

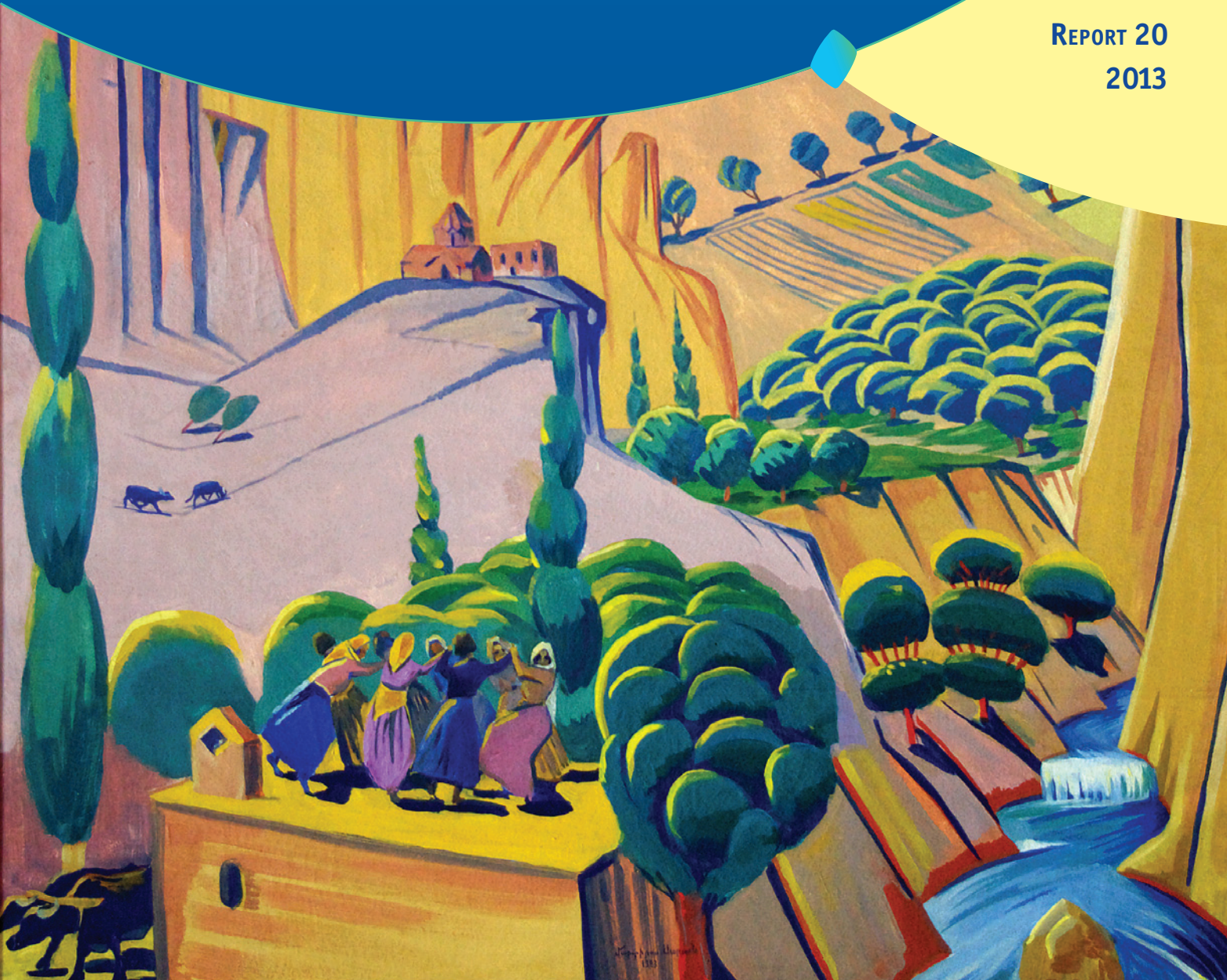


Eurasian Development Bank

CENTRE FOR INTEGRATION STUDIES

ARMENIA AND THE CUSTOMS UNION: IMPACT OF ECONOMIC INTEGRATION

REPORT 20
2013



ARMENIA AND
THE CUSTOMS UNION:
IMPACT OF ECONOMIC
INTEGRATION



Centre for Integration Studies

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ABBREVIATIONS AND ACRONYMS

- CIS** – Commonwealth of Independent States
- CM** – common market
- CU** – Customs Union of Belarus, Kazakhstan and Russia
- DCFTA** – Deep and Comprehensive Free Trade Area Agreement
- EAU** – Eurasian Union
- EDB** – Eurasian Development Bank
- EU** – European Union
- EurAsEC** – Eurasian Economic Community
- FDI** – foreign direct investments
- FTA** – free trade area
- GDP** – gross domestic product
- IFC** – International Finance Corporation
- IMF** – International Monetary Fund
- ITC** – international transportation corridor
- MFN** – most favoured nation
- MMI** – Monitoring of Mutual Investments
- ORP** – oil refinery plant
- PPP** – purchase power parity
- RA** – Republic of Armenia
- RF** – Russian Federation
- SES** – Single Economic Space
- USA** – United States of America
- WTO** – World Trade Organization

Analytical Summary

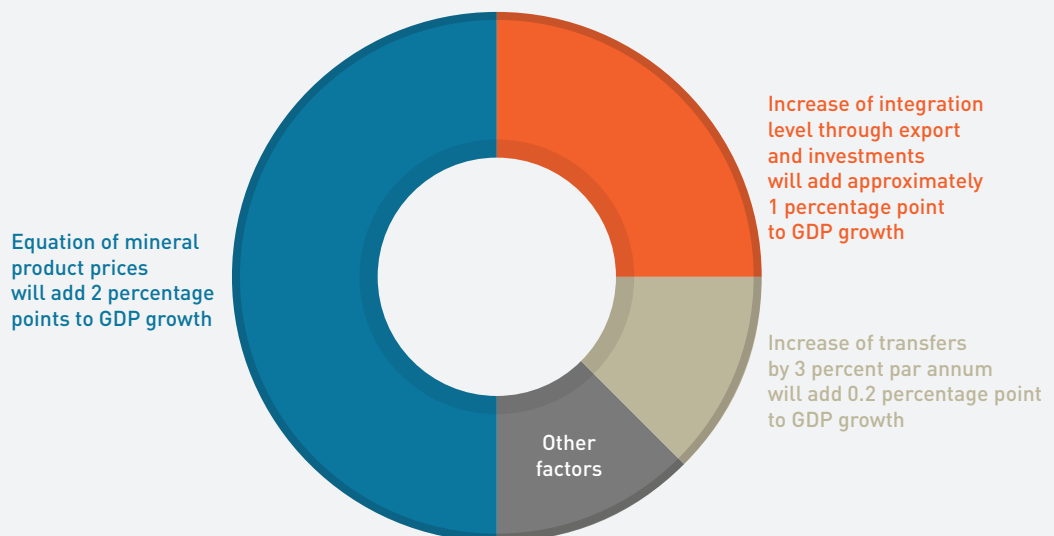
The integration of Armenia with the CU-SES is advantageous to all possible economic development strategies for the republic. Developing the national economy while taking account of the expansion of domestic demand, Armenia is highly interested in the treaties that guarantee free movement of the work force and capital. This will provide stable financing of the trading account of the balance of payments. Selection of an export oriented scenario opens a number of opportunities for Armenia:

- attainment of GDP growth rate guaranteeing a higher living standard and convergence of revenue;
- access to the substantial and protected CU-SES market;
- inflow of investments into export sectors, oriented both to the CU-SES market and the domestic market;
- solution of the transport deadlock problem;
- solution of strategic energy problems.

The GDP growth effect of integration with CU-SES: During integration with the CU, additional growth may amount to 2%. Growth in 2015 is forecast to be \$200 million because integration will affect the capital growth rate.

If mineral product prices come closer to those in the CU, an additional \$400 million or 4% GDP growth may be expected after two years.

The GDP growth rate will be increased by: the construction of a new nuclear power plant; the railroad to Iran; the “North-South” corridor; and the opening of railway communication with Russia through Georgia. This will enhance the economic security of Armenia, and provide long-term economic stability.



The short-term trading effect of the reduction of gas price will be \$140 million within one year. This is comparable with GDP growth of \$146 million in the longer term that would have been the result of the EU association agreement.

Transport: The transport situation in Armenia may be regarded as “deadlock”. This is because the country is completely dependent on freight in-transit via Georgia and Iran; however this transport does not play a significant role in securing freight traffic for its neighbours. This fact drastically increases the level of one-sided dependence of Armenia on its neighbours. Implementation of the projects for the construction of the North-South motorway corridor, construction of the Iran-Armenia railway, and opening the Armenia-Georgia-Russia railway will:

- create a powerful communication hub at the regional and international level;
- create reliable transport communication between the CU countries and the markets of the Persian Gulf, and South and Southeast Asia;
- become a factor attracting Armenia and Georgia to the CU;
- become the first international transport project in the South Caucasus intended to support Eurasian rather than European integration.

Unless the transport problem is solved, the integration of Armenia with the CU and SES will fail to have a maximum positive effect either for Armenia or for the existing CU countries.

The transport benefits of Armenia joining the CU will be for both Armenia and other countries.

Energy: Armenia’s energy industry has two primary goals: to ensure the country’s energy security; and to increase the engineering capabilities for the export of electricity. In the long term, Iran will be the main export direction and not the Post-Soviet areas.

Armenia’s current energy strategy is the implementation of new energy projects to guarantee the system stability, and to increase the export volume. It includes plans for the eventual closing of the Armenian nuclear power plant. The projects include:

- construction of a new power generating unit of 1,000 MW at the Armenian nuclear power plant;
- construction of the 5th power generating unit of 440M MW at the Hrazdan TPP;
- installation of a new gas turbine of over 200 MW at the Yerevan TPP;
- construction of new hydropower plants;
- construction of wind farms having a total capacity of over 200 MW.

Migration is affected by the visa-free regime. This is due to the difference between per capita GDP in the CU and Armenia, and the size of the Armenian expatriate community. The considerable output growth in the CU results in the growth of remittances (money transfers) to Armenia with 85% coming from Russia. In 2012, the remittances from Russia amounted to 64.5% of the state budget of Armenia. The quarterly growth of remittances is estimated to be \$9 million, and the forecast increase in remittances from the CU to Armenia is approximately 3% per annum. The obstacles that remain to labour migration from Armenia to the EU are: the impossibility of full scale free movement of people; employment difficulties; and financial and language problems.

Customs tariffs: A comparison of the customs tariffs of Armenia and the CU shows that Armenia will have to increase considerably its protection level. The increase of customs tariffs will result in a reduction of the budget deficit and a reorientation of trade.

Problems will arise related to the WTO. The applied average weighted import customs tariff of Armenia is one of the lowest tariffs applied by WTO members. The MFN rate is 2.7%, and in the CU it was 7.6% in 2013, and will be 6.9% in 2014, and 6% in 2015. Armenia does not use tariff quotas – 73% of tariff lines are duty-free, and most of the others are subject to 10% duty. The average weighted bound tariff of Armenia is 8.5% – Russia is 10%. In many sectors, in particular the services sector, the trade regime is even more liberal than that specified in Armenia’s commitments to the WTO. The resolution of WTO controversies will require trade negotiations, in which the CU countries will act as a single unit.

Summing up, it should be noted that Armenia’s integration with the CU-SES has a number of structural advantages. These will enhance the economic position of Armenia and improve its stability. The realization of these advantages depends on the successful solution of the key problems: transport; energy; railway and motorway export via Georgia; labour migration legalization and the absence of restrictions; and an improvement of Armenia’s investment appeal. The CU members, in their turn, are interested in the development of railway and motorway transport corridors, as well as electrical supply routes to the Middle East and Southern Asia.

Introduction

Since the early 2000s, the disintegration process in the Post-Soviet areas has been replaced by a new wave of economic integration. By 2010, the required legal framework had been created for the Customs Union of Belarus, Kazakhstan and Russia (CU). In January 2012, the next integration process – the formation of the Single Economic Space (SES) – was commenced. The SES provides the harmonization of laws in all areas of interaction between member-states, and lays the foundation for coordination of monetary and fiscal policy. A single labour market is being created within the SES. Participation in the SES will provide fundamentally new opportunities for further development and structural reconstruction of the economies of Belarus, Kazakhstan and Russia. This also applies to the countries that wish to join the SES, and which share the objectives and principles of their association, and are ready to implement them.

From 1 January 2015, the CU and SES will be transformed into the Eurasian Economic Union. The four freedoms – flow of goods, services, capital and labour – must operate within SES from 2015 without any restrictions. This provision will be set forth in the Eurasian Union agreement. Any exclusion will be of a temporary nature. All tariff restrictions must be removed prior to commencing the operation of the Eurasian Union of Russia, Belarus and Kazakhstan on 1 January 2015.

Armenia will join the Customs Union and will take the required practical steps, and subsequently will participate in EAU formation. This was announced by the Armenian President Serzh Sargsyan during negotiations held in Moscow on 3 September 2013 with the Russian President Vladimir Putin. It was stated that Armenia's inclusion into the Eurasian integration structures will provide a powerful impetus for mutually beneficial economic cooperation. This statement was confirmed by the Russian President during his state visit to Armenia on 2 December 2013. After the negotiations with the Armenian President, Vladimir Putin said that the Armenian experts had clearly considered all the benefits, advantages and possible preferences under the framework of integration associations and then made the choice.

It is important that Armenia is joining SES at the very beginning of its formation. In due course it will result in growth of the Armenian economy and an increase of citizens' earnings. It will open the markets due to the elimination or reduction of tariffs and quotas; and it will facilitate the harmonisation of laws, standards and rules in all sectors of the economy, thus enhancing the investors' confidence. It is anticipated that economic integration will result in an increase of labour productivity and wages; and that it will stimulate economic growth and generate employment.

The purpose of this study is the analysis and general assessment of the macroeconomic effect in various scenarios of the interaction between the Republic of Armenia and the Customs Union. The creation of an economic union of states involves essential elements of long-term economic policy. The impact of its implementation on a selection of scenarios is impossible without a comprehensive analysis. Innovative technological and scien-

tific technological directions in industrial investment policy and in service rendering are considered to be the key factors of a competitive state. The selection of these two directions remains therefore of strategic importance. This study is intended for the numerical evaluation of various scenarios of Armenia's integration. Its two key objectives are: the development of methodological instruments for reasoned selection of efficient forms and directions of integration processes development; and obtaining validated comprehensive assessments of macroeconomic effects of Armenia's integration in the CU-SES.

The distinctive feature of Armenia's inclusion into the integration process within the CU is the fact that the integration process achieves a fundamentally new level. In fact the CU goes beyond the limits of the Post-Soviet area, since the countries are interested in Armenia's accession and in the development of transport corridors, and in electrical supply lines to Iran and South Asia. We may speak about the commencement of the process of "Eurasia continent integration aimed at mutual interpenetration and interlacing of previously isolated regions – Europe, Post-Soviet area, the Central, East and South Asia". (Vinokurov, 2012)

In our opinion, the benefits from the development of North-South transport corridors apparently evidence that "Eurasia continent integration could become the key force in the development of trade in energy resources and other goods, in transport, in flow of capital and work force, in tourism, in combating drug trafficking and in prevention of cross-border sanitary and epidemiological c threats". (Vinokurov, 2012).

1. The impact of the integration initiatives on the Armenian economy

Armenia is going to integrate with the CU-SES. It is necessary to understand: firstly, the initial conditions and challenges that the national economy is going to face; secondly, the critical problems that must be solved to realize in full the integration agreement potential; and thirdly, to give a quantitative estimate of the potential of the CU-SES integration agreement and of alternative integration strategies.

1.1 Revenue

The level of personal income of the existing CU countries is regarded as the essential starting position in the integration process. **Per capita income in Armenia is below the average.** In 2012, the nominal per capita GDP in the republic amounted to \$5,178 (IMF data, PPP) and \$3,338 (at nominal rate). A trend of actual GDP growth has been noted in Armenia since 1998. In 2009, GDP reduced by 14.1%. In 2012, the GDP growth rate was 7.2%. The economic growth of Armenia during the last decade has been based on the export of goods and on the growing domestic demand in the form of private consumption. This is supported by money transfers by labour migrants from primarily Russia.

When considering the position of Armenia in reference to CU-SES member states (Russia, Belarus, Kazakhstan) and to prospective members (Kyrgyzstan and Tajikistan), it may be noted that **Armenia is ranked fourth in terms of per capita income. The vague process of per capita GDP divergence in reference to the oil exporting countries (Russia and Kazakhstan) is a negative factor.**

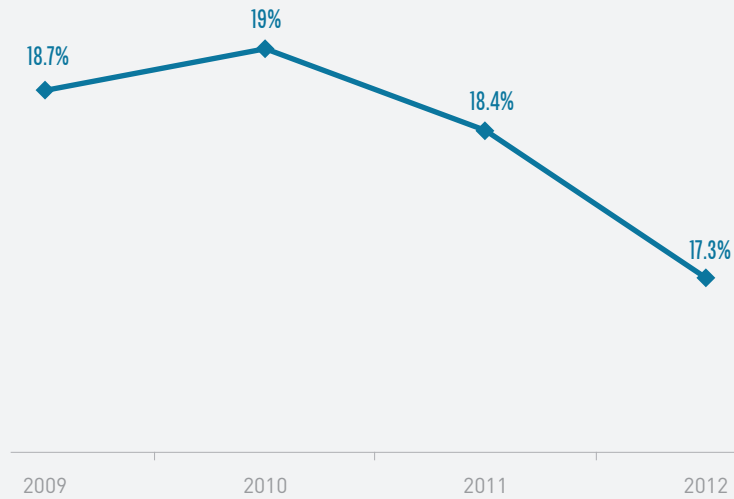
1.2 Employment and unemployment

The condition of the Armenian labour market is important. It has experienced profound transition: from the systemic crisis in early 1990s; the economic and social reforms; the

Countries	1999		2008		2012		Index Russia = 100	
	Rank	\$	Rank	\$	Rank	\$	1999	2012
Russia	1	1,760	1	9,760	1	14,037	100	100
Kazakhstan	3	1,290	2	6,140	2	12,007	73	86
Belarus	2	1,400	3	5,430	3	6,685	80	48
Armenia	4	610	4	3,340	4	3,338	35	24
Kyrgyzstan	5	300	5	780	5	1,160	17	8
Tajikistan	6	180	6	620	6	872	10	6

Table 1 – Per capita GDP of the CU states and prospective CU members in 1999, 2008 and 2012 (in nominal terms), \$ (at nominal rate)

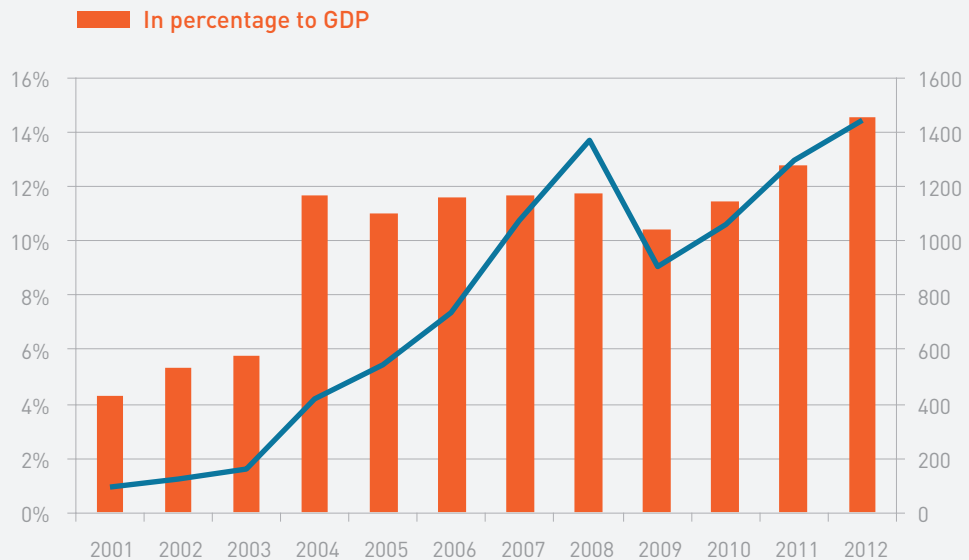
Figure 1 —
Unemployment
in Armenia



period of economic growth from mid 1990s to 2008; and the 2008 crisis that resulted in deceleration of growth and an economic downturn. **Actual unemployment has always been at a double-digit level: on average, one in four economically active persons was unemployed. This fact contributed to some extent to the high level of labour migration.** The officially registered unemployment level in 2012 reduced by 1.1% in comparison with 2011, and comprised 17.3%.

Armenia is a labour exporting country, and in the mid-term this is unlikely to change drastically. An active state migration policy is required. Non-commercial remittances (money transfers) from abroad to Armenia in 2012 amounted to \$1.68 billion; this included from Russia \$1.44 billion in 2012, and \$1.29 billion in 2011. A considerable proportion of private consumption is of imported goods, including food products. Money remittances stimulate the consumer market, construction and service rendering.

Figure 2 —
Remittances from
Russia to Armenia
— \$ thousand



The state policy for the export of the labour force must be oriented to support temporary labour migration. In order to protect and support labour migrants, it is important to involve the opportunities provided by the agreements within the SES framework (and thereafter within the EAU framework). Negotiations must be held on the expansion of the existing agreements toward: securing full-scale social insurance; mutual recognition of education certificates; and the possibility of receiving professional education within the receiving country.

1.3 Foreign trade

The problem with Armenia's trade balance is a consequence of high labour migration. **The trade deficit is minus 28-30% of GDP. This situation will not be stable in the long run. It may result in considerable pressure on the currency rate and in problems in the external sector connected with financing the current account. This is because the earnings of migrants depend directly on the migration policy of the receiving country and on the level of migrants' legalization, while obtaining grants and investment is very sensitive to the economic situation in donor countries.** The foreign trade imbalance is covered by **remittances** from labour migrants (70%) and external grants and investments (30%). The development strategy of the Armenian economy must be based on the development of export potential in the existing growth points. This is impossible without attracting a greater scope of investments and available market outlets, in which the products with high added value will be competitive.

The foreign trade pattern in terms of its geography is one of the key indicators for selecting the integration vector. However, the use of this argument for Armenia should be very limited for two reasons. Firstly, **Armenia's foreign trade is unbalanced. We cannot know for sure the pattern that would have been in place if the trade balance could not be financed using remittances and foreign investment.** Secondly, accord-

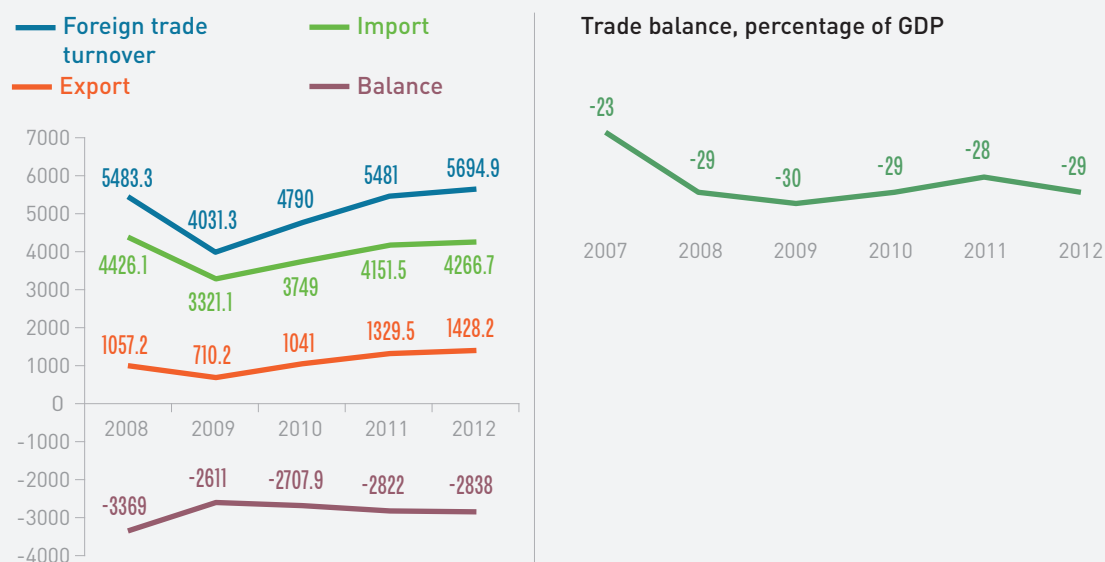
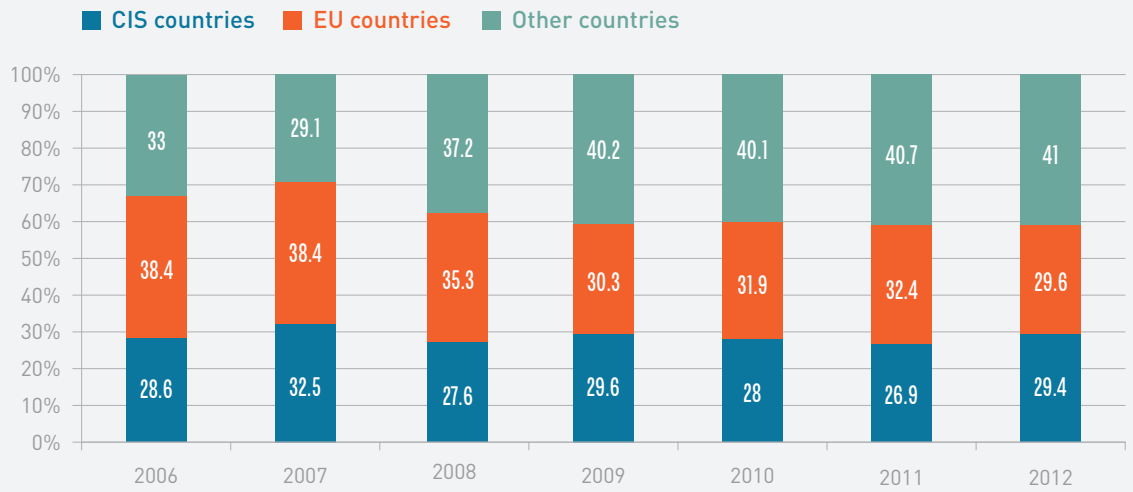


Figure 4 —
Foreign trade turnover pattern of the Republic of Armenia (percentage)



ing to statistics, the high proportion of EU countries in Armenia’s foreign trade is the result of a high share of raw material export to those countries. This does not imply a high level of technological cooperation, technology transfer due to investments, and such like.

In 2012, no drastic changes were noted in the geography of commodity turnover. For example, the percentage of CIS countries increased slightly, and amounted to 29.4%. Russia’s share increased to 23.5% *in the total foreign trade turnover of Armenia* (in comparison with 20.3% in 2011). The share of EU countries in the foreign trade turnover of Armenia is traditionally some percentage points higher than the share of CIS countries, however, in 2012 the EU share of 32.4% reduced to 29.6%.

CIS and EU countries took 59% of the total foreign trade turnover of Armenia in 2012;

Table 2 —
Geography of goods export and import of Armenia in 2012 (percentage)

Exports		Imports	
Total	100	Total	100
Russia	19.6	Russia	24.8
Germany	10.7	China	9.4
Bulgaria	9.1	Germany	6.2
Belgium	8.9	Iran	5.2
Iran	6.8	Ukraine	5.1
USA	6.1	Turkey	5.0
Netherlands	5.6	USA	3.4
Canada	6.0	Italy	4.0
Georgia	5.7	Japan	2.3
Spain	2.1	Bulgaria	2.0
Kazakhstan	0.3	Kazakhstan	0.2
Belarus	0.5	Belarus	0.8

Source of Table 2: National Statistics Service of the Republic of Armenia

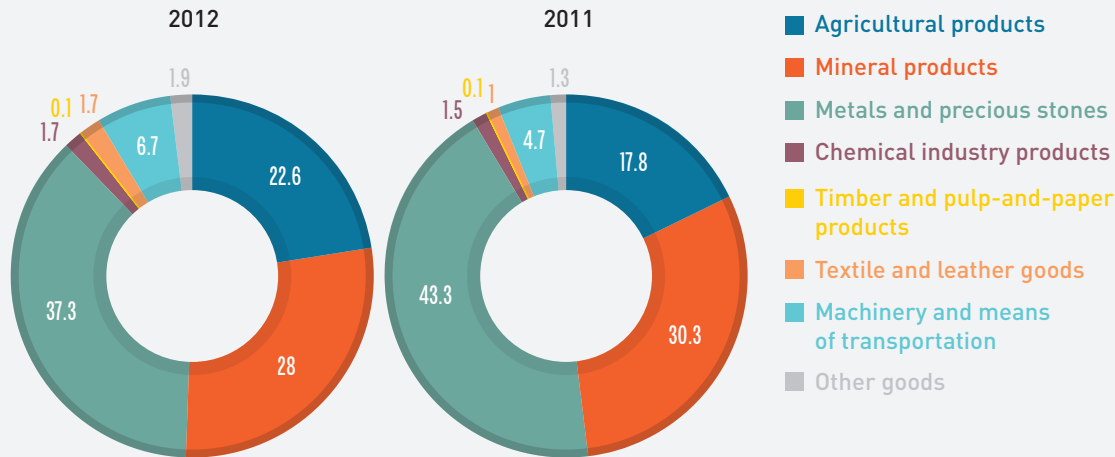


Figure 5 – Pattern of export commodities of Armenia in 2011-2012 (percentage)

Source: National Statistics Service of the Republic of Armenia

and in 2011 the figures for the following countries were: China 7.6% (\$431.7 million); Iran 5.6% (\$317.7 million); USA 4.1% (\$231.1 million); Turkey 3.8% (\$215.5 million).

The pattern of export commodities has not changed significantly in 2012 as compared to 2011. In 2012, Armenia’s pattern of export commodities was: metals and precious stones – \$533.2 million (37.3%); mineral products – \$401.0 million (28.0%); agricultural products – \$323.2 million (22.6%).

In 2012, the **pattern of Armenia’s import commodities** was: machinery and means of transportation – \$953.8 million (22.4%); mineral products – \$916.4 million (21.5%); agricultural products – \$812.5 million (19.0%); metals and precious stones – \$570.4 million (13.4%); chemical industry products – \$496.4 million (11.6%).

The commodity pattern of Armenian imports includes a wide range of commodities including gas, oil, food products and others. However, the pattern for exports is limited and includes: aluminium foil and rolled aluminium, precious and semiprecious stones, alcoholic beverages, copper and molybdenum concentrates and crude cop-

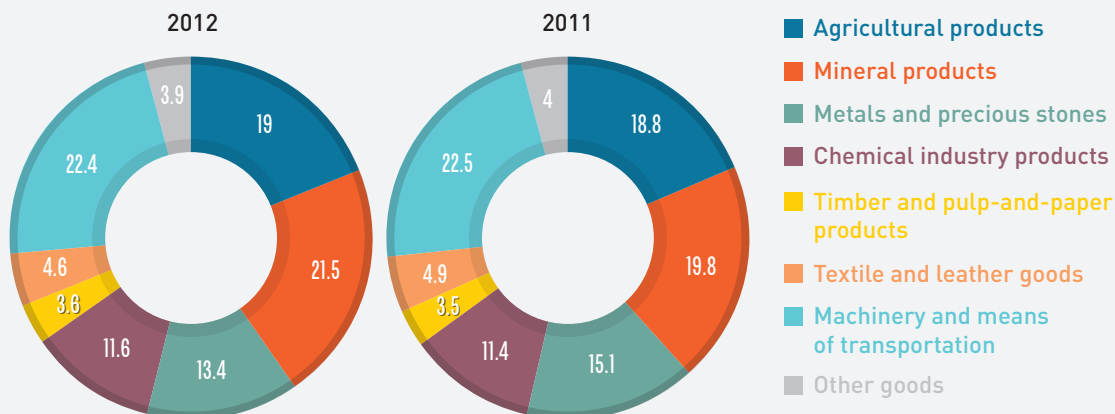


Figure 6 – Pattern of import commodities of Armenia in 2011-2012 (percentage)

Source: National Statistics Service of the Republic of Armenia

per. The export situation has a profound impact on the formation of budget revenue and on economic growth. Armenia tries to diversify the foreign trade turnover geography though developing and establishing trade and economic relations with other countries. **The unfavourable geographical location contributes to trade with the partners from the Post-Soviet countries:** Russia, Georgia, Belarus, Kazakhstan, and the countries within the region: Iran, Turkey and Middle East countries.

1.4 Investment

According to the latest data of Monitoring of CIS Mutual Investments (MMI – a joint project of EDB Centre for Integration Studies and IMEMO RAS), the foreign direct investment (FDI) of Armenia within the region are placed in Kazakhstan (production of alcoholic beverages, food products) and Georgia (processing of crop products, production of foodstuff, production of cigarettes, hotel business). The scope of investment in the projects is from \$1 million to \$5 million. **The total of Armenian FDI within the region is below \$20 million. Armenia remains a major net importer of investment.**

Table 3 — Gross inflow of foreign investment in real economy of Armenia from 1988-2012, \$ thousand

	Gross flows		Share (percentage)	
	Total of investments	Including direct investments	Total of investments	Including direct investments
Total	7,936,930.3	5,895,302.1	100	100
Including				
Russia	3,292,803.1	2,480,026.6*	41.49	42.07
France	957,779.1	911,810.5	12.07	15.47
Greece	478,787.1	301,689.8	6.03	5.12
Germany	405,069.4	379,153.5	5.10	6.43
USA	393,103.1	244,635.6	4.95	4.15
Lebanon	388,678.5	316,795.6	4.90	5.37
Argentina	377,697.3	167,216.6	4.76	2.84
Canada	319,407.9	145,128.6	4.02	2.46
Netherlands	166,071.6	29,460.2	2.09	0.50
United Kingdom	141,966.2	87,207.1	1.79	1.48
Cyprus	129,091.0	118,276.1	1.63	2.01
Switzerland	103,366.9	9,0735	1.30	1.54
Luxembourg	86,437.3	62,688.3	1.09	1.06
Italy	57,223.3	56,860.4	0.72	0.96
<i>Kazakhstan</i>	<i>22.8</i>	<i>22.8</i>	<i>0</i>	<i>0</i>
<i>Belarus</i>	<i>197</i>	<i>197</i>	<i>0</i>	<i>0</i>

Source: National Statistics Service of the Republic of Armenia

* The data presented in Table 3 are based on the balance of payments, hence errors may be made in the determination of the country of investment origin, therefore find below the statistics based on MMI, which allows to determine more precisely the country of investment origin.

From 1988 to the end 2012 the Armenian economy received \$7.58 billion of foreign investment, from which \$5.54 billion is FDI.

Direct investment of the CU countries in Armenia according to MMI is mostly represented by Russia's direct investment, which by the end of 2012 amounted to \$2.83 billion. Kazakhstan and Belarus take another \$13 million of FDI in the Armenian economy. Russia is a major investor in Armenia. Russian investments comprise about 41.5% of all FDI in Armenia; France ranks second (12.1%); and Greece ranks third (6%). Russian FDI in Armenia is allocated for modernization of systemic economy sectors: railway transport, gas transportation, electrical power industry, nonferrous metal industry, banking and insurance, cellular communication, internet and data transmission.

In 2012, foreign investment was allocated as follows: extraction of metal ores – \$282.7 million (37.6% of the total investment volume); telecommunications – \$107.6 million (14.3%); mining industry and use of discovered deposits – \$93.8 million (12.5%); real estate operations – \$56.1 million (7.5%); production of beverages – \$32.7 million (4.3%); supply of electricity and gas – \$31.3 million (4.2%); retail – \$25.1 million (3.3%).

Laissez-faire laws and flexible tax treatment, as well as the available skilled labour

Investment industry	Investor company	Investee	Project commencement year	Cost as of the end of 2012, \$ million
Electric power industry	Gazprom	5th unit of Hrazdan TPP	2006	456
Electric power industry	Inter RAO UES	100 percent in Electric Networks of Armenia CJSC	2006	260
Electric power industry	Inter RAO UES	100 percent in OJSC HrazTPP (Hrazdan TPP –four units)	2011	31
Telecommunications	MTS	80 percent of K-Telecom CJSC	2007	160
Telecommunication	Vimpelcom	100 percent in Armentel CJSC	2006	131
Gas transportation and sale	Gazprom	80 percent in ArmRosgazprom	2002	402
Railway transport	Russian Railways	100 percent – 1 share in South Caucasian Railway CJSC	2008	187
Banking	Troika Dialog	Ameriabank CJSC	2007	63
Banking	Prometey City, Zakneftegazstroy Prometey, RF citizen V.S. Gevorkyan	Prometey Bank LLC	1991	36
Banking	VTB Group	100 percent in VTB Bank (Armenia) CJSC	2004	35
Banking	Gazprombank	100 percent in Areksimbank CJSC	2007	31
Production of non-ferrous metals	RUSAL	100 percent in RUSAL ARMENAL cjsc	2000	57

Table 4 – Major Russian projects, FDI in Armenia according to MMI CIS data

Source: CIS EDB, (2013b)

force are important incentives for investment inflow to Armenia. The republic implements an “open door” policy in respect of investments. This policy is set out in legislation: in the Armenian law “On Foreign Investments” adopted in 1994; in the Investment Policy Concept adopted in 2005; and in other investment-related legislative acts regulating the economic environment. Armenia is also a member of MIGA (*Multilateral Investment Guarantee Agency*). *MIGA is an international organization offering investment risk insurance.* It is a party to the Convention on the Settlement of Investment Disputes between the States and Nationals of Other States, and a member of the International Centre for Settlement of Investment Disputes. MIGA inspires therefore additional confidence of foreign investors. According to Economic Freedom Index (“Doing Business”) Armenia keeps ahead of all CIS countries in terms of investment climate and ease of doing business. In the annual rating of ‘Doing Business – 2013’ of the World Bank and the International Finance Corporation (IFC), Armenia went up 18 points from the 50th to the 32nd position. The position of the other Post-Soviet area countries was: Georgia (9th) retaining the lead; Estonia (21st); Latvia (25th); Lithuania (27th); Kazakhstan (49th); Belarus (58th); Azerbaijan (67th); Kyrgyzstan (70th); Moldova (83rd); Russia (112th); Ukraine (137th); Tajikistan (141st); Uzbekistan (154th).

1.5 Customs tariff regulation

Armenia has a laissez-faire foreign trade regime consisting of: simple dual rates for import (0% and 10%); duty-free export; and an absence of sales quotas. Import and export licenses for local production are required only to satisfy public health, safety and environmental protection.

Ad valorem customs duty is applied in Armenia for the import of goods at the rate of 0% or 10%. Import duty of 0% is established mainly for the commodities that are not final consumption commodities. 10% import duty is imposed mainly on consumer goods and luxury articles.

The average rate of customs duties of the CU is somewhat higher than the import rate applied in Armenia. The average weighted rate of import duty in the CU is 7.6%, while the average weighted import duty rate in Armenia is below 3.5%.

The comparative assessment of the import duty rates of the CU and Armenia in four groups of foreign trade commodity nomenclature showed matching of rates for 128 positions, which is 10% of the total scope of nomenclature.

The commodities and means of transportation may cross the customs border of Armenia under 15 customs regimes established by the Customs Code of the Republic of Armenia. Whenever required, the governmental authorities of Armenia may carry out veterinary, phytosanitary and other controls.

The comparison of customs tariffs of Armenia and the CU shows that Armenia will have to increase the level of protection. The increase of customs duty rates will result in deficit reduction and trade reorientation; however this might cause problems with the WTO. The applied average weighted import duty rate in Armenia is one of the lowest rates used by WTO members. The MFN rate is 2.7% (in the CU: 7.6% in 2013,

1. THE IMPACT OF THE INTEGRATION INITIATIVES ON THE ARMENIAN ECONOMY

Categories	CU	RA	Categories	CU	RA
Animals	12.2	6.7	Chemicals	7.7	0
Fish and fish products	9.99	10	Plastics products	9.8	0
Dairy products	15.64	10	Leather, footwear	9	6.7
Fruit, vegetables, plants	10.8	10	Timber, paper	13.9	0
Tea, coffee	5.63	10	Cotton	10.7	0
Cereals	7.15	0	Textile	11	2
Other plant products	7	3.3	Clothing	13.1	10
Fats, olive oil	10.3	10	Stone, ceramic and glass items	14.9	6.7
Finished products	13.1	6	Pearls	17.8	0
Sugar, confectionery	6.3	10	Metals	9.8	2.5
Beverages, tobacco	22.4	5	Electric machinery	5.4	5
Mineral products (including fuel)	4.7	0	Transport	9.7	10
Pharmaceuticals	7	0	Devices	5	0

Table 5 – Average rates in Armenia and the CU Common Customs Tariff per commodity groups as of September 2012

6.9% in 2014, and 6% in 2015). Furthermore, Armenia does not use tariff quotas, 73% of tariff lines are duty-free, and most of the remaining tariffs are subject to 10% duty. The average weighted bound tariff of Armenia is 8.5% (Russia – 10%). In many sectors, in particular the service industry, the trade regime is even more liberal than that specified in the Armenia's commitments to the WTO.

In our opinion, a transition period will be required for bringing the rates closer to the CU tariff rates for some of the most sensitive tariff lines.

2. Evaluation of the effect of integration on the growth of the Armenian economy¹

2.1 Methodology

The econometric model developed by the authors for evaluation of the effects of Armenia's integration with the CU-SES and the EU is based on the approaches and findings set forth in the works of Harald Badinger (2001), Paul Romer (1990), Michael Demidenko (2012), reports of the EDB Centre for Integration Studies, and works of other authors. **The proposed model is based on the multiple regression model for the evaluation of the economic integration effect on GDP dynamics.** In such case the equation that should explain the GDP dynamics is evaluated. Hence, the form of functional relationship is close to the Cobb-Douglas production function in the modification of Paul Romer (*endogenous economic growth*). That is, the indicators of involved social product production factors (*capital, labour, and science and technology progress*) are used as the variables explaining GDP dynamics. The model is also added with artificial variables, which reflect and affect the economic integration process.

After evaluation of such a multiple regression equation in the historical period (*years 2000-2012*) it is potentially possible to perform an alternative (scenario) calculation, in which the economic integration variable is time-dependant (2014 and subsequent years). **The difference between the actual GDP values and the values calculated for the scenario-related changing variables of economic integration, shows the impact of integration processes on GDP dynamics.**

The mathematical economic evaluation of multiple econometric models that assesses the impact of integration effects of Armenia on GDP dynamics was as follows.

For the Customs Union:

$$\begin{aligned} \frac{\Delta Y_t}{Y_t} = & \alpha_1 + \alpha_2 \frac{\Delta INT_{1,t}}{INT_{1,t}} + \alpha_3 \frac{TRADE_{1,t}}{Y_t} + \alpha_4 \frac{TRF_{1,t}}{Y_t} + \alpha_5 \frac{\Delta K_t}{K_t} + \alpha_6 \frac{\Delta M_t}{M_t} + \\ & + \alpha_7 \frac{\Delta L_t}{L_t} + \alpha_8 \frac{\Delta F_t}{F_t} + \alpha_9 \gamma X_1 + \alpha_{10} \frac{\Delta Y_{t-1}}{Y_{t-1}} + \varepsilon_{1,t} \end{aligned}$$

$$K_t \equiv K_{t-1} + \Delta K_t; \quad K_{t-1} = \sum_{i=1}^3 [0.9K_{i,t-1}(1-\delta) + 0.1K_{i,t-1}]; \quad \Delta K_t = \sum_{i=1}^3 [GDI_{i,t} - FDI_{1,i,t}]$$

¹ A.T. Terzyan, PhD, Economics, T.A. Terzyan, PhD, Physics and Mathematics, associate professor, and T.G. Akopyan, PhD, Economics, associate professor, participated in the work on this chapter together with the writing team.

For the European Union:

$$\begin{aligned} \Delta Y_t / Y_t = & \beta_1 + \beta_2 \Delta INT_{2,t} / INT_{2,t} + \beta_3 TRADE_{2,t} / Y_t + \beta_4 TRF_{2,t} / Y_t + \beta_5 \Delta K_t / K_t + \beta_6 \Delta M_t / M_t + \\ & + \beta_7 \Delta L_t / L_t + \beta_8 \Delta F_t / F_t + \beta_9 \phi X_2 + \beta_{10} \Delta Y_{t-1} / Y_{t-1} + \varepsilon_{2,t} \end{aligned}$$

$$K_t \equiv K_{t-1} + \Delta K_t; \quad K_{t-1} = \sum_{i=1}^3 [0.9K_{i,t-1}(1-\delta) + 0.1K_{i,t-1}]; \quad \Delta K_t = \sum_{i=1}^3 [GDI_{i,t} - FDI_{2,i,t}]$$

where

i 1 – Customs Union,

2 – European Union

t From 2000 to 2012

Y_t Armenian GDP in year t

$INT_{i,t}$ $INT_{i,t}$ – level of integration in percentage in union i , where

$$INT_{i,t} = -PROT_{i,t} = -(T_{i,t} + TC_{i,t} + NTB_{i,t})$$

where

$PROT_i$ – protectionist measure (sign «-» shows that i -union established for Armenia in year t , depending on the integration level, the protectionist measure $PROT_{i,t}$);

T_i – tariff protectionist measure (*customs duty*) established by i -union for the trade with Armenia;

TC_i – trade costs of Armenia with i -union (*all costs except for customs duties established by i -union for the trade with Armenia*);

NTB_i – protectionist measure for non-tariff regulation established by i -union for trade with Armenia.

Tariff is calculated according to formula, thus enabling wider consideration (involvement into the scenario options) of integration effects:

$$T_{i,t} = \sum_{j=1}^{20/product\ group} \left(\frac{\text{tariff}_{j,t} \text{ value}_{IMP+EXP, j,t}}{\text{value}_{IMP+EXP, t}} + \frac{\text{tc}_{j,t} \text{ value}_{IMP+EXP, j,t}}{\text{value}_{IMP+EXP, t}} \right) \cdot NTB_{j,t}$$

where

$value_{IMP+EXP}$ – total trade volume of Armenia;

$\text{tariff}_{j,t}$ – average weighted tariff for a commodity group applied in the trade with i -union;

	$tc_{j,t}$ – average weighted costs for a commodity group with or without preference in the trade with i -union.
$\frac{FDI_{it}}{Y_t}$	Ratio between foreign direct investments received from i -union and GDP in year t
$\frac{GDI_t}{Y_t}$	Ratio between gross internal investments of Armenia and GDP
$\frac{TRADE_{it}}{Y_t}$	Ratio between foreign trade turnover of Armenia with i -union and GDP in year t
$\frac{TRF_{it}}{Y_t}$	Ratio between transfer receipts in Armenia from i -union and GDP in year t
$\frac{\Delta K_t}{K_t}$	<p>The following is highlighted in the capital growth rate:</p> <ul style="list-style-type: none"> – traditional portion of fixed capital consumption (<i>not related to technological progress realized in the capital</i>) – 90% of the total shift in capital $K_{t-1}=0.9 \cdot K_{t-1}$; – qualitative change in capital (innovative portion) – 10% of the total shift in capital $K_{t-1}=0.1 \cdot K_{t-1}$; <p>$\delta$ – capital consumption ratio (<i>presumably: about 5%</i>), which refers to the <i>traditional portion</i> of fixed capital consumption. Such a presumption is based on the fact of severe wear of equipment in the Armenian industry.</p> <p>It is assumed that the change in the capital productivity (<i>quality</i>) is defined as an unexplained component of growth in the economic growth assessment. Considering the severe wear of equipment in the Armenian industry, the changes in the capital productivity (<i>quality</i>) are explicitly connected with the unexplained components of growth.</p> <p>All industries:</p> <ul style="list-style-type: none"> • mining industry and open-pit mining; • processing industry; • supply of electricity, gas, steam and conditioned air; • water supply, waste treatment and processing, secondary raw materials; • construction; • information and communications.
$\frac{\Delta M_t}{M_t}$	Material inventories growth rate in Armenia
$\frac{\Delta L_t}{L_t}$	Labour cost growth rate in Armenia. – economically active population
$\frac{\Delta F_t}{F_t}$	Human capital asset growth rate. The value is expressed through education and science expenditures

γ, ϕ	Assessment of output elasticity in terms of energy resources (<i>oil and gas</i>) price increase. As practice of the latest years shows, such an assessment value is 0.2 or close to it
X_i	The share of proceeds in percentage point from imported oil and oil products and gas due to difference between the current price and integration-related price, which in the result of integration is lower than world prices
α_i	Unknown parameters for the Customs Union
β_i	Unknown parameters for the European Union
ε_{it}	Accidental error

Modelling of customs regulation and non-tariff measures

Protectionism level ($PROT_i$) of *i*-regional union is calculated as the sum total of weighted tariffs ($Tariff_i$), weighted “trade costs” (TC_i) and non-tariff regulation measures (NTB_i):

$$PROT_i = Tariff_i + TC_i + \sum_k NTB_{i,t,k}$$

where:

$i - 1$ (*Customs Union*), 2 (*European Union*);

$Tariff_i$ – average tariff for union i (*for manufactured goods*);

TC_i – “trade costs” in trade with union i ;

$\sum_k NTB_{i,t,k}$ – k of various non-tariff regulation measures with union i .

$Tariff_i$ is the protectionist value (at least approximate) of one i -union in relation to Armenia, and TC_i measures the average trade costs of an Armenian enterprise in the trade with i -union. The same is applied to NTB . In such case, the ($PROT$) index – **protectionist measure of i -union** with Armenia in different variants may be interpreted as common measure of the country’s integration with the CU or the EU.

Consequently, by summing up $Tariff_i$, TC_i and $\sum_k NTB_{i,t,k}$ the protectionist index is determined for Armenia ($PROT_i$) with i -union.

Multiplying the protectionist index ($PROT$) by (-1), we receive the integration index (INT) (*this purely technical transformation results in a variable factor for direction interpretation of integration*):

$$INT_i = (-1)PROT_i$$

$$INT_P_i = (-1)PROT_P$$

For scenario description, the following may be introduced additionally:

$$INT_LIBER_i = (-1)PROT_LIBER_i,$$

where

$PROT_P_i$ describes (*hypothetical*) **protectionist scenario**, i.e. absence of integration for Armenia since 2000; for the whole period it is equal to the external tariff determined for the country at the level of year 2000 plus *trade costs* 5%.

$PROT_LIBER_i$ describes (*hypothetical*) **liberalization scenario** (*preferential arrangements*), but without additional association of Armenia with the Eurasian Union or the European Union.

Integration of Armenia with the CU-SES – main conclusions:

Integration with the EU, with which Armenia has no common border, may bring certain results, but they are incommensurable with the results expected from integration with the CU within the SES. According to estimates, integration with the CU will exert decisive influence on the development of the Armenian economy.

Upon selection of any economic development strategy, Armenia's integration with the CU-SES is preferable on the following grounds. Firstly: **upon development of the national economy according to the current scenario based on expansion of domestic demand and pumping up of service industry, Armenia is highly interested in agreements guaranteeing free movement of workforce and capital.** Such agreements within the SES framework could guarantee sustainable development of the national economy. For the time being due to various reasons, the Armenian economy has been developing according to the scenario implying growth in domestic demand (final consumption of households and governmental sector in 2011 was 98%) on account of remittances and investments from abroad. Structural imbalances are obvious in the economy where the sectors oriented towards the domestic market prevail, i.e. the service sector. The share of construction, trade, transport and services in the country's GDP amounted to 60% in 2011, while industry and agriculture covered only 40%, though in 1996 the situation was exactly the converse (40% and 60% respectively). Such an economic pattern strongly depends on the volume of remittances, which stimulate final consumption of imported goods on the one hand (direct effect), and on the other hand allows smooth development of service industry, transport, construction and trade. A decrease in remittances will result in currency exchange rate problems, import reduction, and collapse of the mentioned sectors. As a consequence collapse of the financial sector may entail the most negative implications for the national economy. Without joining CU-SES, Armenia will have to follow an extremely risky development pattern according to the first scenario.

Upon selecting the export-oriented scenario, Armenia will open a window of possibilities in the event of fulfilling a number of conditions that are essential for its implementation:

1. **Access to a substantial and protected SES market for sale of products with high added value** (raw materials and non-ferrous metals in any case may be sold on the international market, but proceeds from sale of raw materials will not cover the country's need for currency).
2. **Solution of transport problem will lead Armenia out of transport deadlock.** Upon construction of Iran-Armenia railway and opening of Armenia-Georgia-Russia rail-

way, a very powerful communication hub of regional and international significance² may be created, which:

- will lead Armenia out of communication deadlock;
- will create reliable transport communication between the CU countries and the markets of Persian Gulf and South and Southeast Asia;
- will become a strong factor attracting Armenia and Georgia to the CU;
- will become the first international transport project in South Caucasus oriented towards support of Eurasian rather than European integration.

3. Inflow of investments in export sectors oriented to the CU-SES market.

However, for the most efficient implementation of investment strategy within the CU-SES framework it would be required to fulfil the following conditions:

1. **Within the CU integration framework, providing Armenia with certain preferences in receiving inexpensive energy, and construction of a new NPP, will minimize the dependence on the import of energy and will ensure the energy security of Armenia.** Access to inexpensive energy, first of all to natural gas, will enable the national economy to realize its growth potential and will create certain competitive advantages.
2. Opening of a number of strategic objects, inclusive of their cumulative effect, will not only facilitate direct GDP growth, but will concurrently create additional employment. **Optimal utilization of production capacity would be facilitated by free access to the CU common market. Armenian companies will have the opportunity to participate in tenders for public procurement within the whole CU space.**
3. Integration with the CU opens the prospects for making Armenia a transport and transit hub, **though a long-term political decision is required for opening a railway communication with Russia via Georgia.**

2.2 Short-term trade effects of CU integration

- Positive **effect from reduction in gas price** (presumably \$140 million per annum);
- Removal of other Russian export duties, for example, for rough diamonds;
- Possible **investments in oil refining** (construction of oil refinery) and oil supply for domestic use without any export duty;
- Possible indirect budget subsidizing through oil products (for example, budget may be supported through delivery of oil products at internal SES prices, thus enabling the state to collect additional taxes);
- **Increase in customs tariffs will have positive effect for the national budget.** The negative effect will be certain problems with WTO, and adjustment procedures are required, which supposedly will be made together with other CU countries.

² Congestion of railway routes to Turkey and Iran via Georgia, Armenia and Azerbaijan in Soviet times created (in mid 80s) the project for the construction of a direct railway from Vladikavkaz to Tbilisi. It was planned to overpass the Caucasus Mountain range through Argotsky tunnel having a length of 23 km. However, Georgia protested against the implementation of the project: the Georgian political elite referred to possible harmful environmental impact of the new railway. It was a mini-project of the North-South transport corridor, whose functions today may be taken by the Iran-Armenia railway — provided, however, that railway communication with Russia will be opened via Georgia.

2.3 Structural effects and economic growth in case of CU integration

The calculations made according to the above models show that the most significant growth factors of the Armenian economy are as follows:

- Economic growth lags four quarters behind the growth rate of the active economic population – with 1% population growth then the economic growth rate will be 0.17%.
- The investment rate is directly connected with the CU integration level (since 60% of direct investments come from CU countries) and has effect within the same quarter, the investment rate of 1% results in economic growth rate of 0.2%.
- The level of Armenia's integration with the CU has a positive effect, which lags two quarters behind. If the integration level (estimated using a specific index) is increased by 1% (*for example, through various preferential agreements*), then, under all other conditions being equal, in two quarters economic growth rate will increase by 5%.
- Remittances growth rate (*calculated in migration model*) has effect in three quarters. The growth rate of 1% results in economic growth rate of 1.1%.
- Commodity turnover growth rate has effect within the same quarter (*short-term effect*). The growth rate of 1% within the same quarter results in economic growth rate of 1.1%.

Direct GDP growth effect due to integration: Enhancement of integration through investments and export will increase the economic growth rate approximately by 20%. Additional GDP growth will be about 1%. Since remittances to Armenia in the event of integration may increase by 3% per annum, they may increase the approximate GDP growth rate by 4% (0.2% of additional GDP growth). Adjustment of mineral product prices with the CU prices, and removal of export duty in the event of integration in two years may result in approximately double GDP growth rate. These factors, as well as an increase in capital provided for the qualitative effect of economic growth.

The research findings enable us to state that in the process of integration with the CU, growth may be 1.5% to 2% (about \$200 million increase is forecasted in 2015, considering the fact that integration has an effect on the investment rate). In another two years, provided that mineral product prices will be adjusted with the CU process, additional GDP growth may be 4% (increase of about \$400 million). In the final report on the EU Association Agreement, the forecast long term increase is \$146 million. Armenia's GDP growth rate will be steadily high, which will ensure its economic security, after: construction of a new nuclear power plant with CU support; construction of the railway with Iran, and the North-South road; and the opening of railway communication via Georgia.

Armenia-EU Association Agreement – main conclusions:

Signing of an Association Agreement between Armenia and the EU may result in conflicts in integration with the CU countries. The implications may be as follows:

- **Increase in energy resource prices with an adverse effect for economic growth** (the EU will never compensate them), and increase of prices for the strategic commodities (no such products will be received from EU). Possible increase of duties and non-tariff restrictions from export of production from Armenia to the CU.
- **Considerable decrease in remittances from labour migrants.** EU Association Agreement does not provide for free movement of people to the EU countries. In addition, it should be taken into account that 85% of remittances come from Russia.
- **Reduction of direct investments from the CU to Armenia**, since it is obvious that they will be directed first and foremost to the CU countries and to the countries having agreements of integration with the Eurasian Economic Union. Only portfolio loans, and within a certain period grants, will probably come from the CU. No direct investments are implied. As practice shows, the economic effect of such loans and grants is poor, they may not compensate for direct investments.
- The EU is interested in obtaining non-ferrous metal ores from Armenia, and therefore agrees to lift restrictions for such products. However an **increase in revenue only from metal mining will hardly facilitate intensive growth and technical upgrading of the country**. In terms of strategic development and enhancement of economic security of Armenia, it may not counterbalance the economic growth of the republic due to integration with the Eurasian Economic Union.

2.4 Structural effects and economic growth in the event of EU agreement

The EU integration level and increase of remittances from EU has actually no effect on economic growth. The volume of the mineral resources trade with the EU does not have any effect on economic growth. The factors connected with the export terms for non-ferrous metal ores, with receipt of large scope of loans (their efficiency is significantly lower than the efficiency of direct investments, 42% of which have come from Russia) may affect favourably on economic growth. Thus, **the backbone factors have no real impact on economic growth in the event of EU integration.**

3. Analysis of integration effects in the energy and transport sectors of Armenia

3.1 Power engineering

The economic logic of a common electricity market is linear: the broader is its scope and the more versatile are the energy sources, the better. One of the prospective directions of cross-border development being of interest for the CU countries is the Armenia – Iran vector. (Vinokurov, 2012)

Energy security holds a specific place within the Armenian national security system. This fact is preconditioned by the experience gained in 90s, when Armenia’s power engineering suffered from the disintegration of the Soviet Union. Import of energy feedstock (through gas pipelines and railway) via Azerbaijan was suspended due to the conflict in Nagorny Karabakh, and since early 90s the only available supply possibility has been via Georgia.

Since the crisis of 1990s the issue of electric power system stability has been of paramount importance in the national security protection. This fact is manifested in the position it holds in the National Security Strategy of the Republic of Armenia.³ This document regards the Armenian-Russian relations as the factor securing energy independence of Armenia.

Today the strategic interest of Armenia in power engineering is focused on the creation of new energy infrastructure, and for it to guarantee the system stability after closing the Armenian nuclear power plant, and to increase the volume of electricity exports. **The projects include** (Karapetyan, 2008):

- construction of a new power supply unit of 1,000 MW at the Armenian nuclear power plant;
- construction of the 5th power generating unit of 440M MW at the Hrazdan TPP;⁴
- installation of a new gas turbine of over 200 MW at the Yerevan TPP;⁵
- construction of new hydropower plants;
- construction of wind farms having total capacity of 200 MW.

Construction of the Iran-Armenia gas pipeline is a significant achievement for Armenia. It is capable of importing up 2.3 billion m³ of natural gas per annum, which covers Armenia’s annual gas consumption. Today the gas pipeline passing via Georgia is functioning stably – Armenia has no need for Iranian gas. The gas, which comes to Armenia from Iran, is used for electricity generation and export to Iran. Nevertheless, in the

³ National Security Strategy of the Republic of Armenia was adopted by the Security Council headed by the president of the Republic of Armenia on January 26, 2007.

⁴ Construction was completed in mid 2010.

⁵ Construction was completed in 2011.

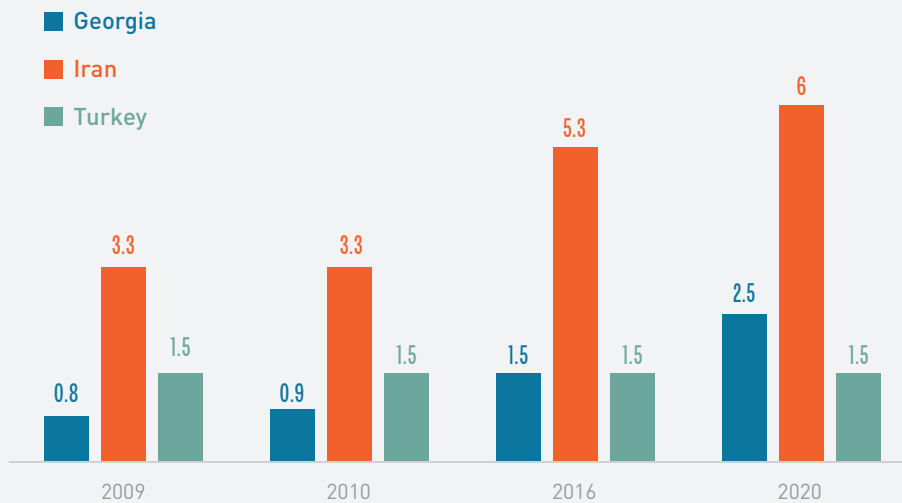


Figure 7 — Probable volume of electric power export from Armenia, considering the transfer capacities of interconnected lines, billion, kW-h

event of force majeure with the supply of Russian gas, this pipeline may provide stable functioning of the Armenian economy and the energy sector.

The logic of energy industry development in Armenia had **two main objectives: ensuring energy security of the country; and enhancement of technological capabilities in order to increase the export of electric power.** In the long run the electric power export will be mainly to Iran.

Considering the fact that the main electricity generating infrastructure in Armenia is owned by Russian companies, and gas comes from Iran and Russia, it is obvious that Moscow and Teheran are the key partners of Armenia in the sphere of power engineering. **With due regard to this circumstance, ‘is it possible for the EC Eastern Partnership programme to change the reality, and to redirect the energy sector development in Armenia to Europe’?** As of today the answer is negative, particularly, considering the fact that EU and European companies have no plans for infrastructural changes in the power industry of Armenia. At the same time, the Association agreement contains serious challenges for the energy security of Armenia. The challenges may be divided into the following three groups.

Armenia-Iran cooperation: The Association agreement, unlike the Free Trade Area Agreement, is a political document. It refers not only to deepening cooperation but also to the creation of foreign trade policy, including the underlying political concerns. From this perspective, **Iranian-Armenian relations are of great importance for Armenia, especially in relation to the EU sanctions against Iran resulting from its nuclear programme.** The EU has adopted additional sanctions against Iran, which are more severe than the sanctions of the UNSC. The significant question would be: Would Armenia be obliged to abide by those sanctions after having signed the EU Association agreement? In economic terms, this issue concerns mainly the energy sphere of Armenia, because it is the power industry that dominates in the Iranian-Armenian economic relations. If yes, it means that Armenia would be obliged at least to reject the idea of construction of product pipeline from Iran intended for the import of oil products, since the UN sanctions

exclude any oil-related cooperation with Teheran. **In the event of expansion of sanctions against Iran, they may totally cover the power industry, including the import of Iranian gas, and export of electricity to Iran.** This would then entail nullification of practically the whole range of Iranian-Armenian economic relations. It would make the Iran-Armenia gas pipeline, which is essential for national security, senseless.

However, we can state with assurance that even within the framework of the existing sanctions against Iran, the Iranian-Armenian projects will be affected.

As of today, some of the most prospective energy projects of Armenia and Iran are as follows:

- construction of product pipeline from Iran to Armenia, which will provide the import of Iranian petrol to Armenia in the volume up to 0.5 million tonnes per annum (the project has been discussed since 2009, and practically all technical details have been agreed);
- construction of oil refinery in Armenia, which will provide the processing of Iranian oil for its further sale on the Armenian and Iranian markets.

Due to the EU sanctions against the Iranian oil sector, both projects cannot be implemented, since Iranian oil is not allowed to enter EU territory in any form, and this would be likely to happen in case of Armenia's accession to the European Free Trade Area. So it is safe to say that EU association would definitely have an adverse effect on Iranian-Armenian energy sector cooperation.

Nuclear power engineering: Despite the stable functioning of the Armenian thermal power plants and Vorotan Hydropower Plant,⁶ **nuclear energy still remains the backbone of the Armenian energy sector, producing approximately 40% percent of Armenian electric power.**

Since the very first day of the Armenian Nuclear Power Plant's re-commissioning, many European countries, and subsequently also the EU itself, have expressed concerns about its safety. The nuclear reactor of the Medzamor power plant is evidently the only one in the world which was re-commissioned after a full closedown.

At the 6th meeting of the Armenia-EU Cooperation Council, Mr. Hugues Mingarelli, Deputy Director-General of the External Relations Directorate-General of the European Commission formulated the maximum assistance that Armenia could expect from Europe: *"If the government of Armenia takes steps to shut down the Armenian Nuclear Power Plant as soon as possible, the European Union would hold an international conference of the donor countries to raise the necessary funds for that"* (Mingarelli, 2005). As a matter of fact, this has to do solely with financing the safe shutdown of the plant and doesn't offer any viable alternatives for creating other electricity producing capacities.

The European policy in relation to the power unit is preconditioned by two facts:

- **Armenia is able to produce the required volume of electricity after NPP closedown.** In 2011, the fifth power unit commenced functioning in Hrazdan TPP; its capacity corresponds to the capacity of the nuclear reactor, which should be closed. In addition, Armenia implements a number of other projects, which are able to

⁶ It generates about 8% of electricity in the country.

compensate the closedown of the nuclear power plant. The projects include the construction of hydropower plants of various sizes; the largest of them with the capacity up to 400 MW will be built by Armenia and Iran in the Araks River.

- **After the Fukushima nuclear disaster, the EU attitude towards nuclear energy has become strongly negative**, though this industry keeps developing in France and the United Kingdom.

At the same time it should be expected that absence of opposition on the part of EU as regards the construction of a new power generating unit of the Armenian NPP does not imply that the plant will be constructed, since the **Armenian party will have to face two key problems:**

- **The doubtful prospects for attracting European investments** in view of the fact that no European company has ever expressed at least minimum interest in the construction of a new power generating unit at the Armenian NPP.
- **The sale of electricity** generated by the new plant at the domestic and external markets. This problem is directly connected with the fact that after signing the EU Association agreement Armenia would face the necessity to comply with the new energy security standards set forth in the EU Third Energy Package.

The EU Third Energy Package and the future of Armenian power engineering: The other significant challenge for the Armenian energy sector is the creation of the EU common electricity market within the framework of the “third energy package”. This may result in complete liberalisation of the energy sector within EU and in the states that have signed the EU Association agreement and free trade area agreement. The “Third package” implies, inter alia, the following two measures directly related to Armenia.

The first measure is the complete division of the sector into industries, where operators engaged in import of power carriers are separated from power generation, and visa versa. In terms of Armenian prospects it means the actual transformation of gas operator ArmRosgazprom CJSC, which, inter alia, imports gas to Armenia, and owns the largest fifth power generating unit of Hrazdan TPP.

The second measure is that EU member states are obliged to unbundle ownership in their energy sectors, thus securing free third-party access, including within the free trade framework. In fact, it means complete refusal to protect the national power generating companies, and passing to the system of “best proposal” selection. For Armenia such prospects may imply free access to the energy market of European companies, and the companies of the countries that have signed the Association Agreement. For example in Georgia a decrease in electricity prices is noted due to the development of an inexpensive HPP sector. In Armenia 1 kWh of electricity is currently 38 drams for public utilities, the equivalent in Georgia is 25 drams. Obviously, the electricity wholesale price is also low. **From this perspective, signing the EU Association agreement by Georgia and Armenia may open the Armenian market for Georgian exporters of electricity. This could be the beginning of the end for Armenian companies that produce electricity from expensive natural gas, which in the event of Armenia’s accession to the EU could become more expensive. This is a threat to Russian companies (including Gazprom) that have invested huge amounts in the Ar-**

menian energy sector, including for the construction of the 5th power generating unit of the Hrazdan TPP.

The possible reaction of the Russia to Armenia’s accession to the EU single energy space could be manifested in an increase of the natural gas price. Also the implementation of a number of energy projects within Armenia could be suspended including: the construction of a new NPP, expansion of the capacities of the Abovyan gas storage facility, reduction of investments in modernization, and re-commissioning of Hrazdan cascade HPP.

It should be noted that in methodological terms, the issue remains open of natural gas price calculation upon consideration of the economic prospects of Armenia-EU Association agreement. In particular, the studies made on request of the European Commission and covering the economic prospects of Armenia after accession to the EU Free Trade Area⁷, present the possible growth rates with consideration of the current situation both in Europe and Armenia. However, the following issue is essential: what would happen after the price increase of the goods imported from Russia due to Armenia not acceding to the CU? Obviously, in industries that strongly depend on the gas price – such as electricity production, agricultural greenhouses, and cement production – if the price of Russian gas increases then the prime cost of goods and services will increase. This would entail negative multiple effects for the economy in general, including the loss of competitive capacity of the Armenian national economy.

Armenia’s power engineering within the CU – problems and prospects: Consideration of the prospects of Armenia’s accession to the CU in terms of energy security is inseparably connected with the economic prospects of such accession.

It makes economic and technical sense for Armenia to remain beyond the “third package” limits of the EU energy policy. It should continue the expansion of technological capacity of electricity export to Iran, including the electricity generated by the new NPP. In order to attain this target, Armenia: firstly, has to build a new nuclear power plant, which will minimize the country’s dependence on import of energy; and secondly, it must get access to inexpensive energy, especially natural gas, which will enable the Armenian economy to develop under preferential conditions. Russia is the principal supplier of natural gas and the principal stakeholder interested in the construction of a new reactor of the Armenian NPP. We may assume that Armenia’s accession to the CU will open its access to Russian investment in the nuclear industry and to Russian natural gas. Armenia’s accession to the CU will not automatically entail the right to receive Russian or Kazakh gas at the internal Russian or Kazakh prices. In order to enhance Armenia’s interest in joining the CU, new mechanisms should be elaborated that assign certain preferences to Armenia for receipt of inexpensive energy. This would be due to its specific location of not having a common border with an EU country. Such a mechanism may be found both within the CU framework, and within a long-term Russian-Armenian gas agreement, fixing the gas price at a level close to internal Russian prices, including transit cost.

⁷ Available at: http://trade.ec.europa.eu/doclib/docs/2013/july/tradoc_151659.pdf

3.2 Transportation

Transportation and, in a wider sense, communication security play a critical role in the Armenian national security system. In many respects it is preconditioned by the political realities; the most important one is the blockage of Armenia by Turkey and Azerbaijan. The two longest borders of Armenia are with Turkey and Azerbaijan, and they are blocked due to political differences. This makes Armenia in terms of communication the most “closed-off” country of the world. Even Israel, conflicting with its Arabian neighbours has a more advantageous position than Armenia due to access to the sea, and its partly open borders with Egypt and Jordan.

Armenia is the aggrieved party of the Georgian Russian and Georgian Abkhaz relations, which have seriously complicated the possibility to use the Abkhaz portion of the railway connecting Armenia and Georgia to the Russian railway.

The communicational position of Armenia may be regarded as “deadlock”, since the country fully depends on freight transit via Georgia and Iran; however the country itself fails to play a critical role in the provision of freight transportation for its neighbours. This dramatically enhances the one-sided dependence of Armenia on its neighbouring countries. Considering this particular fact and the necessity to change the communication status of Armenia, we can identify the advantages and disadvantages of a certain integration model to be selected by Armenia. The potential can be highlighted of either model for leading Armenia out of the communication deadlock and for enhancement of its transport and transit potential.

On the one hand, opening the railway communication at the Abkhaz section may become a serious basis for better integration of Armenia into the integration unions of the Post-Soviet area, including the Customs Union. On the other hand, signing of DCFTA with the EU would open the path to the European market for Armenia and Georgia, and would make the Georgian route safer for the Armenian importers and exporters. Nevertheless, both models have their own serious problems.

Which new communications would be provided by the EU-Armenia Association?

The answer to this question is hidden in the political and economic position of Georgia rather than in the Armenian-European relations, **because Armenia’s integration into the international transport corridors depends, first of all, on the position of Georgia.**

In the negotiations between Armenia and the EU on the association agreement, the creation of new transport infrastructure has not been discussed. The modernization of Armenia-Georgia border section was discussed,⁸ which solves some technical problems rather than strategic issues. As for the new transportation infrastructure of strategic significance, there are neither agreements nor objective preconditions. Armenia is connected by railway to Georgia and to its largest port Poti, which provides access for Armenian importers and exporters to the international market.

Technically the Poti port itself and the transport industry of Georgia have to currently undergo a qualitative transformation. This may be provided by commissioning the Tbili-

⁸ The EU allocated €60 million for modernization of three border crossing points.

si-Ahalkalaki-Kars railway, which is intended for direct railway communication between Azerbaijan and Georgia, on the one part, and Turkey and Europe, on the other part.

This transportation hub **may be used only technically by Armenia for freight transportation within the EU Free Trade Area**. The political, rather than the economic factor, is of importance in this case.

Georgia, Azerbaijan and Turkey plan that the construction operation on the Kars-Ahalkalaki-Tbilisi (or Tbilisi-Ahalkalaki-Kars) route will be completed by end 2013, and this transportation hub will be operating as early as 2014. In fact, Kars-Ahalkalaki-Tbilisi railway has not aggravated and could not have aggravated Armenia's isolation. The railway has been built to solve the top priority economic problem of the development of freight transportation infrastructure and commodity turnover within Azerbaijan-Georgia-Turkey. Armenia has never been and is not participating in this.

The Kars-Ahalkalaki-Tbilisi railway is likely to play a serious regional role, as it will create a new transportation hub between Central Asia and Europe. Connecting the railways of Turkey and Azerbaijan may provide a good opportunity for the Central Asia countries to enter the international market, avoiding the use of Russian territory and railways for export and import of cargoes.

Meanwhile, it should be noted that theoretically **Armenia could be connected to the Kars-Ahalkalaki-Tbilisi railway through the EU Association agreement, which includes DCFTA**. Though such a prospect seems to be strange, since normatively after accession of Armenia and Georgia to the EU Free Trade Area, to which Turkey also belongs, Tbilisi and Ankara would have no reasons for rejecting the right of Armenian companies to import and export cargoes through that railway. Such a decision directly conflicts with the meaning of the EU Free Trade Area.

Nevertheless, Azerbaijan will be against such a prospect. This has been repeatedly declared by the country leadership: 'Armenia will not be allowed to have access to Kars-Ahalkalaki-Tbilisi railway'. Since Azerbaijan is the main party financing the railway construction, the chance of Baku exerting pressure on Tbilisi are rather high. The possible response of Georgia to Azerbaijan's objections is unclear. If the EU refuses to exert pressure on Georgia to abide by the rules of the Free Trade Area as regards the new railway, then Georgia will have a negative response to Armenia's proposals on the use of Kars-Ahalkalaki-Tbilisi railway. It would be a serious challenge for Yerevan, because in the event of Tbilisi's refusal to provide access of Armenia to the new railway **due to signing of the EU Association agreement, no changes can be made in the Armenian communication security system**.

Communication security of Armenia within the CU – problems and prospects: The prospects for communications development in Armenia and for improvement of its transportation security are connected with development of new transport infrastructure. This may underpin the security of the country and diversify the export and import routes. The lack of a common border with the CU diminishes the appeal of this integration project for Armenia, but only if within the CU and the Eurasian Unions it is not assumed to implement such projects, which may compensate for the absence of such border. **The projects include the creation of North-South international transport corridor (North-**

South ITC), and resuming the operation of the Abkhaz railway section, which connects Armenia via Georgia with Russia and other CU countries.

North-South ITC, Iran-Armenia railway and the significance of available railway communication with Russia: North-South ITC is of geopolitical importance, since it will connect the markets of South and Southeast Asia with Russia and Europe via direct railway, thus considerably lessening the burden of Suez Canal sea transportation. The significance of this aspect has increased significantly as Egypt has plunged into a lengthy crisis. We will highlight some prospective options for freight delivery from the Indian Ocean regions to North and Central Europe countries, and to Russia.

Option 1: via Bandar Abbas port through transportation lines of Iran to Amirabad port, then loading on the vessels and via the Caspian sea to Makhachkala port; in Makhachkala port loading on the railway and delivery via MTC No. 9 and Moscow-Voronezh-Rostov-on-Don-Makhachkala highway.

Option 2: From India to Iran, then by railway to the Iranian station Julfa – then through the crossing to Julfa in Nakhichevan, through Azerbaijan and Armenia to the Russian federal railways.

Option 3: from Iran to Armenia via the new railway, then via Georgia and Abkhazia to the Russian federal railway stations.

Option 4: construction of new branch railway line Kazvin (Iran) to Astara (Azerbaijan) is planned, which by-passing Armenia, will connect the railways of Iran and Azerbaijan. Hence, direct railway communication between Iran and Russia will become possible.

Kazvin-Resht-Astara is an indirect competitor of Armenia's prospective transport projects, the most important being the construction of the Iran-Armenia railway. Unfortunately, in the discussion of the Armenian railway construction issues, the focus is on commodity turnover between Armenia and Iran. Due to small volumes of and one-sided (about 80% of the total freight traffic falls on import from Iran to Armenia) Armenian-Iranian commodity turnover, the railway is unviable, and must not be built. Such a wrong approach fails to consider the fact that nearly all railways presently being constructed worldwide solve the regional rather inter-state issues.

The prospects of making Armenia a transit country, and a transportation hub, which open new opportunities for trade with the South Asia and Middle East, keep up to date the development of the CU as an organization open for changes, which will be in the process of continuous adaptation considering the nature and geography of its expansion, and interests of its new and prospective members.

4. Assessment of migration flows and remittances⁹

Armenia is a country with a long migration history. Both regular and irregular migration remains as an important phenomenon. From the commencement of the transition period Armenia lived through several migration flows, preconditioned by various reasons. However, it is difficult to assess the volume of migration flows due to non-availability of reliable statistical data. According to the estimates, migration varies from 800 thousand to 1 million people. Seasonal workforce migration in Armenia commenced in the early 1960s due to differences in socio-economic development of various administrative-territorial divisions of the country. In the 1990s, migration had a significant impact on availability of labour in Armenia. Emigration to other countries often involved the most educated, most skilled employees, thus having a serious impact on the professional structure of employment. The fact that remittances from abroad play an important social and economic role in Armenia, for examples in poverty reduction, is a direct consequence of labour migration. The assessment of migration flows may be only approximate, especially for the sending state. According to expert estimates of the State Migration Service and on the basis of sociological studies, within the period from 1988 to 2001, around 1.1 million people left Armenia. From 2002 to 2007, about 25 thousand people left the country, and around 60 thousand seasonal migrants. The estimated average number of migrants for the last five years is about 30 thousand people per annum, i.e. the growth is comparably slight. Among the reasons for migration from Armenia we should specify the economic, political, psychological and cultural reasons. Approximately 85% of Armenian migrants go to Russia. The others go west, *to the European Union and North America*.

Migration evaluation method: The evaluation of inter-state migration flows is characterized by a high level of uncertainty. This is preconditioned by the fact that the available statistical data related to the flows of labour migrants fail to reflect the actual situation, as well as by the differences in the statistical information in the sending country and in the recipient country.

For the purpose of migration quantitative analysis, the researchers apply *four* main analysis tools: linear regression model, gravitation model, Markov chain model, matrix population model.

We apply the proposed econometric record of “*gravitation model*” in relation to regression model, where the ***intensity of migration flows between two countries*** is taken as an explainable variable.

The researchers of this project along with the gravitation model used an additional equation, describing the migrants behaviour in recipient countries (in particular, it refers to the volume of transfers), by introducing the assumption of behaviour of the studied agents, whose activities are aimed at utility maximization. The official average wage in the recipient country is chosen as that behaviour variable.

⁹ A.T. Terzyan, PhD, Economics, T.A. Terzyan, PhD, Physics and Mathematics, associate professor, and T.G. Akopyan, PhD, Economics, associate professor, participated in the work on this chapter together with the writing team.

The quarterly statistical data of the National Statistics Service of Armenia, of the World Bank and other sources were used for evaluation of regression models. The research scope includes quarterly data for years 2000–2012. As regards the indicators, for which no quarterly data were available, the quarterly data were presented on the basis the analysis of their annual change dynamics and experts estimates.

General view of the model: The following coupled multivariate regression models were used in the final form in order to evaluate the migration flows and transfer receipts of Armenia.

Migration model:

$$M_{i,t} = \gamma_1 + \gamma_2(y_{i,t} - y_t) + \gamma_3(u_{i,t} - u_t) + \gamma_4 DIASP_{i,t} + \gamma_5(Manuf_{i,t} - Manuf_t) + \gamma_6(HD_{i,t} - HD_t) + \gamma_7(G_{i,t} - G_t) + \gamma_8 EEP_i + \varepsilon_{i,t}$$

Transfer model:

$$TRF_{i,t} = \lambda_1 + \lambda_2 w_{i,t} + \lambda_3 M_{i,t} + \varepsilon_{i,t}$$

Table Independent variables of multivariate regression model

i	1 <i>Customs Union (CU)</i> – Russian Federation, Belarus, Kazakhstan 2 <i>European Union (EU)</i> – France, Germany, Czech Republic, Sweden, Holland
t	From 2000 to 2012
$M_{i,t}$	Amount of migration flow from Armenia to the CU or to the EU in year t
y_t	GDP per capita in Armenia in year t (<i>\$ per capita</i>)
$y_{i,t}$	GDP per capita in CU and EU in year t (<i>\$ per capita in CU or EU</i>)
u_t	Unemployment rate in Armenia, percentage
$u_{i,t}$	Unemployment rate in CU or EU, percentage
$DIASP_i$	Size of Armenian diaspora in CU or EU (<i>appeal ratio for migrants</i>)
$Manuf_t$	Industry level of Armenia in GDP, percentage
$Manuf_{i,t}$	Industry share in GDP of CU or EU, percentage
HD_t	Human Development Index in Armenia (<i>the value is between 0 and 1; the closer to 1, the higher is the human development potential</i>). Human development index (1990–2012)*. Human Development Index (HDI) – integrated index calculated annually for inter-state comparison and measurement of living standard (valued through GNI per capita per PPP in US dollars), literacy (average number of years of education), education and longevity as main characteristics of human potential within the territory under study. It is a standard tool for general comparison of living standards in different countries and regions.

$HD_{i,t}$	Human Development Index in CU or EU (<i>the value is between 0 and 1; the closer to 1, the higher is the human development potential</i>).
G_t	Gini index for Armenia (<i>the value is between 0 and 1 or percentage; the closer to 1, the less fair</i>). Gini index (1996–2008**).
$G_{i,t}$	Gini index for CU or EU (<i>the value is between 0 and 1 or percentage; the closer to 1, the less fair</i>).
EEP_i	General rules acceptance index for the Single Economic Space (<i>the index is either 0 or 1</i>).
$TRF_{i,t}$	Transfer receipts in Armenia from CU or EU
$w_{i,t}$	Wage level in the union (<i>accounted average monthly nominal wage of employees, \$</i>)
γ	Ratios for explaining variables for CU or EU upon evaluation of migration flows
l	Ratios for explaining variables for CU or EU upon evaluation of transfer receipts
ε_{it}	Accidental error

* Available at: <http://hdrstats.undp.org/en/countries/profiles/ARM.html>

** Available at: <http://www.tradingeconomics.com/armenia/gini-index-wb-data.htm>

Since the specific task set for the research was to evaluate the impact of the integration with the CU or with the EU on the economic performance of Armenia, migration and transfer models were presented for the CU and for the EU respectively, and calculations were made for each of them.

Migration and remittances in the event of accession to CU-SES

It is obvious that migration is caused primarily by a visa-free regime, difference in per capita GDP in the CU and in Armenia, and the size of Armenian diaspora. Considerable increase in production in the CU with the same rate of production in Armenia also results in a migration increase. Migration to the CU is caused by difference between per capita GDP: in the CU \$10,909.5 in 2012; and in Armenia \$3,337.9. With a \$2 increase in the difference, the number of migrants on average increases by 1 person. The increase of Armenian diaspora in the CU, which currently includes 2.2 million people has a magnetic effect. The ratio between the Armenian diaspora in the CU and in the EU (0.71) results in an increase of the number of migrants.

Remittances are about 15% of the republic's GDP (\$9.9 billion), of which 85% come from Russia. In 2012, the remittances from Russia amounted to 64.5% of the Armenia's national budget. In the CU the average wage is \$718, in Armenia it is \$295. An increase of the average wage in the CU by \$1 increases the remittances by approximately \$1 million. The existing socio-economic relations between Armenia and the CU, in par-

ticular, between Armenia and Russia, have a considerable impact on the scope of transfers. The quarterly growth of the scope of remittances is estimated to be **\$9 million, and annual approximately \$36 million, thus increasing the annual scope of remittances from the CU to Armenia by approximately 3% (forecast).**

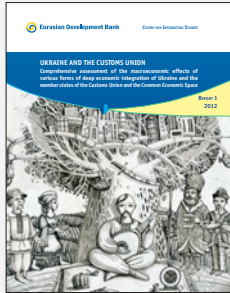
Migration and remittances in the event of signing the EU agreement: Notwithstanding the great difference in per capita GDP in Armenia and in the EU (in 2012 it was \$3,337.9 in Armenia and \$33,677.3 in EU), its impact on the migration to the EU is insignificant. Unemployment in Armenia is about 20%, in the EU 11.2%. The unemployment difference between the EU and Armenia does not have a noticeable effect on migration. Unlike for the CU, the difference between Gini Indexes of EU and Armenia has a certain impact, though a slight one. This is because the social and economic equity factor is higher in the EU. **It is obvious that the impossibility of free movement, employment difficulties, financial and language problems are the obstacles to migration from Armenia to the EU.**

Average wage in the EU (\$3,140 in 2012) is higher than in the CU (\$718), however, its impact on remittances is rather insignificant in comparison with the CU (two orders lower). While the language, the possibility of visiting countries, historical ties have positive effect on the remittances from the CU, in the EU these factors fail to play any significant role, and they are added to with a stricter banking system. Also when entering the EU migrants must have a considerably higher amount of money, than in the CU.

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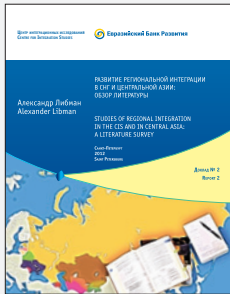


Comprehensive assessment of the macroeconomic effect of different forms of intensive economic cooperation by Ukraine with the member states of the Customs Union and the Single Economic Space within the framework of the Eurasian Economic Community (EEC)

The main goal of the project is to assess a macroeconomic effect of the creation of the Customs Union and Single Economic Space of Russia, Belarus and Kazakhstan, and to determine prospects of the development of integration links between Ukraine and the CU. The project was conducted by the team of five research institutions. The results presented in the Report have been widely recognized and become standard.

Available in Russian and English.

<http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/ukraine/>



Studies of Regional Integration in the CIS and in Central Asia: A Literature Survey

This report, published under auspices of the EDB Centre for Integration Studies, summarizes both international studies in the area of regional integration within the former Soviet Union and Russian language materials on this issue, reviewing the research papers and publications in the area of economics, political studies, international relations and international political economy, law and area studies.

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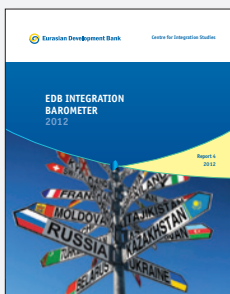
http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/CIS_CentralAsia/



Assessment of the economic, institutional and legal impact of labour migration agreements within the framework of the Single Economic Space

The project included analysis of two labour agreements that came into force on January 1, 2012 within the SES of Russia, Belarus and Kazakhstan. It analyzes their economic and social impact on labour migration processes, labour market and productivity, strengthening of the regional economic relations.

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/labour_migration/

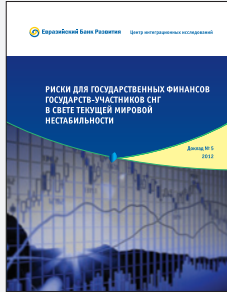


EDB integration barometer 2012

The EDB Centre for Integration Studies in cooperation with the Eurasian Monitor International Research Agency examined the approaches of population to regional integration.

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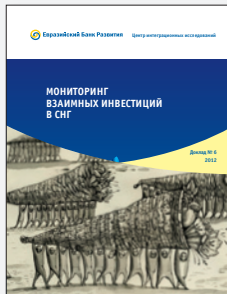
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Threats to public finances of the CIS in the light of the current global instability (in Russian)

The Report deals with the assessment of the risks for the government finances of the CIS countries in the light of current world instability. The report was conducted at the request of the Finance Ministry of the Republic of Kazakhstan, and presented at the permanent council of the CIS Finance Ministers.

<http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/risks/>



Monitoring of Mutual Investments in the Member States of the CIS

The monitoring of mutual CIS investments provides analytical support for work conducted by state and supranational agencies on developing a suitable strategy for deepening integration processes throughout the post-Soviet space. The Centre in partnership with IMEMO (RAS) has created and is regularly updating the most comprehensive database up to date.

Available in Russian and English

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/invest_monitoring/



Customs Union and cross-border cooperation between Kazakhstan and Russia

Research on the economic effects of the development of industrial relations under the influence of the Customs Union in the border regions of Russia and Kazakhstan.

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/kaz_rus_e/



Unified trade policy and addressing the modernization challenges of the SES

The Report presents an analysis of the key economic risks arising under the agreement by SES participants of a foreign trade policy, formulates proposals on the main thrusts of SES Common Trade Policy, and names measures for its reconciled implementation.

http://eabr.org/e/research/centreCIS/projectsandreportsCIS/trade_policy/



SES+ Grain policy

Growth in grain production is propelling Kazakhstan, Ukraine and Russia to the leadership ranks of the global grain market. The Report systematically analyzes trends in development of the grain sector and actual policies and regulations in SES countries, Ukraine and other participants of the regional grain market.

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/grain_policy/



Technological Coordination and Improving Competitiveness within the SES

The report presents a number of proposals aimed at improving SES competitiveness within the international division of labour.

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/technological_coordination/



The Customs Union and Neighbouring Countries: Models and Instruments for Mutually Beneficial Partnership

The report proposes a broad spectrum of approaches to the fostering of deep and pragmatic integrational interaction between the CU/SES and countries throughout the Eurasian continent.

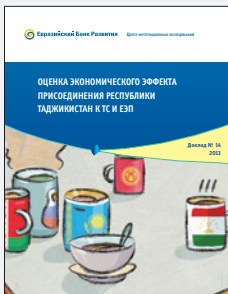
http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/cu_and_neighbors/



Labour Migration and Human Capital of Kyrgyzstan: Impact of the Customs Union

The report focuses on the effects of Kyrgyzstan's possible accession to the Customs Union (CU) and Single Economic Space (SES) on the flows of labour resources, the volume of cash remittances, labour market conditions and professional education and training in this country.

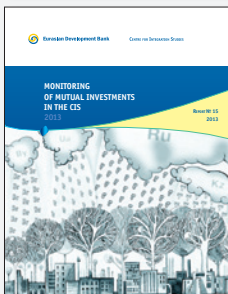
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Tajikistan's Accession to the Customs Union and Single Economic Space

Tajikistan's accession to the CU and the SES will have a positive economic impact on the country's economy. The Report includes a detailed economic analysis of the issue using various economic models and research methods.

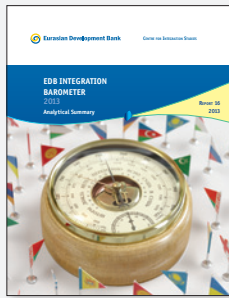
http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/Tajikistan_CU_SES/



Monitoring of Mutual Investments in the CIS

The report contains new results of the joint research project of the Centre for Integration Studies of EDB and the Institute of World Economy and International Relations of the Russian Academy of Sciences. It is aimed at the maintenance and development of the monitoring database of mutual direct investment in the CIS countries and Georgia. A general characteristic of mutual investments in the CIS at the end of 2012 is provided.

<http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/>



EDB Integration Barometer — 2013

The EDB Centre for Integration Studies in cooperation with the Eurasian Monitor International Research Agency examined the approaches of population to regional integration.

http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/integration_barometer/



Cross-Border Cooperation between Russia, Belarus and Ukraine

Cooperation between 27 cross-border regions of Belarus, Russia and Ukraine has significant potential; however the existing frontiers and barriers are a significant factor that fragments the region's economic space.

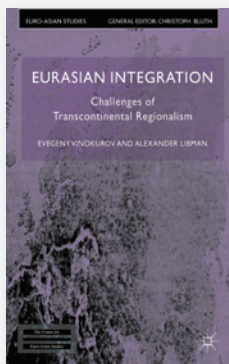
<http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/project16/>



Customs Union and Ukraine: Economic and technological cooperation in sectors and industries

The authors of the report study the issue of industrial and inter-industry links between the SES economies and Ukraine and come to a conclusion that cooperation between enterprises has been maintained in practically all segments of the processing industries, while in certain sectors of mechanical engineering this cooperation has no alternatives.

<http://www.eabr.org/e/research/centreCIS/projectsandreportsCIS/project18/>



Eurasian Integration.

Challenges of Transcontinental Regionalism

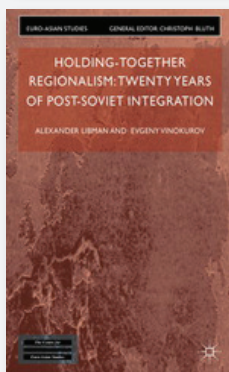
Evgeny Vinokurov, Alexander Libman

Basingtoke: Palgrave Macmillan

“Vinokurov and Libman have pulled together a tremendous range of information and insight about Eurasian economic integration. Their eminently readable book tackles an important and timely topic, which lies at the heart of global economic and political transformation in the 21st century.”

Johannes Linn, Brookings Institute

<http://eabr.org/e/research/centreCIS/monographsCIS/>



Holding-Together Regionalism: Twenty Years of Post-Soviet Integration (Euro-Asian Studies)

An in-depth analysis of one of the most important and complex issues of the post-Soviet era, namely the (re-)integration of this highly interconnected region. The book considers the evolution of «holding-together» groups since the collapse of the Soviet Union in 1991, looking at intergovernmental interaction and informal economic and social ties.

<http://eabr.org/e/research/centreCIS/monographsCIS/>