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The System of Indicators of Eurasian Integration

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Edited by Evgeny Vinokurov

The Eurasian Development Bank is an international financial institution established to promote economic growth and integration processes in Eurasia. The Bank was founded by the intergovernental agreement signed in January 2006 by the Russian Federation and the Republic of Kazakhstan. In April 2009 Armenia has completed all the admission procedures and became the third full member of the Bank. Next, in June 2009 Tajikistan joined the Bank. The Agreement on Establishing the Eurasian Development Bank has come into force for Belarus, it is in the process of finalising the required admission procedures. Electric power, water and energy, transportation infrastructure and high-tech and innovative industries are the key areas for Bank's financing activity.

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Foreword

What is the System of Indicators of Eurasian Integration for?

CIS countries are a natural zone of common interests. The integration of the former Soviet countries is driven by objective economic reasons. In the recent past, these countries albeit notable differences, formed a single political, economic and cultural space. Much of their common heritage has been preserved.

The current financial and economic crisis hit hard the region's economic development and regional integration alike. However, apart from the expansion of protectionist policies, which is a cause of growing concern, there were some positive developments. Particular mention should be made of the establishment of the Customs Union of Belarus, Kazakhstan and Russia, the decision to move toward the Common Economic Area of these three countries by 2012, the establishment of the EurAsEC's Anti-Crisis Fund, and the negotiations over the proposed Grain Pool. The crisis forced all countries to take a more careful stance in their foreign affairs and pursue a more pro-active foreign trade policy. In this context, efficient monitoring and evaluation of integration dynamics and trends becomes a priority.

By publishing this first Report on the System of Indicators of Eurasian Integration (SIEI), we hope to lay the foundations of a new long-term project. It is expected that from now on the EDB will collect data and calculate the indicators on an annual basis. The respective reports will be made available to state bodies, international organisations, scientific circles, the mass media and the general public. The benefits and the "media effect" of the SIEI will be multiplied even further if these calculations are produced on a systematic basis over a lengthy time span.

The data presented in this first edition of the SIEI illustrates the dynamics of integration between 1999 and 2008. This period is used as a benchmark in studying the development of post-Soviet countries after the "Big Bang" of the 1990s. Another important challenge that we have set ourselves is to trace and demonstrate the main trends of integration of the rapidly evolving post-Soviet economies and societies, the activities of integration institutions, and the effect of integration initiatives and decisions.

We hope that the comprehensive picture of the EDB's SIEI based on an elaborate measurement and evaluation method will be well received and prove instrumental, not only as an academic exercise, but also as a tool for formulating internal and external policies, thus assisting integration in Eurasia.

Director for Strategy and Research,   **Vladimir Yasinskiy**
Member of the Executive Board, EDB

Acknowledgements

Greetings

Dear friends,

The Eurasian Development Bank is pleased to present the results of its first full–scale research project, the System of Indicators of Eurasian Integration. The objective of this project was to develop a tool for measuring the dynamics of Eurasian integration, and it occupies a special place among the Bank's research products. This tool for comprehensive monitoring and systematic evaluation of integration dynamics is now available.

To the EDB, this project is of particular importance because of its strategic goals of assisting integration of its member states and becoming an analytical centre on integration problems. The project's success and follow–up will principally depend on support from integration groups that possess the data forming the core of the SIEI. The project involved a great deal of work by experts from the CIS, EurAsEC, an international working group, and the Bank. Our constructive interaction with the key integration groups reached new heights. We are counting on continuing support for our project and expanding cooperation with our partners.

We hope that, with the help of our colleagues, the cause of Eurasian integration will be advanced, and the proposed system of indicators will become a useful tool for formulating strategies and policies for political, economic and social cooperation between the region's countries.

Chairman of the EDB Executive Board **Igor Finogenov**

Dear friends,

Over the next few years the member states of the CIS will be required to put more effort into the sustainable development of national economies, energy security, and improvement of the population's living standards.

Coordination of the members' activities aimed at furthering economic integration and fighting the crisis is almost not possible without the systematic monitoring of basic macroeconomic indices using modern methodology, indicator systems, and other analytical tools.

In this context, the EDB's initiative to develop the System of Indicators of Eurasian Integration, which will cover all aspects of the integration of markets, economic convergence, and institutional cooperation, deserves to be supported.

The Executive Committee and Interstate Statistics Committee of the CIS were directly involved in the project, and their results are presented in this report.

I am sure that this EDB project will be duly assessed, and the SIEI will be widely used by governmental agencies and market players in the CIS and elsewhere.

Executive Secretary of the CIS   **Sergei Lebedev**

The integration initiatives that the Eurasian Economic Community promoted during the last decade became a real mechanism of regional cooperation, and gave rise to new economic relations that strengthened the socioeconomic stability of the member states.

The EurAsEC has achieved a remarkable breakthrough in the inception of the Customs Union of Belarus, Kazakhstan and Russia.

In practical terms, the creation of a common customs territory will mean the application of unified import tariffs for all goods, the elimination of customs borders between the Union members, and the transfer of all state controlled functions (except border guarding) to the external border of the Union. According to experts, the elimination of customs and other administrative barriers to mutual trade will assist economic growth and secure an additional 15–20% increase in GDP for member states by 2015.

The heads of EurAsEC member states are making concerted efforts to overcome the current financial and economic crisis. To this end, the EurAsEC's Anti–Crisis Fund was founded.

The Fund will assist its member states in overcoming the consequences of the global crisis by providing sovereign loans to them; provide stabilising loans to low–income member states; and finance international investment projects. Just as importantly, the Fund will support the activities of the Centre for New Technologies that the EurAsEC is creating as part of its efforts to assist the rehabilitation and growth of member states' economies.

As a result, this publication of the System of Indicators of Eurasian Integration by the EDB is particularly relevant. This study sheds light on the mechanics and directions of integration processes in the post–Soviet space, and illustrates the efficiency of joint integration efforts in the EurAsEC.

The EurAsEC and EDB comanage the Anti–Crisis Fund and various initiatives of EDB's Technical Assistance Fund. We are always searching for opportunities to cooperate in the best interests of EurAsEC economies.

General Secretary of EurAsEC **Tair Mansurov**

Main Conclusions

1. General Conclusions

Our analysis of the dynamics of SIEI measurements over the past decade prompted the following four conclusions.

First, **integration in the post–Soviet space progresses at an uneven pace, both geographically and structurally**. In recent years, there was a sharp upturn in labour migration and student exchange, whilst integration in the trade, energy and agriculture sectors slowed down and the macroeconomic indices of post–Soviet countries were becoming increasingly divergent. It should be understood, however, that these negative trends are partially attributable to the rapid pace of growth of the post–Soviet economies, i.e. an economy's size grows faster than its ties with other economies.

Second, **the consolidated integration index for CIS–12 suggests that the level of integration has decreased; at the same time, EurAsEC–5 (and especially its core, EurAsEC–3) has become more integrated in the 2000s**.

Third, **leadership in integration ratings belongs to small countries – Kyrgyzstan, Armenia and Tajikistan**. The consolidated index of integration for larger countries, especially Russia, is much lower. Again, the reason is the larger economy size which renders the relative role of economic ties with other post–Soviet countries less important. With a few exceptions, the ratings of post–Soviet countries' involvement in regional integration remained stable over the decade. In parallel with that, the level of integration within some groups of post–Soviet countries, as the respective consolidated indices show, vary considerably, which is attributable primarily to the dynamics of economic convergence. The indices of integration of markets also remained stable during the last decade.

Forth, **integration of markets in the CIS is characterised by the existence of distinct spatial clusters**. Particularly, the level of integration in the energy, agriculture and education sectors is higher in Central Asia than in the rest of the post–Soviet space, although this difference shrinks over time. In terms of trade and labour migration, the most intensive interaction normally develops between neighbouring countries. Notably, Russia is not the sole "integration centre" in the post–Soviet space: for example, Kazakhstan has become a desirable destination for many migrant workers from other countries. There is no indication, however, that spatial clusters have any significance for the convergence of post–Soviet economies whose dynamics is determined principally by the evolution of their domestic economic policies.

2. The System of Indicators

The EDB's System of Indicators of Eurasian Integration consists of three sets of indices which correspond to the three main aspects of regional cooperation:

(a) analysis of regional integration as the *integration of markets*. In this case, the integration of countries is assessed from the point of view of mutual flows of commodities, services and production factors. This set includes two groups of indices:

- general indices: trade integration and labour migration integration;

- functional integration: integration in the three key socioeconomic sectors of CIS countries (electric power, agriculture, and education).

(b) analysis of regional integration as the *convergence of economic systems*.

In this case, the subject of evaluation is the convergence of the countries' main quantitative development characteristics in four key areas: macroeconomics (growth dynamics), financial policy, fiscal policy, and monetary policy;

(c) analysis of *institutional cooperation*. In this case, the subject of evaluation is the countries' performance in formal integration projects within the post–Soviet space, taking into account the broad range of goals of the respective structures.

Integration of markets	Convergence of economic systems	Institutional cooperation
Indicators of regional integration in **trade, labour migration, electric power, agriculture, and education.** *Assessment of the level and dynamics of the integration of markets*	Indicators of regional integration in **macroeconomics and financial, fiscal and monetary policy.** *Assessment of the level and dynamics of the convergence of economies*	Assessment of cooperation based on **expert poll and data from integration organisations.** *Cooperation of countries in formal integration projects within the post-Soviet space, taking into account their respective goals*
• Consolidated index of integration of particular countries with the CIS-12 region • Consolidated index of integration within the five regions		

Figure 1.

Composition of SIEI

The integration of markets and the convergence of economies are assessed using a system of consolidated indices which are calculated using national statistics. The evaluation of institutional cooperation is based on an expert poll carried out by the EDB and data supplied by various organisations, and is less formalised. Where regional integration is being considered as the integration of markets or the convergence of economies, three types of indices are calculated: (i) integration of country pairs; (ii) integration of a country with a group of countries; and (iii) integration within a group of countries. Each of these indices needs to be interpreted separately.

The integration of country pairs characterises the extent to which two particular post–Soviet countries are interconnected by means of cross–border trade or migration, or as a result of convergence of their economic indices.

The integration of a country and a group of countries characterises the convergence of any of the twelve post–Soviet states and any of the five large regions within the post–Soviet region; these regions may be of particular interest from the point of view of practical integration activity and each include several countries. The experience of implementing regional projects in the post–Soviet space (successful or less successful) has allowed us to define five of these regions:

1. CIS–12 (all post–Soviet countries);

2. EurAsEC–5 (the five members of EurAsEC: Russia, Kazakhstan, Kyrgyzstan, Belarus and Tajikistan);

3. EurAsEC–3 (the three largest EurAsEC countries that are making attempts at forming an "integration core" in the region: Russia, Kazakhstan and Belarus);

4. SES–4 (group of the four largest post–Soviet economies: Russia, Ukraine, Belarus and Kazakhstan, so called after the inconclusive project to form a Single Economic Space in the same format in 2003–2004);

5. CA–4 (the four Central Asian states participating in integration projects in the region: Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan. Turkmenistan is excluded as it does not take part in CIS and Central Asian integration).

Integration within a group of countries is viewed as a "mean" level of inter–dependence of countries belonging to any of the five regions, including any changes in the level of integration over time.

Generally, the SIEI includes nine indices of regional integration: trade, labour migration, electric power, agriculture, education, macroeconomic convergence, monetary policy, fiscal policy, and financial policy, and a number of cooperation indices based on an expert poll. The first five indices characterise the level and dynamics of integration of markets, and the other four the level and dynamics of economic convergence.

Some aspects of integration cannot be mapped onto each other, and connections between them are not straightforward; therefore, for the purposes of the SIEI, the focus should be on separate indices rather than their aggregates. However, we have developed two types of consolidated indices that give a wider picture of regional integration in the post–Soviet space and include all the nine indices: the consolidated index of a country's integration with CIS–12, and the consolidated index of a country's integration within any of the five regions. The overall structure of the SIEI is shown in *Table 1*:

	Integration of markets		Economic convergence	Regional cooperation	Consolidated indices
	General indices: trade and labour migration	Functional integration: education, agriculture and energy	Macroeconomic conversion, financial policy, fiscal policy, and monetary policy	Set of informal indices based on an expert poll	
Country to country	X	X	X		
Country to region	X	X	X (weighted and non-weighted indices)		Index of a country's integration with CIS-12
Region	X	X	X		Index of integration of five regions
Formal integration projects				X	

Table 1.

The structure of the SIEI

The indices of market integration and economic convergence were calculated for 1999–2008 (where possible; some early data is missing). The evaluation of regional cooperation is provided as at the time of this report.

3. Leaders of Integration in the Post–Soviet Space

Figure 2 shows the consolidated indices of integration of individual countries with CIS–12. The indices are calculated for 2008 and 2002 (i.e. the present time and the first year of observation that data on all the nine integration aspects is available for), for ten post–Soviet countries.

Uzbekistan and Turkmenistan were excluded due to a lack of data. Higher value of the index corresponds to higher level of integration. The values vary within a range of −1 to 1. The scale is calibrated so that the mean value corresponds to zero: accordingly, countries with a low level of integration have negative indices and highly integrated countries have positive indices.

Figure 2.

Consolidated indices of integration of post-Soviet countries with CIS-12 (2002 and 2008)
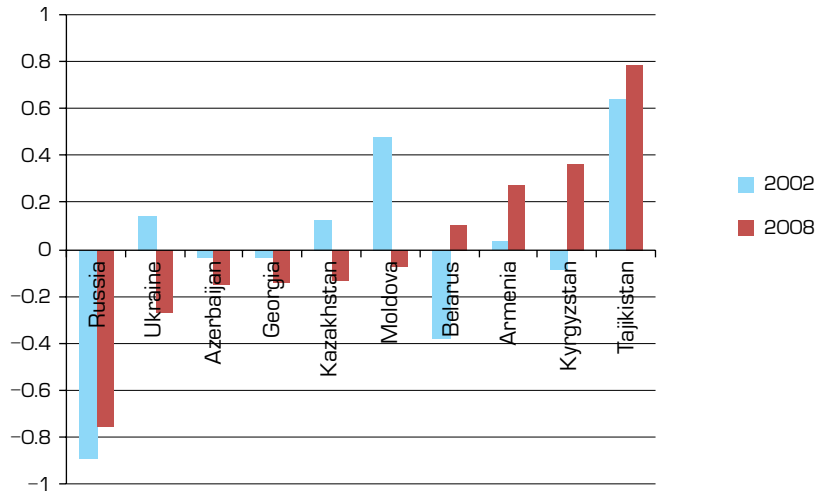
In the above chart we can easily identify three unquestionable leaders.

Tajikistan remains the country which is most integrated with the rest of the post–Soviet space. This can be explained by the exceptional importance of trade (first of all, with Russia) for Tajikistan and its active part in labour migration. Cooperation with other post–Soviet countries in the key sectors of functional integration, especially electric power, is critical to Tajikistan. Its high rating is due to its natural characteristics: small size, absence of any hydrocarbon export potential, and landlocked location. Tajikistan plays an active role in most integration groups in the post–Soviet space.

Kyrgyzstan and **Armenia** ranked second and third, respectively, in the 2008 rating. Integration of these small countries with the post–Soviet space was on the increase during the last six years. Kyrgyzstan is widely involved in trade and labour migration, and benefits considerably from integration in the education and agriculture sectors. Unlike Tajikistan or Armenia, Kyrgyzstan does not view Russia as the only principal partner, and integration with neighbouring Kazakhstan is just as beneficial to this country. Like Tajikistan, Kyrgyzstan is an active member of all key integration groups within the CIS. Armenia is primarily interested in trade integration, which has progressed remarkably in recent years. Armenia's part in formal integration projects is somewhat limited, partly due to the obligations imposed by the WTO; however, its interest in integration with other post–Soviet countries remains strong.

The countries in the fourth and fifth positions in the rating, **Belarus** and **Moldova**, demonstrate directly opposite integration dynamics. The level of Moldova's integration with the CIS countries dropped sharply, and the country fell from second to fifth position among the ten post–Soviet states. At the same time, this index grew considerably for Belarus. The latter, traditionally, has been one of the key players that determined the destiny of post–Soviet integration, and the Belarusian economy is closely connected with that of Russia. Moldova, by contrast, has always been sceptical of integration in the post–Soviet space, and has not participated in any large integration project (with the exception of GUUAM and the CIS proper).

Kazakhstan, Azerbaijan, Ukraine and **Russia** round out the rating. These are large economies with a diverse structure of foreign trade, in which economic ties with the post–Soviet space tend to become less important. These are fairly rich countries; three of them are exporters of fossil fuel (Kazakhstan, Azerbaijan and Russia). Only Kazakhstan and Russia play active roles in formal integration initiatives. Azerbaijan and Ukraine, by contrast, have always taken a restrained stance towards integration projects within the CIS and have consented to very limited participation (e.g., for Ukraine, the limit of their participation is the free trade zone). That Russia occupies the last place in this rating should not be a surprise: this, the largest post–Soviet economy, stands on a par with the rest of the post–Soviet space in terms of population size, and outdoes it in terms of GDP. **Georgia** also belongs to this group of "lagging" countries, mainly due to political reasons.

> **At present, the leaders of integration in the post-Soviet space are Kyrgyzstan, Tajikistan and Armenia – three small countries that have strong economic ties with their neighbours.**

General conclusion is that the distribution of post–Soviet countries by the consolidated index remains stable: the groups of leading and lagging countries have not changed much since 2002. This suggests, on the one hand, that the economic ties within the CIS are fairly stable, and on the other hand, that the lagging countries (i.e. the largest economies) do not make full use of their integration potential.

The second exercise was to calculate consolidated indices of integration within the five regions that we had selected for the purposes of our analysis. *Figure 3* shows the results of the calculations for 2002–2008 (i.e. the period for which data is available for all nine aspects of integration). Again, the index varies within a range of −1 to 1 and the mean value corresponds to zero. Negative indices correspond to low level of integration and vice versa. There are three main trends. First, the level of integration within CIS–12 has reduced compared with the other groups. Second, the level of integration of CA–4 and SES–4 remains unchanged. And, third, EurAsEC–3 and especially EurAsEC–5 demonstrate generally positive dynamics of regional integration and cooperation. By 2008 EurAsEC–3 surpassed all other groups, and this group is now the absolute leader in integration all over the post–Soviet space (which is not only attributable to the growth of the EurAsEC–3 index, but also to a decrease in the SES–4 index). EurAsEC–5 still occupies the lowest position in the rating, although its performance improved considerably.
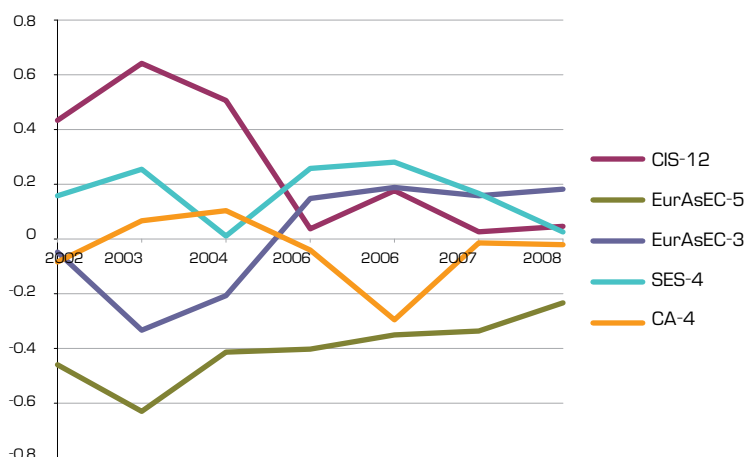
Figure 3.

Consolidated indices of integration of five groups of countries within the post-Soviet space (2002–2008)

4. Integration of Markets

The results of integration in particular areas are as follows. During the period under review, integration increased in labour migration and education; at the same time, there was a decrease in the trade, energy and agriculture indices. These results are partly due to the selected "basis for comparison": population growth in the region is apparently slower than GDP growth. At the same time, this situation indirectly proves that the extensive social integration of post–Soviet countries has been preserved or has even increased – social integration creates potential catalysts for integration in other areas.

It was not possible to identify any unquestionable leaders in all aspects of integration among country pairs or groups. Moreover, the structure of mutual links varies greatly across different CIS markets. To some extent, this is illustrative of the diversity of interests and resources involved in integration in the CIS. The leaders in terms of integration with CIS–12 in various categories are Belarus, Kyrgyzstan and Tajikistan – the most active participants in post–Soviet integration projects. The countries showing the biggest increase in integration levels are Kyrgyzstan, Tajikistan and Ukraine.

In all the three areas of functional integration (energy, agriculture and education), integration levels are much higher in Central Asia than in the post–Soviet space in general, which can be explained by the existence of extensive infrastructural links and a common social space. However, the dynamics of regional integration was negative in all these cases.

As for trade and labour migration, the level of integration of markets in Central Asia is lower than in the CIS in general. With a few exceptions (e.g., in education), the dynamics of integration in large regions followed the overall trend dictated, apparently, by the largest post–Soviet economies. At the same time, the difference between integration levels in particular regions (again, with a few exceptions) remained stable during the last decade.

Table 2.

The dynamics of integration of markets in the post-Soviet space

Note:
an increase in the index (↑) is interpreted as an increase in integration

Index	Leading country pair (2008 index)	Leading country pair (increase in index)	Leading country in integration with CIS-12 (2008 index)	Leading country in integration with CIS-12 (increase in index)	General dynamics of integration in CIS-12
Trade	Russia–Ukraine	Kazakhstan–Ukraine	Belarus	Kyrgyzstan	↓
Labour migration	Kazakhstan–Kyrgyzstan	Kazakhstan–Kyrgyzstan	Tajikistan	Tajikistan	↑
Energy	Uzbekistan–Tajikistan	Russia–Ukraine	Tajikistan	Ukraine	↓
Agriculture	Kazakhstan–Azerbaijan	Kazakhstan–Turkmenistan	Kyrgyzstan	Turkmenistan	↓
Education	Kyrgyzstan–Uzbekistan	Uzbekistan–Kazakhstan	Kyrgyzstan	Kyrgyzstan	↑

The geographic proximity of Central Asian countries does not directly influence **trade integration**, and the leaders in terms of trade integration with CIS–12 are Belarus, Kyrgyzstan, Tajikistan and Moldova – that is (except Belarus), comparatively small economies with no access to global markets. The reasons are obvious. Although the CIS–12 markets are priorities for Belarus,

Tajikistan and Moldova, for the larger economies in this region, trade with these small countries is less important quantitatively than trade with other partners. And, since the SIEI focuses on symmetric integration, this automatically reduces the index. The lowest levels of integration with CIS–12 are demonstrated by Azerbaijan and Russia, whose main interests lie outside this region's markets.

There was an increase in the labour migration and education indices and a decrease in the trade, energy and agriculture integration indices.
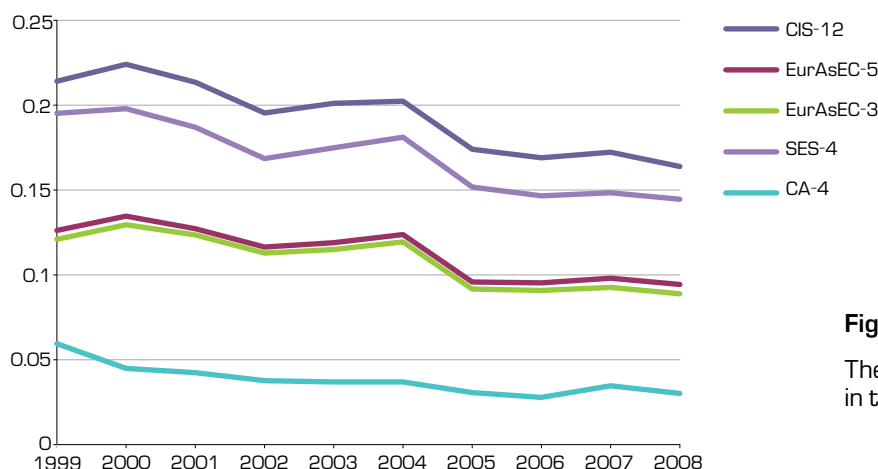
Figure 4.

The dynamics of trade integration in the five regions

In **labour migration** in CIS–12, the leader is Tajikistan, which can be attributed to the large outflow of labour resources to Russia in relation to the country's own population. The next three positions are occupied by Kyrgyzstan, Moldova and Armenia. Notably, the lowest labour migration index belongs to Belarus. In other words, the integration of different post–Soviet markets is non–uniform, i.e. intensive commodity exchange does not necessarily lead to dynamic movement of factors of production.
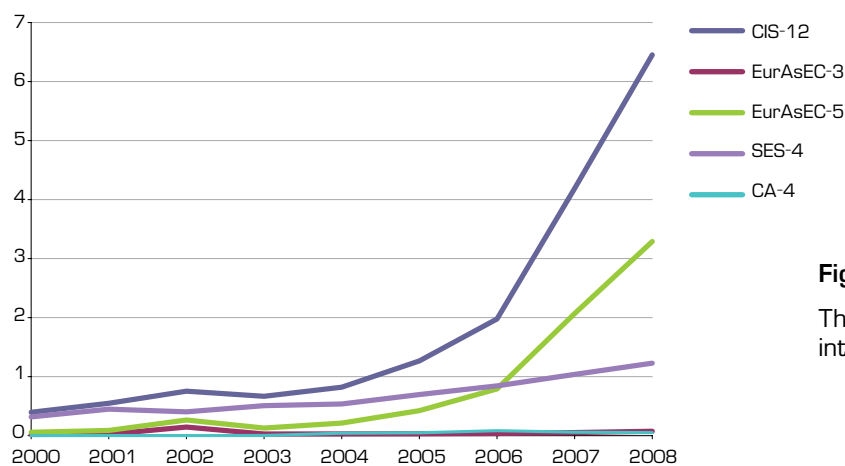
Figure 5.

The dynamics of labour migration integration in three regions

In all the three areas of functional integration (energy, agriculture and education), integration levels are much higher in Central Asia than in the post–Soviet space in general, which can be explained by the existence of extensive infrastructural links and a common social space. However, the dynamics of Central Asian regional integration was negative in 2000s.

The dynamics of trade in **electric power** in the post–Soviet space lags far behind the growth of CIS economies. In most country pairs, this index shrank during 2002–2008. The only exception was Ukraine whose integration with EurAsEC–5 and EurAsEC–3 progressed slightly, whereas its integration with CIS–12 slowed (this process is also driven by trade in electric power with Russia). The dynamics of integration in the regions also follows these trends. The energy integration index was decreasing in all five regions over the last seven years. This decrease was especially pronounced in CA–4 which, nonetheless, remains a leader in integration of electric power markets. It should be stressed that we are speaking about integration of power markets lagging behind economic growth, not the shrinkage of absolute trade figures. Paradoxically, the negative dynamics of this index, in our opinion, can be explained by the rapid economic growth of the region during the decade under review. The countries mainly used the generated power domestically, and reduced export volumes when necessary. The creation of a common electric power market in the CIS is expected to help overcome this trend.

Figure 6.

The dynamics of energy integration in the five regions
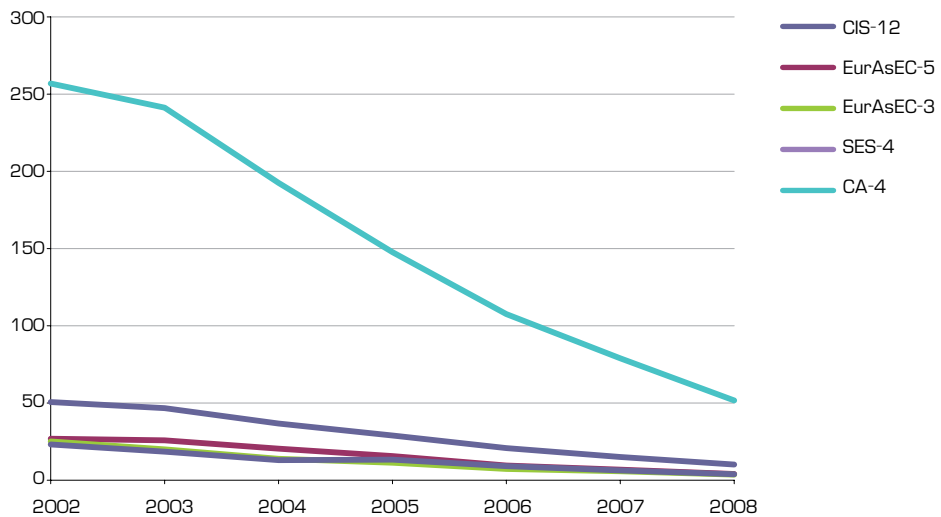
The leader in **agriculture integration** (based on data on cross–border trade in cereals) in the post–Soviet space is Kazakhstan. This country is present in all three leading country pairs: Kazakhstan–Azerbaijan, Kazakhstan–Turkmenistan and Kazakhstan–Kyrgyzstan. In this case, integration of neighbouring Central Asian and Caspian states is presumably based on the export of cereals from Kazakhstan. Kyrgyzstan is the leader in integration with CIS–12, which appears to be caused by the large volume of cereals export in relation to its economic size. The lowest levels of integration with CIS–12 and other groups are demonstrated by Russia, due to its enormous economy and powerful agriculture sector. As with energy integration, trade in cereals in the post–Soviet space lags far behind the growth of national economies.
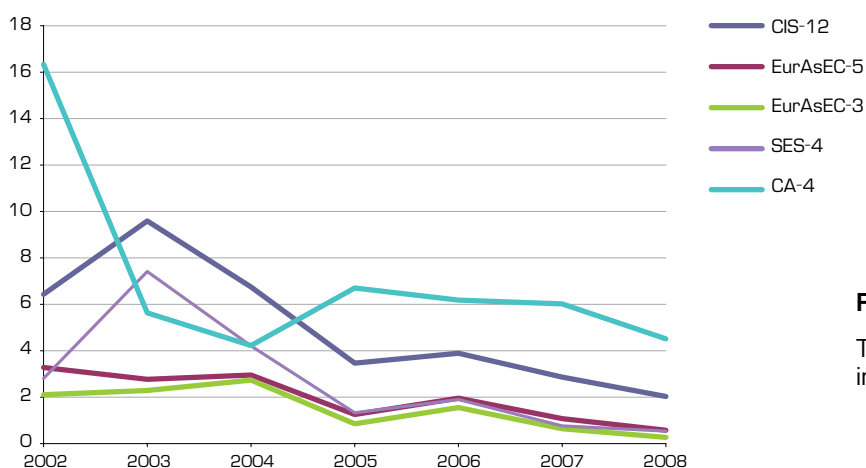
Figure 7.

The dynamics of agriculture integration in the five regions

For assessing **education integration** we used the number of students who study abroad. The most intensive student exchange is recorded between geographically and culturally close countries (Kyrgyzstan–Uzbekistan, Kazakhstan–Kyrgyzstan, Georgia–Armenia). Large countries like Russia or Ukraine are traditionally very attractive for students from all over the CIS, but their number remains insignificant relative to these countries' population. The highest index of integration with CIS–12 is demonstrated by Kyrgyzstan, and Kazakhstan ranks second. Belarus ranks third, and this appears to be due to student exchange with Russia. This exchange is rather negligible in relation to Russia's population size, yet it is important for Belarus. The same three countries (in reverse order) are leading in EurAsEC–5, EurAsEC–3 and SES–4 integration.

The patterns of student exchange (as far as university education is concerned) varied greatly across the CIS in the last nine years, depending on particular country pairs. The largest increase in this index was recorded in the Uzbekistan–Kazakhstan country pair, followed by Kyrgyzstan–Kazakhstan. As for the index of integration of countries with the five regions, positive dynamics was recorded in all country–region pairs. The biggest increase in integration with CIS–12 was demonstrated by Kyrgyzstan and Belarus. The same countries are leading in integration with SES–4, EurAsEC–3 and EurAsEC–5; and in CA–4 the leaders are Kyrgyzstan and Uzbekistan.
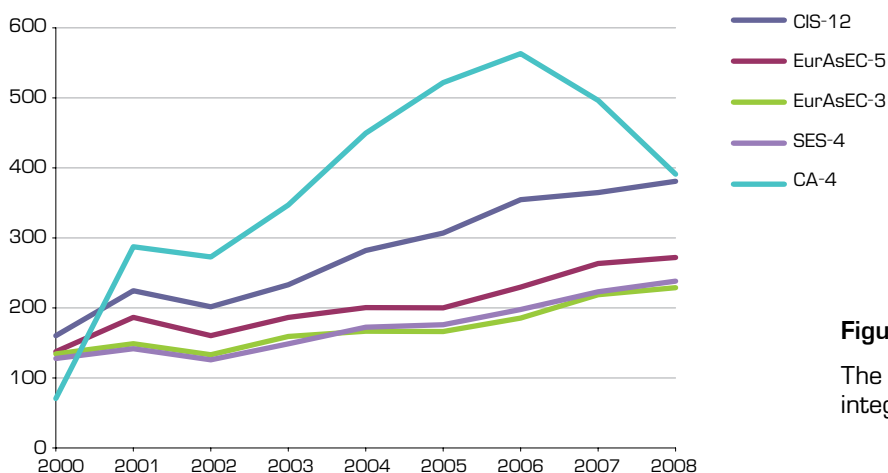
Figure 8.

The dynamics of education integration in the five regions

The most intensive student exchange is recorded between geographically and culturally close countries. The analysis of integration dynamics shows distinct positive trends.

The analysis of integration dynamics in five regions also shows distinct positive trends. The only exception is CA–4, in which the integration index decreased significantly in recent years. Nevertheless, CA–4 remains the leader in education integration over other regions.

5. Economic convergence

Unlike the integration of markets, the convergence of post–Soviet economies varies greatly depending on particular country pairs or country–region pairs. Convergence is largely not driven by any geographic factors, since the closeness of the parameters of the economic policies bears no relation to the geographic proximity of the converging countries. On the whole, we can conclude that the macroeconomic indices of post–Soviet states were diverging over the last decade, whereas their monetary policies converged.

In any case, the calculated results of economic convergence are somewhat less instrumental in identifying consistent and sustainable trends than in the case of the integration of markets. At the same time, the convergence of economies is an important characteristic, at least from the prospective of the potential for integration and cooperation, and therefore deserves scrutiny. The main results of our analysis are summarised in *Table 1.3*. It can clearly be seen that, *unlike the integration of markets, the convergence of economies is principally associated with factors lying beyond the integration process itself*. The key role belongs to reform strategies selected by particular countries, and macroeconomic regulation practices that make them become closer. However, it should be stressed that, for example, without the synchronisation of business cycles or comparable parameters of the monetary system the development of a well–coordinated policy for economic integration is not really possible. Therefore, internal economic processes that assist the convergence of countries should be viewed as critical aspects of integration.

Index	Leading country pair (2008 index)	Leading country pair (in terms of shortening the distance)	Leader in convergence with CIS-12 (minimum distance, 2008)	Leader in integration with CIS-12 (in terms of shortening the distance)	General dynamics of distance in CIS-12
Macroeconomics	Kyrgyzstan–Tajikistan	Moldova–Turkmenistan	Armenia	Georgia	↑
Monetary policy	Belarus–Tajikistan	Belarus–Tajikistan	Russia	Belarus	↓
Financial policy	Kazakhstan–Armenia	Kazakhstan–Armenia	Ukraine	Kazakhstan	→
Fiscal policy	Armenia–Uzbekistan	Armenia–Azerbaijan	Azerbaijan	Armenia	→

Table 3.

The dynamics of convergence of post-Soviet economies (data for non-weighted indices)

Note: increasing the distance (↑) means lowering the convergence level

From the point of view of **macroeconomic convergence**, calculations suggest that the macroeconomic indices of post–Soviet states tend to diverge rather than converge. The leaders in convergence are the comparatively small groups SES–4 and EurAsEC–3, and the maximum distances are demonstrated by

CA–4 countries; therefore, the dynamics of growth in Central Asia, even without Turkmenistan, varies greatly from one state to another. CA–4 has also demonstrated the biggest decrease in the macroeconomic convergence index in the past decade. By contrast, in SES–4 and EurAsEC–3, after the initial "push" towards divergence in 1999 (probably a result of the consequences of the 1997–1998 crisis), the index has remained at practically the same level.

The level of convergence of CIS economies does not really depend on the geographic distance between them. Unlike the integration of markets, the convergence of economies is principally associated with factors lying beyond the integration process itself.
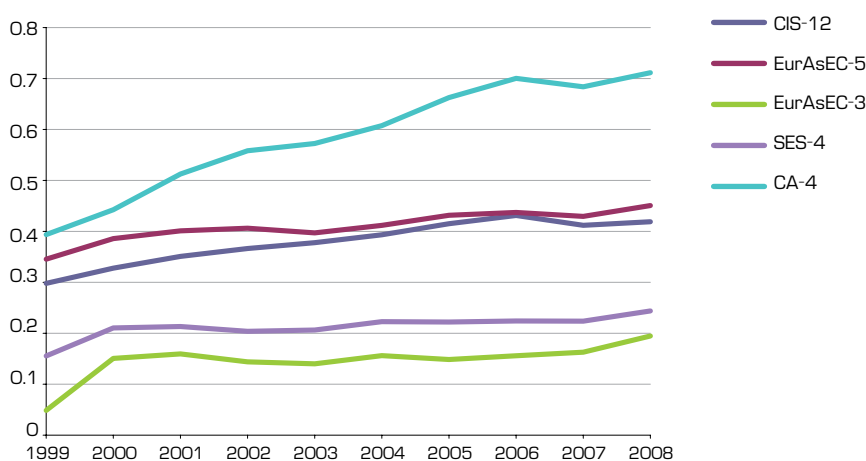
Figure 9.

The dynamics of macro-economic convergence in the five regions

Note:
an increase in the index is interpreted as a decrease in convergence

Our analysis of **monetary convergence** of country pairs, as with macroeconomic indices, suggests that the effect of internal economic changes prevails over that of cross–border cooperation. In 2008, the lowest distance was recorded in the Belarus–Tajikistan country pair. Kyrgyzstan–Azerbaijan ranked second. It is worth mentioning Ukraine–Moldova: this country pair has the highest level of divergence, yet it demonstrates a high level of integration in mutual trade. This can be explained by the differences in their monetary, credit and currency policies. At the country–to–region level, Russia has the least distance from CIS–12, followed by Belarus and Tajikistan. The greatest distance was recorded for Moldova. In EurAsEC–5 and SES–4, the least distance was recorded for Belarus, and in EurAsEC–3 and CA–4 for Tajikistan.

In contrast to the growth dynamics, the second decade after the disintegration of the Soviet Union became a period of convergence of the monetary policies of all the five post–Soviet regions. Whereas in the early 2000s there were considerable fluctuations in the indices of the five groups, since 2004 the indices have been practically identical and have stabilised at a very low level (the latter confirms the closeness of the indices). The dynamics can be explained by the convergence of the characteristics of the monetary and credit policies of all the countries and, to a lesser extent, the influence of global currency markets. It should be remembered that, in the beginning of the 2000s, CA–4 was far ahead of the other groups in terms of monetary policy convergence, but by 2002 demonstrated the highest level of divergence. At present, as we have mentioned, the differences between the regions are negligible.

Figure 10.

The dynamics of monetary policy convergence in the five regions

Note:
a decrease in the index is interpreted as an increase in convergence
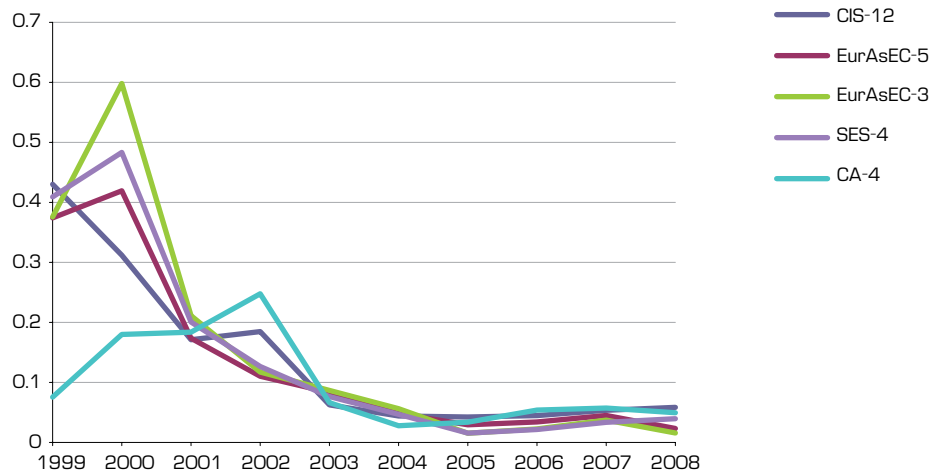
The characteristics of **financial policies** in the second half of the 2000s were converging in practically all the groups of countries. The only exception was CIS–12 whose divergence index remained practically unchanged. This scenario was determined by the development of national banking systems which resulted in their "qualitative breakthrough". The practice of cross–border investments by the banking institutions of Russia and Kazakhstan could have played a role in this, although this conclusion was not confirmed by a more detailed analysis.

The results obtained for the **fiscal policy** sector also suggest that convergence or divergence of countries does not depend on their geographic position, the level of integration of their markets, or their participation in integration groups. The index does not allow us to identify a trend towards the convergence or divergence of fiscal policies. There are significant differences between the national fiscal systems of CIS countries which reflect the differences between their macroeconomic regulation and state administration systems. Moreover, these systems remain highly unstable, which has a negative influence on internal economic development and the potential for integration alike.

We additionally calculated some weighted indices (each calculation method is described in the respective section). Generally, the leadership in convergence is held by large countries: in CIS–12, these are Kazakhstan (macroeconomics), Belarus (monetary policy), Ukraine (financial policy) and Russia (fiscal policy). This is a logical result as these countries principally determine the mean index. To an extent, another modified index serves to measure the convergence of large countries "with themselves". However, Russia does not always become the leader in convergence, and this means that the results are not straightforward. The greatest distances from CIS–12 are demonstrated by Turkmenistan (macroeconomics), Moldova (monetary policy) and Kyrgyzstan (financial and fiscal policy). These are either small or closed economies. Both approaches (weighted and non–weighted indices) have their merits and demerits. Therefore, economic convergence should be assessed by both methods, and the results should be treated as complementary.

From the point of view of macroeconomic convergence, calculations suggest that the macroeconomic indices of post-Soviet states tend to diverge rather than converge. The leaders in convergence are the comparatively small groups SES-4 and EurAsEC-3, and the maximum distances are demonstrated by CA-4 countries.

6. Institutional Integration

The countries' overlapping membership in existing regional organisations suggests that integration in the post–Soviet space is not a single process but a combination of different processes which have different goals, integration ideology, and development programmes.

Generally, the structure of the major post–Soviet integration organisations, the CIS and EurAsEC, allows us to draw the following conclusions:

- both of them are well–structured systems with established mechanisms of decision–making and interstate interaction;

- interstate interaction is the function of the counterpart bodies of the two organisations at the head–of–state, head–of–government, interparliamentary assembly, executive body, and/or court levels;

- these organisations are not vested with any supranational powers, and relations between member countries are built at the level of interstate councils. However, the creation of a Customs Union within EurAsEC will include the transfer of customs administration powers to the Union's Commission on July 1, 2010 – a huge step towards supranational bodies and legal framework.

The above conclusions suggest that institutional and political integration in the post–Soviet space is about to achieve a new qualitative level. Low–level integration, which is characterised by bilateral contacts, joint consultations, top–level meetings and other measures being taken by two countries, is being replaced by multilateral cooperation and joint policies aimed at common priority goals and areas of interest (e.g., the energy sector, the plans to create a Grain Pool, the Customs Union). However, the level of integration that would require supranational institutions and legal framework in the longer–term is yet to be achieved.

We have conducted an expert poll in an attempt to assess the efficiency of three integration structures, namely the CIS, EurAsEC and SCO, from the point of view of various aspects of interaction and integration. Based on the results of these enquiries, we have drawn the following conclusions.

First, the experts considered the CIS and SCO the most efficient organisations from the point of view of political cooperation and security. In the case of the CIS, political cooperation was highlighted by 51% and security by 22% of the experts. The same assessments for the SCO were 37% and 39%, respectively. The experts also noted the efficiency of the CIS in social development (11%) and electric power (8%). Bearing in mind that political cooperation is a considerable part of activities of EurAsEC (as 16% of experts believed), this organisation demonstrated better results in promoting trade and investments (37%), energy (27%) and banking in the member states.

Second, the experts generally agreed that the CIS and SCO are more oriented towards developing common political approaches and decisions (and excel at that), whilst EurAsEC is more efficient in promoting the concerted efforts of member states in particular economic sectors. Notably, the resources available to the CIS are inadequate for the tasks it has to perform (over 60% of the experts assessed the availability of resources as "below average"). EurAsEC and SCO have adequate resources at their disposal.

The experts also commented on the adequacy of an organisation's structure for its goals on the one hand, and the efficiency of its interaction with the respective bodies and organisations of its
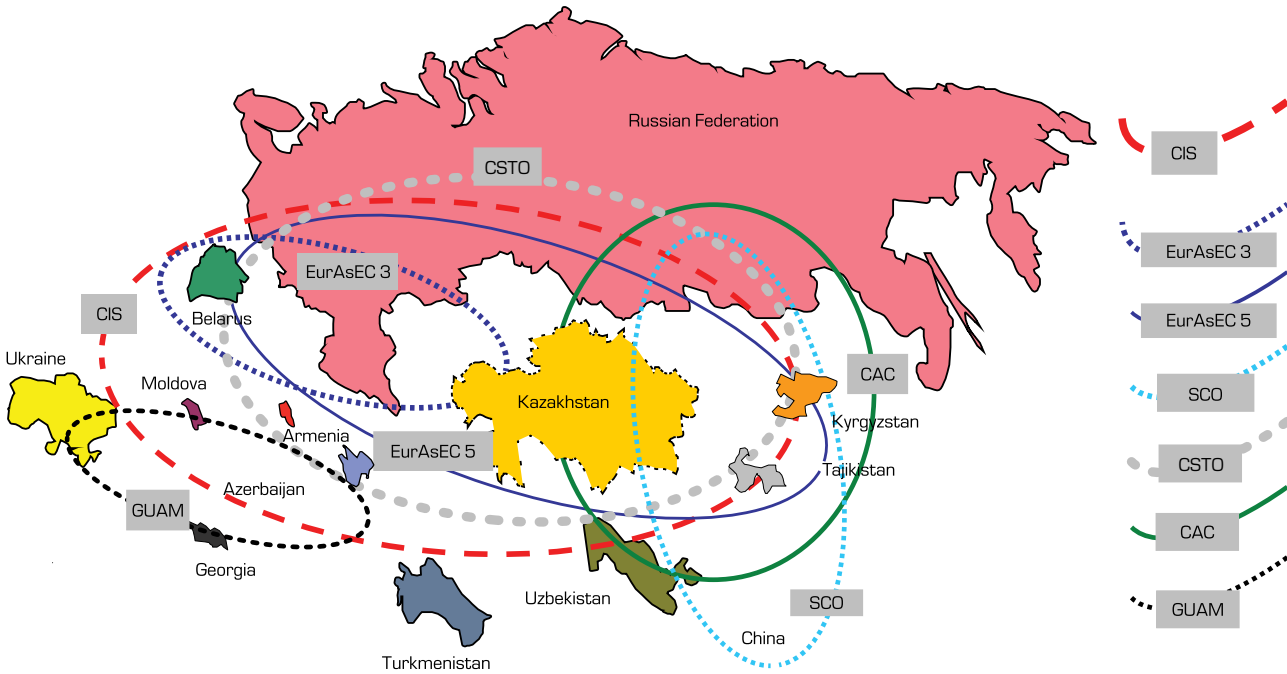
Figure 11.

Membership
of regional
organisations
in the post-Soviet
space

member states on the other. Interaction is more efficient in the case of those organisations whose structures are better suited to their goals (EurAsEC and SCO). The experts agree that integration organisations should specialise in particular areas in order to avoid doubling–up and competition, and be able to concentrate their resources and efforts on the aspects at which they excel. This kind of specialisation can be observed already, albeit in indirect forms.

The experts were also asked to point out the major challenges to integration in the CIS. In their opinion, the size of an economy or the level of development of business in a member state do not exert much influence on integration. On the other hand, integration is most sensitive to internal policies, foreign policy priorities, the quality of state administration, and the level of economic development of member states.

1. Introduction

1.1. Objectives of the SIEI

Regional integration is a process of complex transformation characterised by the intensification of the relationships between countries. It produces new forms of governance that coexist with the traditional forms of state governmental institutions at the national level. Currently, regional integration is viewed as a multifactor process which includes, in addition to economic cooperation, the issues of politics, security, and social and cultural interaction. Trade and economic integration remain the foundation of the majority of the existing integration schemes.

For almost two decades, regional cooperation and integration in the post–Soviet space has remained one of the most talked about issues of economic policy. There are hundreds of initiatives and projects that aim for deepened cooperation between countries in the region. At the same time, to determine the effectiveness of integration strategies a comprehensive system is needed to monitor and assess the current processes of economic, political and social interaction between countries. This can be done with the help of a system of quantitative and qualitative indicators of regional integration. It is intended that the EDB's System of Indicators of Eurasian Integration should become an instrument to monitor and assess regional integration projects in the post–Soviet space.

In the context of globalisation, the number of regional blocs, groups and associations tend to grow, and these are currently approaching two hundred. These associations help smaller economies strengthen their competitive positions with regard to large and major economies. As a result, the following questions arise: how does regional integration influence the position of those countries that are members of particular regional associations and those that are not? What are the real benefits and costs of integration processes? And what is the general vector of integration? What has been achieved? And where have integration efforts not been successful?

Answers to these questions can be given if regional integration is monitored and its effects are assessed with the help of special instruments. Today, globally, these instruments are the systems of regional integration indicators. Undeservingly, Eurasia did not have any of these comprehensive studies and measurements. Although integration processes in the post–Soviet space are specific, there are some objective signs of integration such as the existence of regional organisations (the CIS, EurAsEC), the Customs Union, and visa–free entry between most member countries. Integration includes money transfers, investment, technology, education and many other things. However, for various reasons, only a few of these factors can today be used to assess the real value and effect of this cooperation for the region as a whole, and for each country separately.

The SIEI consists of nine general and two consolidated indices that are aimed at assessing integration in the region, and cover various aspects of the regional integration process. The SIEI is built around several sets of indicators, including the integration of trade and labour markets, and cooperation in key functional areas (agriculture, education, and energy); convergence of the main characteristics of the post–Soviet economies; and qualitative performance parameters

of the CIS integration groupings developed based on an expert poll. The results are valuable for the assessment of both the integration process during the last decade and the potential for integrational interaction between the countries. The SIEI includes a broad range of indices that reflect both country-to-country interaction and integration in the post-Soviet space as a whole and in its sub-regions.

The data given in this first version of the SIEI show the dynamics of integration processes in the decade 1999–2008. They help determine the "reference point" for the development of post-Soviet countries after the collapse of the Soviet Union in the 1990s. Have they simply followed a downward spiral of disintegration, or managed to reverse this trend by achieving a new level of interaction? By the beginning of the 2000s, most post-Soviet countries already had a basic structure of new economic order. Most important in the analysis of post-Soviet integration is to determine the potential effect of the existing institutional environment on the dynamics of interaction. Again, it is critical not only to demonstrate that an institutional "interregnum" and a lack of stability lead to disintegration, but to study how countries with already established (and existing to date) institutions can interact.

The SIEI will be useful for the systemic assessment of the integration effects on the CIS countries involved in the process as well as for the monitoring of the integration processes in dynamics. The SIEI should be viewed not only as a theoretical study, but also as an applied policy-making tool. It should be of interest to the public agencies in the CIS countries, regional integration organisations, academia, and the general public.

1.2. Status of the project and plans for the future

In accordance with EDB's Charter, its mission is to contribute to economic growth in member states and to promote trade and economic integration among them. The Bank is to become a consolidating element of the financial infrastructure and a catalyst to facilitate integration processes in its member states.

The EDB is the regional development and integration bank. The statutory objectives explain the Bank's special interest in the analysis of integration processes with a natural focus on the post-Soviet space. It is our aim that the SIEI becomes the Bank's flagship research project and an integral part of its analytical products dedicated to regional Eurasian integration.

The EDB has been working on this research project from the beginning of 2008, i.e. for two years. After a decision on the project had been made, an international working group was formed comprising experts from EurAsEC, the CIS, the Bank, representatives of governmental agencies and research institutions, as well as leading international experts on regional integration measurement and monitoring. The working group included Sailau Baizakov (Deputy Director, Institute for Economic Research, Astana), Michael Emerson (Senior Researcher, Centre for European Policy Studies, Brussels), Aleksandr Libman (Associate Professor, Frankfurt School of Finance), Philippe De Lombaerde (Research Fellow, United Nations University, Bruges), Natalia Maqsimchook (Chief Specialist, Economic Analysis Department, EDB, and coordinator of the working group), Yerzhan Moldabekov (Lead Specialist, Economic Analysis Department, EDB), Aleksandr Rudik (Deputy Head, Department for Social and Humanity Development, Secretariat for Integration Committee of EurAsEC, Almaty), Maria Shevchuk (Deputy Head, Department for Economic Policy, Secretariat for Integration Committee of EurAsEC, Moscow). The head of the working group was Evgeny Vinokurov (Deputy Head of the Analytical Department / Head of

Economic Analysis Unit at the EDB). The working group produced a comprehensive methodology for the System of Indicators, taking the global best practice into account.

This helped collect various statistical data and develop the SIEI database in 2009, and in the second six months of 2009 the system of indicators was calculated and this project report was prepared. The authors of this report are Evgeny Vinokurov (project leader), Aleksandr Libman, Philippe De Lombaerde, Natalia Maqsimchook, and Yerzhan Moldabekov.

In the future, the Eurasian Development Bank plans to collect data and compute the integration indicators on an annual basis. The respective report will then be prepared and presented to governmental agencies, international organisations, researchers, the mass media, and the general public. We hope that the comprehensive SIEI, which has been prepared based on an elaborate methodology of regional integration measurement and assessment, will be of interest not only as a theoretical product, but also as an applied instrument of foreign policy fostering positive integration processes in Eurasia.

1.3. Integration Organisations in the Post–Soviet Space

The institutional aspect of regional integration is one of its most important components. A host of integration organisations emerged in the post–Soviet space during the as yet incomplete two decades following the breakdown of the Soviet Union.

The Commonwealth of Independent States (CIS) is the oldest organisation; the agreement establishing it was signed on October 8, 1991. The Commonwealth is built on the principles of sovereign equality of all its members. The main activities of the organisation are economic cooperation; general political issues; humanitarian cooperation and social issues; cooperation in the area of defence and border control, and the fight against organised crime; interregional and cross–border cooperation; unification of regulatory framework; and financial cooperation. A total of 87 bodies were formed during the existence of the CIS, including 78 bodies engaged in sectoral cooperation, in particular sector–specific Councils that play an important part in sector interaction in the post–Soviet space.

The Eurasian Economic Community (EurAsEC) is an international organisation whose members are Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan (Uzbekistan joined EurAsEC in 2006 but suspended its membership in 2008). Armenia, Moldova and Ukraine have observer status. EurAsEC has a broad area of activities, but its main focus is economic cooperation and integration, with the ultimate goal of building a single economic space and common market mechanisms, and coordinating the approaches of the member countries for integration into the global economy and global trading system. EurAsEC's priority areas are transport, energy, agriculture, and labour migration.

The Shanghai Cooperation Organisation (SCO) was set up in 2001 by Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. It was a successor of the "Shanghai Five." The main objectives of the SCO are to build mutual trust and good neighbourliness between the member countries; facilitate effective political, trading and economic, scientific and technical, and cultural cooperation, as well as educational, energy, transport, tourism, environmental and other areas of cooperation; joint maintenance and support of peace, security and stability in the region; and movement towards democratic, fair and rational new international political and economic order. The SCO concentrates on security in the region. At the same time, it has a Business Council – a non–government structure that consolidates the most eminent representatives of

the business community of the six countries and aims to enhance economic cooperation within the framework of the organisation, build direct relationships and dialogue between the business and financial structures of the member states, and facilitate practical promotion of multilateral projects.

The Collective Security Treaty Organisation (CSTO). The Collective Security Treaty (CST) was signed on May 15, 1992; its parties today are Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. CSTO succeeded the CST, having become a Eurasian organisation not only geographically, but also in the political and legal sense, due to the universality of its principles and practical goals and to the participation of its member countries in the respective European and Asian security structures, OSCE and SCO in particular. The decision to transform the Collective Security Treaty into an international regional organisation, which was taken by the heads of the member states in May 2002 (Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan), was also influenced by the need to adapt the Treaty to the dynamics of regional and international security, and to counteract new challenges and threats. In its new form as an organisation, cooperation in the framework of CSTO preserved the main principles set forth in the Treaty. The CSTO is primarily a military and political organisation.

The Union State of Russia and Belarus (USRB). The agreement on the union of Belarus and Russia was signed in 1997 on the basis of the community of Belarus and Russia, which was formed in April 1996 to unite the humanitarian, economic and military space. After January 2000, the official name of the Union was the Union State.

GU(U)AM is an organisation whose members are Azerbaijan, Georgia, Moldova, and Ukraine (Uzbekistan was also a member from 1999 to 2005). GUAM's objectives are the multilateral interaction of member states in the area of democratisation and economic cooperation, and the activation of integration with European countries.

The Central Asian Cooperation Organisation (CACO). The agreement on CACO was signed in 2002. The new organisation replaced the Central Asian Economic Union; its objectives included regional interaction and maintaining stability in Central Asia. The organisation disbanded in 2005.

In addition to the above, there are structures in the CIS region that are not reviewed in detail in this report. However, the following should be mentioned: the Central Asian Regional Economic Cooperation (CAREC), which was formed with the support of the Asian Development Bank; the UN Special Programme for the Economies of Central Asia (SPECA); larger interregional structures such as the Conference on Interaction and Confidence-Building Measures in Asia (CICMA), the Economic Cooperation Organisation (ECO) and the EU's Eastern Partnership Programme, as well as a number of specialised organisations (TRACECA, Central and South Asia Transport and Trade Forum, the International Foundation for the Saving of the Aral Sea, etc.).

The CIS countries form a natural area of common interests. The integration of the former Soviet countries is driven by objective economic reasons. In the recent past, these countries, albeit notable differences, formed a single political, economic and cultural space. Much of this heritage has been preserved up to nowadays.

The global crisis changed the global political, financial and economic architecture, with some effects already visible. These are, in particular, the launching of the G-20 institutionalisation that reflects the strengthening of developing countries and a shift in the global economic balance. The IMF is becoming stronger and the idea of a global reserve currency based on the IMF's SDR is being discussed. It is probable that a new global financial regulator will emerge.

Country	CIS (1991)	EurAsEC (2000)	SCO (2001)	CSTO (1992)	USRB (1997)	GU(U)AM (1997)	CACO (2002–2005)
Azerbaijan	X			X (1993–1999)		X	
Armenia	X	observer (2003)		X			
Belarus	X	X	partner	X from 1993	X		
Georgia	X withdrew in August 2009			X (1993–1999)		X	observer
Kazakhstan	X	X	X	X			X
Kyrgyzstan	X	X	X	X			X
Moldova	X	observer (2002)				X	
Russia	X	X	X		X		X (from 2004)
Tajikistan	X	X	X	X			X
Turkmenistan	associate member						
Uzbekistan	X	from 2006; suspended membership in 2008	X	X, 1992–1999, from 2006		X (1999–2005)	X
Ukraine	X (did not ratify the Charter)	observer (2002)				X	observer
Non-CIS:							
China			X				

The financial and economic crisis requires revision and corrective measures on regional integration. In particular, it is worth mentioning the establishment of the Customs Union of Belarus, Kazakhstan and Russia; the decision to move toward the Common Economic Area of these three countries by 2012; the establishment of EurAsEC's Anti-crisis Fund, and the negotiations over the proposed Grain Pool. The crisis forced all countries to take a more careful stance in their foreign affairs and pursue a more expansive foreign trade policy. The current changes could seriously affect the "integration" landscape of the Eurasian space and lead to a new stage in the relationships between the Eurasian nations. In this context, efficient monitoring and assessment of integration dynamics and trends become a priority.

Table 1.1.

Membership of integration organisations in the post-Soviet space

2. The SIEI Methodology

2.1. Regional Cooperation and Integration

Measuring regional economic integration is a challenge of its own. It is impossible to assess the results of an integration process without taking into account the context of the respective integration initiative, its objectives, and the adequacy of the existing expectations. For this reason, one should distinguish between two overlapping processes: *regional cooperation* and *regional integration*. The SIEI is currently focused on the latter, although this report does attempt to review the level of regional cooperation in the post–Soviet space as well.

Regional cooperation is, first of all, about cooperation between the states (and non–state players) aimed at achieving common goals. Depending on the specifics of an integration structure or initiative, these goals can differ from each other (Devlin and Estevadeoral, 2005). First, they can be aimed at *reducing the barriers to cross-border economic transactions* and, thus, increasing business structures' opportunities for cooperation with foreign partners. Second, projects can focus on the production of *regional public goods* such as the development of cross–border transport infrastructure or the resolution of common environmental problems. Third, projects can be launched to *remove so-called market failures (such as information asymmetry, market monopolisation, and cross-border external effects that eventually hinder the cross-border market from functioning effectively)* in the context of high level interpenetration of the economies. This can be, for example, through coordination of policies to mitigate "external shocks" translated by integrated markets, or the pursuit of a common antimonopoly policy. Fourth and last, *regional* cooperation can become an instrument to raise *global* competitiveness through the creation of effective economic institutes and by attracting foreign investment to larger markets.

In principle, regional cooperation structures can differentiate through two features (Hettne and Soederbaum, 2006). First, they can either be aimed at resolving a broad range of issues, or specialise in particular fields of interaction. The latter approach is more "pragmatic," because it is based on the existence of *areas of actual solidarity*, or the areas of cooperation (geographical or sector–specific) where the countries are interested in the utmost interaction. At the same time, this choice can be determined by the regulatory development of key sectors in the framework of economic modernisation[1] generally. Second, decision–making mechanisms can include, to a different extent, the elements of an *organisation*, i.e. a formal structure with strictly determined membership and powers, and a *network* as a more flexible and open structure that often

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[1] In many cases, cooperation in certain areas becomes somewhat of a reference point that fosters broader interaction. This was the case in the EU's iron and steel industry, atomic industry, agriculture, and transport.

assumes the interaction of both governmental and private players. If the "classical" model of the EU is associated with a formal organisation, then the modern "open regionalism" of the Southeast Asia uses the advantages of a network, such as minimal coordination of economic policy, gradual voluntary removal of barriers to trade and investment between countries without the concurrent building of barriers "on the borders" of the grouping, and the proactive involvement of private business in interaction mechanisms.

Regional economic integration first of all concerns the interaction of the economic agents of the countries in a region[2]. The key issue of the economy as a whole is the coordination of the individual plans and decisions of businesses, which can lead to their cooperation by areas of specialisation, based on comparative advantages. An example of these coordination mechanisms is a market, in which the players exchange information via the pricing system. As national borders often restrict this coordination, regional integration means *the removal of barriers to the cross-border interaction of private actors* from various, previously isolated territories. In other words, whilst regional cooperation is about the functioning of international and intergovernmental regional organisations and is characterised by the *level of cooperation achieved to attain common goals*, regional integration describes the status and evolution of a territory (economic space) and is characterised by *the intersection of national economies*.

In principle, we can talk about two interrelated channels that form regional integration. Researchers traditionally focus on the formation of an integrated space due to regional cooperation, or on the interaction of governmental bodies of the countries in a region that is aiming towards the step by step removal of barriers to the flow of goods, services, capital and workforce between countries *(institutional integration)*. However, an equally important channel is the interaction at the micro-level ("informal," "corporate" integration, "consolidation" of the economic space, or regionalisation), e.g. the formation by transnational corporations of production systems that embrace several countries in a region, or the growth of mutual trade. The connection between regional cooperation and integration at the micro-level is not univocal. In some regions, high levels of informal integration coexist with insignificant interaction at the intergovernmental level (Southeast Asia); in other regions, institutional integration outpaces noticeably informal (Latin America); and in other (usually, the most successful) cases these two aspects of interstate interaction are inseparably linked and reinforce each other (EU).

For the purposes of this report, the most important conclusion is that the **assessment of regional cooperation and integration should be differentiated**. For regional cooperation, measurement is linked directly to the declared project objectives and must be differentiated (it is obvious that the assessment of, e.g., international scientific and technical cooperation and defence alliance require different criteria). Regional interaction is, to a certain extent, easier to measure: ultimately, it has two characteristics. First, integration can be in the form of *market integration*, or the increasing interdependence of national economic systems that manifests itself, for example, in a growth of cross-border flows of capital, workforce, goods and services. Second, integration can result in *economic convergence*, or the movement to each other of their key performance indices[3].

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[2] Hereafter, when talking about regional integration we refer to economic integration.

[3] The link between market integration and convergence is again not straightforward. On the one hand, market integration opens opportunities for arbitration that fosters alignment whilst, on the other hand, it can result in the increasing specialisation of countries, taking their comparative advantages into account, or, in other words, their divergence. Additionally, convergence can be a result of purposeful regional cooperation (aimed, for example, at mitigating differentiation between countries).

It should be noted that regional cooperation and integration are inseparably linked to the third index – the level of **social integration** in a region. Social integration means the formation of interrelated networks between people and distribution of common values, language and culture. Social integration often becomes the "foundation" for regional cooperation and for the intersection of economies (see the review in Knelangen, 2001). The current version of the SIEI includes social integration, although it is not given priority; however, SIEI does measure separate aspects of interaction between the CIS societies that are influenced by changes in social integration.

2.2. Measuring Regional Integration: Existing Approaches

Market Integration

Market integration is of interest not only in the analysis of cross-border integration (considered in this report), but also in studies into the integration within separate countries (where integration means the establishment of relationships between isolated regional markets) or even in the understanding of the interaction between particular stock markets. It is not by chance that this area of research produced many approaches to the quantitative assessment of integration. It is practical to discuss four main methods of measuring market integration.

1. Integration can manifest itself in the **cross-border flows of goods, services, and capital**. This approach is usually the simplest one to use when analysing interaction between separate markets, although one should remember that it can produce overoptimistic results. So, the study of the global economy in the 16–18th centuries shows that the growth of sales between regions was not accompanied by any price convergence between markets, which suggests that the arbitration opportunities were not actually used (O'Rourke and Williamson, 2002). However, an advantage of this method is the relative accessibility of statistical data. At the same time, the interpretation of quantitative indices can be difficult and produces a variety of alternative characteristics.

The classical index to measure trade between countries is the share of the *intra-regional trade in the total foreign trade turnover* (see, for example, Osterkamp, 2008). A drawback of this method is that when the share of an integration grouping's countries in the global GDP grows, the share of intra-regional trade rises as well irrespective of whether integration has actually deepened. This distorts the assessment of the integration level for larger groupings. Likewise, the number of countries in a region under consideration influences the index. Hence the need to use a variety of alternative indices that "modify" the index of intra-regional trade. The following alternatives deserve mention:

(1) *regional trade concentration* indices (that help calculate the analogue of well-known indices such as the Herfindahl–Hirschman Index, the Gini coefficient, and others);

(2) the indices of *intra-regional trade intensity for export and import* (today, there are several versions of these indices) that are, simply said, a "weighted" index of the share of intra-regional trade where the "weights" are represented by the aggregate trade of the respective partner countries;

(3) the indices of *export absorption capacity and import saturation capacity* that help determine the complementarities of trade between the countries and their combinations and are, in essence, a modification of the *revealed comparative advantages indices*, which are actively used to characterise foreign trade as a whole (Vollrath, 1991; Floerkemeier, 2002; Iapadre, 2006; Asian Development Bank, 2006).

Most of the existing systems of indicators focused on the measurement of cross-border market integration use both indices of the dynamics of mutual trade (including aggregate trade) and indices of the intensity of intra-regional trade. Thus, for the Asia and Pacific region these calculations are given in the systems of integration indices of the Asian Development Bank (ARIC, 2009) and UNESCAP (UNESCAP, 2009). Another integration index that can be used is the *variability of intermediate imports* resulting in an increasing variety of imported products from the previous stage of a production chain becoming available for national industry (Madani, 2001). However, there are two effects that should be distinguished: the effect of competition with national producers of the same goods as those imported, and the complementary effect that has a positive impact on national industry.

An alternative to the measurement of the intensity of trade is the *network analysis* of trade flows. In this case, standard network characteristics (such as the centrality or closeness of connections) are used to quantify regional economic integration. This approach was used by, for example, (Iapadre and Tironi, 2009) to assess regional trade integration in East and Southeast Asia.

And, finally, of the most interest is the assessment of integration through the comparison of factual and contra-factual results of gravitational regressions[4]. To this end one should first calculate the volume of mutual trade between countries using a "theoretical" model (primarily standard gravitational regression, according to which mutual trade is directly proportional to GDP and inversely proportional to the distance between countries). In this case the integration index is the remainder in the assessment of regression. For example, if the remainder in the measurement of trade between a country and a region is a significant negative number for a particular country, then the volume of trade between that country and the region is subtantially greater than the "forecasted" theoretical trade and, consequently, the attained level of integration is worthy of note (Bussiere et al., 2005). However, this approach is rather time-consuming and cannot really be used to measure integration systemically.

The integration indices for various factor (capital, workforce) markets can be calculated, in principle, by analogy with the afore-mentioned indices. So, in the regional integration measurement methodology proposed by (Dennis and Yussof, 2003) for ASEAN, the components of the integration index include the measurement of intra-regional trade and investment. The problem is however that the data on the global factor migration is, at best fragmentary; in addition, there is no accurate data on the "sectoral" specialisation of flows, and data cannot be generated for migration in principle. Another factor that needs to be taken into account in the analysis of the factor market integration is the necessity to compare (if possible) the indices of status (such as accumulated investment or the total number of labour migrants) and dynamics (the inflow of investment or migrants) that would appear to be of no interest to the analysis of trade. For this reason, when assessing integration in the area of capital or workforce, the "simplest" indices are normally used (such as the dynamics of the share of investment inflows or accumulated investments), which naturally leaves room for criticism.

For separate functional areas, market integration can be described with the help of specific indices used in a particular sector, such as the number of phone calls (integration in communications) or the trade in food commodities (integration in agriculture or other sectors). For example, these indices are used to calculate regional integration indices for the African continent by the UN's Economic Commission for Africa (ECA, 2004).

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[4] The indicators of the intensity of mutual trade allow similar interpretation as well.

2. Integration is reflected in the **structure of prices**: the law of one price governs the integrated markets, i.e. prices of similar goods in various countries or regions of a country should be the same. This approach is usually preferred when internal integration within a country is analysed, and this is connected to the level of development of econometric tools (for example, based on an analysis of the cointegration of series of prices), including those for post–Soviet states (Gluschenko, 2008). However, in studying cross–border integration, the analysis of price dynamics has limited application because of the accessibility of data (both in space and in time, cf. Dreger et al., 2007). Three approaches to the analysis of integration based on the law of one price can be distinguished. First, price convergence can be analysed at the micro–level for particular markets, for example in particular consumer goods (Gil–Pareka and Sosvilla–Rivero, 2005) or raw materials (e.g., Findlay and O'Rourke, 2001). Second, financial markets can be studied (interest and exchange rate correlation, cf. Babetskii et al., 2007). Third, subject to particular assumptions, aggregated market indices can be the basis for analysis, as in the related analysis of the purchasing power parity (cf. Qin et al., 2007; Kim and Lee, 2008).

3. Integration can manifest itself in **consumer behaviour** in various countries. When the level of integration is high, the players can "insure" themselves against specific shocks by buying assets and products in other countries or regions, as a result of which consumption in countries or regions should correlate better than production (Christelis et al., 2008). This approach is obviously interesting, first of all, for the research into capital market integration. An indirect method to assess integration in the latter can be the *β-regression* coefficient, which describes the share of investment in *country i* against the percentage of savings in that country: the higher the level of integration, the lower coefficient, i.e. the correlation between internal savings and investment (Bilas, 2007).

4. The **level of regional specialisation** can be considered as an indirect integration index: the higher level of market integration, the higher the motivation of the various regions for specialisation. This approach has, however, at least two drawbacks. Firstly, it ignores the findings of the New Trade Theory that emphasise the role of intrasectoral trade. Secondly, in its essence, it contradicts the logic of the economic convergence indices discussed below.

Economic Convergence

The main approaches to the convergence assessment were developed in the framework of the theory of economic growth. Today, these are applied to a wide range of indices. This is true, first of all, about the *β–convergence* and *σ–convergence* concepts. According to the *β–convergence* idea, in the initial period of time poorer countries demonstrate, on average, higher growth during the integration process. Similarly, the countries with other low indices demonstrate higher growth of these indices during the initial period of time. In other words, an increase in the index and its initial level are negatively correlated, and this can be shown by the simplest econometric regression. *σ–convergence* implies a reduction, over time, of the standard deviation in an index (say GDP per capita) that evens differences between countries. Another index which is often used when a trend in a time series is recorded is the relation between the standard deviation and the average (coefficient of variation). *β–convergence* does not always include *σ–convergence*: where a group of richer and poorer countries change continuously (because of worsening economic conditions in rich countries, and improvements in poor ones), but the gap between rich and poor countries remains constant, there is no *σ–convergence* (Barro and Sala–i–Martin, 1992; Sala–i–Martin, 1996).

An alternative to this approach is the analysis of the *index history correlation* (e.g. growth rates). It is obvious that this convergence does not coincide with $\sigma-$ or $\beta-convergence$. On the contrary, when the rates of growth coincide, non–absolute values of the indices of countries in a region differ and there is no correlation between the initial level and current dynamics. At the same time, this index is interesting because it shows *the similar reaction of countries to exogenous shocks* or even (if interpreted more freely) *the translation of shocks from country to country*, i.e. the existence of the perturbation transmission mechanisms that connect the economies. In other words, as distinct from the above long–term indices, this is the assessment of short–term dynamics of the "convergence" of business cycles. Again, as for the correlation of price dynamics, more elaborate econometric tools can be used (Rana, 2006).

Institutional Integration

The assessment of institutional integration is far more difficult because there are no clear, non–ambiguous criteria for the assessment of activities of regional integration structures (in view of the multiplicity of their objectives, as already stated above), and because we need to quantify the qualitative characteristics of integrational interaction. The simplest approach is to search for quantitative indices that describe the activities of the structures. These include, for example, the budget of regional organisations (including member states contributions as the percentage of their GDP), the number of various statutory instruments (agreements, supranational acts) within a project (Hansohm, 2005; Flingstein and Stone Sweet, 2002), the structure of voting in the UN, or the number of diplomatic visits made by countries in a region (Kegley and Howell, 1975). It is clear that the above indices provide a limited picture of the processes under consideration.

In some cases, the "target indices" of regional cooperation are, to a certain extent, self–evident. For a free trade zone, for instance, it would be logical to calculate the index of protectionism on the basis of the level of customs duties and the percentage of goods that are subject to them. (Baldinger, 2001) uses this method to assess regional integration in the EU on the basis of the "index of protectionism." At the same time, even this method often forces the use of exogenous assumptions. Thus, this index (Baldinger, 2001) includes the a priori determined "trading costs" that depend on the development of non–trading integration within the EU. At the same time, in the overwhelming majority of cases (where integration is linked, for example, to the harmonisation of economic policies, or where a barrier to be removed does not have a clear quantitative expression such as a customs duty), this method cannot be applied at all. For this reason, an important approach to the assessment of regional cooperation (taking into account the differentiation of its objectives) is the generation of various *ordinal scales* of regional cooperation that take account of interaction within a given regional space. Sources used can be an expert poll or a more time–consuming method of the *analysis of the contents of agreements or statutes* (as distinct from the mentioned *formal analysis* such as calculation of the number of statutes).

An example of these scales are the investment and trade integration indices (te Welde and Bezemer, 2006) computed for six regional integration groupings. (Urata and Sasuya, 2007) assess integration for seven free trade zones in a similar fashion, from the point of view of the barriers to investment, although this index includes, partially, "objective" cooperation indices (restrictions on the percentage of capital that can be owned by foreign investors). The methodology of assessing partnership agreements of various regions with the EU, which has been developed by the European Centre for Development Policy Management (Bilal and Rampa, 2006; ECDPM, 2008) includes (1) two types of "qualitative indices" – ordinal scales generated based on interview

data, and indirect cooperation indices (the number of agreements and statutes, etc.) and (2) "quantitative indices" that are, in general, "objective" cooperation characteristics (e.g. tariff barriers). One peculiarity of this approach is that it takes into account the various objectives of partnership agreements: the system of indices has four blocks, including strengthening regional integration, intensifying cooperation with the EU, internal economic reforms, and market liberalisation.

In many instances, ordinal scales have several dimensions and the final integration index aggregates information on a variety of integration areas. Thus, ECB's index of institutional integration, which has been calculated for the EU and MERCOSUR (Dorucci et al., 2002), ranges between 0 and 100 and includes four indices ranging between 0 and 25 that describe the level of integration within a free trade zone/customs union, common market, economic union, and "full economic integration." Later, this index was calculated to analyse other integration projects as well (ECB, 2004). Similarly, the Integration Achievement Score used by Genna and Feng (2003) to assess integration in seven groupings of Latin America, Asia, Africa and Europe has six indices, each of which is measured on a five-score scale: trade in goods and services, capital mobility, labour resources mobility, the importance of supranational institutes, coordination of monetary policy, and coordination of budgetary policy. It is obvious that the use of these approaches always involves some arbitrariness in the selection of "marks" on the ordinal scale, especially when different integration projects need to be compared.

The institutional integration indices are often used in combination with purely economic integration indices and other sources for the analysis of integrational interaction, in order to build *complex systems of integration indices* for particular regions. As to date, these systems have been developed by a host of integration groupings and researchers (Lombaerde et al., 2008). Kegley and Howell (1975) assess political cooperation and economic and social integration in Southeast Asia. The indicator system includes data on the "closeness" of countries in the region as generally perceived by their inhabitants, and on the cooperation of political elites. This data was collected during mass surveys. The indicator system of the European Commission's Directorate for Development includes four domains: economic integration, functional regional integration (in key areas), governance issues, and the implementation of European Development Fund projects. Each of these domains includes indices using ordinal scales, and the characteristics of intra-regional trade. The system of regional indices used by the Common Market for Eastern and Southern Africa (COMESA) includes 12 areas, each of which covers almost all types of indices described earlier. The European Central Bank's regional cooperation indices were used in combination with the indices of regional integration (that include both convergence and synchronisation of business cycles, and market integration) in the framework of comparative studies of the mutual influence of these two aspects of integration processes (Dorrucci et al., 2004; Mongelli et al., 2005).

In conclusion, it should be said that, in many instances, the systems of monitoring regional cooperation include not only integrational interaction characteristics, but also general characteristics of the economic and social position of countries in a region. Thus, the Global Dimension of the Regional Integration Model (Ruiz Estrada, 2004) uses four groups of characteristics (economy, politics, society, and technology) that often describe the general development of countries in a region in a respective field, irrespective of their actual cooperation. In principle this approach can be used for analysis because regional integration and cooperation are largely a function of economic and political conditions in countries in a region. Yet, it distorts the immediate integration characteristics in the wider context of modernisation and development.

For this reason, the spectrum of analysis for the SIEI was consciously limited to the characteristics of integrational interaction only.

The International Experience in Developing and Applying Systems of Monitoring Regional Integration

As we have mentioned, there are a number of major ongoing initiatives throughout the world to monitor and assess integration. SIEI is built based on existing experience and approaches. Particularly:

• the European Commission set itself the direct goal of monitoring regional integration of African, Caribbean and Pacific Countries (ACP) countries under the Cotonou Agreement;

• the European Central Bank (ECB) measures institutional and economic integration;

• European Union Directorate General for Development (EU DG Development) elaborated a system of indicators for measuring regional integration and the efficiency of cooperation;

• the Inter–American Development Bank made it a priority for its Strategy of Regional Integration to collect, analyse and distribute comparable data on the region's countries for the purpose of assessing the progress of regional integration;

• Asociacion Latinoamericana de Integracion (ALADI) is to publish annual reports on the status of integration in Latin America;

• United Nations Economic Commission for Africa (UNECA) will develop a multi–level SIRI for assessing indicators at four levels (country, region, sector and continent);

• Common Market for Eastern and Southern Africa (COMESA) proposed a set of indicators of regional integration; and

• the World Bank developed a system of indicators of fiscal decentralisation at a national level which can be used to assess the potential of a national state administration system for regional integration.

We have summarised the organisation of variables in some of these systems below.

The EU DG Development proposed the following breakdown of monitoring indicators in ACP countries: regional economic cooperation; functional regional cooperation; management, finance and institutions.

Categories	Sub-categories	Variables
Economic integration	Trade liberalisation policy	WTO compatibility of rules of customs valuation Quality of classification of goods Application of rules of origin Exemptions Phasing out of temporary measures Liberalisation of trade in services Importance of intra-regional trade
	Other integration policies	Facilitation of investments Movement of persons Right of establishment Competition policy Formulation and implementation of cohesion policy Improvement of comparable statistics Macroeconomic surveillance Trade facilitation measures
Functional regional integration	Transport	Progress towards a common transport policy Expenditure for maintenance of regional network Application of harmonised transit regulations
	Telecommunications	
	Energy	
Management, finance and institutions	Institutions	Number of meetings Qualitative assessment of meetings Performance of specific institutions
	Budgets	Fulfilment of requirements of budgetary contributions Transparency of procedures Implementation of budgets
	Human resources	Recruitment policy Staff training
Financing projects and programmes from a common budget	Selecting projects	
	Approving projects	
	Disbursement	Contracts concluded Contracts implemented

Table 2.1.

The EU DG Development's proposal for a system of indicators to measure regional integration and cooperation performance

Source: European Commission

UNECA considers eight "clusters of activity" for the purposes of classifying variables and indicators: integration of trade and markets; monetary, fiscal and financial integration; transport; communications; industry; energy; food and agriculture; and human development and labour market.

Categories	Sub-categories
I. Actors	Number of integration units (countries, regions, organisations, etc.)
	Number and quality of actors in the decision-making process
	Level of activity of actors
	Opinions and perceptions of actors (survey results)
	Overlapping membership
II. Structural factors	Proximity of the actors (geographical, cultural, etc.)
	Structural complementarities
	Structural asymmetries
	Historical patterns of cooperation, integration and conflict
III. Institutionalisation	Number of agreements and treaties
	Contents of agreements and treaties
	Time frames of agreements and treaties
	Institution building
	Arrangements on common policies and policy coordination
	Gradualism, exemptions and differential treatments
IV. Implementation	Common agreements implementation status
	Special agreements implementation status
	Rate of convergence criteria achievement
V. Effects	Human development
	Economic growth
	Trade
	Migration
	Capital flows
VI. Interdependence	Mobility of persons
	Political interdependence (existence of common policy variables, *de facto* coordination of policies, occurrence of conflicts, tensions, etc.)
	Economic interdependence (trade, capital flows, correlation of activity levels, symmetry of shocks, etc.)
	Information and knowledge flows

Table 2.2.

UNU-CRIS classification of variables in SIRI

Source:
De Lombaerde and van Langenhove (2006: 25).

UNU–CRIS, a research centre of the UN University specialising in regional integration, proposed a general framework for building SIRI. The UNU–CRIS scheme reflects the multi–dimensional and dynamic nature of regional integration and includes six categories of variables which can be easily transformed into six SIRI modules.

Categories	Variables
Trade liberalisation	Number of non-zero tariffs
	The highest MFN tariff
	Highest regional tariff
	Weighted average MFN tariff
Trade development	Level of conformity to the WTO TBT Agreement
	Capacity of member states to implement mutually recognised certification marking schemes
	Notification of National Enquiry Points
	Ability to regulate and monitor sanitary and phytosanitary standards
	Use of ASYCUDA (or similar)
	Use of GATT valuation system
	Use of COMESA customs document
	Use of HS1996 (or later) customs classification system
Trade in services	Establishment and publication of Contact and Enquiry Point
	Performance with regard to commitments
	Reduction of exemptions over time
Transit facilitation	Implementation of COMESA harmonised road transit charges Use of COMESA carriers license
	Use of COMESA customs bond guarantee
	Implementation of harmonised axle load and vehicle dimensions regulations
	Implementation of COMESA third party vehicle licensing system
Monetary convergence	Inflation
	Size of the budget deficit Size of the external debt
	Exchange rate movements
Domestic payments and settlement systems, banking and exchange rates	Restrictions on the current account
	Restrictions on the capital account
	Level of government ownership of banks
	Restrictions on foreign banks to open branches and subsidiaries
	Government influence over allocation of credit
	Restrictions on private sector companies to offer all types of financial services, securities and insurance policies
	Use of domestic electronic clearing systems
	Restrictions on foreign financial institutions

Table 2.3.

COMESA's proposal to the development of a set of regional integration indicators

Source: COMESA (2002)

Fiscal environment	Weighted average income tax
	Income tax as percentage of GDP
	Weighted average of direct taxes on business
	Direct business taxes as percentage of GDP
	VAT rate
	VAT as percentage of GDP
	Government expenditure as percentage of GDP
Government intervention in the economy	Government consumption as percentage of the economy
	Government ownership of business and industries
	Share of government revenues from state-owned enterprises and from government-owned property
	Economic output produced by the government
Capital flows and foreign investments	Existence of foreign investment code providing national treatment
	Restrictions on foreign ownership of business
	Restrictions on foreign ownership of land
	Restrictions on repatriation of earnings
Governance issues	Independence of the judiciary
	Performance of contractual obligations and existence of an arbitration court
	Transparency and accountability of the judiciary
	Legally granted and protected private property rights
Regulatory enironment	Existence of independent competition authority and legal framework for regulating competition
	Existence of independent telecommunications and set of legally recognised rules and regulations on telecommunications
	Existence of independent standards authorities and set of legally recognised rules and regulations on standards
	Public procurement regulations in member states
Licensing requirements	Level of licensing requirements to operate a business
	Time taken to obtain appropriate licenses to start business operations
	Transparency of the licensing system

The Technical Aspects of Monitoring the Indicators

Numerous projects and initiatives to monitor regional integration have accumulated a great deal of organisational experience, both positive and negative. The lessons of this experience allow us to identify a number of issues that will have to be addressed in the course of the development of the monitoring system in order to make it successful, relevant and sustainable. These issues will also have to be addressed in the evaluation of integration processes. These issues are not only methodological and technical, but also political. Our conclusions are organised around five points and can be considered the *underlying principles* that the EDB team used when developing the SIEI and preparing this report, and which we will draw upon in the future.

1. Monitoring Regional Integration: Technical vs. Political Aspects

The monitoring of regional integration can not be reduced to a technical problem. The starting point for the creation of an indicator system is rather of a political nature. The purpose of monitoring is usually the evaluation of regional integration policies, given the "implementation problem" faced by several regional initiatives, and to test the quality of regional governance.

The political and technical aspects are clearly linked. Several examples of linkages can be mentioned:

- the number of aspects to be considered in an indicator system are a function of the underlying mandate;

- the inclusion of (inter-regional) comparison and benchmarking is a political choice;

- the choice of assigned weights in a monitoring system and in the design of composite indicators cannot be based only on technical (statistical) criteria;

- the choice to include good governance indicators (like transparency, participation and accountability) is also a political decision.

2. The Monitoring Process: By Whom? For Whom? To What End?

Monitoring is not an isolated (academic) activity. It refers to a series of relevant processes of information gathering, processing and dissemination with the aim to influence, scrutinise and/or evaluate regional integration policies or to secure their implementation. These processes take place in a monitoring system in which different actors participate: regional and national; public and private. These actors can be internal to the regional integration process (e.g. regional secretariats, regional parliaments, regional development banks) or external to the process (e.g. academics, nongovernmental organisations (NGOs) (Costea et al., 2008). The role of monitoring can be political, coordinating, academic, technical, and/or financial, and so on. In other words, monitoring can take place close to or far removed from decision-making centres. Monitoring is thus not to be equated with evaluation, and displays both positive and normative aspects.

In some cases, the integration arrangements have built-in monitoring provisions. These are especially effective when, at the same time, the integration agreement itself includes explicit objectives.

The use of extra-regional benchmarks is a particularly sensitive issue and poses a series of methodological problems.

From an academic point of view, indicator-based monitoring is of particular value because it allows the testing of opinions and accepted opinions on the "progress", "success" or "failure" of particular regional integration processes.

It should therefore not be forgotten that regionalism or regional integration is a "moving target". The institutional complexity of regional arrangements tends to increase over time. And shifts have been noticed from unidimensional regional organisations towards multidimensional and hybrid forms of regional cooperation (Hettne and Soderbaum, 2004). A good example of the latter, in the Eurasian context, is the Central Asia Regional Economic Cooperation (CAREC).

Finally, it should be noted that the monitoring actors are not necessarily (intra–) regional actors. Extra–regional actors (like other regions, international organisations, international NGOs, academics) may also be interested in the monitoring process.

3. Monitoring Experiences: Where Do We Stand?

The lessons from the previously mentioned projects allow us to draw the following conclusions:

- only a few initiatives proved sustainable;

- the political role of monitoring does not seem to be crucial for the regional integration process;

- few actors are usually involved in monitoring;

- different logical components of regional integration are targeted (De Lombaerde and Van Langenhove, 2006);

- monitoring in practice seems to have different objectives (including: measurement of the level of regional integration, measurement of preconditions, assessment of the contribution of individual countries to regional integration, evaluation of regional integration policies, comparison, evaluation of donor–financed support programmes, strategic use in the context of interregional negotiation processes);

- monitoring systems are often characterised by underdeveloped conceptual frameworks and poor selection criteria for the indicators (De Lombaerde, Pietrangeli and Weeratunge, 2008);

- the size of the indicator systems varies considerably. A recent review of several systems revealed that indicator systems cover anywhere between less than ten and close to 150 variables (ibidem);

- one third of the included variables do not necessarily provide information about regional integration processes.

Apart from the observations that can be derived from the indicator–based systems, some additional observations can be derived from monitoring experiences more generally;

- the increasing complexity of regional integration makes monitoring more challenging;

- the increasing complexity of regional integration seems to go hand–in–hand with increasingly complex monitoring systems. In the case of EU, for example, the monitoring system consists of a whole array of interconnected processes, both at the level of internal monitoring (reporting, and auditing processes, EUROSTAT, Eurobarometer, Internal Market Scoreboard, good governance agenda) and at the level of external monitoring (by academics, think tanks, lobbyists, national and subnational parliaments) (Costea et al., 2008);

- the deepening of regional integration results in monitoring assuming a more political role and two–way interaction between regional and national levels. Whereas initially, the national

level (member states and other actors) monitors the regional level, when the regional integration process deepens, regional bodies start to monitor the implementation of regional commitments by member states (De Lombaerde, Estevadeordal and Suominen, 2008);

- monitoring covers the full project cycle. It is not limited to post evaluation; it covers the whole cycle, from the policy preparation phase onwards;

- built-in monitoring agendas are perceived as being functional in nature;

- the role and quality of national institutions is crucial for (good) monitoring, especially in the case of young and shallow forms of regional integration (De Lombaerde, Estevadeordal and Suominen, 2008).

The critical stage is the translation of selected variables into indicators. Although each variable carries specific characteristics, the choice of suitable indicators requires certain general criteria. Anderson (1991) proposes the following criteria (see Table 2.4):

- An indicator or its underlying information must be readily available and inexpensive.

- An indicator must be easy to understand.

- An indicator must be measurable.

- An indicator must characterise something important in itself, or reflect something more than the subject it measures (e.g., life expectancy data can be used to characterise the general health of the population).

- A short time gap between the described condition/situation and the emergence of the indicator is desirable.

- An indicator must be based on information that can be used to compare different geographic areas, social groups, etc., so as to provide a description of distribution, not total figures or mean values.

- The ability to form international comparisons is desirable.

4. Technical Aspects

The actual design of an indicator-based monitoring system is based on three pillars: the conceptual framework, data and methods.

The conceptual framework should guide the selection of variables and indicators. It can be based on one of the theories from the arsenal of theories available for the purpose, or on a combination of these[5]. One should be aware of the fact that many of the available theoretical frameworks are rooted in European experience, so that transferability should be evaluated. Also, the teleological logic of frameworks like Balassa's (1961) should be critically assessed. Indicator systems should be sufficiently flexible to allow for region-specific variables. When there is an underlying understanding of the/a logic of the integration process, variables and indicators can be classified in categories (institutionalised integration versus "real" integration, positive versus negative integration, by sectors, etc.) (De Lombaerde and Van Langenhove, 2005).

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[5] For an overview, see for example, Mattli (1999), Rosamond (2000), Wiener and Diez (2003), Laursen (2003), Söderbaum and Shaw (2003), Farrell et al. (2005), and Malamud and Schmitter (2007).

In indicator systems set-up to monitor regional integration, the indicators are supposed to reflect an aspect of the process. However, as experience shows us (see above), in practice this is not always the case. At the same time it is true that there will always be a grey area between those variables that should be 'in' and those that should be 'out'. Sometimes a simple transformation of variables can turn irrelevant variables into relevant variables. For example, inflation or growth rates that tell us something about the national economies of the member states can be transformed into (regional) convergence indicators.

Other issues raise themselves during the design of indicator systems. For example, systems can be designed at the regional and/or national level of analysis. An example of the latter is the system proposed by UN ESCWA to assess the participation of each national economy in the regionalisation process in the Middle East (UN ESCWA, 2007). Another issue is related to overlapping memberships and poses serious problems to the design of indicator systems. Yet another issue is related to the question of whether consolidated indices should be constructed. These consolidated indices might well capture the multi-dimensional nature of the processes and they are easy to read and communicate. However, their interpretation might become rather abstract and the weighting of the different components of the index will always be arbitrary (De Lombaerde, Dorrucci et al., 2008).

When monitoring is based on quantitative data or on a combination of quantitative and qualitative information, one is faced with the problem of data availability. This problem is even more serious at regional level than at national levels. For many variables that are not mere aggregations of national variables (such as the intra-regional flows of people, services and capital, or data on regional budgets and policies), systematic data is often still lacking, even in regions that tend to have relatively good quality data[6].

5. Comparison and Comparability

The fifth and final point refers to the issues of comparison and comparability. Different contexts, different regional realities and different regional architectures exist. These differences, such as the differences with European institutional architecture, are often confused with differences in effectiveness, but should not be. Comparison should be sensitive to these differences, without adopting the opposite extreme position that specific contexts imply that different processes are incomparable. Different levels of regional interaction and interdependence, and other aspects of regionalisation can be compared.

Comparison can be based on traditional comparative indicators or on relative comparative indicators. The latter compare regional performance first with the region-specific objectives or benchmarks, and then, in a second instance, across regions. Combinations of both approaches are obviously also possible, as the indicator system proposed by UNECA has illustrated (UNECA, 2002). Finally, as UNECA experience also shows, comparison is still a politically sensitive issue at the inter-regional level, although accepted practice at an inter-national level. Before designing an indicator system with a comparative dimension, it is preferable that it is discussed with major stakeholders.

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[6] See, for example, OECD (2004) concerning lacking data on trade in intermediate goods, services and intra-firm trade.

3. The Elements and Calculation of the SIEI

3.1. Composition of SIEI

The EDB's SIEI consists of three sets of indicators which correspond to the three main aspects of regional cooperation:

(a) analysis of regional integration as integration of markets;

(b) analysis of regional integration as convergence of economic systems;

(c) analysis of regional cooperation.

Due to the non-uniform nature of the data contained in each set, we apply different approaches towards the quantitative assessment of integration and cooperation in the post–Soviet space. This exercise exclusively covers the evaluation of regional integration in the CIS and does not pretend to be suitable for comparative analysis of integration processes elsewhere in the world; therefore, the choice of indicators was determined solely by the availability of data on post–Soviet economies and the importance attached to particular areas of economic cooperation and modernisation of CIS countries.

For the analysis of regional integration, three types of indicators are calculated for: (i) the integration of country pairs; (ii) the integration of a country with a group of countries; and (iii) the integration within a group of countries. Each of these indicators needs to be interpreted separately.

Integration of country pairs means convergence of two particular post–Soviet countries. In other words, for the purposes of the SIEI, we considered all the possible pairs of the twelve CIS countries[7] in order to assess the degree to which they are interdependent. These assessments are "symmetric", i.e. a "high level of integration" means a situation where both countries strongly depend on each other. Accordingly, asymmetric dependence (e.g., one of the two countries is a critical trade partner for the other, but not vice versa) results in a lower level of integration.

Integration of a country and a group of countries characterises the convergence of any of the twelve post–Soviet states and any of the five large regions within the post–Soviet region; these regions may be of particular interest from the point of view of practical integration activity and include several countries each. The history of implementing regional projects in the post–Soviet space (positive or less positive) allows us to define five regions:

1. CIS–12 (all post–Soviet countries);

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[7] Although Georgia left the CIS, for the purposes of the SIEI this country is included in CIS–12, which is viewed as a region.

2. EurAsEC–5 (the five members of EurAsEC: Russia, Kazakhstan, Kyrgyzstan, Belarus and Tajikistan);

3. EurAsEC–3 (the three largest EurAsEC countries that are making attempts at forming an "integration core" in the region: Russia, Kazakhstan and Belarus);

4. SES–4 (a group of the four largest post–Soviet economies: Russia, Ukraine, Belarus and Kazakhstan, named after the inconclusive project to form a Single Economic Space in the same format); and

5. CA–4 (the four Central Asian states participating in integration projects in the region: Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan. Turkmenistan is excluded as it does not take part in CIS and Central Asian integration).

In this case we use asymmetric integration indices. In other words, if a country heavily depends on trade with one of the five regions, but this trade is not significant for the region itself, the country is nonetheless assigned a high integration index. The indices of this group complement the "symmetric" indices of country pairs. These indices are calculated for integration of each of the twelve countries with each of the five regions, even if a country does not belong to a particular region. Thus, we can evaluate the "proximity" of all CIS countries to the existing or prospective integration groupings.

Integration within a group of countries is viewed as a "mean" level of interdependence of countries belonging to any of the five regions. Whereas, in the two groups above, an index is a variation in space and time, the indices from the third group represent variations in time.

The analysis of regional cooperation, unlike the study of regional integration, focuses on ongoing projects rather than the potential "cores" of integration. We provide a comparative assessment of three post–Soviet groupings: EurAsEC, the CIS, and SCO. We consider cooperation in every sense of the word, including the progress achieved by the groupings in respect of a wide range of objectives, not merely the elimination of barriers to free movement of goods, services and factors of production.

Integration of markets	Convergence of economic systems	Institutional cooperation
Indicators of regional integration in **trade, labour migration, electric power, agriculture, and education.** *Assessment of the level and dynamics of the integration of markets*	Indicators of regional integration in **macroeconomics and financial, fiscal and monetary policy.** *Assessment of the level and dynamics of the convergence of economies*	Assessment of cooperation based on **expert poll and data from integration organisations.** *Cooperation of countries in formal integration projects within the post-Soviet space, taking into account their respective goals*
• Consolidated index of integration of particular countries with the CIS-12 region • Consolidated index of integration within the five regions		

Figure 3.1.

Composition of SIEI

3.2. SIEI Calculations

Integration of Markets

The evaluation of markets in the SIEI is based on scrutiny of the cross–border flows of production factors. This method appears to be the optimal one, in view of the insufficiencies of the available time–series data (which makes it impossible to apply econometric methods) and the lack of comparable data on prices in post–Soviet countries. The SIEI uses two groups of indices: (1) evaluation of "general market integration" (i.e. covering all sectors) and (2) evaluation of the integration of specific markets. The first group of indices characterises the overall level of regional cooperation achieved by particular countries or regions, whilst the second group refers to critical areas of cooperation which are capable of becoming the "areas of actual solidarity" described above.
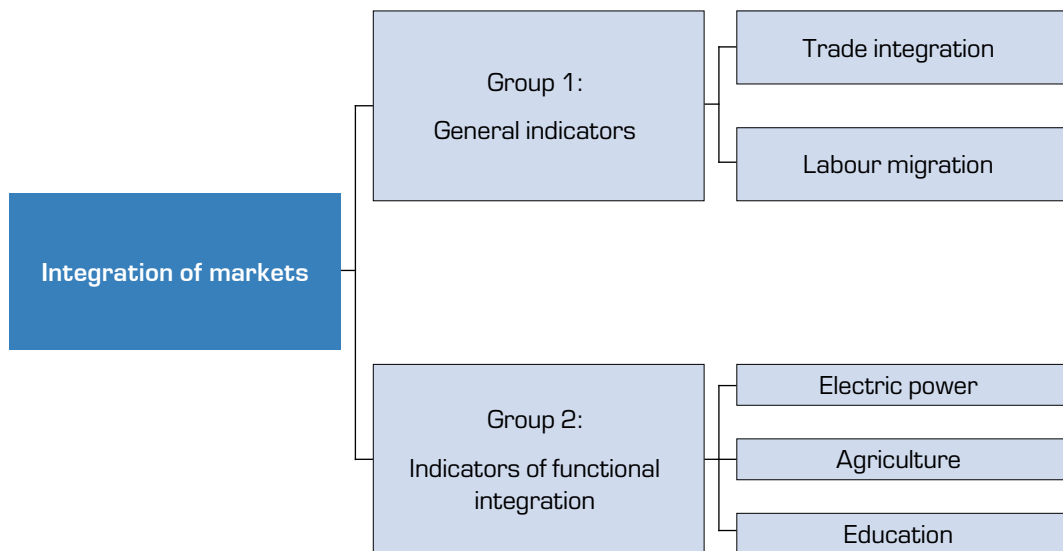
Figure 3.2.

Market integration indicators

The choice of functional areas was determined by the importance attached to particular areas of cooperation and the availability of data. In this report we provide an evaluation of three sectors: electric power, agriculture and education. It is no doubt that these three sectors are of paramount importance to the sustainable development and economic security of the respective countries, and cross–border cooperation in these sectors is essential. Electric power and agriculture provide a basis for modernisation, and education is directly responsible for building the economies' potential for innovation. In addition, cooperation in education, which is understood as levels of student exchange between countries, indirectly characterises the potential for social integration (Kegley and Howell, 1975) – notably, long–term social integration, as student exchange consists of young people.

There are fewer questions around the evaluation of "general market integration". In the SIEI, we calculate the indicators of two types of cross–border cooperation: international trade and labour migration. Logically, we should have considered one more critical area of cooperation – capital flows and mutual investment. Unfortunately, due to the scarcity of data, we cannot

calculate these indicators for the entire region, at least not at present. This issue is discussed in more detail in *Annex 3*, in which we provide recommendations on how to fill this gap in future. The procedure for calculating the indicators of market integration is summarised in *Table 3.1*.

Indicator	Country pair	Country-to-region	Region
A. General market integration			
Mutual trade	(Country's share in the total foreign trade turnover of the country pair + country's share in the total GDP of the country pair) *100 / 2	(Country's share in trade with the region in the total foreign trade turnover of the country + country's share in trade with the region in the country's GDP) *100 / 2	(Share of the countries' mutual trade in their total foreign trade turnover + share of the countries' mutual trade in the region's total GDP) *100 / 2
Migration	Share of labour migrants from each country of the pair working in the other country in the total population of the country pair	Share of labour migrants from the country working in the region in the total population of the country	Share of labour migrants from all countries of region working in other countries of the region in the total population of the region
B. Functional cooperation in key markets			
Electric power	Volume of trade in electric power between the countries of the pair (kWt.h) / their total GDP	Volume of trade in electric power between the country and the region (kWt.h) / the country's GDP	Volume of trade in electric power between the countries of the region (kWt.h) / the region's GDP
Agriculture	Volume of trade in cereals between the countries of the pair (tonnes) / their total GDP	Volume of trade in cereals between the country and the region (tonnes) / the country's GDP	Volume of trade in cereals between the countries of the region (tonnes) / the region's GDP
Education	Number of students from each country of the pair studying in the other country / total population of the country pair	Number of students from the country studying in the region / population of the country	Number of students from all countries of the region studying in other the countries of the region / total population of the

Table 3.1.

Calculation of indicators of market integration

Note: all figures are provided in Annex 2. The trade integration index is divided by 100 in order to make the presentation of data more convenient, and to ensure compatibility with the standard "share in foreign trade" indices which are expressed in percent.

As can be seen, practically all SIEI indicators are calculated by a standard formula: an integration index is a fraction in which the *numerator* is the volume of cross–border flow of production factors with the studied group (country pair, a country and region, or all countries of a region), and the *denominator* is a normalising value which allows the volume of cross–border flow to be compared to the particular country's size. The latter can be absolute GDP (as with electric power and agriculture) or population size (as with education and labour migration). GDP is a standard universal value that characterises the size of an economy; but, where we consider cross–border movement of human resources, population appears to be a more adequate basis for comparison.

The method of calculating the mutual trade index is different. First, the *numerator* in this case is *foreign trade turnover*, which comprises export and import. A standard problem encountered when calculating this index is a discrepancy in recording the same flows in export and import statistics, which can occur due to technical reasons (e.g., export and import are accounted for using different prices) or misrepresentation. Therefore, we calculate the numerator as follows:

- *country pairs*: where a pair comprises country A and country B, the numerator is the sum of export from A to B, import from A to B, export from B to A, and import from B to A;

- *country-to-region*: the numerator comprises import from the country to the region, export from the country to the region, import from the region to the country, and export from the region to the country;

- *region*: the numerator is the sum of values calculated for all pairs of countries in the region.

This approach enables us to make full use of all available data, but creates the problem of "double calculations". As "double calculations" are involved in all the indices without exception and our task is to study their dynamics in space and time, in principle this problem could be ignored. It can also be mitigated to some extent by applying the following method.

As can be seen from the above table, each index of trade integration is an arithmetic mean of two values which have the same numerator but different denominators. *The first* index is calculated the same way as all the others, where the basis for calculation is absolute GDP. However, the trade indices are special in that it is possible to use an alternative basis for comparison which, as we have mentioned above, is a standard element of indices used in literature — that is, the total turnover of trade with all the world's countries. Therefore, we calculate *the second* index, in which the basis for comparison is[8]:

- *country pair*: the aggregate foreign trade turnover of both countries;

- *country-to-region*: doubled foreign trade turnover of the country;

- *region*: the aggregate foreign trade turnover of all countries of the region.

In the case of the first and third indices, the "double count" problem is present in both the numerator and the denominator and therefore no correction is necessary. In order to correct this problem in the second index, the denominator is multiplied by two. Again, as far as comparative analysis is concerned, this is not a critical issue.

In this group of indices, *higher* values correspond to *higher levels* of integration; and flows of commodities and production factors in the context of the studied country pairs or regions are significant in relation to the aggregate size of this territory's economy.

Economic convergence

The convergence of post-Soviet economies is evaluated in four areas: macroeconomics, monetary policy, financial policy, and fiscal policy. Each of these indices comprises several characteristics. The objective of the exercise is to generalise this data and determine the degree of convergence of the region's economies from the perspective of particular characteristics. For the purposes of the above four indices, the following characteristics are considered:

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[8] We decided to omit the "trade intensity" indicators, because our system consisting of three types of indicators (country-to-country, country-to-region and region) copes with the problem of inadequate representation of large countries quite efficiently.

Figure 3.3.

Indicators of convergence of economic systems
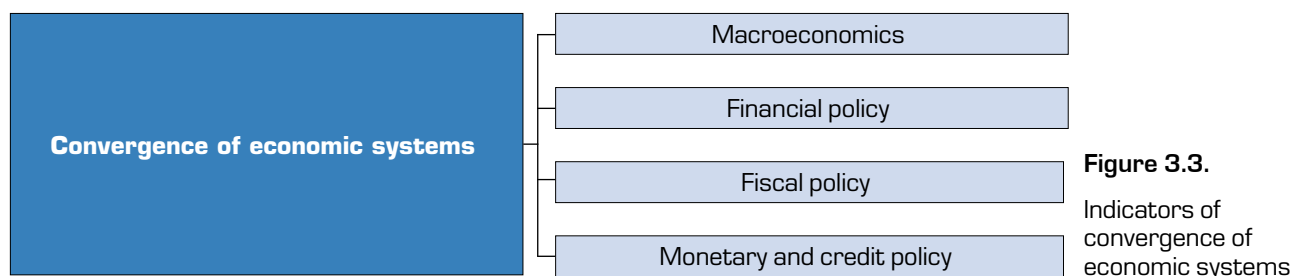
- macroeconomics: per capita GDP, annual GDP growth (thus, we take into account both of the aspects of "growth convergence" that are discussed above);

- financial policy: average deposit rate, average lending rate;

- fiscal policy: the share of consolidated budget expenditure in GDP, the share of foreign debt in GDP, the share of consolidated budget balance in GDP, and the Frank index[9].

- monetary policy: annual rate of growth of national currency against the US dollar and average annual inflation rate.

In this case we use an approach which on the whole corresponds to the concept of *σ–convergence*. Each country is considered a point in multi–dimensional space, and each dimension corresponds to a characteristic. Each index included in the analysis is interpreted as a coordinate of that point (i.e. a country) in the space of integration characteristics. The closer two points come, the higher their convergence level is. The distance is a simple Euclidian distance. Characteristics that are of a different nature are made comparable by standardising: from each index, its average value for all countries is deducted, and the result is divided by standard deviation. Therefore, the absolute size of the characteristics does not affect the resulting index.

To evaluate the *integration of country pairs*, the distance between the respective points (i.e. countries) is calculated. To evaluate the *integration of a country and a region*, a new point ("region") in space is created, whose coordinates correspond to an average value of respective coordinates of all existing points (countries of the region). Next, the distance between that point (country) and the region is measured. Finally, to evaluate the *integration within a region*, we use an average module of the coefficient of variation (standard deviation divided by an average value) for all the characteristics considered for the purposes of this index. The use of the coefficient of variation is warranted by a sustained trend observed in data series (e.g., sustained economic growth was observed in the post–Soviet countries throughout the studied period) which may distort the final results. The absolute value of the coefficient is used because, whilst some characteristics are by definition higher than zero, others (e.g. budget balance) may be negative; accordingly, the use of the initial value (without a module) would have led to a situation in which, given a negative average value, an increase in standard deviation of budget balance leads to a decrease in the resulting index. Thus (in contrast to calculation of market integration indices), *higher indices* correspond to *greater distances between countries and regions* and, accordingly, lower levels of integration.

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[9] The Frank index is the simplest method comparing the tax burden on an economy, which allows the cumbersome and often controversial process of evaluating effective tax rates to be omitted. The Frank index is calculated as a fraction: the numerator is the consolidated tax revenue times the country's population number, and the denominator is the square of GDP (Sosvilla Rivero et al., 2001).

Consolidated indices

Generally, the SIEI includes nine indices of regional integration: trade, labour migration, electric power, agriculture, education, macroeconomic convergence, monetary policy, fiscal policy, and financial policy, and a number of cooperation indices based on the expert poll. The first five indices characterise the level and dynamics of integration of markets, and the other four the level and dynamics of economic convergence. Some aspects of integration cannot translate into each other, and the connections between them are not straightforward; therefore, for the purposes of the SIEI, the focus should be on separate indices rather than their aggregates. However, we have developed two types of consolidated indices that give a wider picture of regional integration in the post–Soviet space and include all the nine indices. The first one is the consolidated index of a country's integration with CIS–12, which was calculated by standardising all the nine indices of integration of individual countries with CIS–12. Before this operation, all convergence indices had been multiplied by −1; therefore, higher values of the indices correspond to shorter distances. The final index is a simple mean of these modified indices. The second one is consolidated index of a country's integration *within* any of the five regions. The values of the nine individual indices for each year were standardised. Next, we calculated a simple mean of the nine indices for each grouping; convergence indices were multiplied by −1.

Calculation Period

Where possible, the indices of market integration and economic convergence were calculated for 1999–2008 (or a shorter period, due to a lack of data for early years). Therefore, the obtained results allow us to evaluate the dynamics of integration over the decade. Some data for the years preceding 2000 (or 2002, in some cases) is missing. In these cases the evaluation has been started from the first year for which data is available.

The selection of the starting year for other characteristics (1999) was determined by the following considerations. The 1990s were the time of disintegration of the post–Soviet space, which was a largely inevitable consequence of the collapse of the Soviet Union, and resulted in the qualitative restructuring of most economies of the region. Therefore, calculation of values in the 1990s would have only enabled the qualitative evaluation of this inevitable disintegration. For the purposes of the SIEI, we have set ourselves a somewhat different task: *to describe how post-Soviet economies' interaction has been evolving after the initial "Big Bang"*. Have they simply followed the downward spiral of disintegration, or have they managed to reverse this trend by achieving a new level of interaction? By the beginning of the 2000s, most post–Soviet countries already had a basic structure of new economic order and as a result the most important consideration in the analysis of post–Soviet integration is to determine the potential effect of the *existing* institutional environment on the dynamics of interaction. Again, it is critical not only to demonstrate that the institutional "interregnum" and the lack of stability led to disintegration, but to study how countries with already established (and existing to date) institutions can interact.

Unfortunately, data for many characteristics relevant to the studied period is missing, and our calculations have a number of gaps. The main difficulty was in the calculation of values for the five regions that include several countries each. In future, we will calculate indices for these regions as *an index for all the countries of the region where data is available*. This will inevitably affect the stability of the resulting values over time; the country–to–country analysis, which is by definition free of this problem, will to some extent make up for the potential inaccuracy in interpretation of the results. Therefore, an increase in market integration indices may be attributable to improved

availability of data. However, as is seen from the results of our analysis, this was not a significant problem in the case of post–Soviet countries.

Regional Cooperation and Institutional Integration

As we have mentioned previously, this set of data is the most difficult from the point of view of quantitative assessment. To evaluate these characteristics of regional interaction, we used two approaches. First, we conducted an *expert poll* in order to obtain and "quantify" the qualitative assessments of the performance of the three integration projects in the post–Soviet space in the context of various objectives and aspects of interaction. The details of the sampling and the main results of the enquiries are all discussed in the respective section. Second, in the case of some integration groupings, we considered the *formal characteristics of their performance* (budget, law–making activity, organisational structure, etc.) to evaluate their minimum potential for cooperation. The details of this analysis are also provided in the respective section. The results of the enquiries are not incorporated in the consolidated indices of integration − principally, because the nature of the studied object is quite different. Whereas the market integration and economic convergence indices were calculated for *countries* and *regions*, the enquiries focused on the characteristics of *international integration organisations.* In other words, if we had incorporated the results of the enquiries in the indicators, our analysis would have been confined to comparing CIS–12 and EurAsEC–5, without indices for individual countries and an analysis of other potential "integration clubs". This would have seriously reduced the value of our report as a "policy–making tool" that aims at identifying an *optimal format* for integration cooperation. In addition, the results of the enquiries by definition enable only the evaluation of the *current* level of integration (any attempts at retrospective evaluation encounter the inevitable problem of "asymmetric" perception of the present and past events), and so it is not possible to analyse the dynamics of regional integration processes.

4. Regional Integration: the Results

4.1. Integration of Markets

Trade

Current status: In *Table 4.1* we summarise the results of our analysis of trade integration (country pairs and country-to-region) in 2008. Country pairs with the highest levels of integration (in the CIS context) are easily identifiable. The leading country pair is Russia–Ukraine: these are large economies and important trading partners for each other. The second country pair, not surprisingly, is Russia–Belarus. High levels of integration (exceeding 1) are demonstrated by Azerbaijan–Georgia, Armenia–Georgia, Ukraine–Belarus, Russia–Kazakhstan, Ukraine–Moldova and Ukraine–Kazakhstan. Almost all pairs comprise neighbouring states (except Kazakhstan and Ukraine). On the other hand, the geographic proximity of Central Asian states does not seem to be an impetus for their trade integration; however, trade integration of this region with other CIS countries is also not significant.

However, the analysis of the integration of individual countries and regions changes the overall picture. The leaders in integration with CIS–12 are Belarus, Kyrgyzstan, Tajikistan and Moldova – that is (except Belarus), comparatively small economies with no access to global markets. The reasons are obvious. Although the CIS–12 markets are priorities for Belarus, Tajikistan and Moldova, for larger economies in this region trade with these small countries is less important quantitatively than trade with other partners. And, since the SIEI focuses on symmetric integration, this automatically reduces the index. The lowest levels of integration with CIS–12 are demonstrated by Azerbaijan and Russia, whose main interests lie outside this region's markets.

The same countries occupy the same positions in integration with EurAsEC–5 and EurAsEC–3. These two groupings have practically identical indices, which reflects the leading role of EurAsEC's three largest economies in its total trade. The situation is slightly different for SES–4: Moldova and Kyrgyzstan exchange positions and Azerbaijan and Russia lag behind. Interestingly, all the three groupings are critical trading partners for countries which do not belong to them – first of all, Moldova, and, for Single Economic Space (SES–4), Kyrgyzstan and Tajikistan. On the other hand, the regions' largest states demonstrate comparatively low levels of trade integration. Finally, the indices of trade integration with CA–4 are significantly lower than with other large groupings. In this case, from the perspective of involvement in regional trade, Kyrgyzstan is the unquestionable leader; Tajikistan ranks second but is far behind. The lowest levels of trade integration at the country-to-region level are demonstrated by Armenia (which is logical) and, surprisingly, Kazakhstan.

0.6 → Share of mutual trade GDP of the CIS (%)

Major flows are reflected

Russian Federation

Kyrgyzstan

Tajikistan

Uzbekistan

Kazakhstan

Turkmenistan

Azerbaijan

Armenia

Georgia

Moldova

Ukraine

Belarus

0.4 0.7 0.2 0.9 0.5 0.2 3.5 0.6 0.6 0.4 2.2 0.9 1.9 0.3 1.3 3.2 6.2 6.2 4.2 0.9

Mutual Trade in CIS, 2008 ($ million)

	Export	Import
Azerbaijan	1619	2340
Armenia	340	1306
Belarus	14406	26054
Georgia	543	2001
Kazakhstan	11078	17497
Kyrgyzstan	781	2187
Moldova	628	1737
Russia	69862	36598
Tajikistan	225	1834
Ukraine	23819	33569
CIS Total	123301	125122

Share of CIS countries in foreign trade, 2008 (%)

- Export
- Import

	Others	Kazakhstan	Belarus	Ukraine	Russia
	3 / 9	9 / 14	12 / 21	19 / 27	29 / 57
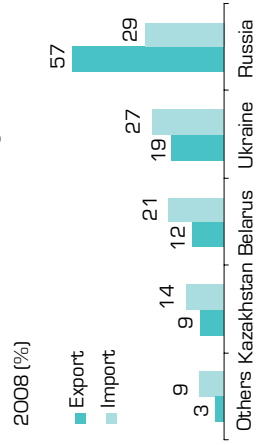
Figure 4.1.

Mutual trade by CIS countries, 2008

Table 4.1.

Trade Integration Index, 2008

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	na	0.178	2.228	0.559	0.032	0.024	0.401	0.211	na	na	0.791	7.882	5.606	5.472	7.190	1.085
Armenia	2	na	-	0.079	1.915	0.025	0.007	0.048	0.191	0.001	na	na	0.356	21.907	13.706	13.699	17.842	0.218
Belarus	3	0.178	0.079	-	0.119	0.591	0.130	0.869	6.210	0.173	na	na	4.194	61.498	52.968	52.805	60.268	1.002
Georgia	4	2.228	1.915	0.119	-	0.111	0.037	0.072	0.100	0.038	na	na	0.929	26.619	6.697	6.638	15.218	0.812
Kazakhstan	5	0.559	0.025	0.591	0.111	-	0.935	0.252	3.455	0.460	na	na	3.165	23.904	17.806	17.078	20.867	0.728
Kyrgyzstan	6	0.032	0.007	0.130	0.037	0.935	-	0.073	0.352	0.719	na	na	0.112	55.092	45.914	45.227	47.019	11.537
Moldova	7	0.024	0.048	0.869	0.072	0.252	0.073	-	0.271	0.010	na	na	1.346	37.665	29.739	29.662	48.211	2.601
Russia	8	0.401	0.191	6.210	0.100	3.455	0.352	0.271	-	0.212	na	na	6.243	10.430	5.579	5.295	8.966	2.229
Tajikistan	9	0.211	0.001	0.173	0.038	0.460	0.719	0.010	0.212	-	na	na	0.110	42.197	30.161	29.403	31.331	6.625
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.791	0.356	4.194	0.929	3.165	0.112	1.346	6.243	0.110	na	na	-	34.422	28.252	28.137	28.137	2.831

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	na	-0.100	-1.260	0.130	-0.234	-0.039	0.021	-0.425	na	na	0.370	-11.617	-6.285	-5.742	-6.309	-0.758
Armenia	2	na	-	0.019	-0.501	-0.038	0.003	0.028	-0.005	0.001	na	na	0.273	3.628	3.148	3.146	6.410	-0.104
Belarus	3	-0.100	0.019	-	0.067	0.161	-0.260	-0.785	-3.333	-0.035	na	na	0.293	-84.531	-77.269	-77.050	-82.375	-0.221
Georgia	4	-1.260	-0.501	0.067	-	0.059	-0.005	0.056	-0.096	-0.012	na	na	0.625	0.923	-4.207	-4.169	1.075	0.441
Kazakhstan	5	0.130	-0.038	0.161	0.059	-	-0.632	0.198	-0.021	-0.490	na	na	2.143	-1.666	-4.981	-4.322	-2.178	-0.659
Kyrgyzstan	6	-0.234	0.003	-0.260	-0.005	-0.632	-	0.002	0.088	-0.319	na	na	0.009	16.347	18.745	19.135	19.657	1.298
Moldova	7	-0.039	0.028	-0.785	0.056	0.198	0.002	-	-0.344	-0.003	na	na	0.420	-7.096	-13.649	-13.640	-6.801	2.190
Russia	8	0.021	-0.005	-3.333	-0.096	-0.021	0.088	-0.344	-	-0.071	na	na	-3.169	-3.665	-1.763	-1.770	-3.763	0.059
Tajikistan	9	-0.425	0.001	-0.035	-0.012	-0.490	-0.319	-0.003	-0.071	-	na	na	-0.272	-26.653	7.200	7.462	4.922	0.264
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.370	0.273	0.293	0.625	2.143	0.009	0.420	-3.169	-0.272	na	na	-	-2.735	-3.780	-3.640	-3.640	1.832

Table 4.2.

Dynamics of Trade Integration Index, 1999–2008

Dynamics: *Table 4.2* illustrates changes in trade integration indices in 1999–2008 (individual tables for each year are provided in the *Annex*)[10]. The largest increase in indices was demonstrated by Kazakhstan–Ukraine, the only country pair which occupies a leading position in trade integration but has no common border. A significant decrease in trade integration (by more than 1 point) was observed in Georgia–Azerbaijan, Russia–Belarus and Russia–Ukraine. They remain the most integrated country pairs in terms of mutual trade, although their interdependence has diminished over the past decade. In terms of integration with CIS–12, the most significant increase in the index was demonstrated by Kyrgyzstan; Armenia follows the leader at a big distance. Belarus demonstrates the lowest level of integration with the region (it seems this is as a direct result of the shrinkage in trade with Russia).

Kyrgyzstan is leading in terms of the increase in integration with EurAsEC–3, EurAsEC–5 and SES–4. Tajikistan's trade integration with CIS–12 decreased, whilst the levels of its integration with other groupings are on the rise, elevating this country to the second position in EurAsEC–3 and EurAsEC–5. Armenia ranks second in SES–4. Belarus retains leadership in reducing trade integration. Finally, in CA–4, the largest increase in the index is observed in Moldova – this appears to be as a result of the expansion in trade with Kazakhstan. Ukraine ranks second and Kazakhstan third. The biggest decrease in trade integration with CA–4 was demonstrated by Azerbaijan. In other words, Central Asia seems to prioritise trade outside the post–Soviet space, and this trend is becoming more pronounced over time.

The dynamics of *integration within the five groupings* is generally characterised by an ongoing decrease in trade integration, as can be seen from the groups' almost identical charts (see Figure 4.2). The lowest (and the most sustainable) levels of integration are observed in Central Asia; the highest indices are demonstrated by CIS–12 (which can be explained by the larger number of members), and SES–4 ranks second. This also shows that there have been no changes in the regions' ranking in terms of trade integration. The analysis of individual components of the index (which use GDP or trade volume as a basis for comparison, respectively) brings virtually identical results.
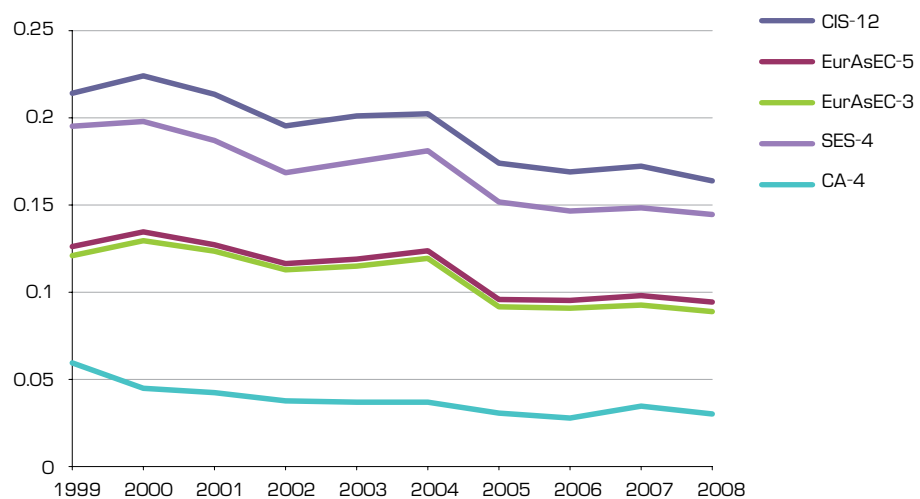
Figure 4.2.

The dynamics of trade integration in the five regions

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[10] In the Table, a difference between 2008 and 1999 is shown. A positive value means an increase in the indicator.

Source: Interstate Statistical Commitee of the CIS

Kazakhstan (15.6) Total population (million)
Labour migrants inflow (thousand)
Only most significant flows are reflected

7.6

Russian Federation (141.9)

Kyrgyzstan (5.3)

Kazakhstan (15.6)

Tajikistan (7.1)

Uzbekistan (27.2)

Turkmenistan (5.2)

Azerbaijan (8.7)

Armenia (3.2)

Georgia (4.4)

Moldova (3.6)

Ukraine (46.4)

Belarus (9.7)

391
185
10
2
0.2
0.8
1.9
0.5
3
643
76
100
4
122
245
0.1
0.6
0.6
2.7
0.6
0.6
0.1
1.1

Inflow to Russia, 2008 (%)

Tajikistan 22.9
Others 15
Uzbekistan 37.6
Moldova 7.1
Kyrgyzstan 10.8
Armenia 5.9
Ukraine 14.3

<1 000
<10 000
>10 000
>100 000
>200 000
>300 000
>500 000

Figure 4.3.

Labour migration in the CIS, 2008

Labour Migration

Current status: Unlike mutual trade, migration flows in the post–Soviet space are aimed at a few large target economies which need foreign workforce. Therefore, most *country pairs* do not demonstrate any significant integration in labour markets (this, however, may also be attributable to the low quality of data). The leading country pair in this aspect of integration is Kazakhstan–Kyrgyzstan (see Table 4.3); Kazakhstan–Azerbaijan follows, far behind. It can be concluded that, at least based on official statistics, Kazakhstan displays the highest dependence on migrant workers from other post–Soviet countries (primarily Kyrgyzstan). The officially recorded migration to Russia, albeit considerable in terms of absolute figures, is rather negligible in relation to its population size.

Our analysis of the *integration of post-Soviet countries and regions* only covered the three groupings (CIS–12, EurAsEC–3 and SES–4) for which data was available. Tajikistan is the leader in integration with CIS–12, which can be explained by the huge outflow of labour resources to Russia in relation to the country's own population. The next three positions are occupied by Kyrgyzstan, Moldova and Armenia. Notably, the lowest labour migration index belongs to Belarus. In other words, the integration of different post–Soviet markets is not uniform, i.e. intensive commodity exchange does not necessarily means dynamic movement of factors of production. The indices of integration of individual countries with EurAsEC–3 and SES–4 are almost identical to those of integration with CIS–12; the only exception is Russia whose index is declining. This can be attributed to a huge inflow of workforce from Tajikistan.

Dynamics: Unlike trade integration, labour migration integration in the post–Soviet space boomed over the past decade (our analysis is confined to 2000–2008 due to a lack of data). An increase in this index was demonstrated by almost all country pairs. The leading pair is Kazakhstan–Kyrgyzstan (see Table 4.4). In other words, Kazakhstan is becoming a new centre of migration (at least for migrant workers from Kyrgyzstan) and as a result the structure of labour migration in the CIS is becoming polycentric (and, in turn, Russia ceases to be the sole centre). Most countries demonstrate positive dynamics in this aspect of integration with the three groupings, with Tajikistan being the absolute leader. The only country whose presence on the labour markets of the CIS is shrinking is Georgia.
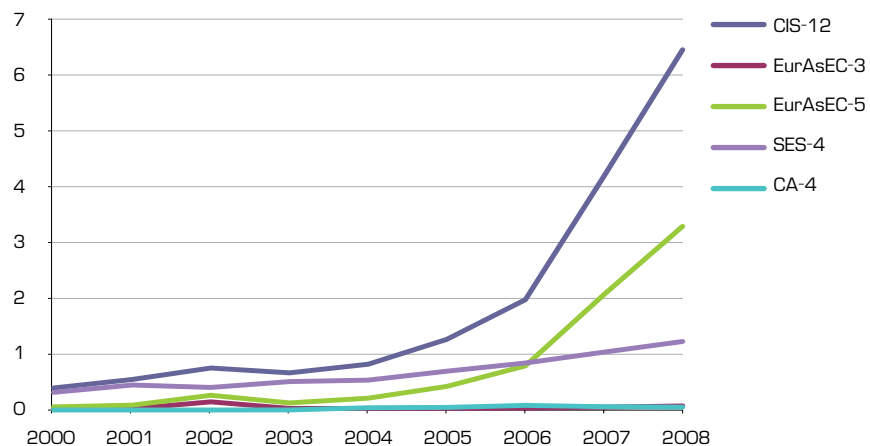
Figure 4.4.

The dynamics of labour migration integration in three regions

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level		
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-3	SES-4
Azerbaijan	1	-	0.000000	0.002508	0.000000	0.022541	0.000000	0.002369	0.000004	0.000000	0.000000	0.000000	0.000000	8.947	8.870	8.944
Armenia	2	0.000000	-	0.005966	0.000000	0.000531	0.000000	0.000588	0.000005	0.000000	0.000000	0.000000	0.000000	31.026	30.963	31.025
Belarus	3	0.002508	0.005966	-	0.002277	0.006212	0.001072	0.006342	0.000884	0.000179	0.000134	0.002441	0.009903	0.188	0.030	0.152
Georgia	4	0.000000	0.000000	0.002277	-	0.006956	0.000000	0.001131	0.000000	0.000000	0.000000	0.000000	0.000000	1.072	0.994	1.070
Kazakhstan	5	0.022541	0.000531	0.006212	0.006956	-	0.089392	0.011996	0.012515	0.009506	0.001635	0.018481	0.008423	1.087	0.801	0.842
Kyrgyzstan	6	0.000000	0.000000	0.001072	0.000000	0.089392	-	0.000453	0.000009	0.000000	0.000000	0.000000	0.000000	35.564	35.514	35.563
Moldova	7	0.002369	0.000588	0.006342	0.001131	0.011996	0.000453	-	0.000281	0.000000	0.000114	0.000422	0.002022	34.444	34.237	34.427
Russia	8	0.000004	0.000005	0.000884	0.000000	0.012515	0.000009	0.000281	-	0.000019	0.000000	0.000027	0.000009	12.578	0.088	1.835
Tajikistan	9	0.000000	0.000000	0.000179	0.000000	0.009506	0.000000	0.000000	0.000019	-	0.000000	0.000000	0.000000	54.995	54.985	54.995
Turkmenistan	10	0.000000	0.000000	0.000134	0.000000	0.001635	0.000000	0.000114	0.000000	0.000000	-	0.000000	0.000000	0.680	0.599	0.680
Uzbekistan	11	0.000000	0.000000	0.002441	0.000000	0.018481	0.000000	0.000422	0.000027	0.000000	0.000000	-	0.000000	23.703	23.661	23.703
Ukraine	12	0.000000	0.000000	0.009903	0.000000	0.008423	0.000000	0.002022	0.000009	0.000000	0.000000	0.000000	-	5.467	5.386	5.386

Table 4.3.

Labour Migration Index, 2008

Table 4.4.

Dynamics of Labour Migration Index, 2000–2008

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level		
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-3	SES-4
Azerbaijan	1	-	0.000000	0.001954	0.000000	0.021539	0.000000	0.002113	0.000003	0.000000	0.000000	0.000000	0.000000	8.522	8.451	8.519
Armenia	2	0.000000	-	0.002408	0.000000	0.000365	0.000000	0.000151	0.000005	0.000000	0.000000	0.000000	0.000000	29.228	29.235	29.228
Belarus	3	0.001954	0.002408	-	0.001997	0.004645	0.001072	0.005095	0.000551	0.000179	-0.000207	0.002441	-0.014752	0.014	0.020	-0.014
Georgia	4	0.000000	0.000000	0.001997	-	0.006696	0.000000	0.000880	0.000000	0.000000	0.000000	0.000000	0.000000	-0.150	-0.210	-0.152
Kazakhstan	5	0.021539	0.000365	0.004645	0.006696	-	0.088230	0.009785	0.009264	0.009316	0.001276	0.016592	0.006138	0.829	0.569	0.596
Kyrgyzstan	6	0.000000	0.000000	0.001072	0.000000	0.088230	-	0.000336	0.000009	0.000000	0.000000	0.000000	0.000000	35.374	35.332	35.374
Moldova	7	0.002113	0.000151	0.005095	0.000880	0.009785	0.000336	-	0.000254	0.000000	0.000114	0.000387	0.001834	31.118	30.947	31.104
Russia	8	0.000003	0.000005	0.000551	0.000000	0.009264	0.000000	0.000254	-	0.000018	0.000000	0.000027	0.000007	11.842	0.064	1.368
Tajikistan	9	0.000000	0.000000	0.000179	0.000000	0.009316	0.000000	0.000387	0.000018	-	0.000000	0.000000	0.000000	53.978	53.971	53.978
Turkmenistan	10	0.000000	0.000000	-0.000207	0.000000	0.001276	0.000000	0.000114	0.000000	0.000000	-	0.000000	0.000000	0.632	0.552	0.632
Uzbekistan	11	0.000000	0.000000	0.002441	0.000000	0.016592	0.000000	0.000387	0.000027	0.000000	0.000000	-	0.000000	23.419	23.412	23.418
Ukraine	12	0.000000	0.000000	-0.014752	0.000000	0.006138	0.000000	0.001834	0.000007	0.000000	0.000000	0.000000	-	4.090	4.038	4.038

The most distinct positive trends in labour migration were observed in the analysis of *integration at the region leve*l. For EurAsEC–3 and CA–4 (see Figure 4.4), the level of integration has not changed over the decade (it should be remembered that, in CA–4 we only consider migration to Kazakhstan, and the indices for EurAsEC–3 and EurAsEC–5 differ only in the numerator (population), but not the denominator. On the other hand, we can point to a migration boom in SES–4, EurAsEC–5 and, especially CIS–12, in particular after 2005. In other words, whereas the post–Soviet space at best retains the same levels of trade integration, in labour migration integration, or even displays some signs of decline of intra–regional links, the situation is completely different on labour markets.

Electric power

Current status: As with labour migration, cross–border trade in electric power is confined to a few countries. In this case (see Table 4.5) we can easily identify the absolute leader in this aspect of integration: Uzbekistan–Tajikistan. Tajikistan's export of electric power is very important for both these economies in the context of their size and also as a component of the scheme of hydraulic power exchange between them. Tajikistan–Turkmenistan and Tajikistan–Kyrgyzstan rank second and third, respectively. Ukraine–Moldova only occupies fourth place. In other words, cross–border markets of electric power play an important role in Central Asia, but are not nearly as significant for the post–Soviet space as a whole.

Tajikistan also has the highest index of *integration at the country-to-region level* (namely, with CIS–12). Moldova ranks second (due to its importing of electric power) and Uzbekistan third. Tajikistan's prominent position in energy integration in the post–Soviet space is almost entirely attributable to its cooperation with CA–4 (in which it is also the leader). In EurAsEC–5, the leader is Uzbekistan; Kyrgyzstan ranks second. In EurAsEC–3 and SES–4, the highest index belongs to Kyrgyzstan (probably as a result of trading energy with Kazakhstan). The lowest level of integration with CIS–12 is demonstrated by Armenia; Russia's index is also very low. In the case of Armenia, the reasons are geographic and political; by contrast, Russia's position is explained by its large economy and the abundance of domestic energy resources.
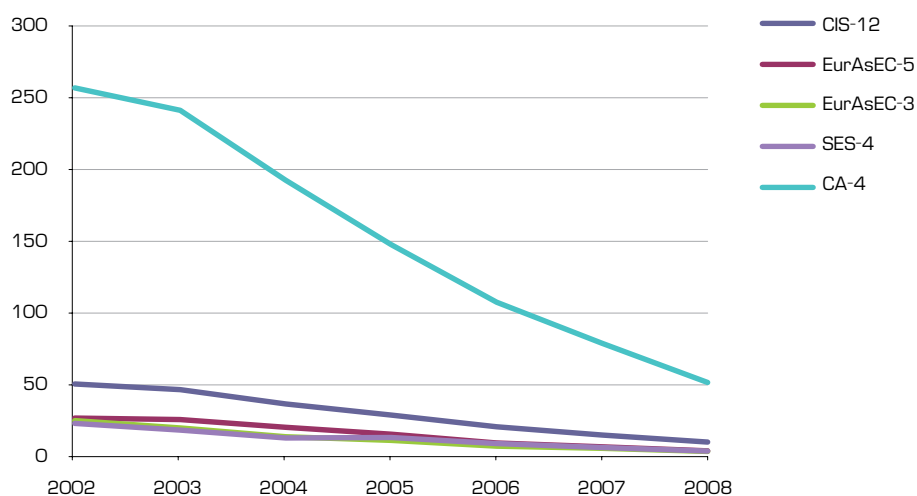
Figure 4.5.

The dynamics of energy integration in the five regions

Table 4.5.

Energy Integration Index, 2008

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	0.00	0.91	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	12.04	10.87	10.87	10.87	0.00
Armenia	2	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	35.92	35.91	35.91	35.92	0.00
Georgia	4	0.91	0.00	0.00	-	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00	88.93	84.78	84.78	84.78	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	4.07	0.00	2.55	0.31	0.00	0.00	0.00	39.28	39.28	34.74	34.74	4.55
Kyrgyzstan	6	0.00	0.00	0.00	0.00	4.07	-	0.00	0.00	16.28	0.00	0.00	0.00	142.31	142.29	109.71	109.71	142.31
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	15.58	486.80	0.00	0.00	486.80	0.00
Russia	8	0.29	0.00	1.25	0.65	2.55	0.00	0.00	-	0.00	0.00	0.00	0.60	5.68	4.05	4.05	4.72	2.75
Tajikistan	9	0.00	0.00	0.00	0.00	0.31	16.28	0.00	0.00	-	22.21	252.19	0.00	1836.19	40.77	8.23	8.23	1600.37
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.21	-	0.00	0.00	24.52	24.52	0.00	0.00	24.52
Uzbekistan	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	252.19	0.00	-	0.00	300.84	300.84	0.00	0.00	300.84
Ukraine	12	0.00	0.00	0.00	0.00	0.00	0.00	15.58	0.60	0.00	0.00	0.00	-	22.20	6.10	6.10	6.10	0.00

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	0.00	-13.21	0.00	0.00	0.00	-3.75	0.00	0.00	0.00	0.00	-237.65	-217.01	-217.01	-217.01	0.00
Armenia	2	0.00	-	0.00	-24.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-59.34	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	-9.11	0.00	0.00	0.00	-0.01	-219.56	-219.53	-219.53	-219.56	0.00
Georgia	4	-13.21	-24.44	0.00	-	0.00	0.00	0.00	-0.78	0.00	0.00	0.00	0.00	-139.76	-62.29	-62.29	-62.29	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	-10.52	0.00	-13.44	-5.46	0.00	-0.51	0.00	-222.95	-222.26	-205.21	-205.21	-17.74
Kyrgyzstan	6	0.00	0.00	0.00	0.00	-10.52	-	0.00	0.00	-65.90	0.00	-78.81	0.00	-732.71	-240.73	-128.82	-128.82	-732.71
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	-1.27	0.00	0.00	0.00	-6.82	-369.39	-264.00	-264.00	-369.39	0.00
Russia	8	-3.75	0.00	-9.11	-0.78	-13.44	0.00	-1.27	-	0.00	0.00	0.00	0.01	-29.76	-23.89	-23.89	-23.89	-14.38
Tajikistan	9	0.00	0.00	0.00	0.00	-5.46	-65.90	0.00	0.00	-	-36.27	-541.32	0.00	-5234.06	-272.20	-114.16	-114.16	-4993.44
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-36.27	-	0.00	0.00	-42.15	-42.15	0.00	0.00	-42.15
Uzbekistan	11	0.00	0.00	0.00	0.00	-0.51	-78.81	0.00	0.00	-541.32	0.00	-	0.00	-703.27	-703.27	-2.02	-2.02	-703.27
Ukraine	12	0.00	0.00	-0.01	0.00	0.00	0.00	-6.82	0.01	0.00	0.00	0.00	-	-6.56	0.63	0.63	0.63	0.00

Table 4.6.

Dynamics of Energy Integration Index, 2002–2008

Dynamics: The dynamics of trade in electric power in the post–Soviet space lags far behind the growth of CIS economies. As can be seen in *Table 4.6,* in most country pairs this index shrank in 2002–2008. The only exception was an insignificant increase in the Ukraine–Russia country pair. The levels of integration of almost all countries with the five regions also decreased. Again, the only exception was Ukraine whose integration with EurAsEC–5 and EurAsEC–3 progressed slightly, whereas its integration with CIS–12 slowed (this process is also driven by trade in electric power with Russia).

The dynamics of the *integration in regions* also follows these trends. The energy integration index was decreasing in all the five regions over the last seven years (see Figure 4.5). This decrease was especially pronounced in CA–4 which, nonetheless, remains the leader in the integration of electric power markets. It should be stressed that this refers to the integration of power markets lagging behind economic growth, not the shrinkage of absolute trade figures. Paradoxically, the negative dynamics of this index can be explained by the rapid economic growth of the region during the decade under review. The countries mainly used the generated power domestically, and reduced export volumes if necessary. The creation of a common electric power market in the CIS is expected to help overcome this trend. In any event, our analysis proves the huge potential the CIS has for cooperation in the electric power sector (Vinokurov, 2008).

Agriculture

Current status: At the *country pair level*, the leader in agriculture integration (based on data on cross–border trade in cereals) in the post–Soviet space is Kazakhstan (see Table 4.7). This country is present in all three leading country pairs: Kazakhstan–Azerbaijan, Kazakhstan–Turkmenistan and Kazakhstan–Kyrgyzstan. In this context integration of neighbouring Central Asian and Caspian states is based on the export of cereals from Kazakhstan. Trade in cereals between other CIS countries is not nearly as significant in relation to the size of their economies. Most country pairs do not have any mutual trade in cereals at all.

Figure 4.6.

The dynamics of agriculture integration in the five regions
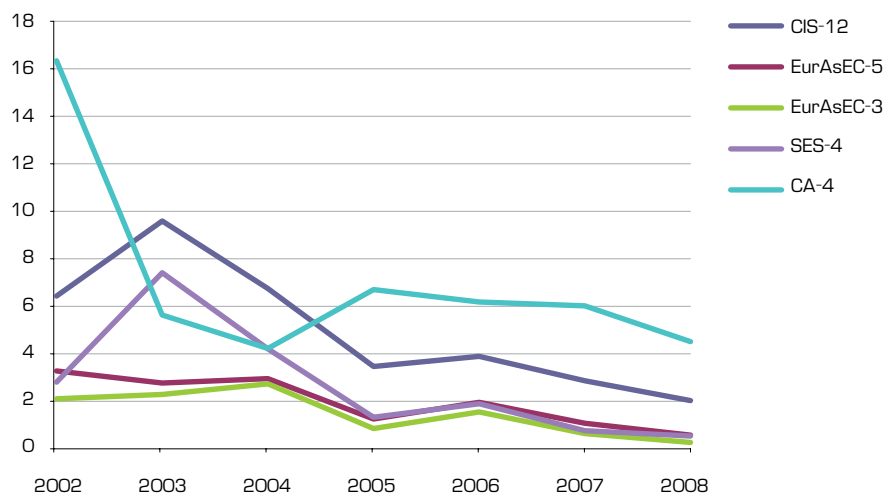
Source: Interstate Statistical Commitee of the CIS

1121 volume (million kWt.h)

Only most significant flows are reflected

<1 000

>1 000

>2 000

>3 000
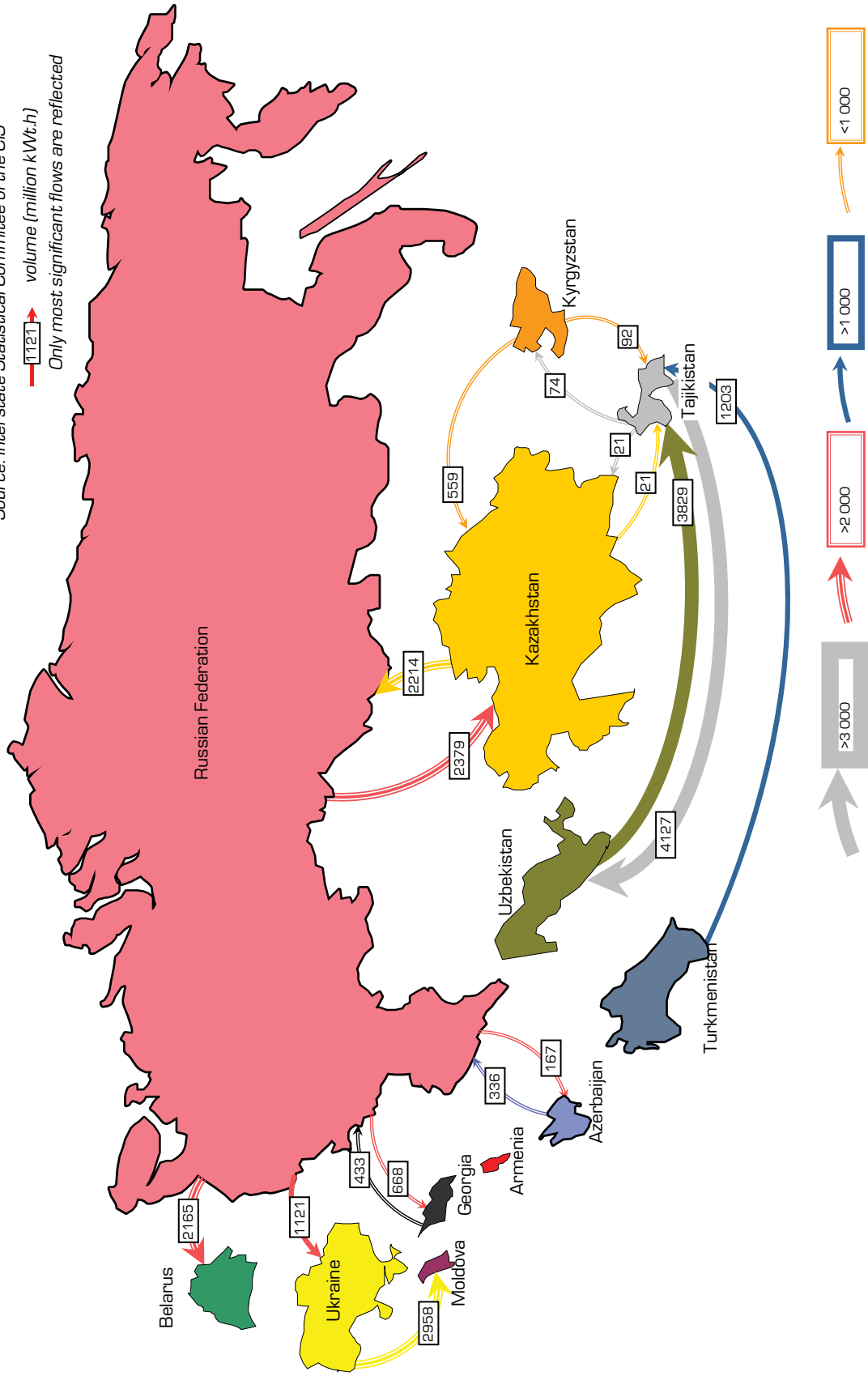
Figure 4.7.

Trade in electric power in the CIS, 2008

Table 4.7.

Agricultural Integration Index, 2008

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	0.00	0.02	2.71	0.00	0.00	0.45	0.00	0.00	0.00	0.67	30.38	27.03	27.03	30.36	10.46
Armenia	2	0.00	-	0.00	0.12	0.27	0.00	0.00	0.16	0.00	0.00	0.00	0.22	30.19	26.33	26.33	29.93	3.27
Belarus	3	0.00	0.00	-	0.00	0.33	0.00	0.00	0.06	0.00	0.00	0.00	0.99	6.77	2.75	2.75	6.77	1.06
Georgia	4	0.02	0.12	0.00	-	0.57	0.00	0.00	0.10	0.00	0.00	0.00	0.30	23.56	18.71	18.71	23.25	6.39
Kazakhstan	5	2.71	0.27	0.33	0.57	-	2.16	0.10	0.19	1.86	2.38	1.32	0.11	16.99	7.20	3.03	3.28	5.76
Kyrgyzstan	6	0.00	0.00	0.00	0.00	2.16	-	0.00	0.01	0.00	0.00	0.00	0.02	61.05	60.46	60.45	61.04	58.30
Moldova	7	0.00	0.00	0.06	0.00	0.10	0.00	-	0.00	0.00	0.00	0.00	0.09	6.42	3.46	3.46	6.42	2.30
Russia	8	0.45	0.16	0.00	0.10	0.19	0.01	0.00	-	0.01	0.00	0.01	0.18	1.21	0.28	0.26	0.46	0.23
Tajikistan	9	0.00	0.00	0.00	0.00	1.86	0.00	0.00	0.01	-	0.00	0.00	0.02	53.73	53.14	53.13	53.72	50.00
Turkmenistan	10	0.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	0.00	-	0.00	0.00	8.82	8.82	8.82	8.82	8.78
Uzbekistan	11	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.01	0.00	0.00	-	0.11	9.72	8.85	8.85	9.72	7.94
Ukraine	12	0.67	0.22	0.99	0.30	0.11	0.02	0.09	0.18	0.02	0.00	0.11	-	4.92	3.30	3.27	3.27	0.34

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	0.00	-0.04	-12.25	0.00	0.00	-0.09	0.00	0.00	0.00	0.63	-74.25	-77.20	-77.20	-74.19	-63.63
Armenia	2	0.00	-	0.00	-6.81	0.12	0.00	-0.74	-0.58	0.00	0.00	0.00	-0.63	-114.59	-84.36	-84.36	-96.74	1.59
Belarus	3	0.00	0.00	-	0.00	-0.69	0.00	-1.23	-1.32	0.00	0.00	0.00	-3.25	-47.98	-34.04	-34.04	-46.61	-1.68
Georgia	4	-0.04	-6.81	0.00	-	-0.14	0.00	0.00	-0.22	0.00	0.00	0.00	0.21	-28.16	-19.90	-19.90	-16.53	0.50
Kazakhstan	5	-12.25	0.12	-0.69	-0.14	-	-4.13	0.10	-0.55	-9.17	2.20	-2.73	-0.44	-40.89	-23.77	-9.68	-10.92	-17.94
Kyrgyzstan	6	0.00	0.00	0.00	0.00	-4.13	-	0.00	0.01	-0.35	0.00	0.00	0.01	-42.71	-43.11	-42.50	-42.10	-45.15
Moldova	7	0.00	-0.74	-1.23	0.00	0.10	0.00	-	-0.01	0.00	0.00	0.00	0.00	-12.06	-10.82	-10.82	-10.26	2.30
Russia	8	-0.09	-0.58	-1.32	-0.22	-0.55	0.01	-0.01	-	-0.01	0.00	0.01	-0.11	-3.00	-1.98	-1.97	-2.09	-0.59
Tajikistan	9	0.00	0.00	0.00	0.00	-9.17	-0.35	0.00	-0.01	-	0.00	-0.10	0.01	-188.68	-188.37	-187.56	-187.05	-185.76
Turkmenistan	10	0.00	0.00	0.00	0.00	2.20	0.00	0.00	0.00	0.00	-	0.00	0.00	8.02	8.02	8.02	8.02	8.09
Uzbekistan	11	0.00	0.00	0.00	0.00	-2.73	0.00	0.00	0.01	-0.10	0.00	-	0.10	-6.59	-7.43	-7.31	-6.47	-8.10
Ukraine	12	0.63	-0.63	-3.25	0.21	-0.44	0.01	0.00	-0.11	0.01	0.00	0.10	-	-5.38	-5.86	-5.88	-5.88	-0.55

Table 4.8.

Dynamics of Agricultural Integration Index, 2002–2008

Kyrgyzstan is the leader in integration at the *country-to-region level* (with CIS–12), probably as a result of the large volume of cereals export in relation to the size of its economy. Tajikistan ranks second. A similar situation is observed in the other four integration groupings. The lowest levels of integration with CIS–12 and other groups are demonstrated by Russia, because of its enormous economy and powerful agriculture sector.

Dynamics: As with energy integration, trade in cereals in the post–Soviet space lags far behind the growth of national economies. This effect persists despite the assumed improvement in the quality of statistics during the studied period. In 2002–2008 (the choice of the first year of observation was dictated by availability of data) the agriculture integration index increased only in the Kazakhstan–Turkmenistan country pair. Turkmenistan is also the only country whose level of agriculture integration with the five post–Soviet regions increased over the studied period.

Our analysis of the *integration within regions* (see Figure 4.9) also confirms the conclusion that integration in all the five regions has slowed over the past seven years. At the same time, the development trends in this group were less stable than in the case of other indices. For example, in CA–4, the integration index stabilised after a downturn in 2003 and still exceeds similar indices of other post–Soviet regions.

Education

Current status: When assessing *education integration* we used the number of students who study abroad. In 2008, the highest level of education integration at the *country pair level* (see Table 4.9) was demonstrated by Kyrgyzstan–Uzbekistan. Kazakhstan–Kyrgyzstan ranked second and Georgia–Armenia third. The most intensive student exchange is recorded between geographically and culturally close countries. Large countries like Russia or Ukraine are traditionally very attractive for students from all over the CIS, but their number remains insignificant in relation to these countries' population. The highest index of integration with CIS–12 at the *country-to-region level* is demonstrated by Kyrgyzstan, and Kazakhstan ranks second. Belarus ranks third, probably because of student exchange with Russia. This exchange is rather negligible in relation to Russia's population size, yet it is important to Belarus. The same three countries (in reverse order) are
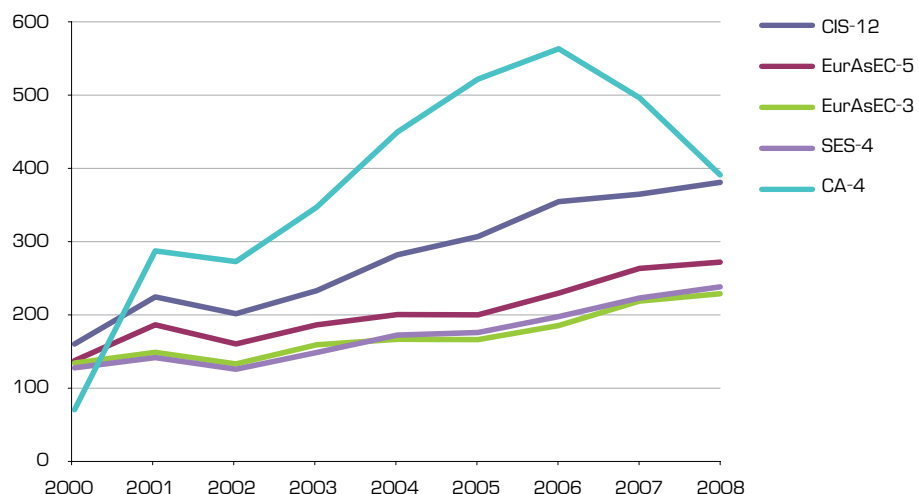
Figure 4.8.

The dynamics of education integration in the five regions
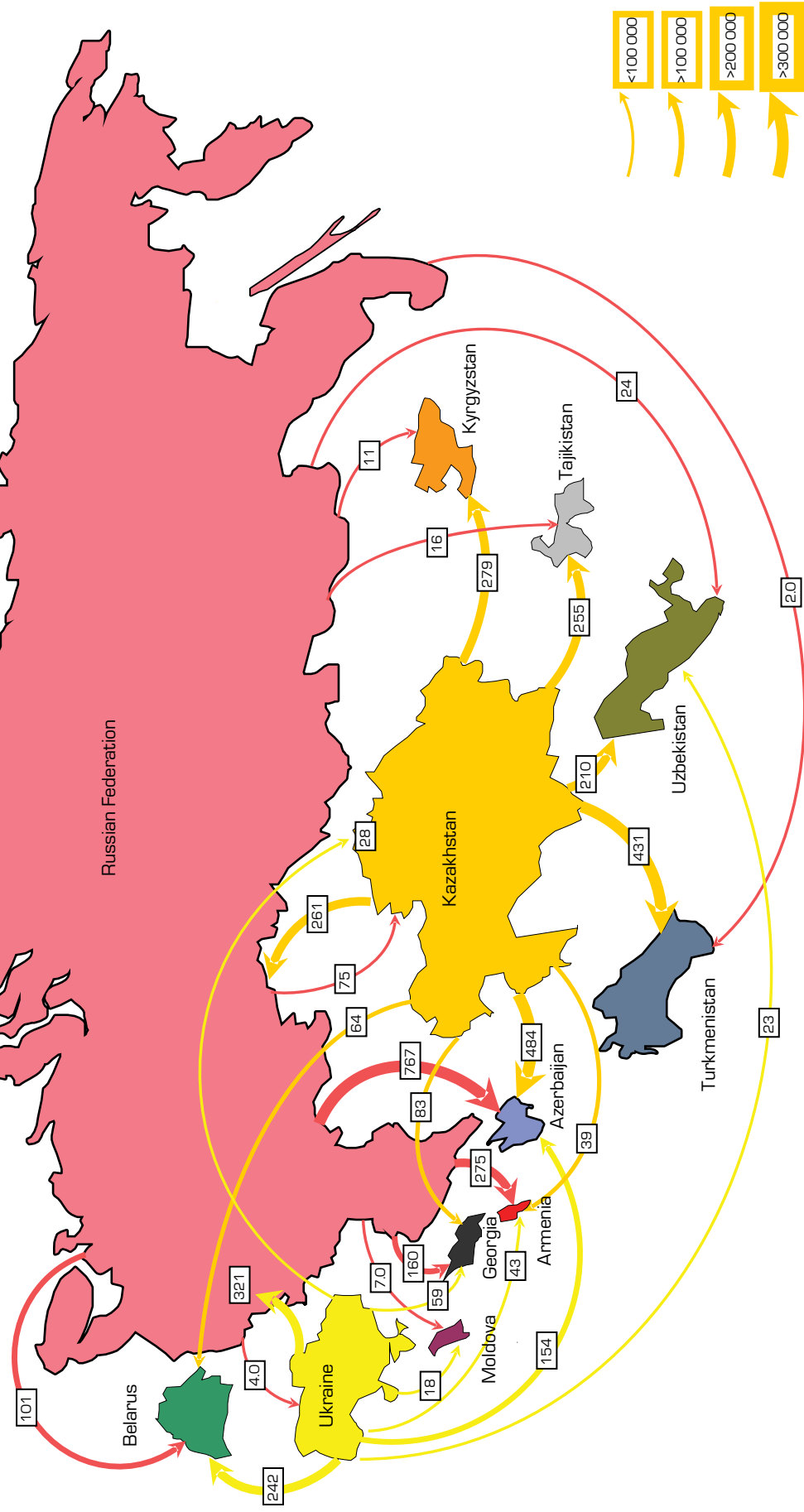
Figure 4.9.

Trade in cereals in the CIS, 2008

Table 4.9.

Education Integration Index, 2008

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	5.78	15.02	4.99	3.45	0.16	29.39	0.06	6.27	0.25	0.13	577.13	542.40	536.75	537.56	20.65
Armenia	2	0.00	-	4.42	151.25	2.02	0.00	0.00	23.72	0.19	5.57	0.16	0.79	1478.57	1094.24	1093.62	1105.68	13.91
Belarus	3	5.78	4.42	-	3.27	3.80	1.21	0.30	104.90	1.73	49.22	0.43	3.91	1780.52	1658.53	1653.68	1676.32	16.44
Georgia	4	15.02	151.25	3.27	-	2.00	30.00	0.00	13.78	0.09	0.52	0.00	0.18	856.67	545.86	479.68	481.73	75.31
Kazakhstan	5	4.99	2.02	3.80	2.00	-	186.84	0.68	141.37	19.45	12.07	80.07	1.39	1966.35	1711.47	1433.40	1438.91	497.76
Kyrgyzstan	6	3.45	0.00	1.21	30.00	186.84	-	0.11	14.42	123.56	96.44	313.48	0.50	3638.61	1440.40	1149.28	1154.23	2969.92
Moldova	7	0.16	0.00	0.30	0.00	0.68	0.11	-	16.57	0.09	0.00	0.00	25.67	1039.27	679.88	679.32	1038.15	4.20
Russia	8	29.39	23.72	104.90	13.78	141.37	14.42	16.57	-	17.06	9.44	44.28	65.43	537.81	301.83	268.96	355.76	242.54
Tajikistan	9	0.06	0.19	1.73	0.09	19.45	123.56	0.09	17.06	-	14.28	61.39	0.00	958.87	637.65	423.00	423.00	572.51
Turkmenistan	10	6.27	5.57	49.22	0.52	12.07	96.44	0.00	9.44	14.28	-	0.00	35.10	1058.46	683.65	455.96	804.04	275.96
Uzbekistan	11	0.25	0.16	0.43	0.00	80.07	313.48	0.00	44.28	61.39	0.00	-	0.00	853.82	853.31	401.84	401.84	577.46
Ukraine	12	0.13	0.79	3.91	0.18	1.39	0.50	25.67	65.43	0.00	35.10	0.00	-	340.63	272.77	272.21	272.21	2.42

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.00	3.89	-2.46	2.11	3.14	-0.09	21.06	-0.01	6.20	0.22	0.11	376.73	369.58	364.55	365.24	11.71
Armenia	2	0.00	-	2.37	93.19	1.58	0.00	0.00	13.82	0.19	4.05	-0.05	0.56	863.26	623.91	623.29	631.62	9.57
Belarus	3	3.89	2.37	-	2.36	1.35	1.00	-1.53	70.37	0.55	14.36	0.26	0.34	1149.19	1109.99	1107.33	1108.75	7.53
Georgia	4	-2.46	93.19	2.36	-	1.43	30.00	-0.13	8.36	0.09	0.52	0.00	0.18	509.36	350.48	284.30	286.36	72.75
Kazakhstan	5	2.11	1.58	1.35	1.43	-	176.13	0.46	32.61	13.79	-36.28	46.65	0.95	603.27	508.72	252.86	256.49	386.49
Kyrgyzstan	6	3.14	0.00	1.00	30.00	176.13	-	0.11	6.29	117.39	96.44	312.87	0.50	3325.04	1131.33	854.09	859.04	2909.04
Moldova	7	-0.09	0.00	-1.53	-0.13	0.46	0.11	-	9.30	0.09	-0.12	0.00	14.36	566.18	372.81	372.25	566.43	3.10
Russia	8	21.06	13.82	70.37	8.36	32.61	6.29	9.30	-	14.27	5.86	25.44	40.12	278.27	133.79	112.24	165.19	89.37
Tajikistan	9	-0.01	0.19	0.55	0.09	13.79	117.39	0.09	14.27	-	6.30	1.99	-0.16	540.37	534.66	331.10	329.63	242.15
Turkmenistan	10	6.20	4.05	14.36	0.52	-36.28	96.44	-0.12	5.86	6.30	-	-0.78	35.10	602.29	235.45	26.28	374.36	48.95
Uzbekistan	11	0.22	-0.05	0.26	0.00	46.65	312.87	0.00	25.44	1.99	-0.78	-	-0.01	594.11	594.84	218.17	218.13	449.16
Ukraine	12	0.11	0.56	0.34	0.18	0.95	0.50	14.36	40.12	-0.16	35.10	-0.01	-	222.97	167.53	167.15	167.15	1.65

Table 4.10.

Dynamics of Education Integration Index, 2000–2008

leading in EurAsEC–5, EurAsEC–3 and SES–4 integration. In CA–4, the leader was Kyrgyzstan, followed by other Central Asian countries (at a big distance). The levels of integration of other CIS countries with CA–4 are significantly lower. Russia and Ukraine, the major education centres of the respective region, demonstrate the lowest levels of integration with CIS–12.

Dynamics: The patterns of student exchange (as concerns university education) varied greatly across the CIS over the nine years studied (2000–2008; data for 1999 was missing), depending on particular country pairs. The largest increase in this index was recorded in the Uzbekistan–Kazakhstan country pair, followed by Kyrgyzstan–Kazakhstan. The largest decrease in the index was also demonstrated by a Central Asian country pair, Kazakhstan–Turkmenistan. In the latter case, the reasons were essentially political. Positive dynamics were recorded in all country–region pairs in the index of integration of countries with the five regions. The biggest increase in integration with CIS–12 was demonstrated by Kyrgyzstan and Belarus. The same countries are leading in integration with SES–4, EurAsEC–3 and EurAsEC–5; and in CA–4 the leaders are Kyrgyzstan and Uzbekistan.

The analysis of integration dynamics *in the five regions* also shows distinct positive trends. The only exception is CA–4, where the integration index has decreased significantly in recent years. Nonetheless, CA–4 remains the leader in education integration over the other regions (see Figure 4.8).

Conclusions

Table 4.11 shows the results of our analysis of the dynamics of market integration in the post–Soviet space. During the period under review, integration increased in labour migration and education; at the same time, there was a slowdown in integration in other sectors. These results are mainly due to the selected "basis for comparison": population growth in the region is apparently slower than GDP growth. At the same time, this situation indirectly proves that the extensive social integration of post–Soviet countries has been preserved or has even increased – social integration creates the potential for catalysing integration in other areas.

It was not possible to identify any unquestionable leaders in all aspects of integration among country pairs or groups. Moreover, the structure of mutual links varies greatly across different CIS markets. To some extent, this is illustrative of the diversity of interests and resources involved in integration in the CIS. The leaders in terms of integration with CIS–12 in various categories are Belarus, Kyrgyzstan and Tajikistan – the most active participants in post–Soviet integration projects. The countries showing the biggest increase in integration levels are Kyrgyzstan, Tajikistan and Ukraine.

In all the three areas of functional integration (energy, agriculture and education), integration levels are much higher in Central Asia than in the post–Soviet space in general, which can be explained by the existence of extensive infrastructural links and a common social space. However, the dynamics of sub–regional integration was negative in all these cases.

As for trade and labour migration, the level of integration of markets in Central Asia is lower than in the CIS in general. With a few exceptions (e.g., in education), the dynamics of integration in large regions followed the overall trend dictated, it would seem, by the largest post–Soviet economies. At the same time, the difference between integration levels in particular regions (again, with a few exceptions) remained stable over the last decade.

Source: Interstate Statistical Commitee of the CIS

1/4   Flows of students (thousand)
Most significant flows are reflected

<1000 >2000 >3000 >5000

Russian Federation

Kyrgyzstan

Tajikistan

Uzbekistan

Kazakhstan

Turkmenistan

Azerbaijan

Armenia

Georgia

Moldova

Ukraine

Belarus

1.0
7.5
1.4
10.2
1.5
2.4
3.4
2.1
3.4
1.4
20.2
2.1
4.2
2.1
2.1
1.3
1.1
1.9
2.4
1.3
7.7
4.6
1.8
13.7
2.2
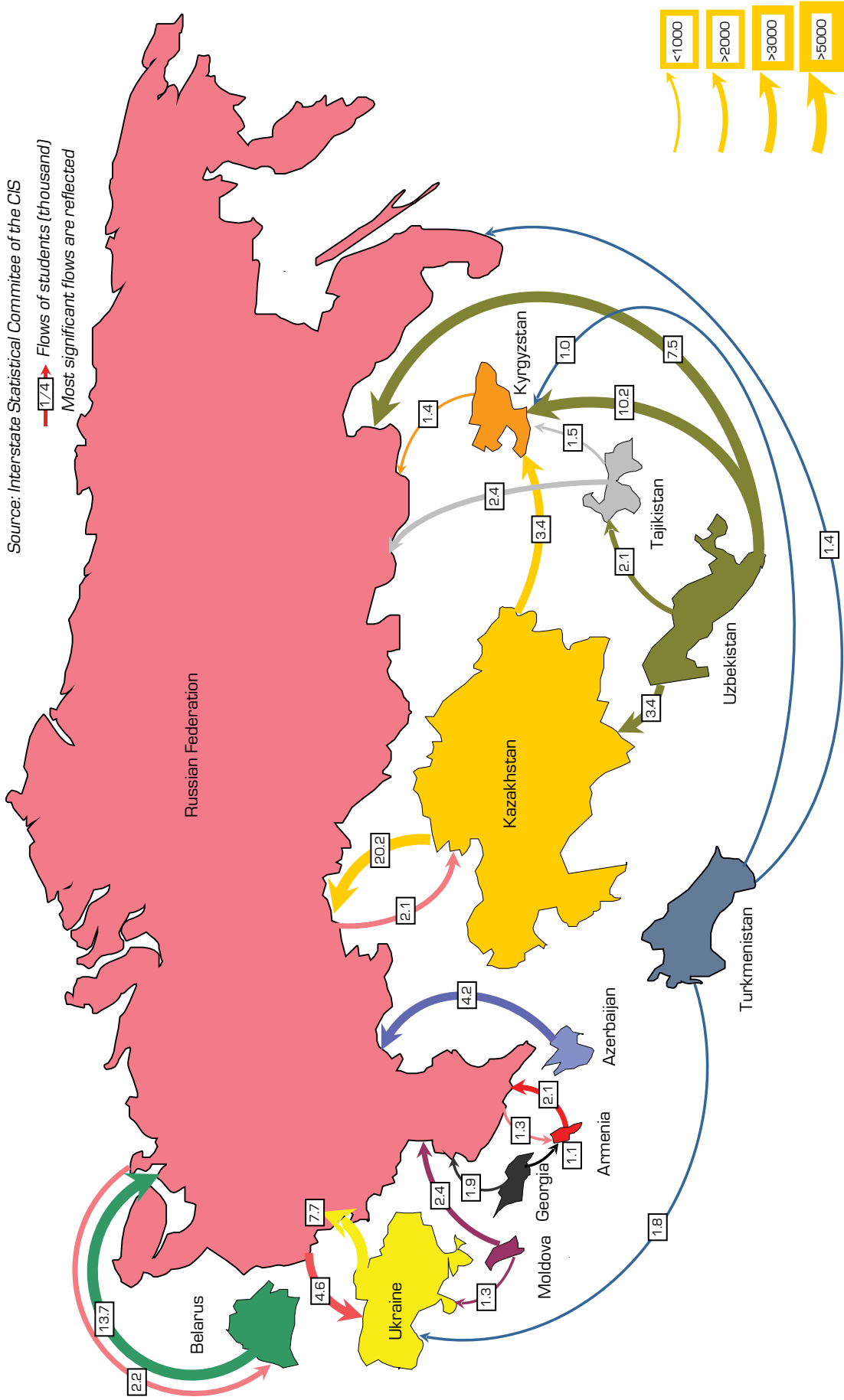
Figure 4.10.

Academic mobility in CIS, 2008

Table 4.11.

The dynamics of integration of markets in the post-Soviet space

Note:
an increase in the index (↑) is interpreted as an increase in integration

Index	Leading country pair (2008 index)	Leading country pair (increase in index)	Leading country in integration with CIS-12 (2008 index)	Leading country in integration with CIS-12 (increase in index)	General dynamics of integration in CIS-12
Trade	Russia–Ukraine	Kazakhstan–Ukraine	Belarus	Kyrgyzstan	↓
Labour migration	Kazakhstan–Kyrgyzstan	Kazakhstan–Kyrgyzstan	Tajikistan	Tajikistan	↑
Energy	Uzbekistan–Tajikistan	Russia–Ukraine	Tajikistan	Ukraine	↓
Agriculture	Kazakhstan–Azerbaijan	Kazakhstan–Turkmenistan	Kyrgyzstan	Turkmenistan	↓
Education	Kyrgyzstan–Uzbekistan	Uzbekistan–Kazakhstan	Kyrgyzstan	Kyrgyzstan	↑

4.2. Economic Convergence

Macroeconomics

Current status: We should stress that *the lowering of economic convergence indices* means *an increase in convergence* (this definition of indices is standard to international practice). *Table 4.12* contains a matrix of distances between the macroeconomic indices of post–Soviet countries (growth rate and per capita GDP) with a breakdown by country pair. *The least distance* is recorded for Kyrgyzstan–Tajikistan; the second and third positions are held by Belarus–Azerbaijan and Kyrgyzstan–Moldova respectively. The maximum distance is observed in the Kazakhstan–Turkmenistan *country pair*. Therefore, the convergence of macroeconomic characteristics is principally dependent on the basic characteristics of an economy (i.e. size) rather than geographic proximity or cross–border flows of goods and production factors.

Figure 4.11.

The dynamics of macroeconomic convergence in the five regions

Note: an increase in the index is interpreted as a decrease in convergence

Country	No																	
		Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	1.390	0.233	2.151	2.569	1.722	1.520	2.346	1.727	1.003	1.491	2.573	1.111	1.191	1.638	1.753	1.454
Armenia	2	1.390	-	1.188	0.817	2.035	0.723	0.496	2.587	0.808	2.012	1.034	1.386	0.330	0.694	1.647	1.386	0.130
Belarus	3	0.233	1.188	-	1.930	2.359	1.587	1.371	2.223	1.605	1.194	1.426	2.341	0.895	0.958	1.460	1.541	1.263
Georgia	4	2.151	0.817	1.930	-	1.743	1.198	1.099	2.699	1.303	2.829	1.697	0.653	1.040	1.110	1.820	1.414	0.827
Kazakhstan	5	2.569	2.035	2.359	1.743	-	2.725	2.524	1.348	2.822	3.549	3.058	1.332	1.929	1.533	1.044	0.817	2.146
Kyrgyzstan	6	1.722	0.723	1.587	1.198	2.725	-	0.246	3.300	0.105	1.985	0.551	1.851	0.979	1.402	2.361	2.108	0.596
Moldova	7	1.520	0.496	1.371	1.099	2.524	0.246	-	3.058	0.316	1.886	0.600	1.739	0.734	1.161	2.121	1.880	0.378
Russia	8	2.346	2.587	2.223	2.699	1.348	3.300	3.058	-	3.373	3.319	3.432	2.521	2.328	1.898	0.940	1.288	2.718
Tajikistan	9	1.727	0.808	1.605	1.303	2.822	0.105	0.316	3.373	-	1.936	0.468	1.956	1.047	1.477	2.436	2.194	0.685
Turkmenistan	10	1.003	2.012	1.194	2.829	3.549	1.985	1.886	3.319	1.936	-	1.511	3.362	1.847	2.084	2.641	2.732	2.016
Uzbekistan	11	1.491	1.034	1.426	1.697	3.058	0.551	0.600	3.432	0.468	1.511	-	2.339	1.154	1.592	2.520	2.353	0.943
Ukraine	12	2.573	1.386	2.341	0.653	1.332	1.851	1.739	2.521	1.956	3.362	2.339	-	1.517	1.403	1.779	1.334	1.430

Table 4.12.

Macroeconomic Convergence Index, 2008

Table 4.13.

Dynamics of Macroeconomic Convergence Index, 1999–2008

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	0.608	-1.620	1.317	0.835	0.654	-0.558	0.324	0.475	-1.319	0.829	1.178	0.490	0.277	-0.201	0.193	0.761
Armenia	2	0.608	-	-0.744	0.434	0.295	0.118	-0.801	0.275	-0.021	-1.091	0.433	0.638	-0.258	-0.212	-0.329	-0.190	-0.097
Belarus	3	-1.620	-0.744	-	0.372	2.125	-0.945	-1.304	1.595	-1.154	-1.898	0.058	0.666	-0.503	-0.083	1.316	1.180	-0.449
Georgia	4	1.317	0.434	0.372	-	0.383	0.211	-0.309	0.727	0.091	-0.251	1.375	0.088	0.706	0.554	0.210	0.214	0.625
Kazakhstan	5	0.835	0.295	2.125	0.383	-	0.382	0.082	0.505	0.253	0.390	1.859	-0.113	0.697	0.662	0.689	0.643	0.622
Kyrgyzstan	6	0.654	0.118	-0.945	0.211	0.382	-	-1.058	0.415	-0.122	-1.288	-0.627	0.632	-0.177	-0.095	-0.210	-0.070	-0.225
Moldova	7	-0.558	-0.801	-1.304	-0.309	0.082	-1.058	-	-0.163	-1.034	-2.514	-1.130	0.725	-1.007	-0.734	-0.655	-0.454	-1.058
Russia	8	0.324	0.275	1.595	0.727	0.505	0.415	-0.163	-	0.265	0.608	1.719	0.313	0.597	0.482	0.451	0.387	0.633
Tajikistan	9	0.475	-0.021	-1.154	0.091	0.253	-0.122	-1.034	0.265	-	-1.450	-0.935	0.546	-0.334	-0.247	-0.361	-0.210	-0.363
Turkmenistan	10	-1.319	-1.091	-1.898	-0.251	0.390	-1.288	-2.514	0.608	-1.450	-	-1.286	-0.272	-0.922	-0.745	-0.331	-0.324	-0.974
Uzbekistan	11	0.829	0.433	0.058	1.375	1.859	-0.627	-1.130	1.719	-0.935	-1.286	-	1.499	1.113	1.263	1.123	1.326	0.568
Ukraine	12	1.178	0.638	0.666	0.088	-0.113	0.632	0.725	0.313	0.546	-0.272	1.499	-	0.651	0.489	0.011	0.008	0.717

The *convergence of individual countries with the five regions*: in CIS–12, the leader is Armenia, and the greatest distance is recorded for Russia. In EurAsEC–5, the leaders are Armenia and Belarus, and in EurAsEC–3 and SES–4 the leaders are Russia and Kazakhstan. We can conclude that small countries take the lead in convergence in larger groups (in terms of the number of members), and Armenia's example demonstrates that a country from outside the group can have a shorter distance to the group's "average" than the members themselves. Quite the reverse, larger countries deviate considerably from the average characteristics of the region. The results obtained in groups comprising a few members simply reflect the relatively high level of convergence of the economic indices of Russia and Kazakhstan. The results for CA–4 are even more interesting: the leaders in convergence are Armenia, Moldova and Kyrgyzstan.

Dynamics: *Table 4.13* illustrates changes in distances between countries since 1999. It is barely possible to identify any common trend for all the country pairs: whereas some of them were converging, the others were diverging. The leading country pairs in convergence are Moldova–Turkmenistan and Belarus–Turkmenistan. In both pairs, convergence is driven by the dynamics of Turkmenistan's internal development which is not linked to regional cooperation. The leaders in divergence are Belarus–Kazakhstan and Uzbekistan–Kazakhstan. In the latter case, the driving force was the economic development of Kazakhstan. On the whole, convergence with CIS–12 in the last decade was demonstrated by Moldova, Turkmenistan, Belarus, Tajikistan, Armenia and Kyrgyzstan; the greatest distance to this region was recorded for Georgia. Notably, most of the countries that are approaching the "average post–Soviet" level take part in regional integration processes (although the leaders are Moldova and Turkmenistan whose participation in these processes is rather sporadic).

The analysis of the dynamics of *convergence in regions* suggests that the macroeconomic indices of post–Soviet states tend to diverge rather than converge (see Figure 4.11). The leaders in convergence are the comparatively small groups SES–4 and EurAsEC–3, and the greatest distances are demonstrated by CA–4 countries; therefore, the dynamics of growth in Central Asia, even without Turkmenistan, varies greatly from one state to another. CA–4 has also demonstrated the biggest decrease of the macroeconomic convergence index in the past decade. By contrast, in SES–4 and EurAsEC–3, after the initial "push" towards divergence in 1999 (probably caused by the consequences of the 1997–1998 crisis), the index has remained at virtually the same level.

Monetary Policy

Current status: Our analysis of the monetary policy convergence of *country pairs*, as with macroeconomic indices, suggests that the effect of internal economic changes prevails over that of cross–border cooperation (see Table 4.14). In 2008, the minimum distance was recorded in the Belarus–Tajikistan country pair. Kyrgyzstan–Azerbaijan ranked second. Ukraine–Moldova is particularly worth noting: this country pair has the highest level of divergence, yet it demonstrates a high level of integration in mutual trade. This can be explained by differences in their monetary, credit and currency policies. At the country–to–region level, Russia has the least distance to CIS–12, followed by Belarus and Tajikistan. The greatest distance was recorded for Moldova. In EurAsEC–5 and SES–4, the least distance was recorded for Belarus, and in EurAsEC–3 and CA–4 for Tajikistan.

Dynamics: Again, as with macroeconomic indices, convergence varied considerably across country pairs. However, we can conclude that convergence prevailed in most of them. The

Table 4.14.

Monetary Policy Convergence Index, 2008

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	2.274	1.436	2.840	2.002	0.288	2.850	1.326	1.686	2.175	3.076	1.372	1.477	1.324	1.578	1.254	1.713
Armenia	2	2.274	-	1.750	0.601	1.358	2.276	0.681	1.432	1.681	1.654	2.927	3.282	1.324	1.611	1.483	1.891	1.855
Belarus	3	1.436	1.750	-	2.107	0.701	1.216	2.431	0.362	0.262	0.768	1.718	1.733	0.427	0.189	0.296	0.229	0.288
Georgia	4	2.840	0.601	2.107	-	1.552	2.815	0.633	1.843	1.972	1.789	2.954	3.752	1.705	2.004	1.815	2.286	2.139
Kazakhstan	5	2.002	1.358	0.701	1.552	-	1.832	2.000	0.677	0.476	0.315	1.610	2.431	0.532	0.713	0.443	0.928	0.616
Kyrgyzstan	6	0.288	2.276	1.216	2.815	1.832	-	2.889	1.165	1.474	1.975	2.812	1.166	1.325	1.129	1.394	1.016	1.481
Moldova	7	2.850	0.681	2.431	0.633	2.000	2.889	-	2.112	2.354	2.277	3.510	3.938	2.005	2.292	2.161	2.572	2.527
Russia	8	1.326	1.432	0.362	1.843	0.677	1.165	2.112	-	0.468	0.879	2.010	1.917	0.163	0.186	0.276	0.460	0.595
Tajikistan	9	1.686	1.681	0.262	1.972	0.476	1.474	2.354	0.468	-	0.506	1.543	1.962	0.435	0.373	0.226	0.486	0.174
Turkmenistan	10	2.175	1.654	0.768	1.789	0.315	1.975	2.277	0.879	0.506	-	1.295	2.425	0.766	0.852	0.606	0.991	0.565
Uzbekistan	11	3.076	2.927	1.718	2.954	1.610	2.812	3.510	2.010	1.543	1.295	-	2.722	1.959	1.891	1.754	1.842	1.433
Ukraine	12	1.372	3.282	1.733	3.752	2.431	1.166	3.938	1.917	1.962	2.425	2.722	-	2.068	1.778	2.019	1.514	1.862

No	Country	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1	Azerbaijan	-	1.351	-2.327	1.910	1.070	-0.815	-1.254	-0.220	0.665	0.900	2.060	-0.836	0.070	-0.207	-0.355	-0.611	0.703
2	Armenia	1.351	-	-1.898	0.332	1.033	1.718	-2.513	0.384	1.314	1.302	2.735	1.965	0.618	0.427	-0.181	0.489	1.499
3	Belarus	-2.327	-1.898	-	-1.274	-2.626	-1.876	-1.920	-2.278	-3.021	-2.902	-1.755	-1.712	-2.622	-2.278	-1.691	-2.092	-3.005
4	Georgia	1.910	0.332	-1.274	-	1.495	2.519	-2.552	1.044	1.856	1.318	2.812	2.467	1.193	1.085	0.416	1.130	2.035
5	Kazakhstan	1.070	1.033	-2.626	1.495	-	1.584	-1.195	-0.078	0.386	-0.200	1.418	1.136	0.042	-0.153	-0.903	-0.184	0.538
6	Kyrgyzstan	-0.815	1.718	-1.876	2.519	1.584	-	-0.215	0.657	1.283	1.328	2.428	-0.053	1.007	0.503	0.287	0.152	1.279
7	Moldova	-1.254	-2.513	-1.920	-2.552	-1.195	-0.215	-	-0.807	-0.760	-0.574	0.422	2.038	-0.785	-0.840	-1.077	-0.296	-0.595
8	Russia	-0.220	0.384	-2.278	1.044	-0.078	0.657	-0.807	-	-0.219	-0.151	1.152	0.757	-0.251	-0.064	-0.391	0.103	-0.104
9	Tajikistan	0.665	1.314	-3.021	1.856	0.386	1.283	-0.760	-0.219	-	0.016	1.347	0.748	0.034	-0.444	-1.072	-0.557	0.161
10	Turkmenistan	0.900	1.302	-2.902	1.318	-0.200	1.328	-0.574	-0.151	0.016	-	0.967	1.432	0.143	-0.373	-1.086	-0.370	0.077
11	Uzbekistan	2.060	2.735	-1.755	2.812	1.418	2.428	0.422	1.152	1.347	0.967	-	1.528	1.444	0.884	0.266	0.629	1.246
12	Ukraine	-0.836	1.965	-1.712	2.467	1.136	-0.053	2.038	0.757	0.748	1.432	1.528	-	1.149	0.371	0.317	0.238	0.639

Table 4.15.

Dynamics of Monetary Policy Convergence Index, 1999–2008

Figure 4.12.

The dynamics of monetary policy convergence in the five region

Note: a decrease in the index is interpreted as an increase in convergence
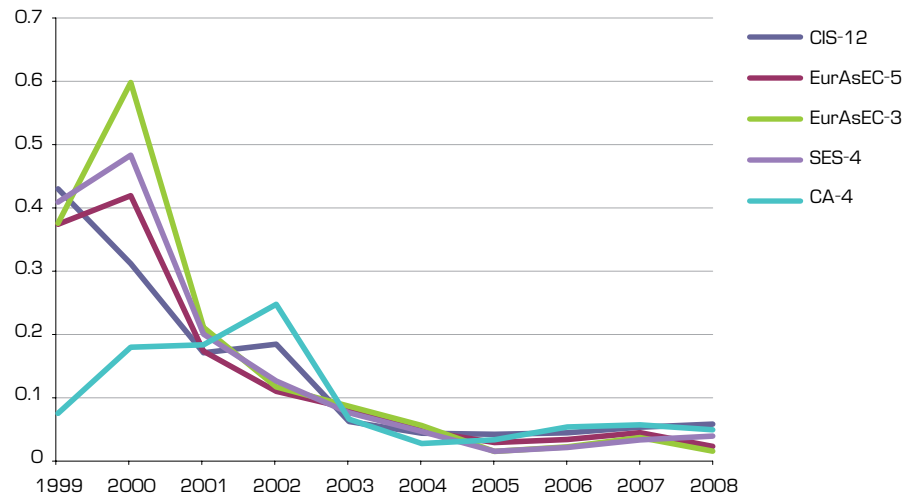
leading pairs in convergence and divergence were Tajikistan–Belarus and Uzbekistan–Georgia, respectively. Practically all of the countries demonstrated an increase in the distance from the "CIS–12 average". The leading countries in convergence and divergence were Belarus and Uzbekistan respectively (see Table 4.15).

In contrast to the growth dynamics, the second decade after the disentegration of the Soviet Union became a period of convergence of the monetary policies of all the five post–Soviet regions (see Figure 4.12). Whereas in the early 2000s there were considerable fluctuations in the indices of the five groups, since 2004 the indices have been virtually identical and have stabilised at a very low level (the latter confirms the closeness of the indices). This dynamics can be explained by the convergence of the characteristics of the monetary and credit policies of all the countries and, to a lesser extent, the influence of global currency markets. It should be remembered that, in the beginning of the 2000s, CA–4 was far ahead of the other groups in terms of monetary policy convergence, but by 2002 demonstrated the highest level of divergence. At present, as we have mentioned, the differences between the regions are negligible.

Financial Policy

Current status: In *Table 4.16* we summarise data on financial policy convergence (interest rates on loans and deposits). At the *country pair level*, the least distance was recorded for Kazakhstan–Armenia; second place is occupied by Moldova–Uzbekistan. The greatest distance was demonstrated by Kyrgyzstan–Moldova. In this case, the main factors of convergence were the characteristics of regulation of the financial services market on the one hand, and the particular features of banking sector development on the other. Interestingly, the pair showing the least distance includes Kazakhstan, a country whose banking institutions are rapidly expanding into the post–Soviet space. At the same time, the presence of banking capital from other CIS countries (including Kazakhstan) in Armenia is negligible (Interaction of the Financial Systems of the CIS, 2009). At the *country-to-region level*, the least distance to CIS–12 is recorded for Ukraine and Georgia and the greatest distance for Tajikistan. In EurAsEC–5, EurAsEC–3 and SES–4, the least distance is recorded for Kazakhstan, Russia and Armenia respectively.

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	1.487	1.654	0.643	1.431	2.837	1.051	1.810	2.181	na	0.629	0.706	0.706	1.420	1.520	1.313	1.332
Armenia	2	1.487	-	1.160	1.491	0.275	2.159	2.511	0.770	2.376	na	2.088	0.800	0.856	0.555	0.543	0.499	1.284
Belarus	3	1.654	1.160	-	2.058	1.403	3.318	2.359	0.573	3.350	na	2.014	1.132	1.469	1.658	0.624	0.693	2.242
Georgia	4	0.643	1.491	2.058	-	1.323	2.299	1.477	2.047	1.538	na	1.116	0.934	0.658	1.187	1.737	1.532	0.790
Kazakhstan	5	1.431	0.275	1.403	1.323	-	1.920	2.478	1.045	2.104	na	2.053	0.806	0.742	0.279	0.802	0.717	1.022
Kyrgyzstan	6	2.837	2.159	3.318	2.299	1.920	-	3.777	2.886	1.437	na	3.406	2.536	2.244	1.691	2.701	2.636	1.516
Moldova	7	1.051	2.511	2.359	1.477	2.478	3.777	-	2.686	2.845	na	0.425	1.711	1.757	2.469	2.435	2.247	2.265
Russia	8	1.810	0.770	0.573	2.047	1.045	2.886	2.686	-	3.128	na	2.297	1.143	1.395	1.323	0.311	0.517	2.021
Tajikistan	9	2.181	2.376	3.350	1.538	2.104	1.437	2.845	3.128	-	na	2.573	2.267	1.910	1.829	2.847	2.689	1.114
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	0.629	2.088	2.014	1.116	2.053	3.406	0.425	2.297	2.573	na	-	1.289	1.335	2.049	2.035	1.841	1.890
Ukraine	12	0.706	0.800	1.132	0.934	0.806	2.536	1.711	1.143	2.267	na	1.289	-	0.357	0.897	0.838	0.629	1.196

Table 4.16.

Financial Policy Convergence Index, 2008

Table 4.17.

Dynamics of Finance Policy Convergence Index, 1999–2008

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Armenia	2	na	-	-1.081	-0.410	-3.298	-0.059	na	-1.809	na	na	na	-0.520	-0.946	-1.977	-2.177	-1.658	-1.551
Belarus	3	na	-1.081	-	0.635	-0.547	1.316	na	-0.814	na	na	na	-1.584	0.151	0.431	-0.453	-0.483	0.482
Georgia	4	na	-0.410	0.635	-	-0.410	1.700	na	1.322	na	na	na	-0.682	0.517	0.446	0.687	1.146	-0.145
Kazakhstan	5	na	-3.298	-0.547	-0.410	-	0.121	na	0.035	na	na	na	-2.480	-1.056	-0.762	-0.124	-0.702	0.123
Kyrgyzstan	6	na	-0.059	1.316	1.700	0.121	-	na	1.947	na	na	na	1.002	1.511	0.642	1.302	1.784	0.617
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	na	-1.809	-0.814	1.322	0.035	1.947	na	-	na	na	na	-1.171	0.606	1.159	-0.170	0.090	1.643
Tajikistan	9	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	-0.520	-1.584	-0.682	-2.480	1.002	na	-1.171	na	na	na	-	-1.257	-1.457	-1.825	-1.369	-1.205

Figure 4.13.

The dynamics of financial policy convergence in the five regions

Note: an increase in the index is interpreted as a decrease in convergence

Dynamics: *Table 4.17* illustrates the changes in the financial policy integration index during the last decade. Unfortunately, 1999 data is missing for most countries. Among those country pairs for which complete data is available, the greatest convergence of indices was demonstrated by Armenia and Kazakhstan, and the greatest divergence, surprisingly, by Kyrgyzstan and Russia. Kazakhstan is the leader in terms of "shortening the distance" to CIS–12 since 1999, and Kyrgyzstan, by contrast, demonstrated the most rapid pace of divergence from CIS–12 (despite the fact that Kazakhstan's banking capital dominates the Kyrgyz economy); however, the latter fact does not indicate that Kyrgyzstan's absolute distance from CIS–12 is considerable in the context of other countries.

Figure 4.13 illustrates the indices of *convergence at the region level*. Interpretation of data for 1999–2001 is complicated by the numerous gaps in observations which, as we have mentioned, affect aggregated indices. In the second half of the 2000s financial policy convergence was observed in all groupings except CIS–12 whose divergence index remained virtually unchanged.

Fiscal Policy

Current status: The results obtained for the fiscal policy sector (the indices of the budgetary and tax systems) also suggest that convergence or divergence of countries does not depend on their geographic position, level of integration of their markets, or their participation in integration groups. At the *country pair level*, the least distance was demonstrated by Armenia–Uzbekistan. Second place is occupied by Moldova–Belarus. The greatest distance was observed between Russia and Kyrgyzstan whose budgetary policies and tax regulation differ considerably. At the *country-to-region level*, the shortest distance to the CIS–12 "average level" was demonstrated by Azerbaijan, and Ukraine ranked second. The greatest distance was demonstrated by Russia. Azerbaijan has the shortest distance to EurAsEC–5, EurAsEC–3 and SES–4, and Tajikistan has the shortest distance to CA–4 (see Table 4.18).

Dynamics: Unfortunately, data on fiscal policy between the late 1990s and early 2000s is extremely scarce and does not allow the dynamics of convergence to be traced in a consistent manner. Due to the numerous gaps in the 1999 data, our analysis covers the period from 2000–2008. As can be seen in *Table 4.19*, the leading country pair in terms of fiscal convergence since 1999 is Azerbaijan–Armenia, which cannot be linked to the growth of economic contacts between these two countries. The greatest increase in the distance was demonstrated by Kyrgyzstan–Azerbaijan. Armenia was the leader in "shortening the distance" to CIS–12, and Kazakhstan demonstrated the most rapid pace of divergence from this group.

Finally, *Figure 4.14* illustrates the convergence *in regions*. Unfortunately, the dynamics of this index cannot be studied due to a lack of data for the first half of the 2000s. At present, the minimum fiscal divergence is observed in CA–4.
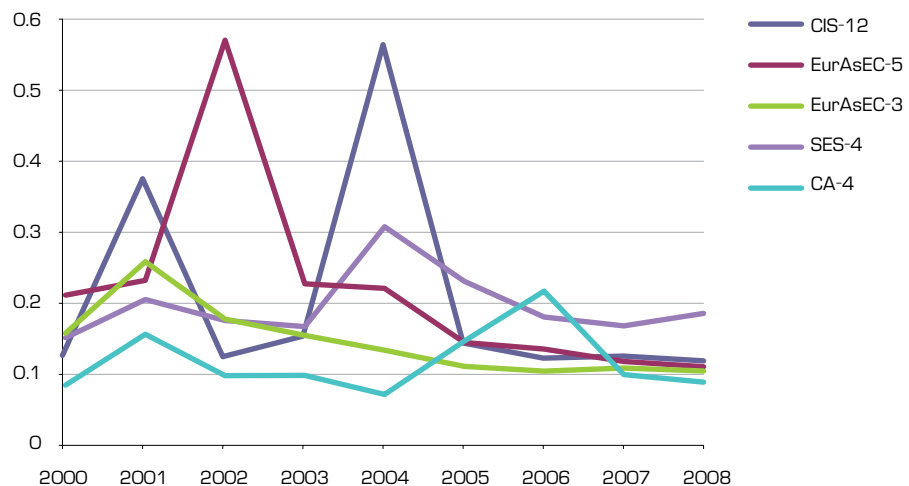
Figure 4.14.

The dynamics of fiscal policy convergence in the five regions

Note: an increase in the index is interpreted as a decrease in convergence

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	1.242	1.956	1.800	1.712	3.644	1.777	3.863	1.976	na	1.128	0.894	0.898	1.608	1.674	1.228	1.678
Armenia	2	1.242	-	2.772	1.699	2.319	3.201	2.266	4.476	1.718	na	0.417	1.201	1.260	2.017	2.570	2.127	1.468
Belarus	3	1.956	2.772	-	1.699	3.175	4.429	0.764	4.070	2.580	na	2.883	1.606	1.877	2.323	2.111	1.788	2.938
Georgia	4	1.800	1.699	1.699	-	3.242	3.575	0.951	4.561	1.671	na	2.014	0.953	1.407	2.183	2.641	2.160	2.237
Kazakhstan	5	1.712	2.319	3.175	3.242	-	3.265	3.204	3.628	2.458	na	2.103	2.510	1.901	1.674	1.824	1.810	1.659
Kyrgyzstan	6	3.644	3.201	4.429	3.575	3.265	-	4.075	5.009	1.952	na	3.400	3.677	2.972	2.579	3.746	3.621	1.994
Moldova	7	1.777	2.266	0.764	0.951	3.204	4.075	-	4.280	2.147	na	2.459	1.121	1.563	2.211	2.302	1.869	2.617
Russia	8	3.863	4.476	4.070	4.561	3.628	5.009	4.280	-	4.242	na	4.409	4.132	3.611	3.062	2.342	2.755	4.049
Tajikistan	9	1.976	1.718	2.580	1.671	2.458	1.952	2.147	4.242	-	na	1.999	1.784	1.204	1.309	2.410	2.088	0.965
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	1.128	0.417	2.883	2.014	2.103	3.400	2.459	4.409	1.999	na	-	1.350	1.385	2.088	2.510	2.095	1.570
Ukraine	12	0.894	1.201	1.606	0.953	2.510	3.677	1.121	4.132	1.784	na	1.350	-	0.899	1.829	2.056	1.542	1.918

Table 4.18.

Fiscal Policy
Convergence
Index,
2008

Country	No	Convergence of "country-to-country" level												Convergence of "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1	-	-1.576	na	na	0.416	1.076	na	-0.058	-0.291	na	na	na	-0.675	-0.125	-1.000	-1.232	0.082
Armenia	2	-1.576	-	na	na	-0.559	0.638	na	-0.721	-1.442	na	na	na	-1.158	-0.771	-1.103	-1.467	-0.924
Belarus	3	na	na	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Georgia	4	na	na	na	-	na	na	na	na	na	na	na	na	na	na	na	na	na
Kazakhstan	5	0.416	-0.559	na	na	-	0.589	na	0.270	0.068	na	na	na	1.155	0.715	0.010	0.340	0.412
Kyrgyzstan	6	1.076	0.638	na	na	0.589	-	na	-0.037	1.073	na	na	na	0.757	0.261	-0.094	-0.088	0.549
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	-0.058	-0.721	na	na	0.270	-0.037	na	-	-0.467	na	na	na	0.256	0.108	0.556	0.618	0.051
Tajikistan	9	-0.291	-1.442	na	na	0.068	1.073	na	-0.467	-	na	na	na	-0.900	-0.792	-1.218	-1.376	-0.352
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na

Country–to–Region Convergence: Weighted Indices

We encountered certain problems when calculating the country–to–region convergence indices. Our interpretation of a region's coordinates as a simple mean of the coordinates of all countries that it comprises was based on the assumption of *equal* integration of all these countries with the region. However, it might be that integration with *larger countries* plays more important role. This approach was applied, albeit not explicitly, in our evaluation of market integration: cross–border flows of goods, services and production factors from larger countries automatically account for a larger share in the region's index. However, in the case of convergence indices the situation is not as simple. Therefore, we complemented our analysis with calculations of country–to–region integration indices in which a region's coordinates are calculated as a weighted mean of the coordinates of all the countries that the region comprises. We use the population as the denominator, which, in the case of the CIS, is a more conservative approach compared with, say, aggregate GDP, because the concentration of GDP in a few developed economies is much more pronounced than the concentration of population.

In *Tables 4.20* and *4.21* we summarise the data for 2008 and the dynamics of indices in 1999–2008. It can be seen easily that the leadership in convergence is held by large countries: in CIS–12, these are Kazakhstan (macroeconomics), Belarus (monetary policy), Ukraine (financial policy) and Russia (fiscal policy). This is logical, as these countries principally determine the mean index. To some extent, a modified index serves to measure the convergence of large countries "with themselves". However, Russia does not always become the leader in convergence, and this means that the results are not straightforward. The greatest distances from CIS–12 are demonstrated by Turkmenistan (macroeconomics), Moldova (monetary policy) and Kyrgyzstan (financial and fiscal policy). These are either small or closed economies.

Small countries often take the lead in the dynamics of convergence with CIS–12, which can be explained by the initially high levels of convergence of larger countries. However, large countries can also be seen among the leaders. The leaders are Moldova (macroeconomics), Belarus (monetary policy) and Armenia (financial and fiscal policies). The reasons for this convergence may be associated with changes in the practice of economic policy (Belarus); however, in the case of Armenia and Moldova, convergence may be determined by the level of economic cooperation with larger countries. The leaders in divergence from CIS–12 are Uzbekistan (macroeconomics), Georgia (monetary policy), Kyrgyzstan (financial policy) and Russia (fiscal policy).

Index	Leading country pair (2008 index)	Leading country pair (in terms of shortening the distance)	Leader in convergence with CIS-12 (minimum distance, 2008)	Leader in integration with CIS-12 (in terms of shortening the distance)	General dynamics of distance in CIS-12
Macroeconomics	Kyrgyzstan–Tajikistan	Moldova–Turkmenistan	Armenia	Georgia	↑
Monetary policy	Belarus–Tajikistan	Belarus–Tajikistan	Russia	Belarus	↓
Financial policy	Kazakhstan–Armenia	Kazakhstan–Armenia	Ukraine	Kazakhstan	→
Fiscal policy	Armenia–Uzbekistan	Armenia–Azerbaijan	Azerbaijan	Armenia	→

Table 4.20.

The dynamics of convergence of post-Soviet economies (data for non-weighted indices)

Note:
An increase in the index (↑) is interpreted as an increase in integration

Table 4.21.

Convergence Index (regions' weighted indicators), 2008

Country	Macroeconomics					Monetary policy					Financial policy					Fiscal policy				
	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	1.578	2.026	2.208	2.920	1.344	1.315	1.368	1.393	1.618	2.272	0.950	1.369	1.626	1.483	0.930	2.001	3.146	3.354	2.552	1.120
Armenia	1.418	2.178	2.395	2.413	0.100	1.768	1.455	1.430	1.084	2.144	0.663	0.559	0.506	0.381	1.567	2.628	3.772	4.005	3.182	0.997
Belarus	1.379	1.882	2.073	2.715	1.152	0.121	0.317	0.334	0.668	0.857	1.466	1.641	0.708	0.782	2.266	2.546	3.450	3.618	3.018	2.776
Georgia	1.572	2.303	2.503	2.078	0.901	2.153	1.852	1.822	1.459	2.287	0.830	1.140	1.808	1.643	0.288	2.785	3.886	4.111	3.365	2.140
Kazakhstan	1.004	1.115	1.203	0.382	2.127	0.800	0.636	0.610	0.504	0.786	0.509	0.286	0.778	0.641	1.359	2.179	2.933	3.138	2.514	1.417
Kyrgyzstan	2.137	2.891	3.109	3.097	0.654	1.095	1.199	1.227	1.498	2.029	2.065	1.722	2.647	2.540	2.069	3.752	4.367	4.639	4.125	2.690
Moldova	1.900	2.651	2.868	2.900	0.418	2.450	2.136	2.111	1.764	2.776	2.002	2.418	2.557	2.439	1.720	2.603	3.629	3.825	3.142	2.468
Russia	1.177	0.411	0.197	1.403	2.646	0.343	0.058	0.070	0.388	1.127	1.296	1.322	0.270	0.432	2.196	1.904	0.765	0.526	1.320	4.006
Tajikistan	2.216	2.966	3.183	3.195	0.734	0.381	0.410	0.407	0.618	0.660	1.884	1.819	2.858	2.700	1.251	2.534	3.509	3.783	3.081	1.440
Turkmenistan	2.572	3.019	3.192	3.909	1.930	0.886	0.827	0.809	0.800	0.500	na	na	na	na	na	na	na	na	na	na
Uzbekistan	2.327	3.037	3.251	3.438	0.938	1.822	1.952	1.949	2.067	0.885	1.579	1.998	2.153	2.029	1.381	2.586	3.714	3.935	3.113	0.948
Ukraine	1.558	2.167	2.336	1.602	1.482	1.649	1.919	1.949	2.305	2.223	0.471	0.853	0.933	0.782	1.134	2.267	3.436	3.650	2.852	1.553

Country	Macroeconomics					Monetary policy					Financial policy					Fiscal policy				
	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Azerbaijan	0.262	0.223	0.237	1.123	0.557	-0.207	-0.178	-0.188	0.265	1.279	na	na	na	na	na	-0.775	-0.246	-0.280	-0.510	-0.476
Armenia	-0.050	0.120	0.163	0.725	-0.538	0.884	0.365	0.299	0.289	1.863	-1.450	-2.072	-2.320	-1.952	-1.467	-1.394	-0.875	-0.871	-1.289	-1.390
Belarus	0.842	1.442	1.553	2.251	-0.147	-2.749	-2.266	-2.210	-2.214	-2.513	-0.023	0.314	-0.498	-0.535	0.318	na	na	na	na	na
Georgia	0.454	0.591	0.618	0.774	0.605	1.483	1.016	0.946	0.908	2.224	0.617	0.333	0.705	1.162	-0.845	na	na	na	na	na
Kazakhstan	0.544	0.493	0.469	0.124	1.010	0.162	-0.153	-0.219	-0.005	0.697	-1.040	-0.659	-0.018	-0.618	0.539	0.128	0.140	0.101	0.084	0.709
Kyrgyzstan	0.084	0.257	0.299	0.807	-0.580	0.674	0.659	0.646	1.231	1.751	1.545	0.671	1.247	1.742	1.051	-0.159	-0.120	-0.129	-0.208	0.505
Moldova	-0.490	-0.312	-0.252	0.637	-1.262	-0.317	-0.839	-0.860	-1.183	-0.346	na	na	na	na	na	na	na	na	na	na
Russia	0.321	0.149	0.088	0.312	0.965	0.089	-0.015	-0.030	0.136	0.357	0.741	1.210	-0.192	0.182	1.614	0.562	0.174	0.181	0.379	0.364
Tajikistan	-0.064	0.107	0.150	0.682	-0.727	-0.173	-0.316	-0.359	0.182	0.573	na	na	na	na	na	-1.079	-0.658	-0.666	-0.904	-0.645
Turkmenistan	-0.175	0.306	0.429	0.533	-0.968	0.079	-0.262	-0.318	0.007	0.072	na	na	na	na	na	na	na	na	na	na
Uzbekistan	1.451	1.578	1.617	2.235	0.812	1.130	1.049	1.004	1.461	0.772	na	na	na	na	na	na	na	na	na	na
Ukraine	0.180	0.219	0.229	0.310	0.731	0.703	0.689	0.707	1.199	1.000	-1.289	-1.556	-1.786	-1.303	-1.410	na	na	na	na	na

Table 4.22.

Dynamics of Convergence Index (regions' weighted indicators), 1999-2008

Both approaches (weighted and non–weighted indices) have their merits and demerits. Therefore, economic convergence should be assessed by both methods, and their results should be treated as complementary.

Conclusions

Unlike the integration of markets, the convergence of post–Soviet economies varies greatly depending on particular country pairs or country–region pairs. Convergence is not driven by any geographic factors, as the closeness of the parameters of the economic policies bears no relation to the geographic proximity of the converging countries (the only exception is fiscal convergence of Central Asian countries). The list of leaders in convergence with CIS–12 includes both large (e.g., Russia) and small economies. If we consider the general trends of the convergence dynamics, in most cases the time–series data are significantly less stable than in the case of market integration; availability of data may also be an important factor. On the whole, we can conclude that the macroeconomic indices of post–Soviet states were diverging over the last decade, however, their monetary poilicies converged.

In any event, the calculated results of economic convergence are somewhat less instrumental in identifying consistent and sustainable trends than in the case of the integration of markets. At the same time, the convergence of economies is an important characteristic, at least from the prospective of the potential for integration and cooperation, and therefore deserves scrutiny. The main results of our analysis are summarised in *Table 4.22*. It can be seen clearly that, unlike the integration of markets, the convergence of economies is principally associated with factors lying beyond the integration process proper. The key role is performed by the reform strategies selected by particular countries, and macroeconomic regulation practices that make them become closer. However, it should be stressed that, for example, without the synchronisation of business cycles or comparable parameters of the monetary system the development of well–coordinated policy of economic integration is not really possible. Therefore, the internal economic processes that assist the convergence of countries should be viewed as critical aspects of integration.

4.3. Consolidated Indices

Integration of Individual Countries with CIS–12

Figure 4.15.

Integration of individual countries with CIS-12

Finally, we attempted to incorporate all the aspects of regional integration in a single consolidated index. As we have mentioned above, some aspects of integration cannot

translate into each other, and connections between them are not straightforward; therefore, the focus should be on separate indices rather than their aggregates. However, consolidated indices can still justify their existence.

First, we developed a consolidated index of a country's integration with CIS–12, which was calculated by standardising all nine indices of integration of individual countries with CIS–12. Before this operation, all convergence indices had been multiplied by −1; therefore, higher values of the indices correspond to shorter distances. The final index is a simple mean of these modified indices. Second, using a similar method, we calculated a consolidated index of a country's integration *within* any of the five regions. The values of the nine individual indices for each year were standardised. Next, we calculated a simple mean of the nine indices for each grouping; convergence indices were multiplied by −1.

The indices are calculated for 2008 and 2002 (i.e. the present time and the first year of observation for which data on all the nine integration aspects is available), for ten post–Soviet countries. Uzbekistan and Turkmenistan were excluded due to a lack of data. Higher indices correspond to higher levels of integration. But even the 2002 data is not complete; therefore, the indices of financial integration of Azerbaijan and fiscal integration of Ukraine and Moldova were replaced with the respective indices for 2003.

Figure 4.16 illustrates the results of our analysis. Higher indices correspond to higher levels of integration. At present, the leaders in integration are Kyrgyzstan, Tajikistan and Armenia – three small states which have close economic links with their neighbours. By contrast, Russia, Ukraine and Azerbaijan demonstrate comparatively low levels of integration with the CIS. These are the region's largest economies; two of them are prominent players in the global energy markets. The most remarkable change since 2002 is the downgrading of Moldova from second to fifth place. The members of EurAsEC, Kyrgyzstan, Belarus and Armenia, show considerable progress in integration. On the whole, the distribution of consolidated indices among post–Soviet countries is relatively even. The values vary within a range from −1 to 1. The scale is calibrated so that the mean value in each year corresponds to zero (essentially, that is what the standardisation is for); accordingly, countries with a low level of integration (lower than average) have *negative* indices and highly integrated countries (above average) have *positive* indices.
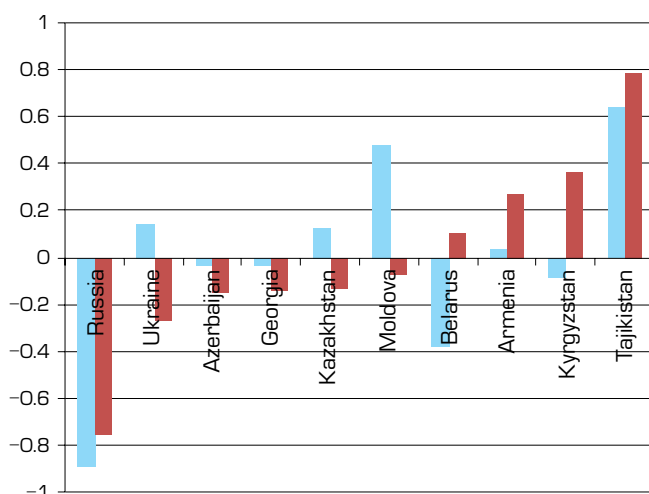
Figure 4.16.

Consolidated indices of country-to-region integration (CIS-12), 2002 and 2008

(legend: 2002, 2008)

Integration in CIS–12

The second exercise was to calculate consolidated indices of integration within the five regions which we had selected for the purposes of our analysis. *Figure 4.17* shows the results of calculations for 2002–2008 (i.e. the period for which data is available for all the nine aspects of integration). Again, negative indices correspond to low levels of integration and vice versa. There are three main trends. First, the level of integration within CIS–12 has fallen compared with the other groups (the downturn occurred in 2004–2005, i.e. there is no connection with the quality of statistics). Second, the level of integration of CA–4 and SES–4 remains unchanged. And, third, EurAsEC–3 and especially EurAsEC–5 demonstrate uniformly positive dynamics of regional integration and cooperation. By 2008 EurAsEC–3 surpassed all other groups, and is now the absolute leader of integration over all the post–Soviet space (this is not only attributable to the growth of the index of EurAsEC–3, but also to a decrease in the index of SES–4). EurAsEC–5 still occupies the lowest position in the rating, although its performance improved considerably.

Figure 4.17.

Consolidated integration indices of the five regions, 2002-2008
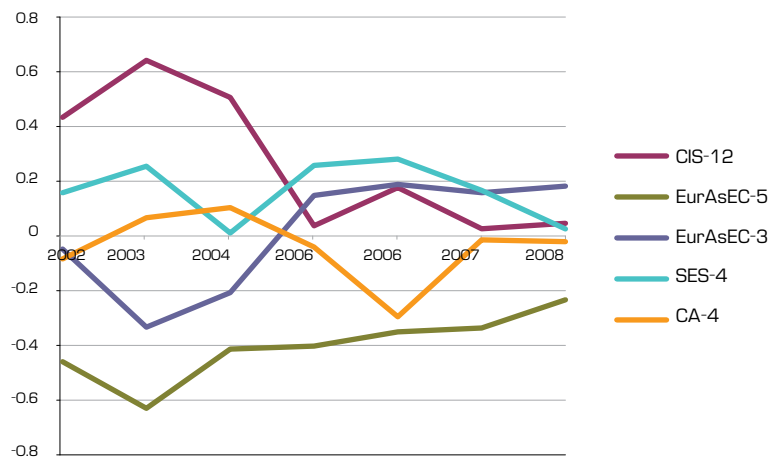
5. Assessment of Qualitative Aspects of Institutional Cooperation

5.1. Assessment of the Performance of Integration Organisations: the Analysis of Documents

The institutional aspect is one of the most important components of regional integration. Institutionalisation, as an organisational or statutory embedment of a set of rules and standards in various areas of interaction between states, is an important criterion of maturity of political relationships. In particular, the depth of political integration is characterised by the existence and functioning of supranational policy and decision–making bodies and of the supranational legislative framework, and by the formation of a common security space.

It is clear that economic integration is easier to quantify than institutional integration. However, one of the SIEI's objectives is to assess integration as a multifactor process. For this reason, the system includes a section on the institutional aspects of integration. The indicators associated with this aspect are as follows:

- membership in regional integration organisations and participation in regional agreements;

- the performance of integration organisations (structure, budget, adoption and implementation of decisions);

- cooperation in the area of security and counter–terrorism.

To assess the quantitative and qualitative performance of integration organisations and integration processes as a whole, we collected statistical data on the key performance characteristics of the largest regional organisations, and conducted an expert survey.

Over almost two decades following the breakdown of the Soviet Union, a host of integration organisations has been set up in the post–Soviet space. Some quantitative data is available for the CIS, EurAsEC and CSTO. This data serves as background and supplements the findings of the expert survey.

Figure 5.2 shows the countries that are members of the respective integration groupings. For more detailed information, on the observer countries in particular, please refer to *Section 1.3*. Almost every country, with a few exceptions, is a member of several regional organisations. All organisations are institutionalised in that they have their legal framework and status, an organisational structure and budget, decision–making mechanisms and procedures, and regular meetings at various levels of representation of the member states.

The countries' overlapping membership in the existing regional organisations suggests that integration in the post–Soviet space is not an integral process but rather a multitude of various processes which have different goals, underlying integration ideology and development agenda.

The **CIS** is the oldest organisation; the agreement on establishment was signed on December 8, 1991. The Commonwealth is built on the principles of sovereign equality of all its members. The member states are independent and equal subjects under international law. The CIS does not have supranational powers. Interstate interaction between the CIS countries is effected through its coordinating institutions: Council of Heads of State (CHS), Council of Heads of Government (CHG), an interparliamentary assembly, and Executive Committee. From 2000 to 2008, the CIS established 71 bodies, including 68 sectoral cooperation bodies that facilitate sector–based cooperation in the post–Soviet space.
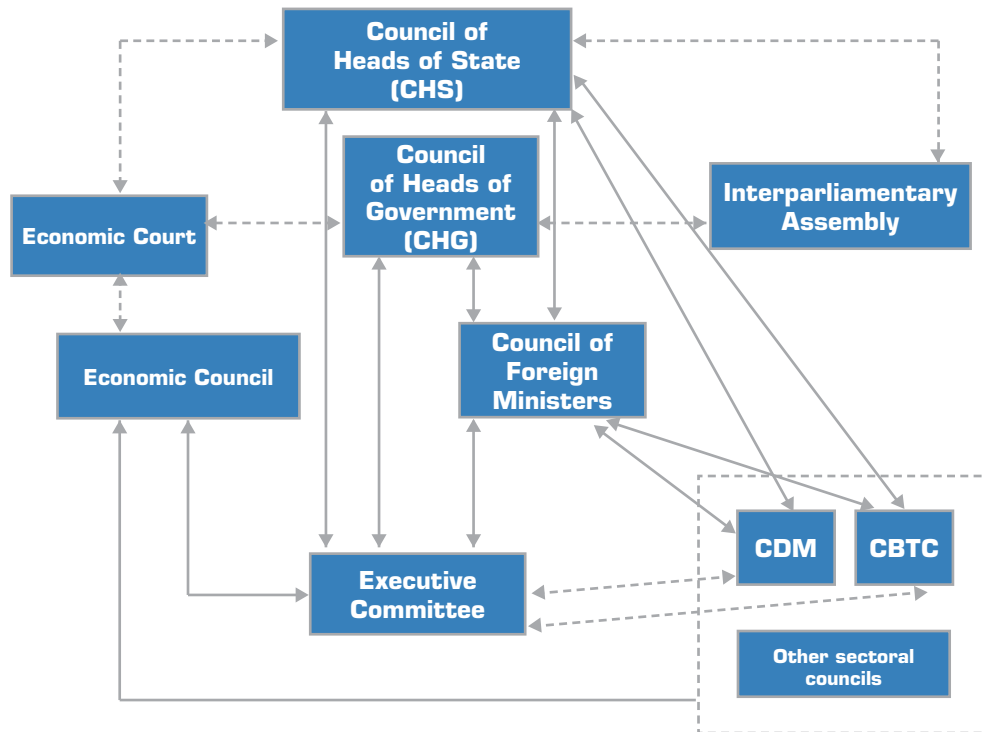
Figure 5.1.

Structure of the CIS

CDM – Council of Defence Ministers

CBTC – Council of Border Troops Commanders

From 2000 to 2008, the CIS held 22 meetings of the Council of Heads of State and 20 meetings of the Council of Heads of Government.
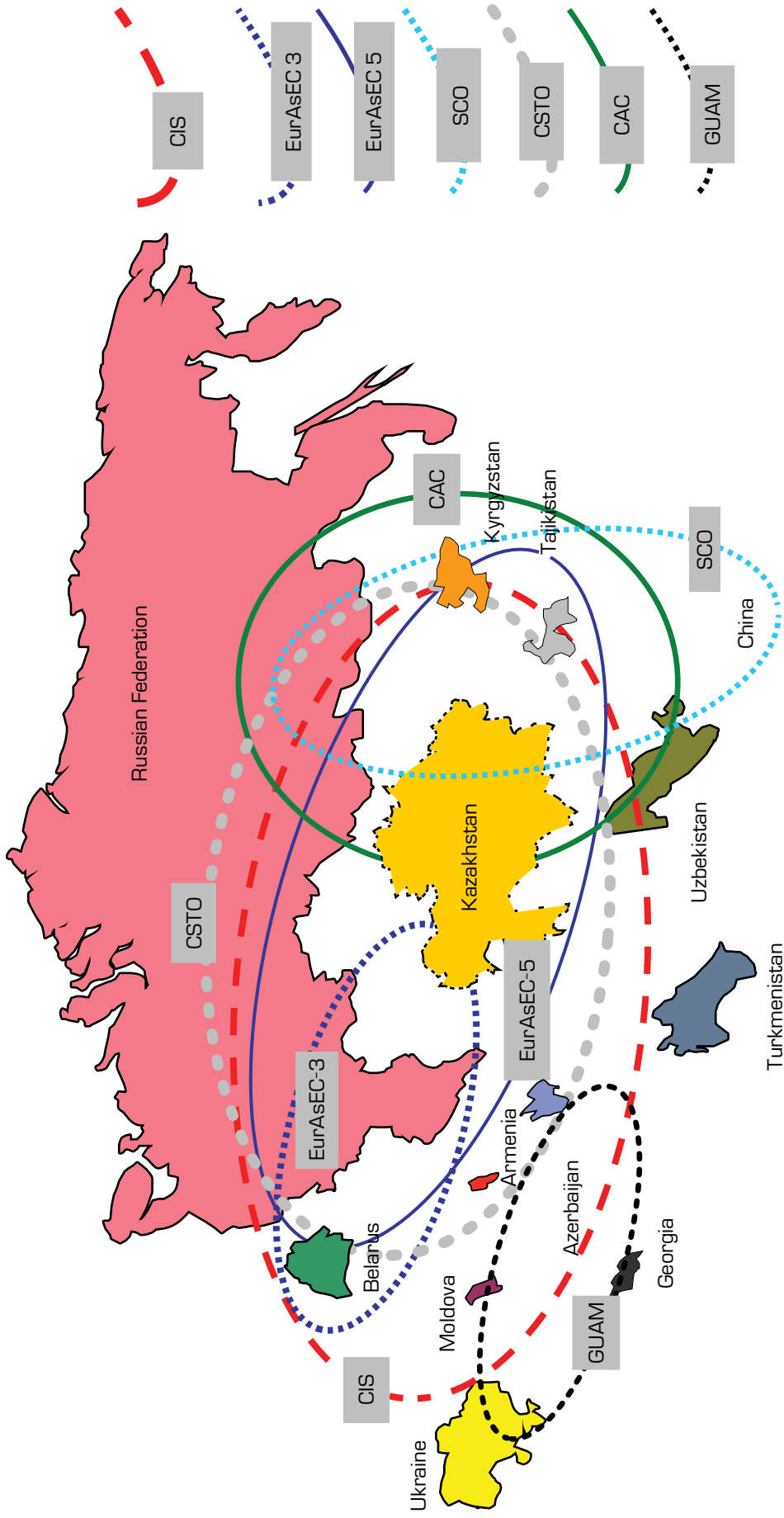
Figure 5.2.

Membership of regional organisations in the post-Soviet space

Table 5.1.

The number of meetings of the Council of Heads of State and Council of Heads of Government

Source: CIS Executive Committee

	2000	2001	2002	2003	2004	2005	2006	2007	2008	total
CHS CIS	4	3	2	3	1	2	2	2	3	22
CHG CIS	3	3	2	2	2	2	2	2	2	20

Eurasian Economic Community. The agreement on the establishment of the EurAsEC was signed on October 10, 2000 in Astana by the presidents of Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. Institutionally, EurAsEC is a well structured system with a decision–making and implementation mechanism, the mechanism of checks and balances, and an elaborate proportionality of voting and financing. In addition to this, the Community has significant opportunities for the coordination of authority in the area of international relations, which includes the right and possibility of representing the interests of the member states in international organisations. In other words, EurAsEC has a status of an international legal entity.

Interstate interaction of the EurAsEC member countries is effected through the Interstate Council, Integration Committee, Interparliamentary Assembly, Community's Court of Justice, and the Customs Union Commission.

Figure 5.3.

Structure of EurAsEC
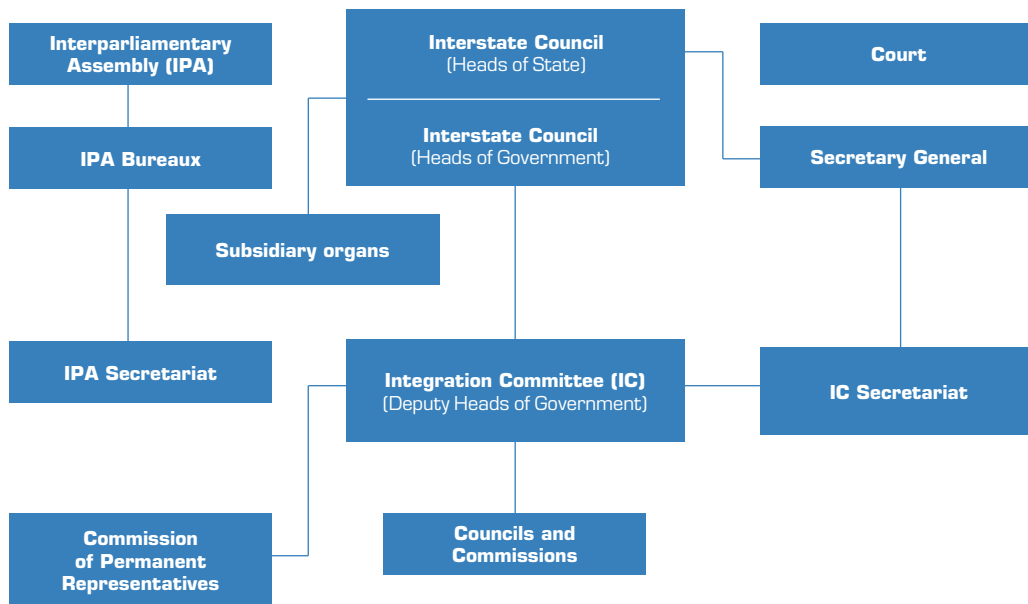
From 2000 to 2008, 11 meetings of the Interstate Council at the level of Heads of State and 14 meetings at the level of Heads of Government were held.

Generally, the structure of major post–Soviet integration organisations, the CIS and EurAsEC, allows us to draw the following conclusions:

• both of them are well–structured systems with established mechanisms of decision–making and interstate interaction;

• interstate interaction within these two organisations is exercised through similar specialised entities at the level of head–of–state, head–of–government, interparliamentary assembly, executive body, or court levels;

• these organisations are not vested with supranational powers, and relations between member countries are pursued through interstate councils. However, the creation of a Customs Union within EurAsEC will lead to the transfer of customs administration authority to the Union's Commission on July 1, 2010 – a huge step towards the establishment of supranational bodies and legislative framework.

The above observations suggest that institutional and political integration in the post–Soviet space progresses towards a new qualitative level. Low–level integration, which is characterised by bilateral contacts, joint consultations, top–level meetings and other measures being taken by two countries, gradually shifts towards multilateral cooperation and common policies aimed at shared priority goals and areas of interest (e.g., the energy sector, the plans to create a Grain Pool, and the Customs Union). However, a level of integration implying the existence of supranational institutions and legislative framework is yet to be achieved.

Below are some quantitative indicators of the performance of integration organisations.
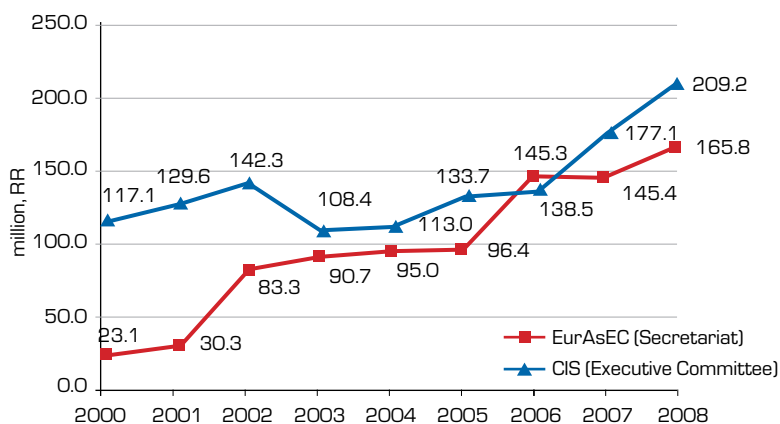
Figure 5.4.

Regional organisations' budget in 2000-2008

Source: EurAsEC and CIS

First, the dynamics of the organisations' budget was analysed (see Figure 5.4). The data submitted by the organisations showed that the budgets of their permanent executive bodies have positive dynamics. From 2000 to 2008, the budget of the CIS Executive Committee grew by 79% and that of the Secretariat for the Integration Committee of EurAsEC by 717%.

The dynamics of implementing budget obligations by member countries was uneven between 2000 and 2008. In the case of the CIS, there is a tendency towards an improvement in its budgeting. If in 2000 and 2002, the budgeting obligations were fulfilled by less than half, over 2003–2005 the percentage of set contributions made by the member states grew at a stable rate.

Figure 5.5.

CIS: Member's contributions to the budget by year

Source: CIS Executive Committee
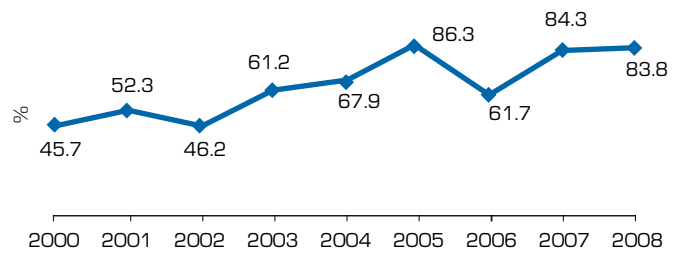
Figure 5.6 shows averaged data on the fulfillment of budgeting obligations by each country, in per cent, in the period of 2000–2008. With the exception of Russia, implementation by the member states of their contributions ranged between 65% and 80%. It should be noted that the issue of the methodology of determining the amount of contributions to the consolidated CIS budget was addressed repeatedly, but the different positions and approaches of the member states make it difficult to find a decision which would be acceptable to all. Russia's performance at more than 100% is a direct result of its role of a financial donor of the CIS budget, and it closes the periodic deficit.

Figure 5.6.

CIS: Member's contributions to the budget by country; average for 2000–2008

Source: CIS Executive Committee
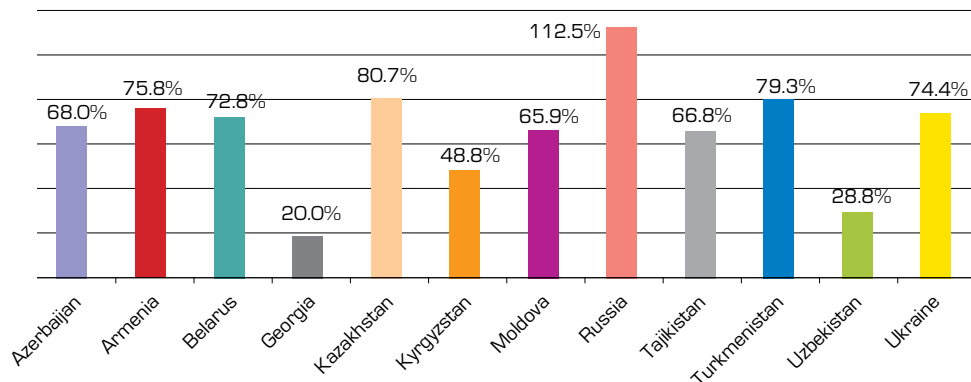
EurAsEC's budget is prepared yearly by the Integration Committee with the agreement of the member states and is approved by the Interstate Council at the level of the heads of state. The share of the member states' contributions to the EurAsEC budget is set as following: Russia

40%, Belarus and Kazakhstan 15% each, Kyrgyzstan and Tajikistan 7.5% each. Russia and Kazakhstan are the most reliable contributors. Beginning 2004, after a recession in 2001 and 2002, Belarus and Tajikistan also performed their financial obligations regularly and fully. Kyrgyzstan's payment of contributions fluctuates, but from 2005 it has also been covering its share of the budget in full. Having joined the Community in 2006 with a 15% contribution, Uzbekistan suspended its membership in November 2008.
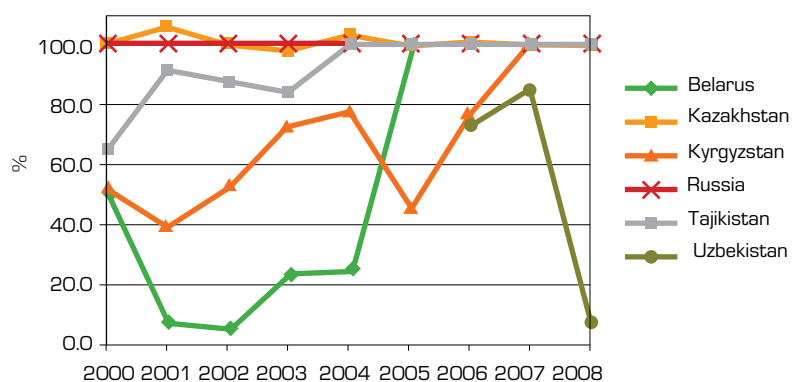
Figure 5.7.

EurAsEC: members' contributions to the budget by year

Source: EurAsEC Integration Committee
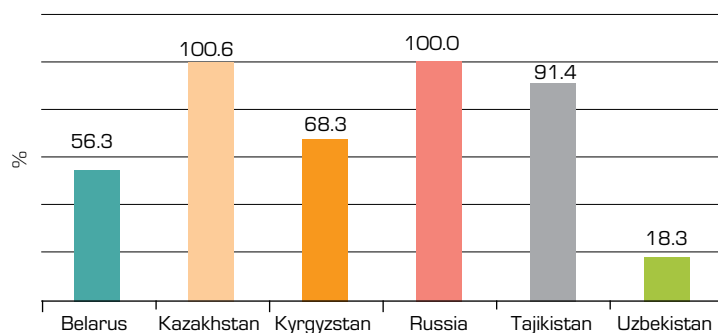
Figure 5.8.

EurAsEC: Members' contributions to the budget by country; average for 2000–2008

If seen against consolidated index of the countries' integration with CIS–12, the data on fulfilment of budget obligations by the member states it shows that Tajikistan, a leader of integration, was fulfilling its obligations to a reduced volume, as did Kyrgyzstan which ranks second (maximum percentage in 2000–2008 was only 63%). Armenia fulfilled its obligations fully in 2005 and 2007–2008. Belarus was fulfilling its obligations fully starting from 2003, except for 2006. For the countries characterised by low level of integration with the region CIS–12, the following pattern is observed: Russia regular 100% performance and over 120% starting from 2005; Kazakhstan from 108% in 2005 to 58% in 2007; Azerbaijan from 31% in 2002 to 92% in 2007–2008. Having shown a sharp fall in the level of integration, Moldova nevertheless regularly performed its obligations in 2004–2008 at a level of 90%, except for 2006 (53%).

The data on the number of the functioning structural divisions in the CIS and EurAsEC show that in CIS the number of divisions financed from the consolidated budget increased in the period from 2001 to 2003. However in 2008, it fell to 7, the same as it was in 2000. The number of EurAsEC's structural divisions grew from 4 in 2000 to 21 in 2008.

Table 5.2.

The number of permanent structural divisions

Source: EurAsEC and CIS

	2000	2001	2002	2003	2004	2005	2006	2007	2008
EurAsEC	4	7	12	16	16	17	18	21	21
CIS*	7	9	9	9	8	8	7	7	7

 * CIS bodies financed from the consolidated budget (Regulations of the Consolidated Budget of the CIS Bodies approved by the Resolution of the Council of Heads of Government on May 31, 2001). The table does not include the sector–based councils of the CIS (there are up to 70 of these).

Following on from this is the data on the number of permanent employees of the CIS and EurAsEC executive bodies. The number of CIS executive bodies' employees decreased in 2006 by 35%. In EurAsEC, the number of personnel of the Secretariat for the Integration Committee grew by 31% in 2008 (compared to 2001).

Table 5.3.

The number of permanent employees by years

Source: EurAsEC and CIS

		2000	2001	2002	2003	2004	2005	2006	2007	2008
EurAsEC	Integration Committee Secretariat	0	75	85	85	85	85	97	97	98
CIS	CIS Executive Committee	310	310	310	220	220	220	220	220	220
	CIS bodies, total	770	770	770	549	549	549	499	499	499

The CIS and EurAsEC show positive dynamics in budget implementation. The peak in both organisations was in 2005.
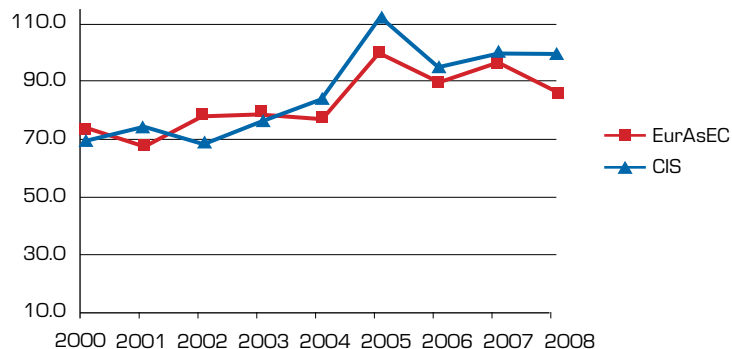
Figure 5.9.

EurAsEC's budget performance in 2000–2008

Source: EurAsEC and CIS

The information on the number of documents adopted and on the proportion of them coming into force could be considered as performance assessment indicator and/or meter of favourability of the political environment. *Table 5.4* shows the statistics on the EurAsEC, CSTO and CIS documents that have been adopted and taken effect.

	EurAsEC (2000–2008)		CSTO (2000–2008)		CIS (1991–2008)	
Total adopted	90	100%	27	100%	1850	100%
Taken effect	58	64%	22	81%	1831	99%
including:						
from the date of signature	11	12%			1517	83%
after ratification					30	2%
after fulfilment of intrastate procedures	47	52%	18	67%	284	15%
Did not take effect	32	36%	5	19%	19	1%
including:						
not ratified					7	37%
intrastate procedures not fulfilled	32	36%	4	15%	12	63%
Cancelled					493	27%
in effect					1357	73%

Table 5.4.

Document statistics

Source: EurAsEC, CSTO and the CIS

Note: * Data on CIS for the period from 1991 to 2009

Collective security is an important characteristic of the level of integration. The "collective security umbrella" provides the opportunity to gradually reconcile the varying economic interests and prevent political disagreements. In many cases, military and political integration preceded economic integration.

The issues of security are in the mandate of the CIS and CSTO. CSTO is primarily a military and political organisation. Its charter reads that one of its main objectives and activities is coordination and joining efforts in counteracting international terrorism and other non-traditional security threats. The interaction of member states is also being built at the interstate level.

	2000	2001	2002	2003	2004	2005	2006	2007	2008
CIS	2	2	2	2	2	1	0	1	0
CSTO	0	1	1	1	1	1	1	1	1

Table 5.5.

The number of joint military exercises of member states

Table 5.6.

The number of joint counter-terrorist exercises of the member states

	2000	2001	2002	2003	2004	2005	2006	2007	2008
CIS	0	1	1	1	1	1	1	1	1
CSTO	0	0	1	0	0	0	0	1	0

Table 5.7.

Joint emergency response exercises

	2000	2001	2002	2003	2004	2005	2006	2007	2008
CIS	1	1	1	1	1	1	1	2	1

5.2. Evaluation of Activities of Integration Organisations: an Expert Poll

The experts were asked to fill in the questionnaire consisting of several sections. The first set of questions concerned the assessment of performance of integration organisations, primarily, the CIS, EurAsEC and SCO. The second set concerned the evaluation of integration as a process.

The survey covered the three largest integration structures in the post–Soviet space. The inclusion of the Shanghai Cooperation Organisation (which includes China) is justified by the representation of post–Soviet countries in this structure (all members except China) and the broad range of tasks it sets itself. All the three selected structures are multi–functional and have overlapping membership. Other integration structures from the region do not meet the above criteria. For example, the Union State of Russia and Belarus comprises only two members, and the Collective Security Treaty Organisation has narrow goals confined to military and political cooperation.

The questionnaire was filled in by 30 experts from CIS countries. Of this number, the majority specialise in economics, energy or political science, and the others are experts in international security, financial cooperation, trade and investments, transport and social policy; all of them have a particular interest in cooperation and integration issues and represent various research or international organisations or the private sector (see Figure 5.10).

1. The experts' opinions on the declared goals of the organisations under review were distributed as follows (see Figure 5.11).

CIS: most experts believe its declared goals are formal (47%). A large group of the experts defined the goals as practical (25%). The nature of the answers was not mutually exclusive. 3% of the experts viewed the goals as realistic. Many experts (22%) believe the goals cannot be achieved.
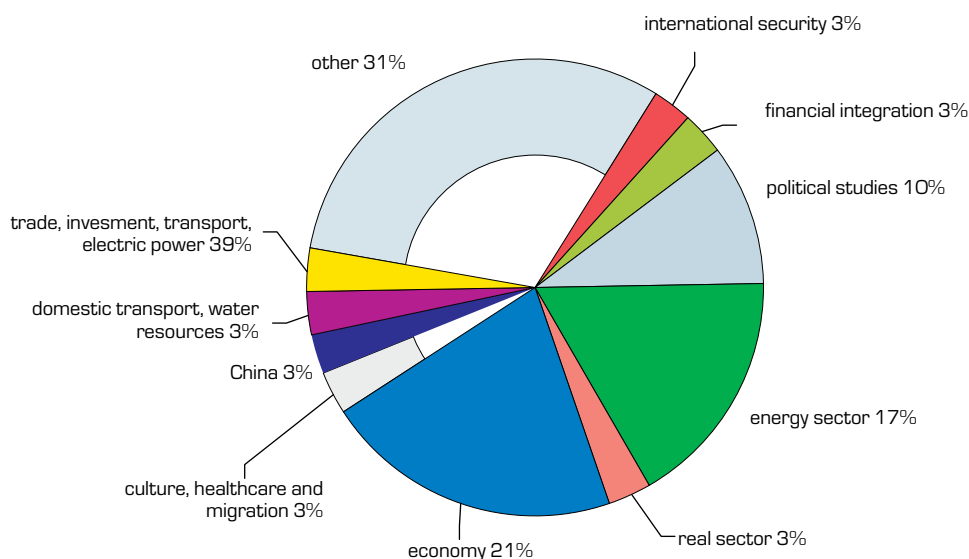
Figure 5.10.

Experts' specialisation

EurAsEC: its goals are realistic (50%) and practical (36%). Very few experts believe the goals cannot be achieved.

SCO: the experts generally agree that its declared goals are practical and realistic (51% in aggregate).
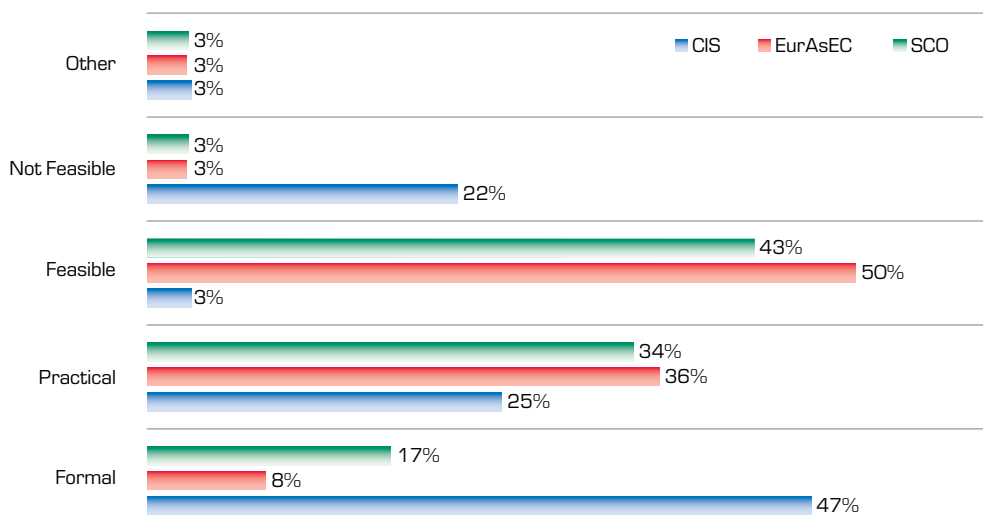
Figure 5.11.

Organisations' goals

2. The experts were asked to assess how fit is the organisations' structure for their declared goals (minimum – 1; maximum – 5).

Figure 5.12.

CIS: adequacy of the organisation's structure for its goals
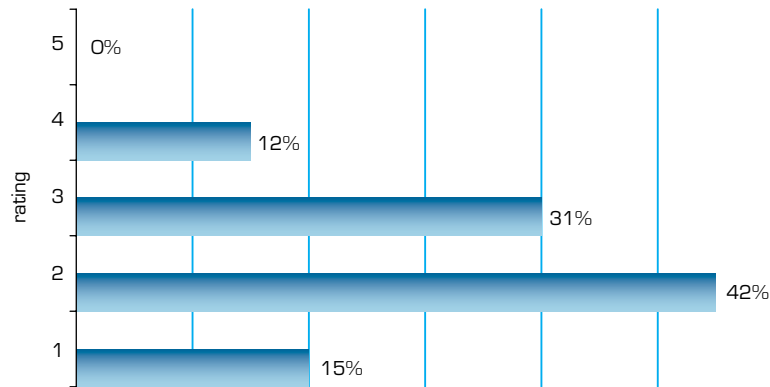
CIS: assuming 3 is an average value, it can be concluded that most experts (42%) believe the organisational structure is poorly suited to its declared goals. About 30% of the experts agree that the existing structure is generally adequate (see Figure 5.12).

Figure 5.13.

EurAsEC: adequacy of the organisation's structure for its goals
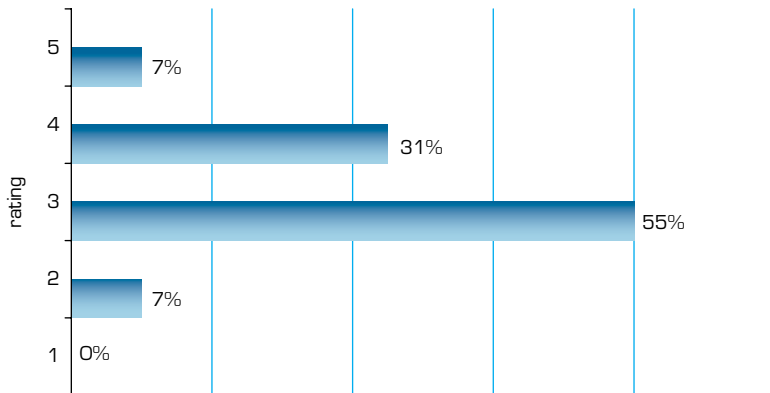
EurAsEC: most experts (55%) percieved the organisational structure as adequate, and one–third assessed the adequacy at above average (see Figure 5.13).

Figure 5.14.

SCO: adequacy of the organisation's structure for its goals
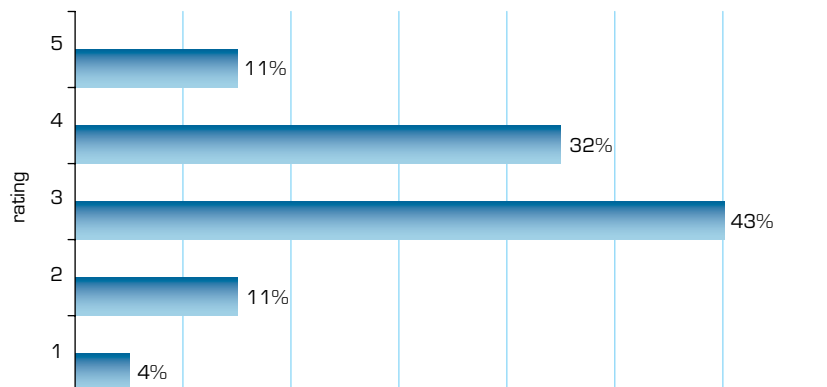
SCO: the experts generally define the organisational structure as adequate for its declared goals. About one–third assess the adequacy as above average and 11% as very high (see Figure 5.14).

As a conclusion on the first two questions, there is a relationship between the nature of declared goals and the existing organisational structure. According to the experts' opinions, practical and realistic goals are attributable to more efficient organisational structures.

3. The experts were then asked to assess the resources (including financial and staff) available to the organisations for achieving their goals (minimum – 1; maximum – 5).
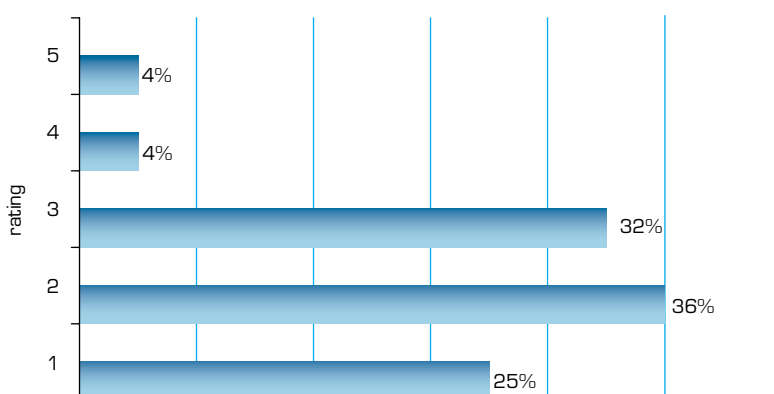
Figure 5.15.

CIS: Sufficiency of resources for achieving goals

CIS: 25% and 36% of the experts assess the sufficiency of resources as below average. 32% believe the resources are generally adequate. On the whole, the vast majority of the experts believe the resources are inadequate (see Figure 5.15).
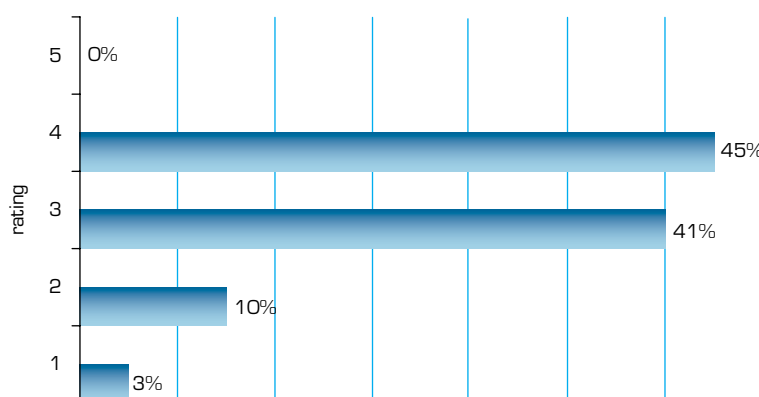
Figure 5.16.

EurAsEC: sufficiency of resources for achieving goals

EurAsEC: 41% of the experts assess the sufficiency of resources as average and 45% as above average. Only 13% rates the sufficiency as inadequate (see Figure 5.16).

Figure 5.17.

SCO: sufficiency of resources for achieving goals
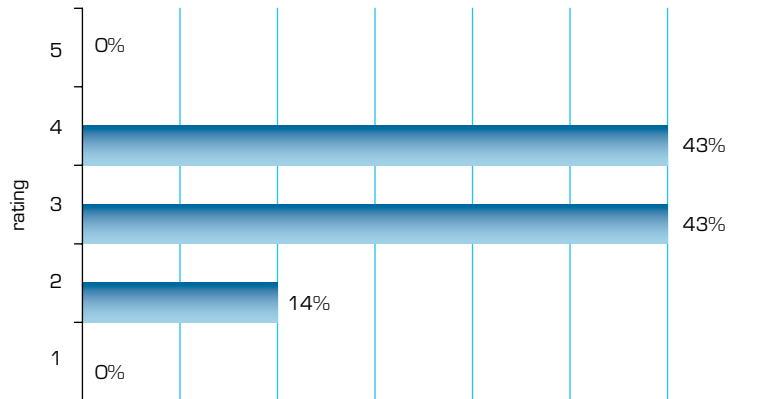
SCO: the distribution of answers is following the similar pattern; most experts assess the sufficiency of resources as average or above average (43% each). The opinions do not vary greatly: none of the experts gave the lowest or the highest score (see Figure 5.17).

4. Then the experts gave their opinions on the effectiveness of the organisations under review (see Figure 5.18).

Figure 5.18.

Effectiveness of integration organisations
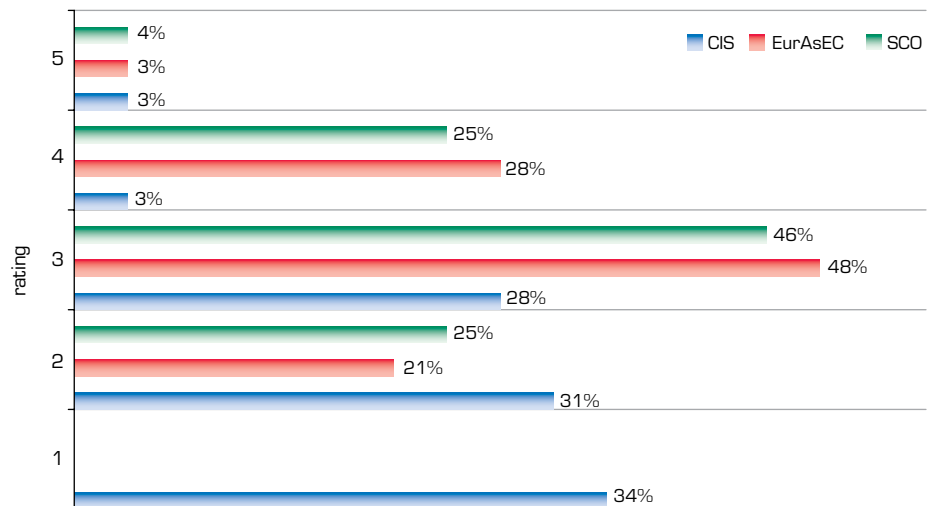
The effectiveness of the CIS was rated as very low by 34% of the experts. The efficiency of the EurAsEC and SCO was generally rated as average (48% and 46%, respectively) or above average (28% and 25%, respectively).

5. The experts were asked to assess the effectiveness of the organisations under review by area of cooperation and integration (see Figure 5.19). The assessments were given separately for each organisation. The experts considered the CIS and SCO to be the most effective in political cooperation and security. Political cooperation was pointed out by 51% and security by 22% of the experts in the case of the CIS. The same assessments for SCO were 37% and 39%, respectively. The experts also emphasised the effectiveness of the CIS in social development (11%) and electric power (8%). Bearing in mind that political cooperation is a considerable part of activities of the EurAsEC (as 16% of experts believe), this organisation demonstrates better results in facilitating trade and investments (37%), energy (27%) and banking in the member states.
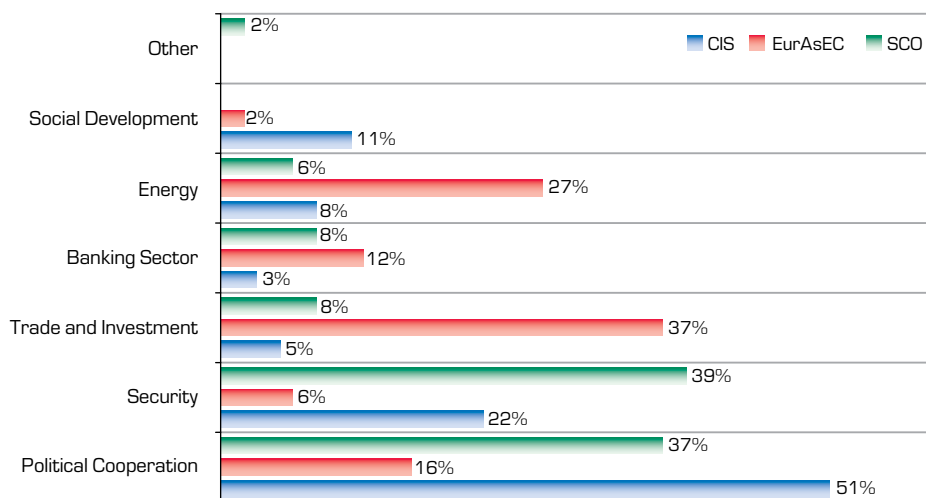
Figure 5.19.

Assessment of the efficiency of integration organisations by area of activity

The experts generally agree that the CIS and SCO are more focused towards developing common political approaches and decisions (and excel at that), whilst the EurAsEC is more efficient in promoting concerted efforts of member states in particular economic sectors. Notably, the resources available to the CIS are inadequate for the scope of goals set for this organisation (over 60% of the experts assess the sufficiency of resources as below average). Both the EurAsEC and SCO in experts' opinion have sufficient resources at their disposal.

6. The experts assessed the progress achieved in implementing signed agreements as follows (see Figure 5.20).

Figure 5.20.

Progress in implementing signed agreements
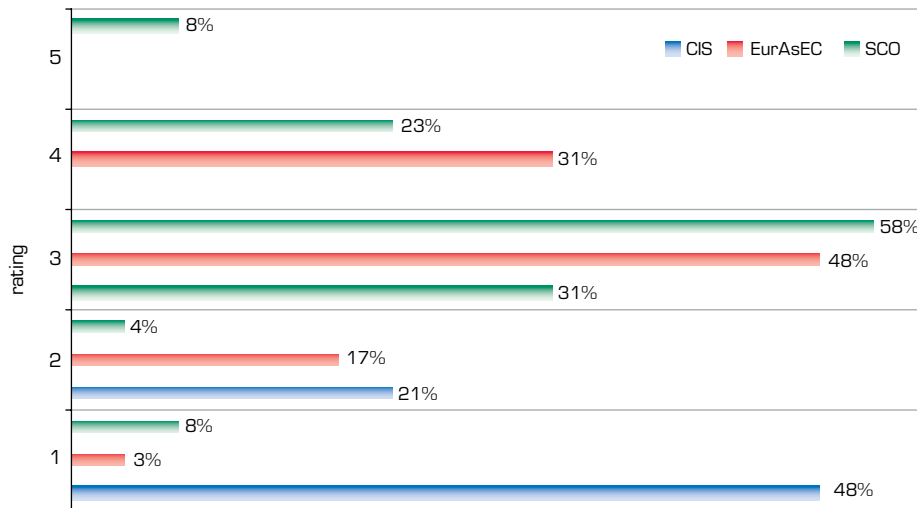
CIS: the lowest score was given by 48% of the experts. One–third assessed the progress as average.

EurAsEC: most assessments (79%) were average or above average, and 17% of the experts assess the progress as below average.

SCO: assessments scattered broadly. 58% of the experts note some progress in implementing the agreements, and 23% assess this progress as above average. There were equal numbers of the lowest and highest assessments (8% each).

In conclusion, SCO is the leader in implementing signed agreements. However, we should remember that the comparability of these integration organisations in this respect may be questioned as they differ in the number of member states and agreements.

7. To continue with the subject of the effectiveness of integration organisations, the experts were asked to assess the promptness of translation of political decisions into laws and regulations (see Figure 5.21).

Figure 5.21.

Promptness of implementing decisions
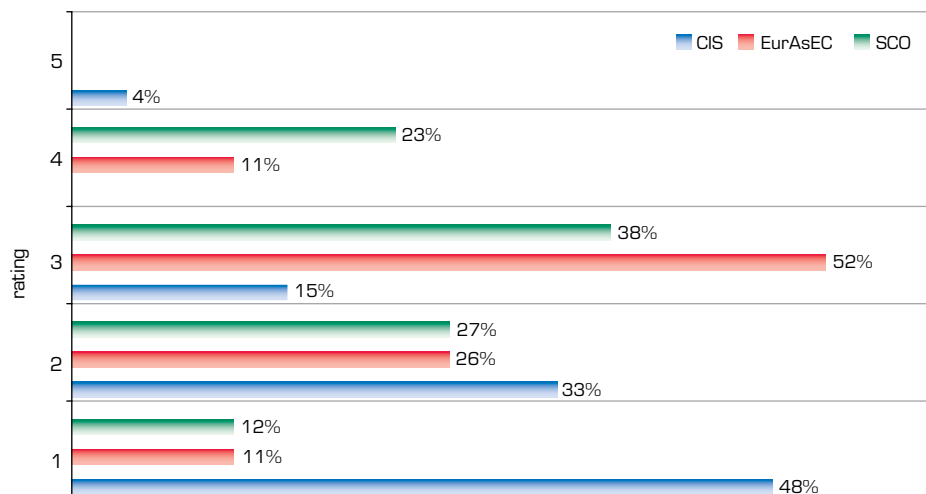
Although there are many positive assessments, the experts generally agree that there is a lack of promptness in implementing decisions (below average or very low). The longest time of translation of political decisions into laws was reported for the CIS. The numbers of negative assessments for EurAsEC and SCO were nearly equal.

8. The experts' assessments of the quality of adopted documents (including time required for final revision and approval by all the parties) were largely moderate or negative (see Figure 5.22).
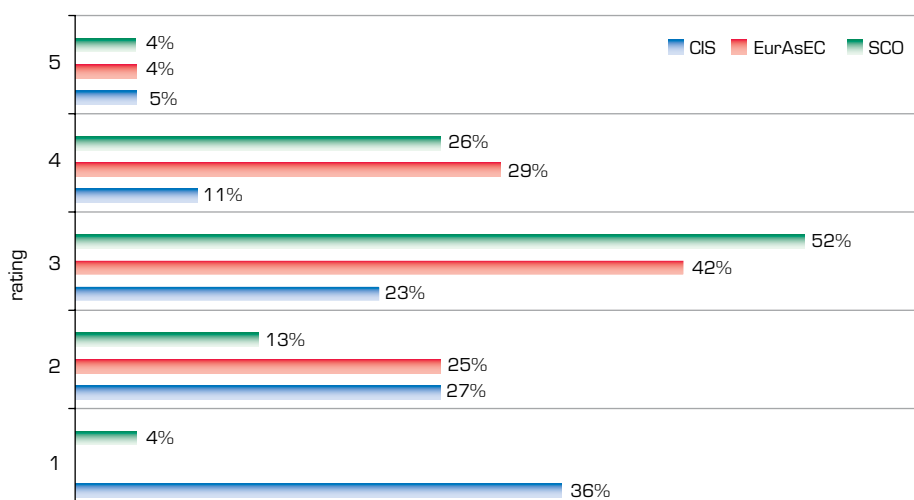
Figure 5.22.

Quality of adopted documents

SCO received the largest number of positive assessments. EurAsEC's performance was also assessed as fairly good. The assessment of the CIS, again, was largely negative.

9. The last question concerned the effectiveness of interaction between integration organisations and the respective bodies and organisations of their member states (see Figure 5.23).
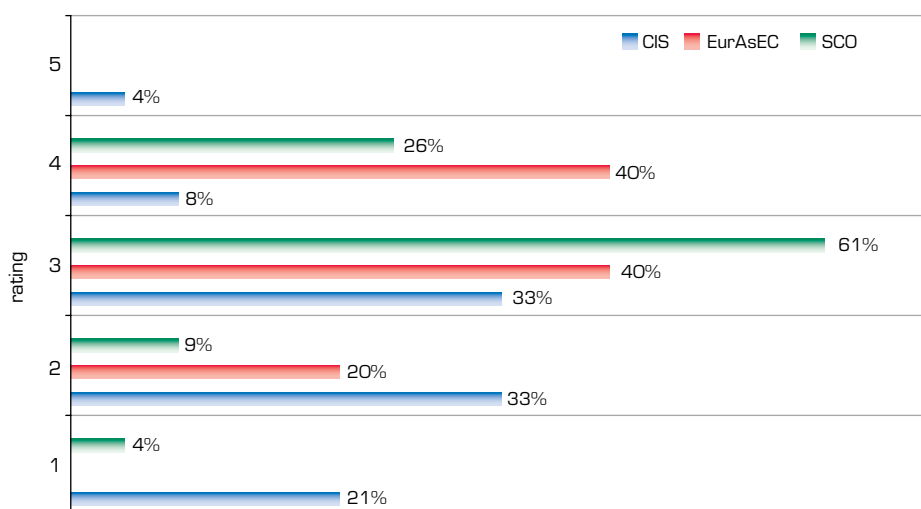
Figure 5.23.

The efficiency of interaction between integration organisations and their member states

CIS: 46% of the experts assess the efficiency of this interaction as average or above average. Yet there is much room for improvement, as 54% of the assessments are negative. EurAsEC: the assessments are distributed evenly. 80% of the assessments are positive (average or above average). One–quarter of the assessments are negative. SCO: interaction with the respective bodies and organisations of member states is fairly efficient (over 80% of the assessments are positive). There is room for improvement, however: 13% of the assessments are below average or very low.

The experts' assessments suggest that there is a relationship between the adequacy of an organisation's structure in the light of its goals on the one hand, and the efficiency of its interaction with the respective bodies and organisations of its member states on the other hand. This interaction is more efficient in the case of those organisations whose structures are more suited for their goals (EurAsEC and SCO). Again, we should remember that the organisations under review were established in different time periods, comprise different numbers of members, and set themselves different goals: economic, social or political, and all these differences may affect their comparability.

5.3. Integration Processes: Depth, Dynamics and Obstacles

The second set of questions concerned the depth of integration processes in the post–Soviet space.

10. Assessment of the depth of integration in the light of formal interstate agreements (see Figure 5.24).
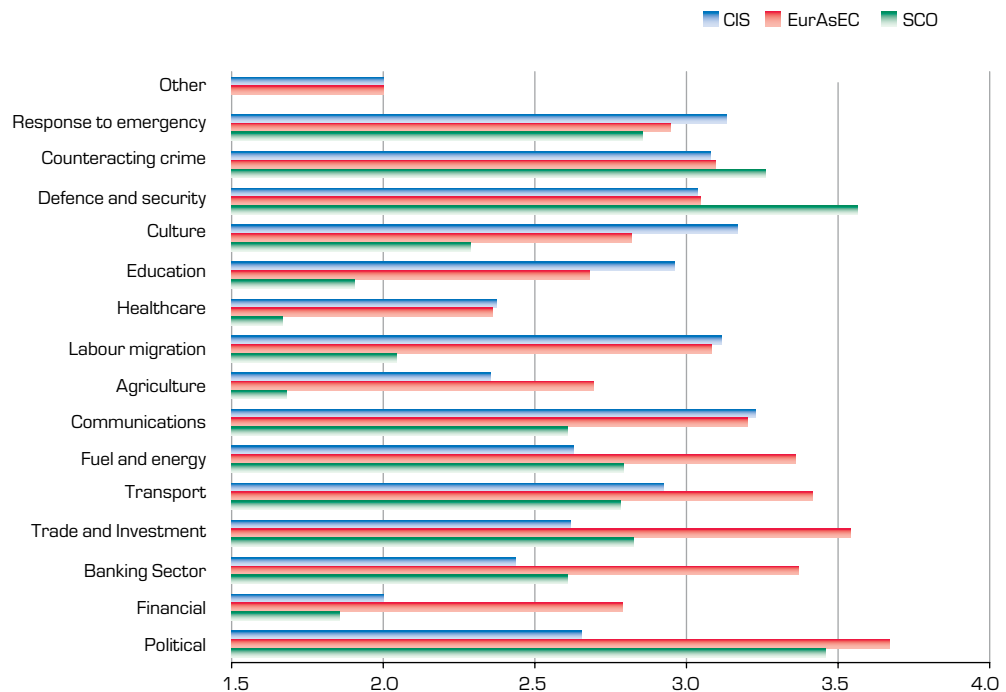
Figure 5.24.

Depth of integration in the light of formal agreements

To analyse the distribution of the experts' answers, we used average values calculated for each aspect of integration and each organisation under review. The scale was calibrated from 0 to 5 with 0.5 interval. The values from 2.0 to 3.0 are average.

According to the experts, the deepest level of integration, in the light of signed agreements, was achieved in politics, banking, trade and investments, transport, fuel and energy, communications, labour migration, culture, collective security, fighting crime, and emergency response. The highest marks were given to the EurAsEC and SCO.

CIS: finance and environment – below average. Politics, banking, trade and investments, transport, fuel and energy, agriculture, health, education – average. Communications, labour migration, culture, collective security, fighting crime, emergency response – above average.

EurAsEC: banking, trade and investments, transport, fuel and energy, communications, labour migration, collective security, fighting crime – high. The other aspects were assessed as above average. There were no assessments below average.

SCO: finance, agriculture, health, education – low. Collective security, fighting crime, politics – high. The other aspects were assessed as above average.

It can be concluded that integration organisations should specialise in particular areas in order to avoid doubling up and competition, and be able to concentrate their resources and efforts on the aspects at which they excel.

11. The experts were asked to assess the dynamics of integration in a number of sectors, including finance, banking, trade and investments, fuel and energy, communications, agriculture, transport, labour migration, health, education, culture, and military and political cooperation (see Figure 5.25).
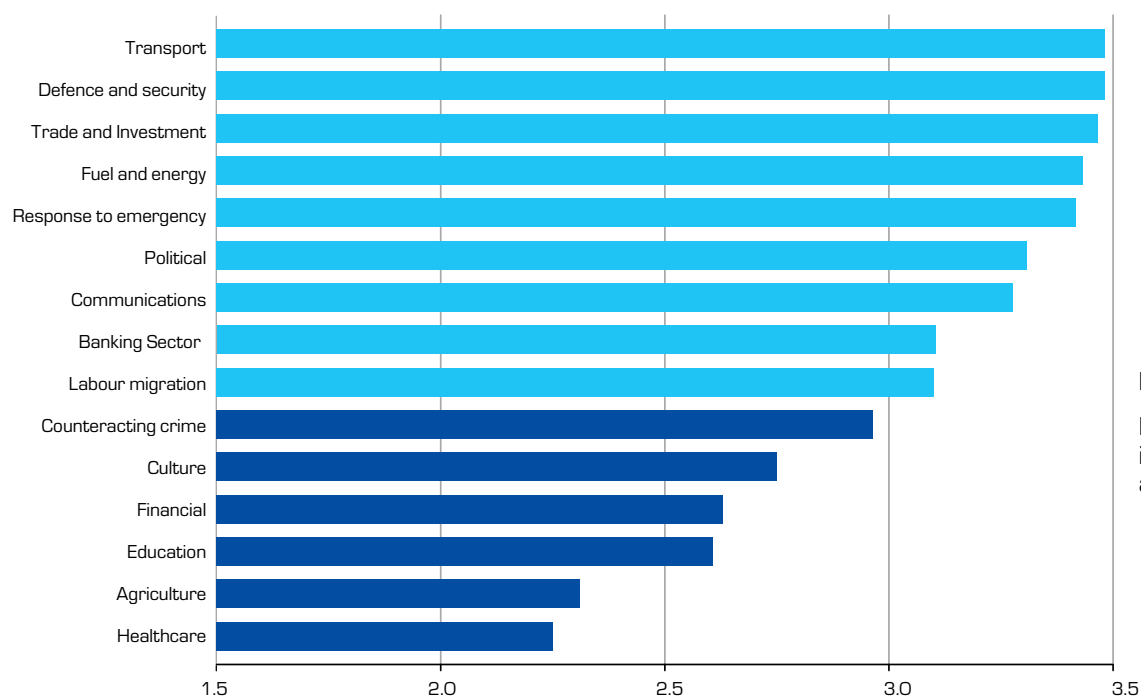
Figure 5.25.

Dynamics of integration by aspect

As with the previous question, we used average values calculated for each sector. The scale was calibrated from 0 to 5 with an interval of 0.5. The values from 2.0 to 3.0 are average.

The experts gave average marks to integration dynamics in health, agriculture, education, finance, culture, and fighting crime. The assessments of other sectors were above average, the most successful sectors being transport, trade and investments, fuel and energy, politics, emergency prevention and response, and collective security. Interestingly, the experts believe that integration in education is less dynamic, although our analysis of market integration allows us to draw a more optimistic conclusion. In our opinion, this discrepancy should be viewed as evidence that there is still a lot of room to enhance cooperation in this sector, despite the positive dynamics.

12. The experts were asked to evaluate obstacles to integration on a scale from 1 to 5, where the minimum score corresponds to the minimum value of the criterion (see Figure 5.26). The following criteria were put up as obstacles: economy size; level of development of business; orientation of foreign trade links; level of development of national law; level of economic development; quality of state administration; priorities of foreign policy; and characteristics of domestic policies.

Figure 5.26.

Barriers to integration

Again, we used average values calculated for each sector. The scale was calibrated with marks from 0 to 5 at a pace of 0.5. The values from 2.0 to 3.0 are average.
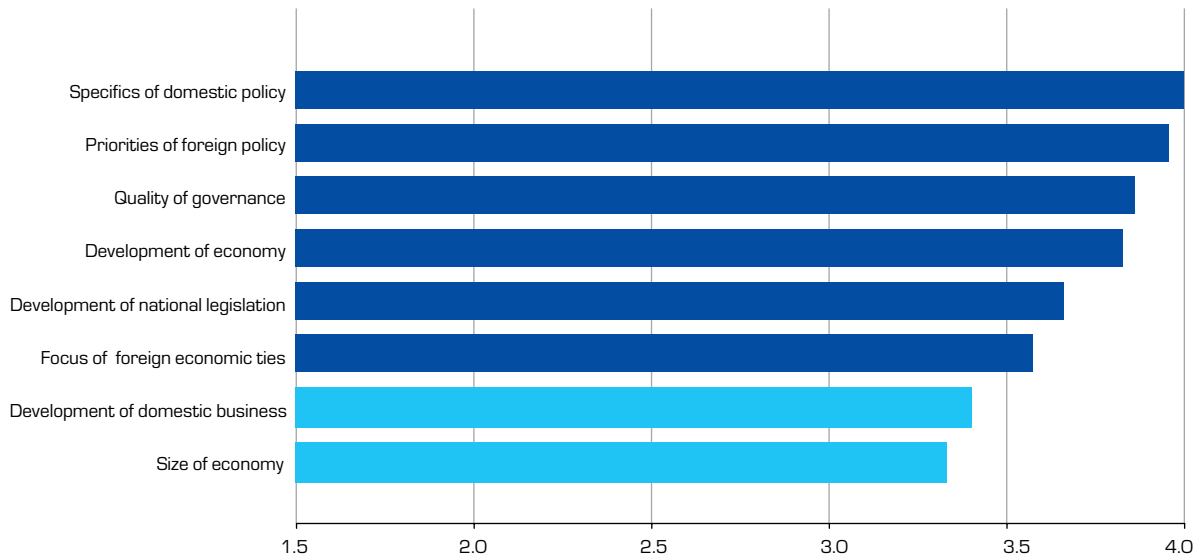
The experts generally agree that the size of an economy or the level of development of business in a member state do not exert much influence on integration. On the other hand, integration is most sensitive to internal policies, priorities of foreign policy, the quality of state administration, and the level of economic development of member states.

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Annex 1: Indicators of Regional Integration in 1999–2007

Table A.1.1. Trade Integration Index, 1999–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1999																		
Azerbaijan	1	-	na	0.003	0.035	0.004	0.003	0.001	0.004	0.006	na	na	0.004	0.195	0.119	0.112	0.135	0.018
Armenia	2	na	-	0.001	0.024	0.001	0.000	0.000	0.002	0.000	na	na	0.001	0.183	0.106	0.106	0.114	0.003
Belarus	3	0.003	0.001	-	0.001	0.004	0.004	0.017	0.095	0.002	na	na	0.039	1.460	1.302	1.299	1.426	0.012
Georgia	4	0.035	0.024	0.001	-	0.001	0.000	0.000	0.002	0.000	na	na	0.003	0.257	0.109	0.108	0.141	0.004
Kazakhstan	5	0.004	0.001	0.004	0.001	-	0.016	0.001	0.035	0.009	na	na	0.010	0.256	0.228	0.214	0.230	0.014
Kyrgyzstan	6	0.003	0.000	0.004	0.000	0.016	-	0.001	0.003	0.010	na	na	0.001	0.387	0.272	0.261	0.274	0.102
Moldova	7	0.001	0.000	0.017	0.000	0.001	0.001	-	0.006	0.000	na	na	0.009	0.448	0.434	0.433	0.550	0.004
Russia	8	0.004	0.002	0.095	0.002	0.035	0.003	0.006	-	0.003	na	na	0.094	0.141	0.073	0.071	0.127	0.022
Tajikistan	9	0.006	0.000	0.002	0.000	0.009	0.010	0.000	0.003	-	na	na	0.004	0.689	0.230	0.219	0.264	0.064
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.004	0.001	0.039	0.003	0.010	0.001	0.009	0.094	0.004	na	na	-	0.372	0.320	0.318	0.318	0.010
2000																		
Azerbaijan	1	-	na	0.001	0.030	0.006	0.002	0.000	0.003	0.016	na	na	0.004	0.163	0.114	0.101	0.118	0.029
Armenia	2	na	-	0.000	0.021	0.000	0.000	0.000	0.001	0.000	na	na	0.001	0.169	0.091	0.090	0.101	0.003
Belarus	3	0.001	0.000	-	0.000	0.004	0.001	0.009	0.095	0.001	na	na	0.041	0.830	0.745	0.744	0.814	0.006
Georgia	4	0.030	0.021	0.000	-	0.001	0.000	0.000	0.002	0.000	na	na	0.003	0.232	0.101	0.101	0.132	0.009
Kazakhstan	5	0.006	0.000	0.004	0.001	-	0.011	0.001	0.044	0.009	na	na	0.018	0.321	0.288	0.278	0.304	0.010
Kyrgyzstan	6	0.002	0.000	0.001	0.000	0.011	-	0.000	0.002	0.008	na	na	0.001	0.424	0.255	0.246	0.253	0.083
Moldova	7	0.000	0.000	0.009	0.000	0.001	0.000	-	0.005	0.000	na	na	0.011	0.423	0.397	0.397	0.535	0.006
Russia	8	0.003	0.001	0.095	0.002	0.044	0.002	0.005	-	0.004	na	na	0.085	0.142	0.079	0.076	0.126	0.027
Tajikistan	9	0.016	0.000	0.001	0.000	0.009	0.008	0.000	0.004	-	na	na	0.006	0.822	0.366	0.357	0.439	0.073
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	0.430	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.004	0.001	0.041	0.003	0.018	0.001	0.011	0.085	0.006	na	-	0.000	0.420	0.349	0.346	0.346	0.017
2001																		
Azerbaijan	1	-	na	0.001	0.031	0.008	0.001	0.000	0.002	0.008	na	na	0.003	0.148	0.077	0.071	0.082	0.026
Armenia	2	na	-	0.000	0.017	0.000	0.000	0.000	0.002	0.000	na	na	0.002	0.199	0.120	0.120	0.141	0.002
Belarus	3	0.001	0.000	-	0.000	0.003	0.001	0.010	0.089	0.001	na	na	0.028	0.743	0.683	0.682	0.731	0.004
Georgia	4	0.031	0.017	0.000	-	0.001	0.000	0.000	0.002	0.000	na	na	0.003	0.248	0.104	0.104	0.138	0.006
Kazakhstan	5	0.008	0.000	0.003	0.001	-	0.013	0.001	0.044	0.008	na	na	0.027	0.332	0.277	0.266	0.305	0.011
Kyrgyzstan	6	0.001	0.000	0.001	0.000	0.013	-	0.001	0.002	0.007	na	na	0.000	0.365	0.246	0.240	0.247	0.110
Moldova	7	0.000	0.000	0.010	0.000	0.001	0.001	-	0.005	0.000	na	na	0.015	0.467	0.391	0.390	0.577	0.006
Russia	8	0.002	0.002	0.089	0.002	0.044	0.002	0.005	-	0.002	na	na	0.081	0.134	0.075	0.073	0.121	0.026
Tajikistan	9	0.008	0.000	0.001	0.000	0.008	0.007	0.000	0.002	-	na	na	0.003	0.627	0.257	0.250	0.293	0.072
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	0.399	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.003	0.002	0.028	0.003	0.027	0.000	0.015	0.081	0.003	na	na	-	0.388	0.309	0.308	0.308	0.022
2002																		
Azerbaijan	1	-	na	0.001	0.031	0.012	0.002	0.000	0.003	0.011	0.015	na	0.005	0.188	0.118	0.110	0.131	0.039
Armenia	2	na	-	0.000	0.021	0.000	0.000	0.001	0.002	0.000	0.004	na	0.002	0.217	0.116	0.115	0.141	0.002
Belarus	3	0.001	0.000	-	0.000	0.003	0.001	0.010	0.086	0.001	0.002	na	0.020	0.678	0.633	0.632	0.667	0.004
Georgia	4	0.031	0.021	0.000	-	0.001	0.000	0.000	0.002	0.001	0.011	na	0.004	0.270	0.109	0.108	0.150	0.006
Kazakhstan	5	0.012	0.000	0.003	0.001	-	0.014	0.001	0.036	0.006	0.005	na	0.019	0.267	0.228	0.217	0.245	0.011
Kyrgyzstan	6	0.002	0.000	0.001	0.000	0.014	-	0.001	0.002	0.008	0.001	na	0.001	0.382	0.276	0.267	0.276	0.126
Moldova	7	0.000	0.001	0.010	0.000	0.001	0.001	-	0.004	0.000	0.001	na	0.016	0.454	0.340	0.339	0.525	0.008
Russia	8	0.003	0.002	0.086	0.002	0.036	0.002	0.004	-	0.002	0.003	na	0.074	0.122	0.068	0.067	0.110	0.022
Tajikistan	9	0.011	0.000	0.001	0.001	0.006	0.008	0.000	0.002	-	0.014	na	0.003	0.555	0.204	0.195	0.245	0.055
Turkmenistan	10	0.015	0.004	0.002	0.011	0.005	0.001	0.001	0.003	0.014	-	na	0.079	0.354	0.066	0.057	0.338	0.018
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.005	0.002	0.020	0.004	0.019	0.001	0.016	0.074	0.003	0.079	na	-	0.348	0.276	0.274	0.274	0.018
2003																		
Azerbaijan	1	-	na	0.001	0.027	0.009	0.000	0.000	0.004	0.013	0.018	na	0.005	0.195	0.118	0.109	0.133	0.031
Armenia	2	na	-	0.001	0.015	0.001	0.000	0.001	0.002	0.000	0.011	na	0.002	0.210	0.110	0.110	0.135	0.003
Belarus	3	0.001	0.001	-	0.000	0.004	0.001	0.009	0.087	0.001	0.003	na	0.021	0.692	0.646	0.645	0.681	0.006
Georgia	4	0.027	0.015	0.000	-	0.001	0.000	0.001	0.002	0.000	0.013	na	0.005	0.260	0.115	0.115	0.170	0.008
Kazakhstan	5	0.009	0.001	0.004	0.001	-	0.016	0.004	0.038	0.007	0.005	na	0.021	0.274	0.234	0.222	0.253	0.012
Kyrgyzstan	6	0.000	0.000	0.001	0.000	0.016	-	0.001	0.002	0.017	0.001	na	0.001	0.395	0.338	0.320	0.331	0.159

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Moldova	7	0.000	0.001	0.009	0.001	0.004	0.001	-	0.004	0.000	0.001	na	0.018	0.489	0.361	0.360	0.578	0.025
Russia	8	0.004	0.002	0.087	0.002	0.038	0.002	0.004	-	0.002	0.003	na	0.079	0.127	0.070	0.068	0.115	0.023
Tajikistan	9	0.013	0.000	0.001	0.000	0.007	0.017	0.000	0.002	-	0.007	na	0.002	0.457	0.211	0.194	0.227	0.073
Turkmenistan	10	0.018	0.011	0.003	0.013	0.005	0.001	0.001	0.003	0.007	-	na	0.065	0.362	0.071	0.067	0.296	0.015
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.005	0.002	0.021	0.005	0.021	0.001	0.018	0.079	0.002	0.065	na	-	0.365	0.292	0.291	0.291	0.018
2004																		
Azerbaijan	1	-	na	0.001	0.034	0.012	0.000	0.000	0.004	0.013	na	na	0.006	0.232	0.144	0.135	0.161	0.044
Armenia	2	na	-	0.001	0.021	0.001	0.000	0.001	0.001	0.000	na	na	0.003	0.195	0.094	0.094	0.127	0.006
Belarus	3	0.001	0.001	-	0.000	0.005	0.000	0.009	0.090	0.001	na	na	0.024	0.732	0.682	0.681	0.722	0.007
Georgia	4	0.034	0.021	0.000	-	0.002	0.000	0.001	0.002	0.001	na	na	0.005	0.293	0.117	0.116	0.164	0.011
Kazakhstan	5	0.012	0.001	0.005	0.002	-	0.015	0.003	0.040	0.007	na	na	0.020	0.274	0.227	0.215	0.242	0.012
Kyrgyzstan	6	0.000	0.000	0.000	0.000	0.015	-	0.001	0.002	0.012	na	na	0.001	0.452	0.399	0.387	0.401	0.171
Moldova	7	0.000	0.001	0.009	0.001	0.003	0.001	-	0.004	0.000	na	na	0.019	0.474	0.342	0.341	0.571	0.024
Russia	8	0.004	0.001	0.090	0.002	0.040	0.002	0.004	-	0.002	na	na	0.081	0.132	0.073	0.071	0.120	0.024
Tajikistan	9	0.013	0.000	0.001	0.001	0.007	0.012	0.000	0.002	-	na	na	0.002	0.446	0.225	0.214	0.239	0.082
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Ukraine	12	0.006	0.003	0.024	0.005	0.020	0.001	0.019	0.081	0.002	na	na	-	0.376	0.310	0.309	0.309	0.017
2005																		
Azerbaijan	1	-	na	0.001	0.038	0.004	0.000	0.001	0.004	0.015	na	na	0.007	0.227	0.124	0.114	0.142	0.022
Armenia	2	na	-	0.001	0.018	0.001	0.000	0.001	0.001	0.000	na	na	0.003	0.200	0.104	0.103	0.139	0.007
Belarus	3	0.001	0.001	-	0.001	0.005	0.001	0.010	0.062	0.001	na	na	0.033	0.580	0.512	0.511	0.569	0.008
Georgia	4	0.038	0.018	0.001	-	0.001	0.000	0.001	0.002	0.001	na	na	0.006	0.319	0.131	0.130	0.186	0.010
Kazakhstan	5	0.004	0.001	0.005	0.001	-	0.012	0.003	0.037	0.007	na	na	0.015	0.242	0.205	0.195	0.214	0.010
Kyrgyzstan	6	0.001	0.000	0.001	0.000	0.012	-	0.001	0.002	0.011	na	na	0.001	0.477	0.422	0.410	0.430	0.166
Moldova	7	0.001	0.001	0.010	0.001	0.003	0.001	-	0.003	0.000	na	na	0.017	0.459	0.331	0.330	0.542	0.025
Russia	8	0.004	0.001	0.062	0.002	0.037	0.002	0.003	-	0.001	na	na	0.073	0.110	0.056	0.054	0.097	0.022
Tajikistan	9	0.015	0.000	0.001	0.001	0.007	0.011	0.000	0.001	-	na	na	0.002	0.458	0.243	0.232	0.263	0.089
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Ukraine	12	0.007	0.003	0.033	0.006	0.015	0.001	0.017	0.073	0.002	na	na	-	0.358	0.299	0.297	0.297	0.014
2006																		
Azerbaijan	1	-	na	0.001	na	0.006	0.001	0.001	0.005	0.015	na	na	0.008	0.205	0.137	0.127	0.155	0.028
Armenia	2	na	-	0.001	na	0.002	0.000	0.001	0.002	0.000	na	na	0.003	0.214	0.136	0.136	0.176	0.022
Belarus	3	0.001	0.001	-	na	0.006	0.001	0.008	0.061	0.001	na	na	0.037	0.587	0.517	0.516	0.578	0.010
Georgia	4	na	na	na	-	na	na	na	na	na	na	na	na	0.310	na	na	na	na
Kazakhstan	5	0.006	0.002	0.006	na	-	0.011	0.001	0.038	0.005	na	na	0.021	0.237	0.196	0.187	0.212	0.008
Kyrgyzstan	6	0.001	0.000	0.001	na	0.011	-	0.000	0.003	0.012	na	na	0.001	0.514	0.458	0.445	0.462	0.157
Moldova	7	0.001	0.001	0.008	na	0.001	0.000	-	0.003	0.000	na	na	0.015	0.405	0.280	0.279	0.481	0.012
Russia	8	0.005	0.002	0.061	na	0.038	0.003	0.003	-	0.002	na	na	0.066	0.106	0.056	0.054	0.092	0.023
Tajikistan	9	0.015	0.000	0.001	na	0.005	0.012	0.000	0.002	-	na	na	0.001	0.435	0.253	0.242	0.261	0.079
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Ukraine	12	0.008	0.003	0.037	na	0.021	0.001	0.015	0.066	0.001	na	na	-	0.349	0.294	0.292	0.292	0.019
2007																		
Azerbaijan	1	-	na	0.002	0.037	0.007	0.000	0.001	0.004	0.006	na	na	0.008	0.176	0.126	0.122	0.156	0.026
Armenia	2	na	-	0.001	0.022	0.003	0.000	0.001	0.002	0.000	na	na	0.004	0.240	0.153	0.153	0.199	0.022
Belarus	3	0.002	0.001	-	0.001	0.007	0.001	0.008	0.063	0.001	na	na	0.035	0.623	0.549	0.548	0.610	0.012
Georgia	4	0.037	0.022	0.001	-	0.002	0.000	0.001	0.002	0.001	na	na	0.010	0.294	0.098	0.097	0.179	0.013
Kazakhstan	5	0.007	0.003	0.007	0.002	-	0.011	0.002	0.038	0.007	na	na	0.027	0.248	0.195	0.186	0.218	0.009
Kyrgyzstan	6	0.000	0.000	0.001	0.000	0.011	-	0.001	0.003	0.009	na	na	0.001	0.574	0.487	0.478	0.500	0.153
Moldova	7	0.001	0.001	0.008	0.001	0.002	0.001	-	0.003	0.000	na	na	0.015	0.401	0.290	0.289	0.495	0.022
Russia	8	0.004	0.002	0.063	0.002	0.038	0.003	0.003	-	0.002	na	na	0.065	0.107	0.058	0.055	0.093	0.024
Tajikistan	9	0.006	0.000	0.001	0.001	0.007	0.009	0.000	0.002	-	na	na	0.001	0.460	0.316	0.307	0.322	0.094
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Ukraine	12	0.008	0.004	0.035	0.010	0.027	0.001	0.015	0.065	0.001	na	na	-	0.357	0.288	0.287	0.287	0.024

Table A.1.2. Labour Migration Integration Index, 2000–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level		
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-3	SES-4
2000																
Azerbaijan	1	-	0.000000	0.000554	0.000000	0.001002	0.000000	0.000257	0.000000	0.000000	0.000000	0.000000	0.000000	0.425519	0.418561	0.425146
Armenia	2	0.000000	-	0.003558	0.000000	0.000166	0.000000	0.000437	0.000000	0.000000	0.000000	0.000000	0.000000	1.797833	1.727360	1.796902
Belarus	3	0.000554	0.003558	-	0.000280	0.001567	0.000000	0.001247	0.000333	0.000000	0.000342	0.000000	0.024655	0.174474	0.009810	0.166166
Georgia	4	0.000000	0.000000	0.000280	-	0.000260	0.000000	0.000252	0.000000	0.000000	0.000000	0.000000	0.000000	1.222209	1.203856	1.221745
Kazakhstan	5	0.001002	0.000166	0.001567	0.000260	-	0.001162	0.002211	0.003251	0.000190	0.000358	0.001889	0.002285	0.257690	0.231384	0.245543
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.001162	-	0.000117	0.000000	0.000000	0.000000	0.000000	0.000000	0.189778	0.182628	0.189573
Moldova	7	0.000257	0.000437	0.001247	0.000252	0.002211	0.000117	-	0.000027	0.000000	0.000000	0.000035	0.000188	3.326199	3.289427	3.323454
Russia	8	0.000000	0.000000	0.000333	0.000000	0.003251	0.000000	0.000027	-	0.000000	0.000000	0.000000	0.000002	0.735947	0.023705	0.467129
Tajikistan	9	0.000000	0.000000	0.000000	0.000000	0.000190	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.000000	1.016534	1.014249	1.016534
Turkmenistan	10	0.000000	0.000000	0.000342	0.000000	0.000358	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.048245	0.046522	0.048245
Uzbekistan	11	0.000000	0.000000	0.000000	0.000000	0.001889	0.000000	0.000035	0.000000	0.000000	0.000000	-	0.000000	0.284315	0.248629	0.284274
Ukraine	12	0.000000	0.000000	0.024655	0.000000	0.002285	0.000000	0.000188	0.000002	0.000000	0.000000	0.000000	-	1.376983	1.348296	1.348296
2001																
Azerbaijan	1	-	0.000000	0.000498	0.000000	0.000653	0.000000	0.000170	0.000000	0.000000	0.000000	0.000000	0.000000	0.555912	0.547281	0.555665
Armenia	2	0.000000	-	0.003114	0.000000	0.000166	0.000000	0.000730	0.000000	0.000000	0.000000	0.000000	0.000000	2.717090	2.644908	2.715535
Belarus	3	0.000498	0.003114	-	0.000699	0.001773	0.000000	0.003901	0.000444	0.000123	0.000000	0.000057	0.018259	0.145814	0.013064	0.134057
Georgia	4	0.000000	0.000000	0.000699	-	0.000520	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.166897	1.147586	1.166897
Kazakhstan	5	0.000653	0.000166	0.001773	0.000520	-	0.001869	0.004486	0.003515	0.000000	0.000868	0.001176	0.003010	0.314350	0.283473	0.300089
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.001869	-	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.362483	0.356202	0.362483
Moldova	7	0.000170	0.000730	0.003901	0.000000	0.004486	0.000000	-	0.000081	0.000000	0.000000	0.000000	0.000438	3.795219	3.700036	3.793293
Russia	8	0.000000	0.000000	0.000444	0.000000	0.003515	0.000000	0.000081	-	0.000000	0.000000	0.000000	0.000003	1.031696	0.029231	0.667060
Tajikistan	9	0.000000	0.000000	0.000123	0.000000	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.000000	1.605600	1.603520	1.605600
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.000868	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.033249	0.031979	0.033249
Uzbekistan	11	0.000000	0.000000	0.000057	0.000000	0.001176	0.000000	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.431713	0.402669	0.431713
Ukraine	12	0.000000	0.000000	0.018259	0.000000	0.003010	0.000000	0.000438	0.000003	0.000000	0.000000	0.000000	-	1.958498	1.927899	1.927899
2002																
Azerbaijan	1	-	0.000000	0.000498	0.000000	0.000782	0.000000	0.000424	0.000001	0.000000	0.000000	0.000000	0.000000	1.849364	1.841777	1.848752
Armenia	2	0.000000	-	0.003356	0.000000	0.000388	0.000000	0.000731	0.000001	0.000000	0.000000	0.000000	0.000000	4.013576	3.947565	4.012019
Belarus	3	0.000498	0.003356	-	0.000070	0.007111	0.000134	0.000444	0.000272	0.000000	0.000000	0.000028	0.013795	1.734014	1.628649	1.727649
Georgia	4	0.000000	0.000000	0.000070	-	0.000312	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.569713	1.549354	1.569713
Kazakhstan	5	0.000782	0.000388	0.007111	0.000312	-	0.000908	0.006007	0.006125	0.000094	0.001273	0.002211	0.003981	0.630797	0.592348	0.612212
Kyrgyzstan	6	0.000000	0.000000	0.000134	0.000000	0.000908	-	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.305134	1.297696	1.305134
Moldova	7	0.000424	0.000731	0.000444	0.000000	0.006007	0.000000	-	0.000123	0.000000	0.000000	0.000000	0.000422	11.325597	11.259717	11.322840
Russia	8	0.000001	0.000001	0.000272	0.000000	0.006125	0.000000	0.000123	-	0.000001	0.000000	0.000001	0.000002	1.431545	0.169428	0.597938
Tajikistan	9	0.000000	0.000000	0.000000	0.000000	0.000094	0.000000	0.000000	0.000001	-	0.000000	0.000000	0.000000	2.641361	2.640891	2.641361
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.001273	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	1.467877	1.466208	1.467877
Uzbekistan	11	0.000000	0.000000	0.000028	0.000000	0.002211	0.000000	0.000000	0.000001	0.000000	0.000000	-	0.000000	0.633780	0.611850	0.633780
Ukraine	12	0.000000	0.000000	0.013795	0.000000	0.003981	0.000000	0.000422	0.000002	0.000000	0.000000	0.000000	-	1.333055	1.308560	1.308560
2003																
Azerbaijan	1	-	0.000000	0.001106	0.000000	0.001645	0.000000	0.001181	0.000000	0.000000	0.000000	0.000000	0.000000	0.746651	0.737786	0.744951
Armenia	2	0.000000	-	0.001838	0.000000	0.000166	0.000000	0.000586	0.000000	0.000000	0.000000	0.000000	0.000000	3.194345	3.132065	3.193099
Belarus	3	0.001106	0.001838	-	0.001057	0.003844	0.000000	0.000891	0.000292	0.000000	0.000000	0.000056	0.016853	0.139507	0.014215	0.132095
Georgia	4	0.000000	0.000000	0.001057	-	0.000312	0.000000	0.000879	0.000000	0.000000	0.000000	0.000000	0.000000	0.764058	0.736195	0.762446
Kazakhstan	5	0.001645	0.000166	0.003844	0.000312	-	0.001409	0.005410	0.004539	0.000140	0.000456	0.002983	0.005551	0.368337	0.321319	0.347619
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.001409	-	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.973644	0.968456	0.973644
Moldova	7	0.001181	0.000586	0.000891	0.000879	0.005410	0.000000	-	0.000102	0.000000	0.000000	0.000034	0.000465	6.053948	5.990382	6.046762
Russia	8	0.000000	0.000000	0.000292	0.000000	0.004539	0.000000	0.000102	-	0.000001	0.000000	0.000001	0.000004	1.265804	0.032781	0.752809
Tajikistan	9	0.000000	0.000000	0.000000	0.000000	0.000140	0.000000	0.000000	0.000001	-	0.000000	0.000000	0.000000	2.094521	2.094213	2.094521
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.000456	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.041915	0.039655	0.041915
Uzbekistan	11	0.000000	0.000000	0.000056	0.000000	0.002983	0.000000	0.000034	0.000001	0.000000	0.000000	-	0.000000	0.589261	0.571089	0.589222
Ukraine	12	0.000000	0.000000	0.016853	0.000000	0.005551	0.000000	0.000465	0.000004	0.000000	0.000000	0.000000	-	2.217713	2.195257	2.195257

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level		
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-3	SES-4
2004																
Azerbaijan	1	-	0.000000	0.000608	0.000000	0.001677	0.000000	0.000336	0.000000	0.000000	0.000000	0.000000	0.000000	1.199422	1.191115	1.198941
Armenia	2	0.000000	-	0.000384	0.000000	0.000055	0.000000	0.001319	0.000001	0.000000	0.000000	0.000000	0.000000	5.355943	5.291226	5.353143
Belarus	3	0.000608	0.000384	-	0.000425	0.002586	0.000000	0.000149	0.000613	0.000000	0.000068	0.000168	0.005329	0.074898	0.016122	0.071735
Georgia	4	0.000000	0.000000	0.000425	-	0.000467	0.000000	0.000252	0.000000	0.000000	0.000000	0.000000	0.000000	0.905172	0.881535	0.904709
Kazakhstan	5	0.001677	0.000055	0.002586	0.000467	-	0.106464	0.007813	0.003964	0.000324	0.000603	0.002588	0.003436	0.512133	0.330542	0.348266
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.106464	-	0.000231	0.000000	0.000000	0.000000	0.000000	0.000000	2.001777	1.997828	2.001382
Moldova	7	0.000336	0.001319	0.000149	0.000252	0.007813	0.000231	-	0.000117	0.000000	0.000000	0.000000	0.000469	6.406276	6.335034	6.401563
Russia	8	0.000000	0.000001	0.000613	0.000000	0.003964	0.000000	0.000117	-	0.000001	0.000000	0.000001	0.000004	1.561199	0.034648	0.801519
Tajikistan	9	0.000000	0.000000	0.000000	0.000000	0.000324	0.000000	0.000000	0.000001	-	0.000000	0.000000	0.000000	3.507982	3.507380	3.507982
Turkmenistan	10	0.000000	0.000000	0.000068	0.000000	0.000603	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.068756	0.064105	0.068756
Uzbekistan	11	0.000000	0.000000	0.000168	0.000000	0.002588	0.000000	0.000000	0.000001	0.000000	0.000000	-	0.000000	0.947885	0.931269	0.947885
Ukraine	12	0.000000	0.000000	0.005329	0.000000	0.003436	0.000000	0.000469	0.000004	0.000000	0.000000	0.000000	-	2.350512	2.327812	2.327812
2005																
Azerbaijan	1	-	0.000000	0.000606	0.000000	0.004347	0.000000	0.000417	0.000000	0.000000	0.000000	0.000000	0.000000	2.087859	2.075228	2.087263
Armenia	2	0.000000	-	0.002005	0.000000	0.000328	0.000000	0.001320	0.000001	0.000000	0.000000	0.000000	0.000000	8.210412	8.143279	8.207615
Belarus	3	0.000606	0.002005	-	0.000853	0.002900	0.000000	0.001123	0.001134	0.000121	0.000000	0.000111	0.003051	0.085119	0.025126	0.077941
Georgia	4	0.000000	0.000000	0.000853	-	0.000876	0.000000	0.000126	0.000000	0.000000	0.000000	0.000000	0.000000	1.038760	1.004975	1.038528
Kazakhstan	5	0.004347	0.000328	0.002900	0.000876	-	0.098736	0.007282	0.005676	0.000183	0.000796	0.013926	0.005581	0.552645	0.337385	0.363455
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.098736	-	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	3.562347	3.558637	3.562347
Moldova	7	0.000417	0.001320	0.001123	0.000126	0.007282	0.000000	-	0.000179	0.000193	0.000116	0.000000	0.001848	8.656260	8.551828	8.651261
Russia	8	0.000001	0.000001	0.001134	0.000000	0.005676	0.000001	0.000179	-	0.000002	0.000000	0.000002	0.000005	2.426779	0.036324	1.041653
Tajikistan	9	0.000000	0.000000	0.000121	0.000000	0.000183	0.000000	0.000193	0.000002	-	0.000000	0.000000	0.000000	7.760604	7.758834	7.760309
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.000796	0.000000	0.000116	0.000000	0.000000	-	0.000000	0.000000	0.308718	0.301553	0.308519
Uzbekistan	11	0.000000	0.000000	0.000111	0.000000	0.013926	0.000000	0.000000	0.000002	0.000000	0.000000	-	0.000000	1.898522	1.882739	1.898522
Ukraine	12	0.000000	0.000000	0.003051	0.000000	0.005581	0.000000	0.001848	0.000005	0.000000	0.000000	0.000000	-	3.082858	3.055553	3.055553
2006																
Azerbaijan	1	-	0.000000	0.001703	0.000000	0.009703	0.000000	0.002402	0.000001	0.000000	0.000000	0.000000	0.000000	3.391990	3.368535	3.388572
Armenia	2	0.000000	-	0.002087	0.000000	0.000542	0.000000	0.001615	0.000002	0.000000	0.000000	0.000000	0.000000	12.415634	12.355096	12.412219
Belarus	3	0.001703	0.002087	-	0.001134	0.002166	0.000000	0.001353	0.001409	0.000120	0.000000	0.000247	0.003460	0.098826	0.027589	0.088223
Georgia	4	0.000000	0.000000	0.001134	-	0.001274	0.000000	0.000626	0.000000	0.000000	0.000000	0.000000	0.000000	1.173290	1.128985	1.172154
Kazakhstan	5	0.009703	0.000542	0.002166	0.001274	-	0.196167	0.009304	0.005997	0.000632	0.001329	0.013860	0.005921	0.754174	0.392988	0.421636
Kyrgyzstan	6	0.000000	0.000000	0.000000	0.000000	0.196167	-	0.000228	0.000002	0.000000	0.000000	0.000000	0.000000	7.169983	7.157789	7.169596
Moldova	7	0.002402	0.001615	0.001353	0.000626	0.009304	0.000228	-	0.000064	0.000000	0.000345	0.000033	0.001267	14.362796	14.251093	14.348589
Russia	8	0.000001	0.000002	0.001409	0.000000	0.005997	0.000002	0.000064	-	0.000005	0.000000	0.000004	0.000007	3.803959	0.043186	1.262075
Tajikistan	9	0.000000	0.000000	0.000120	0.000000	0.000632	0.000000	0.000000	0.000005	-	0.000000	0.000000	0.000000	14.271491	14.269902	14.271491
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.001329	0.000000	0.000345	0.000000	0.000000	-	0.000000	0.000000	0.148119	0.143221	0.147531
Uzbekistan	11	0.000000	0.000000	0.000247	0.000000	0.013860	0.000000	0.000033	0.000004	0.000000	0.000000	-	0.000000	3.978539	3.956966	3.978502
Ukraine	12	0.000000	0.000000	0.003460	0.000000	0.005921	0.000000	0.001267	0.000007	0.000000	0.000000	0.000000	-	3.748474	3.715168	3.715168
2007																
Azerbaijan	1	-	0.000000	0.001861	0.000000	0.018308	0.000000	0.004851	0.000003	0.000000	0.000000	0.000000	0.000000	6.800447	6.763040	6.793572
Armenia	2	0.000000	-	0.004026	0.000000	0.000752	0.000000	0.000588	0.000004	0.000000	0.000000	0.000000	0.000000	22.836820	22.780722	22.835580
Belarus	3	0.001861	0.004026	-	0.001633	0.003627	0.000201	0.003768	0.001048	0.002686	0.000000	0.001117	0.007260	0.146027	0.025800	0.120433
Georgia	4	0.000000	0.000000	0.001633	-	0.001718	0.000000	0.000627	0.000000	0.000000	0.000000	0.000000	0.000000	1.170501	1.094500	1.169363
Kazakhstan	5	0.018308	0.000752	0.003627	0.001718	-	0.106334	0.013331	0.006443	0.007213	0.002089	0.020921	0.006592	0.857122	0.562841	0.595770
Kyrgyzstan	6	0.000000	0.000000	0.000201	0.000000	0.106334	-	0.000341	0.000005	0.000000	0.000000	0.000000	0.000000	21.445712	21.435170	21.445137
Moldova	7	0.004851	0.000588	0.003768	0.000627	0.013331	0.000341	-	0.000369	0.000000	0.000000	0.000163	0.001434	26.427913	26.264556	26.406691
Russia	8	0.000003	0.000004	0.001048	0.000000	0.006443	0.000005	0.000369	-	0.000012	0.000000	0.000014	0.000008	8.143549	0.061507	1.552162
Tajikistan	9	0.000000	0.000000	0.002686	0.000000	0.007213	0.000000	0.000000	0.000012	-	0.000000	0.000000	0.000000	35.452306	35.447918	35.452306
Turkmenistan	10	0.000000	0.000000	0.000000	0.000000	0.002089	0.000000	0.000000	0.000000	0.000000	-	0.000000	0.000000	0.417856	0.409564	0.417856
Uzbekistan	11	0.000000	0.000000	0.001117	0.000000	0.020921	0.000000	0.000163	0.000014	0.000000	0.000000	-	0.000000	12.828778	12.795815	12.828593
Ukraine	12	0.000000	0.000000	0.007260	0.000000	0.006592	0.000000	0.001434	0.000008	0.000000	0.000000	0.000000	-	4.617438	4.568387	4.568387

Table A.1.3. Energy Integration Index, 2002–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2002																		
Azerbaijan	1	-	0.00	0.00	14.12	0.00	0.00	0.00	4.04	0.00	0.00	0.00	0.00	249.69	227.88	227.88	227.88	0.00
Armenia	2	0.00	-	0.00	24.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.34	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	10.36	0.00	0.00	0.00	0.01	255.47	255.43	255.43	255.47	0.00
Georgia	4	14.12	24.44	0.00	-	0.00	0.00	0.00	1.43	0.00	0.00	0.00	0.00	228.70	147.06	147.06	147.06	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	14.59	0.00	15.99	5.76	0.00	0.51	0.00	262.23	261.54	239.95	239.95	22.28
Kyrgyzstan	6	0.00	0.00	0.00	0.00	14.59	-	0.00	0.00	82.18	0.00	78.81	0.00	875.01	383.01	238.53	238.53	875.01
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	1.27	0.00	0.00	0.00	22.40	856.19	264.00	264.00	856.19	0.00
Russia	8	4.04	0.00	10.36	1.43	15.99	0.00	1.27	-	0.00	0.00	0.00	0.60	35.44	27.93	27.93	28.60	17.13
Tajikistan	9	0.00	0.00	0.00	0.00	5.76	82.18	0.00	0.00	-	58.48	793.51	0.00	7070.25	312.97	122.40	122.40	6593.80
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.48	-	0.00	0.00	66.67	66.67	0.00	0.00	66.67
Uzbekistan	11	0.00	0.00	0.00	0.00	0.51	78.81	0.00	0.00	793.51	0.00	-	0.00	1004.12	1004.12	2.02	2.02	1004.12
Ukraine	12	0.00	0.00	0.01	0.00	0.00	0.00	22.40	0.60	0.00	0.00	0.00	-	28.75	5.47	5.47	5.47	0.00
2003																		
Azerbaijan	1	-	0.00	0.00	2.40	0.00	0.00	0.00	3.27	0.00	0.00	0.00	0.00	201.19	197.48	197.48	197.48	0.00
Armenia	2	0.00	-	0.00	31.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.53	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	7.86	0.00	0.00	0.00	0.02	198.23	198.14	198.14	198.23	0.00
Georgia	4	2.40	31.23	0.00	-	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	306.47	246.44	246.44	246.44	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	37.52	0.00	13.10	11.27	0.00	0.01	0.00	248.13	248.11	196.41	196.41	51.72
Kyrgyzstan	6	0.00	0.00	0.00	0.00	37.52	-	0.00	1.65	113.64	0.00	21.87	0.00	1351.11	1216.74	1011.17	1011.17	979.53
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	2.03	0.00	0.00	0.00	33.71	1330.93	443.81	443.81	1330.93	0.00
Russia	8	3.27	0.00	7.86	2.25	13.10	1.65	2.03	-	0.44	0.00	0.00	0.44	32.45	24.31	22.22	22.72	16.13
Tajikistan	9	0.00	0.00	0.00	0.00	11.27	113.64	0.00	0.44	-	0.00	735.52	0.00	6022.59	611.14	357.03	357.03	5900.36
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	11	0.00	0.00	0.00	0.00	0.01	21.87	0.00	0.00	735.52	0.00	-	0.00	877.41	877.41	0.06	0.06	877.41
Ukraine	12	0.00	0.00	0.02	0.00	0.00	0.00	33.71	0.44	0.00	0.00	0.00	-	39.35	4.30	4.30	4.30	0.00
2004																		
Azerbaijan	1	-	0.00	0.00	0.00	0.00	0.00	0.00	2.83	0.00	0.00	0.00	0.00	195.50	195.50	195.50	195.50	0.00
Armenia	2	0.00	-	0.00	54.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	133.37	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	2.46	0.00	0.00	0.00	0.01	65.33	65.29	65.29	65.33	0.00
Georgia	4	0.00	54.81	0.00	-	0.00	0.00	0.00	1.35	0.00	0.00	0.00	0.00	250.12	157.06	157.06	157.06	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	49.58	0.00	11.97	0.02	0.00	0.00	0.00	228.28	228.27	176.14	176.14	52.14
Kyrgyzstan	6	0.00	0.00	0.00	0.00	49.58	-	0.00	3.03	89.32	0.00	0.03	0.00	2003.60	2003.42	1830.29	1830.29	1189.94
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	1.54	0.00	0.00	0.00	27.21	1060.19	353.38	353.38	1060.19	0.00
Russia	8	2.83	0.00	2.46	1.35	11.97	3.03	1.54	-	0.00	0.00	0.00	0.42	24.68	18.44	15.40	15.86	15.88
Tajikistan	9	0.00	0.00	0.00	0.00	0.02	89.32	0.00	0.00	-	0.00	619.97	0.00	4448.46	184.90	0.39	0.39	4448.46
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	11	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	619.97	0.00	-	0.00	725.49	725.49	0.00	0.00	725.49
Ukraine	12	0.00	0.00	0.01	0.00	0.00	0.00	27.21	0.42	0.00	0.00	0.00	-	32.57	4.27	4.27	4.27	0.00
2005																		
Azerbaijan	1	-	0.00	0.00	2.14	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	99.71	96.54	96.54	96.54	0.00
Armenia	2	0.00	-	0.00	57.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	133.86	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	5.91	0.00	0.00	0.00	0.04	155.68	155.54	155.54	155.68	0.00
Georgia	4	2.14	57.95	0.00	-	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	230.51	121.80	121.80	121.80	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	42.09	0.00	6.01	1.14	0.00	0.00	0.00	131.54	131.54	86.44	86.44	45.10
Kyrgyzstan	6	0.00	0.00	0.00	0.00	42.09	-	0.00	1.22	49.06	0.00	0.01	0.00	1495.05	1494.97	1399.86	1399.86	1114.60
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	0.72	0.00	0.00	0.00	11.78	535.46	184.05	184.05	535.46	0.00
Russia	8	1.64	0.00	5.91	1.01	6.01	1.22	0.72	-	0.00	0.00	0.00	3.35	20.96	13.83	12.60	16.33	7.68
Tajikistan	9	0.00	0.00	0.00	0.00	1.14	49.06	0.00	0.00	-	0.00	510.77	0.00	3778.09	130.74	29.44	29.44	3778.09
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	11	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	510.77	0.00	-	0.00	593.96	593.96	0.00	0.00	593.96
Ukraine	12	0.00	0.00	0.04	0.00	0.00	0.00	11.78	3.35	0.00	0.00	0.00	-	45.29	33.10	33.10	33.10	0.00

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2006																		
Azerbaijan	1	-	0.00	0.00	0.93	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	55.98	54.69	54.69	54.69	0.00
Armenia	2	0.00	-	0.00	12.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.51	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	0.00	2.34	0.00	0.00	0.00	17.29	132.62	64.93	64.93	132.62	0.00
Georgia	4	0.93	12.87	0.00	-	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	99.07	72.28	72.28	72.28	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	25.37	0.00	5.29	0.00	0.00	0.00	0.00	96.13	96.13	69.87	69.87	26.26
Kyrgyzstan	6	0.00	0.00	0.00	0.00	25.37	-	0.00	0.00	75.28	0.00	0.01	0.00	900.51	900.44	750.49	750.49	900.51
Moldova	7	0.00	0.00	0.00	0.00	0.00	0.00	-	0.41	0.00	0.00	0.00	22.30	845.72	118.26	118.26	845.72	0.00
Russia	8	1.09	0.00	2.34	0.56	5.29	0.00	0.41	-	0.00	0.00	0.00	0.45	10.74	8.15	8.15	8.65	5.72
Tajikistan	9	0.00	0.00	0.00	0.00	0.00	75.28	0.00	0.00	-	0.00	433.54	0.00	3209.31	151.19	0.01	0.01	3209.31
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	11	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	433.54	0.00	-	0.00	505.16	505.16	0.00	0.00	505.16
Ukraine	12	0.00	0.00	17.29	0.00	0.00	0.00	22.30	0.45	0.00	0.00	0.00	-	50.85	27.84	27.84	27.84	0.00
2007																		
Azerbaijan	1	-	0.00	0.00	4.68	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	23.97	17.76	17.76	17.76	0.00
Armenia	2	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Belarus	3	0.00	0.00	-	0.00	0.00	0.00	1.26	1.99	0.00	0.00	0.00	3.71	76.03	59.25	59.25	74.64	0.00
Georgia	4	4.68	0.00	0.00	-	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	85.78	66.72	66.72	66.72	0.00
Kazakhstan	5	0.00	0.00	0.00	0.00	-	11.86	0.00	4.08	0.00	0.00	0.00	0.00	66.55	66.55	54.27	54.27	12.28
Kyrgyzstan	6	0.00	0.00	0.00	0.00	11.86	-	0.00	0.00	40.74	0.00	33.92	0.00	656.29	424.49	343.60	343.60	656.29
Moldova	7	0.00	0.00	1.26	0.00	0.00	0.00	-	0.19	0.00	0.00	0.00	20.13	737.01	70.29	70.29	737.01	0.00
Russia	8	0.42	0.00	1.99	0.52	4.08	0.00	0.19	-	0.00	0.00	0.00	0.69	8.38	6.47	6.47	7.23	4.41
Tajikistan	9	0.00	0.00	0.00	0.00	0.00	40.74	0.00	0.00	-	4.78	318.03	0.00	2321.26	82.08	0.00	0.00	2282.52
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.78	-	0.00	0.00	5.46	5.46	0.00	0.00	5.46
Uzbekistan	11	0.00	0.00	0.00	0.00	0.00	33.92	0.00	0.00	318.03	0.00	-	0.00	411.50	411.50	0.00	0.00	411.50
Ukraine	12	0.00	0.00	3.71	0.00	0.00	0.00	20.13	0.69	0.00	0.00	0.00	-	32.62	11.86	11.86	11.86	0.00

Table A.1.4. Agricultural Integration Index, 2002–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2002																		
Azerbaijan	1	-	0.00	0.00	0.05	14.96	0.00	0.00	0.54	0.00	0.00	0.00	0.04	104.64	104.24	104.24	104.56	74.09
Armenia	2	0.00	-	0.00	6.93	0.15	0.00	0.74	0.75	0.00	0.00	0.00	0.85	144.77	110.68	110.68	126.67	1.68
Belarus	3	0.00	0.00	-	0.00	1.02	0.00	1.23	1.38	0.00	0.00	0.00	4.25	54.75	36.79	36.79	53.37	2.74
Georgia	4	0.05	6.93	0.00	-	0.71	0.00	0.00	0.32	0.00	0.00	0.00	0.09	51.73	38.61	38.61	39.79	5.89
Kazakhstan	5	14.96	0.15	1.02	0.71	-	6.29	0.00	0.74	11.02	0.18	4.05	0.55	57.88	30.97	12.70	14.21	23.71
Kyrgyzstan	6	0.00	0.00	0.00	0.00	6.29	-	0.00	0.00	0.35	0.00	0.00	0.01	103.76	103.57	102.95	103.13	103.44
Moldova	7	0.00	0.74	1.23	0.00	0.00	0.00	-	0.01	0.00	0.00	0.00	0.09	18.48	14.28	14.28	16.68	0.00
Russia	8	0.54	0.75	1.38	0.32	0.74	0.00	0.01	-	0.02	0.00	0.01	0.28	4.21	2.25	2.23	2.55	0.82
Tajikistan	9	0.00	0.00	0.00	0.00	11.02	0.35	0.00	0.02	-	0.00	0.10	0.00	242.41	241.51	240.69	240.77	235.76
Turkmenistan	10	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	-	0.00	0.00	0.80	0.80	0.80	0.80	0.69
Uzbekistan	11	0.00	0.00	0.00	0.00	4.05	0.00	0.00	0.01	0.10	0.00	-	0.01	16.31	16.27	16.16	16.19	16.04
Ukraine	12	0.04	0.85	4.25	0.09	0.55	0.01	0.09	0.28	0.00	0.00	0.01	-	10.30	9.16	9.15	9.15	0.89
2003																		
Azerbaijan	1	-	0.00	0.00	0.18	17.06	0.00	0.00	0.44	0.00	0.00	0.00	0.03	116.26	115.71	115.71	115.99	89.33
Armenia	2	0.00	-	0.00	10.61	0.00	0.00	0.17	0.12	0.00	0.00	0.00	0.26	50.16	19.24	19.24	24.23	0.00
Belarus	3	0.00	0.00	-	0.00	0.25	0.00	0.59	0.81	0.00	0.00	0.00	1.27	26.46	20.98	20.98	25.81	0.67
Georgia	4	0.18	10.61	0.00	-	0.23	0.00	0.00	0.31	0.00	0.00	0.00	0.02	54.26	35.42	35.42	35.67	2.01
Kazakhstan	5	17.06	0.00	0.25	0.23	-	2.93	1.49	1.57	4.35	0.02	0.27	18.97	104.73	31.59	23.90	73.72	8.05
Kyrgyzstan	6	0.00	0.00	0.00	0.00	2.93	-	0.00	0.00	0.00	0.00	0.00	0.00	50.38	50.38	50.38	50.38	50.01
Moldova	7	0.00	0.17	0.59	0.00	1.49	0.00	-	0.22	0.00	0.00	0.00	0.12	83.31	79.88	79.88	82.91	24.74
Russia	8	0.44	0.12	0.81	0.31	1.57	0.00	0.22	-	0.01	0.00	0.00	2.51	6.44	2.53	2.52	5.32	1.69
Tajikistan	9	0.00	0.00	0.00	0.00	4.35	0.00	0.00	0.01	-	0.00	0.07	0.00	93.15	92.64	92.64	92.64	91.22
Turkmenistan	10	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	-	0.00	0.00	0.09	0.09	0.09	0.09	0.09
Uzbekistan	11	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.07	0.00	-	0.00	1.29	1.29	1.20	1.20	1.19
Ukraine	12	0.03	0.26	1.27	0.02	18.97	0.00	0.12	2.51	0.00	0.00	0.00	-	56.95	56.49	56.49	56.49	30.64
2004																		
Azerbaijan	1	-	0.00	0.00	0.00	8.60	0.00	0.00	0.89	0.00	0.00	7.81	0.11	132.37	112.67	112.67	113.59	70.16
Armenia	2	0.00	-	0.00	0.46	0.81	0.00	0.49	0.46	0.00	0.00	2.47	0.51	109.32	86.68	86.68	96.46	21.53
Belarus	3	0.00	0.00	-	0.00	0.62	0.01	0.47	0.35	0.00	0.00	0.08	2.62	21.66	11.03	11.02	21.00	1.91
Georgia	4	0.00	0.46	0.00	-	1.64	0.00	0.00	0.25	0.00	0.00	3.93	0.11	60.48	44.87	44.87	46.43	28.68
Kazakhstan	5	8.60	0.81	0.62	1.64	-	1.59	0.39	2.43	1.88	0.01	0.65	3.66	63.87	40.39	36.75	45.92	4.47
Kyrgyzstan	6	0.00	0.00	0.01	0.00	1.59	-	0.00	0.00	0.00	0.00	1.25	0.00	41.14	33.00	33.00	33.00	40.68
Moldova	7	0.00	0.49	0.47	0.00	0.39	0.00	-	0.00	0.00	0.00	0.04	0.39	23.52	12.13	12.13	22.13	7.16
Russia	8	0.89	0.46	0.35	0.25	2.43	0.00	0.00	-	0.00	0.00	0.02	0.94	5.65	2.97	2.97	4.01	2.63
Tajikistan	9	0.00	0.00	0.00	0.00	1.88	0.00	0.00	0.00	-	0.00	2.87	0.00	60.85	41.09	41.09	41.09	60.70
Turkmenistan	10	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	-	0.00	0.00	0.04	0.04	0.04	0.04	0.03
Uzbekistan	11	7.81	2.47	0.08	3.93	0.65	1.25	0.04	0.02	2.87	0.00	-	0.05	31.62	9.12	4.28	4.61	7.79
Ukraine	12	0.11	0.51	2.62	0.11	3.66	0.00	0.39	0.94	0.00	0.00	0.05	-	20.40	19.15	19.15	19.15	6.16
2005																		
Azerbaijan	1	-	0.00	0.00	0.20	1.55	0.00	0.00	1.10	0.00	0.00	0.00	0.03	73.19	72.67	72.67	72.89	8.23
Armenia	2	0.00	-	0.00	0.01	0.00	0.00	0.00	0.39	0.00	0.00	0.42	0.07	64.50	61.63	61.63	62.85	1.63
Belarus	3	0.00	0.00	-	0.00	0.24	0.00	0.45	0.09	0.00	0.00	0.00	2.54	13.21	2.95	2.95	12.72	0.70
Georgia	4	0.20	0.01	0.00	-	0.42	0.00	0.32	0.39	0.00	0.00	0.00	0.27	56.09	51.09	51.09	54.98	4.21
Kazakhstan	5	1.55	0.00	0.24	0.42	-	2.30	0.00	0.78	3.47	0.00	0.95	0.03	21.19	17.56	11.55	11.62	7.20
Kyrgyzstan	6	0.00	0.00	0.00	0.00	2.30	-	0.00	0.00	0.00	0.00	1.50	0.00	65.86	55.69	55.69	55.69	65.86
Moldova	7	0.00	0.00	0.45	0.32	0.00	0.00	-	0.00	0.00	0.00	0.00	0.61	24.47	5.39	5.39	23.46	0.00
Russia	8	1.10	0.39	0.09	0.39	0.78	0.00	0.00	-	0.01	0.00	0.00	0.26	3.12	0.93	0.92	1.21	0.84
Tajikistan	9	0.00	0.00	0.00	0.00	3.47	0.00	0.00	0.01	-	0.00	4.49	0.00	123.43	91.39	91.39	91.39	121.22
Turkmenistan	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uzbekistan	11	0.00	0.42	0.00	0.00	0.95	1.50	0.00	0.00	4.49	0.00	-	0.00	12.40	11.81	4.83	4.86	11.77
Ukraine	12	0.03	0.07	2.54	0.27	0.03	0.00	0.61	0.26	0.00	0.00	0.00	-	7.04	6.01	6.01	6.01	0.05

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2006																		
Azerbaijan	1	-	0.00	0.00	0.04	3.63	0.00	0.00	0.67	0.00	0.00	0.08	0.05	52.27	51.77	51.77	52.07	18.31
Armenia	2	0.00	-	0.00	5.23	0.03	0.00	0.00	0.30	0.00	0.00	0.00	0.17	61.71	47.15	47.15	50.12	0.47
Belarus	3	0.00	0.00	-	0.00	0.93	0.00	0.37	0.07	0.00	0.00	0.00	2.09	13.47	4.90	4.90	13.07	2.98
Georgia	4	0.04	5.23	0.00	-	1.16	0.00	0.45	0.40	0.00	0.00	0.00	0.53	83.36	65.19	65.19	73.05	13.27
Kazakhstan	5	3.63	0.03	0.93	1.16	-	2.60	0.04	1.44	2.79	0.02	1.39	0.01	33.52	25.92	20.34	20.36	7.26
Kyrgyzstan	6	0.00	0.00	0.00	0.00	2.60	-	0.00	0.00	0.00	0.00	0.45	0.00	80.14	76.97	76.97	76.97	80.09
Moldova	7	0.00	0.00	0.37	0.45	0.04	0.00	-	0.00	0.00	0.00	0.05	0.43	21.19	5.34	5.34	19.43	1.18
Russia	8	0.67	0.30	0.07	0.40	1.44	0.00	0.00	-	0.01	0.00	0.00	0.26	3.32	1.64	1.63	1.91	1.57
Tajikistan	9	0.00	0.00	0.00	0.00	2.79	0.00	0.00	0.01	-	0.00	2.22	0.00	101.78	86.12	86.12	86.13	98.89
Turkmenistan	10	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	-	0.00	0.00	0.09	0.09	0.09	0.09	0.09
Uzbekistan	11	0.08	0.00	0.00	0.00	1.39	0.45	0.05	0.00	2.22	0.00	-	0.00	11.46	11.22	8.11	8.11	11.11
Ukraine	12	0.05	0.17	2.09	0.53	0.01	0.00	0.43	0.26	0.00	0.00	0.00	-	6.68	5.43	5.43	5.43	0.01
2007																		
Azerbaijan	1	-	0.00	0.00	0.01	7.02	0.00	0.06	0.38	0.00	0.00	0.06	0.01	47.00	46.79	46.79	46.82	30.66
Armenia	2	0.00	-	0.00	0.00	0.42	0.00	0.01	0.30	0.00	0.00	0.00	0.27	51.52	47.04	47.04	51.50	5.21
Belarus	3	0.00	0.00	-	0.00	1.42	0.00	0.31	0.09	0.00	0.00	0.00	1.10	12.33	7.41	7.41	11.99	4.76
Georgia	4	0.01	0.00	0.00	-	1.72	0.00	0.00	0.34	0.00	0.00	0.00	0.25	67.08	63.28	63.28	67.01	19.46
Kazakhstan	5	7.02	0.42	1.42	1.72	-	3.29	0.00	0.42	2.51	1.02	1.25	0.04	28.02	13.69	7.68	7.78	7.51
Kyrgyzstan	6	0.00	0.00	0.00	0.00	3.29	-	0.00	0.00	0.00	0.03	0.31	0.00	98.54	96.12	96.11	96.11	97.45
Moldova	7	0.06	0.01	0.31	0.00	0.00	0.00	-	0.01	0.00	0.00	0.00	0.25	14.42	5.71	5.71	13.90	0.01
Russia	8	0.38	0.30	0.09	0.34	0.42	0.00	0.01	-	0.00	0.00	0.00	0.05	1.66	0.56	0.55	0.60	0.47
Tajikistan	9	0.00	0.00	0.00	0.00	2.51	0.00	0.00	0.00	-	0.00	0.47	0.00	77.75	74.50	74.49	74.49	76.94
Turkmenistan	10	0.00	0.00	0.00	0.00	1.02	0.03	0.00	0.00	0.00	-	0.00	0.00	5.15	5.15	5.11	5.11	5.11
Uzbekistan	11	0.06	0.00	0.00	0.00	1.25	0.31	0.00	0.00	0.47	0.00	-	0.00	8.48	8.33	7.41	7.43	8.15
Ukraine	12	0.01	0.27	1.10	0.25	0.04	0.00	0.25	0.05	0.00	0.00	0.00	-	2.83	2.01	2.01	2.01	0.07

Table A.1.5. Education Integration Index, 2000–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2000																		
Azerbaijan	1	-	0.00	1.88	17.48	2.88	0.31	0.26	8.33	0.07	0.08	0.03	0.02	200.40	172.82	172.20	172.32	8.95
Armenia	2	0.00	-	2.04	58.07	0.44	0.00	0.00	9.90	0.00	1.53	0.21	0.23	615.32	470.34	470.34	474.06	4.35
Belarus	3	1.88	2.04	-	0.91	2.45	0.20	1.83	34.53	1.18	34.85	0.17	3.57	631.33	548.55	546.35	567.57	8.91
Georgia	4	17.48	58.07	0.91	-	0.57	0.00	0.13	5.42	0.00	0.00	0.00	0.00	347.31	195.38	195.38	195.38	2.56
Kazakhstan	5	2.88	0.44	2.45	0.57	-	10.71	0.22	108.75	5.66	48.35	33.42	0.44	1363.07	1202.75	1180.54	1182.42	111.26
Kyrgyzstan	6	0.31	0.00	0.20	0.00	10.71	-	0.00	8.14	6.17	0.00	0.61	0.00	313.57	309.08	295.19	295.19	60.88
Moldova	7	0.26	0.00	1.83	0.13	0.22	0.00	-	7.27	0.00	0.12	0.00	11.30	473.09	307.07	307.07	471.72	1.10
Russia	8	8.33	9.90	34.53	5.42	108.75	8.14	7.27	-	2.79	3.58	18.83	25.31	259.54	168.03	156.72	190.57	153.16
Tajikistan	9	0.07	0.00	1.18	0.00	5.66	6.17	0.00	2.79	-	7.99	59.40	0.16	418.50	102.99	91.89	93.36	330.36
Turkmenistan	10	0.08	1.53	34.85	0.00	48.35	0.00	0.12	3.58	7.99	-	0.78	0.00	456.17	448.20	429.68	429.68	227.01
Uzbekistan	11	0.03	0.21	0.17	0.00	33.42	0.61	0.00	18.83	59.40	0.78	-	0.01	259.72	258.47	183.67	183.71	128.31
Ukraine	12	0.02	0.23	3.57	0.00	0.44	0.00	11.30	25.31	0.16	0.00	0.01	-	117.66	105.24	105.06	105.06	0.77
2001																		
Azerbaijan	1	-	0.00	2.55	19.82	0.74	0.46	0.00	22.82	0.00	0.39	0.00	0.04	472.20	440.88	440.14	440.39	2.84
Armenia	2	0.00	-	2.05	104.44	1.94	0.37	0.00	9.25	0.00	2.52	0.00	0.40	707.20	448.65	447.71	454.25	11.82
Belarus	3	2.55	2.05	-	0.91	2.18	0.07	2.87	41.52	0.74	31.96	0.17	3.74	738.22	655.81	654.51	676.62	7.34
Georgia	4	19.82	104.44	0.91	-	0.57	0.00	0.00	4.99	0.00	0.00	0.00	0.00	415.86	177.47	177.47	177.47	2.53
Kazakhstan	5	0.74	1.94	2.18	0.57	-	220.19	1.57	117.51	9.95	55.04	43.36	0.34	1776.31	1579.55	1272.13	1273.61	424.00
Kyrgyzstan	6	0.46	0.37	0.07	0.00	220.19	-	1.87	9.54	56.95	12.74	196.47	1.26	2543.06	1303.64	1174.58	1188.35	2208.13
Moldova	7	0.00	0.00	2.87	0.00	1.57	1.87	-	7.89	0.00	0.24	0.00	11.19	509.20	346.90	342.49	504.25	12.38
Russia	8	22.82	9.25	41.52	4.99	117.51	9.54	7.89	-	12.15	4.49	13.94	28.16	301.78	196.41	173.87	211.50	168.39
Tajikistan	9	0.00	0.00	0.74	0.00	9.95	56.95	0.00	12.15	-	16.04	59.23	0.31	760.64	432.64	330.72	333.44	432.64
Turkmenistan	10	0.39	2.52	31.96	0.00	55.04	12.74	0.24	4.49	16.04	-	0.00	0.00	539.61	533.90	470.57	470.57	291.62
Uzbekistan	11	0.00	0.00	0.17	0.00	43.36	196.47	0.00	13.94	59.23	0.00	-	0.00	473.19	473.19	164.10	164.10	378.13
Ukraine	12	0.04	0.40	3.74	0.00	0.34	1.26	11.19	28.16	0.31	0.00	0.00	-	131.14	118.66	116.92	116.92	2.19
2002																		
Azerbaijan	1	-	0.00	0.28	71.11	1.13	2.51	0.25	13.86	0.21	1.23	0.06	0.09	380.32	267.99	263.58	264.19	7.83
Armenia	2	0.00	-	9.15	98.64	0.78	7.09	0.00	11.23	0.10	7.37	0.00	0.89	843.82	578.22	559.85	574.17	22.73
Belarus	3	0.28	9.15	-	0.70	1.33	0.81	3.25	28.79	0.12	10.07	0.08	2.21	501.57	455.20	453.78	466.81	5.05
Georgia	4	71.11	98.64	0.70	-	0.21	0.00	0.00	5.68	0.00	10.69	0.00	0.00	594.76	197.19	197.19	197.19	0.92
Kazakhstan	5	1.13	0.78	1.33	0.21	-	187.84	1.03	113.25	11.45	33.55	26.61	0.25	1610.12	1488.31	1221.19	1222.27	339.24
Kyrgyzstan	6	2.51	7.09	0.81	0.00	187.84	-	0.12	6.63	59.56	34.29	233.16	0.62	2603.03	1086.81	950.91	957.54	2308.31
Moldova	7	0.25	0.00	3.25	0.00	1.03	0.12	-	8.10	0.10	0.00	0.00	10.60	502.78	349.80	349.25	501.41	5.79
Russia	8	13.86	11.23	28.79	5.68	113.25	6.63	8.10	-	5.30	9.53	8.30	24.48	260.52	167.99	155.60	188.26	146.99
Tajikistan	9	0.21	0.10	0.12	0.00	11.45	59.56	0.10	5.30	-	27.13	40.19	0.09	519.65	270.25	164.22	165.01	344.44
Turkmenistan	10	1.23	7.37	10.07	10.69	33.55	34.29	0.00	9.53	27.13	-	0.00	0.00	635.38	599.29	466.21	466.21	270.55
Uzbekistan	11	0.06	0.00	0.08	0.00	26.61	233.16	0.00	8.30	40.19	0.00	-	0.00	427.13	427.05	97.95	97.95	371.26
Ukraine	12	0.09	0.89	2.21	0.00	0.25	0.62	10.60	24.48	0.09	0.00	0.00	-	113.96	101.51	100.73	100.73	1.11
2003																		
Azerbaijan	1	-	0.00	0.66	69.02	1.34	2.94	0.51	7.75	0.07	1.83	0.21	0.27	265.36	153.63	148.77	150.59	9.47
Armenia	2	0.00	-	1.38	118.08	2.71	0.12	0.29	11.06	0.00	7.30	0.17	0.43	833.93	528.76	528.45	535.30	17.13
Belarus	3	0.66	1.38	-	0.63	1.62	0.34	3.19	42.36	0.24	3.53	0.14	2.25	694.89	667.58	666.67	679.87	5.48
Georgia	4	69.02	118.08	0.63	-	4.11	0.00	0.00	6.04	0.00	0.00	0.00	0.00	632.11	226.82	226.82	226.82	18.19
Kazakhstan	5	1.34	2.71	1.62	4.11	-	210.22	1.79	127.78	8.66	36.43	43.95	0.64	1847.33	1663.43	1369.89	1372.59	413.47
Kyrgyzstan	6	2.94	0.12	0.34	0.00	210.22	-	0.12	6.26	59.30	42.31	320.92	0.15	3217.01	1157.40	1021.13	1022.73	2936.49
Moldova	7	0.51	0.29	3.19	0.00	1.79	0.12	-	8.54	0.00	0.00	0.00	10.67	524.83	370.34	370.06	522.34	9.40
Russia	8	7.75	11.06	42.36	6.04	127.78	6.26	8.54	-	5.03	8.71	13.58	27.08	293.52	197.95	186.21	222.31	168.69
Tajikistan	9	0.07	0.00	0.24	0.00	8.66	59.30	0.00	5.03	-	27.17	43.13	0.00	511.64	250.52	145.55	145.55	346.88
Turkmenistan	10	1.83	7.30	3.53	0.00	36.43	42.31	0.00	8.71	27.17	-	0.00	0.00	591.53	574.48	425.11	425.11	297.10
Uzbekistan	11	0.21	0.17	0.14	0.00	43.95	320.92	0.00	13.58	43.13	0.00	-	0.00	597.35	596.89	159.34	159.34	506.93
Ukraine	12	0.27	0.43	2.25	0.00	0.64	0.15	10.67	27.08	0.00	0.00	0.00	-	124.39	112.14	111.97	111.97	1.00

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2004																		
Azerbaijan	1	-	0.00	0.77	31.85	1.63	1.50	0.92	10.43	0.00	2.49	0.15	0.14	254.62	199.36	196.95	197.92	7.58
Armenia	2	0.00	-	1.15	148.36	2.42	0.12	1.47	11.98	0.20	7.11	0.21	0.20	939.64	565.96	565.03	568.14	16.49
Belarus	3	0.77	1.15	-	0.92	1.45	0.27	4.70	42.67	0.49	4.27	0.22	2.47	704.80	672.35	671.12	685.61	5.71
Georgia	4	31.85	148.36	0.92	-	0.31	0.00	0.00	6.10	0.09	0.00	0.00	0.00	565.67	213.66	213.43	213.43	1.62
Kazakhstan	5	1.63	2.42	1.45	0.31	-	232.41	1.40	135.56	8.89	29.00	38.53	0.62	1917.37	1763.00	1439.01	1441.62	429.53
Kyrgyzstan	6	1.50	0.12	0.27	0.00	232.41	-	0.00	7.63	76.12	32.67	513.66	0.21	4540.18	1318.85	1142.94	1145.11	4244.82
Moldova	7	0.92	1.47	4.70	0.00	1.40	0.00	-	9.10	0.00	0.00	0.03	31.31	846.32	395.58	395.58	840.22	7.48
Russia	8	10.43	11.98	42.67	6.10	135.56	7.63	9.10	-	7.59	7.34	17.55	47.07	341.00	211.09	195.26	257.95	186.24
Tajikistan	9	0.00	0.20	0.49	0.09	8.89	76.12	0.00	7.59	-	22.87	12.29	0.00	436.60	335.84	201.66	201.66	223.49
Turkmenistan	10	2.49	7.11	4.27	0.00	29.00	32.67	0.00	7.34	22.87	-	0.65	14.91	650.35	469.36	349.65	508.19	240.44
Uzbekistan	11	0.15	0.21	0.22	0.00	38.53	513.66	0.03	17.55	12.29	0.65	-	0.04	805.92	804.58	175.42	175.54	689.85
Ukraine	12	0.14	0.20	2.47	0.00	0.62	0.21	31.31	47.07	0.00	14.91	0.04	-	243.52	192.93	192.70	192.70	1.11
2005																		
Azerbaijan	1	-	0.00	1.60	18.56	2.86	0.30	1.00	10.16	0.00	3.95	0.14	0.11	232.13	194.95	194.47	195.19	9.06
Armenia	2	0.00	-	2.24	148.83	2.51	0.48	1.76	14.20	0.20	7.77	0.07	0.46	1049.57	669.46	667.60	674.75	16.78
Belarus	3	1.60	2.24	-	2.20	2.30	0.47	4.94	50.67	0.60	4.53	0.44	2.70	840.43	800.23	798.48	814.28	9.23
Georgia	4	18.56	148.83	2.20	-	0.52	0.00	0.00	7.38	0.00	1.28	0.00	0.00	577.81	260.79	260.79	260.79	2.31
Kazakhstan	5	2.86	2.51	2.30	0.52	-	236.89	2.36	127.21	7.55	28.26	48.61	1.41	1852.57	1664.37	1336.07	1341.91	461.90
Kyrgyzstan	6	0.30	0.48	0.47	0.00	236.89	-	0.23	7.98	53.36	40.32	630.98	0.15	5252.61	1290.30	1166.29	1167.85	4937.21
Moldova	7	1.00	1.76	4.94	0.00	2.36	0.23	-	11.04	0.00	0.00	0.03	30.46	917.40	479.95	479.39	909.90	13.05
Russia	8	10.16	14.20	50.67	7.38	127.21	7.98	11.04	-	8.46	7.20	24.23	51.05	360.22	211.90	194.77	262.72	186.48
Tajikistan	9	0.00	0.20	0.60	0.00	7.55	53.36	0.00	8.46	-	15.59	11.07	0.00	387.74	306.18	212.52	212.52	172.11
Turkmenistan	10	3.95	7.77	4.53	1.28	28.26	40.32	0.00	7.20	15.59	-	0.00	18.81	677.95	456.41	338.38	534.24	231.09
Uzbekistan	11	0.14	0.07	0.44	0.00	48.61	630.98	0.03	24.23	11.07	0.00	-	0.00	1000.33	1000.02	232.53	232.53	843.90
Ukraine	12	0.11	0.46	2.70	0.00	1.41	0.15	30.46	51.05	0.00	18.81	0.00	-	264.74	210.53	210.36	210.36	2.03
2006																		
Azerbaijan	1	-	0.00	1.26	7.14	2.74	1.61	0.66	13.73	0.00	4.34	0.31	0.18	278.04	256.82	254.23	255.41	11.55
Armenia	2	0.00	-	3.17	143.79	2.82	0.00	1.32	20.85	0.20	6.97	0.10	0.40	1338.98	970.79	970.17	976.37	17.70
Belarus	3	1.26	3.17	-	2.34	2.17	0.40	4.96	61.69	0.78	2.02	0.41	2.58	1008.75	972.31	970.35	985.38	9.06
Georgia	4	7.14	143.79	2.34	-	0.71	0.84	0.00	17.52	0.00	0.00	0.00	0.00	866.11	596.19	594.37	594.37	5.00
Kazakhstan	5	2.74	2.82	2.17	0.71	-	267.20	1.17	137.06	14.91	20.08	66.80	0.61	2024.14	1800.81	1421.22	1423.72	563.56
Kyrgyzstan	6	1.61	0.00	0.40	0.84	267.20	-	0.11	10.77	77.11	43.82	593.38	0.06	5296.72	1543.05	1362.65	1363.23	4894.70
Moldova	7	0.66	1.32	4.96	0.00	1.17	0.11	-	14.07	0.00	0.00	0.13	30.13	1025.93	596.12	595.84	1019.81	7.52
Russia	8	13.73	20.85	61.69	17.52	137.06	10.77	14.07	-	12.45	8.93	34.98	58.86	439.30	241.85	217.64	295.93	217.49
Tajikistan	9	0.00	0.20	0.78	0.00	14.91	77.11	0.00	12.45	-	11.14	59.52	0.00	761.24	452.44	317.76	317.76	471.51
Turkmenistan	10	4.34	6.97	2.02	0.00	20.08	43.82	0.00	8.93	11.14	-	0.00	20.01	684.76	457.88	343.46	547.41	194.36
Uzbekistan	11	0.31	0.10	0.41	0.00	66.80	593.38	0.13	34.98	59.52	0.00	-	0.00	1110.52	1109.85	326.70	326.70	888.01
Ukraine	12	0.18	0.40	2.58	0.00	0.61	0.06	30.13	58.86	0.00	20.01	0.00	-	296.47	241.21	241.15	241.15	0.87
2007																		
Azerbaijan	1	-	0.00	1.75	9.09	3.00	0.72	0.74	18.08	0.13	6.10	0.84	0.14	359.74	330.72	329.32	330.26	13.28
Armenia	2	0.00	-	3.41	154.57	2.15	0.12	1.18	19.98	0.10	7.01	0.13	0.56	1321.87	926.08	925.46	934.14	14.26
Belarus	3	1.75	3.41	-	2.84	2.47	0.87	4.75	94.36	1.01	5.71	0.44	3.94	1538.49	1486.69	1483.59	1506.50	11.15
Georgia	4	9.09	154.57	2.84	-	1.16	2.29	0.00	12.13	0.00	0.73	0.00	0.04	720.41	423.46	418.46	418.91	10.24
Kazakhstan	5	3.00	2.15	2.47	1.16	-	231.59	0.79	140.94	15.72	9.33	84.32	1.29	2037.43	1777.83	1444.84	1450.03	565.18
Kyrgyzstan	6	0.72	0.12	0.87	2.29	231.59	-	4.66	13.65	96.57	84.59	475.80	0.31	4653.76	1529.85	1302.54	1305.61	4080.31
Moldova	7	0.74	1.18	4.75	0.00	0.79	4.66	-	16.46	0.00	0.00	0.10	27.53	1094.08	702.30	690.85	1077.04	16.48
Russia	8	18.08	19.98	94.36	12.13	140.94	13.65	16.46	-	15.70	7.26	33.31	57.22	479.84	287.65	257.03	333.05	226.50
Tajikistan	9	0.13	0.10	1.01	0.00	15.72	96.57	0.00	15.70	-	6.78	56.48	0.00	836.09	551.54	383.65	383.65	490.25
Turkmenistan	10	6.10	7.01	5.71	0.73	9.33	84.59	0.00	7.26	6.78	-	0.00	21.84	692.44	445.24	259.54	477.82	222.72
Uzbekistan	11	0.84	0.13	0.44	0.00	84.32	475.80	0.10	33.31	56.48	0.00	-	0.00	981.89	980.52	341.52	341.52	771.41
Ukraine	12	0.14	0.56	3.94	0.04	1.29	0.31	27.53	57.22	0.00	21.84	0.00	-	292.97	238.24	237.90	237.90	2.06

Table A.1.6. Macroeconomic Convergence Index, 1999–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1999																		
Azerbaijan	1	-	0.781	1.853	0.833	1.734	1.068	2.078	2.022	1.252	2.322	0.662	1.394	0.621	0.914	1.839	1.560	0.692
Armenia	2	0.781	-	1.932	0.383	1.739	0.604	1.297	2.312	0.830	3.103	0.601	0.748	0.588	0.905	1.976	1.576	0.227
Belarus	3	1.853	1.932	-	1.558	0.234	2.532	2.675	0.629	2.759	3.092	1.369	1.675	1.398	1.040	0.145	0.361	1.712
Georgia	4	0.833	0.383	1.558	-	1.360	0.987	1.408	1.972	1.212	3.080	0.322	0.565	0.334	0.556	1.610	1.199	0.201
Kazakhstan	5	1.734	1.739	0.234	1.360	-	2.343	2.442	0.843	2.569	3.159	1.199	1.445	1.232	0.871	0.355	0.175	1.524
Kyrgyzstan	6	1.068	0.604	2.532	0.987	2.343	-	1.304	2.884	0.227	3.273	1.178	1.219	1.156	1.497	2.571	2.178	0.821
Moldova	7	2.078	1.297	2.675	1.408	2.442	1.304	-	3.221	1.351	4.400	1.730	1.014	1.741	1.895	2.775	2.334	1.436
Russia	8	2.022	2.312	0.629	1.972	0.843	2.884	3.221	-	3.108	2.711	1.713	2.208	1.731	1.416	0.490	0.901	2.085
Tajikistan	9	1.252	0.830	2.759	1.212	2.569	0.227	1.351	3.108	-	3.387	1.404	1.410	1.381	1.724	2.798	2.404	1.047
Turkmenistan	10	2.322	3.103	3.092	3.080	3.159	3.273	4.400	2.711	3.387	-	2.796	3.634	2.768	2.829	2.972	3.056	2.989
Uzbekistan	11	0.662	0.601	1.369	0.322	1.199	1.178	1.730	1.713	1.404	2.796	-	0.840	0.041	0.329	1.397	1.027	0.375
Ukraine	12	1.394	0.748	1.675	0.565	1.445	1.219	1.014	2.208	1.410	3.634	0.840	-	0.866	0.914	1.768	1.326	0.713
2002																		
Azerbaijan	1	-	1.211	1.463	2.088	1.292	1.517	2.122	2.446	1.242	1.771	1.651	1.167	0.875	0.900	1.620	1.342	0.982
Armenia	2	1.211	-	1.178	1.002	1.810	0.503	0.913	2.909	0.920	2.953	0.485	0.304	0.617	0.963	1.933	1.522	0.238
Belarus	3	1.463	1.178	-	1.188	0.985	1.670	1.717	1.841	2.003	2.694	1.152	0.874	0.730	0.562	0.903	0.543	1.086
Georgia	4	2.088	1.002	1.188	-	2.151	1.201	0.728	2.993	1.853	3.692	0.530	0.925	1.243	1.435	2.088	1.725	1.162
Kazakhstan	5	1.292	1.810	0.985	2.151	-	2.298	2.576	1.176	2.354	1.823	1.992	1.551	1.193	0.848	0.382	0.450	1.613
Kyrgyzstan	6	1.517	0.503	1.670	1.201	2.298	-	0.758	3.410	0.699	3.288	0.705	0.802	1.107	1.456	2.435	2.024	0.686
Moldova	7	2.122	0.913	1.717	0.728	2.576	0.758	-	3.558	1.453	3.864	0.584	1.060	1.449	1.752	2.603	2.203	1.149
Russia	8	2.446	2.909	1.841	2.993	1.176	3.410	3.558	-	3.525	2.303	2.987	2.622	2.309	1.962	0.976	1.388	2.737
Tajikistan	9	1.242	0.920	2.003	1.853	2.354	0.699	1.453	3.525	-	2.928	1.327	1.179	1.295	1.605	2.586	2.204	0.923
Turkmenistan	10	1.771	2.953	2.694	3.692	1.823	3.288	3.864	2.303	2.928	-	3.343	2.837	2.465	2.267	2.158	2.235	2.716
Uzbekistan	11	1.651	0.485	1.152	0.530	1.992	0.705	0.584	2.987	1.327	3.343	-	0.507	0.889	1.174	2.025	1.622	0.679
Ukraine	12	1.167	0.304	0.874	0.925	1.551	0.802	1.060	2.622	1.179	2.837	0.507	-	0.389	0.707	1.646	1.235	0.280
2001																		
Azerbaijan	1	-	0.096	1.445	1.080	1.565	1.188	0.952	2.621	0.921	2.590	1.273	0.211	0.420	0.786	1.637	1.274	0.403
Armenia	2	0.096	-	1.447	1.023	1.660	1.095	0.860	2.664	0.846	2.681	1.191	0.238	0.440	0.810	1.691	1.327	0.319
Belarus	3	1.445	1.447	-	0.890	1.911	1.623	1.475	1.482	2.125	3.346	1.348	1.235	1.028	0.696	0.909	0.777	1.317
Georgia	4	1.080	1.023	0.890	-	2.266	0.736	0.620	2.370	1.401	3.542	0.472	0.937	0.831	0.833	1.650	1.366	0.739
Kazakhstan	5	1.565	1.660	1.911	2.266	-	2.685	2.444	2.064	2.430	1.461	2.650	1.520	1.495	1.446	1.231	1.147	1.901
Kyrgyzstan	6	1.188	1.095	1.623	0.736	2.685	-	0.242	3.097	0.940	3.776	0.359	1.172	1.200	1.396	2.314	1.991	0.797
Moldova	7	0.952	0.860	1.475	0.620	2.444	0.242	-	2.932	0.846	3.541	0.415	0.930	0.963	1.179	2.112	1.779	0.557
Russia	8	2.621	2.664	1.482	2.370	2.064	3.097	2.932	-	3.468	3.415	2.830	2.426	2.232	1.871	1.014	1.359	2.655
Tajikistan	9	0.921	0.846	2.125	1.401	2.430	0.940	0.846	3.468	-	3.206	1.252	1.072	1.244	1.597	2.522	2.159	0.818
Turkmenistan	10	2.590	2.681	3.346	3.542	1.461	3.776	3.541	3.415	3.206	-	3.843	2.648	2.712	2.791	2.684	2.600	2.990
Uzbekistan	11	1.273	1.191	1.348	0.472	2.650	0.359	0.415	2.830	1.252	3.843	-	1.196	1.161	1.262	2.120	1.825	0.872
Ukraine	12	0.211	0.238	1.235	0.937	1.520	1.172	0.930	2.426	1.072	2.648	1.196	-	0.209	0.577	1.455	1.091	0.382
2002																		
Azerbaijan	1	-	0.661	1.762	1.296	1.318	2.768	0.836	2.794	0.825	1.576	1.765	1.385	0.882	1.323	1.881	1.660	1.145
Armenia	2	0.661	-	2.342	1.957	1.587	3.409	1.432	3.219	1.001	1.594	2.395	2.044	1.521	1.936	2.333	2.179	1.798
Belarus	3	1.762	2.342	-	1.024	1.248	2.105	1.642	1.320	2.376	1.847	1.610	0.857	0.933	0.476	0.650	0.349	1.252
Georgia	4	1.296	1.957	1.024	-	1.682	1.547	0.746	2.342	1.591	2.239	0.689	0.177	0.568	0.640	1.563	1.209	0.261
Kazakhstan	5	1.318	1.587	1.248	1.682	-	3.157	1.815	1.671	2.141	0.606	2.367	1.618	1.150	1.154	0.879	0.925	1.746
Kyrgyzstan	6	2.768	3.409	2.105	1.547	3.157	-	1.992	3.225	2.751	3.745	1.020	1.556	2.111	2.006	2.755	2.433	1.629
Moldova	7	0.836	1.432	1.642	0.746	1.815	1.992	-	2.906	0.853	2.245	0.972	0.908	0.777	1.174	2.033	1.711	0.495
Russia	8	2.794	3.219	1.320	2.342	1.671	3.225	2.906	-	3.538	2.029	2.913	2.177	2.139	1.744	0.914	1.197	2.561
Tajikistan	9	0.825	1.001	2.376	1.591	2.141	2.751	0.853	3.538	-	2.378	1.749	1.743	1.444	1.901	2.628	2.358	1.347
Turkmenistan	10	1.576	1.594	1.847	2.239	0.606	3.745	2.245	2.029	2.378	-	2.913	2.194	1.682	1.751	1.398	1.513	2.268
Uzbekistan	11	1.765	2.395	1.610	0.689	2.367	1.020	0.972	2.913	1.749	2.913	-	0.795	1.231	1.307	2.210	1.855	0.662
Ukraine	12	1.385	2.044	0.857	0.177	1.618	1.556	0.908	2.177	1.743	2.194	0.795	-	0.574	0.513	1.422	1.066	0.435
2003																		
Azerbaijan	1	-	0.971	1.798	0.056	1.496	1.563	1.639	2.735	0.721	1.778	2.421	0.590	0.759	1.219	1.967	1.600	1.142
Armenia	2	0.971	-	2.649	1.007	2.117	2.491	2.593	3.329	1.259	1.708	3.373	1.540	1.676	2.092	2.661	2.339	2.110
Belarus	3	1.798	2.649	-	1.744	0.848	1.622	1.439	1.327	2.250	2.168	1.840	1.242	1.048	0.580	0.615	0.489	1.220
Georgia	4	0.056	1.007	1.744	-	1.441	1.547	1.616	2.680	0.762	1.749	2.398	0.543	0.708	1.165	1.911	1.543	1.113
Kazakhstan	5	1.496	2.117	0.848	1.441	-	2.070	1.959	1.245	2.143	1.323	2.543	1.148	0.971	0.729	0.556	0.361	1.541
Kyrgyzstan	6	1.563	2.491	1.622	1.547	2.070	-	0.234	2.946	1.395	3.051	0.902	1.184	1.230	1.345	2.179	1.866	0.548

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Moldova	7	1.639	2.593	1.439	1.616	1.959	0.234	-	2.766	1.563	3.016	0.782	1.190	1.197	1.230	2.018	1.725	0.526
Russia	8	2.735	3.329	1.327	2.680	1.245	2.946	2.766	-	3.350	2.101	3.095	2.319	2.121	1.716	0.810	1.185	2.509
Tajikistan	9	0.721	1.259	2.250	0.762	2.143	1.395	1.563	3.350	-	2.481	2.295	1.038	1.240	1.693	2.552	2.173	1.221
Turkmenistan	10	1.778	1.708	2.168	1.749	1.323	3.051	3.016	2.101	2.481	-	3.714	1.880	1.823	1.889	1.781	1.683	2.508
Uzbekistan	11	2.421	3.373	1.840	2.398	2.543	0.902	0.782	3.095	2.295	3.714	-	1.953	1.930	1.845	2.456	2.246	1.295
Ukraine	12	0.590	1.540	1.242	0.543	1.148	1.184	1.190	2.319	1.038	1.880	1.953	-	0.203	0.667	1.516	1.137	0.664
2004																		
Azerbaijan	1	-	0.134	1.188	1.775	1.539	1.411	1.183	2.838	0.594	2.186	1.136	0.831	0.540	0.929	1.749	1.360	0.638
Armenia	2	0.134	-	1.093	1.896	1.513	1.545	1.316	2.848	0.650	2.062	1.270	0.698	0.584	0.953	1.726	1.319	0.765
Belarus	3	1.188	1.093	-	2.459	0.862	2.407	2.127	2.273	1.733	1.160	2.181	0.849	1.029	0.984	1.042	0.613	1.575
Georgia	4	1.775	1.896	2.459	-	2.066	0.774	0.730	2.490	1.948	3.619	0.956	2.558	1.493	1.487	2.150	2.117	1.141
Kazakhstan	5	1.539	1.513	0.862	2.066	-	2.289	2.002	1.431	2.132	1.812	2.147	1.610	1.080	0.737	0.215	0.253	1.583
Kyrgyzstan	6	1.411	1.545	2.407	0.774	2.289	-	0.289	3.060	1.362	3.526	0.289	2.242	1.380	1.574	2.432	2.253	0.838
Moldova	7	1.183	1.316	2.127	0.730	2.002	0.289	-	2.822	1.238	3.256	0.247	2.011	1.099	1.285	2.149	1.963	0.573
Russia	8	2.838	2.848	2.273	2.490	1.431	3.060	2.822	-	3.397	2.983	3.042	3.040	2.306	1.911	1.233	1.683	2.638
Tajikistan	9	0.594	0.650	1.733	1.948	2.132	1.362	1.238	3.397	-	2.610	1.077	1.146	1.093	1.489	2.340	1.954	0.892
Turkmenistan	10	2.186	2.062	1.160	3.619	1.812	3.526	3.256	2.983	2.610	-	3.280	1.470	2.168	2.141	1.904	1.625	2.688
Uzbekistan	11	1.136	1.270	2.181	0.956	2.147	0.289	0.247	3.042	1.077	3.280	-	1.965	1.167	1.414	2.307	2.083	0.608
Ukraine	12	0.831	0.698	0.849	2.558	1.610	2.242	2.011	3.040	1.146	1.470	1.965	-	1.106	1.344	1.817	1.362	1.451
2005																		
Azerbaijan	1	-	1.846	2.696	2.481	2.848	3.989	2.825	3.816	3.010	2.061	2.939	3.518	2.512	3.028	3.094	3.122	3.046
Armenia	2	1.846	-	1.237	0.635	1.610	2.179	1.019	2.713	1.282	1.260	1.181	1.685	0.739	1.326	1.849	1.657	1.202
Belarus	3	2.696	1.237	-	1.039	0.445	2.202	1.453	1.500	1.804	0.852	1.680	1.289	0.692	0.543	0.639	0.441	1.277
Georgia	4	2.481	0.635	1.039	-	1.481	1.585	0.496	2.517	0.838	1.479	0.715	1.059	0.347	0.866	1.672	1.360	0.574
Kazakhstan	5	2.848	1.610	0.445	1.481	-	2.582	1.896	1.104	2.246	0.817	2.122	1.632	1.135	0.900	0.255	0.432	1.704
Kyrgyzstan	6	3.989	2.179	2.202	1.585	2.582	-	1.166	3.268	1.021	2.935	1.064	0.970	1.743	1.683	2.644	2.225	1.030
Moldova	7	2.825	1.019	1.453	0.496	1.896	1.166	-	2.864	0.354	1.972	0.228	0.951	0.791	1.124	2.056	1.694	0.365
Russia	8	3.816	2.713	1.500	2.517	1.104	3.268	2.864	-	3.193	1.766	3.077	2.311	2.174	1.747	0.866	1.170	2.596
Tajikistan	9	3.010	1.282	1.804	0.838	2.246	1.021	0.354	3.193	-	2.316	0.126	1.128	1.145	1.446	2.399	2.027	0.613
Turkmenistan	10	2.061	1.260	0.852	1.479	0.817	2.935	1.972	1.766	2.316	-	2.193	2.093	1.211	1.372	1.047	1.179	1.927
Uzbekistan	11	2.939	1.181	1.680	0.715	2.122	1.064	0.228	3.077	0.126	2.193	-	1.057	1.019	1.331	2.278	1.909	0.512
Ukraine	12	3.518	1.685	1.289	1.059	1.632	0.970	0.951	2.311	1.128	2.093	1.057	-	1.025	0.748	1.677	1.258	0.590
2006																		
Azerbaijan	1	-	2.604	3.075	3.084	3.223	3.993	3.791	4.033	3.499	3.227	3.437	3.347	2.978	3.344	3.407	3.331	3.389
Armenia	2	2.604	-	1.025	0.480	1.680	1.449	1.213	2.586	1.042	1.242	0.949	0.787	0.524	1.033	1.758	1.435	0.785
Belarus	3	3.075	1.025	-	0.996	0.715	1.815	1.542	1.569	1.677	0.218	1.573	0.799	0.586	0.367	0.750	0.410	1.079
Georgia	4	3.084	0.480	0.996	-	1.710	1.011	0.756	2.535	0.709	1.184	0.604	0.391	0.418	0.832	1.738	1.375	0.306
Kazakhstan	5	3.223	1.680	0.715	1.710	-	2.492	2.225	0.940	2.390	0.557	2.286	1.494	1.296	0.991	0.190	0.415	1.783
Kyrgyzstan	6	3.993	1.449	1.815	1.011	2.492	-	0.275	3.146	0.528	1.936	0.564	1.020	1.352	1.501	2.457	2.092	0.769
Moldova	7	3.791	1.213	1.542	0.756	2.225	0.275	-	2.902	0.459	1.668	0.440	0.745	1.079	1.235	2.196	1.828	0.497
Russia	8	4.033	2.586	1.569	2.535	0.940	3.146	2.902	-	3.159	1.360	3.061	2.242	2.146	1.721	0.828	1.165	2.534
Tajikistan	9	3.499	1.042	1.677	0.709	2.390	0.528	0.459	3.159	-	1.844	0.105	0.918	1.121	1.441	2.396	2.026	0.625
Turkmenistan	10	3.227	1.242	0.218	1.184	0.557	1.936	1.668	1.360	1.844	-	1.742	0.939	0.786	0.436	0.555	0.195	1.230
Uzbekistan	11	3.437	0.949	1.573	0.604	2.286	0.564	0.440	3.061	0.105	1.742	-	0.820	1.016	1.341	2.294	1.924	0.529
Ukraine	12	3.347	0.787	0.799	0.391	1.494	1.020	0.745	2.242	0.918	0.939	0.820	-	0.394	0.523	1.484	1.113	0.294
2007																		
Azerbaijan	1	-	2.109	3.138	2.405	3.281	3.307	4.174	3.757	3.394	3.015	3.152	3.288	2.779	3.133	3.332	3.261	3.128
Armenia	2	2.109	-	1.287	0.303	1.842	1.276	2.068	2.663	1.366	1.274	1.130	1.215	0.754	1.229	1.890	1.630	1.019
Belarus	3	3.138	1.287	-	1.165	0.799	1.502	1.602	1.684	1.555	0.212	1.465	0.628	0.589	0.115	0.827	0.470	0.930
Georgia	4	2.405	0.303	1.165	-	1.822	0.981	1.769	2.682	1.071	1.201	0.840	0.967	0.582	1.085	1.866	1.567	0.729
Kazakhstan	5	3.281	1.842	0.799	1.822	-	2.300	2.314	0.890	2.355	0.653	2.257	1.421	1.311	0.915	0.052	0.340	1.727
Kyrgyzstan	6	3.307	1.276	1.502	0.981	2.300	-	0.989	3.186	0.090	1.660	0.155	0.912	1.073	1.387	2.329	1.971	0.574
Moldova	7	4.174	2.068	1.602	1.769	2.314	0.989	-	3.110	0.931	1.812	1.126	1.044	1.525	1.507	2.322	1.981	1.056
Russia	8	3.757	2.663	1.684	2.682	0.890	3.186	3.110	-	3.238	1.542	3.146	2.294	2.196	1.799	0.857	1.215	2.613
Tajikistan	9	3.394	1.366	1.555	1.071	2.355	0.090	0.931	3.238	-	1.719	0.242	0.953	1.147	1.440	2.382	2.023	0.634
Turkmenistan	10	3.015	1.274	0.212	1.201	0.653	1.660	1.812	1.542	1.719	-	1.609	0.820	0.662	0.308	0.690	0.366	1.086
Uzbekistan	11	3.152	1.130	1.465	0.840	2.257	0.155	1.126	3.146	0.242	1.609	-	0.908	0.992	1.352	2.289	1.935	0.541
Ukraine	12	3.288	1.215	0.628	0.967	1.421	0.912	1.044	2.294	0.953	0.820	0.908	-	0.518	0.516	1.444	1.083	0.380

Table A.1.7. Monetary Policy Convergence Index, 1999–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1999																		
Azerbaijan	1	-	0.923	3.762	0.930	0.932	1.103	4.104	1.546	1.021	1.275	1.016	2.209	1.407	1.531	1.933	1.865	1.010
Armenia	2	0.923	-	3.648	0.269	0.325	0.558	3.195	1.047	0.367	0.352	0.193	1.317	0.706	1.183	1.664	1.403	0.356
Belarus	3	3.762	3.648	-	3.381	3.327	3.092	4.352	2.640	3.283	3.670	3.473	3.445	3.050	2.467	1.986	2.320	3.293
Georgia	4	0.930	0.269	3.381	-	0.057	0.296	3.185	0.800	0.116	0.470	0.143	1.286	0.512	0.919	1.399	1.157	0.103
Kazakhstan	5	0.932	0.325	3.327	0.057	-	0.248	3.195	0.755	0.090	0.516	0.192	1.295	0.489	0.866	1.346	1.111	0.078
Kyrgyzstan	6	1.103	0.558	3.092	0.296	0.248	-	3.103	0.508	0.191	0.647	0.384	1.219	0.318	0.626	1.107	0.864	0.202
Moldova	7	4.104	3.195	4.352	3.185	3.195	3.103	-	2.919	3.113	2.852	3.088	1.900	2.791	3.131	3.238	2.868	3.122
Russia	8	1.546	1.047	2.640	0.800	0.755	0.508	2.919	-	0.686	1.030	0.859	1.160	0.414	0.250	0.667	0.357	0.699
Tajikistan	9	1.021	0.367	3.283	0.116	0.090	0.191	3.113	0.686	-	0.490	0.195	1.214	0.401	0.817	1.298	1.043	0.013
Turkmenistan	10	1.275	0.352	3.670	0.470	0.516	0.647	2.852	1.030	0.490	-	0.328	0.993	0.622	1.225	1.692	1.361	0.488
Uzbekistan	11	1.016	0.193	3.473	0.143	0.192	0.384	3.088	0.859	0.195	0.328	-	1.193	0.515	1.007	1.487	1.213	0.187
Ukraine	12	2.209	1.317	3.445	1.286	1.295	1.219	1.900	1.160	1.214	0.993	1.193	-	0.919	1.407	1.702	1.277	1.223
2000																		
Azerbaijan	1	-	0.200	4.339	0.257	0.364	0.647	0.604	1.174	1.830	0.295	2.019	0.965	0.800	1.443	1.810	1.505	1.154
Armenia	2	0.200	-	4.312	0.192	0.553	0.818	0.763	1.292	1.998	0.307	2.219	1.142	0.922	1.519	1.831	1.554	1.345
Belarus	3	4.339	4.312	-	4.126	4.263	4.090	4.034	3.541	3.919	4.046	5.162	4.081	3.777	3.134	2.595	2.965	4.308
Georgia	4	0.257	0.192	4.126	-	0.509	0.723	0.654	1.133	1.882	0.130	2.210	1.047	0.772	1.338	1.639	1.365	1.280
Kazakhstan	5	0.364	0.553	4.263	0.509	-	0.302	0.288	0.898	1.475	0.439	1.702	0.607	0.539	1.230	1.681	1.336	0.792
Kyrgyzstan	6	0.647	0.818	4.090	0.723	0.302	-	0.089	0.624	1.183	0.616	1.570	0.326	0.313	0.992	1.494	1.130	0.571
Moldova	7	0.604	0.763	4.034	0.654	0.288	0.089	-	0.611	1.236	0.541	1.659	0.396	0.264	0.957	1.440	1.081	0.655
Russia	8	1.174	1.292	3.541	1.133	0.898	0.624	0.611	-	0.884	1.003	1.779	0.539	0.375	0.408	0.973	0.598	0.789
Tajikistan	9	1.830	1.998	3.919	1.882	1.475	1.183	1.236	0.884	-	1.760	1.259	0.869	1.139	1.098	1.613	1.309	0.791
Turkmenistan	10	0.295	0.307	4.046	0.130	0.439	0.616	0.541	1.003	1.760	-	2.136	0.936	0.644	1.213	1.534	1.249	1.181
Uzbekistan	11	2.019	2.219	5.162	2.210	1.702	1.570	1.659	1.779	1.259	2.136	-	1.335	1.773	2.148	2.720	2.360	1.036
Ukraine	12	0.965	1.142	4.081	1.047	0.607	0.326	0.396	0.539	0.869	0.936	1.335	-	0.439	0.947	1.506	1.129	0.299
2001																		
Azerbaijan	1	-	0.131	4.017	0.149	0.393	0.430	0.381	1.443	1.258	0.795	3.472	0.409	0.965	1.422	1.884	1.480	1.288
Armenia	2	0.131	-	3.935	0.073	0.269	0.300	0.258	1.320	1.220	0.665	3.440	0.280	0.882	1.331	1.787	1.379	1.240
Belarus	3	4.017	3.935	-	3.879	3.704	3.723	3.708	2.888	2.860	3.470	1.635	3.834	3.054	2.611	2.186	2.597	2.788
Georgia	4	0.149	0.073	3.879	-	0.252	0.299	0.238	1.297	1.150	0.657	3.370	0.308	0.825	1.279	1.739	1.333	1.171
Kazakhstan	5	0.393	0.269	3.704	0.252	-	0.074	0.016	1.051	1.082	0.406	3.290	0.174	0.666	1.094	1.539	1.127	1.079
Kyrgyzstan	6	0.430	0.300	3.723	0.299	0.074	-	0.088	1.028	1.137	0.365	3.338	0.120	0.700	1.113	1.549	1.136	1.129
Moldova	7	0.381	0.258	3.708	0.238	0.016	0.088	-	1.063	1.077	0.421	3.287	0.183	0.667	1.098	1.545	1.133	1.076
Russia	8	1.443	1.320	2.888	1.297	1.051	1.028	1.063	-	1.173	0.679	2.906	1.104	0.744	0.609	0.758	0.470	1.077
Tajikistan	9	1.258	1.220	2.860	1.150	1.082	1.137	1.077	1.173	-	1.124	2.220	1.254	0.527	0.632	1.000	0.794	0.112
Turkmenistan	10	0.795	0.665	3.470	0.657	0.406	0.365	0.421	0.679	1.124	-	3.233	0.427	0.604	0.899	1.284	0.876	1.081
Uzbekistan	11	3.472	3.440	1.635	3.370	3.290	3.338	3.287	2.906	2.220	3.233	-	3.458	2.653	2.366	2.177	2.456	2.211
Ukraine	12	0.409	0.280	3.834	0.308	0.174	0.120	0.183	1.104	1.254	0.427	3.458	-	0.819	1.226	1.656	1.242	1.248
2002																		
Azerbaijan	1	-	0.156	2.964	0.240	0.347	0.248	0.149	1.414	1.049	0.554	4.056	0.348	0.767	1.124	1.566	1.093	1.242
Armenia	2	0.156	-	3.120	0.395	0.500	0.221	0.305	1.568	1.204	0.696	4.170	0.203	0.919	1.280	1.722	1.248	1.375
Belarus	3	2.964	3.120	-	2.725	2.631	3.099	2.816	1.603	1.925	2.502	2.684	3.303	2.218	1.847	1.408	1.881	1.992
Georgia	4	0.240	0.395	2.725	-	0.123	0.417	0.091	1.177	0.814	0.358	3.889	0.581	0.538	0.884	1.327	0.853	1.050
Kazakhstan	5	0.347	0.500	2.631	0.123	-	0.478	0.201	1.068	0.738	0.238	3.876	0.673	0.482	0.785	1.227	0.752	1.028
Kyrgyzstan	6	0.248	0.221	3.099	0.417	0.478	-	0.340	1.515	1.216	0.609	4.293	0.247	0.951	1.253	1.691	1.218	1.463
Moldova	7	0.149	0.305	2.816	0.091	0.201	0.340	-	1.265	0.904	0.423	3.956	0.491	0.625	0.975	1.417	0.943	1.124
Russia	8	1.414	1.568	1.603	1.177	1.068	1.515	1.265	-	0.527	0.908	3.395	1.735	0.769	0.325	0.236	0.343	0.958
Tajikistan	9	1.049	1.204	1.925	0.814	0.738	1.216	0.904	0.527	-	0.691	3.251	1.395	0.293	0.226	0.573	0.236	0.507
Turkmenistan	10	0.554	0.696	2.502	0.358	0.238	0.609	0.423	0.908	0.691	-	3.918	0.839	0.512	0.669	1.095	0.631	1.083
Uzbekistan	11	4.056	4.170	2.684	3.889	3.876	4.293	3.956	3.395	3.251	3.918	-	4.367	3.413	3.376	3.173	3.412	2.848
Ukraine	12	0.348	0.203	3.303	0.581	0.673	0.247	0.491	1.735	1.395	0.839	4.367	-	1.114	1.458	1.900	1.425	1.578
2003																		
Azerbaijan	1	-	0.377	4.048	0.854	0.889	1.215	2.078	2.001	2.187	0.535	2.115	0.915	1.163	1.607	2.086	1.783	0.996
Armenia	2	0.377	-	3.734	0.566	0.611	1.221	1.708	1.633	1.932	0.196	1.933	0.542	0.799	1.239	1.718	1.412	0.666
Belarus	3	4.048	3.734	-	3.741	3.769	4.677	2.254	2.947	1.957	3.702	2.298	3.383	2.978	2.610	2.218	2.502	3.067
Georgia	4	0.854	0.566	3.741	-	0.051	0.947	1.544	1.229	2.129	0.373	2.249	0.379	0.802	1.132	1.568	1.260	0.857
Kazakhstan	5	0.889	0.611	3.769	0.051	-	0.913	1.564	1.222	2.172	0.419	2.297	0.420	0.841	1.159	1.589	1.283	0.904
Kyrgyzstan	6	1.215	1.221	4.677	0.947	0.913	-	2.449	1.961	3.060	1.122	3.131	1.323	1.746	2.068	2.478	2.179	1.764

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Moldova	7	2.078	1.708	2.254	1.544	1.564	2.449	-	0.781	1.231	1.609	1.648	1.232	0.917	0.472	0.046	0.297	1.131
Russia	8	2.001	1.633	2.947	1.229	1.222	1.961	0.781	-	1.953	1.467	2.311	1.092	1.053	0.813	0.826	0.719	1.317
Tajikistan	9	2.187	1.932	1.957	2.129	2.172	3.060	1.231	1.953	-	1.961	0.487	1.752	1.337	1.200	1.188	1.238	1.300
Turkmenistan	10	0.535	0.196	3.702	0.373	0.419	1.122	1.609	1.467	1.961	-	2.009	0.393	0.729	1.150	1.624	1.312	0.663
Uzbekistan	11	2.115	1.933	2.298	2.249	2.297	3.131	1.648	2.311	0.487	2.009	-	1.889	1.515	1.511	1.609	1.594	1.393
Ukraine	12	0.915	0.542	3.383	0.379	0.420	1.323	1.232	1.092	1.752	0.393	1.889	-	0.423	0.788	1.250	0.937	0.502
2004																		
Azerbaijan	1	-	1.499	2.354	2.096	1.731	0.839	2.737	1.881	0.657	0.222	0.833	1.552	0.841	0.788	1.384	1.399	0.806
Armenia	2	1.499	-	3.227	0.606	0.233	1.317	1.692	1.421	1.018	1.516	1.804	2.054	0.842	1.015	1.433	1.585	0.981
Belarus	3	2.354	3.227	-	3.613	3.408	3.188	3.244	2.271	2.918	2.561	3.108	1.205	2.426	2.251	1.866	1.701	3.071
Georgia	4	2.096	0.606	3.613	-	0.385	1.893	1.384	1.525	1.620	2.121	2.394	2.410	1.368	1.525	1.751	1.916	1.570
Kazakhstan	5	1.731	0.233	3.408	0.385	-	1.511	1.605	1.488	1.235	1.745	2.009	2.221	1.058	1.228	1.581	1.740	1.185
Kyrgyzstan	6	0.839	1.317	3.188	1.893	1.511	-	2.920	2.298	0.397	0.654	0.518	2.294	1.169	1.247	1.949	2.021	0.347
Moldova	7	2.737	1.692	3.244	1.384	1.605	2.920	-	1.042	2.549	2.865	3.337	2.148	1.902	1.955	1.618	1.742	2.574
Russia	8	1.881	1.421	2.271	1.525	1.488	2.298	1.042	-	1.900	2.052	2.609	1.119	1.137	1.110	0.590	0.702	1.980
Tajikistan	9	0.657	1.018	2.918	1.620	1.235	0.397	2.549	1.900	-	0.566	0.800	1.950	0.773	0.861	1.563	1.643	0.155
Turkmenistan	10	0.222	1.516	2.561	2.121	1.745	0.654	2.865	2.052	0.566	-	0.613	1.773	0.963	0.944	1.579	1.604	0.696
Uzbekistan	11	0.833	1.804	3.108	2.394	2.009	0.518	3.337	2.609	0.800	0.613	-	2.385	1.480	1.504	2.174	2.210	0.824
Ukraine	12	1.552	2.054	1.205	2.410	2.221	2.294	2.148	1.119	1.950	1.773	2.385	-	1.310	1.149	0.661	0.495	2.089
2005																		
Azerbaijan	1	-	3.444	0.810	1.145	0.610	1.680	1.100	0.755	1.834	0.769	2.263	0.223	0.703	0.821	0.434	0.317	1.419
Armenia	2	3.444	-	3.465	2.371	3.173	2.234	4.276	4.195	3.999	4.132	4.344	3.640	3.210	3.354	3.589	3.594	3.402
Belarus	3	0.810	3.465	-	1.127	0.371	1.338	0.832	1.210	1.041	0.861	1.482	0.955	0.281	0.113	0.436	0.563	0.629
Georgia	4	1.145	2.371	1.127	-	0.805	0.664	1.911	1.891	1.926	1.767	2.356	1.363	0.854	1.023	1.220	1.236	1.296
Kazakhstan	5	0.610	3.173	0.371	0.805	-	1.162	1.106	1.223	1.375	0.996	1.821	0.812	0.114	0.304	0.448	0.512	0.857
Kyrgyzstan	6	1.680	2.234	1.338	0.664	1.162	-	2.168	2.377	1.772	2.148	2.143	1.903	1.144	1.226	1.608	1.671	1.169
Moldova	7	1.100	4.276	0.832	1.911	1.106	2.168	-	0.876	1.219	0.431	1.528	1.068	1.068	0.944	0.742	0.803	1.237
Russia	8	0.755	4.195	1.210	1.891	1.223	2.377	0.876	-	2.014	0.461	2.374	0.557	1.270	1.285	0.802	0.712	1.818
Tajikistan	9	1.834	3.999	1.041	1.926	1.375	1.772	1.219	2.014	-	1.559	0.447	1.943	1.262	1.073	1.414	1.546	0.634
Turkmenistan	10	0.769	4.132	0.861	1.767	0.996	2.148	0.431	0.461	1.559	-	1.913	0.680	1.004	0.957	0.552	0.539	1.421
Uzbekistan	11	2.263	4.344	1.482	2.356	1.821	2.143	1.528	2.374	0.447	1.913	-	2.358	1.709	1.519	1.836	1.966	1.059
Ukraine	12	0.223	3.640	0.955	1.363	0.812	1.903	1.068	0.557	1.943	0.680	2.358	-	0.894	0.987	0.532	0.399	1.581
2006																		
Azerbaijan	1	-	1.826	1.016	0.642	0.091	1.044	2.449	0.883	2.230	1.165	3.235	1.263	0.868	0.751	0.423	0.590	1.438
Armenia	2	1.826	-	1.860	2.235	1.885	1.445	4.189	2.709	3.821	2.863	3.975	3.065	2.386	2.279	2.087	2.330	2.635
Belarus	3	1.016	1.860	-	0.737	0.965	0.423	2.498	1.494	2.017	1.252	2.342	1.614	0.727	0.685	0.792	0.968	0.776
Georgia	4	0.642	2.235	0.737	-	0.552	1.021	1.954	0.760	1.633	0.629	2.652	0.908	0.227	0.118	0.219	0.240	0.835
Kazakhstan	5	0.091	1.885	0.965	0.552	-	1.027	2.369	0.828	2.141	1.078	3.156	1.191	0.779	0.662	0.333	0.503	1.355
Kyrgyzstan	6	1.044	1.445	0.423	1.021	1.027	-	2.892	1.727	2.435	1.609	2.644	1.929	1.082	1.008	0.989	1.216	1.196
Moldova	7	2.449	4.189	2.498	1.954	2.369	2.892	-	1.669	0.691	1.325	2.797	1.215	1.823	1.919	2.110	1.877	1.872
Russia	8	0.883	2.709	1.494	0.760	0.828	1.727	1.669	-	1.638	0.655	3.196	0.460	0.862	0.839	0.738	0.526	1.441
Tajikistan	9	2.230	3.821	2.017	1.633	2.141	2.435	0.691	1.638	-	1.074	2.126	1.205	1.446	1.562	1.831	1.641	1.301
Turkmenistan	10	1.165	2.863	1.252	0.629	1.078	1.609	1.325	0.655	1.074	-	2.561	0.429	0.529	0.605	0.791	0.575	0.895
Uzbekistan	11	3.235	3.975	2.342	2.652	3.156	2.644	2.797	3.196	2.126	2.561	-	2.946	2.442	2.534	2.851	2.843	1.817
Ukraine	12	1.263	3.065	1.614	0.908	1.191	1.929	1.215	0.460	1.205	0.429	2.946	-	0.893	0.932	0.992	0.744	1.324
2007																		
Azerbaijan	1	-	3.427	1.165	1.269	0.478	1.479	0.929	1.656	1.443	1.837	2.608	0.613	0.973	0.695	0.740	0.612	0.936
Armenia	2	3.427	-	3.267	2.335	3.885	2.097	2.499	2.132	4.678	2.950	3.755	3.835	2.822	3.175	3.035	3.233	3.453
Belarus	3	1.165	3.267	-	0.987	1.494	1.201	1.239	1.139	1.553	0.748	1.446	0.962	0.540	0.491	0.531	0.559	0.309
Georgia	4	1.269	2.335	0.987	-	1.744	0.240	0.564	0.401	2.348	1.074	2.060	1.530	0.489	0.845	0.706	0.910	1.125
Kazakhstan	5	0.478	3.885	1.494	1.744	-	1.957	1.393	2.127	1.220	2.218	2.891	0.635	1.416	1.086	1.165	0.994	1.212
Kyrgyzstan	6	1.479	2.097	1.201	0.240	1.957	-	0.675	0.302	2.588	1.170	2.155	1.768	0.725	1.084	0.945	1.149	1.358
Moldova	7	0.929	2.499	1.239	0.564	1.393	0.675	-	0.944	2.260	1.569	2.530	1.388	0.716	0.866	0.749	0.879	1.236
Russia	8	1.656	2.132	1.139	0.401	2.127	0.302	0.944	-	2.625	0.936	1.905	1.854	0.768	1.151	1.023	1.230	1.355
Tajikistan	9	1.443	4.678	1.553	2.348	1.220	2.588	2.260	2.625	-	2.237	2.484	0.874	1.871	1.504	1.644	1.445	1.280
Turkmenistan	10	1.837	2.950	0.748	1.074	2.218	1.170	1.569	0.936	2.237	-	0.988	1.711	0.928	1.144	1.106	1.232	1.058
Uzbekistan	11	2.608	3.755	1.446	2.060	2.891	2.155	2.530	1.905	2.484	0.988	-	2.284	1.840	1.934	1.949	2.006	1.686
Ukraine	12	0.613	3.835	0.962	1.530	0.635	1.768	1.388	1.854	0.874	1.711	2.284	-	1.086	0.703	0.833	0.625	0.655

Table A.1.8. Financial Policy Convergence Index, 1999–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1999																		
Azerbaijan	1	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Armenia	2	na	-	2.240	1.901	3.573	2.218	na	2.579	na	na	na	1.320	1.802	2.532	2.720	2.157	2.835
Belarus	3	na	2.240	-	1.424	1.950	2.002	na	1.387	na	na	na	2.716	1.318	1.226	1.077	1.176	1.760
Georgia	4	na	1.901	1.424	-	1.733	0.599	na	0.725	na	na	na	1.616	0.141	0.741	1.050	0.386	0.934
Kazakhstan	5	na	3.573	1.950	1.733	-	1.798	na	1.010	na	na	na	3.286	1.798	1.041	0.926	1.419	0.899
Kyrgyzstan	6	na	2.218	2.002	0.599	1.798	-	na	0.939	na	na	na	1.534	0.733	1.050	1.399	0.852	0.899
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	na	2.579	1.387	0.725	1.010	0.939	na	-	na	na	na	2.314	0.789	0.164	0.481	0.427	0.377
Tajikistan	9	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	1.320	2.716	1.616	3.286	1.534	na	2.314	na	na	na	-	1.614	2.354	2.664	1.998	2.402
2000																		
Azerbaijan	1	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Armenia	2	na	-	2.164	1.463	3.125	2.188	1.274	3.110	na	na	na	1.197	1.585	2.331	2.626	2.143	2.510
Belarus	3	na	2.164	-	1.701	2.403	3.050	0.977	2.078	na	na	na	2.522	1.592	1.747	1.490	1.522	2.561
Georgia	4	na	1.463	1.701	-	1.663	1.356	0.902	1.687	na	na	na	0.966	0.169	0.889	1.300	0.749	1.151
Kazakhstan	5	na	3.125	2.403	1.663	-	1.977	2.228	0.451	na	na	na	2.386	1.544	0.823	0.921	1.058	0.988
Kyrgyzstan	6	na	2.188	3.050	1.356	1.977	-	2.230	2.282	na	na	na	0.997	1.458	1.676	2.235	1.748	0.988
Moldova	7	na	1.274	0.977	0.902	2.228	2.230	-	2.071	na	na	na	1.569	0.872	1.414	1.503	1.170	1.998
Russia	8	na	3.110	2.078	1.687	0.451	2.282	2.071	-	na	na	na	2.532	1.539	0.799	0.603	0.967	1.315
Tajikistan	9	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	1.197	2.522	0.966	2.386	0.997	1.569	2.532	na	na	na	-	1.134	1.752	2.238	1.679	1.538
2001																		
Azerbaijan	1	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Armenia	2	na	-	2.092	0.935	2.692	2.095	1.374	3.301	na	na	na	0.735	1.424	2.184	2.452	1.964	2.296
Belarus	3	na	2.092	-	1.883	2.545	3.108	0.924	2.456	na	na	na	2.220	1.654	1.893	1.635	1.566	2.743
Georgia	4	na	0.935	1.883	-	1.758	1.389	0.963	2.417	na	na	na	0.425	0.546	1.282	1.632	1.121	1.402
Kazakhstan	5	na	2.692	2.545	1.758	-	1.477	1.932	0.981	na	na	na	2.068	1.322	0.670	0.992	1.011	0.739
Kyrgyzstan	6	na	2.095	3.108	1.389	1.477	-	2.212	2.452	na	na	na	1.366	1.455	1.583	2.110	1.738	0.739
Moldova	7	na	1.374	0.924	0.963	1.932	2.212	-	2.189	na	na	na	1.324	0.778	1.269	1.276	0.935	1.941
Russia	8	na	3.301	2.456	2.417	0.981	2.452	2.189	-	na	na	na	2.802	1.884	1.137	0.913	1.343	1.715
Tajikistan	9	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	0.735	2.220	0.425	2.068	1.366	1.324	2.802	na	na	na	-	0.962	1.665	2.047	1.535	1.589
2002																		
Azerbaijan	1	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Armenia	2	na	-	2.097	0.616	1.619	1.819	1.232	2.285	1.945	na	na	0.338	0.771	1.218	1.512	1.196	1.161
Belarus	3	na	2.097	-	2.210	2.749	3.867	1.528	2.810	1.424	na	na	2.196	1.911	2.026	1.832	1.847	2.507
Georgia	4	na	0.616	2.210	-	2.232	2.074	1.742	2.896	2.410	na	na	0.946	1.361	1.814	2.071	1.769	1.772
Kazakhstan	5	na	1.619	2.749	2.232	-	1.910	1.221	0.831	1.630	na	na	1.286	1.016	0.726	0.977	0.904	0.460
Kyrgyzstan	6	na	1.819	3.867	2.074	1.910	-	2.601	2.717	3.272	na	na	1.671	2.051	2.226	2.620	2.353	1.701
Moldova	7	na	1.232	1.528	1.742	1.221	2.601	-	1.430	0.726	na	na	1.083	0.566	0.499	0.403	0.320	1.018
Russia	8	na	2.285	2.810	2.896	0.831	2.717	1.430	-	1.435	na	na	1.978	1.549	1.106	1.034	1.211	1.220
Tajikistan	9	na	1.945	1.424	2.410	1.630	3.272	0.726	1.435	-	na	na	1.809	1.284	1.052	0.674	0.920	1.601
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	0.338	2.196	0.946	1.286	1.671	1.083	1.978	1.809	na	na	-	0.541	0.952	1.292	0.969	0.826
2003																		
Azerbaijan	1	-	1.829	1.378	2.060	1.446	2.976	0.351	1.650	0.717	na	na	0.764	0.799	0.837	0.614	0.616	1.279
Armenia	2	1.829	-	2.001	1.085	1.554	1.370	2.069	2.535	2.040	na	na	1.097	1.044	1.122	1.556	1.438	0.796
Belarus	3	1.378	2.001	-	1.436	2.569	3.370	1.703	3.015	0.753	na	na	1.557	1.513	1.734	1.835	1.756	1.998
Georgia	4	2.060	1.085	1.436	-	2.451	2.291	2.395	3.298	1.873	na	na	1.606	1.531	1.739	2.111	1.984	1.655
Kazakhstan	5	1.446	1.554	2.569	2.451	-	2.011	1.392	1.032	2.105	na	na	1.023	1.079	0.844	0.833	0.856	0.801
Kyrgyzstan	6	2.976	1.370	3.370	2.291	2.011	-	3.117	3.004	3.343	na	na	2.218	2.196	2.146	2.506	2.427	1.700

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Moldova	7	0.351	2.069	1.703	2.395	1.392	3.117	-	1.381	0.993	na	na	0.973	1.026	0.986	0.621	0.691	1.425
Russia	8	1.650	2.535	3.015	3.298	1.032	3.004	1.381	-	2.359	na	na	1.703	1.777	1.559	1.234	1.348	1.742
Tajikistan	9	0.717	2.040	0.753	1.873	2.105	3.343	0.993	2.359	-	na	na	1.207	1.199	1.353	1.288	1.249	1.738
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.764	1.097	1.557	1.606	1.023	2.218	0.973	1.703	1.207	na	na	-	0.075	0.180	0.512	0.384	0.539
2004																		
Azerbaijan	1	-	1.455	0.929	1.183	1.682	2.225	0.653	2.453	1.418	na	na	0.739	0.562	0.910	1.481	1.287	1.117
Armenia	2	1.455	-	2.070	1.642	0.934	0.821	2.080	2.157	2.263	na	na	1.504	0.949	0.784	1.492	1.453	0.455
Belarus	3	0.929	2.070	-	2.094	1.852	2.890	0.612	2.112	2.192	na	na	0.592	1.153	1.305	1.259	1.074	1.874
Georgia	4	1.183	1.642	2.094	-	2.362	2.075	1.640	3.415	0.664	na	na	1.880	1.367	1.664	2.483	2.320	1.194
Kazakhstan	5	1.682	0.934	1.852	2.362	-	1.510	2.133	1.227	2.892	na	na	1.279	1.142	0.781	0.775	0.858	1.238
Kyrgyzstan	6	2.225	0.821	2.890	2.075	1.510	-	2.869	2.686	2.738	na	na	2.324	1.758	1.601	2.215	2.215	1.115
Moldova	7	0.653	2.080	0.612	1.640	2.133	2.869	-	2.635	1.624	na	na	0.902	1.140	1.428	1.706	1.505	1.767
Russia	8	2.453	2.157	2.112	3.415	1.227	2.686	2.635	-	3.839	na	na	1.767	2.057	1.754	0.972	1.169	2.409
Tajikistan	9	1.418	2.263	2.192	0.664	2.892	2.738	1.624	3.839	-	na	na	2.156	1.796	2.139	2.874	2.689	1.809
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.739	1.504	0.592	1.880	1.279	2.324	0.902	1.767	2.156	na	na	-	0.657	0.725	0.812	0.609	1.371
2005																		
Azerbaijan	1	-	1.297	1.285	0.775	2.064	2.814	0.672	2.657	1.508	na	na	0.875	0.931	1.385	1.926	1.642	1.526
Armenia	2	1.297	-	1.627	0.590	1.238	1.531	1.610	2.173	1.966	na	na	1.428	0.614	0.555	1.534	1.414	0.303
Belarus	3	1.285	1.627	-	1.544	1.437	2.978	0.753	1.568	2.775	na	na	0.412	1.025	1.226	0.946	0.661	1.929
Georgia	4	0.775	0.590	1.544	-	1.678	2.053	1.260	2.501	1.479	na	na	1.221	0.623	0.926	1.790	1.581	0.765
Kazakhstan	5	2.064	1.238	1.437	1.678	-	1.843	1.948	0.999	3.153	na	na	1.573	1.152	0.752	0.638	0.805	1.399
Kyrgyzstan	6	2.814	1.531	2.978	2.053	1.843	-	3.124	2.766	3.010	na	na	2.887	2.087	1.755	2.454	2.515	1.290
Moldova	7	0.672	1.610	0.753	1.260	1.948	3.124	-	2.294	2.166	na	na	0.396	1.042	1.449	1.611	1.307	1.895
Russia	8	2.657	2.173	1.568	2.501	0.999	2.766	2.294	-	3.966	na	na	1.903	1.891	1.629	0.734	1.016	2.374
Tajikistan	9	1.508	1.966	2.775	1.479	3.153	3.010	2.166	3.966	-	na	na	2.371	2.075	2.402	3.242	3.002	1.961
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	0.875	1.428	0.412	1.221	1.573	2.887	0.396	1.903	2.371	na	na	-	0.817	1.153	1.214	0.911	1.729
2006																		
Azerbaijan	1	-	1.539	1.909	0.895	2.034	2.740	0.886	2.276	1.822	na	1.157	1.362	0.997	1.571	2.017	1.853	1.118
Armenia	2	1.539	-	1.735	0.659	0.939	1.312	1.193	1.628	1.950	na	2.646	1.014	0.627	0.350	1.389	1.274	0.725
Belarus	3	1.909	1.735	-	1.752	1.133	2.876	1.042	0.615	3.376	na	2.919	0.762	1.390	1.406	0.551	0.539	2.131
Georgia	4	0.895	0.659	1.752	-	1.373	1.857	0.858	1.873	1.631	na	1.987	1.002	0.368	0.790	1.603	1.448	0.399
Kazakhstan	5	2.034	0.939	1.133	1.373	-	1.791	1.282	0.771	2.878	na	3.190	0.790	1.075	0.619	0.613	0.596	1.610
Kyrgyzstan	6	2.740	1.312	2.876	1.857	1.791	-	2.503	2.555	2.277	na	3.729	2.257	1.934	1.532	2.398	2.346	1.658
Moldova	7	0.886	1.193	1.042	0.858	1.282	2.503	-	1.395	2.401	na	1.983	0.514	0.591	1.025	1.143	0.982	1.256
Russia	8	2.276	1.628	0.615	1.873	0.771	2.555	1.395	-	3.483	na	3.370	0.929	1.512	1.279	0.271	0.434	2.197
Tajikistan	9	1.822	1.950	3.376	1.631	2.878	2.277	2.401	3.483	-	na	2.112	2.632	1.999	2.261	3.218	3.069	1.287
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	1.157	2.646	2.919	1.987	3.190	3.729	1.983	3.370	2.112	na	-	2.488	2.150	2.719	3.125	2.965	2.076
Ukraine	12	1.362	1.014	0.762	1.002	0.790	2.257	0.514	0.929	2.632	na	2.488	-	0.634	0.726	0.662	0.496	1.372
2007																		
Azerbaijan	1	-	1.892	1.975	1.035	2.050	2.975	0.596	2.446	2.024	na	0.720	1.737	1.190	1.818	2.121	2.025	1.380
Armenia	2	1.892	-	1.235	1.065	0.437	1.584	1.561	1.274	2.172	na	2.610	0.955	0.703	0.110	0.958	0.941	1.022
Belarus	3	1.975	1.235	-	1.771	0.884	2.803	1.395	0.529	3.161	na	2.610	0.329	1.219	1.297	0.397	0.340	1.962
Georgia	4	1.035	1.065	1.771	-	1.389	1.941	1.048	2.074	1.418	na	1.695	1.447	0.558	0.964	1.711	1.640	0.364
Kazakhstan	5	2.050	0.437	0.884	1.389	-	1.929	1.610	0.840	2.596	na	2.765	0.675	0.902	0.536	0.547	0.556	1.419
Kyrgyzstan	6	2.975	1.584	2.803	1.941	1.929	-	2.896	2.714	1.898	na	3.602	2.538	2.033	1.551	2.473	2.484	1.600
Moldova	7	0.596	1.561	1.395	1.048	1.610	2.896	-	1.886	2.345	na	1.221	1.186	0.893	1.515	1.582	1.483	1.407
Russia	8	2.446	1.274	0.529	2.074	0.840	2.714	1.886	-	3.390	na	3.107	0.710	1.522	1.366	0.364	0.442	2.189
Tajikistan	9	2.024	2.172	3.161	1.418	2.596	1.898	2.345	3.390	-	na	2.351	2.832	1.947	2.065	3.035	2.981	1.206
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	0.720	2.610	2.610	1.695	2.765	3.602	1.221	3.107	2.351	na	-	2.406	1.909	2.534	2.800	2.701	2.006
Ukraine	12	1.737	0.955	0.329	1.447	0.675	2.538	1.186	0.710	2.832	na	2.406	-	0.892	1.003	0.399	0.300	1.632

Table A.1.9. Fiscal (Policy) Convergence Index, 2000–2007

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2000																		
Azerbaijan	1	-	2.818	na	na	1.296	2.568	na	3.921	2.266	1.643	na	na	1.573	1.733	2.674	2.460	1.596
Armenia	2	2.818	-	na	na	2.877	2.563	na	5.196	3.159	2.643	na	na	2.418	2.788	3.673	3.593	2.392
Belarus	3	na	na	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Georgia	4	na	na	na	-	na	na	na	na	na	na	na	na	na	na	na	na	na
Kazakhstan	5	1.296	2.877	na	na	-	2.676	na	3.359	2.390	0.804	na	na	0.746	0.959	1.814	1.471	1.247
Kyrgyzstan	6	2.568	2.563	na	na	2.676	-	na	5.046	0.879	2.014	na	na	2.215	2.317	3.840	3.710	1.445
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	3.921	5.196	na	na	3.359	5.046	na	-	4.709	3.660	na	na	3.354	2.954	1.786	2.137	3.998
Tajikistan	9	2.266	3.159	na	na	2.390	0.879	na	4.709	-	1.801	na	na	2.104	2.101	3.627	3.464	1.317
Turkmenistan	10	1.643	2.643	na	na	0.804	2.014	na	3.660	1.801	-	na	na	0.532	0.783	2.155	1.879	0.595
Uzbekistan	11	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na
Ukraine	12	na	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na
2001																		
Azerbaijan	1	-	2.789	na	1.688	1.405	2.592	na	4.373	2.129	1.263	1.945	na	1.488	1.855	2.868	2.541	1.635
Armenia	2	2.789	-	na	1.242	2.345	3.210	na	5.502	3.036	2.811	2.546	na	2.183	2.683	3.424	3.123	2.510
Belarus	3	na	na	-	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Georgia	4	1.688	1.242	na	-	1.723	2.327	na	5.033	2.007	1.936	2.010	na	1.465	2.024	3.150	2.829	1.592
Kazakhstan	5	1.405	2.345	na	1.723	-	2.714	na	3.920	2.476	0.776	0.793	na	0.679	1.119	1.953	1.491	1.398
Kyrgyzstan	6	2.592	3.210	na	2.327	2.714	-	na	5.070	0.551	2.200	2.364	na	2.164	2.267	3.835	3.611	1.318
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	4.373	5.502	na	5.033	3.920	5.070	na	-	4.992	3.857	3.856	na	3.853	3.250	2.258	2.700	4.317
Tajikistan	9	2.129	3.036	na	2.007	2.476	0.551	na	4.992	-	1.966	2.283	na	1.967	2.145	3.716	3.476	1.155
Turkmenistan	10	1.263	2.811	na	1.936	0.776	2.200	na	3.857	1.966	-	0.820	na	0.756	0.989	2.228	1.847	0.958
Uzbekistan	11	1.945	2.546	na	2.010	0.793	2.364	na	3.856	2.283	0.820	-	na	0.691	0.885	1.981	1.565	1.132
Ukraine	12	na	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na
2002																		
Azerbaijan	1	-	2.144	3.190	2.477	1.129	2.597	na	4.655	2.113	0.616	2.188	na	1.469	1.909	2.706	2.541	1.661
Armenia	2	2.144	-	2.921	0.877	1.859	1.848	na	4.886	2.768	2.231	1.339	na	1.511	2.041	2.870	2.871	1.588
Belarus	3	3.190	2.921	-	3.701	2.065	3.706	na	3.604	3.902	2.737	2.033	na	2.167	2.005	1.426	1.362	2.789
Georgia	4	2.477	0.877	3.701	-	2.501	2.310	na	5.471	3.249	2.752	2.210	na	2.267	2.817	3.593	3.613	2.280
Kazakhstan	5	1.129	1.859	2.065	2.501	-	2.563	na	4.025	2.399	0.760	1.435	na	0.788	1.156	1.762	1.582	1.427
Kyrgyzstan	6	2.597	1.848	3.706	2.310	2.563	-	na	5.238	1.554	2.548	1.696	na	1.912	2.193	3.492	3.424	1.185
Moldova	7	na	na	na	na	na	na	-	na	na	na	na	na	na	na	na	na	na
Russia	8	4.655	4.886	3.604	5.471	4.025	5.238	na	-	5.095	4.310	4.211	na	3.901	3.361	2.452	2.671	4.502
Tajikistan	9	2.113	2.768	3.902	3.249	2.399	1.554	na	5.095	-	1.978	2.300	na	2.009	2.156	3.454	3.284	1.343
Turkmenistan	10	0.616	2.231	2.737	2.752	0.760	2.548	na	4.310	1.978	-	1.900	na	1.153	1.479	2.273	2.063	1.445
Uzbekistan	11	2.188	1.339	2.033	2.210	1.435	1.696	na	4.211	2.300	1.900	-	na	0.841	1.094	2.063	1.999	0.998
Ukraine	12	na	na	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na
2003																		
Azerbaijan	1	-	1.494	3.380	2.420	1.302	2.756	1.819	4.344	1.925	0.902	1.846	1.996	1.255	1.631	2.520	2.332	1.471
Armenia	2	1.494	-	2.697	1.609	1.134	1.866	2.017	4.452	2.165	1.238	0.435	1.499	0.671	1.144	2.268	2.025	0.689
Belarus	3	3.380	2.697	-	3.484	2.184	4.244	3.534	4.131	4.481	2.835	2.435	1.723	2.520	2.447	1.722	1.627	3.203
Georgia	4	2.420	1.609	3.484	-	2.014	2.555	3.545	5.432	3.278	1.822	1.823	2.912	2.143	2.568	3.305	3.161	2.056
Kazakhstan	5	1.302	1.134	2.184	2.014	-	2.981	2.334	4.121	2.824	0.663	1.286	1.284	0.950	1.313	1.714	1.515	1.641
Kyrgyzstan	6	2.756	1.866	4.244	2.555	2.981	-	2.439	5.382	1.804	2.921	1.895	2.944	2.226	2.413	3.782	3.547	1.413
Moldova	7	1.819	2.017	3.534	3.545	2.334	2.439	-	4.097	1.370	2.416	2.062	1.825	1.631	1.584	2.694	2.441	1.564
Russia	8	4.344	4.452	4.131	5.432	4.121	5.382	4.097	-	4.899	4.397	4.380	3.664	3.872	3.377	2.653	2.884	4.511
Tajikistan	9	1.925	2.165	4.481	3.278	2.824	1.804	1.370	4.899	-	2.616	2.371	2.807	2.095	2.250	3.611	3.381	1.509
Turkmenistan	10	0.902	1.238	2.835	1.822	0.663	2.921	2.416	4.397	2.616	-	1.565	1.842	1.174	1.625	2.227	2.061	1.622
Uzbekistan	11	1.846	0.435	2.435	1.823	1.286	1.895	2.062	4.380	2.371	1.565	-	1.312	0.781	1.094	2.147	1.889	0.883
Ukraine	12	1.996	1.499	1.723	2.912	1.284	2.944	1.825	3.664	2.807	1.842	1.312	-	1.070	0.959	1.305	0.978	1.745

Country	No	Integration at "country-to-country" level												Integration at "country-to-region" level				
		1	2	3	4	5	6	7	8	9	10	11	12	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
2004																		
Azerbaijan	1	-	1.269	3.394	1.391	0.841	2.981	2.280	4.469	1.144	0.419	1.122	2.382	1.090	1.387	2.266	1.941	1.217
Armenia	2	1.269	-	3.400	0.522	1.331	2.210	2.162	5.120	0.500	1.599	0.940	1.593	1.050	1.544	2.754	2.196	0.623
Belarus	3	3.394	3.400	-	2.898	2.748	4.699	1.624	4.737	3.734	3.195	2.976	2.678	2.620	2.578	2.098	1.895	3.398
Georgia	4	1.391	0.522	2.898	-	1.207	2.365	1.688	4.971	0.937	1.617	0.802	1.300	0.766	1.286	2.435	1.834	0.763
Kazakhstan	5	0.841	1.331	2.748	1.207	-	3.362	1.934	4.514	1.515	0.754	1.297	1.784	0.941	1.323	1.927	1.441	1.503
Kyrgyzstan	6	2.981	2.210	4.699	2.365	3.362	-	3.139	5.845	2.014	3.328	2.175	3.358	2.644	2.787	4.113	3.742	1.861
Moldova	7	2.280	2.162	1.624	1.688	1.934	3.139	-	4.412	2.391	2.220	1.520	2.173	1.357	1.314	1.737	1.393	1.961
Russia	8	4.469	5.120	4.737	4.971	4.514	5.845	4.412	-	5.064	4.280	4.556	5.521	4.267	3.738	2.945	3.553	4.865
Tajikistan	9	1.144	0.500	3.734	0.937	1.515	2.014	2.391	5.064	-	1.539	0.940	2.092	1.215	1.623	2.892	2.422	0.499
Turkmenistan	10	0.419	1.599	3.195	1.617	0.754	3.328	2.220	4.280	1.539	-	1.332	2.489	1.182	1.398	2.026	1.767	1.545
Uzbekistan	11	1.122	0.940	2.976	0.802	1.297	2.175	1.520	4.556	0.940	1.332	-	2.053	0.577	0.910	2.199	1.783	0.515
Ukraine	12	2.382	1.593	2.678	1.300	1.784	3.358	2.173	5.521	2.092	2.489	2.053	-	1.768	2.178	2.831	2.123	2.050
2005																		
Azerbaijan	1	-	0.942	3.451	1.438	1.423	3.132	2.453	5.096	1.389	0.675	1.068	1.743	1.331	1.903	2.757	2.343	1.408
Armenia	2	0.942	-	3.131	0.916	1.774	2.531	2.090	5.340	0.992	1.348	0.337	1.206	1.093	1.750	2.849	2.342	0.959
Belarus	3	3.451	3.131	-	2.471	2.679	4.697	1.819	5.140	3.621	3.195	3.072	1.951	2.571	2.654	2.344	2.026	3.347
Georgia	4	1.438	0.916	2.471	-	1.355	2.555	1.178	4.861	1.153	1.401	0.690	0.827	0.487	1.085	2.196	1.679	0.895
Kazakhstan	5	1.423	1.774	2.679	1.355	-	3.531	1.604	4.211	1.906	0.805	1.660	1.703	1.037	1.222	1.613	1.307	1.724
Kyrgyzstan	6	3.132	2.531	4.697	2.555	3.531	-	3.125	5.974	1.772	3.347	2.311	3.174	2.715	2.822	4.207	3.851	1.869
Moldova	7	2.453	2.090	1.819	1.178	1.604	3.125	-	4.476	2.121	2.143	1.860	1.391	1.223	1.152	1.713	1.311	1.825
Russia	8	5.096	5.340	5.140	4.861	4.211	5.974	4.476	-	5.129	4.640	5.172	5.087	4.420	3.810	3.002	3.502	4.987
Tajikistan	9	1.389	0.992	3.621	1.153	1.906	1.772	2.121	5.129	-	1.587	0.743	1.869	1.207	1.590	2.940	2.528	0.296
Turkmenistan	10	0.675	1.348	3.195	1.401	0.805	3.347	2.143	4.640	1.587	-	1.337	1.772	1.150	1.585	2.256	1.907	1.515
Uzbekistan	11	1.068	0.337	3.072	0.690	1.660	2.311	1.860	5.172	0.743	1.337	-	1.200	0.878	1.502	2.697	2.202	0.647
Ukraine	12	1.743	1.206	1.951	0.827	1.703	3.174	1.391	5.087	1.869	1.772	1.200	-	1.074	1.588	2.271	1.704	1.654
2006																		
Azerbaijan	1	-	0.889	2.739	1.472	0.507	3.202	2.149	4.574	1.541	1.785	0.918	1.278	0.938	1.453	2.105	1.727	1.317
Armenia	2	0.889	-	2.977	1.214	1.352	2.563	1.987	5.041	1.088	2.499	0.071	1.202	1.071	1.618	2.628	2.189	0.837
Belarus	3	2.739	2.977	-	1.978	2.705	4.358	1.402	4.538	3.427	3.586	3.045	1.806	2.278	2.362	2.043	1.788	3.184
Georgia	4	1.472	1.214	1.978	-	1.704	2.572	0.811	4.746	1.553	2.817	1.269	0.549	0.842	1.234	2.157	1.678	1.300
Kazakhstan	5	0.507	1.352	2.705	1.704	-	3.422	2.309	4.273	1.759	1.339	1.377	1.533	1.030	1.387	1.842	1.544	1.574
Kyrgyzstan	6	3.202	2.563	4.358	2.572	3.422	-	3.050	5.868	1.709	3.934	2.533	3.054	2.708	2.731	4.073	3.745	1.888
Moldova	7	2.149	1.987	1.402	0.811	2.309	3.050	-	4.822	2.319	3.376	2.047	0.952	1.499	1.701	2.248	1.808	2.087
Russia	8	4.574	5.041	4.538	4.746	4.273	5.868	4.822	-	4.974	4.019	5.059	4.664	4.180	3.668	2.796	3.249	4.905
Tajikistan	9	1.541	1.088	3.427	1.553	1.759	1.709	2.319	4.974	-	2.413	1.052	1.861	1.298	1.532	2.839	2.483	0.289
Turkmenistan	10	1.785	2.499	3.586	2.817	1.339	3.934	3.376	4.019	2.413	-	2.499	2.774	2.057	2.066	2.266	2.242	2.374
Uzbekistan	11	0.918	0.071	3.045	1.269	1.377	2.533	2.047	5.059	1.052	2.499	-	1.270	1.110	1.645	2.669	2.236	0.811
Ukraine	12	1.278	1.202	1.806	0.549	1.533	3.054	0.952	4.664	1.861	2.774	1.270	-	0.901	1.371	1.998	1.498	1.579
2007																		
Azerbaijan	1	-	0.855	2.635	1.530	0.735	3.715	2.048	4.235	1.672	na	0.703	1.033	1.088	1.757	1.973	1.594	1.417
Armenia	2	0.855	-	2.698	1.272	1.509	3.460	1.849	4.608	1.446	na	0.349	0.882	1.187	1.911	2.383	1.952	1.310
Belarus	3	2.635	2.698	-	1.579	2.841	4.511	1.077	4.208	2.620	na	2.926	1.837	2.166	2.298	2.003	1.791	2.926
Georgia	4	1.530	1.272	1.579	-	1.927	3.356	0.608	4.249	1.250	na	1.563	0.677	0.963	1.449	1.872	1.448	1.532
Kazakhstan	5	0.735	1.509	2.841	1.927	-	3.624	2.392	3.932	1.785	na	1.348	1.586	1.208	1.628	1.806	1.559	1.461
Kyrgyzstan	6	3.715	3.460	4.511	3.356	3.624	-	3.670	5.077	2.202	na	3.573	3.744	2.980	2.739	3.895	3.773	2.300
Moldova	7	2.048	1.849	1.077	0.608	2.392	3.670	-	4.285	1.716	na	2.140	1.122	1.446	1.736	1.958	1.595	2.069
Russia	8	4.235	4.608	4.208	4.249	3.932	5.077	4.285	-	4.191	na	4.620	4.264	3.693	3.160	2.544	2.959	4.200
Tajikistan	9	1.672	1.446	2.620	1.250	1.785	2.202	1.716	4.191	-	na	1.624	1.553	0.873	1.084	2.150	1.851	0.519
Turkmenistan	10	na	na	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Uzbekistan	11	0.703	0.349	2.926	1.563	1.348	3.573	2.140	4.620	1.624	na	-	1.107	1.316	2.027	2.448	2.039	1.381
Ukraine	12	1.033	0.882	1.837	0.677	1.586	3.744	1.122	4.264	1.553	na	1.107	-	1.000	1.668	1.855	1.391	1.626

Table A.1.10. Convergency Index (regions' weighted indicators), 1999–2007

Country	Macroeconomics					Monetary policy					Financial policy					Fiscal policy				
	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
1999																				
Azerbaijan	1.316	1.803	1.971	1.798	0.787	1.523	1.546	1.581	1.353	0.993	na	na	na	na	na	na	na	na	na	na
Armenia	1.468	2.057	2.232	1.688	0.638	0.884	1.090	1.130	0.795	0.280	2.112	2.631	2.826	2.333	3.034	na	na	na	na	na
Belarus	0.537	0.439	0.520	0.465	1.299	2.870	2.583	2.544	2.882	3.370	1.488	1.327	1.206	1.317	1.948	na	na	na	na	na
Georgia	1.117	1.713	1.885	1.304	0.296	0.670	0.836	0.876	0.551	0.063	0.213	0.807	1.104	0.480	1.133	na	na	na	na	na
Kazakhstan	0.460	0.623	0.734	0.257	1.117	0.638	0.788	0.829	0.509	0.089	1.549	0.945	0.796	1.259	0.821	na	na	na	na	na
Kyrgyzstan	2.054	2.634	2.809	2.290	1.234	0.421	0.540	0.581	0.268	0.278	0.520	1.051	1.400	0.797	1.017	na	na	na	na	na
Moldova	2.390	2.962	3.120	2.263	1.680	2.766	2.975	2.971	2.947	3.122	na	na	na	na	na	na	na	na	na	na
Россия	0.856	0.261	0.109	1.091	1.682	0.254	0.073	0.101	0.252	0.770	0.555	0.112	0.462	0.250	0.581	na	na	na	na	na
Tajikistan	2.280	2.859	3.034	2.513	1.461	0.554	0.725	0.766	0.436	0.087	na	na	na	na	na	na	na	na	na	na
Turkmenistan	2.748	2.713	2.763	3.376	2.897	0.807	1.089	1.127	0.794	0.428	na	na	na	na	na	na	na	na	na	na
Uzbekistan	0.876	1.459	1.634	1.203	0.126	0.692	0.904	0.944	0.606	0.113	na	na	na	na	na	na	na	na	na	na
Ukraine	1.378	1.949	2.107	1.292	0.751	0.945	1.230	1.242	1.106	1.222	1.759	2.409	2.719	2.085	2.545	na	na	na	na	na
2000																				
Azerbaijan	1.451	2.074	2.260	2.052	1.087	1.052	1.224	1.229	0.878	1.325	na	na	na	na	na	2.777	3.393	3.634	3.062	1.596
Armenia	1.726	2.510	2.705	1.972	0.393	1.192	1.327	1.327	1.007	1.524	2.118	2.621	2.964	2.524	2.596	4.022	4.647	4.875	4.470	2.387
Belarus	0.732	1.464	1.645	0.795	0.799	3.745	3.427	3.394	3.759	4.595	2.074	2.091	1.987	1.982	2.640	na	na	na	na	na
Georgia	1.920	2.633	2.804	1.792	1.001	1.052	1.158	1.155	0.860	1.490	0.683	1.158	1.541	1.063	1.242	na	na	na	na	na
Kazakhstan	0.333	0.789	0.980	1.012	1.438	0.743	0.971	0.986	0.599	0.983	1.066	0.505	0.455	0.603	0.976	2.051	2.793	3.037	2.431	0.708
Kyrgyzstan	2.228	3.011	3.207	2.462	0.897	0.450	0.713	0.734	0.342	0.824	1.155	1.628	2.171	1.630	1.009	3.911	4.487	4.768	4.333	2.186
Moldova	2.411	3.176	3.360	2.430	1.173	0.457	0.688	0.706	0.314	0.913	1.492	1.774	1.937	1.658	2.087	na	na	na	na	na
Россия	1.182	0.400	0.203	1.257	2.518	0.205	0.118	0.156	0.300	1.093	1.225	0.660	0.146	0.691	1.326	1.342	0.592	0.344	0.941	3.641
Tajikistan	2.383	3.130	3.326	2.782	1.219	0.856	0.953	0.988	1.052	0.909	na	na	na	na	na	3.614	4.167	4.449	3.985	2.085
Turkmenistan	2.156	2.153	2.229	2.820	2.733	0.925	1.029	1.027	0.732	1.406	na	na	na	na	na	2.353	3.075	3.341	2.792	0.392
Uzbekistan	1.830	2.600	2.787	1.900	0.614	1.614	1.893	1.933	1.726	0.747	na	na	na	na	na	na	na	na	na	na
Ukraine	1.441	2.226	2.419	1.668	0.115	0.336	0.655	0.689	0.394	0.598	1.325	1.908	2.391	1.847	1.609	na	na	na	na	na
2001																				
Azerbaijan	1.496	2.216	2.400	2.177	0.473	1.221	1.423	1.472	0.844	1.936	na	na	na	na	na	2.777	3.757	4.014	3.270	1.593
Armenia	1.534	2.260	2.446	2.196	0.419	1.115	1.305	1.353	0.714	1.896	1.850	2.445	2.789	2.337	2.290	3.830	4.834	5.069	4.408	2.409
Belarus	0.587	1.144	1.323	0.802	1.111	2.869	2.804	2.784	3.451	2.283	2.167	2.273	2.241	2.152	2.736	na	na	na	na	na
Georgia	1.353	2.017	2.201	1.670	0.608	1.073	1.274	1.324	0.708	1.826	0.917	1.516	1.883	1.412	1.395	3.329	4.359	4.623	3.917	1.663
Kazakhstan	1.433	1.742	1.846	2.157	1.827	0.858	1.037	1.085	0.457	1.741	0.853	0.288	0.510	0.417	0.739	2.117	3.255	3.505	2.737	0.821
Kyrgyzstan	2.041	2.735	2.921	2.406	0.862	0.864	1.025	1.070	0.414	1.790	1.032	1.455	1.922	1.463	0.739	3.622	4.462	4.758	4.186	1.956
Moldova	1.851	2.559	2.748	2.272	0.624	0.866	1.048	1.096	0.472	1.738	1.349	1.644	1.791	1.515	1.934	na	na	na	na	na
Russia	1.133	0.405	0.233	0.807	2.457	0.408	0.146	0.123	0.640	1.520	1.652	1.028	0.562	1.075	1.714	1.815	0.687	0.446	1.193	4.024
Tajikistan	2.336	3.069	3.257	2.919	1.023	0.769	1.039	1.089	1.148	0.678	na	na	na	na	na	3.503	4.375	4.671	4.060	1.810
Turkmenistan	2.893	3.146	3.218	3.611	2.996	0.609	0.698	0.737	0.051	1.709	na	na	na	na	na	2.127	3.208	3.481	2.739	0.592
Uzbekistan	1.824	2.484	2.667	2.105	0.849	2.666	2.770	2.784	3.238	1.549	na	na	na	na	na	2.078	3.191	3.453	2.742	0.514
Ukraine	1.296	2.022	2.207	1.967	0.349	0.969	1.113	1.155	0.471	1.909	1.216	1.853	2.255	1.762	1.583	na	na	na	na	na
2002																				
Azerbaijan	1.836	2.426	2.588	2.730	1.139	1.097	1.353	1.408	0.615	2.141	na	na	na	na	na	2.968	3.909	4.163	3.480	1.661
Armenia	2.365	2.872	3.014	3.294	1.798	1.252	1.507	1.562	0.763	2.264	1.043	1.469	1.766	1.499	1.194	3.247	4.142	4.394	3.884	1.410
Belarus	0.293	0.966	1.149	0.969	1.136	1.871	1.649	1.598	2.408	1.798	2.429	2.547	2.573	2.565	2.552	2.147	2.932	3.097	2.615	2.302
Georgia	1.279	1.982	2.166	1.855	0.179	0.860	1.115	1.170	0.397	1.964	1.655	2.085	2.380	2.114	1.803	3.929	4.762	5.003	4.521	2.204
Kazakhstan	1.090	1.359	1.474	1.996	1.651	0.777	1.008	1.063	0.274	1.948	0.577	0.204	0.369	0.184	0.433	2.222	3.243	3.494	2.809	1.092
Kyrgyzstan	2.394	2.957	3.116	2.360	1.660	1.255	1.460	1.514	0.695	2.373	1.694	1.962	2.273	1.975	1.678	3.626	4.502	4.788	4.279	1.562
Moldova	1.837	2.531	2.712	2.556	0.571	0.950	1.204	1.259	0.474	2.034	0.965	1.019	1.076	1.037	1.060	na	na	na	na	na
Russia	1.074	0.377	0.206	0.964	2.444	0.458	0.071	0.033	0.819	1.603	1.313	0.872	0.533	0.847	1.211	1.846	0.797	0.543	1.248	4.251
Tajikistan	2.516	3.163	3.335	3.330	1.413	0.069	0.456	0.502	0.593	1.347	1.585	1.464	1.341	1.469	1.635	3.483	4.368	4.656	4.053	1.824
Turkmenistan	1.666	1.786	1.856	2.525	2.185	0.711	0.855	0.908	0.100	1.995	na	na	na	na	na	2.562	3.546	3.805	3.097	1.374
Uzbekistan	1.893	2.574	2.754	2.265	0.730	3.256	3.381	3.366	3.826	1.928	na	na	na	na	na	2.461	3.433	3.700	3.152	0.598
Ukraine	1.122	1.821	2.004	1.678	0.338	1.441	1.677	1.732	0.918	2.465	0.709	1.143	1.452	1.172	0.858	na	na	na	na	na
2003																				
Azerbaijan	1.738	2.385	2.562	2.798	1.501	1.532	1.890	1.956	1.367	1.283	1.198	1.340	1.284	1.263	1.344	2.625	3.586	3.844	3.136	1.429
Armenia	2.484	3.017	3.171	3.623	2.471	1.154	1.516	1.583	1.086	1.017	0.989	1.180	1.604	1.475	0.814	2.564	3.643	3.912	3.210	0.253
Belarus	0.424	0.992	1.165	1.000	1.088	2.872	2.838	2.836	3.761	2.778	2.054	2.303	2.457	2.384	2.082	2.661	3.453	3.583	3.102	2.685
Georgia	1.681	2.329	2.506	2.743	1.468	0.911	1.165	1.220	0.522	1.274	1.824	2.077	2.440	2.319	1.713	3.703	4.671	4.910	4.284	1.857
Kazakhstan	0.469	0.909	1.076	1.610	1.612	0.928	1.167	1.219	0.481	1.321	0.628	0.380	0.186	0.189	0.755	2.275	3.322	3.553	2.859	1.162
Kyrgyzstan	1.917	2.601	2.780	2.383	0.537	1.814	1.967	2.003	1.015	2.172	1.817	1.799	2.166	2.067	1.644	3.719	4.653	4.941	4.306	1.843

Country	Macroeconomics					Monetary policy					Financial policy					Fiscal policy				
	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4	CIS-12	EurAsEC-5	EurAsEC-3	SES-4	CA-4
Moldova	1.763	2.428	2.604	2.160	0.359	0.637	0.620	0.644	1.507	1.130	1.302	1.380	1.212	1.226	1.475	2.491	3.383	3.658	2.982	1.773
Russia	1.079	0.363	0.177	1.119	2.414	0.585	0.198	0.143	0.946	1.543	1.548	1.369	0.936	1.064	1.721	1.924	0.817	0.583	1.285	4.334
Tajikistan	2.297	2.990	3.174	3.233	1.587	1.518	1.762	1.811	2.367	0.915	1.723	1.925	1.959	1.917	1.817	3.346	4.206	4.495	3.836	2.011
Turkmenistan	1.785	1.916	1.997	2.857	2.719	1.022	1.362	1.426	0.891	1.057	na	na	na	na	na	2.615	3.617	3.856	3.163	1.301
Uzbekistan	2.240	2.801	2.955	2.239	1.002	1.809	2.114	2.171	2.573	0.976	na	na	na	na	na	2.490	3.573	3.837	3.149	0.450
Ukraine	1.260	1.957	2.142	2.241	0.974	0.631	0.975	1.041	0.727	0.915	0.520	0.750	0.937	0.844	0.614	1.801	2.867	3.103	2.415	1.349
2004																				
Azerbaijan	1.577	2.410	2.597	2.753	0.704	1.283	1.648	1.767	1.574	0.760	1.073	1.411	1.842	1.655	1.206	2.335	3.596	3.882	2.879	0.942
Armenia	1.585	2.419	2.603	2.813	0.824	1.191	1.256	1.360	0.341	1.087	0.508	0.540	1.403	1.295	0.370	2.846	4.225	4.527	3.454	0.697
Belarus	1.184	1.871	2.014	2.654	1.563	2.083	2.233	2.224	3.038	3.063	1.574	1.783	1.760	1.599	1.944	2.983	3.960	4.137	3.414	3.073
Georgia	1.744	2.197	2.367	1.739	1.072	1.529	1.444	1.508	0.595	1.676	1.619	1.961	2.699	2.526	1.272	2.654	4.062	4.359	3.287	0.651
Kazakhstan	0.392	1.017	1.173	1.830	1.517	1.343	1.352	1.443	0.399	1.292	0.744	0.421	0.487	0.438	1.201	2.272	3.617	3.888	2.836	1.119
Kyrgyzstan	2.066	2.707	2.894	2.455	0.844	1.767	2.066	2.194	1.559	0.251	1.325	1.243	1.991	1.940	1.022	3.939	5.055	5.360	4.492	2.258
Moldova	1.789	2.457	2.645	2.289	0.565	1.554	1.201	1.133	1.381	2.670	1.648	1.946	2.166	1.986	1.855	2.306	3.533	3.793	2.911	1.707
Russia	1.263	0.430	0.259	1.083	2.541	0.600	0.236	0.114	1.098	2.053	1.864	1.625	0.759	0.904	2.390	2.332	0.918	0.648	1.722	4.647
Tajikistan	2.146	2.973	3.163	3.207	0.995	1.374	1.668	1.796	1.213	0.164	2.156	2.516	3.169	2.986	1.894	2.867	4.187	4.493	3.456	0.723
Turkmenistan	2.198	2.662	2.747	3.627	2.692	1.460	1.816	1.938	1.636	0.628	na	na	na	na	na	2.183	3.411	3.684	2.706	1.202
Uzbekistan	1.966	2.666	2.857	2.534	0.642	2.034	2.373	2.499	2.013	0.718	na	na	na	na	na	2.315	3.655	3.958	2.953	0.298
Ukraine	1.832	2.618	2.782	3.231	1.497	0.883	1.042	1.052	1.841	2.111	0.999	1.191	1.264	1.086	1.427	3.249	4.633	4.899	3.820	1.915
2005																				
Azerbaijan	3.162	3.561	3.654	3.899	2.860	0.471	0.544	0.608	0.719	1.581	1.430	1.834	2.253	1.985	1.590	2.866	4.215	4.505	3.530	1.069
Armenia	1.712	2.362	2.527	2.427	1.014	3.822	3.976	4.051	2.735	3.721	0.513	0.771	1.636	1.454	0.345	3.009	4.431	4.737	3.739	0.712
Belarus	0.490	1.137	1.315	1.232	1.127	0.676	0.915	1.036	0.949	0.773	1.305	1.574	1.355	1.104	1.962	3.223	4.321	4.522	3.763	3.049
Georgia	1.418	2.146	2.335	2.043	0.380	1.463	1.640	1.730	0.447	1.613	0.932	1.295	2.002	1.770	0.832	2.501	3.931	4.236	3.255	0.609
Kazakhstan	0.432	0.766	0.919	1.076	1.565	0.718	0.936	1.046	0.578	1.083	0.753	0.524	0.460	0.447	1.378	1.992	3.306	3.581	2.644	1.357
Kyrgyzstan	2.263	2.930	3.126	2.452	1.232	1.881	2.096	2.203	1.071	1.488	1.676	1.444	2.280	2.279	1.224	4.031	5.166	5.486	4.659	2.320
Moldova	1.749	2.492	2.688	2.270	0.361	0.637	0.714	0.785	1.624	1.142	1.519	1.893	1.998	1.728	1.949	2.279	3.566	3.845	2.968	1.663
Russia	1.115	0.373	0.186	0.893	2.507	0.535	0.297	0.178	1.473	1.852	1.661	1.520	0.546	0.732	2.360	2.370	0.933	0.653	1.627	4.881
Tajikistan	2.080	2.822	3.020	2.559	0.689	1.558	1.761	1.871	1.913	0.313	2.401	2.732	3.479	3.240	2.020	2.904	4.238	4.560	3.608	0.649
Turkmenistan	1.203	1.500	1.598	1.894	1.737	0.314	0.291	0.354	1.409	1.416	na	na	na	na	na	2.431	3.753	4.035	3.078	1.132
Uzbekistan	1.963	2.705	2.903	2.456	0.570	1.955	2.142	2.245	2.359	0.753	na	na	na	na	na	2.839	4.258	4.569	3.577	0.426
Ukraine	1.295	1.965	2.163	1.538	0.706	0.440	0.408	0.435	0.930	1.711	1.229	1.573	1.603	1.333	1.773	2.749	4.170	4.452	3.478	1.328
2006																				
Azerbaijan	3.403	3.806	3.891	4.020	3.277	0.909	0.754	0.745	0.321	1.909	1.239	1.694	2.117	1.995	0.644	2.403	3.691	3.974	3.065	0.820
Armenia	1.497	2.227	2.411	2.107	0.678	2.639	2.570	2.569	1.508	2.935	0.427	0.379	1.399	1.276	1.315	2.837	4.152	4.453	3.531	0.444
Belarus	0.472	1.206	1.396	1.106	0.961	1.132	1.297	1.347	1.024	1.114	1.389	1.450	0.661	0.667	2.277	2.776	3.764	3.964	3.276	2.978
Georgia	1.419	2.169	2.366	1.944	0.213	0.430	0.563	0.619	0.879	1.317	0.498	0.899	1.662	1.528	0.699	2.544	3.850	4.145	3.256	1.207
Kazakhstan	0.427	0.618	0.767	0.824	1.670	0.824	0.687	0.684	0.391	1.828	0.877	0.560	0.557	0.482	2.068	2.161	3.398	3.672	2.790	1.163
Kyrgyzstan	2.108	2.797	2.997	2.424	0.907	1.447	1.538	1.574	0.919	1.498	1.736	1.452	2.348	2.267	2.312	4.016	5.067	5.385	4.621	2.397
Moldova	1.847	2.549	2.750	2.195	0.635	1.557	1.719	1.754	2.757	2.009	0.767	1.140	1.251	1.137	1.250	2.749	3.962	4.232	3.407	2.013
Russia	1.116	0.366	0.175	0.767	2.447	0.492	0.197	0.154	1.202	1.898	1.408	1.269	0.230	0.356	2.506	2.240	0.907	0.623	1.531	4.813
Tajikistan	2.059	2.796	2.997	2.499	0.722	1.332	1.606	1.664	2.505	1.350	2.075	2.323	3.264	3.130	1.201	2.883	4.101	4.420	3.552	0.773
Turkmenistan	0.255	0.996	1.189	0.893	1.123	0.258	0.560	0.628	1.456	1.302	na	na	na	na	na	2.369	3.247	3.490	2.786	2.172
Uzbekistan	1.959	2.698	2.898	2.408	0.620	2.709	3.049	3.122	3.338	1.336	2.388	2.841	3.234	3.119	1.417	2.862	4.172	4.474	3.554	0.434
Ukraine	1.143	1.878	2.079	1.600	0.217	0.484	0.513	0.541	1.582	1.721	0.633	0.808	0.756	0.634	1.588	2.457	3.774	4.054	3.154	1.302
2007																				
Azerbaijan	3.166	3.553	3.654	3.991	3.068	1.164	1.338	1.414	1.929	1.373	1.468	1.902	2.239	2.187	0.831	2.291	3.472	3.684	2.843	0.724
Armenia	1.614	2.310	2.496	2.414	0.962	2.745	2.417	2.333	1.818	3.528	0.424	0.090	0.952	0.919	1.519	2.636	3.840	4.068	3.221	0.750
Belarus	0.552	1.297	1.505	1.167	0.843	0.534	0.858	0.937	1.463	0.311	1.194	1.324	0.523	0.500	2.124	2.673	3.534	3.697	3.104	2.789
Georgia	1.577	2.312	2.508	2.326	0.682	0.458	0.200	0.209	0.661	1.287	0.709	1.037	1.780	1.731	0.454	2.327	3.472	3.702	2.920	1.406
Kazakhstan	0.255	0.504	0.710	0.715	1.637	1.602	1.803	1.883	2.405	1.634	0.681	0.523	0.520	0.492	1.833	2.095	3.178	3.388	2.593	1.005
Kyrgyzstan	2.049	2.799	3.007	2.561	0.668	0.668	0.350	0.290	0.460	1.491	1.822	1.501	2.420	2.405	2.235	3.808	4.443	4.709	4.201	3.013
Moldova	2.106	2.746	2.943	2.282	1.132	0.831	0.742	0.772	1.127	1.548	1.160	1.596	1.710	1.659	1.102	2.488	3.538	3.752	3.036	1.997
Russia	1.144	0.387	0.180	0.937	2.525	0.640	0.336	0.249	0.326	1.397	1.403	1.361	0.323	0.361	2.476	1.996	0.802	0.570	1.402	4.251
Tajikistan	2.105	2.851	3.059	2.594	0.731	1.986	2.300	2.389	2.950	1.446	1.993	2.099	3.074	3.031	1.246	2.342	3.407	3.673	2.918	1.054
Turkmenistan	0.398	1.157	1.363	1.140	0.993	0.757	0.874	0.895	1.175	0.794	na	na	na	na	na	na	na	na	na	na
Uzbekistan	2.004	2.759	2.966	2.560	0.622	1.700	1.860	1.883	2.097	1.257	2.186	2.617	2.925	2.873	1.371	2.669	3.861	4.084	3.235	0.721
Ukraine	1.179	1.908	2.116	1.652	0.339	1.239	1.519	1.607	2.168	1.036	0.869	1.041	0.534	0.486	1.812	2.297	3.495	3.709	2.884	1.188

Annex 2: Data Sources

Index	Data sources	Unit
Student exchange (number of students who study abroad)	CIS Interstate Statistics Committee	person
Per capita GDP	International Monetary Fund	$
Foreign national debt to GDP	National banks of CIS countries, Ministry of Finance (for Belarus), national statistics bodies (for Armenia), Asian Development Bank (for Tajikistan, Turkmenistan and Uzbekistan)	%
Consolidated budget deficit to GDP	National banks of CIS countries, Ministry of Finance (for Belarus), national statistics bodies (for Armenia), Asian Development Bank (for Tajikistan, Turkmenistan and Uzbekistan)	%
Inflation rates	National banks of CIS countries	%
Consolidated budget tax revenue	Ministries of Finance of CIS countries, National Bank (for Azerbaijan), Asian Development Bank (for Turkmenistan and Uzbekistan)	$ million
Population	National statistics bodies of CIS countries	million people
Nominal GDP	National statistics bodies of CIS countries	$ million
National currencies/ US dollar exchange rates (direct quotation, growth rate)	National banks of CIS countries	%
Consolidated budget expenditure to GDP	Ministries of Finance of CIS countries, National Bank (for Azerbaijan), Asian Development Bank (for Turkmenistan and Uzbekistan)	%
Deposit rates	National banks of CIS countries	%
Lending rates	National banks of CIS countries	%
GDP growth rate	National statistics bodies of CIS countries	%
Trade in cereals	CIS Interstate Statistics Committee	ton
Trade in electric power	CIS Interstate Statistics Committee	thousand kWt.h
Labour migration (number of people who work abroad)	CIS Interstate Statistics Committee	thousand people
Export and import by CIS countries	CIS Interstate Statistics Committee	$ million

Annex 3: Investment Cooperation in the CIS

As we have stressed earlier, we studied cooperation in the two key areas of foreign trade: the trade proper, and migration. However, the SIEI has no special index for cross–border investments, despite the obvious importance of this issue to all post–Soviet countries. This omission can be primarily explained by the numerous difficulties of statistical assessment of investment cooperation:

- no comprehensive database on investment dynamics in the CIS exists; all available data is confined to a few post–Soviet countries;

- in many cases investments come to post–Soviet countries through offshore or non–CIS jurisdictions, which makes it impossible to correctly assess foreign investments, as well as any intra–CIS investments being made via offshore zones;

- assessments of any one investment flow in the country of origin and the country of destination often diverge tremendously, since definitions of "foreign investments" differ.
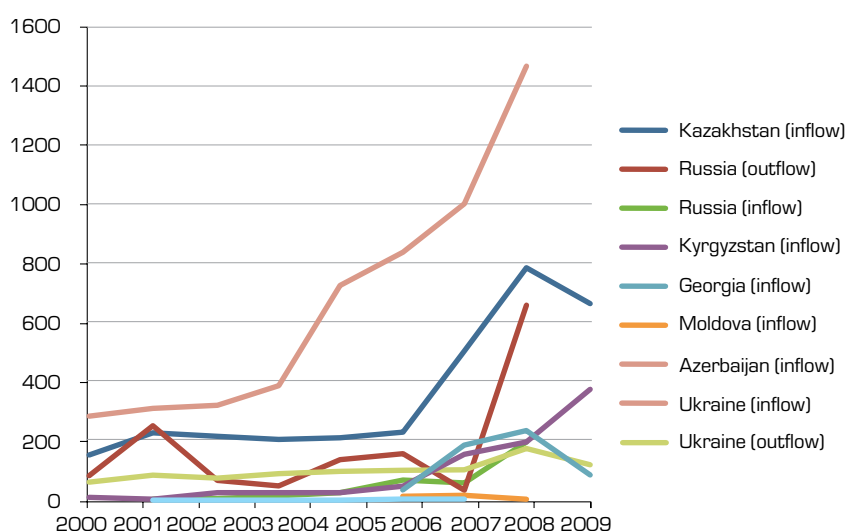
Figure A.3.1.

Dynamics of foreign investments from CIS countries to other post-Soviet countries ($ million)

Table A.3.1 contains a matrix of data on investment flows in the CIS in 2007 (the 2008 data for most countries was not available at the time of preparation of this review). There are some striking differences in the statistics, as some of these countries only publish data on net investments rather than separate investment flows.

In addition, a review of available data (published by the national statistics bodies of Russia, Ukraine, Kyrgyzstan, Azerbaijan, Georgia and Moldova, and the National Bank of Kazakhstan) shows that, in many cases, the investment dynamics is extremely unstable. Investment flows can grow by hundreds of times in some years (following major transactions or intergovernmental agreements), and then return to the initial level. Even the limited available data allows us to conclude that, as a minimum, investment flows between CIS countries show absolute growth (see Figure A.3.1). At the same time, according to national statistics, the proportion of investment flows to GDP growth in respective CIS countries (see Figure A.3.2) has remained practically the same (except for Kyrgyzstan). In other words, the inclusion of foreign investments in our analysis (using the available statistics) would probably have not influenced the calculations.

Bearing in mind all the imperfections of the current statistics, the project to organise ongoing monitoring of mutual investments in the CIS and maintain respective databases is of particular practical and academic interest. Attempts at creating and analysing these databases have already been made by Russian researchers (Kuznetsov, 2008; Heifetz and Libman, 2008; Heifetz, 2009; Crane et al. 2005). Ideally, these databases must be updated on an ongoing basis and made available to the general public and business and scientific communities.

Figure A.3.2.

Foreign investments ($ thousand) from CIS countries to other post-Soviet countries divided by absolute GDP ($ million)

Table A.3.1. — Mutual investments by CIS countries in 2007 ($ thousand)
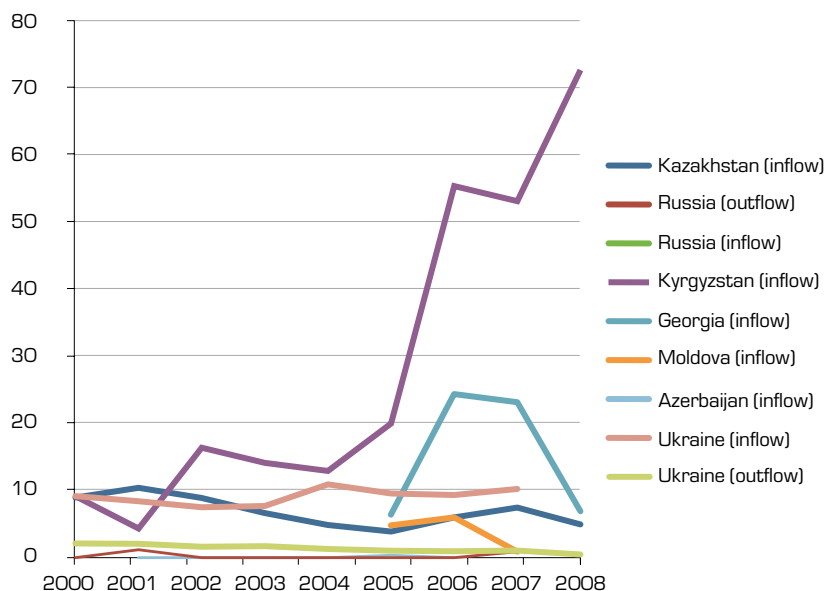
Country of destination (first column – statistics of the country of origin; second column – statistics of the country of destination)

No	Country of origin	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
1	Azerbaijan	-							41368.1		1500		0	0	58.4		512								
2	Armenia	-		-					-4895.4		0		3		212.9		206								
3	Belarus					-	-		52.8		4700		861.6		109.6		18468								
4	Georgia					-	-		-		0		0	0	0		1								
5	Kazakhstan								884862	-	-		182712	0			149566								
6	Kyrgyzstan										1400	0	-		0		551								
7	Moldova										1000		0	0	-		4784								
8	Russia	10	0	36		634306		0	88996.5	13052	772000	0	13352.1	0	478.9	-		222	-	0	-	183	-	14720	1462200
9	Tajikistan										6300		271.9		0		16	-	-						
10	Turkmenistan										-100		147.8		0		1			-	-				
11	Uzbekistan										400		911.6		-0.4		536					-	-		
12	Ukraine							28000	243808		1600		0	0	5691.7	148600	23829							-	-

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The Bank and its Research Publications

The Eurasian Development Bank is an international financial institution aiming to foster economic development and integration in Eurasia. It was founded by an intergovernmental agreement signed by Russia and Kazakhstan in January 2006. In April 2009, Armenia finalised all procedures required for joining the Bank thus becoming its third full member. Next, in June, Tajikistan joined the Bank. On November 1, 2009, the Agreement establishing the EDB became effective for Belarus.

The main areas of the Bank's financial activity are electric power, transport infrastructure, industry, and high-tech sectors.

In line with its Charter, the Bank views information and research support for integration in Eurasia as a priority of its analytical work. To this end, the Bank holds conferences on integration on a regular basis and, since 2008, has published the research quarterly *Journal of Eurasian Economic Integration, Eurasian Integration Yearbook*, and digests on regional investment projects.

Full versions of all these publications are available at www.eabr.org/eng/publications/ free of charge.

Journal of Eurasian Economic Integration

The *Journal of Eurasian Economic Integration* is the EDB's research quarterly. Its editorial board and council comprise renowned scientists and specialists in regional integration. The magazine publishes research papers, book reviews, and quarterly news of regional integration. Whilst its main focus of attention is economics, the magazine also offers materials on a wide range of other issues relating to Eurasian integration: the theory of integration (particularly, in the context of post-Soviet countries); economic integration (trade, investments, financial institutions); institutional integration; cooperation of post-Soviet countries; global experience in regional integration; and others. The journal has been published since 2008.

EDB Eurasian Integration Yearbook

EDB Eurasian Integration Yearbook is an English-language volume on the theoretic and practical problems of Eurasian integration. These are mainly English versions of selected publications from the *Journal of Eurasian Economic Integration* and other EDB periodicals, supplemented with integration news from the past year. The purpose of this yearbook is to make the best papers published in Russian available to the international community. Papers in Russian or English which were written specially for the yearbook may also be accepted for publication.

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- No.2. *Water Energy Resources in Central Asia: Problems of Utilization and Development.*
- No.3. *The Common Electric Power Market of the CIS.*

2009:

- No.4. *The Eurasian Development Bank's Investment Policy and the Environment.*
- No.5. *EurAsEC's International Transport Corridors.*
- No.6. *The Effect of Climate Change on Water Resources in Central Asia.*

2010:

- No.7. *Cooperation of EurAsEC Countries in the Agriculture Sector.*
- No.8. *Prospects and Problems of Cooperation of CIS countries in Space Industry.*

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The EDB's research products include monthly digests dedicated to the activities of international development banks and news of regional integration. These are available at http://www.eabr.org/rus/publications/digests/. The digests, as well as other EDB publications, are also available by free electronic subscription.

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Our consulting services cover:

- particular industries of the Bank's member states and other EurAsEC countries;
- review of EurAsEC's financial markets;
- due diligence exercises for integration agreements and structures of post–Soviet countries;
- activities of development banks in CIS countries and cooperation with them.

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List of Abbreviations

ALADI — Asociacion Latinoamericana de Integracion
ASEAN — Association of South East Asian Nations
CA–4 — Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan
CAC — Central Asian Cooperation Organisation
CAEU — Central Asian Economic Union
CAREC — Central Asian Regional Economic Cooperation
CFM — Council of Foreign Ministers
CICMA — Conference on Interaction and Confidence–building Measures in Asia
CIS — Commonwealth of Independent States
CHS — Council of Heads of States
CHG — Council of Heads of Governments
COMESA — Common Market for Eastern and Southern Africa
CSTO — Collective Security Treaty Organisation
ESCAP — Economic and Social Commission for Asia and the Pacific
EDB — Eurasian Development Bank
EurAsEC — Eurasian Economic Community
EurAsEC–3 — Belarus, Kazakhstan and Russia
EurAsEC–5 — Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan
EU — European Union
ECB — European Central Bank
GDP — gross domestic product
GU(U)AM — Organisation for Democracy and Economic Development (Georgia, Ukraine, (Uzbekistan), Azerbaijan, Moldova)
MERCOSUR — Common Market of the South
NATO — North Atlantic Treaty Organisation
OSCE — Organisation for Security and Cooperation in Europe
OECD — Organisation for Economic Cooperation and Development
SCO — Shanghai Cooperation Organisation
SES — Single Economic Space
SES–4 — Belarus, Kazakhstan, Russia and Ukraine
SIEI — system of indicators of Eurasian integration
SIRI — system of indicators of regional integration
UNECA — United Nations Economic Commission for Africa
UN ESCWA — United Nations Economic and Social Commission for Western Asia
USRB — Union State of Russia and Belarus
WTO — World Trade Organisation

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