Iikka Korhonen

Bank of Finland, Institute for Economies in Transition, Finland

Sanctions and Counter-Sanctions — What Are their Economic Effects in Russia and Elsewhere?

Abstract. In this note I review the literature on the economic effects of sanctions against Russia and Russia's own counter-sanctions. There are papers looking at the macroeconomic effects of sanctions as well as their effects on international trade and financial flows. All such papers must also deal with the collapse of oil price, which happened almost concurrently with the introduction of sanctions. Most papers find a negative effect of sanctions on Russia's general economic development since 2014. This effect most likely operates both via foreign trade and decreasing foreign capital flows into Russia. Moreover, Russia's own counter-sanctions have a clear negative effect on the well-being of an average Russian household.

Keywords: *sanctions, foreign trade, capital flows, oil price, Russia.*

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Introduction

After conflict over the occasion of Crimea and East Ukraine, various sanctions against Russian individuals and organizations have been initiated by the European Union Member States, the United States, Canada, Australia, and others.

The sanctions against Russian entities came mainly in two waves during 2014. In the spring of 2014, many individuals and organizations faced travel restrictions and asset freezes. However, these sanctions were not very far-reaching, e.g. they did not apply to any of the large state-owned companies in Russia or to the Russian Federation itself. The second set of sanctions came into force after the downing the Malaysian Airlines flight MH-17 in July 2014. These sanctions included e.g. ban on the sale of military equipment as well as dual-use goods meant for military use. Also, G7 countries announced e.g. that they would block financing the Russian entities in "European Bank for Reconstruction and Development" (EBRD).

However, far more important sanctions tool has been the prohibition of long-term financing¹ to several large state-owned companies. In the banking sector these companies included "Sberbank", VTB, "Gazprombank", "Rosselkhozbank" (Russian Agricultural Bank) and VEB (Russia's state-owned development finance institution, which is strictly speaking not a bank). As the first two of these banks, "Sberbank"

and VTB, accounted approximately 45% of the sector's consolidated balance sheet at the end of 2018, this was clearly a significant step towards disintegration of the Russian economy from the global financial markets.

Furthermore, similar financial sanctions were introduced against the large Russian companies in the energy sector, namely against the oil giant "Rosneft", oil pipeline company "Transneft", oil exploration and refiner "Gazpromneft", as well as several companies operating in the military sector.

Only a few days after the introduction of these measures, much more stringent sanctions by the European Union Member States, the United States, Canada etc., Russia countered with its own "counter-sanctions". These counter-sanctions took the form of banning import of many foodstuffs (mainly meats, dairy products as well as fruits and vegetables) from the countries that had introduced sanctions against Russia. (Not all foodstuffs, though. E.g. alcoholic beverages were excluded from the ban, as were agricultural goods meant for production of baby food.) Initially the timing of Russia's counter-sanctions was set to mimic the EU's decision cycle, but that has changed. Currently Russia's import ban is set to run until the end of 2020, whereas the EU decides on the continuation of most of its sanctions

¹ Initially the threshold was 90 days, but it was very soon reduced to only 30 days.

every six months. Moreover, Russia's counter-sanctions have by now become a part of its general import substitution policies. These policies, by reducing foreign competition in Russia may further slowdown Russia's economic growth in the coming years, if incumbent and protected companies do not have sufficient incentives to increase their efficiency and productivity. For a more detailed account of sanctions, their timing and design in 2014 (Korhonen et al., 2018).

This note does not dwell on larger number of literature reviews concerning rationale and effects of economic sanctions. However, N. Gould-Davies (Gould-Davies, 2018) provided, among other things, a succinct discussion on the uses of economic sanctions as a foreign policy tool. He notes that the sanctions against Russia are unique in the sense that so far Russia is the largest economy against which they have been employed. This makes assessment of their effects for all the parties involved more difficult. For further discussion on the design of sanctions against Russian entities, see e.g. (Christie, 2016).

It is clear that Russia suffered an economic downturn in 2014 and 2015 (Fig. 1). But how much of that was due to the sanctions and how much due to other factors? And if sanctions had an effect, through which channels did they operate? It should also be noted that Russia's GDP growth had decelerated continuously since early 2012.

The rest of this note is structured as follows. The second section looks at various papers assessing the macroeconomic effects of

sanctions and Russia's counter-sanctions, while the third section looks at papers that have focus on international trade or company-level effects of sanctions. The fourth section concludes.

Macroeconomic Effects of Sanctions and Counter-Sanctions

A number of papers looked at the macroeconomic effects of Western sanctions on Russia. As is often noted, such an exercise is made much more complicated by the almost-concurrent drop in the price of crude oil (Fig. 2). In tandem with the introduction of sanctions, Urals crude oil prices declined almost by 50% between June 2014 and early 2015. Traditionally such drops were associated with lower export and tax revenue in Russia as well as tightening of financial conditions. In 2014 and 2015 these negative effects were then reinforced by the introduction of sanctions and – possibly – also by the potential for further sanctions.

The earliest papers analyzing the economic effects of sanctions were necessarily quite tentative. So, "Citibank" (Citibank, 2015) assessed that at about 90% of the GDP decline in 2014 and early 2015 could be explained by the drop in the price of oil, leaving only 10% to be explained by everything else, including the sanctions. International Monetary Fund (International Monetary Fund, 2015) examined the potential effects of sanctions and Russia's counter-sanctions. In this model exercise sanctions reduced Russian real GDP initially by 1–1.5%. Over the medium-

Fig. 1

Russia's quarterly GDP growth rate, % year-on-year

Source: Rosstat.

Fig. 2

Urals crude oil price and RUB/USD exchange rate

Source: Reuters.

term, the IMF suggested that Russia's cumulative output loss might be as high as 9%. This large loss in GDP, however, presupposes a lower level of investment and lower level of productivity growth (as Russia's own inward-looking policies lead to lower level of competition). According to then-available data, Russia's GDP declined initially some 2.5%, of which 1 percentage point, or almost half, could be explained by sanctions and counter-sanctions. (Since then Russia's statistical agency revised its data on gross domestic product, and decline in Russia's GDP was smaller than it was previously thought.) World Bank (World Bank, 2015) assesses the various channels sanctions and counter-sanctions can affect the Russian economy. Importance of investments is highlighted in this paper.

E. Gurvich and I. Prilepskiy (Gurvich, Prilepskiy, 2015) looked at the effects of financial sanctions on the Russian companies. Financial sanctions had reduced their financing opportunities. However, they were able to use their own foreign assets, which had alleviated the negative effects of sanctions. To gauge the macroeconomic effects of sanctions, Gurvich and Prilepskiy formulated four scenarios for various combinations of sanctions regimes and oil price. They found that cumulative effect of sanctions on Russian GDP during 2014–2017 would be 2.4 percentage points lower, i.e. without sanctions the level of GDP would possibly be 2.4% higher at the end of 2017. However, the negative effects of low oil prices in the period were three times greater than the sanctions effect, and in this regard their results conform with many other papers on the topic.

Ch. Dreger et al. (Dreger et al., 2016) reviewed the effects of sanctions and oil price on Russia's financial markets. They concluded that the price of oil was much more important in driving developments of the external value of Russia's rouble than sanctions. However, sanctions and sanctions announcements may have increased volatility of the rouble.

As sanctions have been in place for more than five years, there are now a handful of fresh studies looking at the economic effects of sanctions. International Monetary Fund (International

Monetary Fund, 2019) looks at Russia's growth slowdown between 2014 and 2018 with the help of international macroeconomic models, and concluded that sanctions were reducing Russia's growth rate by 0.2 percentage points every year during that period. However, other factors, including Russia's own macroeconomic policies were more important. Low oil prices shaved off approximately 0.7 percentage points from GDP growth per annum, and restrictive macroeconomic policies meant that growth was eventually even lower. Again, effect of oil prices dominated over that of the sanctions.

A. Pestova and M. Mamonov (Pestova, Mamonov, 2019) concur that the oil prices have been more important in slowing down Russia's GDP developments than sanctions. They use Bayesian vector-autoregressive model and find that in 2014 as well as in 2015 the cumulative effect of sanctions was to decrease the level of Russia's GDP by 1.2%. They argue that sanctions have worked via reduced investment by the Russian companies.

K. Kholodilin and A. Netšunajev (Kholodilin, Netšunajev, 2019) also use structural vector-autoregressive model to examine the effects of sanctions on Russia and the euro area. They are much more skeptical on the effects of sanctions on Russian GDP. If there was negative effect from the sanctions, it took place mainly between mid-2014 and early 2016. However, sanctions had a clear negative influence on the real effective exchange rate of the rouble, ten times as large as the effect on the euro.

G. Barsegyan (Barsegyan, 2019) uses synthetic control method to examine how sanctions have affected Russia's per capita GDP. (The control group consists of mostly other oil producers, so the effect of oil price drop should be observed in this group or "synthetic Russia" as well.) She finds that, on average, Russia's per capita GDP was 1.5% lower between 2014 and 2017 than it could be without sanctions. Sanctions work e.g. via reduced foreign direct investment. On the other hand, Russia's counter-sanctions have led to higher agricultural production at home.

There are much fewer studies looking at the economic effects of Russia's counter-

Table 1

Summary of recent studies concerning sanctions' effect on Russian GDP

Paper	Period	Effect
International Monetary Fund, 2019	2014–2018	–0.2 p.p. per annum
Pestova, Mamonov, 2019	2014–2015	–1.2% by the end of 2015
Kholodilin, Netšunajev, 2019	2014–2016	No statistically significant effect
Barsegjan, 2019	2014–2017	Level of per capita GDP was on average 1.5% lower

sanctions. N. Volchkova et al. (Volchkova et al., 2018) assessed that they clearly reduced the welfare level of an average Russian household, as prices of many goods increased. On average every Russian has had to decrease consumption of banned items by 2000 roubles.

Overall the papers seem to suggest that sanctions had an effect on the Russian macroeconomic developments. However, oil price changes are usually more important in explaining Russia's economic fluctuations. Differences in the precise results obtained can be due to several factors, e.g. choice of the sanctions variable. Ch. Dreger et al. (Dreger et al., 2016) as well as K. Kholodilin and A. Netšunajev (Kholodilin, Netšunajev, 2019) use a particular form of sanctions intensity index, while many other studies treat sanctions more as a binary variable. In addition, different vintages of Russian GDP may give different results. For example, in January 2019 "Rosstat" significantly revised its estimates of GDP and domestic demand in 2016 and 2017. Also, its estimate of the GDP drop in 2015 improved between the first estimate and the final release by more than 1.5 percentage points, and is now –2.3%. Keeping in mind all these caveats, Table 1 summarizes results from some of the papers surveyed in this section.

Trade and Company-Level Effects

There is also a number of papers looking in greater detail at the effect of sanctions either on trade between Russia and the sanctioning countries or on individual sanctioned companies.

M. Crozet and J. Hinz (Crozet, Hinz, 2019) look at the effect of sanctions on foreign trade between Russia and other countries. Within a traditional gravity model, they first look at Russia's

exports to all of its (major) trade partners. They assess that from the beginning of sanctions to the end of 2015 Russia lost some \$54 billion in terms of exports. Western countries imposing sanctions lost approximately \$42 billion in terms of exports to Russia, and more than 90% of this loss was borne by the EU countries. Interestingly, most of this reduction in trade happened in goods that neither side had banned. Trade declined perhaps because of reduced availability of finance or greater risk aversion.

O. Fritz et al. (Fritz et al., 2017) used counterfactual analysis based on an econometric model to assess sanctions' effect on the EU countries' exports to Russia. They found that between 2014 and 2016 the EU countries' exports to Russia were \$35 billion lower (11% lower as compared to the baseline) than they would have been without the sanctions. In this analysis the drop in exports was the largest in agricultural goods, as they were targeted by Russia's counter-sanctions. However, exports declined in many other categories as well, hinting at the importance of trade finance and its availability.

D. Ahn and R. Ludema (Ahn, Ludema, 2019) use company-level data from Russia to research whether targeted sanctions really had the desired effect, i.e. whether those Russian companies under sanctions have performed differently from their peers. According to them, this is indeed the case. Targeted companies have performed poorly in comparison to other companies with similar characteristics. For example, their operating revenue falls by one-quarter and their total assets by approximately one-half in comparison to the control group. The targeted companies also reduce employment and face higher probability of going out of business. In

this sense the targeted sanctions have functioned as designed.

Closing Remarks

Surveying the literature on the topic, it is clear that Western sanctions have had a negative effect on the Russian economy during the past five years. At the same time, fluctuations in the price of oil continue to exert larger (or maybe even much larger) effect on Russia's economic activity. In this sense, sanctions have the intended effect: from the viewpoint of 'senders' they represent a clear economic cost for Russia's undesirable actions.

Based on the evidence, one can surmise that so far sanctions worked e.g. by restricting Russian companies' access to finance, and hence by lowering investments in Russia. And while foreign direct investments were not banned, they were probably affected as well.

Sanctions and Russia's counter-sanctions have also imposed costs on the Western countries. Their exports to Russia were actually lower than they otherwise would be. And this is perhaps true also in sectors where Russia did not impose import bans.

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Иикка Корхонен

Банк Финляндии, Институт переходных экономик,
Финляндия

Санкции и контрсанкции — каковы их экономические последствия для России и других стран?

Аннотация. В этой статье я привожу обзор литературы об экономическом влиянии санкций против России и ответных санкций самой России. В этих работах анализируются макроэкономические последствия санкций, а также их влияние на мировую торговлю и направление финансовых потоков. Во всех этих работах также рассматривается последствия спада цен на нефть, который произошел почти одновременно с введением санкций. В большей части работ отмечаются негативные последствия санкций для общего экономического развития России с 2014 г. Эти последствия, наиболее вероятно, скажутся не только на международной торговле, но они уже проявились в снижении притоков иностранных капиталов в Россию. Более того, собственные, ответные санкции самой России негативно отразились на благосостоянии обычного российского домохозяйства.

Ключевые слова: *санкции; мировая торговля; потоки капитала; цена нефти; Россия.*

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