

## RUSSIA'S GDP GROWTH RATE DECOMPOSITION IN 1999–2015

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*The Gaidar Institute has developed a method of decomposing Russia's GDP growth rates into the structural, foreign trade, and market-based components based on the decomposition algorithm decomposing macroeconomic indicators of developed countries (OECD). The algorithm has been refined to take account of the Russian economy's peculiarities, i.e. its heavy reliance on foreign trade trends (the dynamics of global crude oil prices).*

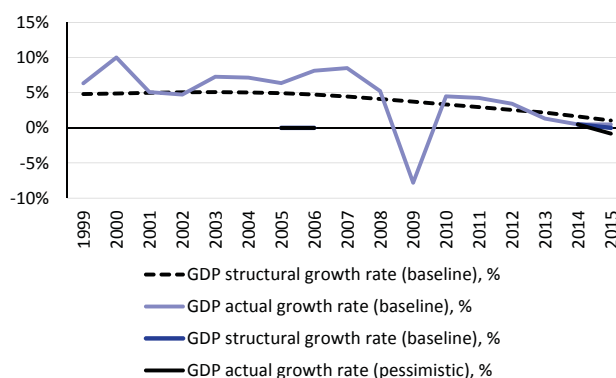
Currently, the Russian expert community is actively discussing the issue of how close the Russian economy is to its production possibility frontier, and hence, whether the proposed budgetary and monetary policy measures, aimed at stimulating economic growth, will be efficient in the current situation. There is an opinion that the former model of economic growth, based on the favorable structure of the world prices of energy resources, and implying growth through the stimulation of internal demand, has exhausted its potential<sup>1</sup>. At the moment, the level of crude oil prices remains high, however, it no longer makes a significant contribution to Russia's GDP growth rate as it did in 2000–2007. Although high crude oil prices did slow down the fall of the Russian economy in the period of the 2008–2009 global crisis<sup>2</sup>, they now only can allow economic growth to be maintained above zero level<sup>3</sup>.

Economic growth rate decomposition into its different components, including those determined by foreign trade trends, is a separate time-consuming task. The method we propose is based on a method of decomposing the macroeconomic indicators into their structural, foreign trade, and market-based (business cycle and random shocks) components which was previously applied in developed countries (OECD), except that the method has been refined to take account of the peculiarities of the Russian economy. These peculiarities imply a heavy reliance on foreign trade trends, which we have approximated through the dynamics of global crude oil prices.

1 Мау В.А. Между модернизацией и застоём: экономическая политика 2012 года // Вопросы экономики. 2013. № 2. С. 4–23. [Maу V.A. Between modernization and stagnation: economic policy in 2012// Voprosy Ekonomiki. 2013. No 2. pp. 4–23.]

2 Мау В.А. Экономическая политика 2009 года: между кризисом и модернизацией//Вопросы экономики. 2010. № 2. С. 4–25. [Maу V.A. Economic policy in 2009: between crisis and modernization // Voprosy Ekonomiki. 2010. No 2. pp. 4–25.]

3 Замараев Б.А., Киюцевская А.М., Назарова А.Г., Суханов Е.Ю. Замедление экономического роста в России// Вопросы экономики. 2013. № 8. С. 4–34. [Zamarayev B.A., Kiyutsevskaya A.M., Nazarova A.G., Sukhanov E.Y. Economic growth slowdowns in Russia // Voprosy Ekonomiki. 2013. No 8. pp. 4–34.]



Source: The Federal State Statistics Service (Rosstat), the Ministry of Economic Development (MED), authors' estimates.

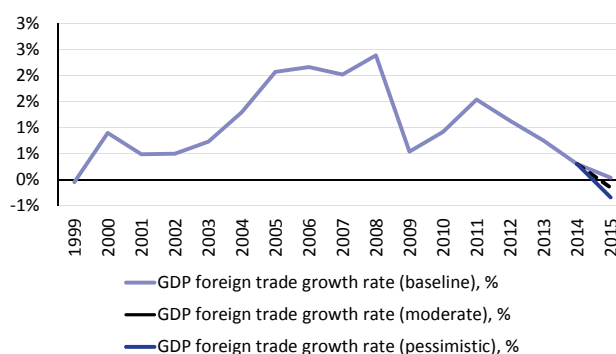
Note to Figs. 1–5:

The baseline scenario projection anticipates GDP growth rate to be 0.5% and crude oil price at \$90 per barrel in 2015

The moderate scenario projection anticipates GDP growth rate to be 0% and crude oil price at \$80 per barrel in 2015.

The pessimistic scenario projection anticipates GDP growth rate to be –0.8% and crude oil price at \$70 per barrel in 2015 .

Fig. 1. GDP actual and structural growth rates, y-o-y, 1999–2015



Source: Rosstat, MED, IMF, authors' estimates.

Fig. 2. GDP foreign trade growth rate, y-o-y, 1999–2015

Russia's GDP actual, structural, and foreign trade growth rate, as well as the market-based component of the same (i.e. the sum of business cycles and random shocks) are shown in Figs. 1–3. We estimated the foregoing components of GDP growth rates for three arbitrary scenarios of economic development (GDP growth rate and crude oil price) in 2015. An

additional point to emphasize is that the arbitrarily called “baseline” scenario is not baseline in terms of Russia’s economic development prospects in 2015 and is regarded as such exclusively for estimation purposes.

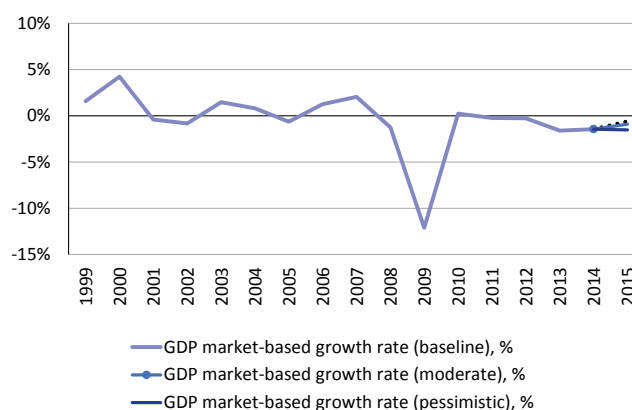
Figs. 3–4 show that in 2012–2014 Russia’s economy moved to the lower stage of cycle following an overheating, and hence the market-based component became negative. Compound economic growth rates are close to zero, because the negative market-based component was offset by the positive foreign trade component.

At the same time, in the period between 2010 and 2014, with negative market-based component of economic growth rates, the output gap was positive, about 2–3%, because the level of actual GDP was higher than that of the structural GDP (Fig. 1). Nonetheless, no overheating, as might be expected, took place in the economy, because actual GDP growth rates were lower than structural growth rates: with increasing crude oil prices, production factors are utilized at 100% and see no growth in volume.

A negative foreign trade component of GDP growth rates in Russia in 2015 for the moderate and pessimistic scenarios derives from the logics of our decomposition method, namely the actual price appears to be less than the long-term average annual price (about \$87–88 per barrel depending on the scenario) as a result of crude oil prices falling to the levels provided for by the scenarios (Fig. 4).

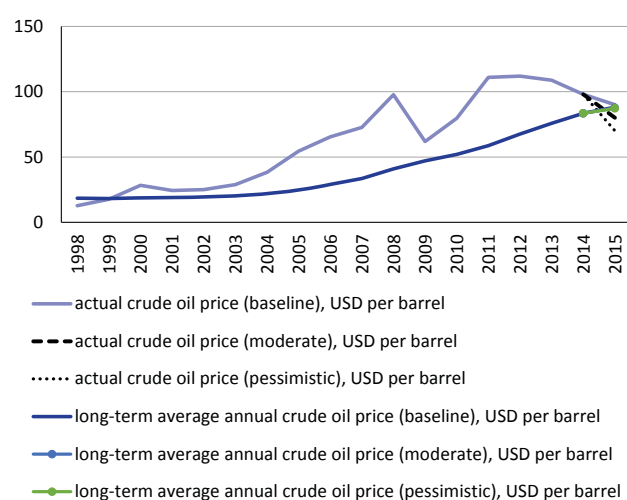
Depending on the economic development scenario, the output gap varies within a range of 0.45% (a moderate option with zero GDP growth rates and annual crude oil price of \$80 per barrel) and -0.85% (a pessimistic option anticipating the economy to decline by -0.8% and crude oil prices to fall to \$70 per barrel) (Fig. 5).

According to our estimates, the economy is expected to be close to its production possibility frontier (i.e. GDP actual growth rate is close to its potential value) in 2014. Under the circumstances, stimulating budgetary and monetary policy measures will be inefficient and boost inflation instead of increasing economic growth rates. ●



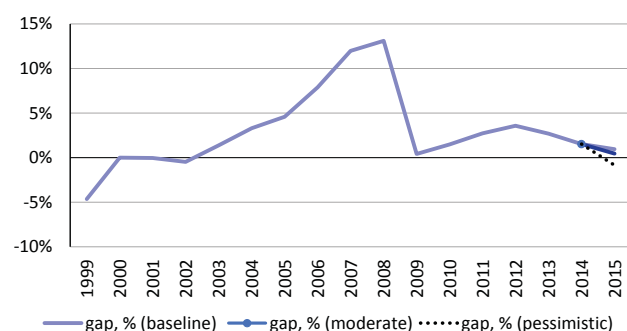
Source: Rosstat, MED, authors’ estimates.

Fig. 3. The market-based component of GDP growth rate (or the sum of business cycle components and shocks), y-o-y, 1999–2015



Source: IMF, authors’ estimates.

Fig. 4. Actual and long-term average annual crude oil prices, USD per barrel, 1999–2015



Source: authors’ estimates.

Fig. 5. Output gap in the Russian economy (%), 1999–2015