward the EaP States.

One explanation is that Russia is involved in virtually all the conflicts in the region but is not included in the EaP, having specifically requested and received a special relationship of its own with the EU. A second explanation is that the EU has not offered the EaP States an explicit EU membership perspective. This would have required solving the most acute conflicts (Transnistria and Nagorno-Karabakh).¹¹ The EaP focused on concluding bilateral DCFTAs between the EU and each partner country but did not call for DCFTAs between the partner countries themselves. This approach avoided the built-in conflicts. Had the EU required the EaP States to conclude DCFTAs also with each other, the conflicts would have immediately come to the fore and their solution would have required participation by Russia. We have noted elsewhere that the most difficult conflicts to solve in the EU's neighborhood are those where participants lack a membership perspective and where a third country is party to the conflict.¹² Now that Russia is in direct conflict with the EU in Ukraine, regional conflict resolution is unavoidable. The key question is whether potential trade between the EaP States is sufficient to entice them to normalize their relations with each other and whether Russia can find a normalization of its trade relations with the EU sufficiently beneficial for it to find conflict resolution worthwhile.

3.4 Summary

The six EaP States are located between two major economic powers – the EU to the West and Russia to the East. While the EU's combined purchasing-power-

¹⁰ Russia supports the self-proclaimed autonomous Transnistria (formerly part of Ukraine, formally part of Moldova). It is a source of conflict between Moldova and Ukraine. It hosts significant Russian troops and a Russian speaking population. Russia protects the largely Armenian population in Nagorno-Karabakh in Azerbaijan with troops. Following the war of 2008, Russia occupies the formerly autonomous regions of South Ossetia and Abkhazia in Georgia.

¹¹ The EU does not require, as it did in the Western Balkans, that any two countries having DCFTAs with the EU also have a DCFTA with each other. The countries in the Western Balkans had a prospect of membership following the Thessaloniki Declaration in 2003. The EU would not accept as members countries having a conflict with other members or with non-member neighbors.

¹² See Gylfason and Wijkman (2014).

parity adjusted GDP is more than five times as large as that of Russia, the six countries historically have well-established export markets in the East. Although the EU has steadily increased in importance as a market for most EaP States in the last two decades, Russia remains an important market for all.

The best trade policy for the six EaP States is, therefore, to have free trade agreements with both the EU and Russia.¹³ Russia's proposed Eurasian Customs Union (ECU) excludes that option. As a member of the ECU an EaP State cannot have an FTA also with the EU. While the ECU can negotiate an FTA with the EU it is likely to be inferior to the DCFTA already negotiated by Ukraine and Armenia with the EU and will take significantly longer to enter into force. From a strictly economic viewpoint an FTA with both the EU and with Russia is a superior solution for the EaP States.

4. The size of potential trade: DCFTAs

In this section we present estimates of the trade effects of the different FTAs on bilateral exports. The estimation is based on the gravity model, a widely used theoretical apparatus underpinning estimates of the effects of trade agreements. Our aim is to investigate how the trade relations of the EaP States will be affected by:

- Entering into the EU, full membership (EU)
- A DCFTA with:
 - EU (EUdeep)
 - Russia (Eurasian Customs Union, RUSdeep)
- A shallow FTA with:
 - EU (EUshallow)
 - Russia (RUSshallow)
 - Each of the EaP states (FTA-East)

This will allow us to say something about the intermediate case, which is likely to be the outcome for the next few years if Georgia and Moldova go west while Azerbaijan and Armenia and Belarus go east and Ukraine goes nowhere.

¹³ Kowalczyk (2000).

In what follows we present the data used in the analysis (4.1), the empirical model and method (4.2) and finally the results of alternative regional integration scenarios (4.3).

4.1 Data and summary statistics

Bilateral exports for 34 exporters and 150 importers¹⁴ are obtained from the UN-COMTRADE database for the period 1995 to 2012. Data on income variables are drawn from the World Bank (World Development Indicators Database, 2014). Distances between capitals and other gravity dummies, namely, common border, common language, colonial relationship and having been part of the same country, were computed using data from CEPII.¹⁵ The FTA variable was constructed based on data from the World Trade Organization and a program provided by De Sousa (2012) as well as information from the European Commission. Table 1 present the summary statistics of the abovementioned variables. The FTA variables considered are listed in the second part of Table 1.

Table 1. Summary statistics

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Exports	164700	4.79e+08	3.42e+09	0	1.43e+11
Lnexports	121249	15.93	3.590	0	25.68
Lngdpi	163350	24.82	1.884	20.57	28.92
Lngdpj	161650	24.07	2.190	18.72	30.42
Lndist	164700	8.36	.864	1.90	9.88
Contig	164700	.024	.152	0	1
Comcol	164700	.058	.233	0	1
Smctry	164700	.007	.083	0	1
Comlang	164700	.086	.281	0	1
EU	164700	.066	.248	0	1
EUshallow	164700	.056	.230	0	1
EUdeep	164700	.005	.071	0	1
RUSdeep	164700	.058	.234	0	1
RUSshallow	164700	.045	.208	0	1
Turkey	164700	.0002	.016	0	1
FTA-East	164700	.003	.056	0	1

¹⁴ Countries included in the sample are listed in Table A.2 in the Appendix. The exporters considered are EU countries plus all European, North African and Middle East countries that are EU neighbors.

¹⁵ The Centre d'Etudes Prospectives et d'Informations Internationales.

Note: \ln denotes natural logarithms, exports are in thousands of US\$. gdp_i and gdp_j denote Gross Domestic Product of exporter and importer country, respectively. $Dist$ is distance between capital cities of origin and destination countries. $Contig$, $comcol$, $smctry$ and $comlang$ are dummy variables that take the value of 1 when the trading countries share a border, have ever had a colonial relationship, were part of the same country in the past, or have a common language, respectively.

4.2 Method of estimation

In the last two decades the main ex-post method used to estimate the effects on trade of free trade agreements (FTAs) has been based on the gravity model of trade, a “workhorse” model of bilateral trade (Feenstra, 2004) that has evolved into a sophisticated tool to analyze the broad determinants of bilateral trade flows, among them a number of policy factors such as FTAs, trade facilitation factors, tariffs, regulations, etc.

As regards the techniques used to estimate the model, the main novelties are nicely reviewed by Head and Mayer (2015) and Baltagi *et al.* (2014). Head and Mayer (2015) review the main trade theories supporting the model and the estimation challenges involved to be able to accurately identify the effects on trade of specific economic and political factors. Baltagi *et al.* (2014) focus instead on presenting the most recent econometric techniques proposed to estimate these effects consistently and efficiently. We rely on these papers in our choice of model specification and estimation techniques.

According to the underlying theory that has been reformulated and extended by Anderson and van Wincoop (2003), the model assumes constant elasticity of substitution and product differentiation by place of origin. In addition, prices differ among locations due to symmetric bilateral trade costs. The reduced form of the model is specified as

$$X_{ijt} = \frac{Y_{it}Y_{jt}}{Y_t^W} \left(\frac{t_{ijt}}{P_{it}P_{jt}} \right)^{1-\sigma} \quad (1)$$

The empirical specification in log-linear form is given by

$$\ln X_{ijt} = \ln Y_{it} + \ln Y_{jt} - \ln Y_t^W + (1 - \sigma)\ln t_{ijt} - (1 - \sigma)\ln P_{it} - (1 - \sigma)\ln P_{jt} \quad (2)$$

where X_{ijt} are bilateral exports from country i to country j in year t , and Y_{it} , Y_{jt} and Y_t^W are the GDPs in the exporting country, the importing country, and the world in year t , respectively. t_{ijt} denotes trade cost between the exporter and the importer in year t and P_{it} and P_{jt} are the so-called multilateral resistance terms. σ is the elasticity of substitution between all goods.

The estimation of equation (2) is not straightforward because some assumptions are required concerning trade costs and multilateral resistance terms. The trade cost function is assumed to be a linear function of a number of trade barriers, namely, the time invariant determinants of trade flows, including distance, common border, common colony and common language dummies and the time-varying FTA variable. In line with the recent gravity literature the multilateral resistance terms are modeled as time-varying or time-invariant country specific dummies, depending on the estimation procedure. Substituting the trade cost function into equation (2) with an idiosyncratic error term suggests estimating

$$\ln(X_{ijt}) = \alpha_0 + \alpha_1 \ln Y_{it} + \alpha_2 \ln Y_{jt} + \alpha_3 \ln D_{ij} + \alpha_4 \text{Lang}_{ij} + \alpha_5 \text{Colony}_{ij} + \alpha_6 \text{Border}_{ij} + \alpha_7 \text{Smctry}_{ij} + \alpha_8 \text{FTA}_{ijt} + u_{ijt} \quad (3)$$

where D_{ij} denotes geographical distance from country i to country j , Lang_{ij} and Colony_{ij} take the value of one when countries i and j share official language or have ever had a colonial relationship, zero otherwise, Border_{ij} takes the value of one when the trading countries share a border, zero otherwise, Smctry_{ij} takes the value of one when countries i and j were part of the same country in the past and FTA_{ijt} takes the value of one when the trading countries are members of an FTA, zero otherwise.

In equation (4) we introduce a set of dummies, d_{it} and d_{jt} , to control for the multilateral resistance terms. We are still able to estimate the coefficients of the income variables because we construct country-and-time dummies that vary every five years (y) instead of yearly (t). In addition, instead of adding the usual gravity variables to control for differences in trade costs (distance, etc.), we use time-invariant bilateral fixed effects. The equation is given by

$$\ln(X_{ijt}) = \gamma_{ij} + \beta_1 \ln Y_{it} + \beta_2 \ln Y_{jt} + \beta_3 RTA_{ijt} + \sum d_{i,y} I_{iy} + \sum d_{j,y} I_{jy} + u_{ijt} \quad (4)$$

The first estimation strategy we employ follows the most recent literature suggesting the use of panel data to control for the endogeneity of the FTA effects and the use of exporter-and-time and importer-and-time dummy variables to control for the so-called multilateral resistance factors (for comparison, we add the usual FE estimation with only bilateral FE). Additional problems that arise in the estimation are caused by the presence of zero trade flows and heteroscedasticity in the error term (non-constant variance in the unexplained part of the model). In order to tackle these two issues we estimate the model as suggested in Head and Mayer (2015) using a multinomial Poisson estimation based on Eaton *et al.* (2012) and an EK-Tobit as in Eaton and Kortum (2001). The multinomial Poisson consists of estimating a Poisson model using the market share (X_{ij}/X_j) as the dependent variable and adding country-specific fixed effects as regressors. The model specification is given by

$$\frac{X_{ijt}}{X_{jt}} = \gamma_{ij} + \beta_1 \ln Y_{it} + \beta_2 \ln Y_{jt} + \beta_3 \ln D_{ij} + \beta_4 \text{Lang}_{ij} + \beta_5 \text{Colony}_{ij} + \beta_6 \text{Border}_{ij} + \beta_7 \text{Smctry}_{ij} + \beta_8 \text{FTA}_{ijt} + d_{iI} + d_{jI} + \epsilon_{ijt} \quad (5)$$

The EK-Tobit consists of replacing the zero trade flows (X_{ij}) with the minimum value of the dependent variable for a given origin (X_{ij} , min for all j) and the natural log of the new variable is used as the dependent variable in a Tobit-type regression (intreg in Stata).

The selection of the appropriate estimator depends on the process generating the error term. Under the assumption of a Poisson-type error term it would be better to use Multinomial PML but, under log-normality, EK-Tobit is preferred. The solution proposed here is to assume that all missing values are zeros and then use a MaMu (Manning and Mullah, 2001) test to check for the process generating the error term.¹⁶ Since we could not reject the assumption of a Poisson-type error term in our data, we estimated the gravity model using the multinomial PML in this case as suggested by Head and Mayer (2015).

¹⁶ See Martínez-Zarzoso (2013, p. 321, eq. 13). The results from the test are available upon request from the authors.

Alternative approaches to estimating the gravity model of trade, including zero trade flows, have been proposed in the literature. One of them, proposed by Helpman, Melitz and Rubinstein (2008), is a two-step approach in which first the probability to export to a given destination is estimated and in the second step some elements of the first step are incorporated in the estimation of the positive trade values, namely, a control for sample selection and a control for firm heterogeneity. Further, Davies and Kristjánsdóttir (2010) proposed to use a Heckman two-step approach (Heckman, 1978), which controls for selection bias in the second step (which dependent variable is the magnitude of exports given that exports are positive). We will also use these procedures as a robustness check.

4.3 Main results of various regional integration agreements

We have used the acronym FTA to denote free trade agreements. However, some of the deep and comprehensive agreements recently signed by the EU include not only trade issues, but also an increasing number of provisions concerning investment, environmental and labor standards, intellectual property rights, rules of origin and so on. Hence, we try to identify the trade effect of specific agreements by focusing specifically on its scope. For instance, the EU has signed DCFTAs with a number of countries in the 2000s, the effects of which can already be identified and could be comparable in scope to the DCFTAs negotiated with Armenia, Georgia and Moldova and almost signed with Ukraine, whose future is uncertain as described earlier¹⁷. Instead, these countries could decide, as Armenia did already, to join the Eurasian Customs Union and thus stay under Russia's influence. The main aim of this section is to evaluate the trade effects of Russia's agreements in comparison with the trade effects of the EU's agreements to add some economic reasoning to the actual debate. Hence, we will distinguish between FTAs proposed by Russia, including the Common Economic Zone (RUSshallow) and Eurasian Economic Community (EAEC), and FTAs or DCFTAs proposed by the EU and estimate the corresponding trade effects. Table A.1 in

¹⁷ The DCFTAs considered are with Albania (2006), Croatia (2002) and Macedonia (2001).

the Appendix lists the agreements considered that are in place during the period under study.

We estimate equations (4) and (5) for a panel of 34 exporters and 150 importers in the period 1995 to 2012 (see Table A.2 in the Appendix for a list of countries).

The baseline results are presented in Table 2. The first column presents the result of estimating equation (4) with bilateral fixed effects (γ_{ij}) only and the second column adds the multilateral resistance proxies (exporter-and-time and importer-and-time dummies). Finally, column (3) shows the result of applying the MPPML method with zero trade flows and with export shares as dependent variable.

It is clear from the results that entering into trade agreements with the EU provides a greater stimulus to trade than joining the agreements promoted by Russia. By focusing on the results shown in column (3), we see that full accession to the EU (2004 and 2007 enlargements) increased export shares by 317 percent ($e^{1.429} - 1 = 3.17$); however, as stated above, this is not an option for EaP countries.

A DCFTA with the EU (EUdeep) will increase export shares by 86 percent ($e^{0.619} - 1 = 0.86$), whereas a DCFTA with Russia (RUSdeep) will not result in any significant increase in export shares for the EaP countries considered. As regards the shallow FTAs, on the other hand, the results are less stable and vary widely across specifications. By including the zero trade in column (3) the estimate for a shallow FTA with the EU is quite high – export shares will be 10 times larger – and probably biased upwards, whereas according to column (2) there is no effect on trade.¹⁸ On the other hand, a shallow FTA with Russia will have no positive effects on trade; in fact, the results in column (3) suggest that trade will even be reduced (RUSshallow). Finally, a shallow FTA among former Soviet Republics will result in nearly a trebling of export shares ($e^{1.368} - 1 = 2.93$) by column (3). Again, in this case, the results are probably exaggerated because we only have data since 1995/1996 for some countries and trade among these countries has

¹⁸ Although in column 2, missing and zero export flows are excluded from the estimation, the advantage is that we are able to control for time-variant multilateral resistance factors (MRT1) and we are only able to control for time-invariant multilateral resistance factors (MRT2) in column 3, because the estimation of the model does not converge with MRT1.

expanded rapidly in recent years and also due to possible measurement error in the trade data in the early years of the sample.

Table 2. Gravity model baseline results

	(1)	(2)	(3)
Dependent variable:	Ln exports	Ln exports	Export share
Independent variables	FE	FE with MRT1	MPPML with MRT2
Lngdpi	0.712*** [0.040]	0.495*** [0.039]	0.569*** [0.075]
Lngdpj	0.648*** [0.026]	0.696*** [0.029]	0.720*** [0.061]
EU (full membership)	0.199*** [0.036]	0.156*** [0.046]	1.429*** [0.072]
EUshallow	0.0923*** [0.030]	-0.0355 [0.032]	2.340*** [0.067]
EUdeep	0.275*** [0.084]	0.354*** [0.092]	0.619*** [0.101]
RUSdeep	0.00682 [0.058]	0.172*** [0.057]	0.0263 [0.095]
RUSshallow	-0.134*** [0.049]	-0.0111 [0.055]	-0.181** [0.087]
Turkey	0.143 [0.162]	-0.315 [0.256]	2.342*** [0.629]
FTA-East	-0.278 [0.231]	-0.157 [0.211]	1.368*** [0.143]
Constant	-17.92*** [1.174]	-13.57*** [0.653]	-45.70*** [2.126]
Time Fixed Effects	Yes	No	Yes
Observations	118,887	118,887	160,371
R-squared	0.253	0.299	0.392
Number of id	8,415	8,415	-

Note: Robust standard errors in brackets. *** p < 0.01, ** p < 0.05, * p < 0.1. FE denotes bilateral fixed effects and MRT1 denotes multilateral resistance terms (exporter-and-time and importer-and-time dummy variables). MTR2 denotes exporter and importer dummy variables.

Coefficients for bilateral variables are omitted in column (3). MPPML and PPML denotes Multinomial Pseudo Poisson Maximum Likelihood. The variables are defined in the note below Table 1.

Table 3. Gravity model estimation: Sensitivity analysis

	(1) MPPML with MRT2	(2) EK-Tobit with MRT2	(3) PPMP with MRT2
Dependent variable:	Export Share	Ln Exports	Exports
Lngdpi	0.570*** [0.075]	0.460*** [0.032]	0.704*** [0.051]
Lngdjp	0.720*** [0.061]	0.561*** [0.023]	0.615*** [0.046]
Lndist	0.0450* [0.027]	-1.548*** [0.014]	-0.0741*** [0.024]
Contig	1.026*** [0.042]	0.164*** [0.039]	0.979*** [0.039]
Comcol	0.0711 [0.113]	1.281*** [0.030]	1.263*** [0.078]
Smctry	0.728*** [0.069]	0.487*** [0.068]	0.484*** [0.045]
Comlang	0.126** [0.051]	0.873*** [0.021]	0.358*** [0.029]
EU	1.430*** [0.072]	0.0968*** [0.022]	0.536*** [0.043]
EUshallow	2.342*** [0.067]	0.0620*** [0.019]	0.233*** [0.033]
EUdeep	0.619*** [0.101]	0.281*** [0.060]	0.377*** [0.079]
RUSdeep	0.0292 [0.095]	-0.196*** [0.060]	0.0307 [0.081]
RUSshallow	-0.184** [0.087]	-0.0300 [0.042]	-0.170*** [0.058]
Turkey	2.347*** [0.630]	0.614*** [0.099]	1.371*** [0.116]
Armenia	1.924*** [0.369]	0.930*** [0.261]	0.940** [0.446]
Georgia	2.441*** [0.121]	3.239*** [0.111]	2.499*** [0.130]
Ukraine	1.205*** [0.151]	1.238*** [0.090]	0.155 [0.115]
Constant	-45.72*** [2.126]	-1.106 [0.907]	-16.81*** [1.680]
Time Fixed Effects	Yes	Yes	Yes
Observations	160,371	160,371	160,371

Note: Robust standard errors in brackets. *** p < 0.01, ** p < 0.05, * p < 0.1. MRT2 denotes multilateral resistance terms (exporter and importer dummy variables). (M)PPML denotes (Multinomial) Pseudo Poisson Maximum Likelihood. The variables are defined in the note below Table 1.

The results obtained by using alternative estimation techniques to tackle zero trade are presented in Table 3. In this table we also present estimates for the other bilateral time-invariant variables, since the fixed effects included in this table are exporter and importer fixed effects rather than bilateral fixed effects. The first column uses the same method as in column 3 of Table 2, but shows different effects for specific EaP countries, namely, Armenia, Georgia and Ukraine. Columns 2 and 3 present estimates obtained by using alternative estimation techniques that also consider the existence of zero trade flows in the data, an EK-Tobit model in column 2 and a PPML model in column 3. The results accord with those reported in Column 1 concerning the sign and significance of the effects. FTAs with the EU, deep or shallow,¹⁹ boost trade whereas FTAs with Russia do not (they may even reduce trade). Further, FTAs with Turkey as well as Armenia and Georgia are good for trade, whereas the results for Ukraine are mixed. The gravity dummies (common language, common border, colonial links, same country) by and large exert significant influence on trade as expected.

As a first robustness check we estimated the model using a Helpman *et al.* (2008) two-step approach. The results, available upon request, suggest the same main pattern as the alternative approaches. We find no positive effect for FTAs with Russia²⁰ and positive and significant effects for FTAs with the EU.

As a second robustness check, given the striking variability of the EUshallow dummy across specifications, we tried to disentangle the more heterogeneous effects included in EUshallow agreements. To this end, we differentiated between the EU agreements that are classified as EIAs in Table A.1 and those that are only FTAs, with non-EaP countries outside Europe. Among the former are the agreements with Mexico in 2000, Korea in 2001, Chile in 2003 and CARIFORUM in 2008. Trade with those countries is not significantly larger after the agreement. The results seem to be driven by other agreements. We conclude that due to the high correlation between the dummies representing shallow bilateral agreements it is hard to identify separate effects using aggregate trade data. A

¹⁹ The results for EU shallow bilateral agreements shown in columns 2 and 3 of Table 3 suggest that trade increases by 6.2% and 25%, respectively, in keeping with the view that more trade gains should be expected from signing deep agreements rather than shallow ones. This is not the case in the results obtained for the model estimated with export shares.

²⁰ The estimated coefficient for RUSshallow is -0.15 (-3.16) and for RUSdeep 0.05 (1.02), robust t-values are within brackets.

more fruitful approach would be the use of sectoral trade in combination with tariff data to accomplish this task, which is left for further research.

Finally, to place our results in the existing literature we compare them with those reported by Kohl (2014). Also using the gravity model of trade and panel data techniques,²¹ he estimates the effect of 166 single EIAs using data from 1950 to 2010 for 150 countries. Although his sample of countries differs from ours and covers a longer period that ends in 2010 (ours in 2012), we make some tentative comparisons of the results obtained for agreements in which Russia is (or has been) a member with our findings. As shown by Kohl (2014, Table 5), none of the estimates for Russia's agreements with Armenia, Kyrgyz Republic and Ukraine is statistically significant. The same applies to the Eurasian Economic Community and the Commonwealth of Independent States (CIS) estimates; the latter is even negative (-1.55*) and significant at the ten percent level. In contrast, a number of positive effects on trade are found for EU single agreements with some Baltic states (Latvia: 0.74*) and among pairs of EaP countries (e.g., Georgia-Kazakhstan: 0.88**; Georgia-Turkmenistan: 0.01*). In sum, the evidence shows that FTAs with Russia produce negligible positive or even negative effects. A tentative explanation for this, linked to the stylized facts reviewed in section 2 above, is the poor quality of the institutional setting in the agreements proposed by Russia.

4.5 Summary

The econometric results suggest that trade agreements with the EU stimulate the EaP countries' trade significantly more than joining trade agreements promoted by Russia. Furthermore, DCFTAs between Georgia and the other EaPs, and similarly for Moldova, will also provide more trade gains than the shallow FTAs between Ukraine and Armenia and the proposed Eurasian Customs Union.

5. Involving Russia in resolution of regional conflicts

President Putin's objective to include the EaP States in Russia's sphere of influence through the proposed Eurasian Customs Union is, due to its exclusive

²¹ Kohl (2014) estimates a fixed-effects version of the gravity model with importer-year and exporter-year effects that is similar to our results in column 2 of Table 2 and also a similar model in first differences. However, he does not tackle the zero-trade flows issue.

nature, decidedly unfavorable to the EaP States and to the development of democracy in Russia itself. The increasingly violent confrontation between Russia and Ukraine threatens to impose significant costs on both countries and to destabilize much of Eastern Europe. Is it possible to resolve this conflict before it is too late? We propose that the EU offer to negotiate a DCFTA with Russia. This would be far more beneficial for Russia than its proposed Eurasian Customs Union. We have shown how it would benefit the EaP States, which would not have to choose between two opposing blocs.

Such a proposal may appear unrealistic in the current violent situation. At present, moreover, Russia is far from possessing the necessary economic and political characteristics for a DCFTA. It is not a democracy, it produces few goods and services that other nations want to buy other than unrefined oil, it lacks a free press and its market economy functions poorly (recall Diagrams 3 and 4). Moreover, its international status after the absorption of Crimea is that of an outcast.²² However, in times of conflict it is essential to prepare for a post-conflict era. In World War II, such planning started early (we quote Wallace, 1944):

“We are now [December 1941] aware, after the experience of the last twenty-five years, that the most careful delineation of national boundaries is not in itself enough to prevent the world from suffering a repetition of the catastrophe of general war. Nor can this be prevented simply by the establishment of an international league. We know now that the modern world must be recognized for what it is – an economic unit – and that wise arrangements must be made so that trade will be encouraged. The foundations of democracy can be rendered safe only when people everywhere have an opportunity to work and buy and sell with a reasonable assurance that they will be able to enjoy the fruits of their work.”²³ Secure foundations for peace require converting a contentious ‘near abroad’ into a shared neighborhood. Is the EU both willing and able to persuade Russia that it stands to gain more from a shared neighborhood?

²² Russia will become even more of a political pariah if it annexes parts of Eastern Ukraine.

²³ Keynes (1920) had made the same point after World War I.

6. Conclusion

Hindsight provides benefits to which foresight is not privy. This paper concludes that despite, or rather because, of some unforeseen shortcomings of the EaP, the EU has an obligation to salvage the Partnership. The paper has shown that the EaP partners stand to gain significantly more from deep trade agreements with the EU and with each other than from the more shallow customs union proposed by Russia. Their freedom to choose between these options has been jeopardized by measures recently taken by Russia. The EU overestimated the economic ability and political preparedness of the four EaP States to implement Association Agreements with the EU. It underestimated the opposition of Russia to these Agreements with countries in its 'near abroad'. Russia, in turn, underestimated the strong popular support in parts of its 'near abroad' for the democratic values that the EU represented. Thus, President Putin came to view Association Agreements with these four States as a long-run threat to his power base at home. These misjudgments by both sides resulted in a situation which some EaP States found difficult to master.

Together, democracy and a free press provide an important servo-mechanism for flows of information back and forth between the voters, the public's representatives and the government's negotiators. An agreement negotiated with a government that lacks widespread popular support is an uncertain agreement. A key lesson of this for the EU is to consider measures that reduce this uncertainty and thereby the risk of sudden policy reversals. We do not think the EU should make a functioning democracy with a free press a precondition for opening negotiations on a DCFTA. After all, the difference between negotiating membership and a DCFTA is significant. Nor do we think the EU should make a referendum on the negotiated agreement a condition for adoption. After all, what is the value of a referendum conducted in a country that is not a well-functioning democracy?

However, the EU needs to inform key sectors in the Partner country better on issues subject to negotiation. The business community, NGOs, political parties and media need such information if the democratic process is to work. The reaction of key interest groups to the conclusion of negotiations in the past suggests that they have received insufficient information of what is involved.

The EU needs also to focus an EaP partner's attention on measures to improve the functioning of its market economy in the course of negotiations, in particular on reducing corruption and increasing the ease of doing business. The significant progress made by Georgia in these critical respects has facilitated its progress while the poor record of Ukraine in these regards has contributed to its problems.

The great heterogeneity displayed by these six countries suggests the need for different treatment tailored to specific circumstances. The EU has indeed treated countries differently. But the principle of 'more-for-more' now calls for the EU to focus its efforts on assistance to Georgia and Moldova to implement their DCFTAs. The full resources of the Comprehensive Institution Building facility must be brought to bear to fill the "institutional vacuum" in these two countries. To save the EaP requires speeding up signature of the AAs with Georgia and Moldova and for the EU to provide technical and financial assistance for their rapid implementation. It also requires extraordinary actions by the EU in coordination with the USA to allow Ukrainian voters to exercise their right to determine their future. One such action is a nationwide referendum under international supervision on signature of the DCFTA. Implementation of the Agreement in Ukraine will be more difficult, more costly and take longer than in Georgia and Moldova. That observation is not an argument against Ukraine but rather an argument for special assistance for it.

Bibliography

- Anderson, J. E., and E. van Wincoop (2003), "Gravity with gravitas: A solution to the border puzzle," *American Economic Review* 93(1), 170–192.
- Baltagi, B., P. Egger and M. Pfaffermayr, (2014), "Panel data gravity models of international trade," CESifo Working Paper No. 4616.
- Campos, N. (2013), "What drives protests in the Ukraine? This time it is institutions," *VoxEU.org*, 22 December.
- Davies, R., and H. Kristjánssdóttir (2010), "Fixed costs, foreign direct investment, and gravity with zeros," *Review of International Economics* 18(1), 47-62.
- Eaton, J., and S. Kortum (2001), "Trade in capital goods," *European Economic Review* 45(7), 1195–1235.

- Eaton, J., S. Kortum and S. Sotelo (2012), "International trade: Linking micro and macro," NBER Working Paper 17864, National Bureau of Economic Research.
- Feenstra, R. (2004), "Advanced International Trade," Princeton University Press, Princeton, NJ.
- Gylfason, T., and E. Hochreiter (2009), "Growing apart? A tale of two republics: Estonia and Georgia," *European Journal of Political Economy* 25 (3), 355-370.
- Gylfason, T., and P. M. Wijkman (2011), "[Economic integration as a Balkan peace project](#)", *VoxEU.org*, 1 January.
- Gylfason, T., and P. M. Wijkman (2014), "Which conflicts can the European Neighborhood Policy help to resolve?" in Christensen, B. J., and C. Kowalzyck (eds.), in *Globalization: Strategies and Effects*, Springer Verlag (forthcoming).
- Head, K., and T. Mayer (2015), "Gravity equations: Workhorse, toolkit, and cookbook," in Gopinath, G. , E. Helpman and K. Rogoff (eds.): *Handbook of International Economics*, Vol. 4, 131-195, Amsterdam, Elsevier-North Holland (forthcoming).
- Heckman, J. J., (1979), "Sample selection bias as a specification error," *Econometrica* 47, 153-61.
- Helpman, E., M. Melitz and Y. Rubinstein (2008), "Estimating trade flows: Trading partners and trading volumes," *Quarterly Journal of Economics*, 123(2), 441-487.
- Keynes, J. M. (1920), *The Economic Consequences of the Peace*, Harcourt Brace, New York.
- Kohl, T. (2014), "Do we really know that trade agreements increase trade?" *Review of World Economics* (forthcoming).
- Kowalczyk, C. (2000), "Welfare and integration," *International Economic Review* 41(2), 483-494.
- Manning, W., and J. Mullahy (2001), "Estimating log models: to transform or not to transform?" *Journal of Health Economics* 20(4), 461-494.
- Martínez-Zarzoso, I. (2013), "The log of gravity revisited," *Applied Economics* 45(3): 311-327.
- Messerlin, P., M. Emerson, G. Jandieri and A. Le Vernoy (2011), *An Appraisal of the EU's Trade Policy towards its Eastern Neighbours: The Case of Georgia*, Center for Economic Policy Studies, Brussels.

- Sekerev, A. (2013), "The EU Eastern Partners: Post-Vilnius domestic and foreign policy challenges," The Post-Vilnius Challenges of the Eastern Partnership, *The Eastern Partnership Review* No. 15, December.
- Wallace, H. A. (1944), "Foundations of the Peace," *The Atlantic Monthly*, reprinted in Lord, R. B. (ed.), *Democracy Reborn*, Reynal & Hitchcock, New York.
- Wijkman, P. M. (2009), *Frihandel för fred: Exemplet Balkan*, SNS, Stockholm.
- Wijkman, P. M. (2011), "Fostering Deep and Comprehensive Free Trade Agreements for the Eastern Partners," *The Eastern Partnership Review*, No. 8, December.

Appendix

Table A.1. List of Agreements

<u>Members</u>	<u>Coverage</u>	<u>Type</u>	<u>Date of entry into force</u>
Armenia – Kazakhstan	Goods	FTA	25-Dec-2001
Armenia – Moldova	Goods	FTA	21-Dec-1995
Armenia - Russian Federation	Goods	FTA	25-mar-93
Armenia – Turkmenistan	Goods	FTA	07-jul-96
Armenia – Ukraine	Goods	FTA	18-Dec-1996
EC (25) Enlargement	Goods & Services	CU & EIA	01-may-04
EC (27) Enlargement	Goods & Services	CU & EIA	01-ene-07
EU - Turkey	Goods	CU	01-ene-96
Eurasian Economic Community (EAEC)	Goods	CU	08-oct-97
Central European Free Trade Agreement (CEFTA)	Goods	FTA	01-may-07
EFTA - Albania	Goods	FTA	01-nov-10
EFTA - Canada	Goods	FTA	01-jul-09
EFTA - Chile	Goods & Services	FTA & EIA	01-dic-04
EFTA - Colombia	Goods & Services	FTA & EIA	01-jul-11
EFTA - Egypt	Goods	FTA	01-ago-07
EFTA - Former Yugoslav Republic of Macedonia	Goods	FTA	01-may-02
EFTA - Hong Kong, China	Goods & Services	FTA & EIA	01-oct-12
EFTA - Israel	Goods	FTA	01-ene-93
EFTA - Jordan	Goods	FTA	01-sep-02
EFTA - Korea, Republic of	Goods & Services	FTA & EIA	01-sep-06
EFTA - Lebanon	Goods	FTA	01-ene-07
EFTA - Mexico	Goods & Services	FTA & EIA	01-jul-01
EFTA - Montenegro	Goods	FTA	01-sep-12
EFTA - Morocco	Goods	FTA	01-dic-99
EFTA - Palestinian Authority	Goods	FTA	01-jul-99
EFTA - Peru	Goods	FTA	01-jul-11
EFTA - SACU	Goods	FTA	01-may-08
EFTA - Serbia	Goods	FTA	01-oct-10
EFTA - Singapore	Goods & Services	FTA & EIA	01-ene-03
EFTA - Tunisia	Goods	FTA	01-jun-05
EFTA - Ukraine	Goods & Services	FTA & EIA	01-jun-12
Egypt - Turkey	Goods	FTA	01-mar-07
EU - Albania	Goods & Services	FTA & EIA	01-Dec-2006(G) 01-Apr-2009(S)
EU - Algeria	Goods	FTA	01-sep-05
EU - Bosnia and Herzegovina	Goods	FTA	01-jul-08
EU - Cameroon	Goods	FTA	01-oct-09
EU - CARIFORUM States EPA	Goods & Services	FTA & EIA	01-nov-08
EU - Chile	Goods & Services	FTA & EIA	01-Feb-2003(G) 01-Mar-2005(S)

EU - Côte d'Ivoire	Goods	FTA	01-ene-09
EU - Eastern and Southern Africa States Interim EPA	Goods	FTA	14-may-12
EU - Egypt	Goods	FTA	01-jun-04
EU - Faroe Islands	Goods	FTA	01-ene-97
EU - Former Yugoslav Republic of Macedonia	Goods & Services	FTA & EIA	01-Jun-2001(G)
			01-Apr-2004(S)
EU - Iceland	Goods	FTA	01-abr-73
EU - Israel	Goods	FTA	01-jun-00
EU - Jordan	Goods	FTA	01-may-02
EU - Korea, Republic of	Goods & Services	FTA & EIA	01-jul-11
EU - Lebanon	Goods	FTA	01-mar-03
EU - Mexico	Goods & Services	FTA & EIA	01-Jul-2000(G)
			01-Oct-2000(S)
EU - Montenegro	Goods & Services	FTA & EIA	01-Jan-2008(G)
			01-May-2010(S)
EU - Morocco	Goods	FTA	01-mar-00
EU - Palestinian Authority	Goods	FTA	01-jul-97
EU - Papua New Guinea / Fiji	Goods	FTA	20-dic-09
EU - Serbia	Goods & Services	FTA & EIA	01-Feb-2010(G)
			01-Sep-2013(S)
EU - South Africa	Goods	FTA	01-ene-00
EU - Tunisia	Goods	FTA	01-mar-98
European Free Trade Association (EFTA)	Goods & Services	FTA & EIA	03-May-1960(G)
			01-Jun-2002(S)
Georgia - Armenia	Goods	FTA	11-nov-98
Georgia - Azerbaijan	Goods	FTA	10-jul-96
Georgia - Kazakhstan	Goods	FTA	16-jul-99
Georgia - Russian Federation	Goods	FTA	10-may-94
Georgia - Turkmenistan	Goods	FTA	01-Jan-2000
Georgia - Ukraine	Goods	FTA	04-jun-96
Iceland - Faroe Islands	Goods & Services	FTA & EIA	01-nov-06
Kyrgyz Republic - Armenia	Goods	FTA	27-oct-95
Kyrgyz Republic - Kazakhstan	Goods	FTA	11-nov-95
Kyrgyz Republic - Moldova	Goods	FTA	21-nov-96
Kyrgyz Republic - Russian Federation	Goods	FTA	24-Apr-1993
Kyrgyz Republic - Ukraine	Goods	FTA	19-Jan-1998
Kyrgyz Republic - Uzbekistan	Goods	FTA	20-mar-98
Russian Federation - Azerbaijan	Goods	FTA	17-feb-93
Russian Federation - Belarus	Goods	FTA	20-Apr-1993
Russian Federation - Belarus - Kazakhstan	Goods	CU	03-Dec-1997
Russian Federation - Kazakhstan	Goods	FTA	07-jun-93
Russian Federation - Republic of Moldova	Goods	FTA	30-mar-93
Russian Federation - Serbia	Goods	FTA	03-jun-06
Russian Federation - Tajikistan	Goods	FTA	08-Apr-1993
Russian Federation - Turkmenistan	Goods	FTA	06-Apr-1993
Russian Federation - Uzbekistan	Goods	FTA	25-mar-93
Turkey - Albania	Goods	FTA	01-may-08
Turkey - Bosnia and Herzegovina	Goods	FTA	01-jul-03
Turkey - Chile	Goods	FTA	01-mar-11
Turkey - Former Yugoslav Republic of Macedonia	Goods	FTA	01-sep-00
Turkey - Georgia	Goods	FTA	01-nov-08
Turkey - Israel	Goods	FTA	01-may-97

Turkey - Jordan	Goods	FTA	01-mar-11
Turkey - Montenegro	Goods	FTA	01-mar-10
Turkey - Morocco	Goods	FTA	01-ene-06
Turkey - Palestinian Authority	Goods	FTA	01-jun-05
Turkey - Serbia	Goods	FTA	01-sep-10
Turkey - Syria	Goods	FTA	01-ene-07
Turkey - Tunisia	Goods	FTA	01-jul-05
Ukraine - Azerbaijan	Goods	FTA	02-sep-96
Ukraine - Belarus	Goods	FTA	11-nov-06
Ukraine - Former Yugoslav Republic of Macedonia	Goods	FTA	05-jul-01
Ukraine - Kazakhstan	Goods	FTA	19-oct-98
Ukraine - Moldova	Goods	FTA	19-may-05
Ukraine - Montenegro	Goods & Services	FTA & EIA	25-Apr-2013
Ukraine - Russian Federation	Goods	FTA	18-Aug-2008
Ukraine - Tajikistan	Goods	FTA	18-Aug-2008
Ukraine - Uzbekistan	Goods	FTA	18-Aug-2008
Ukraine - Turkmenistan	Goods	FTA	18-Aug-2008

Source: WTO.

Table A.2. List of Countries

Exporter countries

Albania	Hungary	Norway	Yemen, Rep.
Algeria	Iceland	Oman	
Austria	India	Poland	
Azerbaijan	Ireland	Portugal	
Belarus	Israel	Qatar	
Belgium	Italy	Russian Federation	
Bosnia and Herzegovina	Jordan	Saudi Arabia	
Bulgaria	Kazakhstan	Slovak Republic	
Croatia	Kuwait	Slovenia	
Cyprus	Kyrgyz Republic	Spain	
Czech Republic	Latvia	Sweden	
Denmark	Lebanon	Switzerland	
Egypt, Arab Rep.	Libya	Syrian Arab Republic	
Estonia	Lithuania	Tajikistan	
Ethiopia	Luxembourg	Tunisia	
Finland	Malta	Turkey	
France	Mauritania	Turkmenistan	
Georgia	Moldova	Ukraine	
Germany	Morocco	United Arab Emirates	
Greece	Netherlands	United Kingdom	

Importer countries

Albania	Eritrea	Malawi	Swaziland
Algeria	Estonia	Malaysia	Sweden
Angola	Ethiopia	Mali	Switzerland
Argentina	Finland	Malta	Syrian Arab Republic
Armenia	France	Mauritania	Tajikistan
Australia	Gabon	Mauritius	Tanzania
Austria	Gambia, The	Mexico	Thailand
Azerbaijan	Georgia	Moldova	Togo
Bangladesh	Germany	Morocco	Trinidad and Tobago
Belarus	Ghana	Mozambique	Tunisia
Belgium	Greece	Namibia	Turkey
Benin	Guatemala	Nepal	Turkmenistan
Bolivia	Guinea	Netherlands	Uganda
Bosnia and Herzegovina	Guinea-Bissau	New Zealand	Ukraine
Botswana	Haiti	Nicaragua	United Arab Emirates
Brazil	Honduras	Niger	United Kingdom
Bulgaria	Hungary	Nigeria	United States
Burkina Faso	Iceland	Norway	Uruguay
Burundi	India	Oman	Uzbekistan
Cabo Verde	Indonesia	Pakistan	Venezuela, RB
Cambodia	Iran, Islamic Rep.	Panama	Vietnam
Cameroon	Iraq	Paraguay	Yemen, Rep.
Canada	Ireland	Peru	Zambia
Central African Republic	Israel	Philippines	Zimbabwe
Chad	Italy	Poland	
Chile	Japan	Portugal	
China	Jordan	Qatar	
Colombia	Kazakhstan	Russian Federation	
Congo, Rep.	Kenya	Rwanda	
Costa Rica	Korea, Dem. Rep.	Samoa	
Cote d'Ivoire	Korea, Rep.	Saudi Arabia	
Croatia	Kuwait	Senegal	
Cuba	Kyrgyz Republic	Sierra Leone	
Cyprus	Lao PDR	Singapore	
Czech Republic	Latvia	Slovak Republic	
Denmark	Lebanon	Slovenia	
Dominica	Lesotho	Somalia	
Dominican Republic	Liberia	South Africa	
Ecuador	Libya	Spain	
Egypt, Arab Rep.	Lithuania	Sri Lanka	
El Salvador	Luxembourg	Sudan	
Equatorial Guinea	Madagascar	Suriname	
