

Russia's growth problem

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Executive summary

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BETWEEN 2014 AND 2016, the Russian economy suffered from a currency crisis caused by the collapse of oil prices and the country's engagement in the conflict with Ukraine. Although the crisis was overcome in the second half of 2016 thanks to prudent fiscal and monetary policies and higher oil prices, economic recovery remains weak and Russia's medium-term growth prospects look rather disappointing.

THE WEAK GROWTH prospects are caused by several factors including: (i) adverse demographic trends – a declining working-age population and ageing of the population; (ii) a poor business and investment climate; (iii) difficulty in diversifying away from the dominant role of the hydrocarbon sector; (iv) Western sanctions on Russia in response to the annexation of Crimea and Russian support for separatists in the eastern Ukraine Donbas region, and Russian countersanctions.

TO INCREASE POTENTIAL growth, Russia needs comprehensive economic and institutional reforms that, in turn, will be conditioned by political reforms and by improved economic and political relationships with the United States, the European Union and Russia's neighbours.

1 Introduction

In 2014-2015, the Russian economy was hit by a currency crisis, which led to the depreciation of the Russian ruble (RUR) by more than half, a new wave of inflation, a decline in personal income and a contraction of output by a cumulative 2.7 percent. The crisis was caused by a combination of economic and geopolitical factors: the sharp decline in the international price of oil, which is Russia's main export item, and the conflict with Ukraine (the annexation of Crimea and support for separatism in Donbas), which resulted in United States and European Union sanctions against Russia, and in Russian countersanctions.

Since mid-2016, the macroeconomic situation has stabilised and Russia's economy has returned to growth, albeit at a slow pace. The medium-term prospects do not look better despite the partial recovery of oil prices. This raises the question of which factors are limiting the Russian economy's growth potential. And this is the main topic of our analysis.

We start with an overview of growth trends in post-Soviet Russia (section 2). The subsequent sections analyse potential causes of the mediocre growth performance. Section 3 is devoted to the currency crisis of 2014-16, its management and its legacy. In section 4, we assess the potential impact on Russia's economic performance of the conflict with Ukraine and the deteriorating economic and political relationships with the US and EU, including the US/EU sanctions against Russia and Russia's countersanctions. Section 5 analyses the structural characteristics of the Russian economy and trade. Section 6 is devoted to institutional deficiencies, that is, the poor business climate and its consequences for investment and the balance of payments. Section 7 deals with demographic issues, which seem to be the most serious long-term obstacle to growth. Section 8 presents conclusions and recommendations.

2 The post-Soviet growth story

Figure 1 presents the history of economic growth in post-Soviet Russia. The 1990s was marked by a deep output contraction, the result of structural and institutional distortions that accumulated during several decades of the centrally planned economy, plus huge macroeconomic disequilibria in the initial period of transition and the slow pace of economic reform. In fact, the output decline had already started in the late-Soviet period and was preceded by a near decade of economic stagnation.

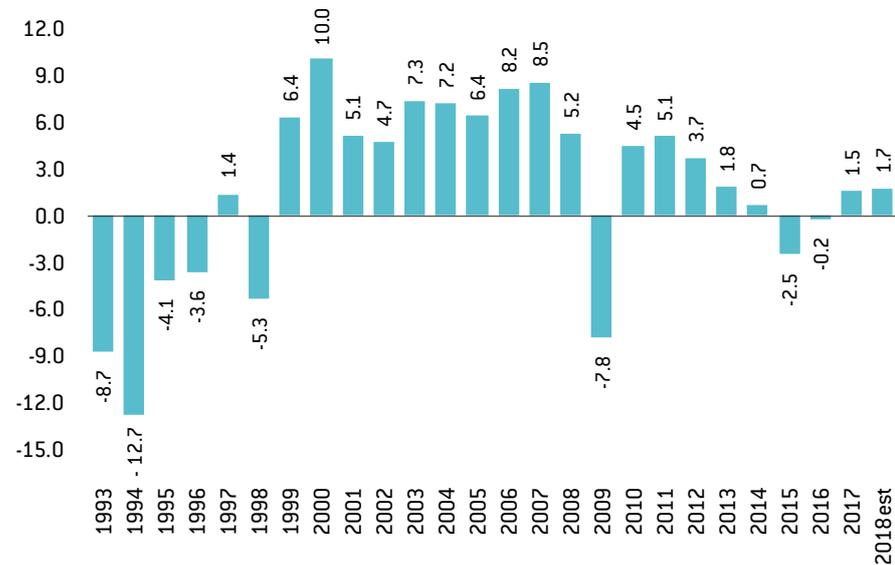
Between 1999 and 2008, Russia enjoyed a decade of rapid economic growth facilitated by structural and institutional changes in the 1990s and the global commodity boom (high oil prices). The global financial crisis of 2008-09 hit Russia hard, leading to a dramatic GDP decline of 7.8 percent in 2009. In the next three years (2010-12), however, there was a visible recovery. In 2013 the growth rate went below 2 percent and the next year Russia was hit by a currency crisis.

This time, the crisis was not caused by imprudent fiscal and monetary policies, as happened in the late 1980s, the first half of the 1990s and in 1998-99. Rather it was triggered by the external shock of the decline in international oil and commodity prices, combined with domestic structural and institutional vulnerabilities. There was also a geopolitical factor not present in the previous crises: Russia's engagement in the territorial conflict with Ukraine, which resulted in international sanctions against Russia and Russian countersanctions (see section 4).

The crisis that started in 2014 caused a two-year recession. Real GDP fell by 2.5 percent in 2015 and additional 0.2 percent in 2016. Although the 2015-16 recession in Russia was shallower than during the global financial crisis (2008-09) it was deeper than in most other oil-producing countries (Dabrowski, 2016). This might have been the result of more conserv-

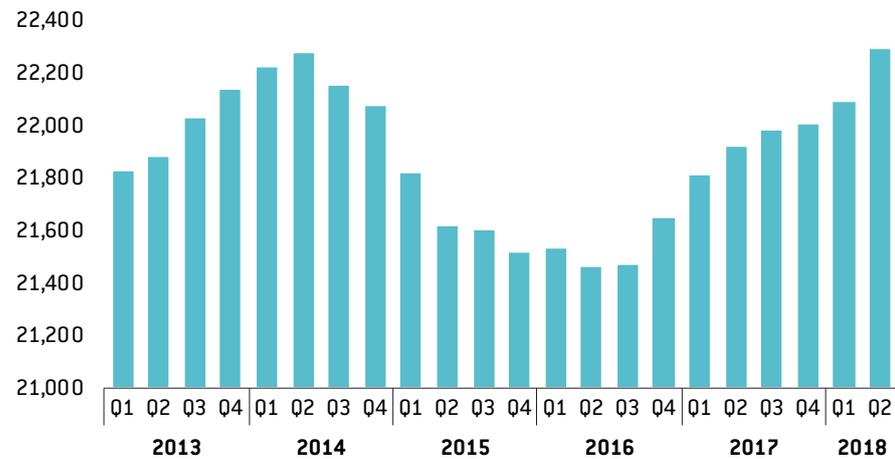
ative fiscal policy in Russia (see section 3), compared to, for example, Saudi Arabia or other Gulf countries, which launched large-scale fiscal stimulus programmes in 2014-15.

Figure 1: Russia: real GDP, annual percentage change, 1993-2018



Source: Bruegel based on IMF WEO database, October 2018.

Figure 2: Russia: quarterly GDP in 2016 prices (RUR billions), seasonally adjusted, 2013-17



Source: Bruegel based on Rosstat.

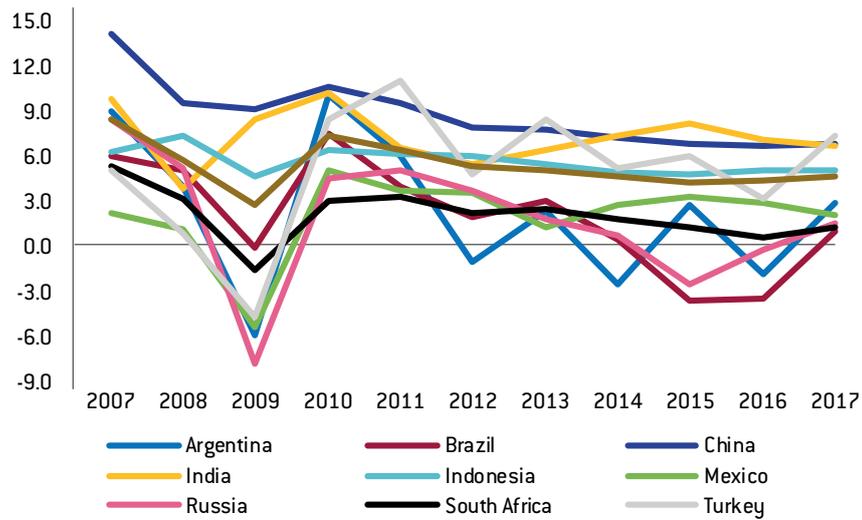
Figure 2 shows quarterly, seasonally adjusted, GDP in constant 2016 prices. The recession started in the third quarter of 2014 and reached its bottom in the second quarter of 2016. Since then, output has recovered, reaching its pre-crisis level in the second quarter of 2018.

Even if the recession of 2015-16 was not deep, it was not followed by a strong post-crisis recovery, as happened after the 1998-99 and 2008-09 crises. In 2017, growth in real GDP amounted to only 1.5 percent (Figure 1) and, according to the International Monetary Fund's (IMF) October 2018 *World Economic Outlook* (WEO) forecasts, it is expected to have been 1.7 percent in 2018. Furthermore, according to the same forecast, growth is expected to fluctuate between 1 percent and 2 percent up to 2023. This is much lower than the growth rate that

Russia enjoyed between 1999 and 2008, and looks disappointing for a middle-income country that still has a long way to go to catch up with the high-income group.

Furthermore, if one compares Russia to other emerging-market economies (Figure 3), its growth performance since 2007 does not look impressive. Brazil, which experienced an even deeper recession in 2014-16, and Argentina, which has recorded several recession episodes since 2010, are the only exceptions. However, it is fair to say that such a comparison of countries might disregard some important factors, such as different demographic conditions or different stages of economic development (see section 7 for an analysis of Russia's unfavourable demographic trends).

Figure 3: Real GDP in Russia and other emerging-market economies, annual percentage change, 2007-17



Source: Bruegel based on World Bank's World Development Indicators. Note: EMDE = emerging market and developing economies.

Nevertheless, the questions of why the rate of growth of the Russian economy slowed down and why Russia's growth prospects remain disappointing, require in-depth analysis and this the main purpose of this Policy Contribution. In the following sections, we analyse in turn five groups of factors that might be responsible for Russia's mediocre growth record: macroeconomic management of the 2014-16 currency crisis; the costs of the Ukrainian conflict and the deteriorating economic and political relationships with the US and the EU; structural characteristics of the Russian economy; institutional shortcomings; and demographic trends.

3 Managing the 2014-16 currency crisis

In 2014-16, Russia was hit by its fifth currency crisis since the early 1990s (Dabrowski, 2016). Between December 2013 and December 2015, the RUR depreciated by 55 percent against the US dollar (it depreciated by less against the euro because of the strengthening of the dollar against the euro), with depreciation greatest in the period between November 2014 and February 2015 (Figure 4). There were then two further but shorter periods of RUR decline – in August 2015 and January-February 2016. After the second quarter of 2016, the RUR gradually strengthened (as a result of the recovery of the oil price) and remained below 60 RUR per dollar thorough most of 2017 and the first quarter of 2018. In April 2018, in response to US sanctions introduced under the Countering America's Adversaries Through Sanctions Act (CAATSA) (see section 4) the ruble depreciated to 61-64 RUR to the dollar. It stayed at this

level until early August 2018 when it fell again to 66-68 RUR per dollar, in reaction to currency crises in Argentina and Turkey (Dabrowski, 2019) and another wave of US sanctions (see section 4).

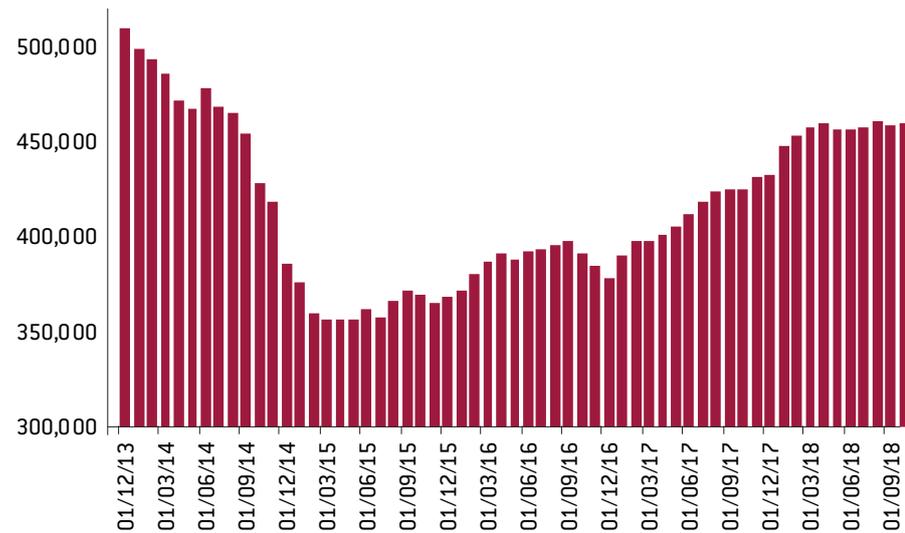
Figure 4: Ruble exchange rate, RUR per dollar, 2013-18



Source: Bruegel based on Central Bank of the Russian Federation.

The Central Bank of the Russian Federation’s (CBRF) international reserves decreased from \$510 billion at the end of December 2013 to \$356 billion at the end of April 2015, a drop of more than \$150 billion. Subsequently, they were gradually rebuilt to a level of about \$460 billion in the second half of 2018 (Figure 5).

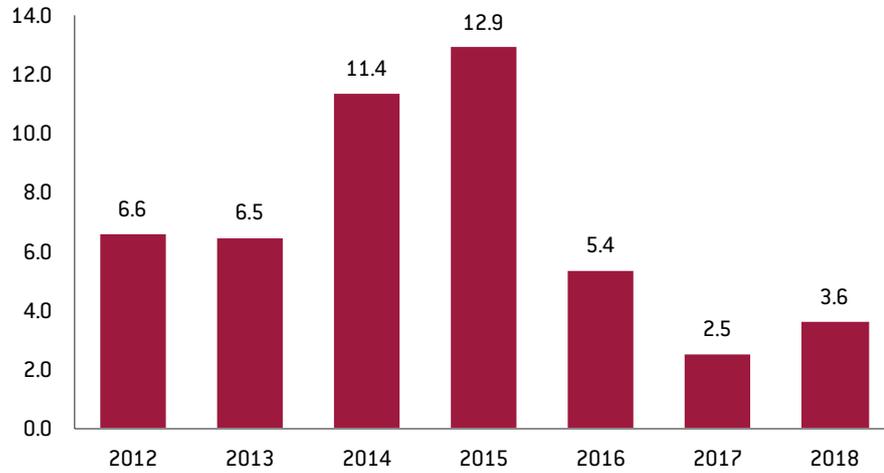
Figure 5: International reserves of the CBRF, in US\$ million, 2013-18



Source: Bruegel based on Central Bank of the Russian Federation.

The introduction in Russia of inflation targeting and a more flexible exchange-rate regime helped in both macro- and microeconomic adjustment, and limited international reserve losses, even if the timing of the introduction of these measures, at the peak of the crisis, was not optimal (Dabrowski, 2016).

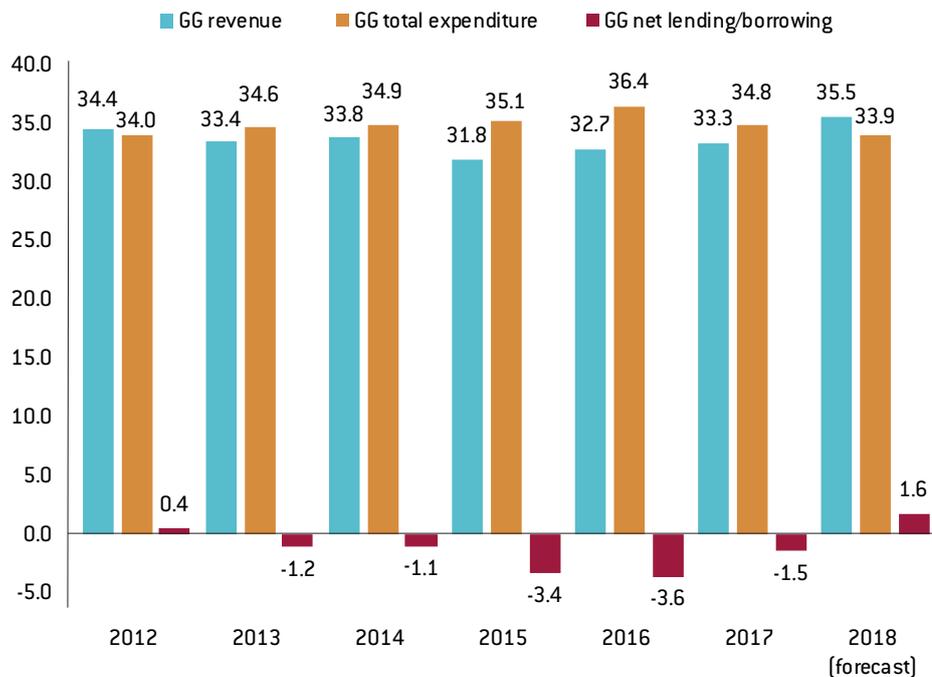
Figure 6: Inflation, end of period, in percent, 2012-18



Source: Bruegel based on IMF WEO database, October 2018 for the period 2012-17; <http://www.gks.ru/dbscripts/cbsd/DBInet.cgi> for 2018.

Currency depreciation pushed twelve-month inflation up to 11.4 percent in December 2014, 16.9 percent in March 2015 and 12.9 percent in December 2015 (Figure 6). Then inflation went down to 5.4 percent in December 2016 and 2.5 percent in December 2017, the lowest ever level in the history of post-Soviet Russia. The inflation-targeting regime helped in this process. Inflation increased again to 4.3 percent in December 2018.

Figure 7: General government revenue, total expenditure and net lending/borrowing, percentage of GDP, 2012-18



Source: Bruegel based on IMF WEO database, October 2018.

Higher inflation was the main driver of a decline in the level of real disposable income of the population: by 0.7 percent in 2014, 3.2 percent in 2015, 5.8 percent in 2016 and 1.7 percent in 2017¹. Inflation also helped to reduce real budget expenditure for several items.

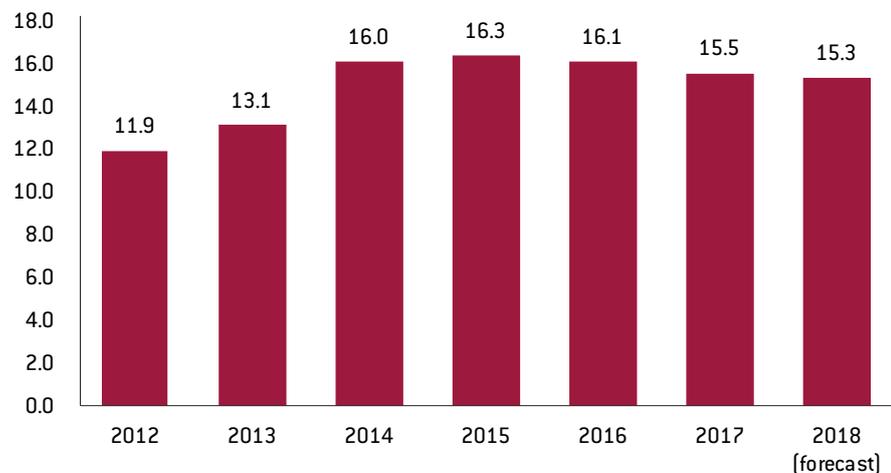
Fiscal policy remained relatively conservative through the entire crisis period (Figure 7). In 2015, general government revenue decreased by only 2 percentage points of GDP despite the dramatic collapse of oil and other commodity prices. Again, devaluation of the RUR and the resulting higher inflation helped to compensate partly, in nominal RUR terms, for both the decline in oil prices in dollars and lower real GDP (see section 2).

Between 2014 and 2016, general government total expenditure increased by only 1.5 percentage points of GDP thanks to limited inflationary indexation of most expenditure items. Since 2016, revenues have started to recover to pre-crisis levels, largely because of higher oil prices. At the same time, expenditure has continued to be kept under control. Nevertheless, the general government balance deteriorated by 4 percentage points of GDP, from a small surplus (+0.4 percent of GDP) in 2012 to a deficit of -3.6 percent of GDP in 2016. Since 2017, the fiscal situation has started to improve and the IMF WEO of October 2018 forecast a general government surplus of 1.6 percent of GDP in 2018 (Figure 7).

Fiscal deficits in the crisis period were financed mainly by running down the assets of the Reserve Fund from \$91.7 billion on 1 September 2014 to zero on 1 January 2018². The second sovereign wealth fund – the National Wealth Fund – has suffered less than the Reserve Fund. The volume of its assets fell from \$87.9 billion on 1 July 2014 to \$77.1 billion on 1 July 2018, with substantial fluctuations in the meantime³.

The remaining part of deficit financing was secured through additional sovereign borrowing, largely on the domestic market, which, however, remains relatively shallow. Opportunities to borrow outside Russia have become constrained by international sanctions (see section 4).

Figure 8: General government gross debt, percentage of GDP, 2012-18



Source: Bruegel based on IMF WEO database.

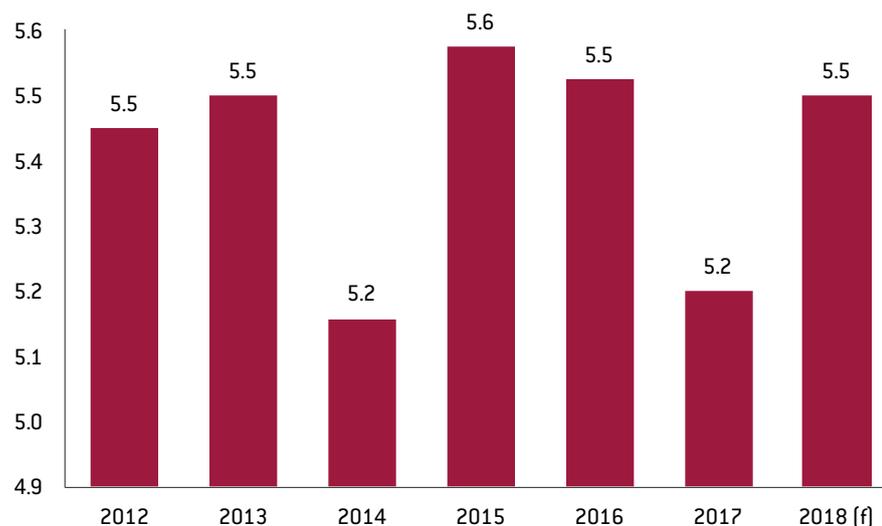
As result, general government gross debt increased only marginally, from 13.1 percent of GDP in 2013 to 16.3 percent in 2015, and then decreased to 15.5 percent in 2017 (Figure 8). Its level remains low by international standards. The net debt statistics are not provided by the IMF WEO database, but net debt increased as a result of the running down of the Reserve Fund.

1 See http://www.gks.ru/free_doc/new_site/population/urov/urov_12kv.doc.

2 See https://www.minfin.ru/common/upload/library/2018/01/main/Obem_sredstv_Rezervnogo_fonda_01_01_2018.docx.

3 See https://www.minfin.ru/common/upload/library/2018/12/main/Volume_of_the_National_Wealth_Fund_01_12_2018.docx.

Figure 9: Russia: unemployment rate (% of labour force), 2012-18



Source: Bruegel based on IMF WEO database, October 2018.

Macroeconomic stability in Russia remains fragile and vulnerable to various economic and political shocks, despite quite solid fiscal fundamentals and the CBRF's large international reserves.

Unemployment did not increase as a result of recession (Figure 9), which can be explained by a combination of the *de-facto* flexibility of the Russian labour market (Gurvich and Vakulenko, 2017), demographic trends (see section 7) and incoming labour migration from other post-Soviet countries, which played the role of short-term anti-cyclical buffer.

Overall, macroeconomic management during the crisis can be considered fairly good and prudent from a technocratic point of view⁴. It tried to minimise the crisis's negative impact on public finances and the real economy and to bring down inflationary expectations. Nevertheless, the crisis itself demonstrated, once again, that macroeconomic stability in Russia remains fragile and vulnerable to various economic and political shocks, despite quite solid fiscal fundamentals and the CBRF's large international reserves. Trust in the ruble and the domestic financial system is limited, which, along with other institutional factors, does not help in improving the business and investment climate (see section 6).

4 The impact of the Ukrainian conflict

In March 2014, Russia annexed Crimea, a part of the Ukrainian territory. Shortly after this annexation, Russia began to actively support the separatist movement in Donbas, which led to Ukrainian authorities losing control over approximately half of this region and the formation of two unrecognised territorial entities – the Donetsk and Luhansk People's Republics. Despite an international effort⁵ to end the conflict in eastern Ukraine (the two Minsk agreements signed on 5 September 2014 and 11 February 2015) it is far from resolved and the end of 2018 it escalated into a new phase caused by Russia's blockade of the Strait of Kerch.

All these actions led to international sanctions against Russia initiated by the US and the EU. Canada, Australia, Norway, Iceland, Switzerland, Japan, some of the EU candidate countries and international organisations such as the European Bank for Reconstruction and Development joined, to various degrees, the anti-Russian measures. Sanctions were put in place in 2014 and are still in force, subject to regular renewal (in the case of the EU) and

⁴ The most controversial episode related to operations to rescue the large state-owned corporations cut off from international financial markets by sanctions in the last quarter of 2014.

⁵ The key roles were played by German Chancellor Angela Merkel and French President Francois Hollande.

updates (concerning the list of sanctioned individuals and companies).

The US and EU sanctions have a multipronged character⁶, involving four groups of measures (Russell, 2016): political/diplomatic (Tier 1), sanctions against individuals and entities (Tier 2), economic sanctions (Tier 3) and those related to Crimea.

The Tier 1 sanctions involve, non-exhaustively, exclusion of Russia from the G8, suspension of negotiations on Russia's accession to the Organisation for Economic Cooperation and Development and the International Energy Agency, suspension of the semi-annual EU-Russia summits, suspension of negotiations on a new EU-Russia treaty and EU-Russia visa liberalisation, suspension of NATO-Russia cooperation, and suspension of the voting rights of the Russian delegation to the Parliamentary Assembly of the Council of Europe.

The Tier 2 sanctions are targeted against named individuals and companies, for example, those engaged in doing business in Crimea. Measures include visa bans and asset freezes. Some of the affected companies have been supported by Russian public money to compensate for sanction-related losses.

In the economic sphere (Tier 3), sanctions have concentrated on three areas:

- A ban on medium- and long-term financing of the largest state-owned banks and companies;
- A ban on trade in military and dual-use equipment, and in some oil exploration and production equipment and services;
- A ban on trade, including tourism, travel and communication services, with the annexed Crimea, prohibition on the use of Crimean ports and involvement in investment activity in this territory.

In April 2018, the US adopted CAATSA, which partly codified the existing sanctions but also introduced new ones against selected Russian business people and companies, in response to Russia's alleged interference in the US 2016 presidential election. Another wave of US sanctions followed in August 2018, this time in response to the attempted assassination in the United Kingdom of a former Russian intelligence officer.

In August 2014, the Government of the Russian Federation responded to the sanctions with a ban on imports of most food products from countries that adopted sanctions against Russia. Since 2014, Russia has also started to introduce a series of economic sanctions against Ukraine, the most significant being the revoking of the bilateral free trade agreement (FTA) on 1 January 2016 (in response to the entry into force of the EU-Ukraine FTA). Between November 2015 and June 2016, Russia also adopted a ban on food imports from Turkey and several other economic sanctions against this country in response to the downing of a Russian fighter jet by the Turkish air force in the Syria-Turkey border area.

Russia has also extended restrictions on non-resident ownership in some sectors, for example, the media.

Assessing the impact on the Russian economy of these sanctions and countersanctions is not an easy task because of the difficulty of disentangling the effects of sanctions and countersanctions from other factors, such as the collapse of the oil price and other commodity prices in mid-2014 (see Korhonen *et al*, 2018). Furthermore, most of the quantitative assessments were done during the early stage of sanctions implementation (2014-16) and are based on *ex-ante* forecasting rather *ex-post* analysis. Nevertheless, the approximate extent of the damage done to Russia's potential growth by sanctions can be given.

Most available estimates found an annual negative impact ranging from 1 percent to 2 percent of GDP. For example, econometric analysis by Kholodilin and Netsunajev (2016) estimated a direct negative impact of sanctions and countersanctions between mid-2014 and the third quarter of 2015. According to their estimate, annualised quarterly growth of

6 See <https://www.state.gov/e/eb/tfs/spi/ukrainerrussia/> for the list and content of US sanctions and https://europa.eu/newsroom/highlights/special-coverage/eu-sanctions-against-russia-over-ukraine-crisis_en for the list and content of EU sanctions.

real GDP was, on average, lower by 1.98 percentage points compared to the counterfactual scenario (without sanctions). The impact on the euro area's quarterly growth rate was also negative but marginal (in the range of 0.02 percentage points).

Dreger *et al* (2016) in their econometric analysis assessed the impact of sanctions and oil prices on RUR depreciation in 2014-2015 and found that the second factor played a decisive role.

IMF (2015, p.5) estimated the initial negative impact of sanctions at between 1 percent and 1.5 percent of Russian GDP, with a long-term cumulative effect of up to 9 percent of GDP.

Gurvich and Prilepskiy (2015) estimated the cumulative loss of Russian GDP arising from Western financial sanctions at 6 percent of GDP for the period 2014-17. A similar result (cumulative 6 percent) for the period 2014-18 was obtained by Bloomberg Economics (Doff, 2018).

World Bank (2016, p. 40) estimated that removing sanctions would increase forecast GDP growth in 2017 by 0.9 percentage points (from 1.1 percent to 2 percent) because of the boost to investment and consumer confidence. However, in subsequent years the forecast growth rate would remain unchanged because of other factors, unrelated to sanctions, limiting Russia's growth potential.

Regarding the Russian countersanctions, Volchkova *et al* (2018) estimated that they are responsible for average annual loss of 2,000 RUR (about \$30) per Russian consumer, or 0.00036 percent of Russian GDP per capita in 2014. Russian producers captured 63 percent of this amount and non-sanctioned exporters, in particular from Belarus took 26 percent. The remaining 10 percent constituted a deadweight loss.

None of the available studies measured the potential impact of the 2018 US CAATSA sanctions.

Overall, sanctions and countersanctions aggravated the 2014-16 currency crisis and the 2015-16 recession. In 2014-15, financial sanctions were particularly painful. By suddenly closing off the international financial market to large state-controlled companies such as Rosneft, Novatek and Gazprom, the sanctions forced the Russian authorities, including the CBRF, to rescue them, causing additional diminution of the CBRF's international reserves and depletion of the National Wealth Fund assets. Financial sanctions also triggered large-scale capital outflows from Russia in 2014-15 (Figure 16) and, therefore, added to market panics and the collapse of the RUR exchange rate in December 2014 and early 2015.

In the longer term, financial and sectoral sanctions limit Russia's growth potential by discouraging investment, both domestic and foreign. The negative effects apply not only to directly-sanctioned sectors such the defence and oil industries. Indirectly, sanctions, countersanctions and deteriorating economic and political relationships with the US and EU negatively affect the entire framework of economic and research cooperation with the west, increase the role of military and security agencies, and limit civil liberties. On the economic front, sanctions and countersanctions strengthen protectionism and economic nationalism⁷. All these phenomena contribute to the deterioration of the already poor business and investment climate in Russia (see section 6).

As well as sanctions, the Ukrainian conflict has involved other direct and indirect costs for Russia, such as higher military spending (Table 1), human losses, the social costs of refugee flows, aid of various kinds to rebel-controlled territories and so on. In addition, there have been the substantial costs of the integration of Crimea into the Russian economy. The costliest investment project was the construction of the Crimea Bridge over the Strait of Kerch, between the Kerch Peninsula (part of the Crimean Peninsula) and Taman Peninsula in the Krasnodarsky krai (part of the Russian mainland), which was opened in May 2018. Its length is over 18 kilometres and the total construction cost was in the region of \$4 billion.

Aslund (2018) estimated the cost to the Russian federal government of administrating

⁷ Korhonen *et al* (2018) argue that the ban on food imports from the EU, US and other countries introduced by Russia in August 2014 as a countersanction measure was, in fact, implementation of much earlier demands from an agriculture lobby for stronger protection against imports, justified on the grounds of the country's food security.

Crimea and providing support to occupied Donbas at \$4 billion or 0.3 percent of Russia's GDP, not including the construction costs of the Crimea Bridge.

Military spending is the only component for which internationally comparative statistics exist. Russia's military expenditure is higher than that of other European countries (Table 1), oscillating between 3.3 percent and 4.1 percent of GDP in 2000s and early 2010s. Military spending has increased since beginning of the Ukrainian conflict, reaching a record-high level of 5.5 percent of GDP in 2016. High military spending crowds out expenditure on other public services, in particular education and health care (Table 1), negatively contributing to potential economic growth, an argument frequently raised in the Russian economic debate (see for example Kudrin and Sokolov, 2017; Kudrin and Knobel, 2018).

Table 1: Russia: government military, education and health expenditure, percent of GDP, 2000-17

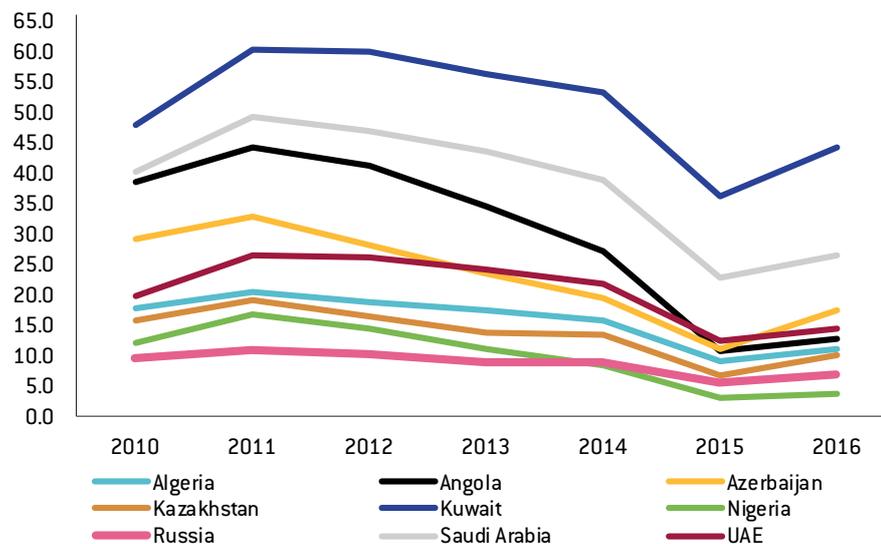
Expenditure item	2000	2004	2008	2009	2012	2014	2015	2016	2017
Military expenditure	3.6	3.5	3.3	4.1	3.8	4.1	4.9	5.5	4.3
Government expenditure on education	2.9	3.5	4.1	..	3.8
GG health expenditure	3.2	3.0	3.2	3.7	3.4	3.5	3.4

Source: World Bank World Development Indicators.

5 Structural challenges

The Russian economy remains dependent on oil and natural gas production and exports. Although in 2013 (that is, before the collapse of oil and gas prices), the share of the hydrocarbon sector in Russian GDP amounted to less than 20 percent, and both oil and natural gas rents were lower than in several other oil- and gas-producing countries (Figures 10 and 11), the industries together made up more than 70 percent of Russian exports (Figure 12). They also provided 40-45 percent of federal budget revenue.

Figure 10: Oil rent as percentage of GDP, 2010-16

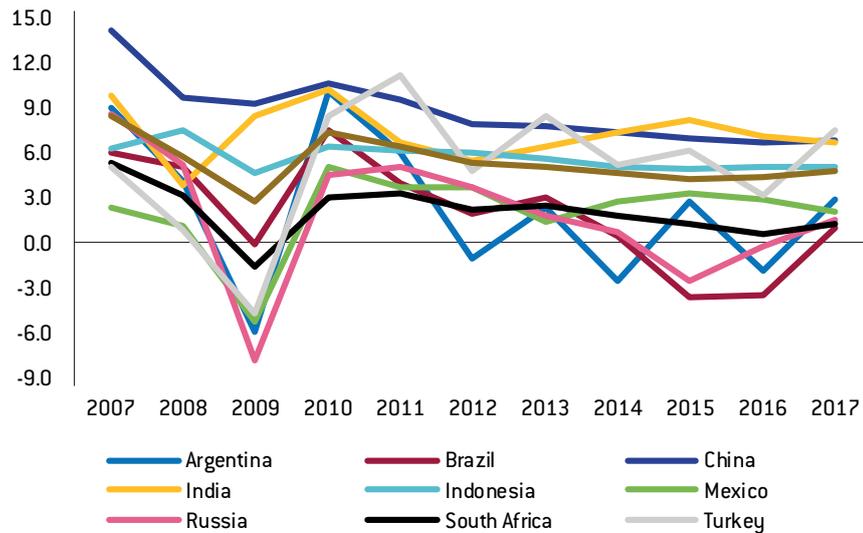


Source: Bruegel based on World Bank World Development Indicators.

Obviously, the period of low oil and gas prices (2014-15) brought these shares down, but since mid-2016, when oil prices started to recover, they have increased again. Furthermore, the drop in oil and gas prices was partly compensated for by an increase in their production and in exports, except for 2017 (GIEP, 2018, p. 247) when Russia joined the countries of the Organisation of Petroleum Exporting Countries in their effort to limit the oil supply to the global market. Thus, if oil and natural gas prices further recover, the role of hydrocarbon exports and revenue in Russia will become even more important than before crisis.

Excessive reliance on hydrocarbon production and exports could create a serious economic challenge in the long-term if the development of low-carbon energy sources results in a smaller global demand for oil.

Figure 11: Natural gas rent as percentage of GDP, 2010-16



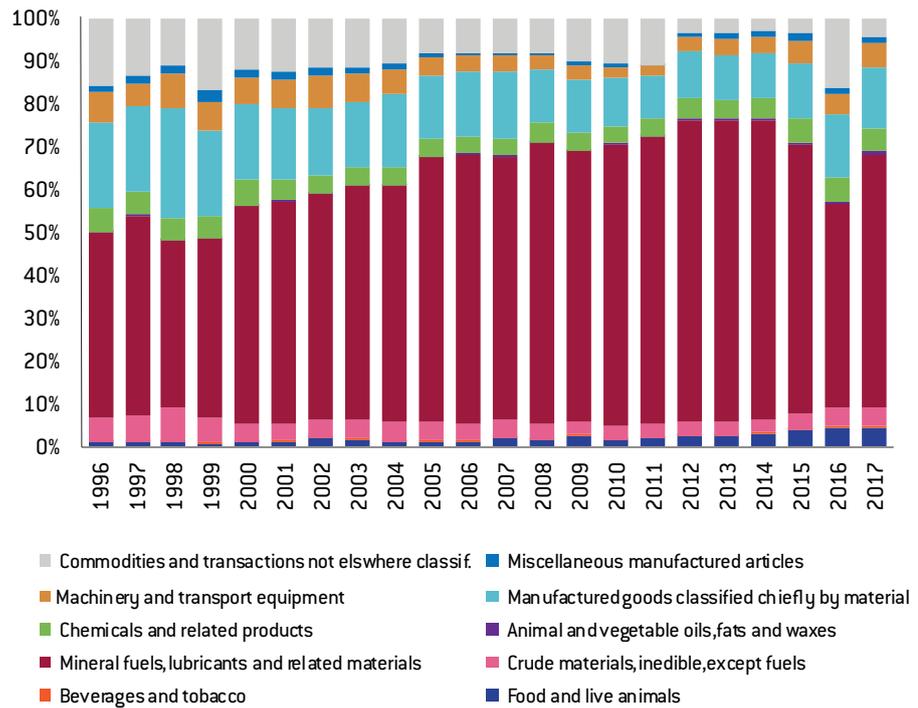
Source: Bruegel based on World Bank World Development Indicators.

For this and other reasons, the Russian economy requires structural diversification away from the hydrocarbon dominance. Most economists inside and outside of Russia accept this. However, in an economy that enjoys unquestionable comparative advantage in production of mineral resources, including hydrocarbons, policies aimed at structural diversification are not easy to conceptualise and implement. The first, macroeconomic obstacle comes from the real exchange rate of the national currency, which appreciates in periods of high hydrocarbon/commodity prices – the so-called Dutch disease. Since the early 2000s, the Russian authorities have tried to neutralise partly this effect through cumulating oil-related fiscal surpluses in sovereign wealth funds. A new budgetary rule introduced in 2017, based on an assumed oil price of \$40 per barrel and capping government expenditure (GIEP, 2018, p. 63), might be helpful in both sterilising the Dutch disease effect and creating more room for countercyclical fiscal policy.

In principle, deep depreciation of the RUR in 2014-15 should have created room for the expansion of domestic manufacturing industries and other non-oil-dependent activities. Unfortunately, there is little evidence of this happening. Between 2014 and 2017, agriculture, food processing, textiles, cellulose and paper production, the chemical and pharmaceutical industries and a few others recorded continuous output growth despite the overall recession (GIEP, 2018, pp.173-175). However, the entire manufacturing sector was in recession, meaning other industries recorded output losses. The share of what the Russian statistics classifies as ‘high-technology and science-intensive’ sectors in GDP remains unchanged, in the range of 21-22 percent since 2013⁸.

⁸ <https://fedstat.ru/indicator/43526>.

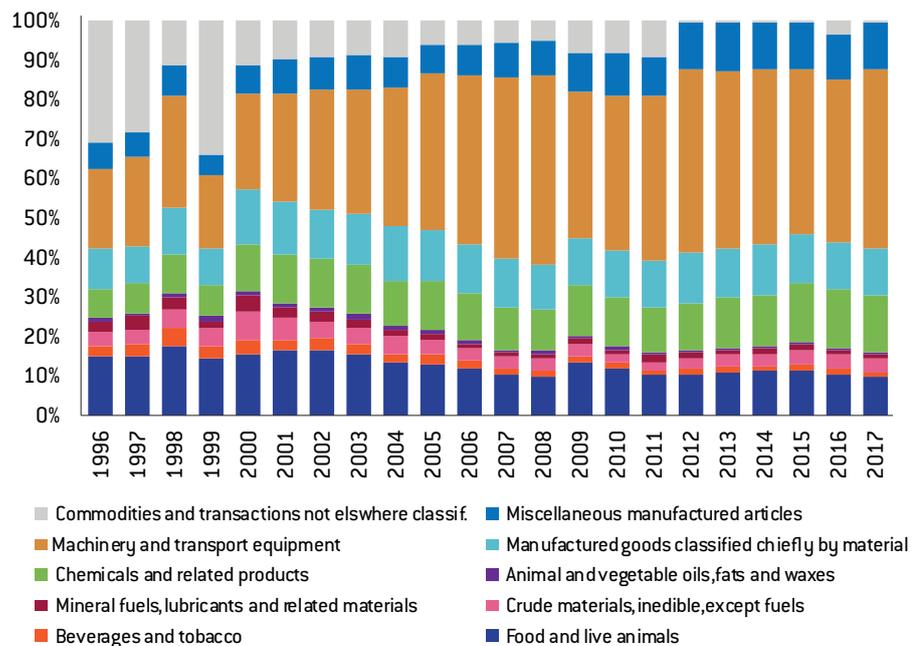
Figure 12: Russia's export profile by product, 1996-2017



Source: Bruegel based on World Integrated Trade Solution database.

There have not been substantial changes in the sectoral structure of Russia's exports (see IMF, 2017a, pp.4-22), but on the import side (Figure 13) one can detect two trends: (i) the slowly decreasing share of food products; and (ii) the increasing share of machinery and transport equipment (amounting, in 2017, to 46 percent of total imports).

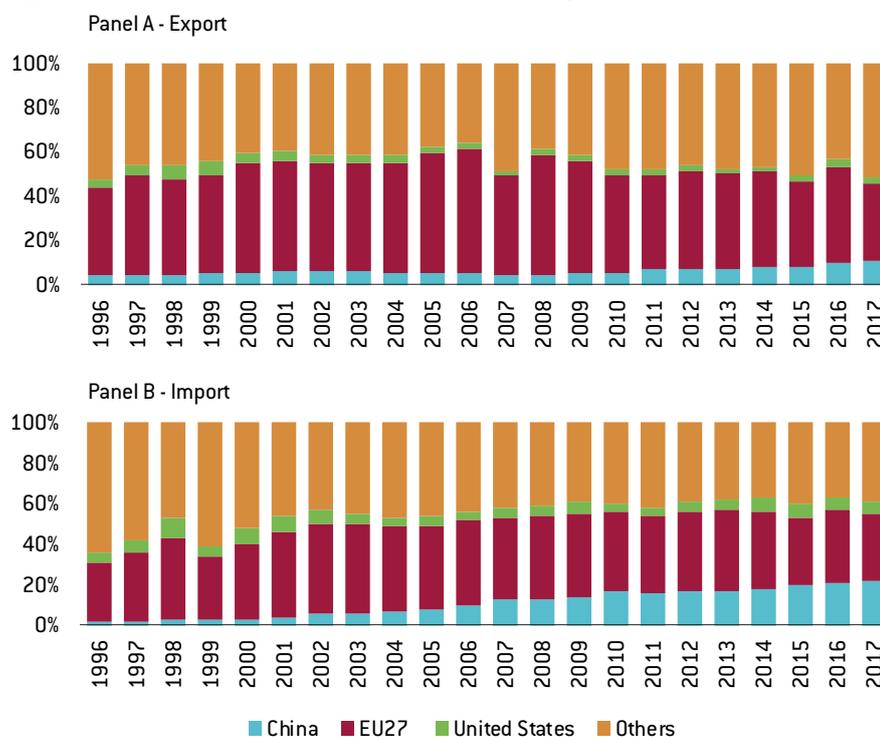
Figure 13: Russia's imports profile by product, 1996-2017



Source: Bruegel based on World Integrated Trade Solution database.

Both trends started to be seen before the 2014-16 crisis, but RUR devaluation and Russian countersanctions (section 4) might strengthen import substitution in relation to food products. Import substitution in other areas, for example, industry supplies and investment goods, was only partial and short-lived despite various government incentives and special programmes (GIEP, 2018, pp. 186-190), because of the lack of availability of domestic equivalents of imported goods, or the poor quality of domestic equivalents.

Figure 14: Russia's exports and imports profile by partner, 1996-2017



Source: Bruegel based on World Integrated Trade Solution database.

Looking ahead, successful structural diversification must rely on market forces, including further opening up to international trade and foreign investment rather than administrative dirigisme, government planning, picking winners and providing state aid to not necessarily economically viable entities. Unfortunately, dirigisme with the aim of promoting import-substitution has been on the rise since 2015 (Connolly and Hanson, 2016). It leads to additional fiscal and quasi-fiscal burdens, trade distortion, state capture by influential special interest groups and political corruption.

Market-oriented diversification requires a supportive macro- and microeconomic environment. Economic agents in non-hydrocarbon and non-commodity sectors must be able to develop and expand their businesses with minimum administrative obstacles, low transaction costs and protection of their property rights. This requires, in turn, improvements in the business climate and governance (see section 6).

In terms of the geographic structure of trade (Figure 14), the EU remains Russia's main trading partner although its share has been decreasing since the mid-2000s. China's share of Russia's trade is increasing, especially on the import side. This seems to be a consequence of rapid economic growth in China and in its export capacities. It is also worth noting that the geographic structure of Russia's trade differs regionally (Melchior, 2015, pp.61-96). Because of Russia's large territory and the limited transportation infrastructure in Siberia, the economy of Eastern Siberia and the Russian Far East gravitates naturally towards China, Japan and Korea, while that of European Russia and Western Siberia pivots to Europe.

6 The unfavourable business and investment climate

Global surveys dealing with various aspects of the business and investment climate provide a contradictory picture of the Russian economy. The World Bank Doing Business (WBDB) 2019 survey, which deals with administrative aspects of business activity in 191 countries, gives Russia a high 31st place in its ranking and score of 77.37 on the scale from 0 to 100. Furthermore, Russia's score and position in the ranking have systematically improved, at least since 2013⁹. Disaggregated scores (Table 2) inform us that Russia performs best in 'Getting electricity' (94.00), 'Starting a business' (93.04) and 'Registering property' (88.74), while scoring worst on 'Protecting minority investors' (61.67) and 'Resolving insolvency' (58.61).

Table 2: Russia: WBDB 2019 ranks and scores

Category	Rank	Score
Starting a business	32	93.04
Dealing with construction permits	48	74.61
Getting electricity	12	94.00
Registering property	12	88.74
Getting credit	22	80.00
Protecting minority investor	57	61.67
Paying taxes	53	79.77
Trading across borders	99	71.06
Enforcing contracts	18	72.18
Resolving insolvency	55	58.61
Overall	31	77.37

Source: <http://www.doingbusiness.org/en/data/exploreeconomies/russia>.

Two other global surveys – the Heritage Foundation Index of Economic Freedom (HFIEF) and Transparency International Corruption Perception Index (TICPI) – offer less optimistic pictures. In the 2018 HFIEF, Russia was ranked 107 out of 180 countries analysed, with a score of 58.2 (on a scale from 0 to 100), the best result since 2005¹⁰. However, this was not enough for Russia to escape the category of 'mostly unfree' countries. HFIEF scored Russia best on 'Fiscal health' (87.7), 'Tax burden' (85.8) and 'Trade freedom' (79.4), and worst on 'Investment freedom' (30.0), 'Financial freedom' (30.0) and 'Government integrity' (38.1) (Table 3). Finally, according to the TICPI 2017 survey, Russia ranks 135 out of 183 countries, with a score of 29, the same as the Dominican Republic, Honduras, Kyrgyzstan, Laos, Mexico, Papua New Guinea and Paraguay. The ranking scores countries from 0 (most corrupt) to 100 (free from corruption). Russia's score has practically not changed over the last couple of years. Overall, the main factors behind Russia's poor investment climate seem to be insecure property rights, including politically motivated expropriations (examples include Yukos in 2003-06 and Bashneft in 2014-17), weak rule of law and the parasitic attitude towards business of a substantial part of the public administration, in particular law-enforcement agencies (known by the Russian business community as 'state racketeering'). These factors are not always fully taken into account by the above-mentioned surveys, in particular, the WBDB.

9 However, the methodology of the WBDB survey has changed several times, limiting the comparability of WBDB scores and ranking from different years.

10 Major improvement was recorded in the 2017 survey with substantial upgrade in categories 'Property rights' and 'Government integrity'.

Table 3: Russia: HFIEF scores and rank

Categories	12 economic freedoms	Score
Rule of law	Property rights	48.7
	Judicial effectiveness	46.7
	Government integrity	38.1
Government size	Tax burden	85.8
	Government spending	62.5
	Fiscal health	87.7
Regulatory efficiency	Business freedom	77.0
	Labour freedom	52.0
	Monetary freedom	60.8
Open markets	Trade freedom	79.4
	Investment freedom	30.0
	Financial freedom	30.0
Overall score		58.2
Ranking		107

Source: <https://www.heritage.org/index/country/russia>.

Since the mid-2000s, the share of state ownership in GDP has increased substantially and, according to IMF (2018, pp. 3-17), it amounted to 33 percent in 2016 but close to 40 percent of the formal sector. GIEP (2018, pp. 213-219) gives a higher estimate of 46 percent in 2016, of which 19.2 percent was provided by general government, 25.3 percent by state-owned enterprises (SOEs) and 1.5 percent by state unitary enterprises. The share of SOEs and, therefore, of the entire public sector was higher in 2014 (29.7 percent and 50.6 percent respectively) because of higher commodity prices. Public ownership is concentrated in a few sectors, such as oil and natural gas, other mining, transport and communication, banking and insurance and the defence industry. SOEs are less efficient than privately-held companies in resource allocation. Sectors and industries in which they dominate are usually more concentrated with less competition (IMF, 2018, pp. 3-17).

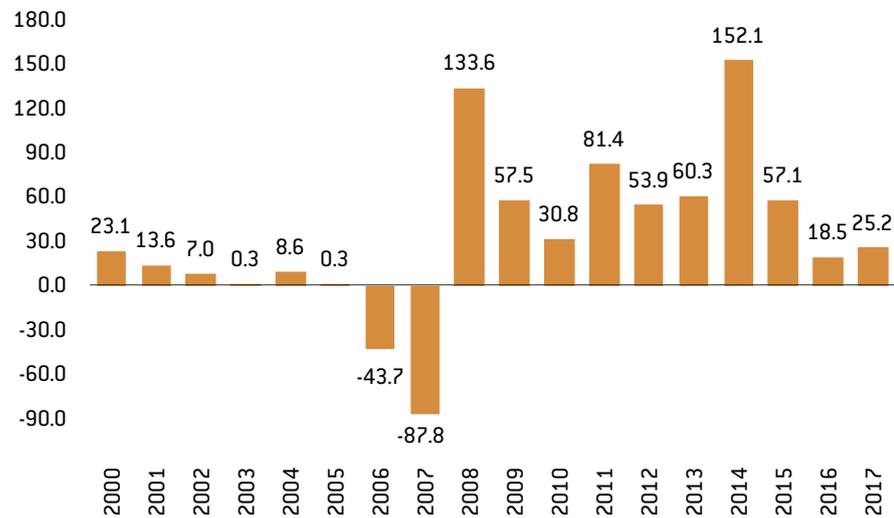
Figure 15: Russia's FDI, net inflow, in percentage of GDP, 2000-17

Source: Bruegel based on World Bank World Development Indicators.

Russia also maintains several *de-jure* and *de-facto* barriers to entry of foreign investors, for example, in natural resources, the financial sector, the media and other sectors considered strategically important. Sanctions, countersanctions and the deteriorating economic and political

relationships with the US and the EU only added to this list. These fundamental shortcomings in the business environment cannot be compensated for by prudent macroeconomic policies, low and relatively simple taxation or several reform measures aimed at simplification in areas including business registration, property registration and court procedures.

Figure 16: Private sector net capital inflows (-) and outflows (+), \$ billions, balance of payments data, 2000-17



Source: Bruegel based on Central Bank of the Russian Federation.

The negative effects of the poor business and investment climate are illustrated by, among other things, a poor foreign direct investment (FDI) performance (Figure 15), especially if one takes into account that a substantial part of Russia's FDI inflows comes from investors from Russia and other post-Soviet countries origin who are domiciled offshore. Russia's continuous net private capital outflows, particularly during currency crises (Figure 16) provide further evidence of precarious property rights and personal freedoms in Russia, and of the high risks that accompany private business activity.

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7 Unfavourable demographic trends

The population of Russia has been declining since the early 1990s, while the working-age population started to decline in 2010. Forecasts are even more alarming (Figure 17). In this respect, Russia does not differ from other European and East Asian countries. For the Russian economy, this adverse demographic trend has two major consequences: (i) reduction of the labour supply; and (ii) population ageing.

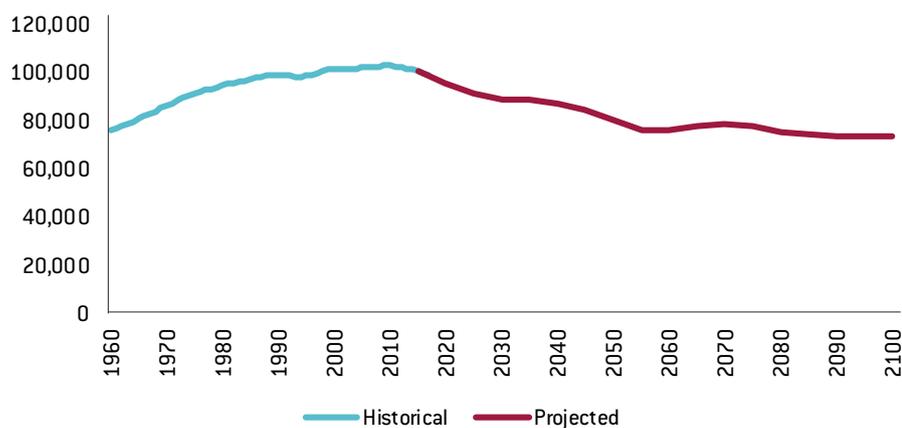
The shrinking supply of domestic labour must have a negative impact on economic growth unless it can be compensated for by higher labour and total factor productivity (TFP). However, according to Voskoboinikov (2017), TFP and the effectiveness of labour allocation in the Russian economy have deteriorated since the mid-2000s.

Population ageing has a negative impact on the fiscal sustainability of the public pension, healthcare and long-term care systems by increasing the old-age dependency ratio. It might also contribute to slower TFP growth.

Russia tries to counter its shortage of domestic labour by implementing an open-door policy for migrant workers from the countries of the former Soviet Union, especially Tajikistan, Uzbekistan, Kyrgyzstan and Armenia, but also from Moldova, Georgia, Azerbaijan and Ukraine.

In September and October 2018, the Federal Assembly adopted a law on pension reform, under which the retirement age for women was increased from 55 to 60, and for men from 60 to 65. The reform will be implemented over a 10-year period, during which, in each calendar year, the retirement age will be increased by half a year. This should help improve the financial balance of the public pension system and will partly mitigate the decreasing supply of labour.

Figure 17: Population of Russia aged 15-64, thousands, 1960-2100



Source: Bruegel based on <https://data.worldbank.org/indicator/SP.POP.1564.T0.ZS?locations=RU&view=chart> (historical data); <https://population.un.org/wpp/Download/Standard/Population/> (projection).

Given the adverse demographic trends facing Russia, boosting TFP is the only way to increase potential growth and return to gradual GDP-per-capita convergence with high-income countries. However, this requires far-reaching institutional and structural reforms that, in turn, depend on political reform.

Opening the Russian labour market to migrants from other former Soviet Union countries and pension reform can both help to reduce the expected labour shortage but are insufficient to compensate entirely for negative demographic trends. This means Russia will be unable to return to the rate of growth recorded in the early and mid-2000s when its demographic situation looked better (the working-age population continued to grow albeit at slow pace) and there were available labour resources freed by the transition related restructuring in the 1990s.

Instead, Russia's economic policy should focus on faster per-capita growth, which would allow continuation of income convergence with advanced economies, which stopped after the 2008-09 global financial crisis. This requires increase in TFP, which in turn depends on progress in structural diversification towards high-tech industries, an upgrade to Russia's human capital, improvement in the business and investment climate and closer cooperation with the leading advanced economies including the US and the EU.

8 The way ahead

Given the adverse demographic trends facing Russia, boosting TFP is the only way to increase potential growth and return to gradual GDP-per-capita convergence with high-income countries. However, this requires far-reaching institutional and structural reforms that, in turn, depend on political reform. The IMF (2017b) recommends five areas in which such reforms can be implemented:

- Improving the investment climate, including strengthening property rights and contract enforcement, reduction of burdensome business operating and licensing standards, which discourage foreign investors;
- Investing in infrastructure to improve connectivity, reducing transportation costs and ensuring better access to domestic and foreign markets;

- Creating a more efficient goods market, among others, by simplifying customs procedures;
- Strengthening trade relationships beyond Russia's immediate neighbours;
- Supporting innovation by allocating more resources to research and development.

In our opinion, several other measures should be added to this list.

First, Russia needs a new privatisation programme based on transparent procedures. It should be open to both domestic and foreign investors on equal terms. This would allow reduction of what the IMF (2018) calls "*the state's footprint in the economy*", more efficient use of available resources and their higher productivity, an increase in domestic competition, a reduction in the involvement of SOEs in performing non-economic functions (such as non-transparent financing of various political activities) and in political corruption, bringing in of more FDI (not only FDI of offshore origin) and the inclusion of Russian companies in global value chains. In parallel to privatisation, some sectors need de-monopolisation and internal restructuring. For example, natural gas production could be unbundled from transmission networks and retail distribution, similarly to what was done in the Russian electricity sector in 2006-08.

Second, improving the business and investment climate requires far-reaching institutional and political reforms. For example, strengthening property rights and contract enforcement will be impossible without genuine independence of the judiciary. Fighting corruption and business extortion will be impossible without democratic oversight of public administration, law enforcement and public security agencies, and without media freedom.

Third, deeper integration of Russia in the global economy must go beyond the strengthening of trade relationships in their narrow sense (although this is also important). It requires far-reaching economic and technological partnerships and cooperation with leading advanced economies, including the EU and the US. Furthermore, the future economic development of Russia will depend, to a great degree, on global economic growth and the stability of international commodity and financial markets. In other words, Russia should be an active player in defending the global liberal economic order and in strengthening it through relevant reforms.

Fourth, closer economic and political cooperation with the EU and the US and conflict resolution in its neighbourhood would allow Russia to shift part of its budget resources that are currently targeted at military and security spending to infrastructure, education, research and public health programmes.

Fifth, political reforms and better guarantees of civil liberties can help increase economic freedom, innovation and business initiative.

Overall, given Russia's increasing labour-supply constraints, the development of innovative business activity and high-value added manufacturing and services is the only realistic long-term strategy that would enable an upper-middle-income economy such as Russia to diversify away from the hydrocarbon monoculture.

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