

June 6, 2017

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New fiscal rule to lower Russia's budget's oil & gas dependence

Federal budget balance and stability study

- **Fiscal rules have acquired a mainstream status in economic policy**, with over 90 nations adhering to this practice. In Russia, the new federal budget rule is similar to those adopted by other commodity exporters, as it decouples expenditures from volatile commodity-based revenues. Some countries, like Colombia and Chile, additionally recourse to measures mitigating the effect of fluctuations in non-commodity revenues.
- **Compared to previous fiscal rules, the new one contains a tougher definition of unsustainable revenues:** from now on the Russian budget shall regard as such any oil & gas income in excess of the one corresponding to the base price for oil at USD 40/bbl. Under the new rule, budget expenditures should not require cutting and would flow smoother in case of a wider range of oil price changes. The enforcement of the rule will require 4.5–5% reduction of real federal budget expenditures in 2016-2020, which will not affect economic growth.
- **The new fiscal rule would have survived the recession of 2014, but hardly that of 2009.** The impossibility to compensate with expenditures for the non oil & gas part of the economic cycle may lead to a suspension of the rule in case of a recession similar to the one seen in 2009, or the one not accompanied by an oil price shock. This is fraught with lack of incentives to taper support measures and may result in excessive expenditures after the crisis is over.
- **The level of non oil & gas federal budget deficit may gradually decline to 5-6%** from 10% (the average for 2009-2016), if the new fiscal rule features the real cutoff price at USD 40-45/bbl (the actual cutoff price is USD 40/bbl), with real prices reaching above USD 50/bbl.
- **Oil & gas revenues of the federal budget may undershoot 0.4% of GDP** in a particular year exclusively due to the ruble exchange rate deviation from the level expected under the given oil price. In 2017, this will be compensated by the actual oil price exceeding the one set in the budget. However, the very possibility of shortfall illustrates the influence the exchange rate targeting mechanism has on the observed and structural deficits. In the long-term, sustainability of both the fiscal rule and the budget will largely hinge upon whether or not any errors, if they occur, have a mixed and non-systematic nature.

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Fiscal rules help achieving socially important targets

Fiscal rule is a long-term quantitative restriction imposed on any budgetary aggregate (revenues, expenditures or deficit), or on government's balance (mostly debt).

A countercyclical economic policy targets stimulating domestic demand during cyclical downturns and restraining it at booming times.

Fiscal rules have acquired a mainstream status in economic policy, with over 90 nations adhering to this practice¹. Theoretically, these rules help achieving socially important goals, such as:

1. Ensuring balance between short-term and long-term goals of the government. Limiting the influence of the electoral cycle and the industry lobby on deficit, debt and expenditures patterns.
2. Providing for sustainable budget expenditures relative to potentially volatile revenues and, as a result, ensuring their acyclicity, or countercyclicality, thus contributing to macroeconomic stability.
3. Maintaining creditworthiness of the state by capping debt or sustaining budget reserves, thus reducing the probability of debt crises.

Developing and commodity exporting countries tend to strive after the first two targets, while the third one is usually less relevant in an environment of relatively high inflation and ballooning economic growth. Therefore, fiscal rules in such countries are often aimed at limiting the budget deficit without formally setting a debt ceiling. A relative smoothness of expenditures is achieved through pegging them to the structural deficit, which is acyclic by definition (see Figure 1).

Raw-material exporters are primarily trying to decouple expenditures from volatile commodity-based revenues. Some countries take additional steps in order to mitigate the impact of fluctuations in non oil & gas revenues (Colombia, Chile).

Whether the rule attains its objectives or not, depends on both correct wording and practical implementation². The effect in the end appears to positively correlate with such factors as:

- a) Sustainability in various macroeconomic conditions (or clear stipulation of circumstances allowing for deviations from or exceptions to the rule).
- b) Coverage of most of budget system levels.
- c) Clear and easily understandable wording, coupled with possibility of an independent implementation assessment, reference to factual data (as opposed to poorly predictable or questionable indicators), and absence of grounds for manipulation.
- d) Existence of a formalized system ensuring compliance with the rule (penalties for non-abidance, personal and shared responsibility).

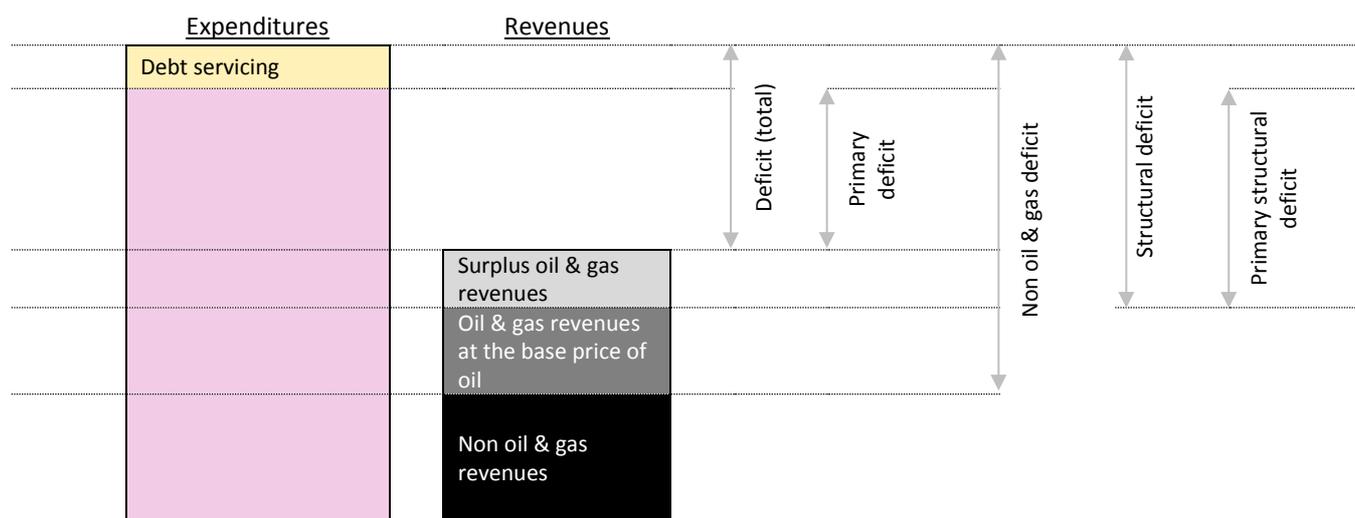
¹ IMF Fiscal Rules Dataset 2016.

² See, for instance, "Fiscal Rules in Response to the Crisis—Toward the "Next-Generation" Rules. A New Dataset // IMF Working Paper No. 12/187" by A. Schaechter, T. Kinda, N. Budina and A. Weber, 2012.

Table 1. Fiscal rules in commodity exporting countries

Country	Description
Australia	Real expenditures may grow by up to 2% per year until the total balance exceeds 1% of GDP. Further on, the total balance should average at least 0% of GDP per year, while the relative tax burden should stand below the 2007-2008 level.
Indonesia	Total consolidated budget deficit ³ may not exceed 3% of GDP, with consolidated budget debt not above 60% of GDP.
Columbia	Structural deficit is scheduled to decline to 1% of GDP. Slating a larger deficit is possible, if the expected economic growth deviates by 2 pps downwards from the long-term average.
Mexico	The total balance should at least equal 0% of GDP. Structural expenditures may climb 2% per year at the most in real terms.
Mongolia	Revenues should not grow faster than non oil & gas based GDP.
Nigeria	Total deficit should not exceed 3% of GDP.
Norway	Structural deficit should not exceed the expected yield of the Government Pension Fund Global, into which the surplus wealth produced by Norwegian oil & gas revenues are deposited.
Chile	Structural deficit should not exceed 1% of GDP. Structural revenues are defined as revenues received when copper prices stand at their long-term levels and when the national economy is close to its potential.
Russia (abolished rules)	2004-2007. Structural deficit should not exceed 0% of GDP. 2012-2014. Structural deficit should not exceed 1% of GDP. Structural revenues are defined as revenues received should the oil price be set at its base level, which is calculated by the formula shown in Table 3.

Source: IMF Fiscal Rules Dataset 2016; ministry and sovereign fund websites of corresponding countries

Figure 1. Relationship between key concepts related to budget balance⁴

Source: ACRA

³ This term covers a greater part of or an entire budgetary system that consists of several equivalent segments or comprises a number of hierarchy levels. In Russia, for example, the budgetary system is made up by the federal budget, consolidated regional budgets and the budgets of non-budgetary state funds (Pension Fund of Russia, Federal Compulsory Medical Insurance Fund, Social Insurance Fund of the Russian Federation).

⁴ This is a schematic diagram, so column sizes do not reflect the real scale of budget deficits either in the Russian or in any other economy. The definition of structural deficit is applicable to particular oil and gas exporter and the Russian budget system. Any of the mentioned deficits can assume negative values, thus turning into surplus.

Practical track record has produced a tougher fiscal rule in Russia

Structural deficit is a hypothetical deficit that emerges when the cyclical, i.e. unstable, portion of budget revenues equals zero, or, put another way, when revenues are on par with their long-term sustainable structural level.

Over a decade, the sustainable oil price assessment climbed from USD 20/bbl to USD 96/bbl, i.e. augmented by 380% in real terms, while the structural deficit setting suitable for planning purposes increased from 0% to 1% of GDP.

The Russian federal budget has been using fiscal rules since 2004, with their key element throughout the whole period being the formula for calculating marginal expenditures that were fixed in for each consecutive year in the course of budget planning (see Table 2). All the three rules that were used targeted a reduction of budget expenditures dependence on the observed and expected oil price fluctuations, and also determined marginal expenditures through the maximum structural deficit value (0%, since 2012 – 1%). Such goals and declared application purposes are in line with approaches used by developing and commodity exporting countries (see Table 1), although, as experience shows, they are sensitive to sub-optimal assessments of sustainable income. The amendments to the rule in 2004-2014 were in fact determined by adjustments of this level, which depends on the sustainable base level of the oil price, and also supported by corrections to the safe level of deficit, which can be financed by debt accumulation and via other sources.

In 2004, the base price for oil was set with no explicit account for the actual price, while the later version of the rule saw it being set dynamically and automatically as a moving average. Theoretically, this was supposed to provide for error-free planning, but post factum it became clear that even the formula-based approach was not enough to ensure realistic base prices, and structural deficit seemed low under the expenditures set by the rule, although oil & gas dependence was fairly strong (see Figure 2). Therefore, the total deficit that emerged after the oil price fall in 2014, while the rule was still in place, tended to deplete budget reserves, with more than vague prospects for their replenishment in the future. In addition, the dynamics of marginal expenditures would require their material reduction in 2015-2018 even in case of maintaining the rule and even in nominal terms, and this is always politically challenging. A slower expenditures growth earlier, when oil prices were still high, would have been a better alternative.

Table 2. Evolution of the budget rule for the Russian federal budget expenditures

Timeline	Expenditures formula for each consecutive year
2004-2007	Expenditures = non oil & gas revenues forecast + + oil & gas revenues forecast with fixed base price for oil. Base price = USD 20/bbl (in 2007, it was increased to USD 27/bbl).
2008	<u>Early in the year:</u> Expenditures = non oil & gas revenues forecast + 4.7% of forecast GDP, financed from oil & gas revenues at ≤ 3,7% of GDP (so called oil and gas transfer). <u>Year end:</u> = maximum 2008-2011 oil and gas transfer: 6.1% -> 5.5% -> 4.5% -> 3.7% of GDP. From 2012: ≤ 3.7%.
2009-2012	The rules were not applied.
2013-2014	Expenditures = non oil & gas revenues forecast + + oil & gas revenues forecast with dynamic base price for oil + 1% of forecast GDP. Base price = average oil price for the period starting 2008 and ending with a year preceding the target year (from 2018 – 10-year long moving average), or 3-year short moving average (when lower than long one).
2015-2017	The rules were not applied (starting 2016, ruble nominal expenditures were unofficially fixed).
2018-... ⁵	Expenditures = non oil & gas revenues forecast + + oil & gas revenues forecast with dynamic base price for oil and base exchange rate + budget balances + planned interest expenditures on state debt. Base price = USD 40/bbl plus 2% per year (US inflation target).

Source: Budget code, Finance Ministry's public statements regarding amendments for 2017

⁵ New rule's parameters sourced from media: http://minfin.ru/common/upload/library/2017/04/main/Materialy_SMI_24.04.17.pdf

The first and main conclusion from the accumulated experience suggests the need for a new sustainable oil price definition that should be more realistic and protected from arbitrary revisions (automatic and transparent).

Other conclusions the government apparently arrived to and accounted for in the new rule wording may look merely technical, but they are also meaningful:

In 2016, the difference between marginal expenditures values that could emerge if the forecast exchange rate was used instead of the base one has run into 0.9% of GDP.

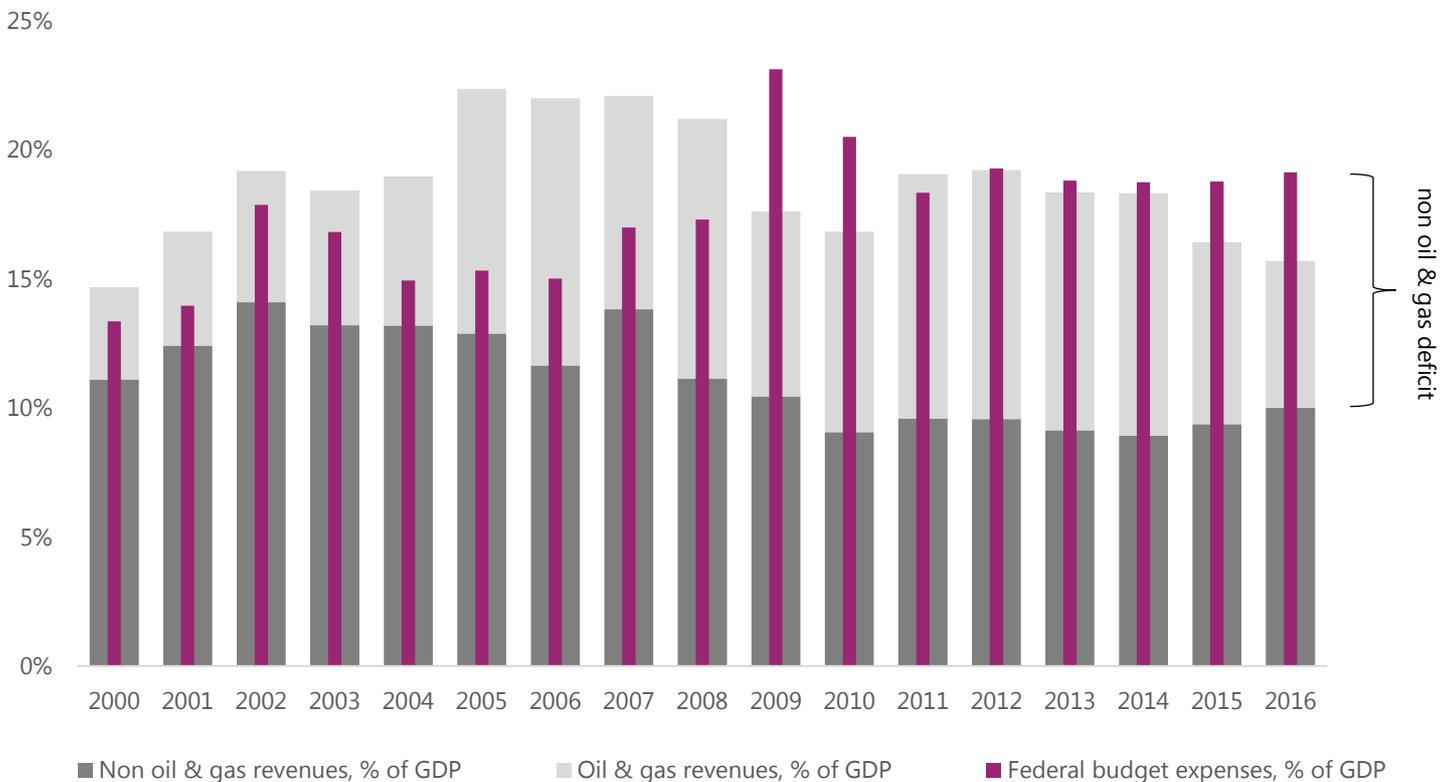
- The exchange rate to be used for oil & gas revenue assessment with base price for oil must be specified. The most recent available project of "The Budget Policy Main Directions..." assumed that the new fiscal rule should hinge on the base ruble exchange rate (the latter matching the base price for oil scenario). Previously, the ruble exchange rate under the basic economic forecast was apparently used (and this was not clearly defined). The new fiscal rule will presumably adhere to the said approach, given the latter is simpler and prevents currency interventions by the Ministry of Finance and the ruble exchange rate from becoming a self-reinforcing cycle.

Primary deficit is a hypothetical deficit that would emerge if public debt servicing expenses equaled zero.

- It would be possible to directly limit structural deficit by the amount of public debt servicing, while the latter could be either above or below 1% of GDP. This wording clarifies the origin of the additional 1% of GDP — set in previous versions of the rule and perceived as a randomly specified — thus bolstering planning transparency and providing for reasonable flexibility, while keeping oil & gas revenue use under control.

In its abbreviated form, the rule in the end sounds as follows: primary structural deficit \leq 0%.

Figure 2. Application of fiscal rules in 2004-2016 resulted in non oil & gas deficit climbing to around 10% of GDP



Source: Treasury of Russia, ACRA estimates

New rule is less sensitive to past shocks

The effectiveness of a rule should be assessed based on its purpose (see page 2). In our case, one of key positive outcomes should be an increase in certainty regarding the scope and structure of public expenditures and, consequently, a reduction of uncertainty among both the budget funds recipients and economic agents in general. In this respect, the possibility of following the rule under different external conditions, i.e. its sustainability, is of critical importance.

Our calculations (see Figures 3-5) show that the level of non oil & gas deficit slated to be achieved by 2019 under the new rule is comparable with the level that would have been attained if the previous rules was used – 5.5% against 6-6.5% respectively (the current level is 9%). Expenditures and, consequently, full deficit levels are also similar. The key differences between the rules should hardly be looked for in the 5-year forecast figures, but they would surely become apparent in a hypothetical environment of a new dramatic surge and drop in oil prices, the one similar, for instance, to what happened in 2005-2008 and 2011-2014.

The reasons to abandon the rules in 2009 and 2015 were different. In the first case, the state had to use a fiscal stimulus to smooth out the cyclical recession and not just compensate for volatility on commodity markets. The rule existing at the time was not sufficiently countercyclical. As a result, expenditures increased by 5% of GDP. By 2010-2011, as the economy was moving out of recession, stimulating measures were logically supposed to restore lower levels of expenditures and non oil & gas deficit (those seen in 2007-2008), but instead these indicators surged to new highs and a relatively lax fiscal rule was introduced. Partly in view of this, in 2015, the rule was discarded on the grounds of potential impossibility to finance deficits this rule was bringing about, with another reason being the understanding of budget's excessive oil and gas dependence. And this is exactly what a good fiscal rule should protect from. Notably, the recession then was not cyclical, but rather structural by nature, and hardly required any special fiscal stimulus.

The new formula provides for a much lower flexibility of the base price for oil, which significantly restricts oil and gas dependence (Figure 4) and, consequently, results in significantly less volatile expenditures (Figure 5). If this formula was in place at the time of the oil price drop in 2014, there would be no need for a nominal freeze or sequestration of the budget.

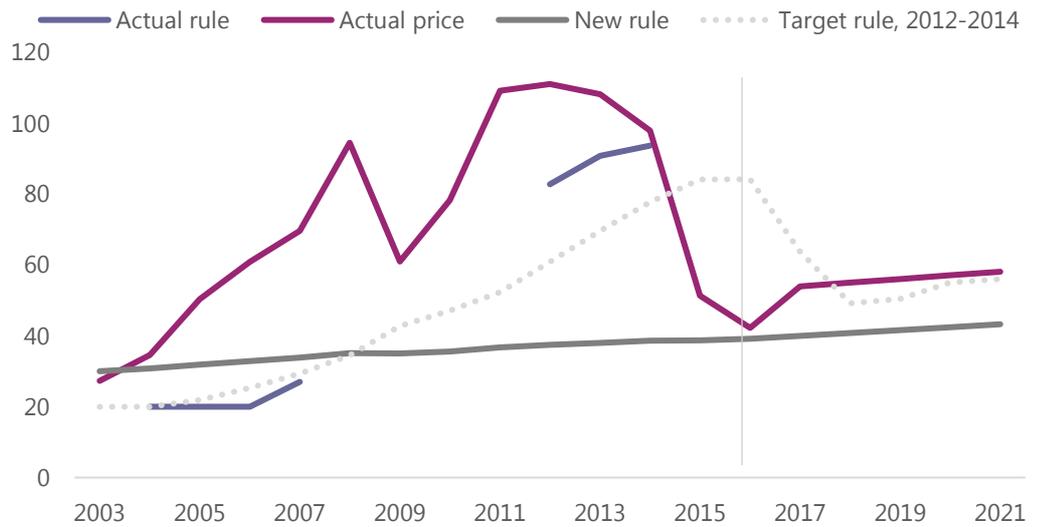
As our calculations show, if the target year is to see a recession, expenditures should be prone to procyclical behavior under the fiscal rule, i.e. they would go down (see Figure 5). Therefore, in 2009, the rule would have likely been abandoned due to limited possibilities for implementing support measures. The same would have most probably happen in case of a recession not associated with fluctuations in oil prices. Our own global recession experience shows that this is quite dangerous if there is no guarantee that after the crisis there will be sufficient incentives for a timely return to an optimally tough rule. Similar problems befell many countries after 2009, resulting in emergence of so-called new generation rules, which soften the budget policy to a higher degree under similar circumstances and do not need to be suspended. An alternative and less sophisticated approach would be to create an exhaustive list of situations when a temporary deviation from the rule is permissible.

Other things being equal, a greater fiscal rule sustainability may have a positive effect on credit quality of public sector companies and their major counterparties due to more a predictable interaction with the federal budget.

The calculations do not account for the impact government expenditures have on business activity and GDP trend. Non oil & gas revenues for each year have been fixed at actual levels. The ruble exchange rate estimate under the base price is based on a proprietary exchange rate model, where all factors, except for commodity export prices, have been fixed at actual levels for 2004-2016 and projected levels for 2017-2021.

This is a manifestation of the so-called dynamic inconsistency problem in the economic policy.

Figure 3. Base and actual oil price comparison

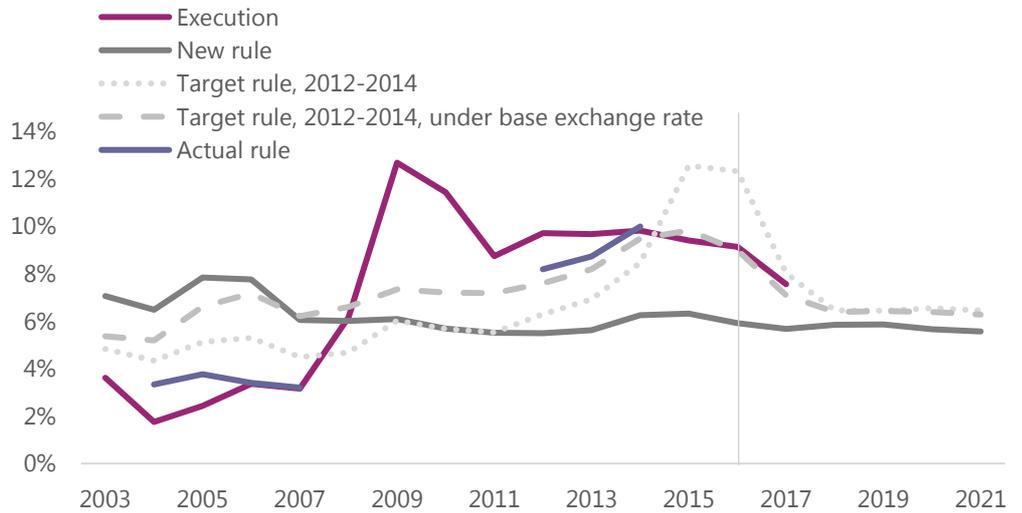


The 2012-2014 target rule was supposed to start working in 2018, when the long oil price averaging period would have reached 10 years.

Source: ACRA estimates

For 2017, the chart provides a deficit estimate based on expenditures sourced from the approved budget, and non oil & gas revenues and the oil price taken from the ACRA March 28, 2017 macroeconomic forecast titled ["Russian Economy: Recession Knocked Out. What Next?"](#)

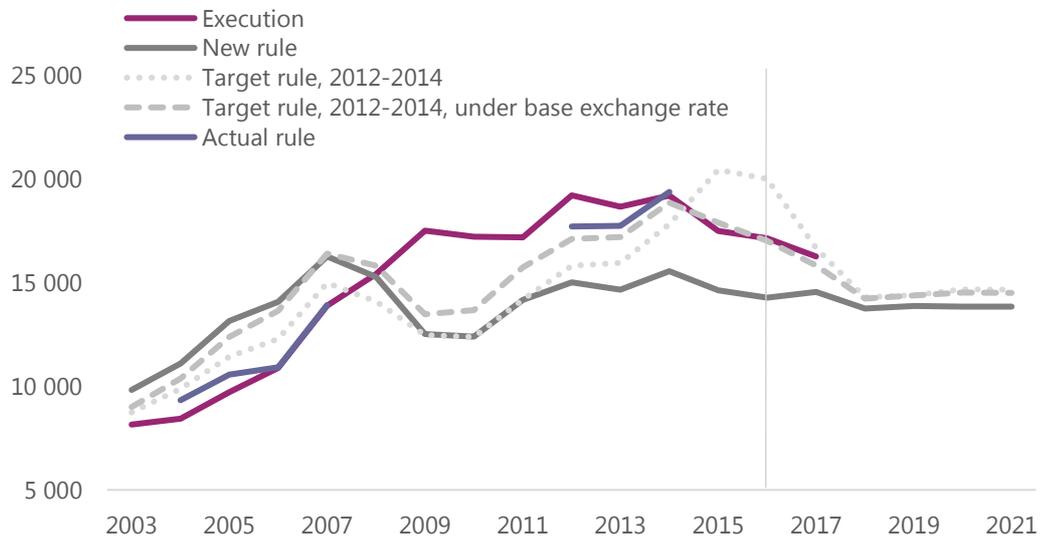
Figure 4. Non oil & gas deficit, % of GDP



Adherence to any reasonable rules will reduce non oil & gas deficit to 5.5-6.5%.

Source: ACRA estimates

Figure 5. Real federal budget expenditures in 2017 prices (CPI-deflated)



The procyclical nature of marginal expenditures during the recession (see 2009-2010) may be undesirable.

Source: ACRA estimates

Underassessment of the ruble exchange rate may lead to excessive structural deficit

Budget planning is carried out in rubles, while one of key uncertainty factors is the oil price in dollars. This makes exchange rate forecasting especially important.

In March-April 2017, the exchange rate averaged RUB 57.2 to USD. Many analysts and economics ministries believe that, given the oil price at the time, the ruble had to be much weaker then, with Focus Economics consensus standing at RUB 61/USD⁶ and the Russian Economics Minister giving an assessment of RUB 62/USD⁷. This means that either some temporary factors have diverted the observed exchange rate from the fundamental one (i.e. modelled), or the current exchange rate models are imperfect (some factors possible influence was not properly considered). In any case, on a 1-year horizon, the expected exchange rate may theoretically deviate of from the actual one by some RUB 5 to USD, or by 8-9% even if the oil price forecast proves correct, while expectations will be allowed for in the course of budget planning.

In view of the influence the exchange rate has on oil & gas revenues forecasts, such ruble strengthening may lead to underestimation of current deficit by 0.4% of GDP, or by RUB 350-400 bln in 2017 prices, while in terms of the fiscal rule this may result in a similar overassessment of structural deficit, due to an overestimated oil and gas revenues forecast under the base price for oil.

Recurring deviations of this magnitude are unlikely, as market exchange rates should converge to fundamental levels, while forecasting systems are usually adjusted to account for discovered errors. If errors are unsystematic and prone to both over- and underassessment, they would not undermine sustainability of the rule and will only require a possibility to swiftly correct the structure of deficit financing or surplus spending by a corresponding value. The most risk-free way to achieve this lies through sufficient budget reserves.

We compare alternatives based on the same year-average oil price of USD 54/bbl. The only difference is the ruble exchange rate, namely RUB 57/bbl against RUB 62/bbl.

⁶ Focus Economics Consensus Forecast, CIS countries, March 2017

⁷ TASS: <http://tass.ru/ekonomika/4181645>

Tighter fiscal rule does not necessarily slow economic growth

Private demand growth mismatching expectations can lure into expansion of state demand as a leading economic growth stimulus. In this case, transition to a stiffer fiscal rule, i.e. the one allowing for lower expenditures, may seem to cause an economic slowdown. However, we believe that a simplified qualitative analysis is fraught with an erroneous assessment of the economic policy outcome.

The economic science employs fiscal multipliers to assess the impact of public spending on economic growth. A comprehensive cross-country comparison produces contradictory conclusions, but it seems rather obvious that not every government demand stimulates economic growth, while efficiency of public expenditures depends on macroeconomic conditions⁸. Multipliers gauging spending growth that takes place in normal conditions may not only be lower than those at a time of recession, but step down to the negative territory for some expenditure types. Their financing mechanism also matters apparently. A non-shock, i.e. expected, spending contraction may not be necessarily associated with declining demand, as it may well be compensated for by growth in private demand or even stimulate the its expansion. Finally, a current monetary policy and proximity of interest rates to zero also play their part.

In a particular situation of Russia, which sees its federal budget consolidate, one may hardly gauge the latter's impact on economic growth with no regard to Bank of Russia's decisions. Starting 2015, the forced fiscal stimulus (deficit) is fully compensated by the restrictive monetary policy that aims at curbing inflation, which has exceeded the medium-term target. As deficit shrinks, monetary policy will get softer⁹. Their combined impact on economic growth in the coming years will likely be either neutral, or slightly negative¹⁰. In the long run, declining presence of the state in the Russian economy should bolster private demand.

Fiscal multiplier is a ratio of a change in fundamental variables (real GDP, consumption, investments) to an exogenous change in fiscal policy (in terms of both total budget expenditures and revenues and their components) for a set period.

⁸ See, for instance, Kilponen, Pisani, Schmidt, Corbo, Hlédik, Hollmayr, Hurtado, Júlio, Kulikov, Lemoine, Lozej, Lun (2015), Comparing fiscal multipliers across models and countries in Europe, Working Paper Series 1760, European Central Bank; Ramey, Zubairy (2014), Government spending multipliers in good times and in bad: evidence from US historical data, University of California at San Diego and Texas A&M University; Caggiano, Castelnuovo, Colombo, Nodari (2015), Estimating Fiscal Multipliers: News from a Nonlinear World, Economic Journal, 125(584): 746-776.

⁹ See, for instance, Morozov, Vlasov (2016), On budget deficit growth impact on Bank of Russia key rate, Analytical note by the Research and Forecasting Department of the Bank of Russia.

¹⁰ In particular, depending on inflationary expectations and their impact on Bank of Russia's decisions on the key rate level.

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