The World Economy in 2020:
Trying to Lower Uncertainties

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THE UNCERTAINTY of world development is growing. The classical systems of bipolarity, monocentrism, and center-periphery now belong to history of the 20 century. What will take their place? What will the world economic system look like 15 years from today? Finding answers to these pressing questions is the objective of a long-term world economy forecast made by the IMEMO (World Economy and International Relations Institute). The forecast has been prepared by more than 50 scholars of the institute (Mirovaia ekonomika: prognoz do 2020 g. M.: Magistr, 2007, 429 pages).

The speed and mnogovektornost' [multidirectionality] of world development increase the risks in implementing major long-term projects in all areas of socioeconomic development. Long-term forecasts, among other tools, serve to reduce these risks. The worldwide demand for such forecasts is growing therefore. Unlike many other forecasts, the IMEMO prognosis relies on a substantial body of statistics and calculations forming the basis for expert judgments. We believe that this combined approach - scenarios, expert forecasting within the framework of statistics - increases the reliability of obtained results.

The methodology used in forecasting quantitative parameters is quite conservative and laborious. It begins with the most reliable basis which is demographic prognosis statistics, which make it possible to figure out the size of the workforce and then, on the basis of estimations of labor productivity movements, to calculate aggregated GDP indicators for 152 countries. Following this, experts carry out iterative coordination of projections (in terms of countries and their problems enabling a likely picture of interlinked indicators and trends of change in the world economy). This stage of forecasting, which is the hardest of all, uses simulations of the world economy. It is followed up by qualitative scenarios of socioeconomic development of individual countries and the world at large and by analysis of the most likely world trends.

All computations in this forecast were carried out using our own database: all indicators were calculated using a single methodology and are presented in a form that makes possible comparison (in U.S. dollars, in parities of the purchasing power of national currencies and in prices of 2005). The statistical supplement presents sequences of data on 152 countries, including Russia, for 1980-2005 and for the period until 2020.

The main assumption in the forecast is that armed conflicts will not spill over from one region to another and there will be no global climatic and environmental disasters.

Sources of change. The rate of change is growing in a globalizing world. It is being accelerated by innovations in information, medical, financial and professional services, by power engineering and energy saving in particularly. The world's development is determined by the growing number and the new quality of the actors. In addition to the traditional centers of power we now have China, India, Brazil, and Iran. Waiting in the wings are Mexico, Indonesia, Thailand, and Turkey. By 2010, GDP of developing countries will exceed, in terms of purchasing power parity, GDP of industrial countries. As a result, competition for resources and markets is growing fiercer.

While accelerating the growth, globalization is increasing the workload of international and national institutions. The rate at which they try to adapt to new conditions is lagging behind the rate of change. The unevenness of development, the information revolution, demographic imbalances, environmental problems, the aging of the population in the advanced part of the world are generating powerful migration flows, intercivilization interactions and contradictions. International security is getting increasingly fragile, terrorism is becoming a fact of reality and the nonproliferation regime is going through a crisis.

This notwithstanding, world development will accelerate. Such is the conclusion about the most probable, according to the IMEMO, scenario of the development of the world economy until the year 2020. This scenario factors in possible threats and uncertainties in politics, the operation of the world economy mechanism and the development trajectory of the world's leading economic centers

Even so, according to our estimates, it is most probable that the average annual growth rate of world GDP in 2006-2020 will be 4.2 percent to 4.4 percent. (Compared to 4.0 percent in 2001-2005 and 3.1 percent in 1991-2000.) This signifies that world GDP will in effect double, from $61 trillion to $117 trillion by the year 2020. World GDP will grow annually by $3 trillion to $5.6 trillion or $7 trillion by the end of the forecast period. In other words, the world economy is growing today by the size of the economy of Germany or India; by the end of the forecast period it will grow by the size of today's economy of China.

The main contribution to the high world development rate will come from China (average annual growth of GDP of 7.7 percent) and India (6.6 percent), which are the new globalization leaders. Russia, CIS countries and most of the countries in Central and Eastern Europe will be developing at rates higher than the world trend. In Brazil, the rate of GDP growth in the forecast period may reach 3.5 percent. In the United States the growth rate will remain as high as it was in the 1990s, or 3.2 to 3.3 percent. In Western Europe (2 to 2.7 percent) and in Japan (1.7 to 2.2 percent) the growth rates will be somewhat higher than in the 1990s, but if they develop at half the world trend, this would signal their policy to maintain the high quality of life without chances of a serious economic expansion. The share of EU-27 nations in world GDP, which is now higher than that of the USA and China; will prove lower than their indicators. By 2020, the countries will be ranged, in accordance with the size of their GDP in prices and purchasing power parity of 2005, as follows: the PRC (23 percent), USA (18 percent), India (8.4 percent), Japan (4.6 percent), Russia (3.2 percent), Germany (2.9 percent), Brazil (2.4 percent) - shown in parenthesis is the share of each country in the world's GDP. These disparate countries are one in actively looking for national and multilateral models of adapting themselves to the realities of global and post-industrial economics.

The relatively high growth rates of the world economy coupled with a slowdown in the population growth will result in more than double growth (in comparison with the growth rate of the 1990s) of GDP per capita. As a result, nearly half the Earth's population (48.8 percent) will be living in 2020 in countries with an average GDP per capita of more than $10,000 a year, whereas the population of such countries in 2005 was 1.5 billion, or 23.2 percent of the world population. Even if considerable differentiation in incomes persists, up to 40 percent of the Earth's population will qualify as middle class.

With regard to GDP per capita, which characterizes not only quantitative but also qualitative parameters of development, the United States will leave the other major countries even farther behind. In terms of GDP per capita, Russia in 2020 will place 40th with $27,000; China, 52nd with $19,000 in 2005 prices and purchasing power parity.

Globalization. The main conditions of achieving the projected economic development consist in further liberalization of foreign trade; wider access to innovation achievements, advanced technical standards and methods of governmental and corporate economic management; global competition and more rational use of all types of resources.

Globalization will ensure rapid growth of international trade in comparison with the growth of GDP. The fastest growth will occur in the exchange of commercial services (marketing, engineering, consulting, financial and other services). The tendency to "wash away" low-tech and resource-intensive products from international trade will continue. The proportion of fuel in it in 2005 prices will drop in the coming 15 years from 13.8 percent to 8 or 9 percent. We expect a rapid rise in trade in medium-tech and especially high-tech products. Their combined share in world exports will exceed 65 percent or 70 percent by the year 2020.

In the event of a serious rollback of globalization and return to protectionism in international economic relations, the average annual rate of world GDP growth may slide by 2 percent or 2.5 percent. However, the interdependence of national economies has reached a point, and their information-related, production and financial ties have become so close where such a scenario has a low short-term probability and only in individual sectors at that. We can, however, expect a greater pressure to limit migration of low-skill workforce. Efforts will be made to institutionally minimize the negative impacts of globalization, the factoring in to a greater extent of the interests of the "second wave" of participants in the globalization processes.

Innovations. The world innovation process will accelerate under the impact of growing investments in R&D, the formation of global telecommunications networks and the increasing use of Internet technology. Economically important will be the process of convergence of technologies, that is to say, of practically simultaneous development of a broad spectrum of new scientific and technological fields based on the potentials offered by the use of biotechnology and nanotechnology. Energy saving and care for the environment will stay in the focus of innovation activities.

With respect to some types of information and communications technology (ICT), South Korea, China, and India are no longer among those who are trying to catch up with but among those who are leading the rest of the field. The rapid rate of growth in R&D expenditure in China and India will result, by the end of the forecast period, in drawing appreciably closer to the science intensity indicators of the industrially developed countries. In 2020, China will account for 20 percent of the world R&D, whereas all countries in Asia for 45 percent, and the USA for 28 percent.

The process of globalization of research done by the leading science-intensive corporations will be growing during the forecast period. Foreign technological experience will be increasingly absorbed through mergers and takeovers. Global partnership cooperation relations will be growing to include the organization of joint research at the leading-edge research stage or conducting strategic R&D, technological alliances based on the market-in-exchange-for-technology principle.

Finance. The world economy will generally have sufficient investment resources to maintain a high rate of development. Moreover, whereas the world's economic development in the latter part of the 20th century depended on the accumulation fund that was growing in the form of GDP from one decade to another, this share will decline in the forecast period to break this tendency. The proportion of accumulations in GDP will also decline in developing countries, in many of which - China, first and foremost - it is twice the level of the accumulations in developed countries. On the whole, the share of material investments in world GDP will decline from 22 percent to 19 percent, including developed countries, where it will decline from 20 percent to 17 percent, and in developing countries it will drop from 26 percent to 20 percent. At the same time there will be generally some growth in investments in human capital and nonmaterial assets.

A new development in the investment area in the forecast period - especially during its latter part - is the growing tendency toward mounting surplus capital, above all in the developed part of the world. The race for attracting capital will, with increasing frequency, be coupled with rivalry between the investors for the possibility to dispose of surplus capital.

In the cards is the continuation of improvements in financial infrastructure of the investment process, the enhancement of the role and effectiveness of operations by institutional investors (investment and pension funds, insurance companies and all manner of savings organizations). A more rational use of investment resources will foster even wider use of the financial derivatives circulating in the spot, forward and option markets.

Energy. The total consumption in 2006-2020 of primary energy resources (PER) around the world will be up roughly by the factor of 1.3. Two thirds of the increase in PER will be the share of developing countries (one fourth, of China). Organic fuels will most probably continue to be mostly used while the proportion of energy generated by atomic and hydroelectric power stations, biofuels and other renewable sources of energy will not exceed 15 percent. Energy intensity in the world economy will continue to decline. The consumption of oil bought with $1,000 of world GDP will be down, by 2020, to 52 kg, compared to 99 kg in 1990 and 75 kg in 2005. Crude oil imports by OECD countries last year already happened to be lower than in 2005. In long term, oil prices in real terms (with reference to world inflation) will most probably go down gradually.

Russia. The historic challenge faced by Russia consists in that it should take advantage of the new wave of the world economic growth and use the globalization potential to promote its own interests. According to our estimates, Russia stands serious chances of joining the leading five world economic powers. This would be possible if, before 2020, its GDP should grow at an average rate of at least 5.5 percent. The external conditions for that are favorable: no dramatic fall in world prices of hydrocarbons is expected, Russia borders on China, which is a new pole of world economic growth, and it also has multidirectional and growing economic ties with the biggest centers of the world economy. It has adopted decisions on its economic strategy: diversification of the economy, investments in human capital and reliance on innovations. It is important to continue on this course, have faith in its own powers and possibilities to successfully compete in international markets.