BOFIT Policy Brief 2019 No. 2

likka Korhonen

Sanctions and counter-sanctions – What are their economic effects in Russia and elsewhere?



BOFIT Policy Brief Editor-in-Chief Juuso Kaaresvirta

BOFIT Policy Brief 2/2019 13 September 2019

likka Korhonen: Sanctions and counter-sanctions – What are their economic effects in Russia and elsewhere?

ISSN 2342-205X (online)

Bank of Finland BOFIT – Institute for Economies in Transition

PO Box 160 FIN-00101 Helsinki

Phone: +358 9 183 2268

Email: bofit@bof.fi

Website: www.bofit.fi/en

The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland.

Contents

Abstract	3
1. Introduction	
2. Macroeconomic effects of sanctions and counter-sanctions	
3. Trade and company-level effects	8
4. Closing remarks	
References	

likka Korhonen

Sanctions and counter-sanctions – What are their economic effects in Russia and elsewhere?¹

Abstract

In this note, I review the literature on the economic effects of sanctions against Russia and Russia's counter-sanctions. As a general observation, studies of the macroeconomic effects of sanctions on Russia and their effects on international trade and financial flows must deal with the nearly concurrent oil price collapse at the introduction of sanctions. Most papers support the view that sanctions have worked as planned, noting the drag they have imposed on Russia's general economic development since 2014. This adverse effect most likely operates by depressing both foreign trade and foreign capital flows into Russia. Russia's own counter-sanctions have also had a clear negative effect on the welfare of the average Russian household.

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

¹ I would like to thank Laura Solanko and Juuso Kaaresvirta for valuable comments on an earlier draft of the paper and Greg Moore for language-editing. This paper is forthcoming in the Russian Journal of Economics.

1. Introduction

Following Russia's annexation of Crimea and Sevastopol, as well as military operations in eastern Ukraine, sanctions against Russian individuals and organizations were initiated by European Union member states, the United States, Canada, Australia and other countries.

The 2014 sanctions against Russian entities came mainly in two waves.² In the wake of Crimea's annexation in spring 2014, travel restrictions and asset freezes were imposed on Russian individuals and organizations. This first set of sanctions was quite limited. They did not apply to a single large state-owned company in Russia or the Russian government itself. The second set of sanctions came with the downing of Malaysian Airlines flight MH-17 in July 2014. They included a ban on the sale of military equipment and dual-use goods with military potential. Additionally, the G7 countries announced that they would block financing to Russian entities through the European Bank for Reconstruction and Development (EBRD).

However, the most important sanctions tool by far been prohibiting long-term financing for select large state-owned companies.³ Companies in the banking sector included Sberbank, VTB, Gazprombank, Rosselkhozbank (Russian Agricultural Bank) and VEB (Russia's state-owned development finance institution, which, strictly speaking, is not a bank). For Sberbank and VTB, which together controlled approximately 60% of the Russian banking market, this was clearly a significant step towards isolating a part of the Russian economy from global financial markets.

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

Russia responded with its own counter-sanctions a few days after the introduction of these much more stringent sanctions. The Russian government banned imports of a range of foodstuffs (mainly meats, dairy products, fruits and vegetables) from countries that had introduced sanctions against Russia. Some food products such as alcoholic beverages and agricultural goods meant for production of baby food were exempt from the ban.

Russia's counter-sanctions were initially synchronized with the EU's decision-making cycle, but that has changed. Russia's current import ban is set to expire at the end of 2020, while the EU must decide on sanction renewal every six months. Moreover, Russia's counter-sanctions have become part of its general import substitution policies. Such policies reduce foreign competition in Russia, so they could further impede Russian growth in coming years if protected incumbent companies lack competitive incentives to increase efficiency and productivity.

This note does not assess the economic effects of the US sanctions introduced in 2018 as they are quite different in nature from earlier sanctions. It also leaves for others the discussion on rationales for economic sanctions. It is sufficient here to mention the observation of Gould-Davies (2018), who, in his succinct discussion on the uses of economic sanctions as a foreign policy tool, notes that the sanctions against Russia are unprecedented in the sense that Russia is the largest economy against which sanctions have ever been deployed. 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).

² For a more detailed account of sanctions, their timing and design in 2014, see Korhonen et al. (2018).

³ The initial threshold was 90 days, but was soon reduced to 30 days.



Figure 1. Russia's quarterly GDP growth rate, % year-on-year

Source: Rosstat.

Russia clearly suffered an economic downturn in 2014 and 2015 (Figure 1), but how much of that was due to the sanctions and how much to other factors? Moreover, if sanctions had any 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 considers papers that assess the macroeconomic effects of sanctions and Russia's counter-sanctions. The third section explores papers focusing on international trade impacts and company-level effects of sanctions. The fourth section concludes.

2. Macroeconomic effects of sanctions and counter-sanctions

A number of papers have looked at the macroeconomic effects of Western sanctions on Russia. The exercise, as noted, is complicated by the almost-concurrent drop in the price of crude oil (Figure 2). In tandem with the introduction of sanctions, Urals crude oil prices declined almost 50% between June 2014 and early 2015. Such drops are traditionally associated with lower export and tax revenue in Russia, as well as tightening financial conditions. In 2014 and 2015, these negative effects were reinforced by the introduction of sanctions and the potential for further sanctions.

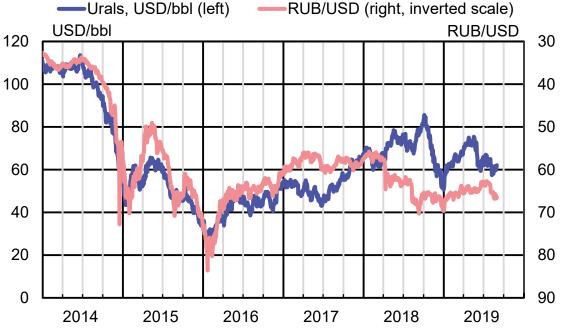


Figure 2. Urals crude oil price and RUB/USD exchange rate

Source: Reuters.

Papers from the outset of sanctions claim that they seemed to be having some negative impact. Citibank (2015) found that some 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. The International Monetary Fund (2015) examined the potential effects of sanctions and Russia's counter-sanctions. In its model exercise, sanctions reduced Russian real GDP initially by 1–1.5%. Over the medium-term, the IMF suggested that Russia's cumulative output loss might be as high as 9%. This large loss in GDP, however, presupposed 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 one percentage point, or almost half, could be explained by sanctions and counter-sanctions. (Russia's statistical agency Rosstat has since revised its GDP data to show that the decline in Russian output was smaller than previously thought.) A study by the World Bank (2015) assesses the various channels through with sanctions and counter-sanctions might affect the Russian economy. They conclude that the impact is likely negative, but do not attempt to quantify the reduction in growth. The paper highlights the fact that investments are most likely to suffer from the sanctions.

Gurvich and Prilepskiy (2015) look at the effects of financial sanctions on Russian companies. While financial sanctions reduced corporate financing opportunities, companies could still access their own foreign assets, thereby alleviating the negative effects of sanctions. To gauge the macroeconomic effects of sanctions, Gurvich and Prilepskiy formulate four scenarios for various combinations of sanctions regimes and oil price. They find that cumulative effect of sanctions on Russian GDP during 2014–2017 would be 2.4 percentage points, i.e. without sanctions the level of GDP would have been 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. In this regard, their results conform with many papers on the topic.

Dreger et al. (2016), who look at the effects of sanctions and oil price on Russia's financial markets, conclude that the price of oil is much more important in driving developments of the external

value of Russia's ruble than sanctions. They point out that sanctions and sanction announcements, however, may have contributed to higher ruble volatility.

With sanctions in place now for over five years, we have a collection of fresh studies looking at their economic effects. The International Monetary Fund (2019) looks at Russia's growth slowdown between 2014 and 2018 with the help of international macroeconomic models, and concludes that sanctions reduced Russia's growth rate 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, the effect of oil prices predominates over sanctions.

Also Pestova and Mamonov (2019) find that oil prices have been more important in driving Russia's GDP growth than sanctions. Using a Bayesian vector-autoregressive model, they determine that the cumulative effect of sanctions in 2014 and 2015 decreased the Russian GDP by 1.2%. They argue that sanctions have worked via reduced investment by Russian companies.

Kholodilin and Netšunajev (2019), also employing a structural vector-autoregressive model, examine the effects of sanctions on Russia and the euro area. They are much more skeptical about the effects of sanctions on Russian GDP, asserting that any negative effect from sanctions likely occurred between mid-2014 and early 2016. However, sanctions have had a clear negative influence on the real effective exchange rate of the ruble, ten times as large as the effect on the euro.

Using a synthetic control method to examine how sanctions have affected Russia's per capita GDP Barsegyan (2019) finds that, on average, Russia's per capita GDP is 1.5% lower between 2014 and 2017 than it would have been without sanctions. Sanctions work by e.g. reducing foreign direct investment. On the other hand, Russia's counter-sanctions have led to higher agricultural production. There are far fewer studies examining the economic effects of Russia's counter-sanctions. Volchkova et al. (2018) conclude that counter-sanctions have clearly reduced the welfare level of the average Russian household by raising prices of many goods. On average, every Russian has had to decrease consumption of banned items by 2,000 rubles a year. Baranova and Porokhova (2018) report that Russia's counter-sanctions reduced Russia's GDP by 0.2% and real incomes by 2–3% between 2014 and 2018. GDP was lower than in a scenario without counter-sanctions due to lower private consumption not fully offset by increased agricultural production.

Taken as a whole, the papers suggest that changes in oil prices are usually more important in explaining Russia's economic growth, even if sanctions have affected the Russian macroeconomic trends. Differences in the precise results obtained can be due to several factors, e.g. choice of the sanctions variable. Dreger et al. (2016) as well as Kholodilin and 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, Rosstat significantly revised its estimates of 2016 and 2017 GDP and domestic demand in January 2019. Rosstat's estimate of the GDP drop in 2015, which now stands at -2.3%, also shifted between the first estimate and the final release by more than 1.5 percentage points. Keeping in mind all these caveats, Table 1 summarizes results from a few of the most recent papers surveyed in this section.

-

⁴ The control group here consists mostly of other oil producing states, so the effect of oil price drop should be observed in this group, including "synthetic Russia."

Paper	Period	Effect
IMF (2019)	2014–2018	−0.2 p.p. per annum
Pestova and Mamonov (2019)	2014–2015	-1.2% by the end of 2015
Kholodilin and Netšunajev (2019)	2014–2016	No statistically significant effect
Barsegyan (2019)	2014–2017	Level of per capita GDP on average 1.5% lower

Table 1. Summary of recent studies on the impact of sanctions on Russian GDP

3. Trade and company-level effects

Several papers go into detail on the effects of sanctions on trade between Russia and sanctioning countries or on individual sanctioned companies.

Crozet and 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 its major trading partners. They determine that Russia lost some \$54 billion in exports from the beginning of sanctions to the end of 2015. Western countries imposing sanctions lost approximately \$42 billion in exports to Russia, with 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.

Belin and Hanousek (2019) find somewhat smaller trade effects from sanctions than Crozet and Hinz (2019) when they dissect the differential effect of the EU and Russian sanctions. Exports from the sanctioning countries to Russia were \$10.5 billion smaller from mid-2014 to the end of 2016 than in the absence of sanctions, with the effect coming predominantly from Russian counter-sanctions. Cheptea and Gaigné (2018) find that less than half of the drop in the EU exports to Russia in goods that Russia sanctioned was due to sanctions themselves. The bulk of the export decline came from a weaker ruble and the decrease in Russian purchasing power. Moreover, EU exports of agricultural goods to Russia are now higher than before the sanctions, indicating that the EU producers have been able to re-orient their exports to circumvent sanctions.

Fritz et al. (2017) apply a counterfactual analysis based on an econometric model to assess sanctions' effect on the EU countries' exports to Russia. They find that EU exports to Russia between 2014 and 2016 were \$35 billion lower (11% lower compared to the baseline) than they would have been without the sanctions. In this analysis, the export drop was largest in agricultural goods 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.

Using company-level data from Russia to research whether targeted sanctions have had their desired effect, Ahn and Ludema (2019) ask whether Russian companies under sanctions performed differently from their peers. They conclude that has indeed been the case. Targeted companies are shown to have performed poorly relative 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. Targeted firms have also had to cut staff and face a higher probability of going out of business. In this sense, targeted sanctions have functioned as designed.

4. Closing remarks

Surveying the literature on the topic, it is clear that Western sanctions have had a negative effect on the Russian economy over the past five years. At the same time, fluctuations in the price of oil continue to exert a larger (arguably much larger) effect on Russia's economic activity. Sanctions thus have worked as intended. They were never designed to wreck the Russian economy or a particular sector of the Russian economy, but nevertheless have extracted a clear economic price for Russia's undesirable actions.

Based on the evidence, one can surmise that so far sanctions have worked (e.g. by restricting the access of Russian companies to finance) to reduce investment in Russia. Figure 3 shows the evolution of Russia's foreign debt. It is clear that the foreign funding of Russian bank in particular has been affected by financial sanctions. The foreign debt of Russian banks peaked in March 2014 at \$214 billion, thereafter declining to \$80 billion in June 2019, a reduction of 62%. The dominant position of Sberbank and VTB, which are under sanctions, likely accounts for much of Russia's decoupling from global capital markets. A tantalizing issue is why no additional financing has been forthcoming from elsewhere, particularly China, to make up for the loss of financing from the US and EU countries. Korhonen and Koskinen (2019) present evidence that net capital flows from the sanctioning countries' banks to Russia declined by \$700 million per quarter after sanctions.

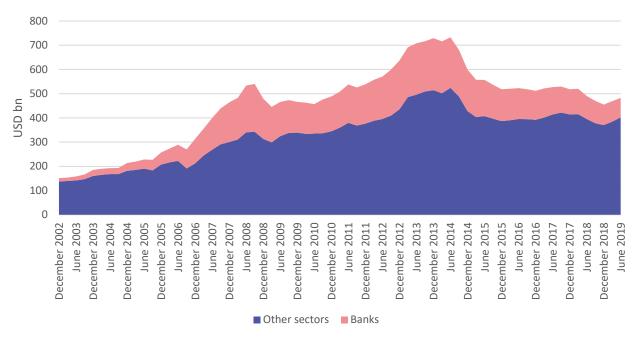


Figure 3. Russia's foreign debt

Source: Central Bank of Russia.

While foreign direct investments have not been banned, they have probably been affected as well. Golikova and Kuznetsov (2017) present survey evidence from Russian companies and show that companies involved in foreign trade are more worried about sanctions. In the manufacturing sector, technologically advanced companies view the effects of sanctions quite negatively. This may hamper Russia's efforts at technological catch-up in the years ahead.

Western countries have also paid a price for sanctions and counter-sanctions. Western exports to Russia have been lower than they would have otherwise, even in sectors where Russia has not imposed import bans.

References

Ahn, Daniel P. and Rodney D. Ludema (2019). "The sword and the shield: the economics of targeted sanctions," CESifo Working Paper 7620.

Baranova, Vasilisa and Natalia Porokhova (2018). "Изменение экономической политики — основной канал влияния санкций на российскую экономику," AKRA Macroeconomic Research, https://www.acra-ratings.ru/research/819.

Barsegyan, Gayane (2019). "Sanctions and Counter-Sanctions: What Did They Do?" forthcoming as BOFIT Discussion Paper.

Belin, Matej and Jan Hanousek (2019). "Which Sanctions Matter? Analysis of the EU/Russian Sanctions of 2014," Centre for Economic Policy Research Discussion Paper 13549.

Cheptea, Angela and Carl Gaigné (2018). "Russian food embargo and the lost trade," SMART-LERECO Working Paper 18-05.

Christie, Edward Hunter (2016). "The Design and Impact of Western Economic Sanctions against Russia," RUSI Journal, 161(3), 52–64.

Citibank (2015). "Russia Macro View – Not too anxious about sanctions," https://ir.citi.com/Ns6%2BuSgO5bg45MCK6HCwlUVxbZo5TXkL%2BBrYQ2S19pKubi3rbFbTU255d6er4oAaBvV4bqrOgYE%3D.

Crozet, Matthieu and Julian Hinz (2019). "Friendly fire: the trade impact of the Russia sanctions and counter-sanctions,"

https://matthieucrozet.weebly.com/uploads/6/0/2/7/60271695/sanctionsep.pdf.

Dreger, Christian, Jarko Fidrmuc, Konstantin Kholodilin and Dirk Ulbricht (2016). "Between the hammer and the anvil: The impact of economic sanctions and oil prices on Russia's ruble," Journal of Comparative Economics, 44(2), 295–308.

Fritz, Oliver, Elisabeth Christen, Franz Sinabell and Julian Hinz (2017). "Russia's and the EU's Sanctions – Economic and Trade Effects, Compliance and the Way Forward," European Parliament, Policy Department, Directorate-General for External Policies, http://www.europarl.europa.eu/RegData/etudes/STUD/2017/603847/EXPO_STU(2017)603847_EN.pdf.

Golikova, Victoria and Boris Kuznetsov (2017). "Perception of risks associated with economic sanctions: the case of Russian manufacturing," Post-Soviet Affairs, 33(1), 49–62.

Gould-Davies, Nigel (2018). "Economic effects and political impacts: Assessing Western sanctions on Russia," BOFIT Policy Brief 8/2018.

Gurvich, Evsey and Ilya Prilepskyi (2015). "The impact of financial sanctions on the Russian economy," Russian Journal of Economics, 1(4), 359–385.

International Monetary Fund (2015). "Russian Federation – Article IV Staff Report," Washington D.C.

International Monetary Fund (2019). "Russian Federation – Article IV Staff Report," Washington D.C.

Kholodilin, Konstantin A. and Aleksei Netšunajev (2019). "Crimea and punishment: the impact of sanctions on Russian economy and economies of the euro area," Baltic Journal of Economics, 19(1), 39–51.

Korhonen, Iikka, Heli Simola and Laura Solanko (2018). "Sanctions, counter-sanctions and Russia – Effects on economy, trade and finance," BOFIT Policy Brief 4/2018.

Korhonen, Iikka and Kimmo Koskinen (2019). "Did sanctions reduce capital flows to Russia? Evidence from bilateral data," forthcoming as BOFIT Discussion Paper.

Pestona, Anna and Mihail Mamonov (2019). "Should we care? The economic effects of financial sanctions on the Russian economy," BOFIT Discussion Paper 13/2019.

Volchkova, Natalya, Polina Kuznetsova and Natalia Turdeyeva (2018). "Losers and winners of Russian countersanctions: A welfare analysis," FREE Policy Brief, https://freepolicybriefs.org/wp-content/uploads/2018/09/freepolicybriefs_oct1.pdf.

World Bank (2015). "Russia Economic Report 33: The Dawn of a New Economic Era?" https://www.worldbank.org/en/country/russia/publication/russia-economic-report-33

BOFIT Policy Brief

https://www.bofit.fi/fi/julkaisut/policy-brief/

2015	No 1 No 2 No 3 No 4 No 5 No 6 No 7 No 8 No 9	Alexey Kudrin and Evsey Gurvich: A new growth model for the Russian economy Heli Simola: Venäjän valuuttavaranto ja rahastot Stephan Barisitz and Zuzana Fungáčová: Ukraine: Struggling banking sector and substantial political and economic uncertainty Heli Simola: Russia's international reserves and oil funds K.C. Fung, Alicia Garcia-Herrero and Jesus Seade: Beyond minerals: China-Latin American Trans-Pacific supply chain Anni Norring: Suomen ja Venäjän välisten suorien sijoitusten tilastot Vesa Korhonen, Zuzana Fungáčová, Laura Solanko, likka Korhonen ja Heli Simola: BOFIT Venäjä-tietoisku 2015 Yang Yao: When are fixed exchange rates an appropriate policy tool for growth? Heli Simola: Rebalancing of demand in China – illustrating possible effects with an input-output analysis
	No 10 No 11	likka Korhonen: How fast can Russia grow? Jouko Rautava, Riikka Nuutilainen, Anni Norring, likka Korhonen ja Jyrki Kallio: BOFIT Kiina-tietoisku 2015
2016	No 1 No 2 No 3 No 4 No 5 No 6 No 7 No 8 No 9 No 10 No 11	Riku Niemi: The Eurasian Union – much potential, little results Andrei Yakovlev: What is Russia trying to defend? Andrei Yakovlev, Lev Freinkman and Anton Zolotov: Domestic and external factors in the development of Russia's economic think tanks sector Mikko Mäkinen: Nowcasting of Russian GDP growth likka Korhonen, Tuomas Forsberg, Vesa Korhonen ja Heli Simola: BOFIT Venäjä-tietoisku 2016 Heli Simola: Economic relations between Russia and China – Increasing inter-dependency? Ivan Lyubimov: Are educational reforms necessarily growth-enhancing? Weak institutions as the cause of policy failure Laura Solanko: Opening up or closing the door for foreign trade – Russia and China compared Heli Simola ja Vesa Korhonen: Arktisen alueen taloudellinen merkitys Venäjälle Masaaki Kuboniwa: Estimating GDP and foreign rents of the oil and gas sector in the USSR then and Russia now Masaaki Kuboniwa: Considerations on new Rosstat data on the contribution of Russia's military goods sector to GDP growth in recent years
2017	No 1 No 2 No 3 No 4 No 5 No 6 No 7 No 8 No 9 No 10	Jouko Rautava: Kiinassa talouspolitiikka ei pysy maan muutosten vauhdissa Heli Simola: China's growing role in global production boosted by strong competitiveness – evidence from international input-output tables Heli Simola ja Laura Solanko: Katsaus Venäjän öljy- ja kaasusektoriin Heli Simola: Chinese production chains rely increasingly on domestic services Heli Simola and Laura Solanko: Overview of Russia's oil and gas sector K.C. Fung, Nathalie Aminian, likka Korhonen and Keith Wong: The Chinese yuan: Influence of interest groups examined Päivi Määttä: Meeting the challenges of impact measurement Caroline Stern, Mikko Mäkinen and Zongxin Qian: FinTechs in China – with a special focus on peer to peer lending likka Korhonen and Riikka Nuutilainen: Breaking monetary policy rules in Russia Andrei Yakovlev, Lev Freinkman, Sergey Makarov and Victor Pogodaev: In response to external shocks: How advanced Russian regions react to changes in federal policies – Experience of Tatarstan
2018	No 1 No 2 No 3 No 4 No 5 No 6 No 7 No 8 No 9 No 10 No 11	Ivan Lyubimov and Maria Lysyuk: Schooling ain't learning in Russia either: High level of student employment as an indicator for slow human capital accumulation Jouko Rautava: Intian nopea kasvu ei vähennä reformien tarvetta Eeva Kerola: Hongkongin talous on vahvasti kytkeytynyt Manner-Kiinaan Iikka Korhonen, Heli Simola and Laura Solanko: Sanctions, counter-sanctions and Russia – Effects on economy, trade and finance Andrei Yakovlev, Lev Freinkman and Nina Ershova: Channels of dialogue between international businesses and national governments: The implications for domestic reforms and international relations in the case of Russia Helmut Wagner: Structural change, rebalancing, and the danger of a middle-income trap in China Wing Thye Woo: A U.S. perspective on China's external economic disputes in the past 40 years and in the coming 40 years Nigel Gould-Davies: Economic effects and political impacts: Assessing Western sanctions on Russia Jouko Rautava: Kiina ja Venäjä – eripariset talouskumppanukset Sergey Vlasov and Mariam Mamedli: Russia's pension system in the context of world experience and expected trends Riikka Nuutilainen: Juanin kansainvälistyminen ei etene suoraviivaisesti
2019	No 1 No 2	Mariya Hake and Alice Radzyner: Western Balkans: Growing economic ties with Turkey, Russia and China likka Korhonen: Sanctions and counter-sanctions – What are their economic effects in Russia and elsewhere?