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**CURRENCY INTERVENTIONS. HOW THE CENTRAL BANK PARTICIPATES
IN OVERCOMING THE ECONOMIC CRISIS IN RUSSIA**

**ВАЛЮТНЫЕ ИНТЕРВЕНЦИИ. КАК ЦЕНТРАЛЬНЫЙ БАНК УЧАСТВУЕТ
В ПРЕОДОЛЕНИИ ЭКОНОМИЧЕСКОГО КРИЗИСА В РОССИИ**

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Abstract. The article is devoted to the currency interventions that were carried out by Central Bank of Russia in order to mitigate crisis consequences. Authors made analysis of the correlation between ruble to dollar exchange rate and Brent price, derivatives of this correlation and made a conclusion about efficiency of the Central Bank actions. The article is relevant, all analyzed actions are connected with 2017 year and concerned interventions that will be done by Central Bank soon.

Аннотация. Статья посвящена проведению валютных интервенций Центральным банком Российской Федерации, как способу смягчения последствий экономического кризиса в период 2014–2017 годов. Авторы статьи проанализировали значения корреляции обменного курса рубля к доллару США и цены барреля нефти марки Brent. Анализ производных между обменным курсом рубля к доллару США и цены барреля нефти марки Brent в период, когда валютные интервенции проводились, позволил сделать выводы об их эффективности. Исследовав многочисленные статьи, а также основываясь на собственных выводах авторы делают вывод о возможности и целесообразности проведения валютных интервенций в 2017 году, которые Центральный Банк и Министерство Финансов Российской Федерации уже анонсировали. Статья является актуальной и всеобъемлющей, отвечает на вопросы сегодняшнего дня, учитывая результаты прошедших трех лет (2014–2016 гг.).

Keywords: currency interventions, Central Bank of the Russian Federation, Ruble exchange rate, Ruble exchange rate to Brent price correlation.

Ключевые слова: валютные интервенции ЦБ РФ, корреляция курса рубля и цены нефти, экономический кризис в РФ, плавающий обменный курс рубля.

Since 2014 we have been hearing about Russian “oil needle” much more. The reason for that is cleared for those who are acquainted with Russian state budget. Budget planning process starts from defining average oil price for the next year and setting the dollar exchange rate to ruble as a consequence. Any changes cannot be made during the following year so the above mentioned step is of high importance.

Dollar exchange rate depends on oil price almost fully. Authors have calculated the correlation between these two parameters by analyzing daily oil price and exchange rate for the last three years. The correlation reaches minus 0.87. Russian government has no possibility to change the oil price by itself, but still has an opportunity to influence on the exchange rate.

The Central Bank of the Russian Federation is an independent structure that is responsible for bank sector and the stock exchange of the country. Furthermore, the Central Bank (CB) is in charge of National Reserve Fund. The Central Bank can provide Currency Interventions — entry to the stock exchange and buying or selling dollars from National Reserve fund [1]. Central Banks are the main participants of currency markets in many countries, they can influence the exchange rate of the country through changing quite big amount of money. The procedure is as follows: CB sells dollars thereby increasing offer of them in the market, simultaneously ruble exchange rate rises up. And vice versa, by buying dollars, CB creates additional demand and ruble becomes “weaker” (1). The main reason for interventions is quite volatile economic situation (oil prices are not stabilized as well as dollar exchange rate) that is harmful for the economy.

In the article authors analyze different cases of interventions in the Russian Federation since 2014, provide the results of interventions’ effectiveness and try to answer the most intriguing question — are interventions in 2017 needed and would they be effective [2]?

First of all, we would like to explain why we took 2014 as a starting point. As we now, till 2014 Russia had pegged exchange rate within horizontal bands [2]. When the market weighted rate deviated from officially settled bounds, Central Bank provided interventions to eliminate the deviation. Since November 2014, CB has set floating exchange rate and after a month and a half stopped all its activities on the stock market, because it is the essence of floated rate. Ruble became totally free.

After ruble has become floated the exchange rate against USD rapidly grew. Let’s have a look at the diagram, that illustrates Brent oil price and ruble exchange rate of the first month after regime change (Figure 1).

The round of intervention is represented between the marks of the same color. The diagram depicts two rounds (02.10.14–08.11.14 and 02.12.14–16.12.14).

In both cases CB sells dollars. First of all, the reason for these rounds is pretty obvious — cheaper oil price and sanctions decreased ruble rate by 15% on October 3rd, and on December 2nd this drop became more remarkable, up to 48%. Since October 3rd till November 8th CB has sold 27.8 billion USD and as we can see from the graph, these currency changes brought a result: ruble rate decreased to 45 rub per USD on November 27th. After November 30th CB and other experts understood, that on the background of oil price declining exchange rate can reach even 80 rub per USD and this situation will create huge inflation risk. By the way, at that time CB imposed interest rate at unreally 17%, trying to stop speculative gateway of the capital and reduce inflation growth.

The second round of interventions were even more helpful: after December 18th the rate started to fall in the same direction with Brent prices, that cannot be naturally. Correlation at the period from December, 18 reached 0.91, when the average correlation from 2014 to 2017 is -0.87 . Therefor we can make a conclusion that in 2014 CB acted very successfully and thanks to interventions the crisis has begun as soft as possible.

In April 2015, after 4 months of “freedom”, CB suddenly announced the intention to intervene and buy dollars. Have a look at the Figure 2 with oil prices and ruble exchange rate from April till August 2015:

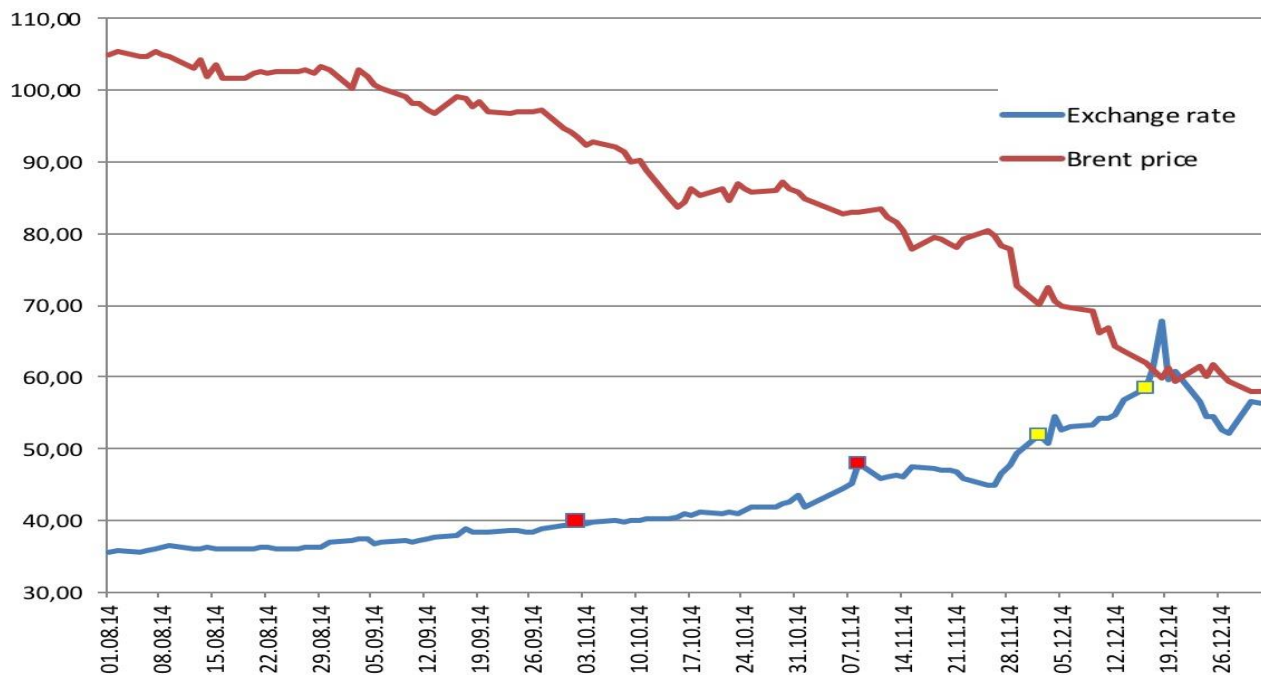


Figure 1. Ruble exchange rate and Brent price in the 4 quarter of 2014

First of all, it should be emphasized that these interventions are totally different from 2014's. Volatile economic situation encouraged CB made some steps for its regulation, because unpredictable reality is harmful for country's economy in a long-term basis.

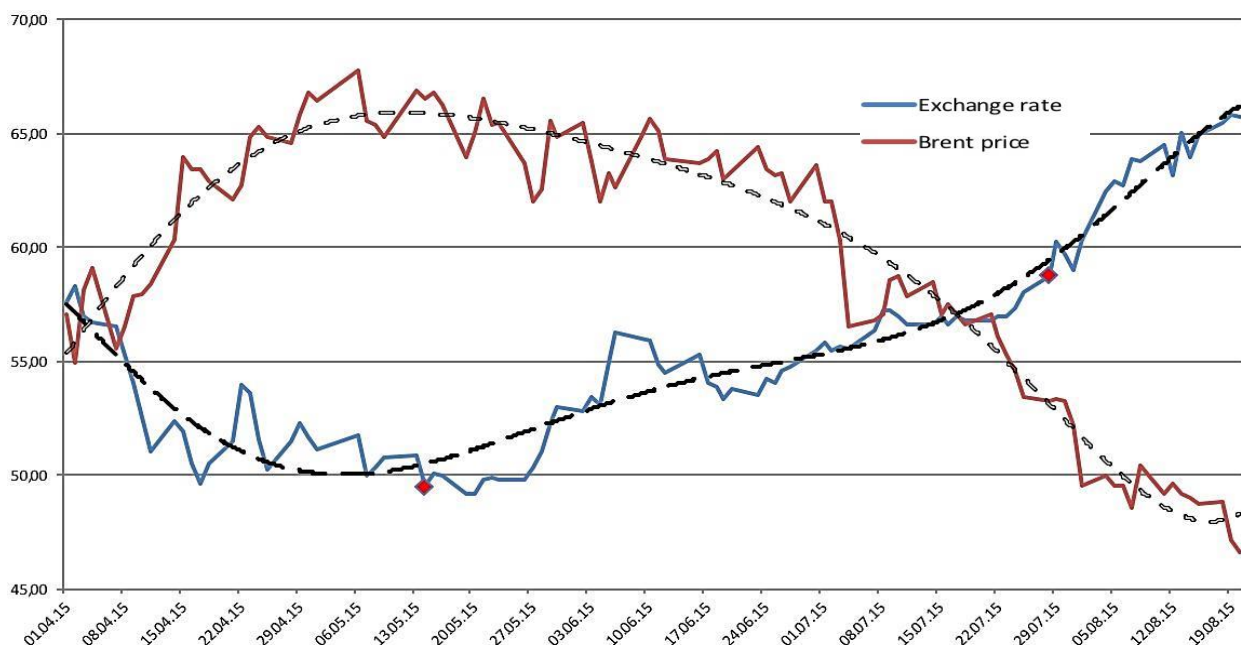


Figure 2. Ruble exchange rate and Brent price in April–August 2015

The situation was followed: on the background of oil prices increase, ruble has become more stronger and governmental taxes on oil production and export became smaller (in ruble equivalent),

so, the budget has received less money. At that time the deficit had been already huge (nearly 7 percent) and it was not sensible to be increased more. So CB decided to buy dollars and make ruble lower. But if we consider the Figure 2 again we can understand, that actually these actions were excess, because Brent price decreased anyway. A confirmative sign of the above mentioned interventions was a small splash on June 9, when ruble reached 62 per dollar. This rate was not an equilibrium point and therefore it was slightly decreased some days later [3]. The conducted analysis shows the effectiveness of the interventions. CB chose exactly right time for replenishment of the reserve found, that was considerably decreased in 2014. The calculation of the derivative (oil price — argument, exchange rate — function value) shows that before interventions, oil price decreasing by one dollar increased ruble exchange rate by 0.65 (derivative equals to -0.65) and after interventions derivative became minus 0.81. It means that ruble has faster become appropriate for the government (as it was conceived) and Reserve fund has grown up. By the way, it is very important for a country to find the opportunity to replenish its reserves during the crisis. Usually in difficult times the country continue to spend that reserved capital. So, we can see that again CB has done successful actions on the stock exchange.

To be sure, we made a data analysis of all oil prices and exchange rates changes. We calculated average derivatives at periods of interventions and without them. The results are followed:

The Table confirms us, that when oil prices was falling down sharply (1.08.2014 — 16.08.2014), CB sold dollars and stopped exchange rate declining (derivative was decreased). And vice versa, during Brent price started to decrease slowly after non-comfortable (for the government) stabilization, ruble moved faster to the appropriate rate.

Table.

DERIVATIVE BETWEEN BRENT PRICE AND RUBLE EXCHANGE RATE

Period	1.08–1.10.2014	2.10–8.11.2014	9.11–29.11.2014	2.12–16.12.2014	16.12.2014– 13.05.2015	4.05–28.07.2015	29.07–20.08.2015	nowadays
Buy/sell dollars	—	Sold 30 bln	—	Sold 10.3 bln	—	Bought 10.1 bln	—	—
Derivative	-0.69	-0.55	-0.39	-0.21	-0.65	-0.69	-0.81	-0.34

Interventions can be stated and hidden (2). In the article we are analyzing only stated actions, because we simply cannot identify hidden. Stated interventions have very serious so-called “effect of announcement”, when CB informs the market what it is going to do. That is why these manipulations in 2015 were without time lag, just simultaneously. As it was mentioned, the announcement was unexpected and therefore had even bigger effect.

Nevertheless, during the crisis each successful action has a downside, a missed opportunity. For example weak ruble is good for exporters and for the government but it is totally deadly for manufacturers, that have to renovate their foreign equipment or import components for production. Another dilemma is struggling with inflation–base interest rate that was imposed by CB in 2014 was very high (17%), made personal credits with more than 20% interest [4]. Of course this decision stopped economic growth at once, but looking at the past it was the only right decision. The crediting activity reduce the amount of money in the economy as well as decreasing inflation. CB is responsible for all such challenging decisions.

Now, we are answering the main and the most intriguing question of the year: is that a good idea to provide interventions in 2017 and will they be effective? The Figure 3 illustrates current situation of the Russian economy:

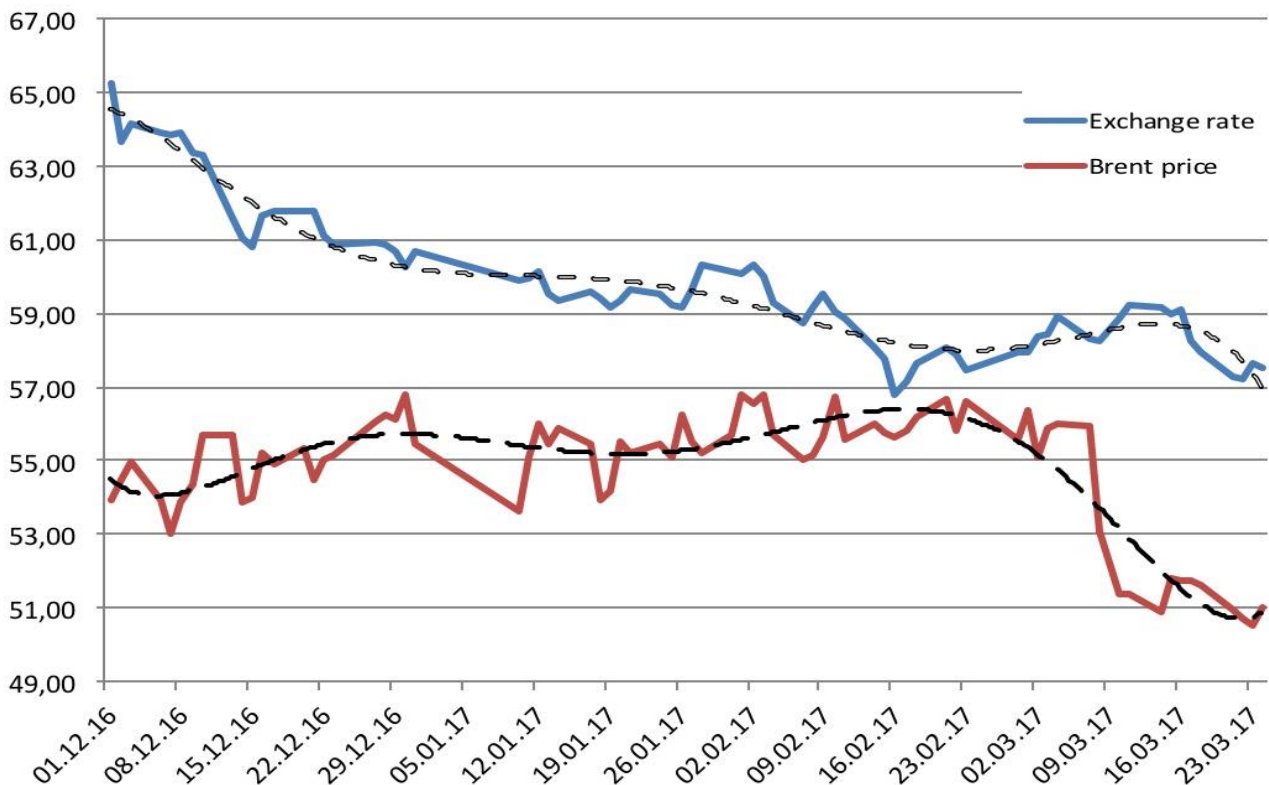


Figure 3. Ruble exchange rate and Brent price nowadays

The exchange rate is decreasing gradually on the background of stable oil price and investors' positive expectations of geopolitical situation. The majority of experts believe that strong ruble is not very beneficial for the government that starts losing its revenues from the export and oil production taxes. But actually budget for 2017 has an "airbag" anyway, it was accepted with the oil price of 40 USD or 2700 ruble per Brent barrel. Nowadays oil prices are approximately 3000 rub per barrel. It means that CB has not very big space for maneuvers, it can continue to wait carefully for gradual exchange rate decreasing or can buy dollars and replenish Reserve found within declining of the interest rate. It is clear from the official sources that CB is more incline to the second option. Analyzing data of the Moscow stock exchange we made a conclusion, that market average price for ruble should be nearly 0.16 USD or 60 rubles per one dollar. The Ministry of Economic Development and the Ministry of Finance recently announced the same figures: if oil prices are stabilized, their expected course for 2017 is 60–61 rubles for one US dollar (1).

Nowadays oil prices are quite high, so CB should not take the main role at the stock market and set the exchange rate synthetically, it has to interfere only in case of unexpected risks appearance, like it was in 2014. The exchange rate should not be supported synthetically by CB during the crisis, this situation is dangerous due to skewness of the economy and exhaustion of all National funds. So, decision to let ruble be "free" was justified. The other problem is what to do with the Reserve found, that has already been only 917 billion rubles. Today on the wave of ruble consolidation it is good time to buy approximately 4–5 billions of dollars, increase exchange rate to fair 60 rubles per dollar, gradually, not to destroy the point of equilibrium totally.

Yesterday on the press-conference the Head of the Central Bank, Elvira Nabiullina announced quite positive forecast for the economic growth of 1–1.5% in 2017. That is very heroic achievement, after two years of recession (3). All in all, CB is responsible for two main things—inflation and exchange rate. In 2016 inflation was only 5.38%, dollar exchange rate came back from extremely high 80 rubles per dollar to moderate 57. We used to think that during the crisis the government takes all leverage of control in its hands and copes with troubles [5]. But in reality

Central Bank takes major part in overcoming the crisis as well, every day doing hard work, calculating and analyzing different strategies and future consequences. This activity is hidden from the publicity, but nevertheless, it cannot be overestimated.

Sources:

- (1). Data on the Bank of Russia FX operations. Available at: <https://goo.gl/mehbph>.
- (2). Foreign Exchange Intervention. Available at: <https://goo.gl/gZ9a8V>.
- (3). Committee on Payments and Market Infrastructures (CPMI), Digital Currencies, Bank for International Settlements (BIS), November 2015, p. 598.

References:

1. Golubev, S. S., & Sekerin, V. D. (2016). Bank management. Moscow, Prospekt, 221
2. Moiseev, S. R. (2002). Politic of the currency interventions of Central Banks: essence, shadow ways and efficiency of Russian CB operations. *Finansy i kredit*, (11), 46-53
3. Barber, S., Boyen, X., Shi, E., & Uzun, E. (2012). Bitter to Better – How to Make Bitcoin a Better Currency. *Financial Cryptography and Data Security, Lecture Notes in Computer Science 7397*, ed. A.D. Keromytis, Springer, Berlin/Heidelberg, 399-414. doi:10.1007/978-3-642-32946-3_29
4. Kharina, P. A., & Mokeeva, N. N. (2015). Currency interventions and their efficiency in the currency crisis. *XII International scientific and practical conference on the problems of economic development in the modern world Sustainable Development of Russian Regions: Economic Policy in terms of external and internal shocks. Yekaterinburg, UrFU, 1332-1336*
5. He, D., Habermeier, K., Leckow, R., Haksar, V., Almeida, Ya., Kashima, M., Kyriakos-Saad, N., Oura, H., Sedik, T. S., Stetsenko, N., & Verdugo-Yepes, C. (2016). Virtual Currencies and Beyond: Initial Considerations. International Monetary Fund, 42

Список литературы:

1. Голубев С. С., Секерин В. Д. Банковский менеджмент. М.: Проспект, 2016. 221 с.
2. Моисеев С. Р. Политика валютных интервенций центральных банков: сущность, теневые механизмы и эффективность операций Банка России // Финансы и кредит. 2002. №11 (101). С. 46-53. Режим доступа: http://www.mirkin.ru/_docs/articles03-014.pdf (дата обращения 15.05.2017).
3. Barber S., Boyen X., Shi E., Uzun E. Bitter to Better – How to Make Bitcoin a Better Currency // *Financial Cryptography and Data Security, Lecture Notes in Computer Science 7397*, ed. A.D. Keromytis, Springer. Berlin; Heidelberg, 2012. P. 399-414. DOI: 10.1007/978-3-642-32946-3_29.
4. Харина П. А., Мокеева Н. Н. Валютные интервенции и их эффективность в условиях валютного кризиса // XII международная научно-практическая конференция «Устойчивое развитие российских регионов: экономическая политика в условиях внешних и внутренних шоков» (г. Екатеринбург, 17-18 апреля 2015 г.): сборник материалов. Екатеринбург: УрФУ, 2015. С. 1332-1336. Режим доступа: <https://goo.gl/RhPSao>.
5. He D., Habermeier K., Leckow R., Haksar V., Almeida Ya., Kashima M., Kyriakos-Saad N., Oura H., Sedik T. S., Stetsenko N., Verdugo-Yepes C. Virtual Currencies and Beyond: Initial Considerations. International Monetary Fund, 2016, 42 p. Режим доступа: <https://goo.gl/9Zr4ob>.

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