

KAZAKHSTAN'S NATIONAL COMPETITIVENESS

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The problem of assessing Kazakhstan's national competitiveness has been actively discussed since March 2006. The rankings used to assess national (country) competitiveness are calculated by the World Economic Forum (WEF) in the form of a special index coupled with a separate Business Competitiveness Index (BCI). Prior to 2006, national competitiveness was assessed in terms of the Growth Competitiveness Index (Growth CI), which has now been replaced by a Global Competitiveness Index (GCI). Based on 2005 results, Kazakhstan was 61st in the Growth CI among 117 countries, trailing behind India's 50th place by 0.27 points (with a score of 3.77 against 4.04). In terms of the component indexes of the Growth CI, Kazakhstan's positions were as follows: rank 77 in the technology index, rank 41 in the macroeconomic environment index, and rank 76 in the public institutions index.

For comparison: Russia's rankings in these component indexes were 73, 58 and 91, respectively (with an overall Growth CI rank of 75).

Changes in the indexes assessing national competitiveness had an effect on the methodology used to calculate these indicators. This change in methodology, for its part, led to a change in the positions of individual countries. Thus, Kazakhstan now occupies 56th place in the GCI rankings. Nevertheless, this is not progress but regress compared to 2005, because under the new methodology the republic ranked 51st and not 61st, as in the Growth CI rankings. The same applies to various component indexes, including the macroeconomy, in which the country now ranks 10th, so that some commentators talk about an unprecedented breakthrough from 41st place in 2005. But it is incorrect to compare these places in the rankings, because the WEF now evaluates the macroeconomic successes of countries using other methods. There have been changes both in formulas and indicators and in the name of the given index. Today it is simply called "macroeconomy," whereas a year earlier the term was "macroeconomic environment index." In assessing macroeconomic competitiveness, the WEF now takes into account only six statistical indicators (hard data), whereas in the past its calculations were based on 10 indicators, including survey data. Consequently, Kazakhstan's current 10th place in 2006 cannot be compared with its 41st place in 2005, because these rankings were compiled based on totally different indexes.

Whereas the former Growth CI took into account three aspects of competitiveness (macroeconomic environment, public institutions and technology), the new GCI covers nine aspects: institutions, infrastructure, macroeconomy, health and primary education, higher education and training, market efficiency, technological readiness, business sophistication, and innovation. In the GCI rankings, 50th place is occupied by Indonesia, with Kazakhstan now lagging behind it by 0.07 points (with a score of 4.19 against 4.26). Nevertheless, the republic has the strongest positions among the CIS countries: Russia ranks 62, Azerbaijan 64, Ukraine 78, Armenia 82, Georgia 85, Moldova 86, Tajikistan 96, and Kyrgyzstan 107.

Here is how the experts of the WEF itself have commented Kazakhstan's positions in the 2006 rankings: "Kazakhstan sheds five places to reach 56 in the World Economic Forum's Global Competitiveness Index (GCI) rankings for 2006-2007. Boosted by its natural resource wealth, it experienced a major improvement in its macroeconomy, thanks to its significant government budget surplus, low debt-GDP ratio, high savings rate and a considerably reduced interest rate spread, possibly reflecting more financial market efficiency or less perceived lending risk. It also saw improvements in market efficiency, rising 8 places to rank 44, boosted by less red tape and more competition in the goods markets, but still impeded by the prevalence of trade barriers and still relatively underdeveloped or unsophisticated financial markets. The country also benefits from flexible labor markets."¹

A separate comment on Kazakhstan's competitiveness was made by Augusto Lopez-Claros, WEF's Chief Economist and Director of its Global Competitiveness Network, who played a leading role in developing the GCI: "Notwithstanding a number of bright areas, more will have to be done in Kazakhstan to improve the institutional environment. The country's top leadership has decided to give high priority to boosting Kazakhstan's competitiveness rankings. Particular attention will have to be given to dealing with widespread perceptions that the country has suffered a deterioration in the quality of its institutions related to judicial independence, property rights' protection, government efficiency, public trust of politicians and security. It also saw falls in its rankings for innovation, business sophistication and for technological readiness. The lower rank for innovation appeared to reflect perceived skills shortages related to sciences and engineering, less company spending on R&D and less university/industry research collaboration, compared to other countries. The authorities have a busy reform agenda ahead of them in coming years."²

The main problems facing Kazakhstan on the way to higher competitiveness are clearly formulated in the above comments. Both the WEF press release and the statement by A. Lopez-Claros amount to an assessment of the republic's positions in various component indexes or, as they are now called, "pillars" of the GCI. Let us take a closer look at Kazakhstan's rankings in some of these pillars (see Table 1).

The table shows that Kazakhstan ranks highest in the macroeconomy and market efficiency pillars (10 and 44) and lowest in health and primary education (86), institutions (75), business sophistication (72) and innovation (70), with intermediate positions in such pillars as higher education and training, technological readiness, and infrastructure, although its 66th and 68th places in the latter two indicators can hardly be seen as adequate to the republic's potential. In the context of implementation of its Industrial Innovation Development Strategy, two GCI pillars related to the technological dimension of national competitiveness are of particular importance to Kazakhstan: technological readiness (66) and innovation (70). By way of international comparison, let us list some of the countries that are ahead of Kazakhstan in these rankings. In terms of technological

¹ *Kazakhstan Falls Five Places to 56th Rank in the World Economic Forum's 2006 Global Competitiveness Rankings. World Economic Forum Press Release, Geneva, Switzerland 27 September, 2006, available at [www.weforum.org].*

² *Ibidem.*

Table 1

**Kazakhstan's Rankings
in the Nine Pillars of the Global Competitiveness Index**

Pillar	Rank	Score
Institutions	75	3.59
Infrastructure	68	3.33
Macroeconomy	10	5.57
Health and primary education	86	6.08
Higher education and training	51	4.28
Market efficiency	44	4.39
Technological readiness	66	3.23
Business sophistication	72	3.90
Innovation	70	3.13

Source: Calculated and compiled from the data of *The Global Competitiveness Report 2006. Executive Summary*, available at [www.weforum.org].

readiness, the republic is “outperformed” by Jordan, El Salvador, the Dominican Republic, Barbados, Mauritius, Panama, Trinidad and Tobago, and Tunisia, among others. In the innovation rankings, Kazakhstan is behind such countries as Kenya, Costa Rica, Colombia, Burkina Faso, Azerbaijan, Morocco and Nigeria. But then, such low rankings do not necessarily mean a very bad situation in the field of innovation and technology. In our opinion, these rankings are partly due to the inadequacies of GCI calculation methodology. For example, very low innovation rankings are assigned to countries with an objectively high technological level, including Russia (59), Italy (43, which is lower than Costa Rica’s 36th place) and China (46, which is lower than Chile’s 39th place). These examples show that the said rankings have significant shortcomings and cannot serve as a direct or objective indicator of an unsatisfactory situation in a certain area.

In order to assess the prospects of a rise or fall in competitiveness as measured by the GCI, let us consider some of the peculiarities of its calculation method in greater detail. In GCI calculations, the countries surveyed are divided into three groups: factor-driven economies (mostly driven by such factor endowments as natural resources and unskilled labor), efficiency-driven economies (with more efficient production processes and higher product quality), and innovation-driven economies. According to the authors of the report, the importance of each pillar depends on the country’s stage of development (they attribute “higher relative weights to those pillars that are relatively more relevant for a country given its particular stage of development”).³ In other words, the weights of these pillars organized into three subindexes differ in GCI calculations for countries at different stages of development (see Table 2).

At present, Kazakhstan is included in the group of efficiency-driven countries. Let us note, however, that the division of countries into these groups in the WEF study is not based on technological

³ *The Global Competitiveness Report 2006*, Chapter 1.1. “The Global Competitiveness Index: Identifying the Key Elements of Sustainable Growth,” p. 11.

Table 2

**Weighting of GCI Subindexes
at Each Stage of Development⁴**

Weights	Basic Requirements	Efficiency Enhancers	Innovation and Sophistication Factors
Factor-driven stage	50%	40%	10%
Efficiency-driven stage	40%	50%	10%
Innovation-driven stage	30%	40%	30%

criteria, as might be supposed, or on the level of innovation, but simply on GDP per capita, and this even without regard for purchasing power parity (PPP). As a result of this strange qualification, such countries as Kuwait, Qatar and the United Arab Emirates have been included in the group of innovation-driven economies simply because of their high GDP. For each of the three subindexes, Kazakhstan has the following scores: 4.64 (rank 51) for basic requirements, 3.97 (rank 56) for efficiency enhancers, and 3.51 (rank 74) for innovation and sophistication factors.

Kazakhstan's overall score (4.19) is calculated based on the weights given in Table 2 for countries at the efficiency-driven stage of development according to the formula: $4.64 \cdot 0.4 + 3.97 \cdot 0.5 + 3.51 \cdot 0.1$. This formula shows that under the WEF methodology the greatest potential for an increase in competitiveness and a rise in the rankings is latent in the pillars of the efficiency enhancers subindex, because the latter has a weight of 50% and Kazakhstan's score in this subindex is below its overall score (3.97 against 4.19). Consequently, faster development of the pillars included in this subindex (higher education and training, market efficiency, and technological readiness) will have the most significant effect on the increase in the republic's GCI as a whole. The greater influence of these three pillars on the overall index is easily expressed in mathematical terms. Thus, the first subindex (basic requirements) has a weight of 40% while including four pillars, which means that each of them has a weight of 10%; the third subindex (innovation and sophistication factors) has a weight of 10% and consists of two pillars, each with a weight of 5%. At the same time, the efficiency enhancers subindex has a weight of 50% and includes only three pillars, which means that each of them accounts for about 17% of the country's overall score.

Consequently, Kazakhstan's rise in the GCI rankings will be most successful given an improvement in the pillars included in the efficiency enhancers subindex. In two of these three pillars, the current situation is quite favorable: in higher education and training, Kazakhstan ranks 51st, and in market efficiency, 44th. The weak point here is the technological readiness pillar: rank 66 with a score of 3.23. Let us consider the possibility of boosting the republic's GCI performance through this pillar. In order to be 50th in the 2006 rankings, Kazakhstan should have had an overall GCI score of 4.26, or 0.07 points above the score it actually had. Our calculations show that a 0.07-point increase in the overall GCI score can be achieved through an increase in the technological readiness pillar by 0.42 points (by about 13%) to 3.648.

⁴ *The Global Competitiveness Report 2006*, Chapter 1.1. "The Global Competitiveness Index: Identifying the Key Elements of Sustainable Growth," p. 12.

For comparison: in order to ensure the same increase in the GCI score (by 0.07 points) through the innovation pillar, the latter will have to be increased by 1.35 points (by 43%) from the current 3.13 to 4.48.

It should be noted that such a methodology for calculating the GCI in effect encourages countries to conserve an irrational economic structure, because the most advanced aspects of development reflected in the third, innovation and sophistication factors subindex (business sophistication and innovation) have the least influence on the overall GCI score.

As regards the pillar in which Kazakhstan has done particularly well in the latest rankings (macroeconomy), we think the republic will find it hard to keep its 10th place in this pillar in the future. The macroeconomy pillar consists of such indicators as government surplus/deficit, national savings rate, inflation, interest rate spread, government debt and real effective exchange rate. The prospects for some of these indicators are not too encouraging. For example, starting from 2007 the country's budget does not include oil revenues, which creates the prerequisites for a budget deficit and a significant worsening of this indicator, because in recent years the republic has had a budget surplus. Another reason for a possible budget deficit is the growing pressure exerted on the domestic market by excess liquidity in the republic's pension funds, which are increasingly short of investment instruments. In these conditions, in order to prevent a decline in the profitability of accumulation pension funds (NPF) the state may be obliged to issue debt securities even if there is no particular need to finance the budget deficit. This measure, for its part, will lead to an increase in another indicator included in the macroeconomy pillar, government debt, which will also have a negative effect on this indicator. Such indicators as inflation and interest rate spread may take a turn for the worse as well. Inflation, which amounted to 3.1% in the first four months of the year, may be accelerated by the consumer boom, a massive credit expansion by second-tier banks and excess liquidity in the financial system. As regards interest rate spreads, they depend in large part on the credit ratings assigned by international financial organizations, which compile such ratings based on many factors, including macroeconomic and financial stability, and also the situation in world raw material markets, a factor crucial to Kazakhstan's economic well-being.

So, considering the above-mentioned threats to macroeconomic stability, one can expect a drop in Kazakhstan's macroeconomy rankings in the next WEF report. Given that the macroeconomy pillar has a weight of 10% in the overall Global Competitiveness Index, its decline will have a noticeable effect on the country's GCI rank. More precisely, a decline in the score for this pillar by 1 point will mean a decline in the GCI score by 0.1 point (in the latest rankings, this would have meant a GCI score of 4.09, which is equivalent to 61st place). Consequently, it would make sense to compensate in advance the possible drop in the rankings resulting from a decline in the macroeconomy pillar by boosting the higher education and training pillar and the market efficiency pillar.

The World Economic Forum's GCI rankings are not the only assessment of Kazakhstan's national competitiveness. The objective problems that exist in some areas of the republic's socioeconomic development are reflected in other rankings as well. For example, technological competitiveness is assessed using the Networked Readiness Index rankings, also developed by the WEF. Based on 2005 results, Kazakhstan is 60th in these rankings with a score of 0.24, the same as that of El Salvador, which occupies 59th place. Characteristically, Kazakhstan is the best performer in these rankings among the CIS countries, followed by Russia (rank 72), Azerbaijan (73), Ukraine (76), Armenia (86), Tajikistan (93), Moldova (94), Georgia (96) and Kyrgyzstan (103). It is interesting to note that although this index was developed by the WEF (just as the GCI), Kazakhstan has lower rankings for technology in the GCI subindexes, being outperformed by some CIS countries. This discrepancy also points to the imperfections of WEF methods. Nevertheless, the problems of Kazakhstan's national competitiveness are captured not only by WEF rankings, but by other methods as well.

If competitiveness is understood not only in the narrow, technological/economic sense, but also from the position of human and social development, Kazakhstan's performance is worthy of consideration in the well-known Human Development Index (HDI) rankings compiled by the UNDP. In the recently published 2006 rankings, Kazakhstan has 79th place and is included in the category of medium human development countries, with a score of 0.774. In order to join the group of high human development countries, it is necessary to have a score of 0.800. At present, this "borderline" score corresponds to 63rd place occupied by Mauritius. In terms of human development, Kazakhstan ranks fourth among the CIS countries (behind Russia, Belarus and Ukraine). Compared to the previous year, Kazakhstan moved up one place: in the 2005 rankings, it was 80th among 177 countries (the total number of countries surveyed did not change during the year).

A comparison of competitiveness and the HDI, in our opinion, is perfectly justified. First of all, the HDI takes into account some aspects of national development which are also taken into account in calculating the GCI: life expectancy (included in the health and primary education pillar of the GCI), education level (included in the higher education and training pillar) and GDP per capita (included, even though in other indicators, in the macroeconomy and market efficiency pillars). A positive trend as regards human development indicators is that in the 2006 rankings Kazakhstan exceeded the "symbolic" level of 1990, when its HDI was 0.768. Overall, Kazakhstan's competitiveness assessed in terms of the indicators used in HDI calculations is illustrated by Table 3.

Table 3

**Basic Indicators of the Human Development Index (HDI)
for Kazakhstan, 2004**

Life expectancy at birth	63.4
Adult literacy rate (ages 15 and above), %	99.5
Combined gross enrolment ratio for primary, secondary and tertiary schools, %	91
GDP per capita, PPP US\$	7,440
Life expectancy index	0.64
Education index	0.96
GDP index	0.72
HDI value, 1990	0.768
HDI value, 1995	0.723
HDI value, 2000	0.736
HDI value, 2004	0.774
<i>S o u r c e: Human Development Report 2006, available at [http://hdr.undp.org].</i>	

Out of the four indicators taken into account in calculating the HDI, Kazakhstan lags in life expectancy and GDP per capita. The latter fact is particularly important, given that progress in any

area of competitiveness—ranging from social development to technological level—is ultimately determined by the level of economic development. If national competitiveness is assessed in terms of such an aggregate as GDP per capita, in order to join the top 50 countries Kazakhstan will have to roughly triple its GDP. According to the estimates of the U.S. Central Intelligence Agency, GDP per capita (PPP) in Kazakhstan in 2005 was \$8,700, which put the republic in 92nd place among 231 countries of the world. In Bahrain, which ranks 50th in this list, the figure is \$20.5 thousand. In other words, the current gap is 2.35 times, but considering that other countries will also continue their development the gap that will have to be closed is more significant. So, if Kazakhstan is to join the 50 most competitive countries within 10 years, its average annual GDP growth throughout this period will have to be around 12-15% (depending on the rate of development of its competitor countries and population growth in the republic).

World Bank assessments based on the key macroeconomic indicators also rank Kazakhstan well below the top 50 countries. Thus, in terms of the gross national income (GNI) per capita index, Kazakhstan in 2005 (depending on the computational method used⁵) was ranked 97th (\$7,730, PPP) and 103rd (\$2,930, Atlas method).⁶ Consequently, in terms of the key macroeconomic indicators per capita as calculated by various organizations and unrelated to WEF methods, Kazakhstan is still very far from the top. In 2004, it had the following positions in the world rankings: 114th place in PPP GNI and 99th place in PPP GNI per capita. Let us add that in the World Bank classification based on PPP GNI per capita the republic is included in the group of middle income countries.⁷

These low rankings in the key macroeconomic indicators somewhat devalue Kazakhstan's high positions in the corresponding GCI rankings of the World Economic Forum, in which the country, for example, occupies 10th place in the macroeconomy pillar. But optimism over this high rank may somewhat wane if we look at the top performers in this list: Algeria (1), Kuwait (2), Qatar (3), UAE (4), Norway (5), China (6), Chile (7), Singapore (8), Hong Kong (9), and Bahrain (11, just behind Kazakhstan).⁸ These economies are not so much the most efficient as the wealthiest in relative terms. And all of them (except China, Hong Kong and Singapore) are countries oriented toward the production of hydrocarbons or, as they are usually called in Kazakhstan economic literature, raw-material-oriented countries. In other words, the method used to calculate the macroeconomy pillar is such that the highest ranks in this pillar go to countries oriented toward raw material exports. Evidently, high ranks here, however honorable, nevertheless cannot serve as evidence of high national competitiveness, unless competitiveness is understood as the "raw material" nature of development.

To return to a more detailed examination of individual socioeconomic indicators that are significant in terms of enhancing national competitiveness, let us say that, in our opinion, their number should not be limited only to the indexes used by the WEF in GCI calculations. For a real rather than a nominal increase in national competitiveness it is necessary to take fuller account of economic indicators, paying special attention to indexes of a foreign economic nature, because national competitiveness is, by definition, competitiveness in foreign markets. It is also necessary to make a more comprehensive and accurate assessment of the macroeconomic situation, particularly using relative indicators, which more adequately reflect the dynamics and quality of economic processes. Another essential aspect of competitiveness is the social sphere, the quality of human development processes and social inequality, i.e., parameters which are virtually not taken into account by the current GCI calculation method. These parameters are analyzed in annual Human Development Reports, and some of them are pre-

⁵ The World Bank calculates this indicator using two methods: PPP and Atlas method.

⁶ See: *GNI per capita 2005, Atlas method and PPP*, The World Bank Group.

⁷ See: *2006 World Development Indicators*, World Bank, Washington D.C., 2006, p. 20.

⁸ See: *The Global Competitiveness Report 2006, Global Competitiveness Index: Basic Requirements. Executive Summary*, Table 2, available at [www.weforum.org].

Table 4

Selected Socioeconomic Development Indicators for Kazakhstan Presented
in the Human Development Report 2006

6. Commitment to Health: Resources, Access and Services	
Public health expenditure (% of GDP), 2003	2.0
Private health expenditure (% of GDP), 2003	1.5
Health expenditure per capita (PPP US\$), 2003	315
11. Commitment to Education: Public Spending	
Public expenditure on education (% of GDP), 1991	3.9
Public expenditure on education (% of GDP), 2002-2004	2.4
13. Technology: Diffusion and Creation	
Telephone mainlines (per 1,000 people), 1990	82
Telephone mainlines (per 1,000 people), 2004	167
Cellular subscribers (per 1,000 people), 1990	0
Cellular subscribers (per 1,000 people), 2003	184
Internet users (per 1,000 people), 1990	0
Internet users (per 1,000 people), 2003	27
Patents granted to residents (per million people), 2004	—
Research and development (R&D) expenditures (% of GDP), 2000-2003	0.2
Scientists & engineers in R&D (per million people), 1990-2003	629
14. Economic Performance	
GDP (US\$ billions), 2004	40.7
GDP (PPP US\$ billions), 2004	111.6
GDP per capita (US\$), 2004	2,717
GDP per capita (PPP US\$), 2004	7,440
GDP per capita annual growth rate (%), 1990-2004	1.7
Average annual change in consumer price index (%), 1990-2004	33.6
Average annual change in consumer price index (%), 2003-2004	6.9
15. Inequality in Income or Expenditure	
Share of income or expenditure (%)—Poorest 10%	3.0
Share of income or expenditure (%)—Poorest 20%	7.4

Table 4 (continued)

Share of income or expenditure (%)—Richest 20%	41.5
Share of income or expenditure (%)—Richest 10%	25.9
Inequality measures—Ratio of richest 10% to poorest 10%	8.5
Inequality measures—Gini index	33.9
16. The Structure of Trade	
Imports of goods and services (% of GDP), 2004	46
Exports of goods and services (% of GDP), 2004	55
Primary exports (% of merchandise exports), 2004	84
Manufactured exports (% of merchandise exports), 2004	16
High-technology exports (% of manufactured exports), 2004	2
<i>Source: Human Development Report 2006.</i>	

sented in Table 4 to illustrate the key areas where Kazakhstan should enhance its national competitiveness.

The data given in Table 4 are a fuller reflection of the state of the economy and, consequently, of national competitiveness. It should be noted that in many areas the situation in Kazakhstan is quite unfavorable. For example, in R&D expenditures as a percentage of GDP the republic's performance is below the average for all regions of the world. Kazakhstan's 0.2% is much lower than the average figure for the developing countries (1.1%), the countries of East Asia and the Pacific (1.7%), Latin America (0.6%), South Asia (0.7%), CEE and the CIS (1.0%), and OECD (2.5%). There is a similar situation in public expenditure on education as a percentage of GDP. In this area, Kazakhstan's 2.4% falls short of the figure not only for the developed countries, but also for an overwhelming majority of countries in the medium human development category and for many low human development countries.

For comparison: Albania has 2.8%, Peru 3%, the Philippines 3.2%, Grenada 5.2%, Tunisia 8.1%, Fiji 6.4%, and Belize 5.1%. In low human development countries, the figures are as follows: Djibouti 6.1%, Lesotho 9.0%, Kenya 7%, Mauritania 3.4%, and Eritrea 3.8%.

In health care, the picture is very similar. Public health expenditure in Kazakhstan in 2003 was 2% of GDP, which is lower than in most countries in the medium or low human development category. As in education, health expenditure in most Asian, Latin American and even African countries is higher than in Kazakhstan. These include El Salvador, Colombia, Albania, Lebanon, Grenada, Jordan, Tunisia, Suriname, Fiji, Algeria, Jamaica, Botswana, Bhutan, Papua New Guinea, Lesotho, Zimbabwe, Haiti and many other countries traditionally included among the world's poorest countries.

Apart from showing some of the main indicators of socioeconomic development, this table demonstrates another fact as well. Many indicators from the Human Development Report coincide with those used by the WEF to assess national competitiveness, such as telephone mainlines per 1,000 people, Internet users or cellular subscribers. This fact may indicate that WEF experts simply use available U.N. data, combining them in a new way to obtain a "product" called GCI, whereas in actual fact what we have here is a truncated HDI. In such a case, it is more appropriate to assess a country's compet-

itiveness based on the more comprehensive methods and techniques of the United Nations rather than those of the WEF, whose studies are of a derivative nature and often produce inadequate assessments. It would make even greater sense, in our opinion, to recognize the need to develop our own national system for assessing competitiveness, a system that would take into account all the key factors of the republic's economic and social success in a comprehensive and systemic way.

Table 5

**Kazakhstan's Positions in Various Rankings Compiled
by International Organizations**

Ranking/Organization	Kazakhstan's Rank	Number of Countries Ranked
Global Competitiveness Index (WEF)	56	125
Networked Readiness Index (WEF)	60	115
Human Development Index (UNDP)	79	177
GDP per capita, PPP (U.S. CIA)	92	231
GNI per capita, PPP (World Bank)	97	208

To summarize our review of Kazakhstan's national competitiveness, we can say that it is fairly high only when assessed using WEF methods (see Table 5). Moreover, the republic's high places even in these rankings are ensured by only three GCI pillars out of nine: macroeconomy, market efficiency, and higher education and training. Consequently, in order to enhance national competitiveness we need progress in other areas of social, economic and technological development so as to move up in the rankings for the respective pillars and to diversify the risks of a loss of competitiveness. Another conclusion about Kazakhstan's national competitiveness is the continued low development level of a number of areas that are crucial to competitiveness (science, education and health care), as reflected in the rankings of other world organizations (apart from the WEF). What we need is further growth—at a very rapid pace—of such dimensions as GDP and GNI (including per capita) and R&D expenditures. We need to improve the quality of life for the purpose of enhancing life expectancy, prevent a further increase in income inequality, and spend much more on education, health care and science.