Customs Union and Kazakhstan's Imports

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Contents

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Abstract

The paper provides an empirical analysis of the early impact of formation of the customs union of Belarus, Kazakhstan and Russia and associated changes in imports schedule on the structure of Kazakhstan's imports. Trade creation effects appear to have been insignificant. At the same time the change in tariffs appears to have created some trade diversion, with a significantly negative impact on imports from China in particular and a significantly positive impact on imports from within the customs union. The magnitude this effect is relatively small, however. The results tentatively suggest that the benefits of the new tariff policy per se to Kazakhstan are limited at best. Larger benefits could come from gradual liberalization of services sectors and market access within the economic union.

1. Introduction[1]

In November 2009 Belarus, Kazakhstan and Russia agreed to establish a customs union with harmonized import tariffs. The new common tariff became effective on 1 January 2010, and internal border controls have been subsequently removed.

The main objective of the customs union is to foster economic integration between the three countries. Further steps of integration foresee moves toward free movement of goods, capital and labour. At the same time, as the common tariff was worked out in the crisis environment of 2009, it was also used in part as a tool of industrial policy—to promote import substitution in certain areas through increase in tariffs, for example in the case of the automotive sector.[2]

The introduction of the common tariff resulted in changes to import tariff structure in each country, predominantly upwards, although a large number of tariffs were also adjusted downwards. The Kazakhstan's schedule underwent most significant changes, which affected more than half of the tariff lines.

This paper looks at the effect of a comprehensive tariff schedule change in Kazakhstan on the structure and volume of imports. It argues that the change in tariff schedule can be seen as largely exogenous and thus provides a unique opportunity to study trade diversion effects across a broad range of merchandize groups.

A number of studies modelled the effects of the customs union on the economy of Kazakhstan (for instance, Vinhas de Souza (2011), World Bank, 2011). Empirical evidence has been so far based largely on a rapid growth of trade within the customs union in 2010. However, this rapid growth came after an even sharper collapse in trade with Russia and Belarus in 2009 (a much sharper drop than in the case of imports from outside the customs union). It may thus to a large extend reflect post-crisis recovery trends not directly related to policy changes, as trade collapses during crises are known to overshoot by far the contraction of demand leading to subsequent brisk recoveries (Baldwin, 2009) and,

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[2] Gnutzmann and Mkrtchyan (2012) construct a model where a customs union setup with high import tariffs is reinforced by industrial lobbying even if it is welfare reducing for consumers.

moreover, as trade intermediate goods tends to be affected more than trade in final goods some trade partnerships may be affected much more than others.

This paper is an early attempt to provide a more nuanced empirical assessment of the impact of the common external tariff of the customs union on Kazakh imports. In particular, the paper looks at how imports of various goods from various trade partners were affected depending on the direction and magnitude of change in the corresponding tariff.

The results suggest that while the change in tariffs had no significant effect on overall (world-wide) imports, it appears to have created some trade diversion, with a significantly negative impact on imports from China in particular and a significantly positive impact on imports from within the customs union. The magnitude of the latter effect is, however, fairly small, and there is little evidence of trade diversion from higher-value-added exporters (in the EU countries) to customs union members. While one needs to be mindful that these are only short-run effects, subject to many caveats, they nonetheless suggest that benefits of the new tariff policy to Kazakhstan (and likely other members of the union) have been limited, if at all present. Larger benefits could come from liberalization of services sectors and market access within the union.

The paper is structured as follows. Section II outlines customs union arrangements and discusses the impact of introduction of the common tariff on trade flows. Section III presents empirical results for Kazakh imports. Concluding remarks follow.

2. Kazakhstan's entry into the Customs Union

2.1. Customs union arrangements

In November 2009 Belarus, Kazakhstan and Russia agreed to establish a customs union. By 1 January 2010 import tariffs of the three countries were harmonized into a common tariff. While for Russia relatively few tariff lines changed, in Kazakhstan approximately 60 per cent of items were affected (in most cases tariffs increased).

In July 2010 the three countries ratified a customs code and other documents forming the regulatory base of the union (which started harmonizing not only tariffs but also procedures and non-tariff regulations). Internal border controls have been removed. The import tariff revenues have been pooled and they accrue to national budgets in predetermined

proportions (with Russia entitled to around 88 per cent of all revenues; Belarus to 5 per cent and Kazakhstan to 7 per cent). These proportions are subject to regular reviews.

The Customs Union established a supranational body, the Customs Union Commission, with initially around 150 staff. Decisions of the Commission are taken by a qualified majority of 2/3 where Russia holds 57 per cent of the votes and Belarus and Kazakhstan hold 21.5 per cent each.

The sides also agreed that the common import tariff will be adjusted over time to reflect Russia's WTO commitments (Russia's accession was approved in December 2011 after 18 years of negotiations). It was also agreed that the common tariff will also serve as a goods schedule for a potential WTO accession of Belarus and Kazakhstan, although the two countries will still need to negotiate their own schedules for services and non-tariff measures.

The union is potentially open to new members that share a land border with the existing members of the union. Kyrgyz Republic is currently considering membership and Ukraine has been invited to join.[3]

The members of the union have plans for further economic integration. The next stage, officially launched on 1 January 2012, is the formation of the Common Economic Area of the Eurasian Economic Community with its own supranational body, the Eurasian Economic Commission. Unlike in the context of the customs union, key decisions will be taken based on the "one country one vote" principle. The ultimate goal of the Community is free movement of goods, capital and people, as well as harmonization of macroeconomic and structural policies (with proposed criteria similar to the Maastricht rules), but terms, timeline and modalities of further integration are yet to be fully clarified.

One remaining complex issue is that of harmonization of export taxes. Russia's taxation of natural resources is unique in that it heavily relies on export duties rather than corporate income taxes or production sharing agreements. Kazakhstan's export duties are currently an order of magnitude lower. Belarus is a net importer of energy. So far the parties could not agree on a common export tariff. There are also remaining temporary exemptions from the common import tariff for certain sensitive items (such as cars for personal use and pharmaceuticals in Kazakhstan).

An interesting feature of the Customs Union is its asymmetry, which is even more extreme than in the case of other regional economic unions dominated by a single member, including

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[3] See Movchan and Shportyuk (2011) for analysis of issues related to Ukraine's possible accession.

the Gulf Cooperation Council (where Saudi Arabia is by far the largest participant) and Mercosur (dominated by Brazil). For instance, Kazakhstan's population and GDP are around one tenth of Russia's and Belarus is smaller still. Together, Belarus and Kazakhstan account for less than 7 per cent of Russia's exports and imports. By contrast, over half of Belarusian imports come from Russia.

2.2. Common external tariff

When the three countries agreed to harmonize their import duties, they generally took Russia's prevailing tariffs as a base (Russian tariffs were adopted for over 80 per cent of classification lines). Belarus and Russia had in many cases identical tariffs prior to unification, and Belarus has been further able to negotiate higher import duties on trucks, electrical engines and equipment and a number of other key Belarusian export products. As a result, around three quarters of tariff lines remained unaffected in Belarus.[4]

By contrast, Kazakhstan ran a relatively more liberal trade policy prior to unification of tariffs. The changes brought about by the introduction of the common tariff were largely exogenous (in the sense that they were not primarily derived from Kazakhstan's own import substitution agenda) and affected the majority of tariff lines: tariff increased in around 45 per cent of cases and decreased in around 10 per cent of cases (Vinhas de Souza, 2011).

This makes the study of the impact of tariff changes on Kazakhstan's imports particularly interesting. Firstly, transition to common economic tariff resulted in a revision of more than half of tariff lines resulting in a large variation in simultaneous changes in tariffs. Secondly, these changes did not result primarily from negotiations with the key trading partners (as would be the case with WTO accession, for example), nor from domestically-driven industrial policy. While joining the Customs Union was an explicit policy choice, the exact changes in most tariff lines were largely driven by Russia's existing tariff structure, and to a lesser extent tariff increases in Russia following the 2008-09 crisis and interests of Belarusian industry.

In some cases tariff increases were seen as sensitive for consumers or the industry, as in the case of passenger cars or pharmaceuticals imports. For these goods (over 80 groups in total) transition arrangements were introduced, which are expected to be phased out over several years.

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[4] For an overview of issues related to Belarus's accession to the union see Tochitskaya (2010).

2.3. Effects of customs union

Economic unions generally generate two effects: trade creation and trade diversion (see, for instance, Venables (2003) for a discussion). The term trade diversion coined by Viner (1950) refers to the fact that a relative change in tariff barriers diverts trade from the more efficient exporters to less efficient ones.

In the case of customs union there are two groups of potential beneficiaries of trade diversion: customs union members (Russia and Belarus) and countries, which retained zero or reduced tariffs under various regional trade agreements (primarily countries of the Commonwealth of Independence States (CIS) and Serbia). For instance, in cases where introduction of a common tariff resulted in a relative increase in the tariff for Chinese goods compared with a tariff for Russian or CIS goods, one would expect an increase in imports from Russia or CIS and a decrease in exports from China. Trade diversion is generally welfare reducing, as consumers are forced to buy goods from less efficient producers.

Trade creation arises due to lowering of trade barriers within the union, and is generally welfare enhancing as consumers are given opportunity to buy from more efficient foreign producers, if any. In the case of customs union some trade creation might arise due to elimination of administrative barriers (as custom checks are removed from internal borders) and expanded market access. As imports from CIS countries were typically subject to zero duties, trade creation is not expected to arise from the change in duties per se. In fact, some "trade destruction" could arise in cases where external tariffs were increased for items where trade cannot be diverted to exporters covered by regional trade agreements, at least in the short term.

Overall, one would expect to observe some trade diversion from the rest of the world to CIS and customs union countries, while trade creation within the union is expected to be unrelated to change in tariffs.

2.4. External trade of Kazakhstan

Figure 1 shows the structure of Kazakh imports. In 2010 over 40 per cent of Kazakh imports came from within the customs union, 23 per cent – from the EU-27 countries; 13 per cent from China; 7 per cent from CIS countries excluding Russia and Belarus; and 16 per cent from elsewhere in the world.

Figure 1. Kazakhstan: Import shares by trade partner, 2010
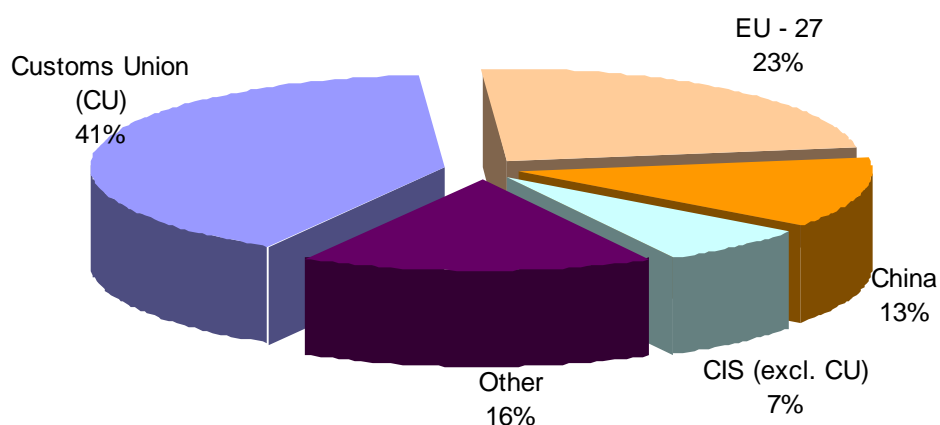
Source: Kazakhstan Statistical Agency

Russian exports to Kazakhstan are relatively diverse substantially covering almost 800 six-digit lines of harmonized system (HS) classification together with exports from Belarus (around 750 lines if Belarusian exports are excluded).[5] However, they are predominantly concentrated in commodities (both agricultural and non-agricultural), petrochemicals and metals. Higher-value-added manufacturing and vehicles account for 24 per cent of Kazakhstan's imports from Russia (as of 2009), other manufacturing goods account for further 9 per cent (Figure 2). Structure of imports from other CIS countries is similar, with basic metals dominating (42 per cent of the total).

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[5] Lines with import value below US$ 1 million per year are excluded here and throughout the analysis. For description of the data see section 3.1.

Figure 2. Kazakhstan: Structure of imports from selected trade partners, 2009
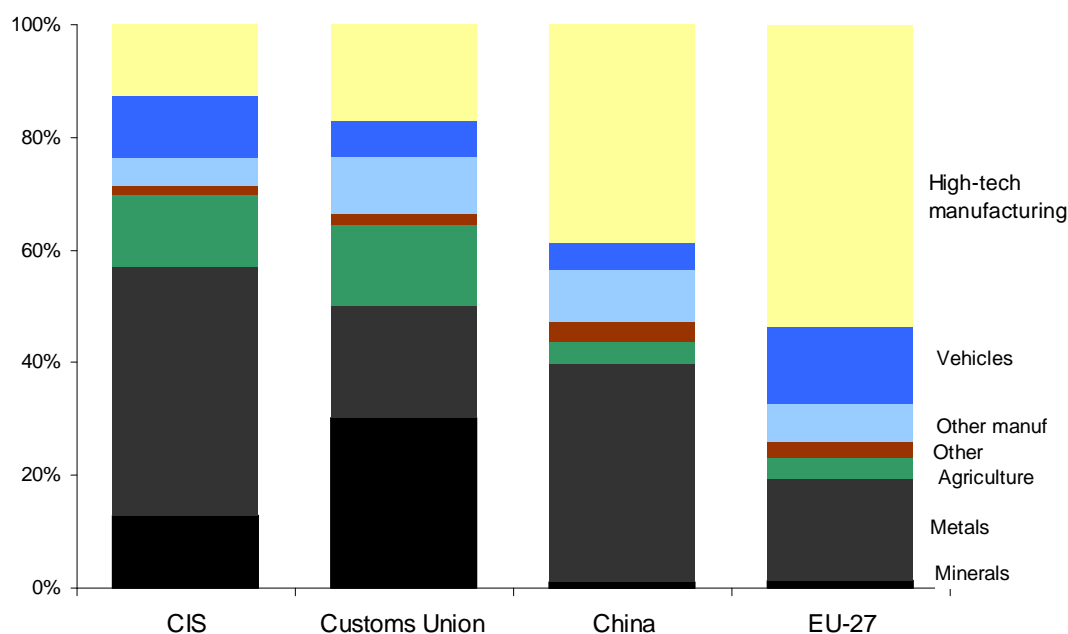
Sources: Kazakhstan Statistical Agency, ITC, authors' calculations, based on 2009 data.

By contrast, the 27 countries of the EU export predominantly higher-value-added manufacturing goods and vehicles (56 per cent of the total) although they are also present in other merchandize groups including metals and petrochemicals. The export structure is similarly diversified, covering almost 800 six-digit positions.

Chinese imports are less diversified (covering 475 positions) but they compete in both lower-value-added and higher-value-added segments. Vehicles account for 4 per cent of total imports; other high-tech manufacturing for 36 per cent and other manufacturing goods (such as textiles) for 8 per cent. Basic metals and petrochemicals account for 45 per cent of Chinese exports to Kazakhstan.

Thus there is a substantial overlap between export positions of the Customs Union members, EU and China (Figure 3). Of the total number of six-digit export lines where at least one of the major trade partners exports over US$ 1 million worth of goods (around 1,250 lines in total), around 55 per cent represent exports by a sole partner (24 per cent for Russia, 22 per cent for the EU, and only 10 per cent for China). At the same time, the triple overlap, where all three key partners record exports above US$ 1 million, amounts to as much as 16 per cent of classification lines, and a further 16 per cent have both Russian and EU exporters. Overlap between EU and Chinese exports (but not Russian ones) is smaller, and the smallest overlap is between Chinese and Russian goods (4 per cent of positions).

Figure 3. Kazakhstan: Overlap between imports from the key trading partners by number of goods
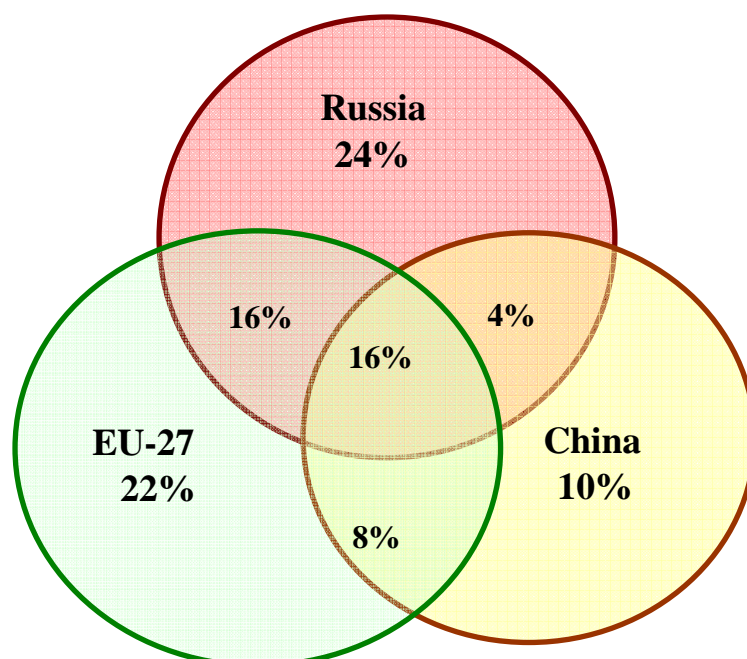
Source: International Trade Center and authors' calculations, based on 2009 data.

Common ground in terms of volumes traded is larger (Figure 4). Overlap between Russia, China and EU represents 42 per cent of the total volume exported by these countries, with EU enjoying a significantly higher share of imports within these tariff lines. Chinese imports that do not have Russian or EU competitors at the six-digit level of disaggregation represent only 2 per cent of the total volume of imports from these countries. Where imports from China and Russia overlap, the aggregate volumes exported by the two countries are similar. China dominates Russia in the common segment where significant imports from the EU are not recorded (which tend to be lower-value-added exports).

Figure 4. Kazakhstan: Overlap between imports from the key trading partners by type of goods, volume-based
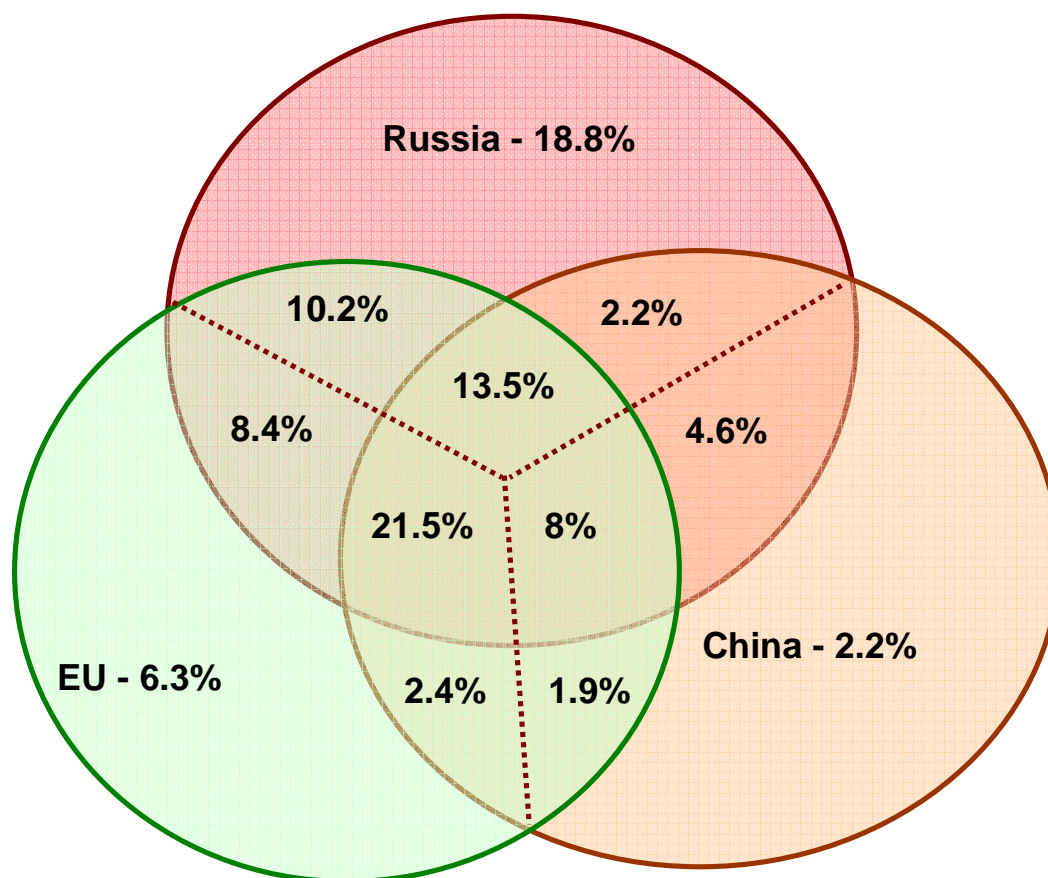
Source: International Trade Center and authors' calculations, based on 2009 data.

Figure 5 shows the evolution of Kazakhstan's imports over the recent years. Overall volumes are still recovering after the 2008-09 crisis. The 2000s saw a trade boom fuelled by rising commodity prices and aggressive borrowing from abroad by banks and corporates. The latter came to a halt in late 2007, and a year later the global economic crisis hit. In 2009 the volume of imports contracted by 25 per cent in nominal terms. Imports from within the (future) customs union were most affected, contracting by over a third (compared with a decrease of 9 per cent for imports from the European Union).

Figure 5. Kazakhstan: Import volumes by trade partner, 2006-2010

(US$ billion)
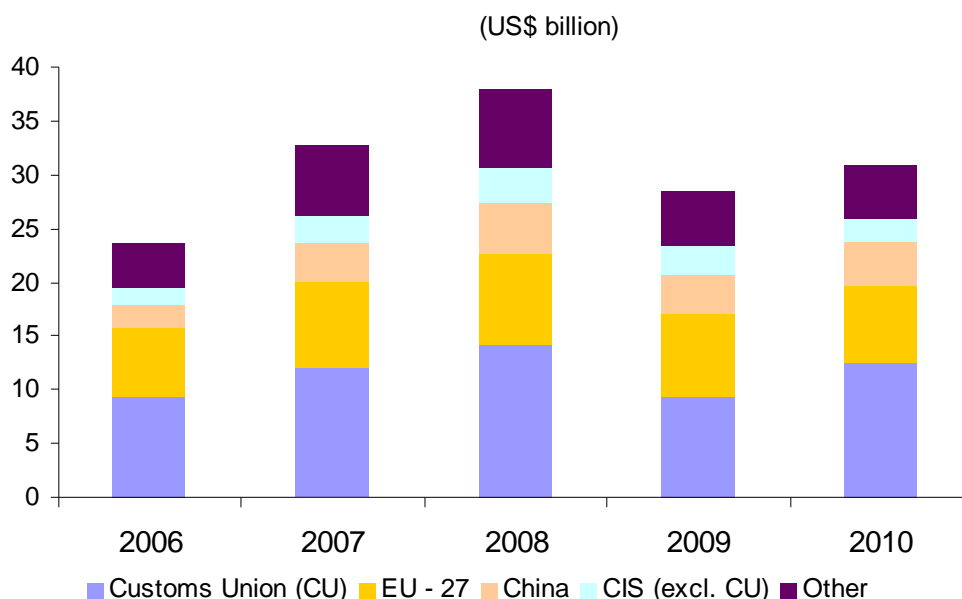
Source: Kazakhstan Statistical Agency.

Imports started recovering in 2010 (by 9 per cent overall). Recovery was strongest for goods from within the customs union – this can be partly attributed to trade diversion, but part of it is likely to be a mere reflection of the depth of contraction in 2009 (econometric analysis below aims to control for this). Imports from China also rebound, offsetting about half of the contraction of 2009, while imports from the EU continued shrinking.

Interestingly, imports from CIS countries outside the customs union also continued declining, suggesting that despite existence of bilateral free trade agreements these countries may not have been net beneficiaries of the trade diversion effect. This may in part be due to the fact that these countries have a relatively narrow set of export capabilities, which largely overlaps with that of Russia and Belarus. Indeed, out of the 244 six-digit tariff lines where imports from CIS exceeded US$ 1 million in 2009, only 23 "overlap" with significant imports from China and EU but not from Russia. Imports from Russia and the CIS, by contrast, "share" 187 tariff lines. In terms of volumes, the overlap between the CIS and EU or China (but not Russia or Belarus) is even smaller, less than 5 per cent of the total volume.

These patterns suggest that the potential for trade diversion is perhaps highest away from the Chinese goods and towards customs union members, although it may in practice be muted if Chinese producers enjoy a significant cost advantage (Rozhkov, 2011). Despite existing free-trade agreements, scope for trade diversion towards CIS countries outside the customs union appears to be currently limited.

3. Results

3.1. Data

The analysis below uses the annual bilateral trade data for the period 2006-10 from the *Trade Map* database of the International Trade Center of UNCTAD/WTO (ITC) at the six-digit level of disaggregation of the HS classification.[6] This level divides goods into over 5,000 separate lines such as, for instance, bottles for sterilization. The trade volumes are reported in nominal US dollars, which were expressed in constant base year prices using Kazakhstan's import deflators as reported in the official statistics.

The tariffs applied by Kazakhstan before and after joining the customs union are taken from the official publication in *Kazakhstanskaya Pravda*, the national newspaper, and the official website of the Customs Union Commission, respectively. The statutory tariffs are specified at the HS ten-digit level for items such as, for instance, bottles for sterilization of more than 0.55 litres in volume for use in the pharmaceuticals industry. In most cases all ten-digit tariffs with the same six-digit group coincide but certain six-digit lines (including the example above) contain multiple rates of ten-digit tariffs.

The analysis below first focuses on a core group of line items with unambiguous tariffs at the six-digit level, i.e. containing uniform tariff at the ten-digit level before and after the change of tariff schedule (this assumption is subsequently relaxed). To minimize the "noise effect" from numerous lines with very low and volatile import values, the analysis further focuses on industry-country pairs, for which annual import volumes exceed US$ 1 million (by volume this eliminates only around 2.5 per cent of the total imports, and up to 11 per cent for individual trade partners).

Tariff lines where transitory arrangements applied are also excluded from the core sample. The list of temporary exclusions is taken from the resolution of the Intergovernmental Council of the Eurasian Economic Community dated 27 November 2009. Assigning transitionary tariffs instead would in many cases problematic as concessionary tariffs were often made conditional on unobserved characteristics, such as items being imported for personal use or having value below a certain threshold.

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[6] The highest level of disaggregation available for Kazakhstan is HS6.

While preliminary trade data are complete for most trading partners, including China, EU and non-customs-union CIS countries, the 2010 six-digit breakdown is incomplete for trade inside the customs union. Thus the corresponding estimates need to be viewed as tentative. It appears that the data are underreported for the later months of the year, in other words, differences in coverage do not seem to be related to the industry structure.

3.2. Empirical approach

The following specifications are estimated for changes in logarithm of imports from Kazakhstan's major trade partners between 2009 (before the customs union) and 2010 (after the introduction of the common external tariff):

$$\Delta IM_{j,t} = \alpha IM_{j,t-1} + \beta \Delta d_{j,t} + \lambda Z_{j,t} + \varepsilon_{j,t} \tag{1}$$

where $IM_{j,t}$ is the change in imports for six-digit line j between 2009 and 2010; $IM_{j,t-1}$ is the logarithm of imports in 2009; Δd is the change in tariff, and Z are a number of controls. These include changes in imports from the same trading partner over previous years (2006-08 and 2008-09); change in imports from all origins over the same periods; and dummy variables for groups of goods at the three-digit level of HS. Regressions were estimated by OLS.

As discussed above, the key groups of trading partners are customs union countries (Belarus and Russia), EU countries, China, CIS countries outside the union, and the rest of the world. In the case of customs union countries additional specifications also control for concurrent exports of Russia and Belarus to the rest of the world (countries outside the customs union) – to account for changes in export capabilities in these countries.

Table 1 summarizes descriptive statistics for selected variables.

Table 1. Descriptive statistics for selected variables

Variable	N obs.	Mean	St. D.	Min	Max	Median
Changes in imports, 2009-10						
Customs Union	453	-4.2	19.0	-365.9	41.1	-1.5
EU	504	-0.8	8.0	-82.5	69.3	-0.1
China	330	0.9	4.6	-19.1	40.6	0.3
CIS	148	-0.5	4.9	-43.7	8.3	0.2
Rest of the world	373	-0.2	4.7	-53.3	30.9	-0.1
World	1,289	-1.9	16.6	-463.9	70.8	-0.3
Change in tariff, %	1,289	1.9	6.3	-20.0	30.0	0.0
Changes in imports						
CU, 2006-08	425	2.5	24.6	-88.9	403.9	0.5
CU, 2008-09	441	-7.7	47.4	-879.1	39.8	-1.5
EU, 2006-08	502	1.2	7.0	-76.6	54.6	0.5
EU, 2008-09	446	-2.1	10.4	-183.1	48.2	-0.9
China, 2006-08	287	1.8	6.2	-22.0	58.5	0.9
China, 2008-09	248	-2.2	5.8	-44.5	15.0	-0.7
CIS, 2006-08	143	3.8	13.2	-7.2	116.1	0.8
CIS, 2008-09	127	-5.6	18.9	-168.4	12.6	-0.9
Rest of world, 2006-08	334	1.7	19.1	-183.4	277.0	0.8
Rest of world, 2008-09	302	-3.7	16.8	-272.9	12.8	-1.1
World, 2006-08	1,236	3.8	31.6	-102.4	652.0	0.8
World, 2008-09	1,167	-6.8	43.3	-1,170.7	61.5	-1.4
CU exports to world, 2010	156	96.7	782.1	-360.5	7,102.0	-0.2
Inports, 2009						
Customs union	453	10.0	50.3	0.7	1,023.1	3.3
EU	504	5.2	10.1	0.7	98.3	2.4
China	330	3.6	5.2	0.7	44.6	1.6
CIS	148	5.1	13.0	0.7	144.8	2.2
Rest of the world	373	4.6	9.2	0.7	118.8	2.1
World	1,289	9.9	35.5	0.7	974.6	3.1

Sources: ICT, KazStat, authors' calculations.

Unless otherwise specified, values are expressed in 2006 prices, in US$ million.

3.3. Results

Basic estimation results are summarized in Table 2. Column (1) presents the results for changes in the overall volume of imports. The coefficient on the change in tariffs is positive but highly statistically insignificant. Taken at face value, it implies that a 10 per cent increase in tariff (which is more than the average increase in the sample plus one standard deviation) led to a 2.7 per cent increase in import volume.

Table 2. Basic results

	Dependent variables: Difference in log imports, 2009-10						
	(1) *World*	*(2)* *CU*	*(3)* *EU*	*(4)* *China*	*(5)* *CIS*	*(6)* *RoW*	*(7)* [1] *CU*
Δtariffs	0.0027	0.0082**	-0.0068	-0.0092	-0.0066	-0.0070	0.0037
	(0.0031)	(0.0037)	(0.0054)	(0.0081)	(0.0178)	(0.0067)	(0.0057)
Δimport_CU (2006-08)		-0.0026					-0.0230
		(0.0342)					(0.0726)
Δimport_CU (2008-09)		-0.2133***					-0.1665*
		(0.0505)					(0.0968)
Log(import_CU_2009)		-0.0738***					-0.0026
		(0.0208)					(0.0325)
Δimport_EU (2006-08)			-0.0795				
			(0.0543)				
Δimport_EU (2008-09)			-0.3174***				
			(0.0899)				
Log(import_EU_2009)			-0.1456***				
			(0.0346)				
Δimport_China (2006-08)				-0.0523			
				(0.0555)			
Δimport_China (2008-09)				-0.2951**			
				(0.1135)			
Log(import_China_2009)				-0.1115**			
				(0.0510)			
Δimport_CIS (2006-08)					0.0924		
					(0.0783)		
Δimport_CIS (2008-09)					-0.3943*		
					(0.2032)		
Log(import_CIS_2009)					-0.3054***		
					(0.1031)		
Δimport_RoW (2006-08)						-0.1247***	
						(0.0471)	
Δimport_RoW (2008-09)						-0.4375***	
						(0.0712)	
Log(import_RoW_2009)						-0.1569***	
						(0.0417)	
Log(import_World_2009)	-0.1083***						
	(0.0146)						
Δexport_CU (2009-10)							0.2199**
							(0.0833)
Δimport_World (2006-08)	-0.0943***	0.0440	0.0936	-0.1404	-0.2754**	-0.0601	-0.0519
	(0.0211)	(0.0490)	(0.0786)	(0.0972)	(0.1223)	(0.0923)	(0.0959)
Δimport_World (2008-09)	-0.3059***	0.1642**	-0.2095*	0.1020	-0.1329	0.1275	0.3102**
	(0.0323)	(0.0650)	(0.1132)	(0.1502)	(0.2806)	(0.1129)	(0.1186)
Constant	0.6914***	-0.0307	0.9290***	1.1088**	2.3592***	1.2304***	-0.5238*
	(0.1296)	(0.1879)	(0.2951)	(0.4376)	(0.8789)	(0.3503)	(0.3006)
Observations	1163	416	443	243	122	288	139
R-squared	0.1526	0.1185	0.2439	0.1235	0.2705	0.3055	0.2070
Number of fixed effects	132	98	87	74	53	82	59

Notes: Standard errors in parentheses. Stars indicate the level of significance: *** p<0.01, ** p<0.05, * p<0.1.

1/ Equation (7) includes a change between 2009 and 2010 in exports from the Russia and Belarus to the world (except Kazakhstan).

Columns (2) to (6) present the results for key trade partners. The coefficient on tariffs is positive for the customs union: a two per cent increase in tariff (average for the sample) is estimated to have led on average to a 1.6 per cent increase in imports from Russia and

Belarus, an effect that could be attributed to trade diversion. For all other trading partner groups, including CIS, the effect is negative, and none of the corresponding coefficients are statistically significant in the base specifications. Among these, the estimated negative effect is largest for China.

In terms of controls, most imports exhibit saturation properties: the higher the existing imports of a given group from a given partner, the slower the growth. The results also point to a post-crisis recovery in trade with all partners: the bigger the drop in trade in 2008-09, the higher the rate of growth in 2009-10. These coefficients are sizable and statistically significant even for those trade partners where volumes continued contracting in aggregate in 2010 (e.g. CIS countries outside the Customs Union). The recovery effect is particularly strong for the rest of the world (primarily US and Japan), where a one per cent deeper drop in trade during the crisis translates into almost half a per cent faster growth in imports in 2010, other things being equal.

The last column adds exports from Belarus and Russia to all countries outside the customs union as an additional control in the customs union regression. This sharply reduces the size of the sample, which now only includes goods that Russia and Belarus export elsewhere. As a result, the magnitude of the coefficient on the tariff increase is halved, while the coefficient on customs union exports to the rest of the world is indeed positive, suggesting that at least for some goods a non-negligible part of the increase in Russian and Belarusian exports to Kazakhstan is explained by increased global export capabilities of these countries in the respective goods.

Table 3 presents results for the case when six-digit lines with non-uniform tariffs (at the ten-digit levels) are included. The change in tariff in these cases is authors' approximation, which may be imprecise (the actual effective tariff would also depend on the import mix within six-digit categories, which changes over time). On the other hand, fine granularity of tariffs within six-digit groups often indicates that these goods are sensitive and / or important in terms of volumes.

The overall picture remains broadly unchanged. The main difference is that the coefficient on tariff change for China is higher and statistically significant at the 5 per cent level. It implies that a two percentage point increase in tariff led on average to a 2.8 per cent contraction in imports of respective goods from China. The coefficients for the world as a whole, the customs union, the EU and the rest of the world are broadly unchanged, while the CIS coefficient turns positive although it is very close to zero. As discussed above, this is

consistent with the impact of tariff increases on CIS countries being a priori somewhat ambiguous.

Table 3. Basic results for the extended sample

	Dependent variables: Difference in log imports, 2009-10						
	(1) World	*(2)* CU	*(3)* EU	*(4)* China	*(5)* CIS	*(6)* RoW	*(7)[1]* CU
Δtariffs	0.0024	0.0076*	-0.0056	-0.0141**	0.0009	-0.0078	0.0058
	(0.0028)	(0.0039)	(0.0049)	(0.0071)	(0.0136)	(0.0062)	(0.0055)
Δimport_CU (2006-08)		0.0068					-0.0529
		(0.0372)					(0.0758)
Δimport_CU (2008-09)		-0.2622***					-0.2144**
		(0.0507)					(0.0922)
Log(import_CU_2009)		-0.1267***					-0.0586*
		(0.0217)					(0.0321)
Δimport_EU (2006-08)			-0.0556				
			(0.0459)				
Δimport_EU (2008-09)			-0.3146***				
			(0.0675)				
Log(import_EU_2009)			-0.1495***				
			(0.0284)				
Δimport_China (2006-08)				-0.1514***			
				(0.0447)			
Δimport_China (2008-09)				-0.4621***			
				(0.0877)			
Log(import_China_2009)				-0.1569***			
				(0.0429)			
Δimport_CIS (2006-08)					0.0101		
					(0.0579)		
Δimport_CIS (2008-09)					-0.3133**		
					(0.1275)		
Log(import_CIS_2009)					-0.3110***		
					(0.0753)		
Δimport_RoW (2006-08)						-0.1148***	
						(0.0427)	
Δimport_RoW (2008-09)						-0.4551***	
						(0.0606)	
Log(import_RoW_2009)						-0.1986***	
						(0.0343)	
Log(import_World_2009)	-0.1111***						
	(0.0129)						
Δexport_CU (2009-10)							0.1230
							(0.0828)
Δimport_World (2006-08)	-0.1020***	-0.0330	0.0479	-0.0153	-0.2297**	-0.1050	-0.1441
	(0.0198)	(0.0509)	(0.0662)	(0.0752)	(0.1010)	(0.0804)	(0.0976)
Δimport_World (2008-09)	-0.3218***	0.0690	-0.2468***	0.1664	-0.1135	0.1888**	0.1527
	(0.0294)	(0.0620)	(0.0907)	(0.1116)	(0.1837)	(0.0929)	(0.1151)
Constant	0.7099***	0.3902**	0.9338***	1.5044***	2.4767***	1.5910***	-0.0885
	(0.1159)	(0.1978)	(0.2460)	(0.3662)	(0.6562)	(0.2929)	(0.2980)
Observations	1323	486	542	295	156	363	164
R-squared	0.1760	0.1821	0.2995	0.2221	0.3393	0.3390	0.2087
Number of fixed effects	133	99	93	77	55	83	62

Notes: Standard errors in parentheses. Stars indicate the level of significance: *** p<0.01, ** p<0.05, * p<0.1.

1/ Equation (7) includes a change between 2009 and 2010 in exports from the Russia and Belarus to the world (except Kazakhstan).

While in most cases tariffs for non-CIS countries have been increased, which is expected to lead to trade diversion and / or "trade destruction", in some cases tariffs were reduced. This could on the contrary lead to trade creation or trade diversion in favour of non-CIS imports. To check for any asymmetric responses to increases and decreases in tariffs, equation (1) was extended to include interactions between the change in tariffs and dummy variables for non-negative (POS) and non-positive (NEG) changes in tariffs, respectively.

$$\Delta IM_{j,t} = \alpha IM_{j,t-1} + \beta_1 \Delta d_{j,t} {*} POS_j + \beta_2 \Delta d_{j,t} {*} NEG_j + \lambda Z_{j,t} + \varepsilon_{j,t} \qquad (2)$$

The results, summarized in Table 4, provide no evidence of trade creation in response to reductions in tariffs and suggest that the earlier results were driven mainly by decreases in trade with China and increases in intra-union trade in response to increases in tariffs. This may partly reflect the lower number of observations and smaller dispersion in case of decreases in tariffs (and hence higher standard errors in that subsample). In addition, in the specification allowing for asymmetric responses the coefficient on tariff increases with respect to the rest of the world becomes slightly larger and statistically significant at the 10 per cent level.

Table 4. Results with asymmetric responses to higher and lower tariffs

VARIABLES	Dependent variables: Difference in log imports, 2009-10					
	(1) World	(2) CU	(3) EU	(4) China	(5) CIS	(6) RoW
Δtariffs (increase)	0.0019	0.0087*	-0.0081	-0.0190**	0.0168	-0.0133*
	(0.0035)	(0.0046)	(0.0061)	(0.0088)	(0.0164)	(0.0076)
Δtariffs (reduction)	0.0038	0.0025	0.0011	0.0003	-0.0664	0.0111
	(0.0061)	(0.0118)	(0.0111)	(0.0167)	(0.0413)	(0.0165)
Δimport_CU (2006-08)		0.0062				
		(0.0372)				
Δimport_CU (2008-09)		-0.2627***				
		(0.0508)				
Log(import_CU_2009)		-0.1267***				
		(0.0217)				
Δimport_EU (2006-08)			-0.0550			
			(0.0459)			
Δimport_EU (2008-09)			-0.3157***			
			(0.0676)			
Log(import_EU_2009)			-0.1486***			
			(0.0285)			
Δimport_China (2006-08)				-0.1536***		
				(0.0447)		
Δimport_China (2008-09)				-0.4627***		
				(0.0877)		
Log(import_China_2009)				-0.1600***		
				(0.0430)		
Δimport_CIS (2006-08)					0.0181	
					(0.0575)	
Δimport_CIS (2008-09)					-0.2960**	
					(0.1266)	
Log(import_CIS_2009)					-0.3030***	
					(0.0747)	
Δimport_RoW (2006-08)						-0.1168***
						(0.0427)
Δimport_RoW (2008-09)						-0.4624***
						(0.0609)
Log(import_RoW_2009)						-0.1951***
						(0.0344)
Log(import_World_2009)	-0.1110***					
	(0.0129)					
Δexport_CU (2009-10)						
Δimport_World (2006-08)	-0.1018***	-0.0328	0.0477	-0.0100	-0.2647**	-0.1040
	(0.0198)	(0.0509)	(0.0662)	(0.0754)	(0.1020)	(0.0803)
Δimport_World (2008-09)	-0.3218***	0.0686	-0.2464***	0.1760	-0.1259	0.1939**
	(0.0294)	(0.0620)	(0.0908)	(0.1121)	(0.1819)	(0.0929)
Constant	0.7127***	0.3817*	0.9411***	1.5658***	2.3035***	1.6017***
	(0.1164)	(0.1989)	(0.2464)	(0.3720)	(0.6572)	(0.2927)
Observations	1323	486	542	295	156	363
R-squared	0.1760	0.1826	0.3002	0.2254	0.3595	0.3427
Number of fixed effects	133	99	93	77	55	83

Notes: Standard errors in parentheses. Stars indicate the level of significance: *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

3.4. Discussion

The analysis suggests some trade diversion effect due to higher tariffs. Imports from China saw a more significant decrease in response to higher tariffs. Imports from Russia and Belarus increased, although the increase was relatively small. Imports from the EU, CIS and the rest of the world were largely unaffected. The association between changes in overall imports and changes in tariff structure appears to have been insignificant, both in statistical and in economic terms.

It should be noted that these conclusions only relate to trade creation and trade diversion in response to changes in tariffs, as the identification strategy relied on differential response of imports that faced higher tariffs and imports that faced lower tariffs. It is possible that changes in non-tariff barriers, in particular their reduction within the customs union, resulted in higher trade creation and perhaps higher trade diversion. Such effects may take place across the board regardless of the corresponding tariffs and changes in them.

The importance of non-tariff barriers may also help to explain the results obtained for the CIS countries. Unlike members of the union, CIS countries do not appear to have benefited from trade diversion, despite the fact that they typically enjoy duty-free regimes under various bilateral treaties. This may in part reflect the structure of imports from CIS discussed above – namely the fact that CIS countries trade less with Kazakhstan and may have fewer industries capable of substituting exports of other trading partners.

It may also reflect the existence of substantial non-tariff barriers to imports from outside the union, while trade inside the union benefited from relaxation of some non-tariff barriers.[7] This is particularly important given a strong overlap between imports from Russia / Belarus and other CIS countries.

Indeed, ADB (2012) provides evidence that while crossing Kazakh-Russian border has become easier since the introduction of the customs union, clearance times on the Kazakh border for trucks entering from non-customs-union CIS countries (like the Kyrgyz Republic) not only have not decreased but in fact have lengthened significantly. Moreover, the legal regime governing imports into the Customs Union, underpinned by both national and supranational acts, is fairly complicated and may entail increased compliance costs (Dragneva-Lewers, 2012).

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[7] See Racine (2011) and Kee and others (2009) for further discussion of non-tariff barriers.

Trade diversion effects may be much higher for a number of individual goods, while being totally absent for others. The estimation above only paints a rough broad picture, essentially averaging price elasticities of demand across all goods.

Finally, the negative trade diversion effects may be slightly overestimated if increases in tariffs led to more widespread underreporting of imports or possibly their reclassification under tariff codes carrying lower rates. For instance, Fisman and Wei (2004) provide empirical evidence on similar tax evasion techniques in trade between China and Hong Kong. Nonetheless, there is no evidence of any sharp increase in such practices within the customs union that could account drive the overall results, in particular in case of within-union trade.

4. Conclusion

This paper looked at the early impact of a change in import tariffs of Kazakhstan upon creation of the customs union on Kazakhstan's imports. The case of Kazakhstan is particularly interesting, as the country effectively adopted the tariff schedule based on the prevailing tariffs of Belarus and Russia (with additional amendments reflecting industrial policy interests of the latter countries). As a result, changes were simultaneous, largely exogenous, and affected over half of all tariff lines.

The preliminary empirical results suggest little overall effect on aggregate imports and some trade diversion as a result of a sweeping change in the tariff schedule. While overall imports for a particular product line appear to be broadly unaffected by the changes in tariffs, an increase in tariff has a statistically significantly negative impact on imports from China and a significantly positive impact on imports from within the customs union. The economic magnitude of this effect is relatively moderate, however. Further, there is little evidence that the effect extends to exporters with a higher share of higher-value-added goods in their product mix, such as the EU countries.

The estimates in the paper can only capture the average short-run effects, only those related to tariff changes per se, and are subject to many other caveats and data limitations. They nonetheless suggest that benefits of the new tariff policy to Kazakhstan and members of the union selling to Kazakhstan are limited; the increases in tariffs mainly led to a substantially

higher tax burden on consumers and producers using imported intermediate goods but had a limited impact on their behaviour.

In this sense, the findings are consistent with the view that the value of modern trade agreements derives primarily from investment and service liberalisation rather than changes in rules governing movement of goods (Baldwin, 2011; Schiff and Winters, 2003). Within the customs union, larger benefits could come over time from liberalization of services sectors and improved market access within the union.

The paper also provides some tentative evidence that improved market access (including physical removal of customs from internal borders) matters – in the sense that, unlike members of the union, CIS countries do not appear to have benefited from trade diversion, despite the fact that they typically enjoy duty-free regimes under various bilateral treaties (This may also in part reflect the fact that they trade less with Kazakhstan and may have fewer industries capable of substituting exports of other trading partners, as well as the existence of substantial non-tariff barriers to imports from outside the union).

Further, a number of simulations suggest that gains from further liberalisation within the customs union could be substantial (World Bank, 2011). Importantly, service sector liberalisation would benefit other members of the union as well (see, for instance, Jensen, Rutherford, and Tarr (2007) and Tarr and Volchkova (2010) on Russia).

Currently, there are plans for gradual deepening of economic integration within the framework of the Common Economic Area of the Eurasian Economic Community, which could help to reap the benefits of lower non-tariff barriers and liberalisation in the service sectors.

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