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Russia and the slowdown of the Chinese economy

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Abstract

This paper examines the development of economic relations between Russia and China in recent years, focusing on how the slowdown in China's growth and changes in its economic structures might impact Russia's economic outlook and the future of China-Russia economic relations. Economic relations between the countries have progressed favorably over the past decade with increased trade and Russian oil exports to China buoying Russian economic growth. While this trade cooperation has served both countries' interests, it has also reinforced Russia's dependence on commodity exports. Like the rest of the world, Russia has to deal with China's slowing economic growth. Those repercussions, however, are particularly challenging in Russia's case.

Keywords: Russian economy, Chinese economy, economic relations, foreign trade, energy, economic growth

Introduction

Russia's illegal annexation of Crimea in early 2014 and its involvement in the war in eastern Ukraine led to a breakdown in relations with the West. In response to Western sanctions, Russia imposed its own economic sanctions, moving to an openly protectionist regime based on import substitution policy as its key element. The collapse of Russia's relations with the West and a bleak economic outlook forced it to reassess its relationship with China. Russia has traditionally been extremely cautious about cooperation with China and economic relations between the two countries have been modest for decades. Russia has intensified its China cooperation, particularly in the energy sector, with its "pivot to Asia."

Increased energy exports, and to a lesser extent other interaction with rapidly growing China, have supported Russia's otherwise modest economic growth in the 2010s. China's economic growth is currently slowing, however. This paper examines the development of economic relations between Russia and China in recent years. In particular, we consider how the slowdown in China's growth and changes in its economic structures may impact Russia's economic outlook and the future of China-Russia economic relations.

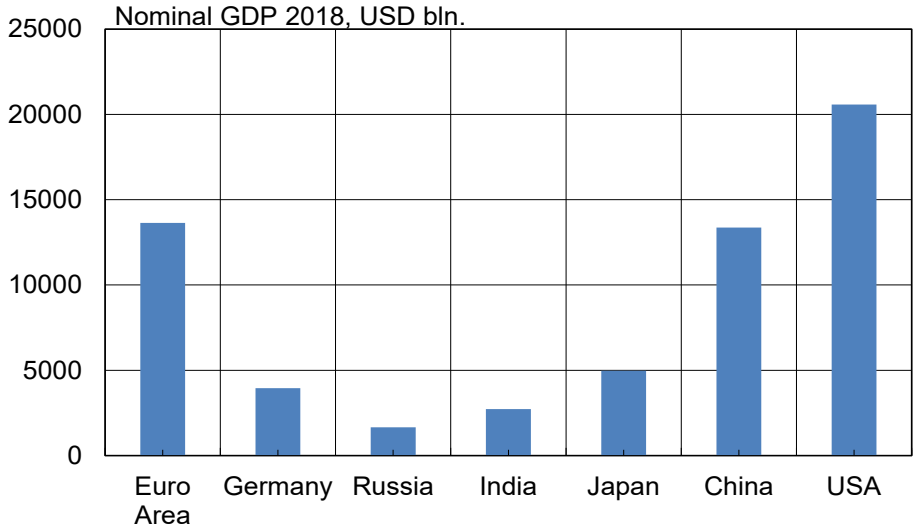
Chinese economy has been opening while Russia is closing

A comparison of the economies and economic policies of China and Russia reveals major differences and helps to understand the nature of Chinese-Russian relations.[1] With nominal GDP of around $13.9 trillion in 2018, China's market size is roughly that of the euro area. In terms of GDP adjusted for purchasing power parity (PPP), China accounts for about 19 % of global output, a level that exceeds that of the United States. The country's technological development continues to proceed at a breathtaking pace, reflected, for example, in the high numbers of international patent applications and industrial robots.

In contrast, the Russian economy has stagnated the past decade and its share of PPP-adjusted world GDP (3 %) is declining. Russia's nominal GDP in 2018 was just under $1.7 trillion, less than half of German GDP. Due to Russia's economic isolation, lack of structural reform and reliance on import substitution policies, most analysts see a bleak medium-term outlook for Russian development and growth.

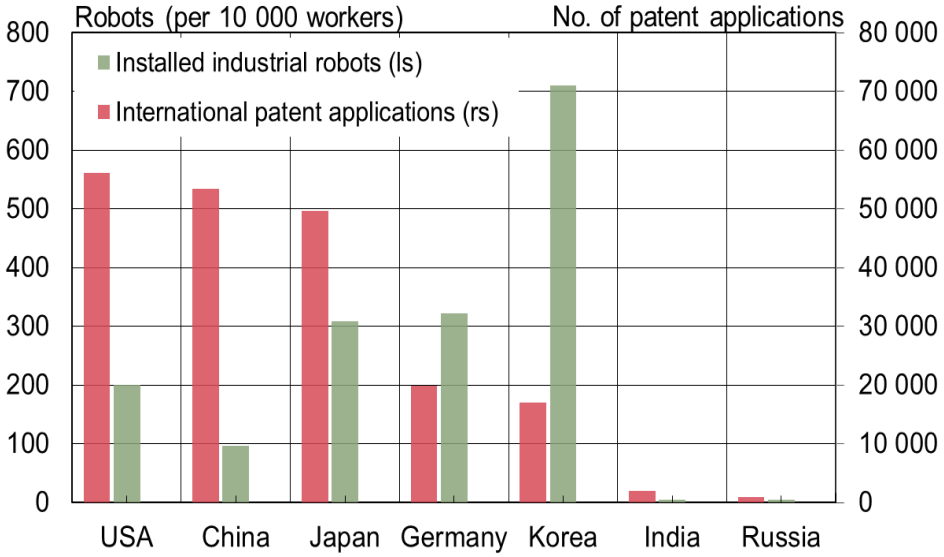
[1] Many of these aspects have been discussed in e.g. Kaczmarski et al. (2018).

Figure 1. Nominal GDP in selected economies in 2018, USD billion.



Source: IMF WEO (October 2019).

Figure 2. Number of international patent applications (PCT) in 2018 and industrial robots per 10,000 manufacturing workers in 2017 in selected countries.



Sources: WIPO and International Federation of Robotics.

In authoritarian regimes like China or Russia, political needs dominate over other policy needs in the ruling elite's decision-making. Nevertheless, the weight given to economic issues in Chinese policymaking appears to be considerably greater than in Russia. China's economic interests are truly global. Russia may be a world-class player in energy and a few other commodities (and may even aspire to widen its sphere of influence), but it mainly focuses on regional interests such as the Eurasian Economic Union. China's entry into the World Trade Organization (WTO) already in 2001 gave it more than a decade head-start over Russia in expanding foreign trade and integration with the global economy. With the exception of energy, some commodities and military technology, Russia has spent recent years disengaging from global markets.

Differences in economic development between China and Russia are also reflected in terms of GDP per capita, another key determinant for future development of relations. Although Russia

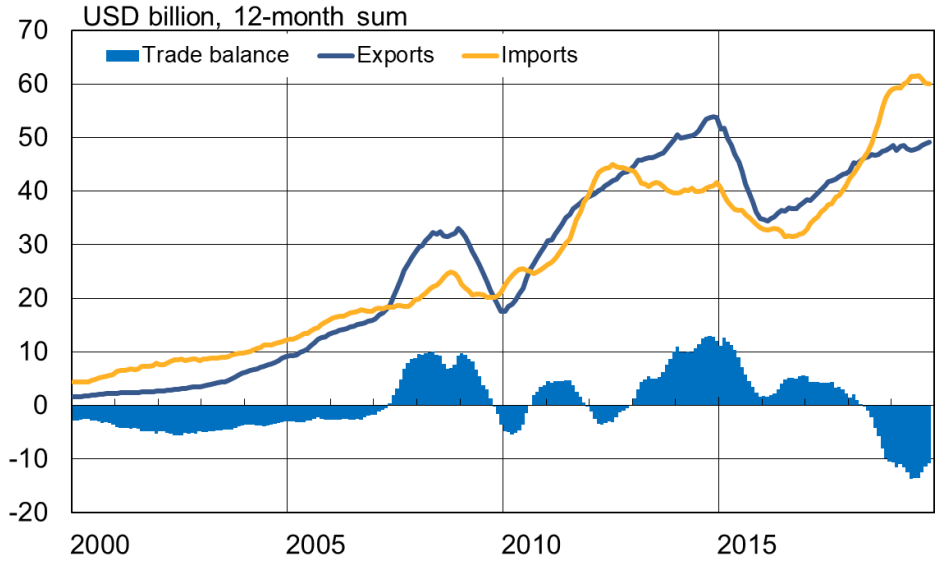
($28,800) is still well ahead of China ($18,100) in terms of PPP-adjusted GDP per capita, that gap is narrowing. The income levels of urban residents in Russia and China are already much closer to each other. Industrial wages in dollars are today higher in China than in Russia. It is also interesting to note that, despite lower income levels, China's life expectancy of 76 years is higher than Russia's 72 years.

Energy dominates economic relations

Russia's total goods exports are currently worth about $440 billion a year, of which exports to China account for $57 billion (13 % share). Russia imports goods valued at nearly $240 billion, of which imports from China comprise $52 billion (22 % share).

Trade between China and Russia, like Russia's trade overall, is driven by the growth in Russian oil export volumes, oil prices and the ruble exchange rate. Fluctuations in the ruble often reflect changes in oil prices, exacerbating rises and falls in the value of Russian imports (Chinese exports), although recently the correlation between the ruble's exchange rate and oil prices seems to have weakened somewhat. China imports energy and raw materials from Russia while the share of highly processed products is marginal. Compared with the beginning of the millennium, the structure of Chinese imports from Russia has become increasingly non-diverse as a result of increased oil supplies and China's enhanced capacity to produce goods it used to import from Russia (e.g. military technology). This trend seems to be continuing. Trade in services between the countries, with the exception of tourism, is quite modest.

Figure 3. Value of China's exports to Russia and imports from Russia.



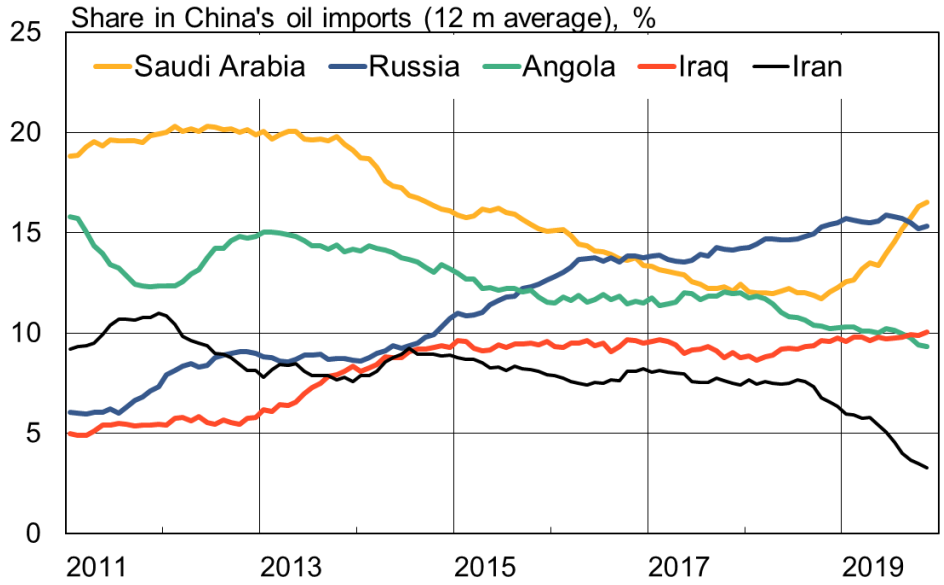
Sources: China Customs and Macrobond.

Chinese exports to Russia, on the other hand, consist of a wide variety of manufacturing goods. Over the years, the share of light industry, such as textiles and clothing, in Chinese exports has declined and the importance of higher value-added industries like machinery and equipment has increased.

The Russia-China trade structure is similar to Russia's trade structure with other countries. Russia exports energy and raw materials and imports manufacturing and consumption goods.[2] Russia-China trade is unremarkable in this respect, so it is perhaps more worthwhile to consider what trade means to the parties themselves and what changes have taken place in the relative trade shares.

Russia's share of China's exports of goods has held steady at around 2 % the past ten years, while the share of imports has recently notched up to 3 %. Nevertheless, Russia's role in Chinese foreign trade has only increased significantly in the energy sector, and this is due to China's higher oil import volumes. A big boost came with the completion of the China branch of the Eastern Siberia Pacific Ocean (ESPO) oil pipeline in January 2011 and the introduction of a parallel pipeline in early 2018. China now imports 77 million metric tons of crude oil a year from Russia. Russia's share of China's oil imports has steadily risen to current 16 %, making Russia China's most important foreign oil supplier in 2017. However, oil imports from Saudi Arabia in 2019 grew faster than those from Russia, making the two countries roughly on par in terms of the amounts of oil they send to China. Other oil producing countries account for less than 10 % each of China's imports, demonstrating how efficiently China has diversified its oil imports.

Figure 4. Share of China's oil imports by country.



Sources: China Customs and CEIC.

[2] Sanghi et al. (2017) suggest that Russia's exports to China have been running well below their natural potential. Based on a gravity model approach, the authors estimate that in 2015 Russia had untapped potential for increasing its merchandise exports to China by an amount equal to a quarter of its actual exports.

Table 1. Structure of China's imports from Russia, %

	2001–2005	2006–2010	2011–2015	2016–2018
Food and agriculture	7	6	4	6
Mineral fuels	26	54	70	68
Chemicals	17	12	7	4
Wood and paper	16	16	10	13
Textile	0	0	0	0
Footwear, leather etc.	0	0	0	0
Base metals	19	10	6	6
Machinery and equipment	5	1	1	1
Transport equipment	9	0	0	0
Other	1	1	1	2
Total	100	100	100	100

Sources: China Customs and CEIC.

Table 2. Structure of China's exports to Russia, %

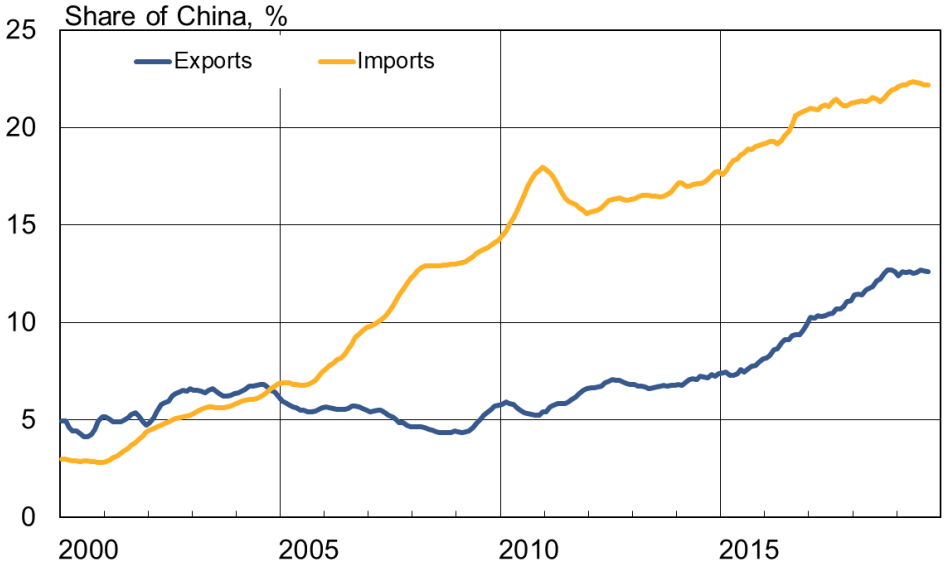
	2001–2005	2006–2010	2011–2015	2016–2018
Food and agriculture	9	5	4	4
Mineral fuels	2	1	1	1
Chemicals	5	7	8	8
Wood and paper	1	1	1	1
Textile	27	24	18	14
Footwear, leather etc.	33	12	13	13
Base metals	3	9	8	7
Machinery and equipment	14	27	31	37
Transport equipment	1	5	5	5
Other	7	10	10	9
Total	100	100	100	100

Sources: China Customs and CEIC.

China's share in Russian imports grew rapidly in the 2000s. Since 2010, China has further strengthened its position, with 22 % of the Russian imports of goods currently coming from China. China's post-2013 market share growth of around 5 percentage points is mainly due to China's excellent performance in its traditionally strong sectors such as telecommunications (SITC 76) and electronic machinery and equipment (SITC 77). The schism between Russia and the West and sanctions policies may have benefited Chinese exporters in some areas, but the effect overall is minor. Instead, the collapse of Russian total imports from about $315 billion in 2013 to $240 billion in 2018 (-24 %) dominates the picture.

A good example is Russian food imports that are affected by Russia's counter sanctions on Western products and its import substitution policy. China's share of Russian food (SITC 0) imports increased from just under 5 % in 2013 to about 8 % in 2018. However, over the same period, the value of Russian overall food imports declined by 36 %. Indeed, the value of exports of Chinese foodstuffs to Russia increased by less than $150 million.

Figure 5. Share of China in Russia's foreign trade.



Sources: IMF DOTS and Macrobond.

China accounted for 5–6 % of Russia's total exports of goods in the first decade of the millennium, but with rising oil supplies, that share has risen to almost 13 % by 2019. China now purchases about a quarter of Russia's crude oil exports. Russian energy exports to China will climb further with sea deliveries of liquefied natural gas (LNG) from the Yamal Peninsula (from summer of 2018), and the overland transmission of natural gas through the Power of Siberia pipeline (commenced in December 2019). The majority owner of the Yamal LNG is the Russian Novatek, but its Chinese partners in the venture also hold a sizeable stake of nearly 30 %.

Analyzed in value-added terms, Russia is quite poorly integrated with Chinese value chains. Based on the latest OECD TiVA statistics (2018), Russia's market share in China (measured as Russia's value added in China's final demand as a share of total foreign value added) was around 3 % from 2005 to 2015. In contrast, China's market share in Russia increased from 5 % in 2005 to 15 % in 2015. When the domestic value added is included, 3 % of final demand of goods and services consumed in Russia are of Chinese origin and around 0.5 % of China's final demand originates from Russia.

Based on TiVA (2018) calculations, around 3 % of value added in Chinese gross imports (including services) originates from Russia. This is close to the share of China's overall goods imports from Russia. Chinese value added in Russia's imports is around 15 %, i.e. somewhat smaller than China's import share as imports from China also contain foreign value added.

Unimpressive investment flows

Although it is difficult to monitor cross-country investment flows due to statistical problems,[3] all available information indicates that only Chinese FDI in Russia actually matters in China-Russia investment relations. Both countries report negligible foreign direct investment into China coming from Russian companies. Moreover, as evidenced by the data below, Chinese investment in Russia, despite a few major energy projects, is relatively small.

Central Bank of Russia statistics show that China's share of FDI inflows has long remained at or below 1 %. The exception occurred in 2014 and 2015, when foreign investment from other countries collapsed and major Chinese investments in Russia's energy sector caused the Chinese share to soar to around 10 % in 2015. By the end of 2018, however, Chinese FDI had fallen back to the normal pattern, accounting for less than 1 % of the total FDI stock in Russia.

According to China's Ministry of Commerce (MoC), Russia's share of Chinese outward direct investment in the past decade has remained below 1 % annually, with the exception of 2015, when Russia's share was 2 %. In 2018, Russia's share was 0.5 %.

The China Global Investment Tracker (CGIT) database, which is published by the American Enterprise Institute in collaboration with the Heritage Foundation, tracks large-scale (over $100 million) foreign investment projects by Chinese companies. According to the CGIT, Chinese companies invested in 2018 in just one Russian energy project and one Russian construction project, for a combine total of $600 million dollars. This amount represented 0.8 % of all overseas investment by Chinese companies in 2018 reported by CGIT. Russia's share of large Chinese foreign investments in the CGIT database has been 2 % for the entire period from 2005 to 2018.

In addition to the investments made by Chinese companies, the country's policy banks have provided significant credits for some major energy projects and various construction projects. These include $25 billion in credits from China Development Bank in 2009 to Rosneft and Transneft against future oil supplies to finance the China branch of the ESPO oil pipeline. These are isolated cases, however, and this type of activity does not seem to be expanding.

Financial market and currency issues

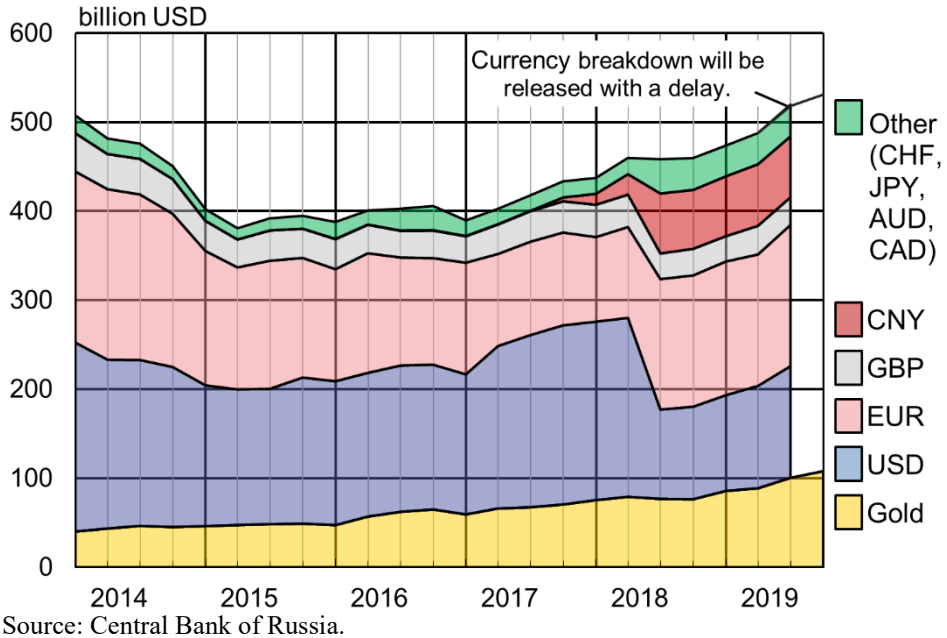
China and Russia seem to have found a shared interest in recent years in opposing US-dollar dominance. Russia has de-dollarized by reducing its use of the US dollar in trade and reserve investments, especially in the wake of US sanctions in 2014. Financial sanctions effectively shut down long-term financing from Western countries for many large state-owned companies, including the biggest banks. For China, increased international acceptance and use of the yuan has long been a foreign policy priority. China has offered political benefits and attractive financing conditions to countries and companies willing to use the Chinese currency. An important milestone for China was the yuan's addition to the IMF's SDR currency basket in 2016. In recent years, however, international use of the yuan has more or less stalled.

Russia announced in 2015 that it was adding the Chinese yuan (CNY) to its foreign currency reserves after signing a currency swap deal with China the preceding year. The share was initially modest, but in the second quarter of 2018 Russia began to substitute USD reserves with euro- and CNY-denominated assets. The yuan's share climbed to almost 15 %, where it has held relatively

[3] See e.g. Damgaard et al. (2019).

steady ever since. Globally the share of CNY in central banks' foreign exchange reserves is on average less than 2 %. In end-June 2019, Russia held CNY-denominated reserves worth $68 billion, whereas the total amount of CNY reserves held by the 149 central banks reporting to IMF COFER statistics was worth $217 billion. In other words, Russia currently holds about a third of global yuan reserves.

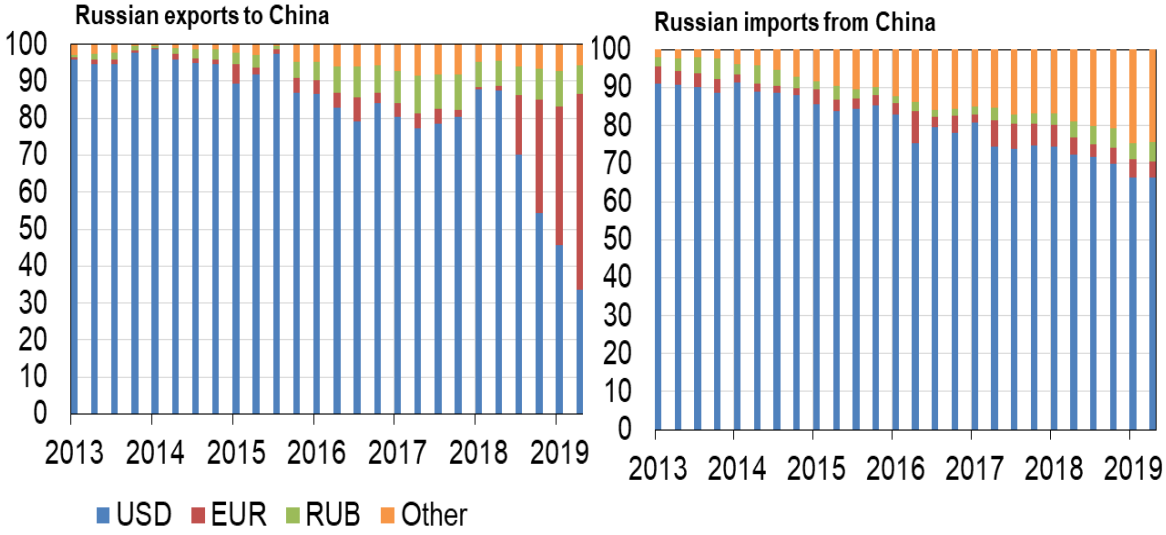
Figure 6. Composition of Russia's currency and gold reserves.



Source: Central Bank of Russia.

Recently, Russia and China have also been moving away from the US dollar in their bilateral trade. Data from the Central Bank of Russia shows that in the first half of 2019 only 39 % of Russian exports to China were invoiced in USD, whereas the share was still 75 % in 2018. A large share of Russian exports to China in the first half of 2019 were invoiced in euros (46 % in 2019H1, up from a 12 % share for all of 2018). The ruble's share also increased slightly to 9 %. In any case, the dollar is still the dominant invoicing currency for Russia's imports from China (67 % in 2019H1, down from 72 % in 2018), but the share of currencies other than the US dollar, euro and ruble rose to 24 % (19 % in 2018). In all likelihood, the shift reflects the increasing use of the yuan as an invoicing currency in Russian imports from China. At the same time, the use of yuan in China's overall foreign trade has declined from a peak of 25 % in 2015 and 2016 to just over 10 %.

Figure 7. Invoicing currency composition of Russia-China goods trade (% of total).



Source: Central Bank of Russia.

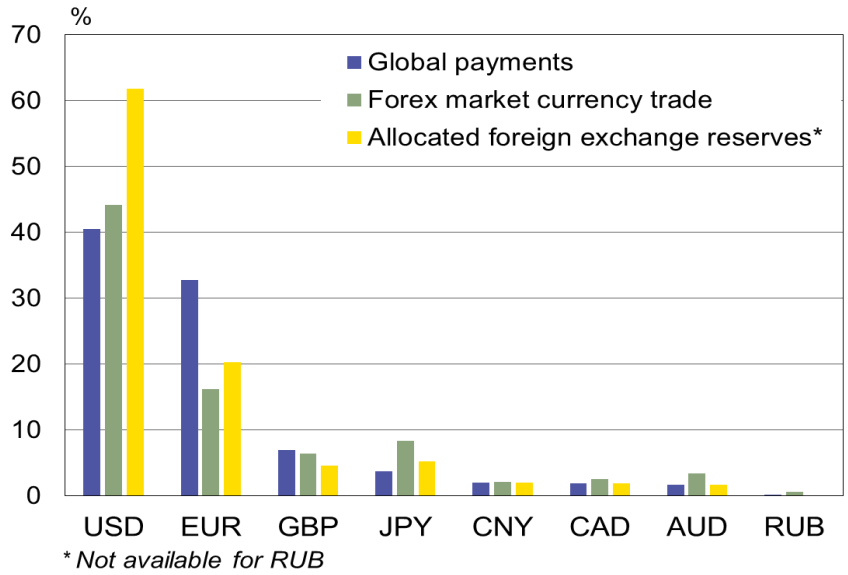
Chinese loans to Russian companies have largely gone to the financing of big energy projects involving Chinese companies. Immediately after the initial imposition of US financial sanctions, there were hopes in Russia that Chinese companies would step in to provide financing to Russian companies. As has been the case with overall economic relations, however, these hopes have not been answered to any significant extent. Instead, sanctions have increased uncertainty and made foreign firms extremely reluctant to lend to even non-sanctioned Russian firms. Chinese companies are no exception; they see the value of US and global markets as much too valuable to put at risk merely for lending to Russian firms.

Russia's increasing use of the yuan in trade invoicing and currency reserves has helped China in its yuan internationalization aspirations. Russia also participates in all of the major Chinese initiatives established in recent years that aim at promoting the overall role of China and the international use and acceptance of the yuan: i.e. the Belt and Road Initiative (BRI), Asian Infrastructure Investment Bank (AIIB), and the BRICS New Development Bank. In contrast, the use of the ruble in China has remained inconsequential.[4]

It is, of course, impracticable for China or Russia to abandon the US dollar completely in present global markets. The yuan is nowhere near providing a viable alternative to the US dollar. Beyond the drawbacks that the currency is not fully convertible and CNY assets are limited as to availability and liquidity, there are China's capital controls that restrict trade in CNY assets and a variety of obstacles caused by legal and property rights issues. Thus, despite the size of the Chinese economy and huge trade volumes, global use of the CNY will remain small for years to come. Partly for these reasons, Russia has not strongly embraced the yuan, turning instead mainly to the euro in its de-dollarization efforts.

[4] China does not publish the composition of its foreign currency reserves. In 2019, the State Administration of Foreign Exchange (SAFE) announced that it had diversified the composition of China's currency reserves. SAFE noted that the USD-share of reserves had fallen from 79 % in 2005 to 58 % by the end of 2014, but did not mention the shares of other currencies.

Figure 8. Global use of selected currencies in 2019 (% of world total)



Sources: BIS, IMF and SWIFT.

China's slowdown will hurt Russia

During the last ten years, the growth in trade between China and Russia has been driven by China's strong economic development, energy demand and the collapse of Russia's Western relations, which finally forced Russia to seek new export opportunities from Asia. There have been no meaningful institutional changes in China-Russia bilateral relations. Nevertheless, increased trade in goods has helped both parties achieve their goals. For China, this has meant securing its energy and raw materials needs.

For Russia, the high growth of export volumes to China has been critical. Russia's total crude oil export volumes are currently about 14 % higher than in 2009, even as its oil exports without China are 11 % below the 2009 level. Without the significant increase in exports to China, Russia's export performance and economic growth would have been even weaker than it actually was.

Figure 9. Changes in volumes of Russia's crude oil exports, % p.a.

Sources: Russian Customs and CEIC.

Perhaps more importantly, China's huge energy demand has supported oil prices, which is of key importance to the health of the Russian economy and public finances. According to the *BP Statistical Review of World Energy (2019)*, China's oil consumption growth accounted for over 40 % of global oil consumption growth in 2010–2018. This has inevitably supported global oil prices. By various estimates, a 10 percentage point increase (decrease) in international crude oil price is associated with a roughly 1–2 percentage point increase (decrease) in the level of Russian GDP over the long run (see e.g. Rautava, 2004; Beck et al., 2007; Korhonen & Ledyaeva, 2010; Kuboniwa, 2014; Feldkircher, 2015; and Faryna & Simola, 2018).

In addition to direct effects, capital flows to Russia and Russian stock market performance are connected to oil prices. Most FDI inflows to Russia relate to oil and gas projects. The Russian RTS stock index tends to move in synch with oil prices as oil and gas companies make up over half of the index.

As China's economic growth slows, its contribution to Russia's growth performance will likely decline as well. China's GDP growth has officially slowed from 11 % p.a. in 2010 to 6 % y-o-y at present. Actual growth is likely lower than official numbers indicate. Investment growth has stalled and the demand for raw materials will eventually slow when infrastructure-investment-fueled growth wanes. With slowing growth, energy demand growth in China will also slow. Total energy consumption in China grew 3 % in 2018 and around 1 % in both 2015 and 2016 when China's economic growth was assumed to be lower than claimed in official statistics. In 2000–2008, energy consumption grew by an average of 11 % a year. Estimates in Dieppe et al. (2018), for example, suggests that a 1 % decline in Chinese GDP growth is associated with a 5 % decline in global oil prices (together with a drop in other commodity prices) after two years. Kolerus et al. (2016) also report effects of a similar magnitude as a result of a 1 % change in China's industrial production.

China's growth slowdown is mostly due to domestic structural factors. The slowdown is therefore not transient, but a long-term phenomenon. Increased uncertainty from soaring indebtedness and financial sector risks at home, as well as other factors as the US-China trade war and pro-democracy protests in Hong Kong, increase the likelihood of even an abrupt slowdown in China.

The literature generally finds the effects of Chinese shocks on the Russian economy to be relatively small.[5] The estimated spillover effects can be limited by model features and assumptions regarding, for example, policy responses and uncertainty. Particularly in the case of China, lack of variation in the output data may also hinder identification of the shocks.

For example, Dizioli et al. (2016) find that a 1 % decline in China's GDP after 5 years results a bit over 0.1 % GDP decline in Russia. Faryna and Simola (2018) also find the effect to be a roughly similar magnitude. Ahuja and Nabar (2012) study the reactions to a slowdown in Chinese fixed asset investment (FAI) growth, and find that a 1 % decline in Chinese FAI leads to a 0.05 % slowing in Russian GDP growth and a 0.25 % drop in industrial output.

Studies analyzing hard-landing scenarios for China often note stronger effects on the Russian economy. Gauvin and Rebillard (2018), for example, expect Russia to be among the countries hardest hit if Chinese growth slows significantly. In consequence of large effects that a slowdown would have on commodity prices, Russian GDP is found to decline cumulatively by 14 %, investment by 30 %, and the real effective exchange rate (REER) to depreciate by 20 % after a 5-year horizon in reaction to an average 3 percentage point growth slowdown in China in the 5 years. Dieppe et al. (2018) find that in an abrupt slowdown scenario in which China's GDP falls 9 % on a cumulative basis below baseline after a three-year horizon, oil prices globally drop by 12 % and oil-producing countries like Russia see and average 3–4 % drop in GDP relative to baseline after the three years.

A rapid slowing of growth in China could also lead to financial market distress and yuan depreciation. Even if the financial linkages between Russia and China are fairly tenuous, spillover effects from China to other countries are greater if the downturn in China is triggered by financial shock rather than a domestic demand shock (see Dieppe et al., 2018). In addition, the real economic effects of a Chinese slowdown are amplified when financial exposure to China increases.

Conclusions

Opening up and increasing competition have never been high on Russia's economic policy agenda. Russia reacted to the 2008 global financial crisis by increasing the role of the state in the economy and economic policy while, at the same time, its war with Georgia strained relations with the West. The aversion of Russian decision-makers to open competition is reflected in the country's WTO process. Russia joined the trade organization in the summer of 2012 after nearly 20 years of difficult negotiations.

Inward-looking and protectionist policies have reinforced the Russia's unbalanced economic structure and its dependence on energy and raw material exports. The increase in trade with China to levels that seem more natural for neighbors has supported Russia's own growth, but it has also increased Russia's reliance on commodity exports. Moreover, the blossoming of economic relations with China is largely based on energy projects in which the Russian state and state-owned companies play key roles in further enhancing their already excessive roles in the Russian economy.

Russia's "pivot to Asia" has thus far only manifested itself in the form of increased energy exports to China and growing imports from China. Energy increasingly dominates Russian exports to China and trade diversification is minimal, making Russia increasingly vulnerable to energy demand shocks in China.

[5] For further analysis on the impacts of external shocks to the Russian economy, see Simola (2019).

Finally, Russia-China economic relations are determined by Chinese economic dynamics. Going forward this will continue to be the case. However, as China moves further along its long-term slowing growth trajectory, relations are likely to head towards more difficult times. Russia could experience difficulties in finding alternatives to Chinese demand. Chinese foreign investment could also be affected if money is needed at home, a fact that makes boom in Chinese investment or financing in Russia increasingly unlikely. Uncertainty related to China's current economic situation has increased the possibility of an abrupt slowdown. Given Russia's lop-sided export structure and tense relations with the West, adjusting to China's slowdown could be a major challenge for Russian policymakers. For these reasons, other actors as well should consider the implications of the spillover effects from China's economic slowdown on Russia and what that might entail.

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