The issue of acceptable rates of economic growth for Russia, from the point of view of achieving the strategic development goals and shrinking the gap between Russia and industrial countries, has been discussed for several years. At present, the only result of this discussion is the acceptance of the fact that to be able to achieve the mid-term and long-term objectives, it is necessary to ensure the annual growth rate of the Russian economy of at least 8%. It was this objective, expressed as doubling the GDP of Russia by 2010, that was declared by President V. Putin in his recent Presidential address.

As regards the possibilities and ways of achieving this goal, there is neither conformity, nor clear explanation of what could be done to support such dynamics and what could be the most efficient approach.

It seems rather easy to estimate the economic growth rates required to restore the position of Russia in the world economy (taking into account the long decline of the Russian economy and the dynamics of the world economy). These estimates are based on the assumption that all other conditions of the economic development are equal, including those determining increase in the quality and competitiveness of production.
At the same time, these parameters (quality and competitiveness) are the key ones to determine the comparative level of economic development. This understanding allows making a conclusion that high growth rates (measured traditionally) do not guarantee shrinkage of the gap in the economic development levels. So, the notions of the “quality of economic growth” and the “quality of growth rates” were introduced in publications. However, each author presents his/her own interpretation of the “growth quality”. It should be mentioned that there are practically no publications which would explain how to measure this “growth quality”.

Below we describe an approach to measuring the quality of economic growth.

The suggested approach is based on the international comparisons, including those of the economies of the former USSR and the USA. Namely the economic competition of the USSR and the USA is one of the most vivid example of inadequacy and incomparability of the traditional measures of the economic development dynamics.

It is well known that the paradox of the economic competition between the USSR and the USA was that for several decades (1960s to 1990s) the ratios of production levels in the two countries was rather stable (production output in the USSR comprised 60-65% of that of the USA), but the economic growth rate in the USSR exceeded that in the USA 1.5-2.0 times. It would mean that in 30 years the gross output of the USSR would have reached the level of the gross output of the USA. However, we are aware that it did not happen. The stability of the production volumes ratios in the Soviet and American economies since the 60-s actually meant a 5% growth of the Soviet economy, effectively, was almost the same that a 3.2% growth of the USA’s economy.

A seeming controversy of these conclusions dissipates if we recall that comparisons of the volumes of the Soviet and American economies
were done not on the basis of growth rates in the previous years, but on the basis of actual (current) exchange proportions (fig.1).

So, in the 60-s and 80-s of the last century there was a situation where larger and larger volumes of the USSR’s production could be only exchanged for smaller and smaller volumes of the USA’s production. If we consider the ratios between production volumes and the dynamics, we will be able to estimate the rate of deterioration of the proportions of exchange for the Soviet economy, which was estimated at approximately 1.42% on average during the thirty-year period.

**Production in the USSR and the USA, 1960-1990**

It is clear that deterioration of the proportions of exchange for the Soviet economy, and hence, their improvement for the American economy
were based on the more powerful quality component of the economic development in the USA.

In this connection, it is necessary to determine what the quantitative and qualitative components of the economic growth are, and how they can be compared.

It is clear that in the absence of any qualitative changes in the economy, a 1% increase in production requires a 1% increase in use of primary resources. It is also clear that in the presence of technological changes and improvements in production quality, a 1% increase in production volume requires increase in primary resources use below 1%. That is why it is suggested to measure the quantitative component of the economic growth with the help of the production (more correctly – domestic consumption) dynamics of primary resources, such as fuel, metal, timber, etc. In this case, to measure the dynamics of the qualitative component of the economic growth we can use a ratio of the total growth rate of production to the growth rate of primary resources production (domestic consumption). This ratio can be interpreted as a primary resources productivity index.

Considering the example with the USSR’s and the USA’s economies (fig.2), the following estimates of the components of the economic growth in 1960-1990 were obtained. In the USSR: the total average annual growth rate of 5.1% could be broken down to 4.5% of the quantitative growth and 0.55% of the productivity growth. In the USA these indicators are estimated, respectively, at 3.2%, 2.2% and 1%. So, we can say that the USA’s economy was characterized by almost two time’s higher rate of the quality growth than the USSR’s economy, and the average annual rate of a relative deterioration of quality of the USSR’s production was 0.45% (1.0% - 0.55%).
Quantitative and qualitative components of economic growth in the USSR and the USA (average annual growth rate for 30 years, %)

Given the rate of deterioration of the proportions of exchange (1.42% per year) and the average annual rate of the relative deterioration of the quality of the USSR’s production (0.45%), we can estimate the relative quality elasticity of the exchange proportions (1.42/0.45). It is approximately equal to 3.2.

It means, in particular, that increase in the quality growth component by 1% provides improvement in the exchange proportions by 3.2%, and vice versa.

The obtained elasticity allows estimating a comparative (integral) growth index, which is a growth index based on the uniform quality level. It is equal to the product of the traditional index and the index of the exchange proportions; the latter, in its turn, depends on the elasticity and the annual rate of changes of the relative quality.

The fact, that the mentioned above relative quality elasticity of the exchange proportions was estimated using data for a long period of time and for large economies, allows us to consider it a rather reliable general
economic indicator and use it in economic comparisons not only for the USSR and the USA, but for other countries as well.

The special role of the US economy in such comparisons should be mentioned. To be able to carry out the comparisons of the exchange proportions for the national economy of any country, we need a benchmark economy as regards production quality and technological innovations. It is reasonable enough to use the USA’s economy as a benchmark taking into account its high level of technical and economic development.

In a benchmark economy, economic growth measured by traditional methods is equal to the integral (comparative) growth indicator for this country. This is assumed only for a benchmark country, therefore the traditionally measured growth rates in other countries are not integral growth indicators and require recalculation on the basis of comparisons of the quality component of growth and the exchange proportions.

So, if we assume that relative quality elasticity of the exchange proportions is rather stable, we will be able to estimate the integral (comparative) growth indicator for the modern Russian economy. However, at first we need to estimate the quantitative and qualitative components of growth in the Russian and American economies in the recent years.

On the basis of calculations and comparisons for 1991-2000 we have obtained the following results. In the USA, average annual growth rate was 2.8%, of which due to increase of the quantity component - 1.8%, due to quality component - 1.0%. In Russia, average annual growth rate was (-4.1%), of which due to increase of the quantity component (– 5.5%), due to quality components 1.5%. So, in spite of a sufficient production decline, Russian economy in 1991-2000 demonstrated higher rates of the quality component of growth that the benchmark economy (USA). It should be mentioned that the growth rate of the quality component in Russia has increased more than three times in comparison with the Soviet period (0.55%
versus 1.5%). It means that, actually, in 1991-2000, the comparative total rate of decline in the Russia economy was lower, and in production decline in Russia in 2000 in comparison with 1990 was not 34% (according to the Goskomstat), but 23% (according to the calculations taking into account changes in the relative quality).

Of course, these estimates are rather approximate. We should mention that the estimates of the quality component of the economic growth vary when different sets of products and price indices are used for estimation of the quantitative component of growth. However, we are sure that there is a need in re-assessment of the rates of economic growth in Russia towards their increase.

The interpretation of the result is rather straightforward. Economic reforms, which took so much time, were so painful, required such big losses have started to bring results in the production sphere. The economy turned into a market one, it began to make higher demands to the production efficiency. And these demands began to work. A relatively high level of the quality component of the economic growth in Russia in 1991-2000 was a result of disappearance of inefficient enterprises due to competition, structural changes in production, development of a more homogeneous technological sphere, improvement in resource saving, and a dramatic improvement in such elements of products’ quality as shape, design, packaging, delivery, etc..

However, it should be emphasized that the mentioned above factors are close to exhaustion, and in future, without real capital renewal, it will be impossible to maintain the higher rate of quality changes.