

ANNEX I.1 MODEL AND DATA SPECIFICATIONS

Model and data specifications

The equation given by (1) reflects the combination of standard wage and price markup equations, and has been augmented here to better account for features of emerging economies (see Mohanty and Klau, 2001). In particular, productivity growth was excluded due to data limitations, the output gap was used as a proxy for labor market conditions, and money growth was introduced to better account for demand developments.

Apart from the output gap, the data used in equation (I.1) are quarterly changes in the variables, ensuring stationarity. The data are seasonally adjusted, and the period covers 2002Q1—2010Q3. Inflation, π_t , is defined as the (log) quarterly change in the CPI, while core inflation is similarly defined using CPI-excluding food. The output gap, \hat{O}_t , is defined as the deviation of actual output from potential output. Potential output is estimated using the common Hodrick-Prescott filter. Unit labor costs, u_t , are derived using average nominal wages, employment, and output.

The food price shock ($\pi f_t - \pi_{t-1}$) is defined as the difference between domestic food price inflation and headline inflation from the previous period. This avoids any potential endogeneity problems arising from regressing inflation on its components. A similar term was defined for energy price inflation, but was not found significant in the final model specification.

II. TRADE IN KAZAKHSTAN: RECENT TRENDS AND THE CUSTOMS UNION¹

During the last two decades Kazakhstan has become more open to international trade, as tariff and non-tariff barriers have been lowered. Exports are dominated by fuel and energy, while imports consist primarily of machinery and food. China, Russia and the EU are the key trading partners, while trade with Central Asia remains low. The recently created customs union with Russia and Belarus can bring benefits from greater access to markets, but can also lead to trade diversion, as tariffs have been increased. The remaining impediments to trade are mainly institutional in nature, and need to be addressed as a matter of priority.

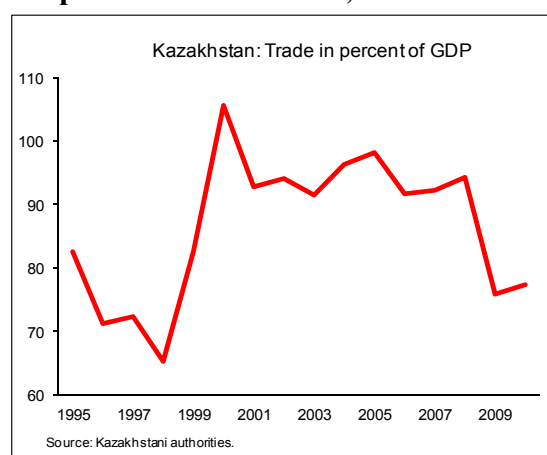
A. Introduction

1. **The radical transformation that followed the break-up of the Soviet Union had a large impact on trade between the former soviet republics and with the outside world.** The old trade mechanisms such as the Council of Mutual Economic Assistance (CMEA) were dismantled, and payment and clearance procedures discontinued (Elborgh-Woytek, 2003, IMF, 1991). The newly independent states had to integrate themselves into the world economy, create new currencies, and establish new trade patterns. Trade was also initially undermined by a severe recession.

2. **This chapter looks at Kazakhstan's trade 20 years after its independence.** It first looks at the increase in openness achieved during that period. It then turns to the structure and geographical pattern of Kazakhstan's trade and discusses the recent trends. With this background, the chapter discusses the developments and possible implications of the recently created customs union between Kazakhstan, Russia and Belarus. Finally, some suggestions are made on ways to further encourage trade and make it more efficient by removing remaining impediments, which appear to be mainly of institutional nature.

B. Growth in Trade

3. **In the almost two decades since the break-up of the Soviet Union, Kazakhstan has gradually become more open to international trade.** The increase in openness has not been linear, and was interrupted by various adverse events. The standard indicator of trade openness (measured as the ratio of total trade in goods and services to GDP), which dropped from around 80 percent in mid-1990s to slightly over 60 percent in the aftermath of the 1998 financial crisis, rebounded strongly in



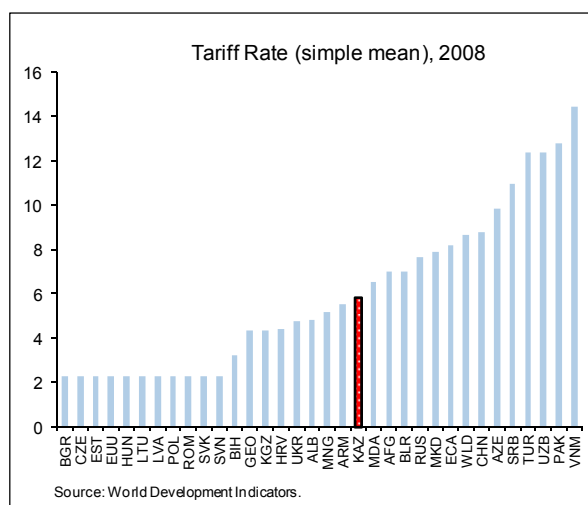
¹ Prepared by Dmitriy Rozhkov (MCD).

the 2000s, and remained between 90 and 100 percent for most of the decade. This increase was mainly driven by exports, which reached 56 percent of GDP in 2008.

4. **As in the rest of the world, Kazakhstan's trade contracted significantly during the 2008-09 financial crisis.** The crisis in Kazakhstan started early relative to the rest of the world, and had a significant negative impact on the banking system. Empirical evidence shows that in such events, trade of the crisis economies (especially imports) tends to fall substantially in the short term – beyond what would be expected from the decline in output – and then stay depressed through the medium term (IMF, 2010). In line with this tendency, Kazakhstan's trade contracted markedly during the crisis, but is now starting to gradually recover, although not yet to the pre-crisis levels. Given the severity of the crisis, however, this contraction does not change the overall perception of the increasing trend in openness.

5. **The increase of trade openness in 2000s coincided with Kazakhstan becoming a major oil producer and exporter.** Oil production started in 2000, and by 2010 it exceeded 82 million tons per year (about 1.7 million barrels a day). Therefore, a big share of the increase in trade was driven by oil exports, as well as increased exports of gas, metals, and several other commodities. In value terms, exports of oil increased from 43 percent of total exports in 2002 to 57 percent in 2010.

Nevertheless, the increase has also likely reflected the genuine tendency toward trade liberalization. Both tariff and non-tariff barriers were reduced, and the index of trade freedom increased significantly, outpacing the increase in the index of overall economic freedom (Table II.1).² Before the creation of the customs union in 2010 (section D), Kazakhstan's average tariff rate was relatively low at around 5 percent, and compared favorably with many other transition and emerging economies.



² The Heritage foundation index of trade freedom (Table II.1) is calculated using a combination of measures on trade-weighted average tariff rates and the existence of non-trade barriers. The latter include quantity and price restrictions; regulatory restrictions such as licensing; investment restrictions, including exchange and other financial controls; customs restrictions; and direct government intervention, such as subsidies and other aid. The overall index of economic freedom combines indices of business, trade, fiscal, monetary, investment, financial, labor freedoms, as well as indices of government spending, property rights and corruption.

6. **Further efforts in the direction of trade liberalization are under way.** Along with other Central Asian countries, Kazakhstan participates in the Central Asian Regional Economic Cooperation Program (CAREC), where the members have undertaken mutual commitments to further reduce and simplify trade tariffs, and significantly reduce or eliminate non-tariff barriers. Under the CAREC Program, these measures are seen as steps toward eventual WTO membership for all members.³ Kazakhstan aims at becoming a member in 2012. Furthermore, like in many other countries in the region, the authorities pursue an economic development policy that encourages export promotion and supports exports through tax exemptions.

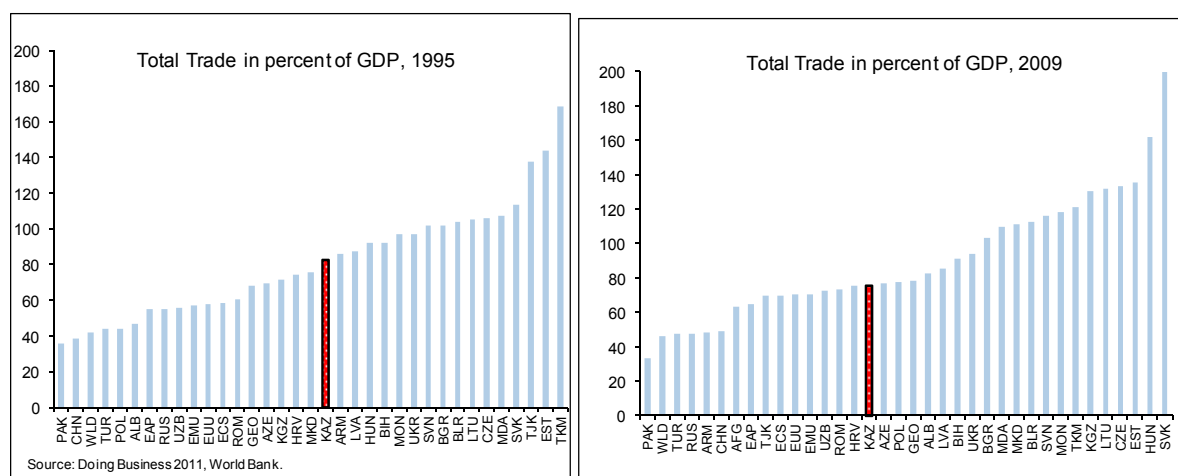
Table II.1. Indicators of Trade and Economic Freedom

	Trade freedom index		Trade freedom rank	Economic freedom index		Economic freedom rank	Trade to GDP ratio (percent)	Average tariff	WTO membership
	2000	2011	2011	2000	2011	2011	2009	Latest	
CCA									
Armenia	77.0	85.5	43	63.0	69.7	36	48.4	2.8	Yes
Azerbaijan	55.0	77.1	90	49.8	59.7	92	77.3	8.9	No
Georgia	69.0	89.2	6	54.3	70.4	28	78.5	1.3	Yes
Kazakhstan	67.0	80.9	74	50.4	62.1	78	75.8	5.9	No
Kyrgyz Republic	65.2	63.2	147	55.7	61.1	83	130.6	4.6	Yes
Tajikistan	75.0	82.5	64	44.8	53.5	128	69.8	7.9	No
Turkmenistan	25.0	79.2	82	37.6	43.6	168	121.4	n.a.	No
Uzbekistan	50.0	66.2	140	38.1	45.8	164	72.8	15.9	No
Selected CEE									
Czech Republic	72.0	87.6	12	68.6	70.4	29	133.3	2.3	Yes
Estonia	85.0	87.6	12	69.9	75.2	14	135.8	2.3	Yes
Hungary	76.6	87.6	12	64.4	66.6	51	161.7	2.3	Yes
Latvia	81.0	87.6	12	63.4	65.8	56	85.3	2.3	Yes
Lithuania	81.0	87.6	12	61.9	71.3	24	131.9	2.3	Yes
Poland	74.8	87.6	12	60.0	64.1	68	77.7	2.3	Yes
Russia	52.4	68.2	134	51.8	50.5	143	48.1	7.7	No
Ukraine	70.0	85.2	46	47.8	45.8	163	94.3	4.8	Yes

Source: Heritage Foundation; World Development Indicators.

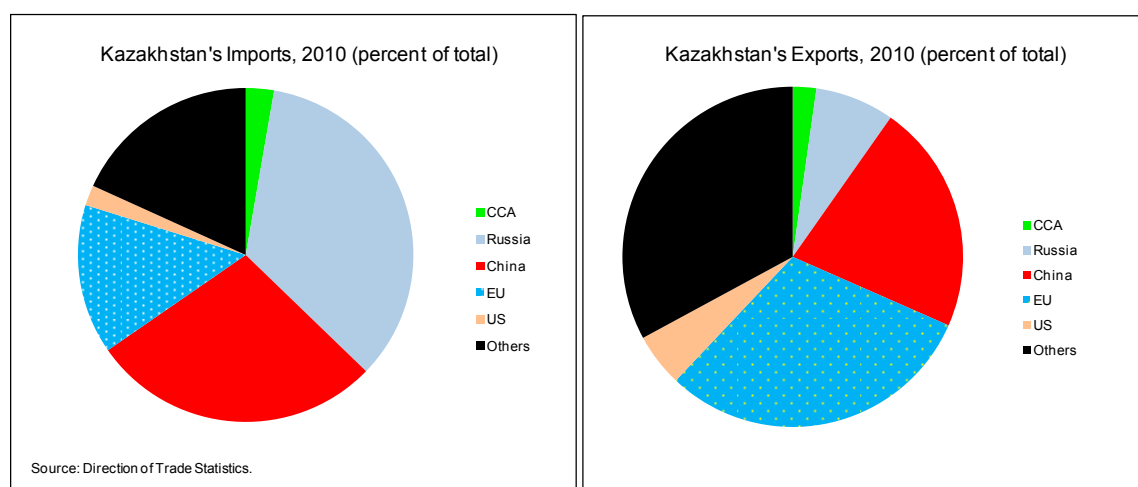
7. **The increase in trade openness during 2000s was not unique to Kazakhstan.** Similar trends were exhibited by other transition economies, including the CCA countries. As a result, the relative position of Kazakhstan in trade openness among economies in transition was roughly the same in 2008 as in 1995, and then deteriorated slightly in 2009, when both exports and imports fell sharply during the crisis.

³ Among the Caucasus and Central Asia (CCA) countries, the Kyrgyz Republic became a member of the WTO in 1998, Georgia in 2000, and Armenia in 2003. All other CCA countries except Turkmenistan are in the process of negotiating the membership, albeit with the different degree of intensity.



C. Composition and Direction of Trade

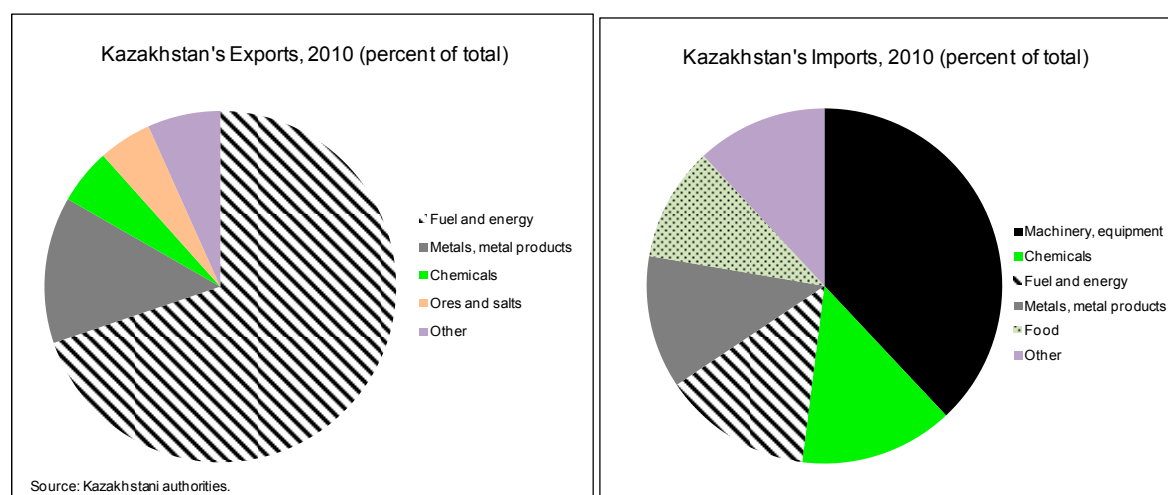
8. **The geographical pattern of Kazakhstan's trade has also undergone significant changes in the last decade.** The most visible trend is the rapidly growing importance of China, especially for imports. Given the proximity of China and its increasing role in the global economy, this trend is not surprising. In fact, the same trend is visible in virtually all Central Asian countries, and in Central and Eastern Europe as well. For energy producers in the region (Kazakhstan and Uzbekistan), China has also become the major destination for their exports (primarily oil and gas). At the same time, the relative weight of Russia as a trading partner continued to decline, especially as a destination for exports. Nevertheless, Russia and the EU, along with China, remain the key trading partners for Kazakhstan.



9. **Another prominent feature in Kazakhstan's trade is the very low share of CCA countries among its trading partners.** In 2010, this share was about 3 percent for both exports and imports. The possible explanations include the high share of fuel and energy in Kazakhstan's exports (with supplies directed primarily toward Europe and China), and the higher per capita income of Kazakhstan in relation to the other CCA countries, which

explains the large share of machinery and food in Kazakhstan's imports and skews these imports in favor of China, Europe and Russia.

10. The relatively low trade with other CCA countries makes Kazakhstan an outlier from the overall CCA pattern.⁴ In general, trade between CCA countries has been picking up during the last decade, in line with the overall growth of trade, although it still remains somewhat below the level that could be expected, given the small size of these economies and their geographical proximity to each other. Following the period of breakdown of traditional centrally planned trade flows between the republics of the Soviet Union, trade between these countries is now probably settling at new equilibrium levels. Statistics in this area are not totally reliable, since part of the trade between CCA countries, especially those with common borders, happens through informal channels and is therefore not registered. Statistics can also be somewhat obscured by re-exports of goods, primarily from China, by some Central Asian countries.



11. The product structure of Kazakhstan's trade has remained more or less unchanged since early 2000s. Kazakhstan remains an exporter of fuel and energy and an importer of machinery and food products (although domestic agriculture also accounts for a substantial share of GDP, and Kazakhstan is an important exporter of wheat). The new Development Plan to 2020 envisages an increase in the share of manufacturing in GDP, as well as measures to increase productivity in agriculture. Efforts will be directed to improving the business environment, modernizing enterprises, creating new high value added export-oriented sectors, and providing selective support to key industries, including telecommunications and transport. The impact of these measures on the structure of Kazakhstan's trade remains to be seen.

⁴ Another notable outlier is Azerbaijan, also a large energy producer and exporter. When Kazakhstan and Azerbaijan are excluded, intra-CCA trade accounts for about 15 percent of total exports and imports of the region, still a relatively low number, but significantly above that for Kazakhstan.

D. The Customs Union with Russia and Belarus

12. **In November 2009, the governments of Belarus, Kazakhstan and Russia signed an agreement to create a customs union.** The authorities see it as the first step to a single economic space, which they plan to create by 2012.⁵ While driven primarily by political considerations, this new arrangement is intended to maximize the benefits of the already strong trade relationship and an enlarged market. The agreement came into force in January 2010, when the three countries eliminated most duties on mutual trade, and moved to harmonize customs rules. In July 2010, member countries adopted a common customs code, finalized customs rules, and began to redistribute collected duties.⁶

13. **As noted above, Russia is already a key trading partner of Kazakhstan, accounting for about 20 percent of total trade.** The customs union should allow Kazakhstan to benefit from greater access to the large Russian market and the eventual free movement of labor and capital. In particular, agricultural and commodity exports should benefit from the removal of customs duties. At the same time, the potential increase in these exports, and the possible exposure of the manufacturing sector to competition from more established Russian companies, could affect Kazakhstan's plans for economic diversification. In addition, trade diversion may arise since—as part of the agreement—Kazakhstan's import tariffs on most goods from outside the union were increased to Russia's levels.⁷ The Ministry of Economy estimates that Kazakhstan's average tariff rate for industrial products increased from 4.6 to 8.5 percent, and for agricultural products from 12.1 to 16.7 percent.⁸ Higher tariffs provide a boost to fiscal revenues through Kazakhstan's share of customs duties—the authorities estimate the impact at additional 0.3 percent of GDP in revenues in 2010.

14. **A number of issues still need to be resolved to achieve free trade of goods and services within the borders of the union.** While member countries have agreed on mutual recognition of import certificates from other countries, in practice these agreements still need to be fully implemented. Registries of suppliers from other countries reportedly still need to be synchronized. In addition, transport tariffs differ significantly between the members of the

⁵ A single economic space is intended to provide for the free movement of all factors of production and set the basis for coordination of macroeconomic policies across member states. The authorities of Kazakhstan and Russia envisage the creation of several supra-national bodies by 2013-14, although the details have not been announced yet.

⁶ Kazakhstan's share of total customs duties collected in the customs union has been set at 7.3 percent. Russia's share is 88 percent, Belarus's is 4.7 percent.

⁷ According to WTO, the average tariff rate in Russia is currently around 10½ percent. Jandosov and Sabyrova (2011) estimate a significant increase in Kazakhstan's indicative aggregate level of tariff protection after entering the customs union.

⁸ These are simple (not trade-weighted) averages of tariff rates with countries outside of the customs union.

union, and are subject of intense negotiations. These issues will need to be resolved to ensure achievement of the full benefits of free trade between the member countries.

15. Since the customs union has been in operation for less than a year, it is too early to evaluate the impact on the direction of Kazakhstan's trade. Some trade diversion effects could be expected in the long term, as higher import tariffs may induce Kazakhstani importers to start switching to suppliers within the customs union. These effects are likely to be small, however, since trade with other CCA countries is already minimal, while China holds a large cost advantage compared to alternative suppliers, and trade with it is not likely to be affected by an increase in tariffs.

16. The impact of the customs union on some of the small neighboring countries could be more significant. Apart from the increased official tariff rates, a relatively liberal regime for shuttle or “suitcase” border trading has been replaced with more restrictive rules (Kaminski and Mironova, 2011).⁹ This could adversely affect trading through non-standard channels, which consists mainly of (a) consumer products imported from outside Central Asia, primarily China, Turkey, India, Iran and South Korea; and (b) locally produced agricultural and industrial goods, including clothing manufactured in Kyrgyz Republic and Tajikistan. This trade is not very significant relative to Kazakhstan's total volume of trade, but it is an important source of income in some neighboring Central Asian countries. Possibly in response to this adverse impact, the Kyrgyz Republic and Tajikistan announced that they are interested in joining the customs union in the near future.

17. International experience of successful trade agreements shows that regional integration works better if conceived as a stepping stone toward multilateral trade liberalization. To succeed, the integration process needs to ensure continued reduction in external tariffs; design and implementation of simple and transparent rules with comprehensive product coverage; and effective implementation of the regional agreements. In that regard, it is encouraging that the Kazakhstani government continues to pursue WTO accession negotiations, albeit from a harmonized position with the other customs union members. The authorities view the WTO accession as a key economic priority, and accession negotiations have continued after the creation of the customs union.¹⁰

⁹ Prior to July 2010, the simplified regime was based on a single customs fee (including VAT) of €0.6 per 1 kg for the light industry goods and 13 percent of value for fruits and vegetables. This was replaced by a general regime with ad valorem tariff rates of 10 to 20 percent, but not less than € 1-4 per kg depending on the product (Kaminski and Mironova, 2011).

¹⁰ The negotiations are mainly focused on the conditions of access to Kazakhstan's markets for goods and services and on agricultural issues. The authorities expect to conclude bilateral negotiations with most partners by end-2011.

E. How to Further Improve Trade

18. **It is generally accepted that growth prospects for developing countries are enhanced by an outer-oriented trade regime.** Outer-oriented trade policy is an important component in the set of policy prescriptions for development (Krueger, 1997). This consensus is based both on economic research¹¹ and on the empirical evidence of many countries that achieved fast economic development through outward oriented policies.

19. **With traditional tariff and non-tariff barriers substantially reduced, the main remaining impediments to further expansion of Kazakhstan's trade are institutional in nature.** In recent years, researchers and policymakers have come to recognize that inadequacies of the institutional market environment have become increasingly important determinants of trade openness.¹² The literature suggests that improving the institutional quality could have a significant positive impact on trade.¹³ This impact is likely to be especially important for landlocked countries, whose relative geographic isolation makes trade more expensive. Improving the quality of trade-related institutions in these countries provides them an opportunity to compensate somewhat for the geographic disadvantages. Furthermore, there are indications that the impact of institutional improvements is the greatest for exports of highly sophisticated, more differentiated and high technology products.¹⁴ This is important for countries like Kazakhstan that are aiming to reduce the dependence on exports of natural resources and diversify their manufacturing base.

20. **In Kazakhstan, progress in improving the quality of trade-related institutions has been slower than desired.** While improvements in the general business environment, in particular simplifying procedures and reducing costs of starting a business, have been achieved, in the area of trading across borders progress has been rather limited. As a result, compared to other transition economies, Kazakhstan ranks rather poorly on indicators of the ease of trading across borders. As the figures in Annex II.1 show, the large number of documents required for exporting or importing, and the long time required for preparation of those documents are the key factors that differentiate Kazakhstan (as well as other CCA countries) from the most dynamically developing countries of Central and Eastern Europe, as well as East Asia. This is due in some cases to slow procedures and to the large number of

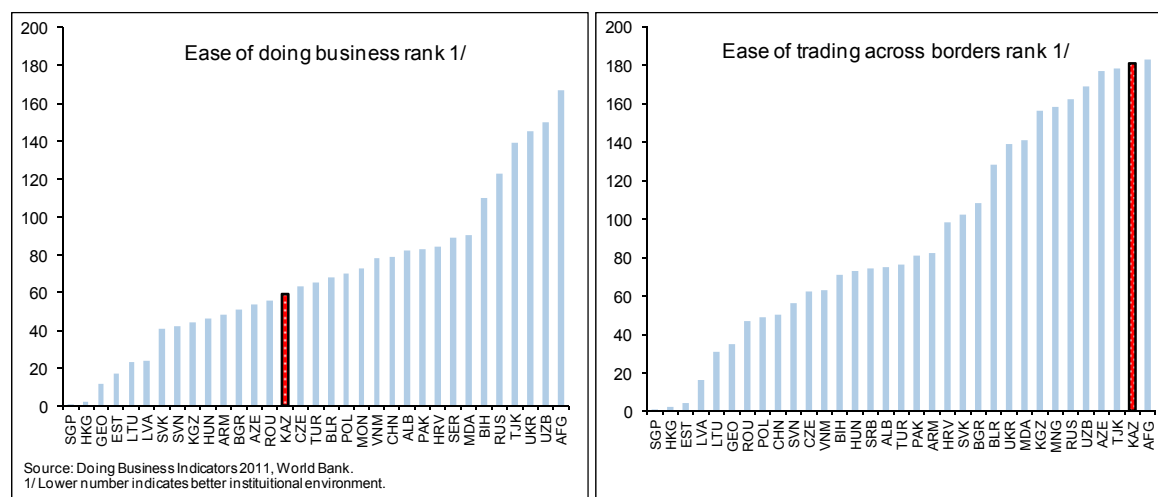
¹¹ See Srinivasan (2001) for a summary. Other key studies include Berg and Krueger (2003) and Dollar and Kraay (2002).

¹² Havrylyshyn (2010) summarizes existing literature on the importance of institutional impediments to trade, and assesses the relative position of CAREC countries with respect to the quality of institutions.

¹³ For example, Hoekman and Nicita (2008).

¹⁴ Felipe and Kumar (2010) show it for the Central Asian countries. They also show that there are significant potential gains from improving trade facilitation in these countries.

agencies that must approve such documents. As a result, costs of exporting or importing goods remain high, and prevent trade from expanding further.



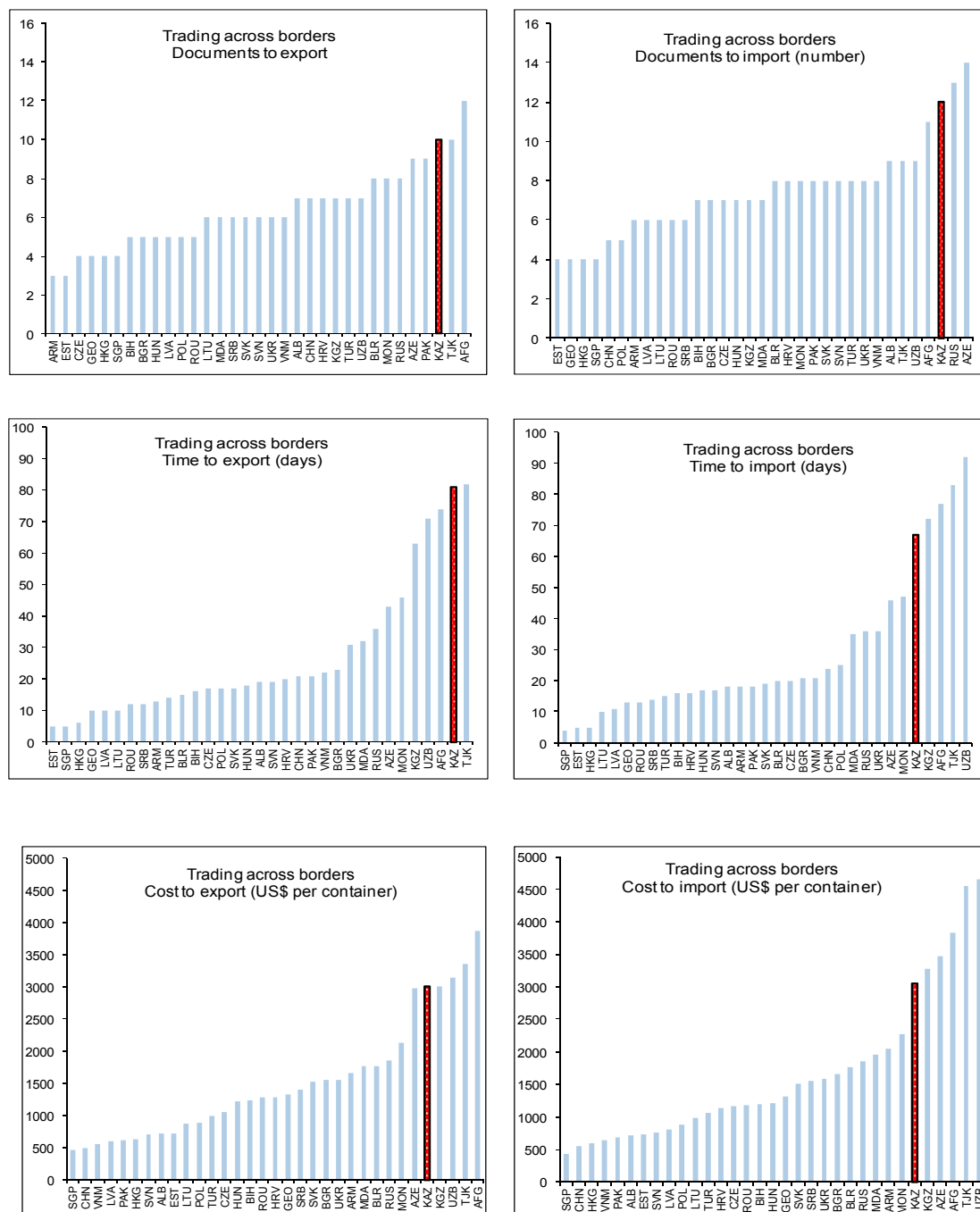
21. **The authorities recognize the need to improve the institutional quality in the trade area, and have started to take steps in that direction in recent years.** In particular, progress has been achieved in simplification of customs procedures, customs modernization, and customs data exchange with neighboring countries. Kazakhstan also has ongoing pilot programs on Joint Customs Control with China and Kyrgyz Republic. Many of these measures have been taken in the context of the trade facilitation program under CAREC. Reduction of institutional impediments to trade has also become one of the main priorities of trade policy work under the CAREC program. However, further improvements are clearly needed with special emphasis on reducing the costs of exports and imports, by further simplifying procedures, and cutting the number of documents required to export or import, as well as the number of clearing agencies.

22. **At the same time, further steps to reduce traditional tariff and nontariff barriers would also be useful.** It is important to ensure that the tariff increase resulting from the customs union does not slow Kazakhstan's progress in liberalizing its trade regime. Further steps could be taken to eliminate remaining export and import restrictions, simplify the tariff structure, and gradually reduce the non-tariff barriers (including all export and import restrictions, and all forms of government subsidies), possibly in coordination with other members of the customs union.

ANNEX II. 1. TRADING ACROSS BORDERS INDICATORS

The set of charts below shows the relative position of Kazakhstan compared to other economies in transition for various components of the Ease of Trading Across Borders indicator.

Annex 1. Kazakhstan: Trading Across Borders Indicators



Source: Doing Business Indicators 2011.