

Optimal Economic Policy and Oil Price Shocks in Russia

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Significant oil price fluctuations are an important factor influencing real economic variables, especially in the countries with large dependency on export of natural resources. Under such fluctuations, it is natural to consider the possibility of economic policy to fine tune the real economy, achieve inflation stability, and to weaken the negative influence of oil price shocks. In terms of monetary policy, authorities realize the existence of many channels through which oil market is related to the real sectors and inflation. The Central Bank of Russia should analyze the necessity to react to oil prices and to change the effect of them on the real economic variables.

The most typical way of reaction to oil prices in the Russian Federation is accumulation of reserves at the Reserve Fund. The Stabilization Fund (was later in 2008 separated into the Reserve Fund and the National Welfare Fund) was created in 2004 based on the initiative of Mr. Alexey Kudrin, who was a Minister of Finance at the time. The idea of the fund is to direct the revenue from oil export to the budget, but only when the price of oil does not exceed a pre-specified level, and the residual income should be accumulated in the fund.

In addition, the Central Bank of Russia may respond with its refinancing rate to the changes of the oil price via an augmented oil price Taylor rule or indirectly without inclusion of a commodity quota into the monetary policy rule.

We consider whether the Central Bank of Russia should formally establish the policy of responding to the changes of the oil price. The key evaluation criterion for selecting the optimal response is the minimization of inflation and GDP fluctuations.

Taking into account the results of an applied Dynamic Stochastic General Equilibrium model estimated for the Russian economy, we suggest that the Central Bank, optimally, should include the oil price in its interest rate Taylor monetary rule. That is, it should react to oil price quotas but only in the case of stabilization fund absence. This suggested optimal monetary policy implies a positive direct response to oil price shocks; a 1% oil price increase (decrease) should trigger CBR to raise (decrease) the refinancing rate by 0.1%. In the case of stabilization fund presence, there is no need to respond to changes in the oil price since the former stabilizes the situation when the oil price fluctuates too much.

The main potential limitation of this study is the problem of model quality against the real data. In addition, other monetary policy instruments may be tested against the reaction to changes in the oil price.

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Semko’s research interests include Applied Macroeconomics and Econometrics.