



Eurasian Development Bank

# Development Prospects for the Pharmaceutical Market of the Single Economic Space



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# Abbreviations

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CIS – Commonwealth of Independent States

CNS – central nervous system

EDB – Eurasian Development Bank

EMA – European Medicines Agency

GMP – Good Manufacturing Practice

INN – International Non-proprietary Name

FDA – Food and Drug Administration

GDP – gross domestic product

M&A – mergers and acquisitions

OTC – over-the-counter

R&D – research and development

SARS – severe acute respiratory syndrome

SES – Single Economic Space

The public segment of the Russian pharmaceutical market encompasses the sales of finished pharmaceutical products through pharmacies under the pharmaceutical benefits programme and through public medical and preventive treatment facilities.

A generic drug is a non-patented medicine that reproduces an original medicine for which the patent has expired. A generic may differ from the original medicine in the composition of additional substances.

Pharmaceutical benefits for some groups of citizens are a measure of the social support for citizens who are authorised to receive public assistance in Russia.

The commercial segment of the Russian pharmaceutical market encompasses the sales of finished pharmaceutical products and para-pharmaceuticals through pharmacies, without taking into account the sales under the pharmaceutical benefits programme.

The para-pharmaceutical sector produces additional pharmaceutical products, concomitant medicines and medical products for the prevention and treatment of diseases, alleviation of the patient's condition and hygiene.

Good manufacturing practice (GMP) is a system of norms, rules and guidelines governing the production of medicines.

# Key conclusions

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1. The pharmaceutical market of the Single Economic Space (SES) member states is characterised by the high level of imported products. National companies are ousted from the market by foreign producers. The barriers to the further growth of the sector include the increasing dependence on imports and the low competitiveness of domestic products. The largest importers of pharmaceuticals are the world leaders – Germany, India and France. Mutual trade in pharmaceuticals between the SES countries is insignificant compared to their foreign trade.
2. In recent years the pharmaceutical industry of the SES countries has been advancing rapidly. This is due to a strong increase in demand on domestic markets, which has outpaced the development of manufacturing facilities.
3. National producers in the SES orientate considerably towards their domestic markets and produce mainly generics and OTC drugs with short payback periods with support from the state. The level of dependence of the SES producers on exports to other countries in the region is insignificant.
4. The SES pharmaceutical market is different from the western markets in that it has low consumption per capita and a greater share of cheaper medicines. In recent years, however, following improvements in the population's financial situation, the structure of consumption has been changing. The demand for more expensive branded products is increasing.
5. National pharmaceutical producers in the SES make almost no investment into research and development (R&D) because of a lack of existing funds and restricted access to long-term finance.
6. Foreign companies set up joint ventures in the SES in order to benefit from the preferences provided to national producers.
7. The harmonisation of law in the framework of the Customs Union and the SES will foster the free movement of goods made in Russia, Belarus and Kazakhstan, a reduction in the prices of medicines and, in the longer run, an improvement in quality.

# Introduction

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The pharmaceutical market is a strategically important sector in any developed economy and the foundation of security in the area of healthcare and medical supplies. An advanced pharmaceutical industry contributes to the sustainable socioeconomic development of the respective country and to the improvement of the quality of life of its people. The present-day pharmaceutical industry is a high-tech sector, connected technologically with the chemical sector, agriculture, mechanical engineering and other industries and capable of generating a significant multiplier effect.

The pharmaceutical sectors in the SES countries have many things in common. Having become independent, the countries lost their economic ties, outputs fell and the supply of pharmaceuticals to these countries, from Eastern Europe in particular, decreased. The SES countries were faced with shortages of almost all sectoral products. To tackle this, in the 1990s they stimulated imports by loosening their customs and sectoral regulations. As a result foreign pharmaceutical companies strengthened their positions in the market and this caused further decline in domestic production, while the percentage of imported medicines increased every year. However, imported products were not always of high quality and safe and they were expensive. The dependence on imported medicines has affected the population's access to pharmaceuticals and resulted in the aggravation of social problems.

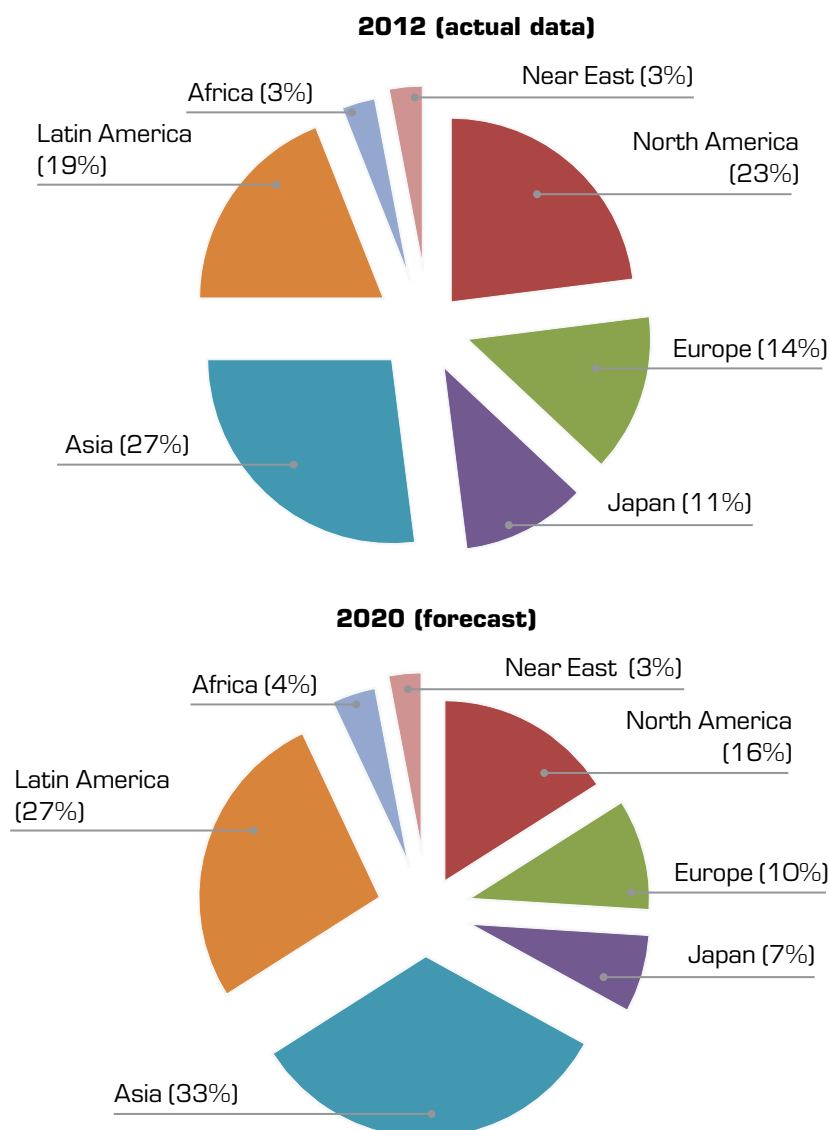
The situation called for the development of import substitution and the improvement of governmental regulation in the sector. The growth of the SES economies in the 2000s, the global tendency for longevity and population growth, the improved financial conditions, integration processes and other factors have fostered the advancement of the pharmaceutical market. Today the pharmaceutical industry of the SES countries is developing in a dynamic fashion and it is one of the most profitable sectors. However, it would be premature to talk about it having reached a high level.

The objective of this report is to analyse the current condition and development prospects of the pharmaceutical industry in the SES countries: Belarus, Kazakhstan and Russia, taking into account the establishment of the Customs Union and the SES. In addition, this paper reviews the main problems and the key opportunities for further development, especially given that the three countries have no customs barriers between them, and determines the possible measures to deepen integration in the region.

To prepare this report we used statistical data from various sources, which may differ significantly. This is because the SES countries use different approaches to recording and classifying pharmaceutical drugs. However, correlations between certain indicators and their structure have permitted us to make objective conclusions.

# 1. The Global Pharmaceutical Market

In this section we provide an overview of the global pharmaceutical market and the changes and latest trends in this sector. According to IMS Health Consulting, an international research company, in 2012 the size of the global pharmaceutical market reached \$940 billion. In monetary terms it grew by 6%. In the future the sector is expected to grow at no less than 3% to 4% a year and if this happens the market will reach \$1.2 trillion in 2016 and up to \$1.5 trillion by 2020. Another research company, Business Monitor International, has made a forecast for the size and geographical composition of the global pharmaceutical market in 2020 (see Figure 1.1).



**Figure 1.1.**  
Global pharmaceutical market (%)

Source: Business Monitor International, 2013

## 1. The Global Pharmaceutical Market

Geographically, three regions remain the leaders of the sector. These are North America, Western Europe and Japan. However, while in 2006 they accounted for 73% of the global market, in 2012 this figure fell to 48% and by 2020 it will reduce to 33%. What has caused this fall?

The global demographic, epidemiological and economic changes are transforming the pharmaceutical market. The world population is growing rapidly and is projected to rise from 7 billion in 2011 to 7.7 billion in 2020 and 9.6 billion in 2050, hence an increase in the demand for pharmaceuticals.

The ageing process also affects the demand. By 2020 about 9.4% of the world population (719.4 million people) will be 65 or above, compared with 7.3% (477.4 million) in 2005 (UN, 2013). Clinical advances reinforce this trend. The improvements of the past few decades have already converted some previously terminal illnesses into chronic conditions, thus increasing long-term demand for therapies to manage these diseases. Older people consume more medicines than younger people: four in five of those aged over 75 take at least one prescription product, while 36% take four or more. Therefore, the population age structure makes it possible to forecast an increase in the demand for medicines in this age group.

The demand for new antibiotics is also mounting, with the development of drug-resistant strains of some existing illnesses. Medical research has exposed problems that were previously unidentified – including risk factors like metabolic syndrome and conditions like chronic fatigue syndrome, which recent evidence suggests is linked to changes in gene expression in the white blood cells. New diseases, including mutated forms of old diseases, are surfacing.

Urbanisation and greater mobility have contributed to the introduction of new pathogens, some of which spread very fast and are very difficult to treat. The severe acute respiratory syndrome (SARS) moved from Asia to North America and Europe in a matter of days. Similarly, the H5N1 avian flu virus has spread from China and Southeast Asia to the Middle East. The human cost has been tiny so far, but the impact of an avian flu pandemic could be enormous.

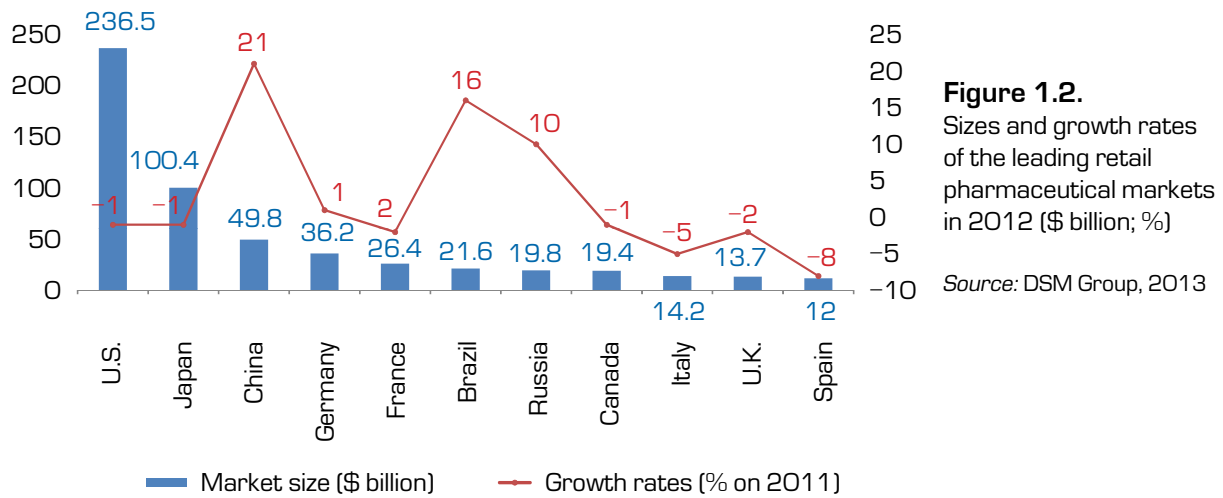
Environmental pollution and other environmental problems can also affect considerably healthcare in developing countries. An increase in the incidence of respiratory diseases such as asthma and bronchitis is a significant threat.

The markets of the developing world are altering even more radically than those of the developed world. Infectious diseases remain one of the main causes of deaths, in particular in sub-Saharan Africa and South Asia. But, elsewhere, chronic diseases are now the leading cause of death, a pattern that will become even stronger as the population of the developing world gets older, fatter and less physically active. In 2004, an estimated 639 million people living in developing countries suffered from hypertension. By 2025, the number is forecast to reach at least one billion. The number of people with diabetes in developing countries is expected to rise from 84 million in 1995 to 228 million in 2025, with India, the Middle East and Southeast Asia bearing the worst of the burden.

The demand for medicines that treat illnesses formerly associated almost exclusively with the developed world is thus expanding in the developing world. Poverty reduction and economic development will improve the financial conditions of people in developing countries and the actual demand for pharmaceuticals will grow accordingly.

This trend is confirmed by the growth rates and sizes of the pharmaceutical markets of the leading countries (see Figure 1.2).

This chart shows that China, Brazil and Russia, which were not among the top ten as recently as five years ago, are moving forward and outrunning the “traditional pharmaceutical leaders”. This, coupled with global and regional economic integration and the removal of many historical barriers to free trade, is incorporated in the development strategies of major pharmaceutical

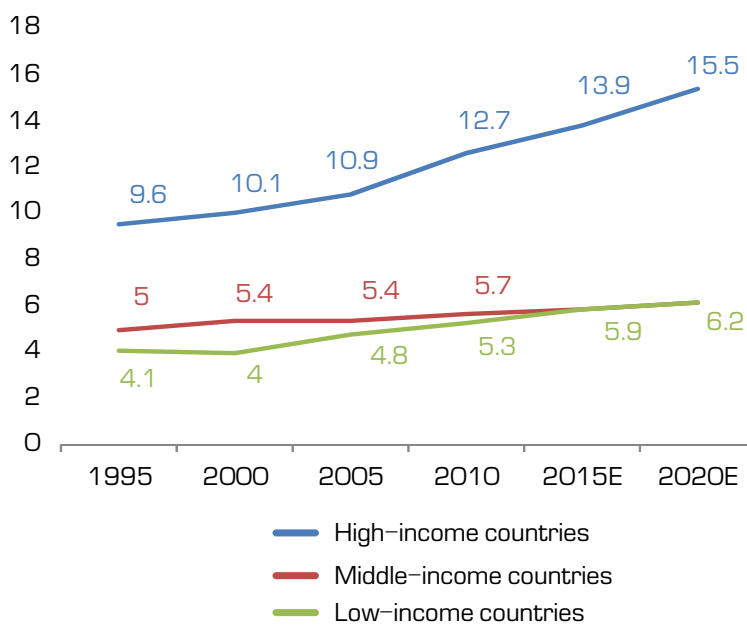


**Figure 1.2.** Sizes and growth rates of the leading retail pharmaceutical markets in 2012 (\$ billion; %)

Source: DSM Group, 2013

producers. The sector leaders are strengthening their positions in new markets and creating manufacturing facilities in or relocating to the main growth centres.

At the same time, health expenditure continues to mount all over the world. In particular, health expenditure as a percentage of the gross domestic product (GDP) is increasing in all countries (see Figure 1.3) and this pattern is the most significant in the mature markets that account for the largest part of the sector’s income. As a rule, the wealthier the country, the more it spends on health.

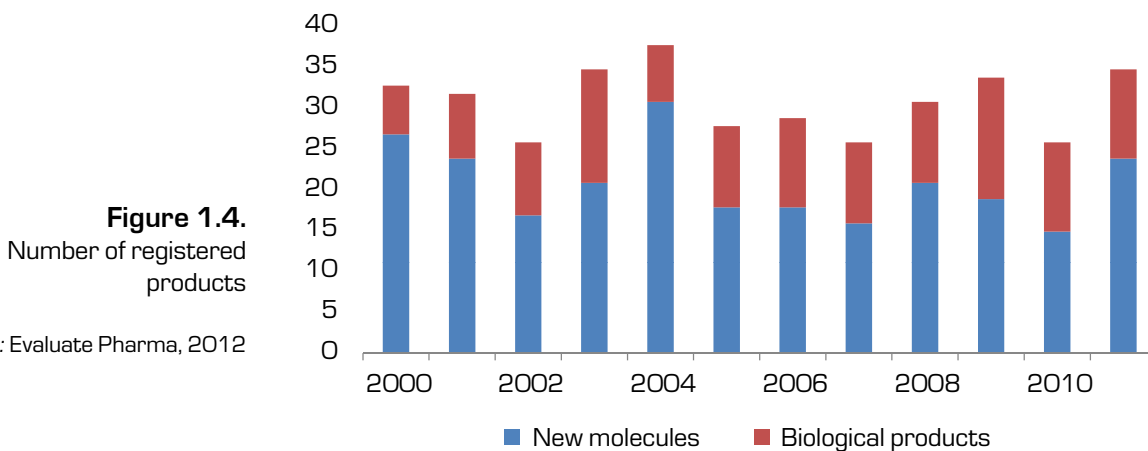


**Figure 1.3.** Health expenditure (% of GDP)

Source: The World Bank, PriceWaterHouseCoopers. Pharma 2020: The Vision. Which Path Will You Take?

Note: Actual data is provided for 1995–2010 and forecasts for 2015–2020

However, the pharmaceutical market faces some barriers. The production technologies for new products get more sophisticated while the volume of innovations goes down and the regulation of the market as well as the requirements for medicines and testing become stricter. There is already limited innovation introduced to the market and the R&D productivity is low. Over the past ten years the annual volume of medicines that are at the R&G stage has actually stagnated (see Figure 1.4).



The development and promotion of new medicines has become increasingly expensive. Between 1995 and 2005, the percentage of total corporate spending accounted for by R&D rose from 15% to 17.1%, while the percentage accounted for by sales and general administration rose from 28.7% to 33.1%. Sales and marketing is by far the biggest corporate expense. This increasing expenditure on sales and marketing could be seen as yet another sign of the paucity of innovative medicines reaching the market, since it is arguable that products for which there is real demand do not need to be promoted.

Many companies focus their efforts on disease investigations. Limited resources and high competition force them to concentrate on certain areas of production, shrink their product portfolios and toughen their approach to recruitment or prefer cooperation with the best specialists in the respective areas of research. The leaders of the industry acknowledge the advantages of “open innovations” and cooperate with universities. Some companies join out-of-competition federations where public and private institutions combine their resources to overcome common research problems.

The regulatory framework becomes stricter with the growth of the global trade. The European Medicines Agency (EMA) has introduced recently a new triune approach to managing adverse reactions. The US Food and Drug Administration (FDA) is developing a proactive medication safety surveillance system for the U.S. market (the so-called Sentinel Initiative). Another important factor is stricter price regulation. Most developed economies make use of direct and indirect methods to control the prices of medicines.

The situation in sales and marketing is even tougher. Many producers of original medicines will have their patents expire very shortly. This “patent cliff” and the mass production of generics will cause a significant reduction in prices as a result of which the income of the pharmaceutical market will decrease by \$148 billion between 2012 and 2018 (Son, 2013).

The companies that have a key medicine that accounts for a lion’s share of their sales will face the most difficult changes (see Table 1.1) – this is another confirmation that the invention of new pharmaceuticals is a pressing need.

The above table shows that today large pharmaceutical producers are deeply dependent on the sales of one or two medicines they call “blockbusters” if their sales exceed \$1 billion. ABBVIE’s Humira, for example, accounts for 45% of the company’s sales. It goes without saying that the expiry of the patent protect for this medicine will threaten their entire production. The table makes it clear that all pharmaceutical companies are rather vulnerable in this respect. In 2011 blockbusters accounted for an average of 20% of the total sales of the top ten companies. Market specialists estimate that this figure varies from company to company but in general it will not change significantly by 2016 and will presumably remain at the level of 20%.

Producer	Key medicine	Sales (2011, \$ billion)	Percentage of total sales (%)
ABBVIE	Humira	7.93	45
GlaxoSmithkline	Seretide	8.12	23
Johnson&Johnson	Remicade	5.19	21
Eli Lilly	Zyprexa	4.70	21
Astra Zeneca	Crestor	6.62	20
Roche	Rituxan	6.49	18
Pfizer	Lipitor	9.58	17
Sanofi	Lantus	5.45	14
MSD	Singulair	4.87	11
Novartis	Diovan	5.66	11

**Table 1.1.**  
Pharmaceutical companies' dependence on a key medicine

Source: Farmvestnik, No. 3, 2013, Moscow

Companies face significant problems and barriers when they introduce innovations to leading markets. Boehringer Ingelheim, for example, failed to have its Trajenta, a new anti-diabetic medicine, included in the highest priced category in Germany. The registering authority concluded that Boehringer Ingelheim had not proved the additional benefits of Trajenta compared to standard treatment. For a product to be included in the higher price category its benefits must be confirmed and, as a result, Boehringer Ingelheim decided not to introduce Trajenta to the German market.

All these factors affect the financial results of pharmaceutical companies. The years of 2011 and 2012 demonstrate the situation best (see Table 1.2) (the crisis of 2008 and 2009 and the post-crisis recovery of sales in 2010 distorted the actual picture of the market).

These tables demonstrate the various trends. The companies' performance confirms the significance and seriousness of patent cliffs. In 2012 Pfizer (the U.S.) alone expected a

Rating	Company	Sales			Net profit		
		\$ million		growth	\$ million		growth
		2011	2012	%	2011	2012	2012/ 2011 (%)
1.	Pfizer	65.259	58.986	-9.6	10.009	14.570	46
2.	Novartis	58.566	56.673	-3.3	10.998	11.511	5
3.	MerckSharpDohme	48.265	47.300	-2	11.697	11.743	0
4.	Sanofi	43.973	46.025	5	11.583	10.771	-7
5.	GlaxoSmithKline	44.394	42.845	-3.5	14.270	13.503	-5
6.	Roche	35.991	38.667	7.5	14.713	16.998	15
7.	Astra-Zeneca	33.591	27.973	-17	13.167	10.430	-21
8.	Johnson & Johnson	23.738	25.400	7	6.406	6.075	-5
9.	Abbott Laboratories	22.435	23.133	3	5.199	6.263	20
10.	Elli Lilly	24.286	22.603	-7	4.348	4.089	-6
11.	Teva	18.312	20.317	11	3.109	2.205	-29
12.	Takeda	18.583	19.088	3	1.529	1.909	25
13.	BristolMyersSquibb	21.244	17.621	-18	6.981	2.340	-46
14.	Amgen	15.582	17.265	11	4.858	5.119	5
15.	Boehringer Ingelheim	18.012	N/A		3.067	N/A	

**Table 1.2.**  
Global pharmaceutical producers rated by sales and net profit

Source: Companies' annual reports for 2013, Handelsblatt, 2012

## 1. The Global Pharmaceutical Market

fall in the sales of its blockbuster Lipitor (Atorvastatin) from \$9.58 billion to \$3.95 billion. Novartis, MSD, GlaxoSmithKline, Astra Zeneca and BristolMyersSquibb had the same problems. It seems that large pharmaceutical players are now at different stages of restructuring and overcoming their internal problems. Corporate savings programmes launched by most companies in 2011 have produced the first positive results on the net profit side.

In general, pharmaceutical companies pursue the following three paths to prevent a fall in income from being caused by the patent cliffs:

- 1) further consolidation and concentration by means of mergers and acquisitions (M&A);
- 2) further diversification of their business (with different approaches in this area); and
- 3) geographical expansion to markets with better development and growth prospects.

Some companies have demonstrated significant improvements as early as in 2012.

Sanofi (France), for example, has resumed growth after a period of stagnation. Its CEO Chris Viehbacher considers that the patent cliff has been overcome. Since 2008 the patents on six out of the seven Sanofi blockbuster drugs, including Plavix, have expired. On the whole, Sanofi has managed to come through the changes with better results than its competitors, including Pfizer, Glaxo, Astra and Lilly. The new management has undertaken the following:

- 1) bringing new diabetes and cancer drugs to the market. It plans to introduce sixteen new products before 2015;
- 2) acquisitions in the area of biotechnology (Genzyme, a U.S. company) and over-the-counter (OTC) business and, thereby, further diversification of its integrated business in the area of health; and
- 3) significant investments in R&D.

Not all pharmaceutical companies are that consistent and successful in solving their current problems. In 2012 they sought solutions in the further consolidation of the sector.

A total of 128 M&A transactions were closed in 2012. Their overall value was significantly lower than a year earlier, reaching about \$101.1 billion (-54.5%). The separate transactions also cost less, with only fourteen of them exceeding a threshold of \$1 billion. It seems that large players have paused to "digest" previous acquisitions. However, the M&A process will continue to be one of the key trends in the global pharmaceutical industry in the future.

There is also an opposite trend in the strategies of large pharmaceutical companies in this area. Some companies, primarily U.S. transnational multi-sectoral corporations, begin to split the conglomerates they have created over recent years into separate companies. Abbott (U.S.), for example, stated towards the end of 2012 that it intended to spin off its core pharmaceutical unit. A new company, ABBVIE, was founded which unites Abbott's global pharmaceutical business with the sales of \$17 billion and 21,000 employees. Abbott, which has been pursuing an aggressive expansion tactic in recent years, has changed its strategy radically in making this decisive step. Abbott's management explained that the spin-off and clear delineation of business sectors add flexibility and, in the eyes of investors, a clearer business profile and broader development prospects.

Large pharmaceutical companies are continuing to look for ways to support and improve their performance and mitigate the above negative effects on the industry. Considerable efforts are invested in enhancing the shares of large companies in developing markets. However, because of the lack of significant assets for acquisition, governmental protectionism and registration barriers in these markets, this choice is a rather complicated, protracted and controversial path.

No.	Buyer	Country	Target	Country	Business	Transaction value (\$ million)
1.	Bristol Myers Squibb	U.S.	Amylin	U.S.	biotechnology	7.000
2.	Alliance Boots	U.K.	Walgreens	U.S.	wholesale	6.700
3.	Watson	U.S.	Actavis	Switzerland	generics	5.600
4.	Baxter International	U.S.	Gambro	Sweden	biotechnology	4.000
5.	Hologic	U.S.	Gen-Probe	U.S.	biotechnology	3.700
6.	GlaxoSmithKline	U.K.	Human Genome Sciences	U.S.	biotechnology	3.600
7.	Valeant Pharmaceuticals	Canada	Medicis Pharma	U.S.	dermatology	2.600
8.	Bristol Myers Squibb	U.S.	Inhibitex	U.S.	biotechnology	2.500
9.	Agilent	U.S.	Dako	Denmark	biotechnology	2.200
10.	TPG Capital	U.S.	Par Pharmaceuticals	U.S.	generics	1.900
11.	Novartis	Switzerland	Fougera	U.S.	dermatology	1.530
12.	Reckitt Benckiser	U.K.	Schiff Nutrition Int.	U.S.	OTC drugs	1.400
13.	Astra Zeneca	U.K.	Ardea Biosciences	U.S.	biotechnology	1.260
14.	China Pharmaceuticals	China	Robust Sun Holding	Hong Kong	CNS drugs	1.200
15.	Amgen	U.S.	Micromet	Germany	biotechnology	1.160
16.	Takeda	Japan	URL Pharma	U.S.	generics	800
17.	Amgen	U.S.	Mustafa Nevzat Pharma	Turkey	generics	700

**Table 1.3.**  
Largest M&As in the pharmaceutical industry in 2012–2013

Source: SCRIP 100, 2013, IMAP report

As a result, the sector is expected to continue to consolidate by means of M&A and this will remain the leading trend. However, an increasing number of acquisitions involve companies with a high rate of innovation and higher profitability (such as biotechnologies) and lower governmental intervention (such as the OTC sector and diagnostics).

## 2. Pharmaceutical Market of the SES: Current Condition

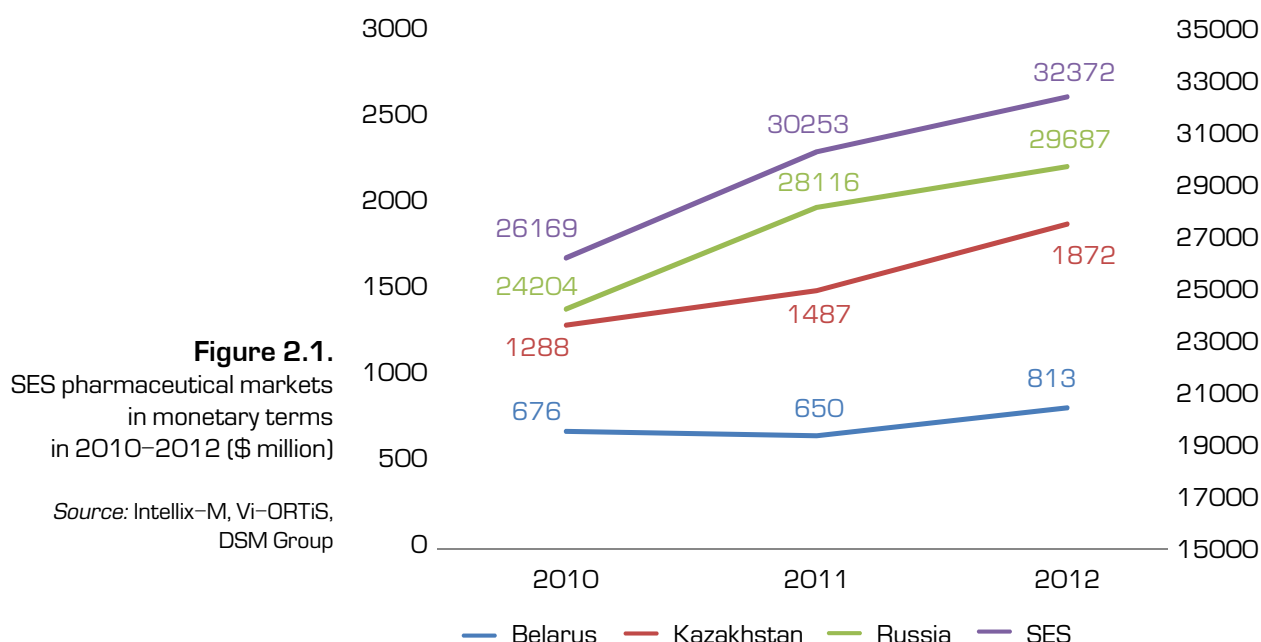
### 2.1. Main indicators in the SES pharmaceutical market

The pharmaceutical sectors of Belarus, Kazakhstan and Russia are among the most rapidly developing global markets today. In 2011 and 2012 their aggregate size grew by 15.6% and 7% respectively, reaching \$32.4 billion (see Figure 2.1).

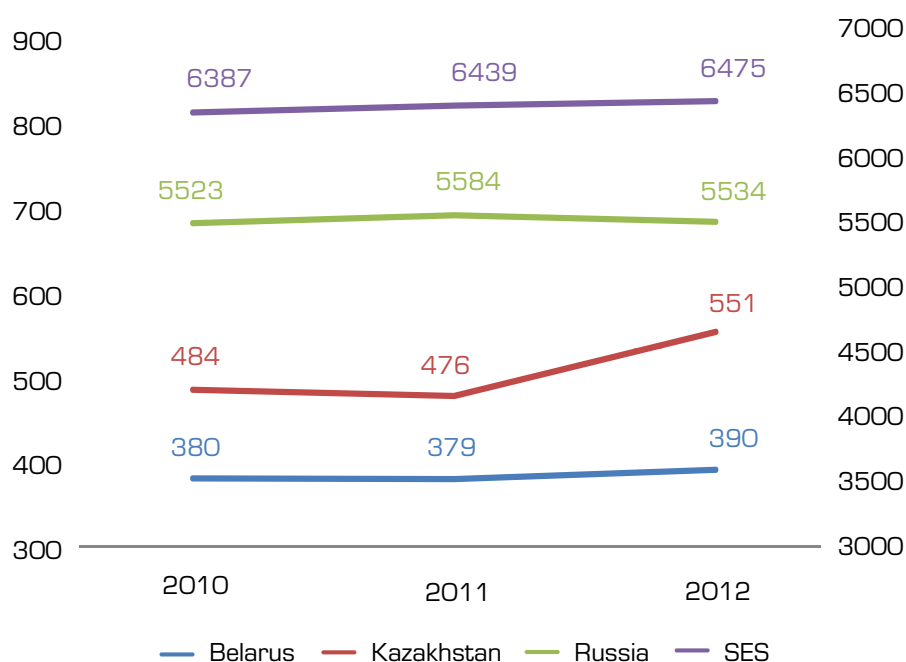
According to Intellix-M, a specialist research company from Belarus, the size of the country's pharmaceutical market in 2012 was 390.02 million packages (in physical terms) or \$813 million (in monetary terms). After a decline in 2011, the physical growth in 2012 was 2.88% while in monetary terms it stood at 25% if measured in U.S. dollars or 124% if measured in the national currency. This difference was caused by a currency devaluation in 2011, following which, in 2012, prices began to adjust to the devaluation level.

In Kazakhstan, according to Vi-ORTiS, a Kazakh consulting agency, 551.38 million of packages of medicines were sold in 2012 for a total of \$1,872.1 million. The increase on 2011 was 15.7% in physical terms and 25.9% in monetary terms (1.51% and 15.45% respectively in 2011 compared to 2010).

Russia is the SES' largest market in pharmaceuticals. According to DSM Group, a Russian analytical agency, in 2012 the Russian market grew by 5.6% year-on-year reaching \$29,687 million (a year earlier it grew by 16%). The physical size of the market remained practically unchanged over the two years, having increased by 1.1% in 2011 and decreased by 0.4% in 2012 and amounting to 5,534 million packages.



The physical size of the SES pharmaceutical markets has remained practically the same in recent years (see Figure 2.2). The monetary value of the market is rising because of the growth in the price of medicines, which is caused by inflation and consumer preference for more expensive drugs.



**Figure 2.2.**  
The SES pharmaceutical markets in physical terms in 2010–2012 (million packages)

Source: Intellix-M, Vi-ORTIS, DSM Group

The Russian market leads not only in terms of absolute quantitative indicators, but in relative figures as well (see Table 2.1). The average price of a package in the Russian market was \$5.364, which is significantly higher than in Kazakhstan (\$3.395) and Belarus (\$2.085).

The consumption of pharmaceuticals per capita is also significantly higher in Russia than in Kazakhstan and Belarus. In 2012 the monetary value of this indicator stood at \$207 a year in Russia, which is 1.9 times more than in Kazakhstan (\$111) and 2.4 times more than in Belarus (\$86).

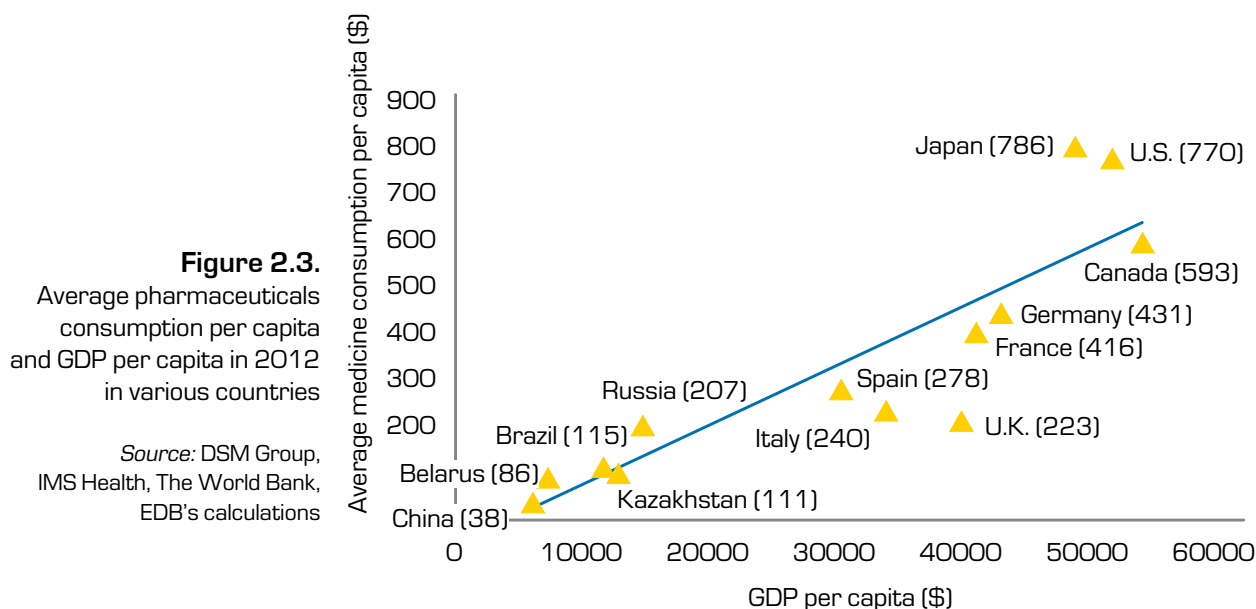
The differences in physical consumption per capita are less sizable, with Kazakhstan being on the top of the list (41.25 packages a year) followed by Russia (39.62) and Belarus (32.63).

Country	Belarus	Kazakhstan	Russia	SES
Population (million)	9.46	16.9	143.3	169.66
GDP per capita (\$)	6 685	12 007	14 037	13 425
Market size (\$ million)	813	1 872	29 687	32 372
Market size (million packages)	390.02	551.38	5 539	6 480.4
Average price per package (\$)	2.085	3.395	5.364	4.995
Average consumption per capita (\$ a year)	86	111	207	191
Average consumption per capita (million packages)	41.25	32.63	38.62	38.17

**Table 2.1.**  
SES pharmaceutical markets in 2012

Source: Rosstat, Belstat, Kazakhstan's Statistics Agency, The World Bank, Intellix-M, Vi-ORTIS, DSM Group, EDB's calculations

The consumption of medicines in the SES countries is lower than in the developed world, which is due, primarily, to the difference in the average per capita income. The higher GDP per capita, the higher drug consumption is (see Figure 2.3). In addition, consumption depends on the level of the system of public and insurance support. In the developed world medicines paid for by public or insurance sources accounts for 60–70%, while in the SES this figure is 25–38%.



## 2.2. The SES pharmaceutical industry

The SES countries have relatively small pharmaceutical sectors, accounting for less than 0.5% of GDP in each country. However, domestic production has been growing over recent years, along with consumption.

The structure of consumption changes with improvements in the financial conditions of the population. The demand for more expensive branded products is growing. This has a negative effect on the share of domestic producers in the market, which tend to specialise in the manufacture of cheaper generics.

**Table 2.2.**

Domestic pharmaceuticals in the SES in 2012

Source: Rosstat, Belstat, Kazakhstan's Statistics Agency, Intellix-M, Vi-ORTiS, DSM Group, EDB's calculations

Country	Market in medicines (\$ million)	Sales of local medicines (\$ million)	Share of local medicines (%)
Belarus	813	202	24.84
Kazakhstan	1,872	465	12.13
Russia	30,350	5,572	18.36

Belarus has the largest share of domestic medicines in its pharmaceutical market measured in monetary terms (24.84%). However, the percentage of domestic drugs is growing at an insignificant rate. In monetary terms the share of domestic products increased from 20.64% in 2009 to 24.84% in 2012 and in physical terms from 54.96% in 2009 to 58.91% in 2012.

In the crisis years of the 1990s the Belarusian pharmaceutical sector had only two enterprises – today it comprises over twenty manufacturers, including Belmedpreparaty, the Borisov Medicines Plant, the Nesvizh Medicines Plant, Minskintercaps, Pharmland, Dialek, Exon, the Isotron Plant, the Grodno Medicines Plant, Pharmtechnology and ENZYME, and others. All these enterprises are members of the Belbiopharm concern, which is the leader in the Belarusian market.

Corporation	Wholesale (\$ million)	Packages (million)	Share of the wholesale market in \$ (%)
Belmedpreparaty	56.49	56.33	6.95
Borisov Medicines Plant	35.73	79.46	4.4
F.Hoffmann La Roche	31.99	0.16	3.94
Novartis	29.27	4.78	3.6
Sanofi-aventis	28.35	4.57	3.49
Nycomed (a member of Takeda)	25.83	3.2	3.18
Lekpharm	23.38	12.27	2.88
Gedeon Richter	23.35	3.94	2.87
Pharmland	23.29	19.44	2.87
Bayer	22.65	3.42	2.79

**Table 2.3.**  
Belarus' top ten  
pharmaceutical suppliers  
in 2012

Source: Intellix-M

Historically, the production of medicines in Kazakhstan was insignificant. At present domestic manufacturers account for 12% of the country's pharmaceutical market in monetary terms (measured in the U.S. dollars), which is significantly less than in physical terms (24%, measured in packages).

Because of the growing consumption of pharmaceuticals, inflation and fluctuations of the exchange rate of the tenge, the production of pharmaceuticals has positive dynamics in the current prices.

Kazakhstan's pharmaceutical industry comprises over eighty firms. However, the top ten suppliers in Kazakhstan include only one domestic company – Chimpharm. The five largest companies account for 88% of the country's production in monetary terms. Chimpharm, Nobel, Global Pharm, Romat and Dospharm are full-service enterprises, which combine the development and introduction of technological processes, the production of medicines and their sales to health institutions and consumers through distribution and pharmacy networks. However, it is clear that in the medium term Kazakhstan's pharmaceutical market will remain orientated towards imports.

	Value (\$)	Packages
Sanofi-aventis	100,216,403.3	8,866,900
Chimpharm	90,957,374.07	89,367,639
F.Hoffmann La Roche	65,698,242.29	176,813
Nycomed Pharma	65,099,581.81	5,470,540
Bayer	61,201,724.35	1,907,700
Pfizer International Inc.	61,188,799.58	1,001,432
GlaxoSmithKline	61,047,217.53	6,919,549
Janssen-Cilag	60,449,645.39	459,592
Berlin-Chemie	48,584,447.99	11,483,904
Lek d.d.	46,915,431.12	7,180,542

**Table 2.4.**  
Kazakhstan's top ten  
pharmaceutical suppliers  
in 2012

Source: Vi-ORTIS

The share of domestic pharmaceuticals in the Russian market is 18.36%. According to the Russian Ministry of Industry and Trade, in 2012 the production of medicines stood at RUB 169.2 billion, up 18.3% on 2011 (in the prices of the respective years). As is the case with Kazakhstan, Russia's top suppliers include only one domestic producer, Pharmstandard, which ranks third in terms of sales and accounts for 3.6% of the market.

Investments in this industry have grown in recent years and new manufacturing facilities are being launched. However, imports continue to dominate the market.

The Russian pharmaceutical industry comprises about 550 enterprises and is a highly concentrated sector. The largest twenty producers manufacture 54.8% of all medicines in Russia.

**Table 2.5.**  
Russia's top ten pharmaceutical suppliers in 2012

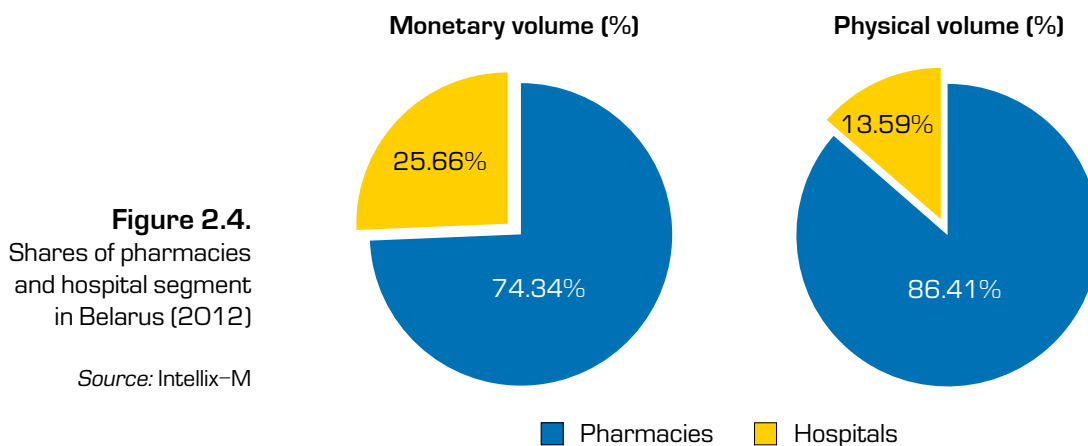
Source: DSM Group

Producer	Monetary value (RUB million)	Increase in monetary value (%)	Share (%)
Novartis	42,373.4	0.6	5.5
Sanofi-aventis	40,257.3	6.3	5.2
Pharmstandard	27,630.2	0.4	3.6
F.Hoffmann La Roche	23,674.5	10.1	3.1
Teva pharmaceutical	22,880.8	6.7	3
Takeda	22,249.4	16.7	2.9
Abbott	21,874.3	34.3	2.8
Bayer	20,707.3	12.4	2.7
Berlin-chemie	20,702.9	2	2.7
Merck	18,188.0	7.5	2.4

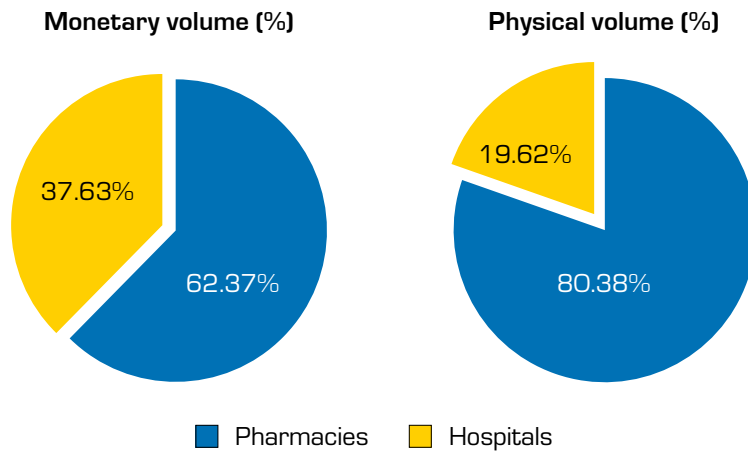
### 2.3. Public support

Public support has been one of the key drivers of growth in the SES pharmaceutical sectors in recent years, with public procurement for hospitals and pharmaceutical benefits programmes as the main form of this.

In Belarus the hospital sector accounted for 25.66% of sales in monetary terms and 13.59% in physical terms in 2012. These figures are significantly higher than in 2011 when the Belarusian economy faced difficulties. The growth of the hospital segment was 73.69% in monetary terms and 10.66% in physical terms.



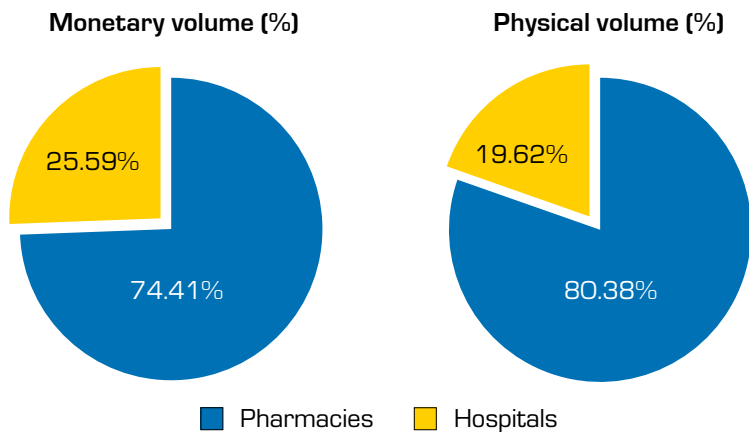
In Kazakhstan the state plays an important role in drug supplies. It has a single distributor, SK-Pharmacia, which was set up for this purpose in 2009 and which purchases and provides medicines and medical products to the population in the framework of the guaranteed free medical assistance programme. In 2012 the hospital segment had a higher share in monetary terms than in Belarus, reaching 37.63%. The physical volume was less than the monetary share, amounting to 19.62%.



**Figure 2.5.**  
Shares of pharmacies and hospital segment in Kazakhstan (2012)

Source: Vi-ORTIS

Russia's hospital segment had the following results in 2012: the state purchased 1,086 million packages worth \$7,596 million, which amounted to 19.62% and 25.59% of the total market respectively. The volume of public procurement in 2012 decreased by 2.6% in physical terms and 1.5% in monetary terms year-on-year, after a growth of 11% in 2011.



**Figure 2.6.**  
Shares of pharmacies and hospital segment in Russia (2012)

Source: DSM Group

In addition to public procurement, the sector receives other support from state programmes.

In order to decrease the level of imports, Belarus adopted the State Programme for the Development of the Import Substitution Production of Pharmaceutical Substances, Official Medicines and Diagnosticums for 2010–2014 and until 2020, which includes the following sub-programmes: Pharmaceutical Substances and Official Medicines, Phytopreparations, Diagnosticums and Professional Development for the Chemical and Pharmaceutical Industry. The programme will receive funding totalling BYR 600 billion. The largest portion of these funds (about 84%) will be used to modernise Belarusian enterprises and certify them to the GMP standard. One of the priorities is to set up the production of quality generics, which will be as good as their foreign-made analogues (Ryndova, 2011).

In accordance with Decree 174 of the President of Belarus, dated April 16, 2012, On Measures to Develop the Pharmaceutical Industry, Belarusian banks will be asked to provide loans to pharmaceutical organisations that are implementing investment projects to create, re-equip and reconstruct their production facilities. These loans will be provided against guarantees by the Belarusian government. Equipment, components and parts imported by pharmaceutical

organisations for investment projects are exempt from import duties and VAT from January 1, 2012 to January 1, 2016.

Nine pharmaceutical plants have introduced quality management systems compliant with ISO 9000. National GMP certificates were issued to certain production units of the Borisov and Grodno Medicines Plants, Belmedpreparaty and Exon. Minskintercaps' production facilities were fully certified. Over 100 medicines are manufactured to the GMP standards (which provide for the complete quality control at all production stages) and eleven production units were certified (Ryndova, 2011).

In Kazakhstan, the Pharmaceutical Industry Development Programme for 2010–2014 provides for public support, which includes long-term procurement contracts, the refunding of expenses for the implementation of the GMP standard and the reimbursement of expenses for the promotion of products abroad, among other measures. The programme's objectives are to ensure that 50% of the country's physical demand for medicines be satisfied by domestic production by 2014 and that all domestic manufacturers fully implement the GMP standard from December 2014.

The programme has stimulated advances in the industry. The industrialisation map of the State Programme for Boosted Industrial and Innovative Development comprises 27 pharmaceutical projects totalling more than KZT 35 billion. Foreign companies such as Polfarma (Poland), Pharmstandard (Russia), Abdi Ibrahim (Turkey) and Favea (the Czech Republic) have created production facilities and introduced up-to-date technologies with the use of public support. Four companies (Nobel AFF, Chimpharm, Dospharm and Medoptic) were reimbursed expenses relating to their foreign trade for a total of KZT 9.4 million.

In Russia, the State Programme for the Development of the Pharmaceutical and Medical Industry for 2013–2020 and the Federal Targeted Programme for the Development of the Pharmaceutical and Medical Industry in the Russian Federation until 2020 and Further were adopted.

The objective of these programmes is to bring an innovative development model to the sector. They envisage the re-equipment of the industry to export standards and of state research and educational institutions in order to create research potential for the manufacture of competitive products that could be both sold in the market and exported. It is planned to raise the export potential of the pharmaceutical and medical sector eight times by 2020 (compared to 2010) and to increase the share of domestic drugs and medical products to 50% and 40% respectively. The GMP standards are also expected to take effect from January 1, 2014.

Another priority is the substitution of imports of strategically important medicines as well as vital and critical pharmaceuticals, medical products and medical equipment.

Investments are also being stimulated. The import of equipment (including components and parts), which has no analogues manufactured in Russia, is exempt from VAT.

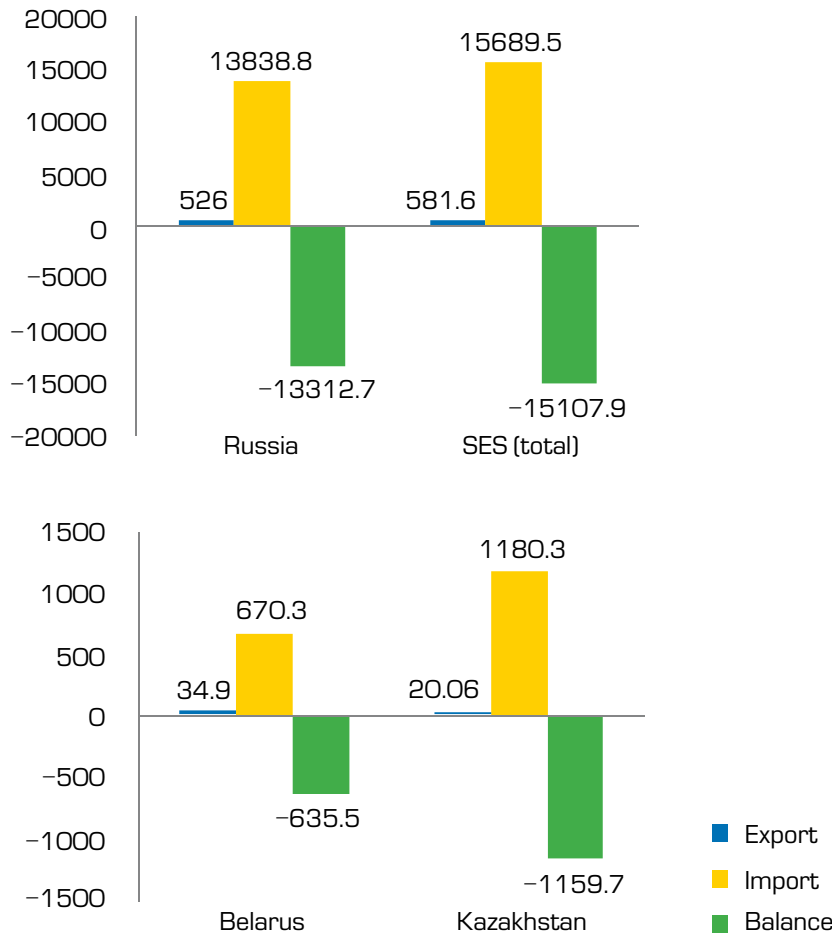
These measures fostered the mass arrival of foreign firms and investment to the Russian market. Large international pharmaceutical producers – KPKA (Slovenia), Gedeon Richter (Hungary), Servier (France), Stada (Germany), Hemofarm (Poland) and Solvey (Belgium) – have opened production facilities in Russia. They are interested in localising their production in order to receive the status of Russian producers and the respective preferences.

### **2.4. Import and export of pharmaceuticals**

A common feature of the SES pharmaceutical markets is the high percentage of imports. All SES countries are net importers of pharmaceuticals.

In Russia, Belarus and Kazakhstan imports are significantly higher than exports. Over the period under consideration, both imports and exports had positive dynamics.

In 2012 Russia accounted for the largest portion of exports (\$526 million, out of US \$581 million; see Figure 2.7). Belarus exported products to the tune of \$34.9 million and Kazakhstan \$20.6 million. The structure of imports had a similar picture in 2012: Russia imported pharmaceuticals for \$31.8 billion, while Kazakhstan and Belarus for \$1.18 billion and \$0.67 billion respectively.



**Figure 2.7.** Pharmaceutical imports and exports by the SES countries in 2012 (\$ million)

Source: Eurasian Economic Commission

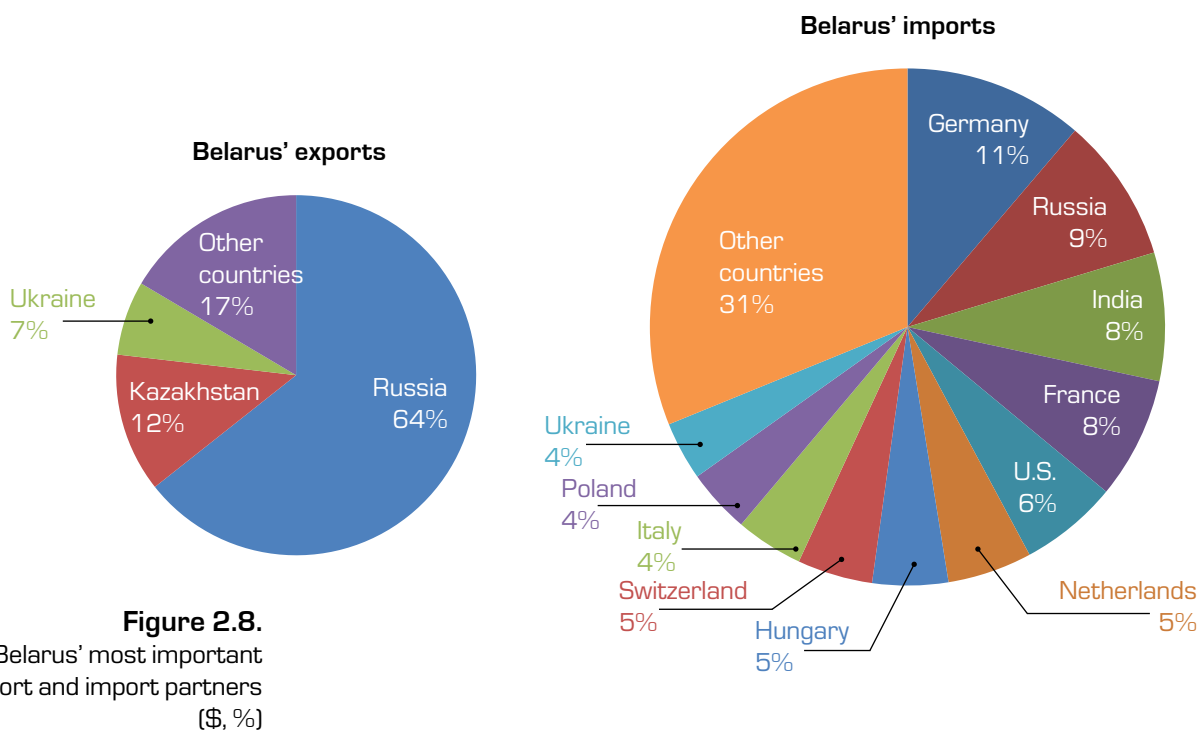
From 2007 to 2011 Belarus doubled its pharmaceutical exports (Annex 1). The country's main export destinations are Russia (64%), Kazakhstan (12%) and Ukraine (7%). The Belarusian production is orientated towards the CIS market and this is proven by the statistics in Figure 2.8. The largest exporters are Belmedpreparaty and the Borisov Medicines Plant.

Belarus' major partners in the area of pharmaceutical imports are world leaders such as Germany (11%), India (8%) and France (8) and its neighbours – Russia (9%), Ukraine and Poland (4% each).

Among the SES countries, Kazakhstan has the lowest level of domestic producers in its market, resulting in the negative balance of trade in pharmaceuticals. Exports are insignificant compared to the country's market size. Export supplies are irregular, one-off contracts. In 2008–2012 exports grew immaterially from \$20.1 million to \$24.6 million, with a decline to \$16.4 million in 2009 (Annex 1). Kazakhstan's largest exporter is Chimpharm.

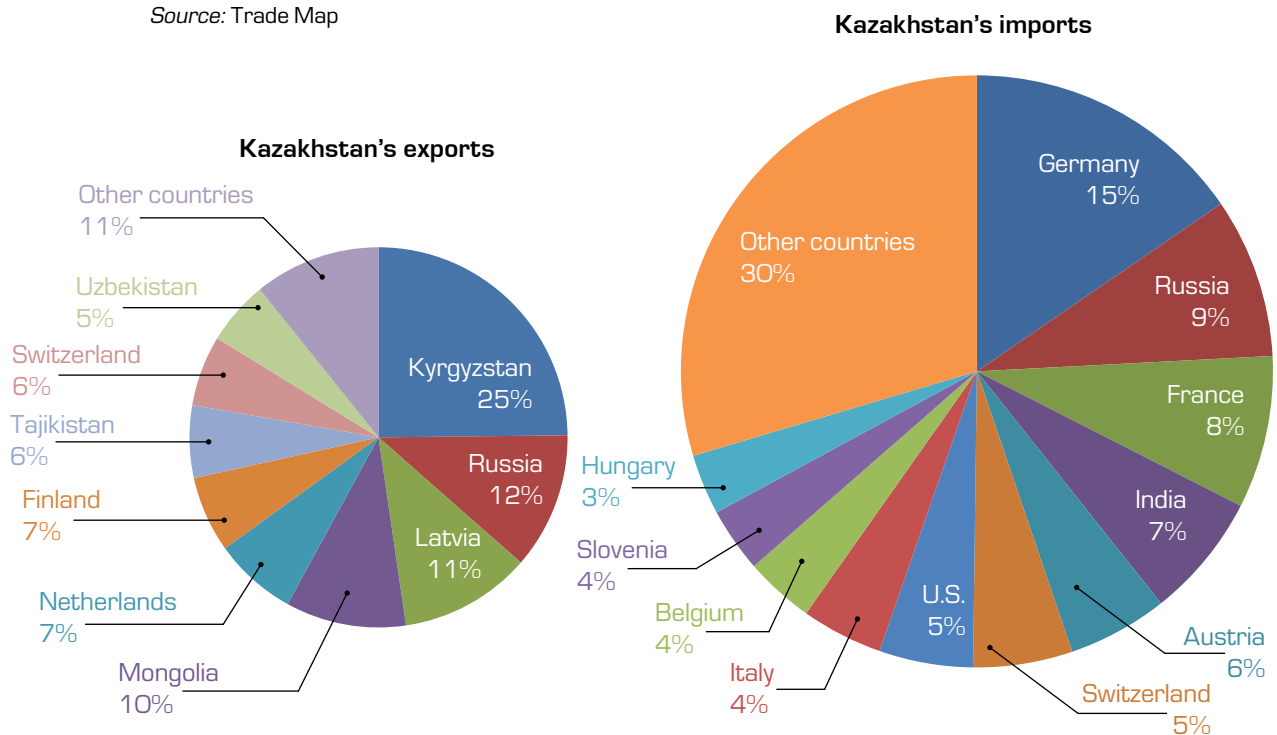
The geographic structure of Kazakhstan's imports is very similar to the Belarusian one. Its largest importers are Germany (15%), Russia (9%), France (8%) and India (7%) (see Figure 2.9). Russian supplies have increased considerably after the creation of the Customs Union.

2. Pharmaceutical Market of the SES: Current Condition



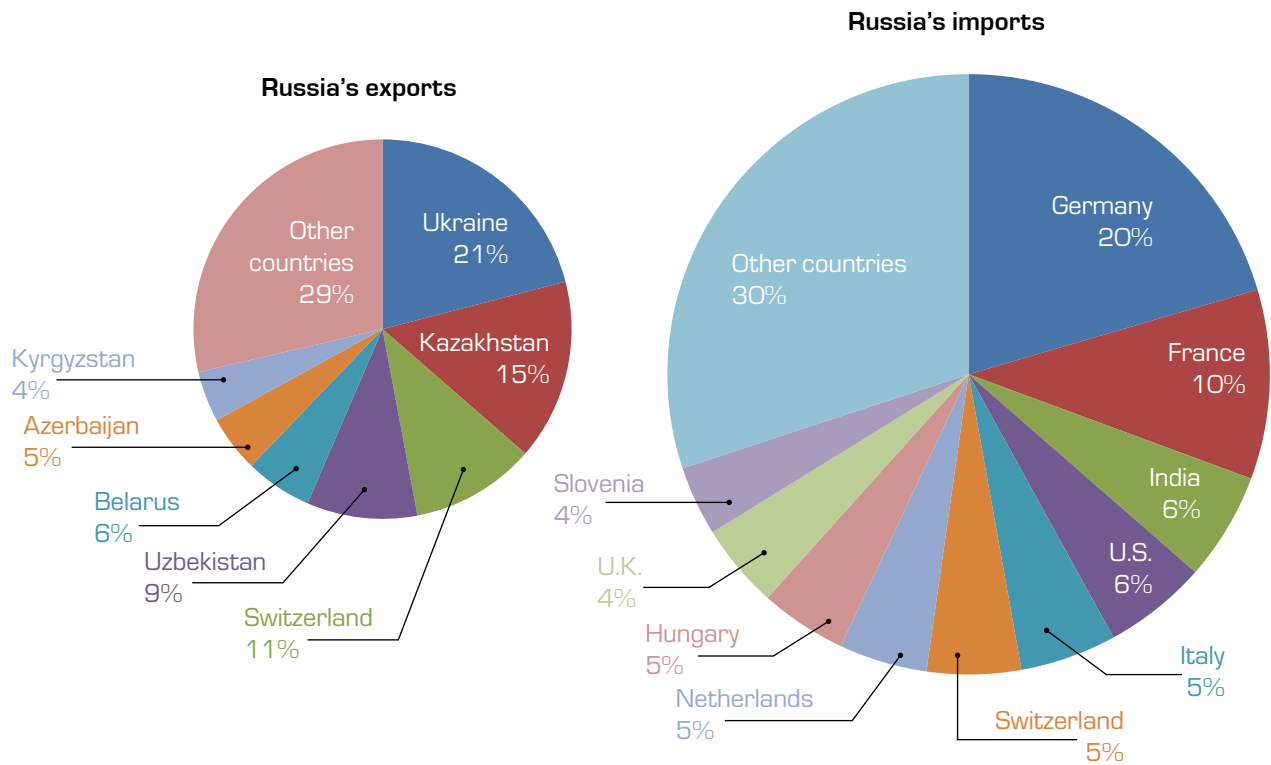
**Figure 2.8.**  
Belarus' most important  
export and import partners  
(\$, %)

Source: Trade Map



**Figure 2.9.**  
Kazakhstan's most important  
export and import partners  
(\$, %)

Source: Trade Map



The geography of the Russian pharmaceutical exports is significantly more extensive than that of Belarus and Kazakhstan. Russia has significant production facilities that manufacture a great range of products (Annex 1) and it therefore makes sizable supplies to the CIS countries. Russia's largest import partners are traditionally world leaders such as Germany, France and India (see Figure 2.10).

**Figure 2.10.** Russia's most important export and import partners (\$, %)

Source: Trade Map

## 3. Integration Processes

### 3.1. Joint projects

The creation of the Customs Union and the SES has stimulated investments from both foreign and local companies.

Kazakhstan's Sultan, for example, packages bulk products and makes packages for liquid medicines in cooperation with Russia's Obolenskoye Pharmaceutical Plant and India's Vizag Pharmaceuticals Ltd.

The Karaganda Pharmaceutical Complex and Russia's Pharmstandard are about to launch the production of cancer drugs in Karaganda Region.

In 2010 Russia's Katren bought shares in Dominantapharm, a Belarusian pharmaceutical distributor, and, a year earlier, shares in AMITY International, a pharmaceutical distributor from Kazakhstan.

The Borisov Medicines Plant (Belarus) has its own dealers in Russia (Boripharm in Smolensk) and Kazakhstan (Borisov KZ in Astana).

The media has recently announced that there are plans to set up the joint production of biologic medical products in Kazakhstan based on the developments by the Belarusian Institute of Genetics and Cytology and the Institute of Microbiology of the National Academy of Sciences of Belarus.

The number of joint projects is expected to increase with the growth of import and export transactions between the SES member states and the strengthening of competition.

### 3.2. Mutual trade flows

Mutual trade in pharmaceuticals between the SES countries is insignificant compared to their overall foreign trade. In 2012 the aggregate pharmaceutical exports and imports in the region stood at \$16.271 billion while the volume of inter-country trade in medicines was \$329 million (2% of the total) (see Table 3.1). In 2012 mutual trade increased in Russia and Belarus and fell in Kazakhstan.

**Table 3.1.**  
Mutual trade between  
Customs Union  
and SES member states  
in 2012

Source: Eurasian Economic  
Commission

	Customs Union and SES (total)	Belarus	Kazakhstan	Russia
Total mutual trade (\$ '000)	67,829,768.8	17,116,305.3	6,221,510.7	44,491,952.9
Total trade in pharmaceuticals (\$ '000)	16,271,056.3	705,258.6	1,200,925.1	14,364,872.5
Mutual trade in pharmaceuticals (\$ '000)	329,320.6	117,421.1	3,511.7	208,387.8
Changes in mutual trade in pharmaceuticals (% on 2011)	114.1	118.5	92.9	112.2
Share of pharmaceuticals in mutual trade (%)	0.49	0.69	0.6	0.47

The dependence of the SES exporters on other member states is not material because domestic producers orientate to the local markets. The same applies to imports as the percentage of imports from non-SES countries is considerably higher.

At the same time, mutual trade between the SES countries comprises only a few significant flows of pharmaceuticals included in Group 30 of the Customs Union Foreign Trade Classification of Goods (see Table 3.2):

- exports from Belarus to Russia: \$94.8 million in 2012;
- exports from Russia to Kazakhstan: \$113.5 million; and
- exports from Russia to Belarus: \$73.6 million.

Export (\$ '000)		To		
		Russia	Belarus	Kazakhstan
From	Russia	–	73,597	113,522
	Belarus	94,786.2	–	18,212
	Kazakhstan	2,862.9	15.3	–

**Table 3.2.**

Pharmaceutical flows (Group 30 of the Customs Union Foreign Trade Classification of Goods) between the SES member states in 2012 (\$ '000)

Source: Eurasian Economic Commission

The largest category of pharmaceuticals exported from Belarus is “medicines packaged for retail.” The same article accounts for 76% of pharmaceutical exports from Kazakhstan to Russia. Kazakhstan had no supplies of this type to Belarus but in 2012 it began to export its domestically produced biologically active food supplements. Russia’s exports comprise primarily “medicines packaged for retail” and “vaccines, serums and blood.”

In 2012 mutual trade grew significantly in almost all groups of products (Annex 2).

### 3.3. Harmonisation of law

The creation of the Customs Union has given rise to the issue of mutual recognition of producers’ marketing authorisations in the member states.

In February 2010 a task force was set up to prepare proposals with respect to the mutual recognition of authorisation for medicines produced in the member countries of the Customs Union. Eighteen draft regulations have been prepared and considered in the framework of the respective plan of action.

Because of the formation of the Eurasian Economic Commission a decision was taken to speed up the development of documents necessary for the harmonisation of law governing the trade in medicines in the Customs Union and the SES. In October 2012 a task force was established at the European Economic Commission’s Board to develop common approaches to regulation. At present a draft agreement on the uniform principles and rules of trade in medicines in the Customs Union and the SES is being discussed (Pak, 2013).

These measures will ensure the free movement of medicines made in Russia, Belarus and Kazakhstan within the Customs Union and the SES and will further a reduction in the prices of medicines and the improvement of their quality due to higher competition in the single market.

# 4. Problems of and Development Prospects for the Pharmaceutical Industry

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Economic crises have negatively affected the pharmaceutical sectors of the SES member states. Budget restrictions limit the support to manufacturers who, in addition to missing a significant portion of their domestic markets, lag behind in their development because of the many problems they have accumulated.

In recent years the SES countries have been implementing health support programmes, which stimulate the sales of pharmaceuticals by means of public procurement. However, the percentage of domestically produced medicines remains practically unchanged and they are still substituted with imports. These factors weaken competition in the pharmaceutical industry and affect economic growth on the whole.

These measures are not expected to bring desirable effects now. Import substitution is only possible if technological and infrastructural gaps in the sector are eliminated. To launch the development and production of original medicines vast investment is needed and there is an obvious lack of this.

This is one of the reasons why the SES pharmaceutical industry remains orientated to the manufacture of generics, particularly in cooperation with foreign firms. Russian, Kazakh and Belarusian companies are primarily engaged in the manufacture of generics from imported raw materials and traditional inexpensive drugs targeted at the CIS market. This production does not require significant investment to start operating, however as competition grows its profitability goes down. The increased demand for original medicines, which are almost 100% imported from non-SES countries, also contributes to this trend.

In addition, the prices of imported drugs are growing continuously. The measures to enhance barriers to trade with non-SES countries and restrict market prices cause an increase in the sales of false and counterfeit drugs.

The Customs Union also poses questions. On the one hand, it has created threats, in particular for the less competitive Kazakh producers. On the other hand, it has expanded the market and this attracted investors who have begun to set up joint ventures in the SES countries focused on the common market. However, the issues of the mutual recognition of marketing authorisations and participation in public procurement in the territory of the Customs Union have not yet been resolved.

The use of high tech is another important issue. Research institutions and universities produce applied results, a great deal of which can potentially become the basis for original medicines. However, because of the lack of screening and pre-clinical testing as well as the clinical testing of new compounds and finance, not all developments are put into production. Here the Customs Union provides an opportunity for utilising the scale effect by means of joining efforts in the conduct of expensive R&D.

The industry acutely needs professionals who are able to work to international standards. Cooperation needs to be established between enterprises and universities that prepare specialists and public finance needs to be provided to these institutions.

The analysis of the region's pharmaceutical industry has revealed some positive and negative factors that are characteristic of the entire pharmaceutical sector of the SES member states. *Table 4.1* provides a SWOT analysis of the current advantages, drawbacks, opportunities and threats in the sector, grouped by their external and internal sources.

	Strengths	Weaknesses
Internal factors	<ul style="list-style-type: none"> <li>the growing public support</li> </ul>	<ul style="list-style-type: none"> <li>the dominant position of non-SES pharmaceutical companies in the SES market</li> </ul>
	<ul style="list-style-type: none"> <li>established pharmaceutical producers with a good knowledge of the local market</li> </ul>	<ul style="list-style-type: none"> <li>the low export potential because of enterprises' incompliance with the international GMP standard</li> </ul>
	<ul style="list-style-type: none"> <li>the developed logistics network, from producers to distributors and retail chains</li> </ul>	<ul style="list-style-type: none"> <li>the lack of specialists who can work to international standards</li> </ul>
	<ul style="list-style-type: none"> <li>GMP and ISO certification of new production facilities</li> </ul>	<ul style="list-style-type: none"> <li>problematic access to loans</li> </ul>
	<ul style="list-style-type: none"> <li>potential exports to the Customs Union and SES markets</li> </ul>	<ul style="list-style-type: none"> <li>the lack of up-to-date production technologies</li> </ul>
	<ul style="list-style-type: none"> <li>political stability and advantageous geographic location</li> </ul>	<ul style="list-style-type: none"> <li>the public procurement systems' focus on the purchase of expensive original medicines rather than mass generics</li> </ul>
	Opportunities	Threats
External factors	<ul style="list-style-type: none"> <li>the production of new generics when original medicines go off patent</li> </ul>	<ul style="list-style-type: none"> <li>the dependence on the import of pharmaceuticals</li> </ul>
	<ul style="list-style-type: none"> <li>legislative support from the state</li> </ul>	<ul style="list-style-type: none"> <li>the entering by the world leaders to domestic markets as domestic producers</li> </ul>
	<ul style="list-style-type: none"> <li>the purchase/transfer of technologies to set up production of up-to-date drugs</li> </ul>	<ul style="list-style-type: none"> <li>the dependence on the import of raw materials and packaging</li> </ul>
	<ul style="list-style-type: none"> <li>the setting up of contractual production with foreign companies</li> </ul>	<ul style="list-style-type: none"> <li>the rapid development of the pharmaceutical industry in India and China and an increase in imports</li> </ul>
	<ul style="list-style-type: none"> <li>an increase in the consumption of generics and OTC drugs</li> </ul>	<ul style="list-style-type: none"> <li>the lack of sources of affordable and long-term finance</li> </ul>
	<ul style="list-style-type: none"> <li>integration processes in the region</li> </ul>	<ul style="list-style-type: none"> <li>a reduction in exports after the opening of new pharmaceutical enterprises and the strengthening of protectionism in importing countries</li> </ul>

**Table 4.1.**  
SWOT analysis

The opportunities associated with the expected increase in production or the improvement of product quality are difficult to realise because of the current problems. The most pressing issue during the periods of economic recession is the limited access to loans. Companies are interested in receiving inexpensive loans to purchase equipment for their investment projects, however the cost of these loans from commercial banks remains high. This issue is being solved by means of public support, public-private partnership and the involvement of international development institutions.

# Conclusion

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The pharmaceutical market of the SES member states remains dependent on imported products. The current outputs of the pharmaceutical industry do not procure the necessary level of national security in the countries.

The analysis we have conducted leads us to the conclusion that the SES member states have an enormous potential to pharmaceutical industry. They have one of the most promising domestic markets in the world and the necessary preconditions to advance the sector, improve the competitiveness of their products and enhance exports.

The creation of the Customs Union and the SES has opened additional opportunities to advance the industry, expand the market and improve the sector's investment attractiveness.

The issues reviewed in this report require further research in order to produce recommendations on all the problematic aspects revealed, including socioeconomic and political tasks that affect the integration of the Bank's member states.

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# Annex 1

## Pharmaceutical Imports and Exports by the SES Member States (\$ '000)

Exports by Belarus	2007	2008	2009	2010	2011
Total	60,523	76,891	87,568	116,044	123,897
Russia	34,925	43,559	52,833	72,758	79,728
Kazakhstan	6,411	10,000	11,946	14,674	15,472
Ukraine	2,782	4,307	3,674	7,594	8,263
Azerbaijan	1,864	2,546	3,917	5,338	5,061
Uzbekistan	7,678	6,313	5,594	5,091	3,234
Turkmenistan	515	1,659	2,144	2,461	2,418
Moldova	1,683	2,009	1,665	1,768	2,016
Georgia	999	1,941	1,611	1,798	1,707
Kyrgyzstan	855	1,166	1,119	1,124	1,308
Tajikistan	882	1,053	748	901	1,176
Armenia	871	928	976	1,050	1,036
Imports by Belarus	2007	2008	2009	2010	2011
Total	376,363	495,180	547,401	555,351	603,532
Germany	50,987	61,531	63,060	62,950	67,819
Russia	31,855	36,840	39,395	37,356	54,869
India	35,112	45,335	47,143	55,274	48,572
France	23,800	34,848	39,878	38,724	46,077
U.S.	22,940	25,418	36,659	34,769	37,153
Netherlands	20,290	24,206	22,793	23,040	31,941
Hungary	18,375	26,271	27,770	28,123	28,582
Switzerland	11,392	17,440	21,323	23,407	28,430
Italy	16,436	20,471	22,426	22,216	25,586
Poland	14,876	20,074	23,382	24,595	24,288
Ukraine	20,751	23,212	25,383	25,871	22,149

Exports by Kazakhstan	2008	2009	2010	2011	2012
Total	20,146	16,440	17,105	23,107	24,558
Kyrgyzstan	8,279	8,444	7,611	5,593	6,096
Russia	778	380	3	3,775	2,863
Latvia	7	0	0	0	2,751
Mongolia	50	633	1,389	889	2,522
Netherlands	315	183	21	550	1,742
Finland	0	403	0	1,064	1,595
Tajikistan	3,158	2,195	2,575	1,418	1,522
Switzerland	14	15	162	3,570	1,483
Uzbekistan	2,934	1,843	1,713	1,651	1,342
Turkmenistan	462	264	537	644	958
Azerbaijan	297	188	154	49	343
Slovenia	0	0	285	999	303
Hungary	80	80	133	0	295
Germany	1,115	6	31	0	293
Ukraine	1,908	968	829	1829	196
Imports by Kazakhstan	2008	2009	2010	2011	2012
Total	725,944	759,625	924,774	985,049	1,298,442
Germany	126,618	130,178	141,642	153,134	200,280
Russia	59,595	63,742	36,311	111,567	113,516
France	72,661	76,908	91,494	93,108	108,207
India	45,786	42,599	63,795	64,288	88,573
Austria	31,294	56,413	78,142	66,994	70,910
Switzerland	15,785	33,965	50,812	41,024	70,398
U.S.	14,542	26,524	48,012	48,073	66,729
Italy	35,408	24,012	21,330	33,015	57,707
Belgium	37,158	26,820	35,458	29,597	49,151
Slovenia	31,186	28,271	36,197	26,733	45,780
Hungary	42,894	25,516	44,330	39,261	42829
Netherlands	18,767	20,955	28,805	20,773	33,951
U.K.	20,145	22,709	15,217	16,059	33,411
Spain	7,460	11,810	12,115	25,802	29,875
Poland	18,920	21,823	23,254	20,659	29,300
Ukraine	14,075	17,046	22,156	19,066	27,544

Exports by Russia	2008	2009	2010	2011	2012
Total	308,656	309,383	313,700	336,905	636,649
Ukraine	78,430	74,552	84,945	101,103	133,391
Kazakhstan	61,761	66,349	-	-	98,343
Switzerland	4,515	9,740	131	1,162	67,780
Uzbekistan	34,792	31,714	49,266	52,799	60,044
Belarus	-	-	-	-	36,323
Azerbaijan	25,692	25,942	34,072	34,272	30,759
Kyrgyzstan	15,846	17,081	21,207	24,826	27,596
Latvia	1,626	1,746	3,638	5,599	20,983
Georgia	8,669	8,685	15,736	9,280	17,930
Mongolia	7,465	4,054	6,701	11,957	17,072
Moldova	10,181	12,105	11,603	13,311	12,764
Turkmenistan	3,020	3,395	4,586	6,016	11,310
Germany	1,590	3,117	2,604	3,455	11,107
Tajikistan	13,089	12,129	14,252	9,984	10,437
South Korea	3,455	6,567	6,510	6,363	9,476
Hong Kong	5,433	6,658	6,177	7,566	9,195
Armenia	4,727	4,638	5,281	5,561	6,221
Imports by Russia	2008	2009	2010	2011	2012
Total	9,047,128	8,509,911	11,124,726	13,185,259	13,393,801
Germany	1,759,775	1,541,138	2,019,918	2,517,631	2,740,709
France	1,038,537	1,017,688	1,147,644	1,338,603	1,361,376
India	532,632	464,004	620,960	722,229	775,907
U.S.	452,057	406,043	604,326	668,025	746,270
Italy	536,371	451,975	602,561	733,825	695,280
Switzerland	576,981	643,214	881,718	995,030	679,071
Netherlands	331,246	371,146	518,902	663,212	636,692
Hungary	440,057	459,435	540,805	639,064	624,129
U.K.	311,830	326,143	534,809	627,679	608,150
Slovenia	470,881	335,711	482,190	461,230	501,542
Austria	423,386	413,735	433,200	419,338	412,511
Belgium	295,711	374,482	311,504	429,592	371,188
Denmark	273,056	213,023	259,861	303,575	258,298
Poland	244,476	201,256	273,514	259,408	249,392
Israel	84,963	79,593	102,403	139,440	244,898
Spain	105,325	119,060	177,695	229,497	231,442
Romania	66,185	71,354	152,796	225,496	201,234
Ireland	94,483	75,077	112,115	164,496	192,891
Sweden	90,272	89,000	125,657	169,636	182,675

Source: Trade Map

# Annex 2

## Mutual Trade in Pharmaceuticals (Group 30 of the Customs Union Foreign Trade Classification of Goods) between the SES Member States in 2012 (\$ '000)

### Exports by Belarus to the Customs Union and SES member states in 2012

Customs Union classification code	Products and countries	Qty (tonnes)	Value (\$ '000)	As percentage on 2011	
				in terms of quantity	in terms of value
3001	Glands, other organs and their extracts for organotherapeutic uses	0	93.1	-	-
	RUSSIA	0	93.1	-	-
3002	Vaccines, serums, blood	106.4	4,239.9	174.3	107.0
	KAZAKHSTAN	0.3	8.8	x	150
	RUSSIA	106.2	4,231.1	173.9	106.9
3003	Medicines from two or more components, not packaged for retail	2.6	27	-	-
	RUSSIA	2.6	27	-	-
3004	Medicines packaged for retail	9,425.9	103,909	138.8	116.3
	KAZAKHSTAN	2 207	18,200	123.1	117.8
	RUSSIA	7,218.9	85,709	144.4	115.9
3005	Cotton wool, gauze, bandages, adhesive bandages	43.8	597.5	240	192.4
	KAZAKHSTAN	0.1	2.8	23	22.7
	RUSSIA	43.7	594.7	250	199.3
3006	Other pharmaceuticals	9.9	4,131.7	117.5	170
	KAZAKHSTAN	0	0.4	-	-
	RUSSIA	9.9	4,131.3	117.5	170

### Exports by Kazakhstan to the Customs Union and SES member states in 2012

Customs Union classification code	Products and countries	Qty (tonnes)	Value (\$ '000)	As percentage on 2011	
				in terms of quantity	in terms of value
3001	Glands, other organs and their extracts for organotherapeutic uses	20.3	128.5	-	-
	RUSSIA	20.3	128.5	-	-
3002	Vaccines, serums, blood	3.6	539.7	18.4	18.8
	RUSSIA	3.6	539.7	18.4	18.8
3004	Medicines packaged for retail	90.9	2,194.7	100	140
	RUSSIA	90.9	2,194.7	100	140

## Exports by Russia to the Customs Union and SES member states in 2012

Customs Union classification code	Products and countries	Qty (tonnes)	Value (\$ '000)	As percentage on 2011	
				in terms of quantity	in terms of value
3001	Glands, other organs and their extracts for organotherapeutic uses	57.8	791.8	x	230
	BELARUS	0.2	409.7	240	180
	KAZAKHSTAN	57.5	382	x	290
3002	Vaccines, serums, blood	612.2	56,765.2	89.4	140.4
	BELARUS	220.4	24,837.8	101.1	109.6
	KAZAKHSTAN	391.7	3,927.4	83.9	179.9
3003	Medicines from two or more components, not packaged for retail	189.9	4,339.9	144.1	109.7
	BELARUS	149.8	4,130	143.5	107
	KAZAKHSTAN	40.1	209.9	146.4	120
3004	Medicines packaged for retail	6,626.2	104,176.2	109	97.4
	BELARUS	1,192.7	30,699.8	115.2	129.3
	KAZAKHSTAN	5,433.5	73,476.4	107.8	88.3
3005	Cotton wool, gauze, bandages, adhesive bandages	856.1	15,321.9	44.8	75.3
	BELARUS	422.9	10,082.6	37.2	87.1
	KAZAKHSTAN	433.2	5,239.3	56.1	59.7
3006	Other pharmaceuticals	323.1	5,723.9	260	175.8
	BELARUS	108.8	3,437.4	330	140
	KAZAKHSTAN	214.3	2,286.6	230	126.6

Source: Eurasian Economic Commission

## **Journal of Eurasian Economic Integration**

The Journal of Eurasian Economic Integration is a quarterly academic and analytical journal published in Russian by the Eurasian Development Bank. The members of Editorial board and Advisory council are distinguished academicians, practitioners and experts in regional integration. Eurasian Economic Integration brings together academic and analytical articles, reviews of books relating to regional integration, interviews and quarterly chronicles of regional integration. With its focus on economics, the journal is a rich source of material addressing a broad range of issues specific to Eurasian integration. These include integration theory and its relevance to the development context; economic integration (trade, investment, financial institutions); institutional integration; cooperation issues in the post-Soviet space; and international experience of regional integration. The first issue was published in the third quarter of 2008.

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