

# RUSSIA INTEGRATES

Deepening the country's integration  
in the global economy



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## ABBREVIATIONS AND ACRONYMS

ADZ	Advanced Development Zone	IEA	International Energy Agency
APEC	Asian-Pacific Economic Cooperation	IMPY	Index on export sophistication
ASEAN	Association of Southeast Asian Nations	ICT	Information and Technology Communications
BIT	Bilateral Investment Treaty		
BRICS	Association Five major emerging national Economies (Brazil,Russia,India,China, South Africa)	IBM	International business machines corporation
CETA	EU Comprehensive Economic and Trade Agreement	IMF	International Monetary Fund
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership	ISS	Independent Service Suppliers
CIS	Commonwealth of Independent States	IC	Intra-Cooperate Transferees
CPB	Central Pacific Bank	MFN	Most Favored Nation
CKD	Completely Knocked Down	NT	National Treatment
CBU	Completely Built-Up	NTM	Next Twelve Months
CAGR	Compound Annual Growth Rate	OECD	Organisation for Economic Co-operation and Development
CP-TPP	Comprehensive and Progressive Agreements for trans-pacific Partnership	OPEC	Organization Of the Petroleum Exporting Countries
CGE	Computable General Equilibrium	PPP	Public-Private-Partnership
CSS	Contractual Service Suppliers	PPML	Poisson Pseudo-Maximum-Likelihood
CBR	Central Bank of Russia	PTA	Preferential Trade Agreements
DTA	Double Taxation Agreement	REIO	Regional Economic Integration Organization
EAEU	Eurasian Economic Union	RF	Russian Federation
EU	European Union	R&D	Research and Development
ECI	Economic Complexity Index	RCA	Russia Comparative Advantage
EVFTA	EU-Vietnam Federal Trade agreements	REER	Real Effective Exchange Rate
ECA	Europe and Central Asia	RZD	Russian Railways
FDI	Foreign Direct Investment	SEZ	Special Economic Zone
FET	Fair and Equitable Treatment	SPIC	Special Investment Contract
FIL	Foreign Investment Law	SIL	Strategic Investments Law
FPS	Full Protection and Security	SPS	Sanitary and phytosanitary
FTA	Federal Trade Agreement	SKD	Semi-Knocked Down
FRP	Federal Industrial Development Fund	SME	Small and Medium-sized Enterprises
GOST	Russian National Standard	SOE	Special Operations Executives
GVC	Global Value Chain	STRI	Services Trade Restrictiveness Index
GDP	Gross Domestic Product	TDZ	Territory Development Zone
GFC	Global Financial Crisis	TBT	Technical Barrier to Trades
GATT	General Agreement on Tariffs and Trades	TCI	Trade complementarity index
HHI	Herfindahl-Hirschman Market Concentration index	UNCTAD	United Nations Commission on Trade and Development
ICRG	International Country Risk Guide	VAT	Value Added Tax
ICSID	International Centre for Settlement of Investment Disputes	WGI	Worldwide Governance Indicators
IIA	International Investment Agreement	WTO	World Trade Organization
IPA	Investment Promotion Agency	WDI	World Development Indicators
		WTI	West Texas Intermediate
		WDR	World Development Report

# EXECUTIVE SUMMARY



# 1. MOTIVATION AND OUTLINE OF THE REPORT

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## 1.1 Motivation

**Russia's early development successes resulted from undertaking ambitious structural reforms, a commodity cycle boom, and taking steps to promote greater economic openness, including becoming a member of the WTO in 2012.** Between 2000 and 2012, Russia's gross domestic product (GDP) rose on average by 5.2 percent a year, slightly below the 5.8 percent average for all upper middle-income countries over the same period, but above the 2.9 percent average for the global economy as a whole. Per capita GDP in real terms grew by about 80 percent between 2000 and 2012 (from US\$14,615 to US\$26,013 in purchasing power parity (PPP), 2017 prices). Since 2003, Russia has been the sixth largest economy in the world in PPP terms, moving up from ninth position in 2000. A favorable external environment and strong macroeconomic fundamentals facilitated inclusive growth throughout the 2000s. Structural policies were also key drivers of growth, reflecting the impact of reforms and structural changes launched during this time.<sup>1</sup> Breaking the 2000s decade into early and late periods reveals that structural policies were the key driver of growth in the early 2000s (2000 to 2005). With better terms of trade, the contribution of the external environment to growth improved significantly from 2005 to 2010. Prudent macroeconomic management and booming oil revenues facilitated fiscal surpluses, a reduction in external debt, and a rise in reserves. This helped Russia to respond with strong countercyclical policies to the recession during the 2008–09 Global Financial Crisis, limiting its impact on the economy.

**Meanwhile, potential growth estimates for Russia show that it peaked before the Global Financial Crisis and has since continued to decline.** The estimated potential growth rate — the rate at which the economy can grow when labor and capital are fully employed — was 3.8 percent in 2000–09 and 1.7 percent in 2010–17.<sup>2</sup> This deceleration was due to a slowdown of productivity growth and a shrinking potential labor force, rather than a shortfall in capital accumulation. In 2014, the economy suffered from adverse oil price shocks and the imposition of economic sanctions, which led to Russia becoming more insular and less integrated globally. One manifestation of this has been reduced foreign direct investment (FDI) inflows since 2014. Although economic activity in Russia has continued to recover from the 2015-16 recession, potential growth has continued to decline. A weakness in potential growth is not specific to Russia. Potential growth has been adversely affected in both advanced economies, where it was evident even before the Global Financial Crisis, and emerging markets and developing economies, especially since 2010-12. However, a faster-than-average decline in Russia's potential growth has raised concerns about its medium-term prospects and the risks of stalled convergence in GDP per capita with advanced economy levels.

**These developments have focused attention on the need for a renewed economic strategy and the establishment of new National Goals, which could boost potential growth and productivity for Russia in a constrained environment.** The new National Goals were announced in 2018 and suggest, among other things, that Russia will strive to develop export-oriented subsectors with modern technologies and highly skilled labor in its major economic sectors (manufacturing, agriculture).

**Further integration into Global Value Chains (GVCs) would be an important step towards achieving Russia's National Goals, as increased GVC participation promotes diversification and economic growth and magnifies the gains of traditional trade.** The World Development Report (WDR) 2020 finds that GVC participation, especially in manufacturing, magnifies the effects of traditional trade and contributes to increased productivity, better jobs, and lower poverty (World Bank 2019).<sup>3</sup> There are opportunities for GVCs to drive Russia's economic growth, by deepening and expanding Russia's participation in manufacturing and services GVCs, through upgrading into higher value-added products, functions, and processes. In turn, deepening the country's integration into GVCs in such a way could promote its National Goals to develop exports of highly technological manufactured and agricultural goods, create jobs in sectors exporting such goods, and speed up Russia's technological development.

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<sup>1</sup> Pathways to inclusive growth, 2016, World Bank.

<sup>2</sup> Potential Growth. Outlook and Options for the Russian Federation. Yoki Okawa, Apurva Sanghi, December 2018, World Bank.

<sup>3</sup> Based on I/O-based measures, GVC trade relates to trade flows that cross at least two borders, while traditional trade can be considered trade that crosses only one border.

**The COVID-19 pandemic has reinforced and accelerated changes in GVCs that were already under way and Russia needs to position itself in this context. The pandemic has posed unprecedented challenges to GVCs.** There has been a sharp downturn in trade and FDI, after an already subdued performance in 2019, in part due to the disruption of GVCs amid mitigation and mobility limiting measures, including national lockdowns and border closures. While declines in GVC activities have been seen across most sectors, some have suffered more disruption than others, particularly those that are concentrated in heavily affected areas or those relying on face-to-face interaction and in-person spending. Before the pandemic, mega-trends towards automation; concentration of market power in some industries (e.g. digital markets and platforms); increased reshoring and regionalization of supply chains; economic protectionism and bi-polarization of US-China relations; as well as a shift towards digitization were steering tectonic shifts in the global economy. The pandemic has reinforced and accelerated these changes. This disruption has led to a rethinking in relation to GVCs, as some firms have recognized the risks associated with dependence on few markets, and advanced countries seek to build more resilient value chains by re-shoring or near-shoring production regionally. Potential GVC reconfigurations could create opportunities for countries such as Russia that are close to major markets, benefitting from possible near-shoring, and have both comparative advantages in relevant sectors and open and conducive trade and business environments.

**While there may be no close comparators for Russia, countries such as Canada and Australia provide examples of the trajectory Russia could take in transforming the structure of its economy from primary commodities to advanced manufacturing and services.** For instance, as Canada's economy modernized after the First World War, its focus shifted increasingly from farming to industry and services, from rural to urban. While in the early 1980s, Canada's main export sectors consisted of minerals and metals, by the early 1990s the automobile industry emerged as a leading sector. In addition, new sectors emerged — specifically pulp and paper and oil/petroleum, as well as hydroelectricity. By 2015, Canada's export structure showed a balanced distribution between commodities, manufacturing, and services, with the top sectors being automotives, machinery and equipment, and energy, followed by metals and minerals, and consumer goods (Cross 2016). Key to its success was trade with international markets and integration into key value chains, specifically those in the USA, which were fostered by the Free Trade Agreement with the USA in 1989 and the North American Free Trade Agreement (NAFTA) in 1994. Similarly, since the early 20th century, the structure of the Australian economy has gradually shifted away from agriculture and basic manufacturing towards services, with the mining industry growing in importance relatively recently. Economic activity also shifted towards the resource-rich states of Queensland and Western Australia. Changes in the structure of the economy have been driven by a range of factors including rising demand for services, the industrialization of east Asia, economic reforms, and technical change.

**This report therefore assesses how GVCs have contributed to Russia's development over the past two decades, as well as the potential for GVCs to drive future economic growth.** Based on the opportunities identified for Russia's integration into GVCs, constraints are revealed and several policy recommendations developed to overcome these, covering areas of trade policy, domestic, and traded services, and the role of institutional and regulatory quality in boosting FDI. While the analysis portrays Russia in a post-sanctions environment – distinctly less connected to global markets, less innovative, and with an unlevel playing field between public and private sectors that hinders competition – the findings indicate significant potential for Russia to make progress in terms of greater participation in the global economy. And while sanctions remain a first-order constraint for FDI, there are various measures that Russia can nonetheless take to make its business environment more conducive to trade and investment.

## 1.2 Outline of the report

This executive summary synthesizes the findings and policy recommendations of the four chapters in this report:

**The first chapter analyzes gross trade data to investigate the extent to which Russia has integrated in the global economy in recent years.** It assesses Russia's trade potential with key trading partners, including Organisation for Economic Cooperation and Development (OECD) countries; the European Union (EU); the Commonwealth of Independent States (CIS); countries that have signed free trade agreements with the Eurasian Economic Union (EAEU-FTA); and China and India. Russia's openness to international trade is benchmarked against what is expected

for a country at its level of economic development. This chapter also identifies sectors in which Russia has a revealed comparative advantage (RCA) to analyze industries that may offer Russia export diversification opportunities. Finally, indicators of trade complementarity are applied to investigate how Russia's export structure is aligned with the import structures of selected countries and country groupings.

**The second chapter exploits recent value-added trade data to carry out a deep-dive analysis of Russia's backward and forward linkages in GVCs.** Gross trade data does not reveal granular, domestic, or foreign value-added portions of trade. Several measures at the country, sector, and firm-level are therefore developed to assess Russia's extent of GVC integration and the scope for economic upgrading. The chapter also assesses key challenges and identifies policy priorities to help Russia transition to advanced manufacturing and services.

**The third chapter explains how the services sector can better contribute to Russia's competitiveness and integration in the global marketplace.** It focuses on two complementary roles that the services sector plays: as a source of jobs, output, and exports in itself; and as inputs into the production of other goods and services for export (a process known as "servicification"). The chapter investigates the impact of services on productivity in Russia; examines constraints to the development of the services sector and services trade; and identifies areas for policy intervention to support services growth and to deepen services integration in trade and GVCs.

**The final chapter focuses on FDI.** Because a large part of GVC integration happens through FDI, this chapter assesses the role played by multinationals in the Russian economy, evaluates Russia's FDI performance in comparison with other peer countries, and reviews the efficiency and effectiveness of Russia's FDI policy and regulatory framework.

## 2. RUSSIA'S PARTICIPATION IN GVCs

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**Over the past two decades, Russia's growth has been supported by sizable investment, rising consumption, exports of energy products, and through greater openness and external orientation of its manufacturing sector.** During this time, the services sector has also been an important driver of Russia's economic growth and, as in other upper-middle-income countries, the services sector accounts for the largest share of GDP. Despite these developments, Russia is not yet fully integrated into GVCs, trade, and the global FDI network, implying untapped potential. Russia's current position is linked to its comparative advantage in commodities and commodity-intensive manufacturing. However, in recent years, the services sector has also been a driver of increased GVC participation.

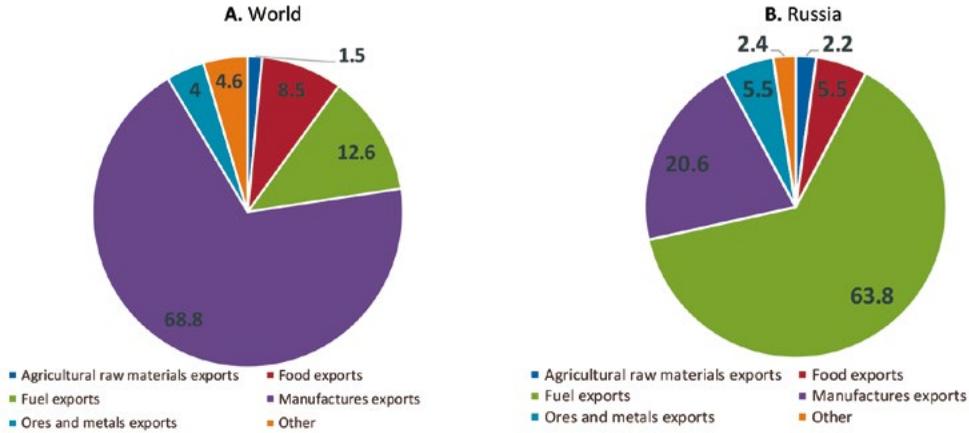
**Russia's fundamentals determine its type of GVC participation and sectoral specialization.** GVC participation is determined by four fundamentals: factor endowments, geography, market size, and the quality of institutions (World Bank 2019). Russia's natural resources, geographical remoteness, and perceived low institutional quality are key characteristics of countries specialized in commodity GVCs. By contrast, Russia is not comparable with the majority of countries in the commodity group (such as Sub-Saharan Africa or Latin America) that are characterized by a smaller market size and relatively cheap labor. Russia's characteristics are consistent with high forward GVC participation, i.e. a high share of domestic value-added in its exports that is not directly consumed in the export destination but re-exported, limited backward GVC participation, i.e. a limited share of foreign value-added in its exports, and FDI driven by natural resources. They are also consistent with low export diversification and sophistication, although the country has been diversifying and upgrading in GVCs over the past years.

### Russia has untapped potential to integrate further into GVCs, trade, and the global FDI network

**Russia's high sectoral concentration in commodities presents both opportunities and challenges.** In 2018, Russia was the 12<sup>th</sup> largest exporter in the world, accounting for 2.3 percent of global exports. The country's goods exports go mostly to China and the EU, whereas its services exports are mostly to the EU and the USA. Russia specializes mainly in mining and commodity-intensive manufacturing exports, such as metals and chemicals. Russia's RCA – the relative advantage of a country as evidenced by trade flows – is concentrated in oil and gas products, agriculture and forestry, and metals. As a result, Russia's share of manufacturing exports is about three times less than the world's average (Figure 1). Besides commodity-intensive manufacturing exports like metals and chemicals, Russia also exhibits export activity in food and beverages, machinery, electronics, and transport equipment. And while it exports business services, such as wholesale and retail trade, storage, and transportation, the value of goods exports far exceeds that of services (Figure 2).

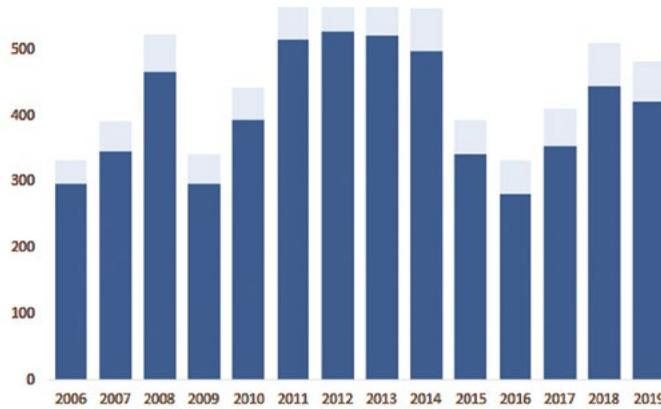
**Russia's natural resource endowments not only dominate trade patterns, but also its inward FDI stock.** Russia's FDI is driven mostly by natural resources rather than skills (Figure 3a): one-fifth of Russia's inward FDI stock is in mining industries, building on the country's comparative advantage in petroleum, natural gas, and coal mining. However, there have been very positive developments in greenfield investments. While 50 percent of mergers and acquisitions concerned oil, natural gas, and mining in 2015-2019, almost 70 percent of greenfield investments went to manufacturing industries. In 2018, 52 percent of Russia's inward investment originated from tax havens (Figure 3b). FDI from a selected group of OECD countries – whose R&D expenditures are high relative to GDP – accounted for only 12 percent of Russia's inward FDI, compared to 22 percent in Turkey and 60 percent in Canada.

**Figure 1: The share of manufacturing exports in Russia is about three times less than the global average**



Source: Comtrade.

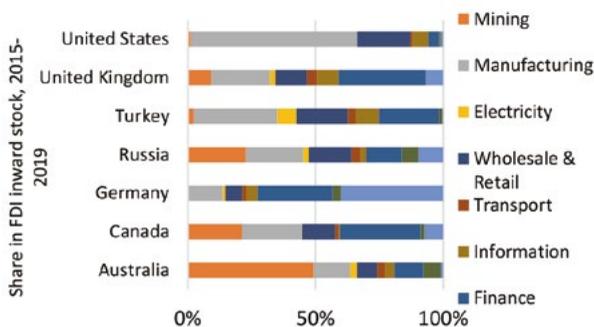
**Figure 2: The value of Russia’s goods exports far exceeds those of services, billion US\$**



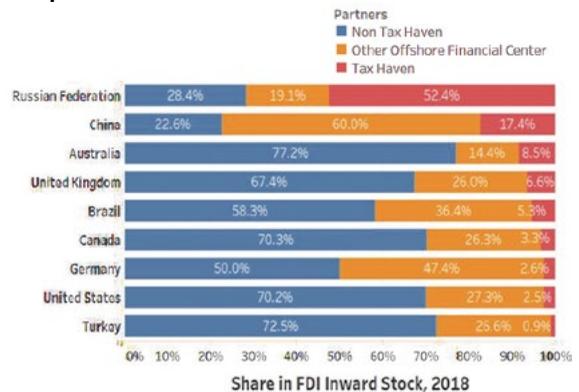
Source: CBR.

**Figure 3: Russia’s FDI is largely driven by its natural resource endowments and originates more from tax havens**

**a. Russia’s FDI is driven more by natural resources than skills**



**b. Russia attracts more FDI from tax havens than comparators**



Source: Authors, based on data from the Central Bank of Russian Federation and OECD.

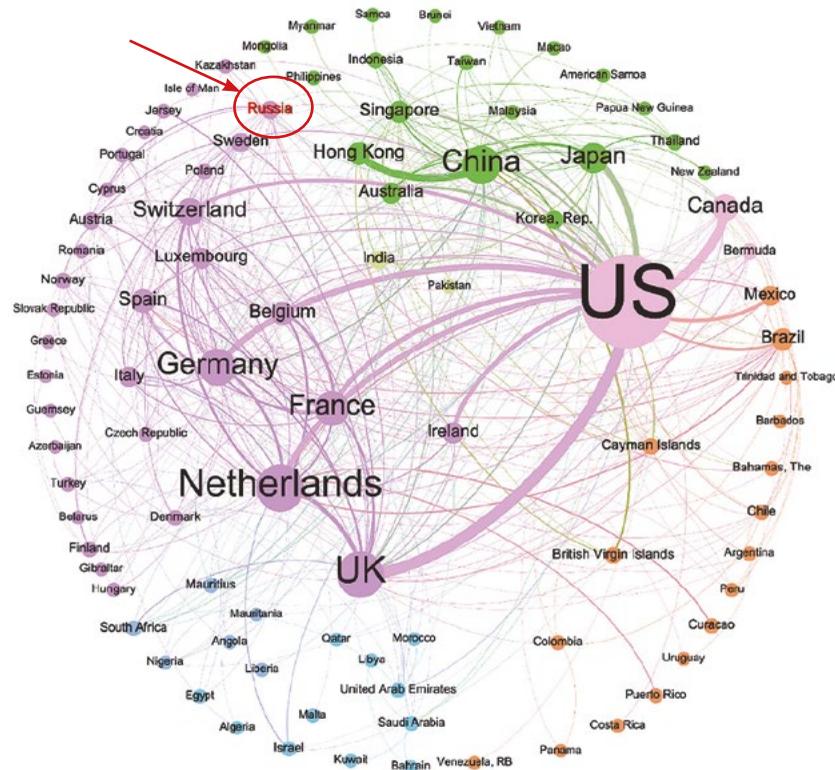
Note: 2019 for Russia and latest available year over 2015-2018 for other countries. ISIC Rev 4 Section-level classification is used. Only top sectors are shown and the total FDI of these sectors are rescaled to 100 percent.

Source: Authors, based on data from IMF CDIS, and OECD.

Note: The tax haven group includes 28 commonly known low-tax offshore financial centers. The other offshore financial center group includes five offshore centers with a high level of real economic activities.

While Russia occupies an important position in the European FDI network, there is untapped potential to expand its role globally. A network analysis finds that the USA, the UK, China, Germany, France, and Canada stand out as the dominant nodes of the “real” FDI network, whereas Russia stands in the mid-range, reflecting a limited influence globally but of reasonable importance in Europe. The most influential nodes overlap significantly with the largest economies in the world (Figure 4). Positions in the FDI network and in the GVC network tend to correlate. Consequently, Russia is currently a second-tier node in the global GVC network, dominating the networks of fuel and iron ore but playing a more peripheral role in others. Electronics is a case in point: Russia is largely outside of its sophisticated supply chain.

Figure 4: Russia is second-tier in the global FDI network



Source: Authors based on data from Damgaard et al. (2019).

Note: The graph depicts the network of global “real” FDI stocks in 2017. Each node represents an economy. The colors of the nodes indicate regions. Each link represents the existence of the FDI connection between the corresponding pair of economies, with the width of the link indicating the value of the bilateral FDI stock. The size of each node represents the weighted degree of the corresponding economy. Links with less than US\$5 billion FDI stock are excluded for ease of presentation.

Reflecting the country’s comparative advantage, Russia’s sectoral specialization in commodities explains the country’s pattern of low backward and high forward participation in GVCs, which is typical of commodity exporters. An analysis of value-added in trade reveals that Russia has a low degree of backward participation in GVCs, compared to its peers, but higher forward participation (Figure 5). A high share of foreign value-added in exports – a measure of backward GVC participation – allows a country to import the necessary inputs to be able to produce exported goods, components, or services. In 2016, Russia’s backward integration into GVCs was 10.2 percent, lower than the EU average, lower than Norway, and much lower than Turkey and China, which both had shares of around 17 percent each, and especially Canada. Forward GVC participation is a measure of a country’s value-added that is not directly

**Figure 5: Russia's backward participation is lower compared to its peers, but its forward participation is higher**



Source: OECD-WTO TIVA 2018 release. 2016 estimates for backward participation, 2015 data for forward participation.

consumed in the export destination but re-exported. High forward GVC participation means that a country exports more intermediate goods and services used for other countries' exports. Thirty percent of Russia's exports are embodied in foreign country exports, representing the highest share among comparator countries besides Norway. A high degree of forward participation is consistent with the fact that Russian exports are largely commodities, which are not re-exported by Russia's trade partners in their original form but are embodied in processed forms, for example, in partners' exports of parts and components or final goods.

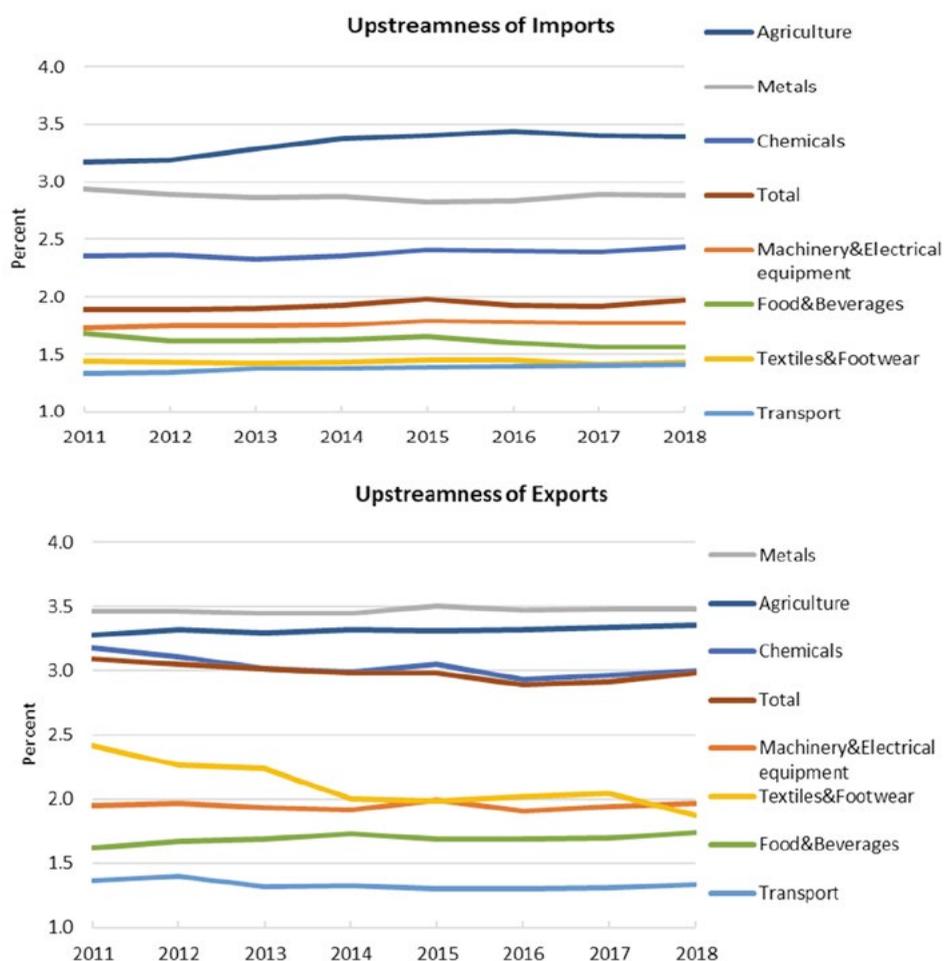
## Russia has been diversifying and upgrading in GVCs

**Over the past years, Russia has been diversifying and upgrading in GVCs.** Russia's overall potential for economic upgrading has increased, with total goods exports moving closer to final demand and imports moving slightly upstream (Figure 6). A high upstreamness of a country's export or import basket indicates a long distance to the final consumer. The difference between a country's upstreamness of imports and exports can indicate potential for economic upgrading. Nevertheless, there remains scope for more domestic transformation in chemicals and metals. Russia's exports within these sectors are the most upstream compared to peer countries, implying that Russia specializes in segments within the metals (e.g. focusing on basic metals rather than fabricated metal products) and chemicals value chains that require less transformation and create less domestic value addition.

**Russia's backward GVC participation has also been expanding but remains at low levels.** The country's overall backward integration into GVCs increased slightly between 2011 and 2016. At the broad sector level, this participation increased in mining and business sector services, but declined across many manufacturing sub-sectors. Russia's peers, by contrast, saw their GVC participation fall across all broad sectors. Russia relies predominantly on China, and to a lesser extent the USA, Germany, and Kazakhstan, to provide foreign inputs to use in its exports.

**At the same time, Russia's high extent of forward GVC participation has declined.** This decline between 2011 and 2015 reflects the country's lower weight of raw commodities and processed fuels relative to exports for final consumption. The decline also reflects a lower contribution of commodity-intensive sectors (e.g. mining, coke, chemicals, basic metals), driven in part by falling commodity prices, and other manufacturing, while that of total business sector services remained constant. This trend has been mirrored by most comparator countries, with the notable exceptions of China and Turkey. Russia relies strongly on final demand from China, the USA, and Germany, which jointly consumed more than 29 percent of the foreign final demand for Russian value-added in 2015.

**Figure 6: Russia's goods export basket has moved closer to final demand, while imports have moved slightly upstream**



Source: Authors' computations, adapted from Chor (2014) and UN Comtrade.

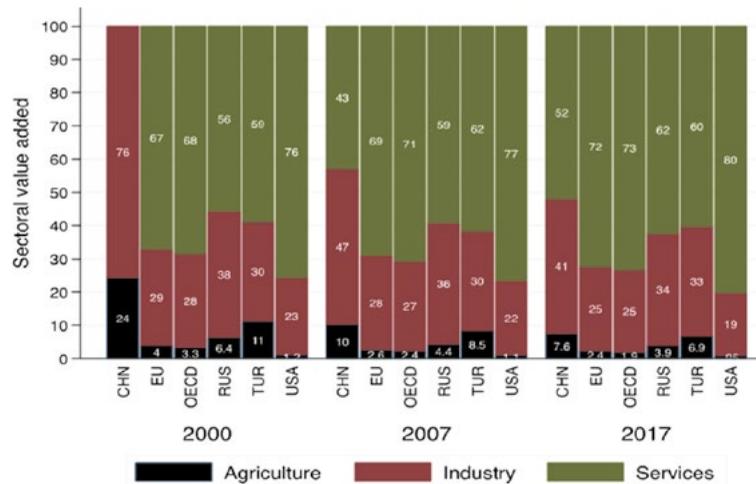
Note: Upstreamness measures the position of a country in the supply chain in terms of its distance (or number of production steps) to the final consumer. Upstreamness measures at the HS6 product level are used to compute the average upstreamness of a country's export and import baskets based on the country's underlying HS6 goods exports (imports, resp.) and using the country's underlying export (imports, resp.) shares as weights.

**Russia's services sector has been an important driver of increased GVC participation.** While Russia's endowments with natural resources explain its current position in GVCs, the services sector also offers important opportunities for increased GVC participation and upgrading. In 2017, as the relative importance of manufacturing and agriculture declined, services contributed 62 percent to Russia's GDP in value-added terms, up from 56 percent in 2000. However, the contribution of services to total value-added in Russia is still low relative to most comparator countries, such as the USA (80 percent in 2017) and the EU (72 percent) (Figure 7).

**Russia's position in GVCs also explains why its trade openness is lower than in other countries with similar income levels.** Russia's external trade in both goods and services (exports plus imports) is a smaller percentage of GDP than in other countries with similar levels of per capita income (Figures 8a and 8b). However, trade openness measures may be somewhat misleading since a low ratio does not necessarily imply high (tariff or non-tariff) barriers to foreign trade but may be due to other factors, such as size of the economy and geographic remoteness from potential trading partners, which can be assessed using a gravity model.

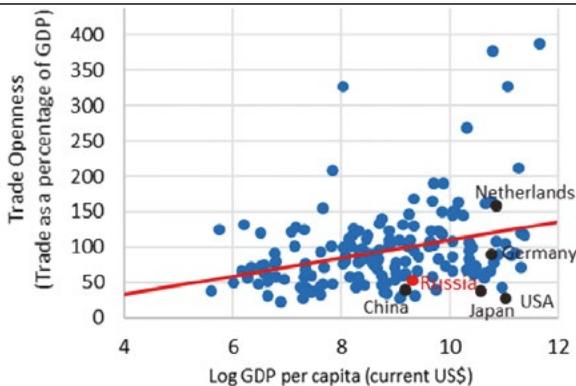
**Figure 7: The contribution of broad sectors to value-added in Russia**

(Sectoral value-added shares, 2000-17)



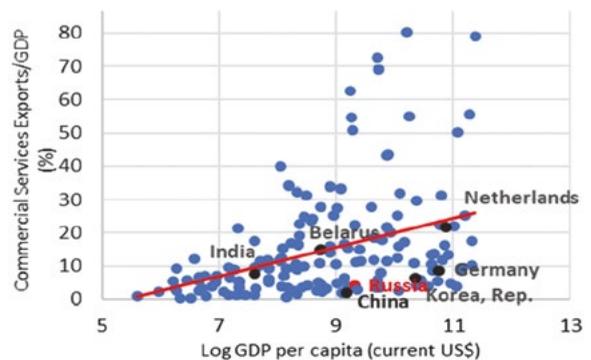
Source: Authors' calculations based on data from WDI.

**Figure 8a: Russia's trade openness is lower than expected given its national income level (2018)**



Source: WDI.

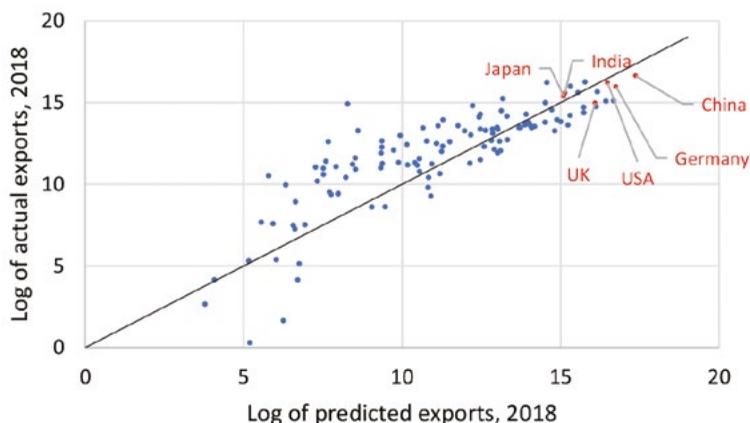
**Figure 8b: Russia's commercial services trade is lower than expected given its national income level (2018)**



Source: WDI.

**Results from a gravity model of bilateral trade suggest that Russia has the potential to trade more with some large economies, including China.** Russia's trade potential with selected countries and country groupings was assessed based on a gravity model of trade, controlling for a country's economic mass, bilateral distance, and other determinants. The model controls for zero trade flows with the use of the Heckman sample selection correction method. Figure 9 shows Russia's predicted non-oil/gas exports for all of the country's bilateral export relationships. The results reveal that Russia under-trades with some of the largest economies in the world, including the USA and China. The gap between actual and predicted trade flows is equivalent to nearly 35 percent of Russia's current trade with China. By contrast, Russia's current level of exports to the CIS countries is significantly higher than predicted levels – more than double – possibly due to active trade policies implemented by Russia and the CIS countries and political ties between those countries. Belarus is the top export partner among the CIS countries, followed by Kazakhstan.

Figure 9: Russia has the potential to trade more with many large economies, including China



Source: Authors' estimates using 2018 COMTRADE, WDI, and CEPII data. Note: Points below the black 45-degree line show those countries that Russia under-trades with.

**The quality of Russia's exports of goods and services also have room to improve.** In line with the decline in forward GVC participation and export upstreamness, Russia's exported goods reveal a reorientation in recent years from raw commodities and processed fuels towards exports of intermediate goods and, to a lesser extent, final goods. But despite a higher reliance on non-commodity goods exports, Russia has not improved the quality of its export basket in the past 10 to 15 years as measured by export sophistication and survival rates.

### 3. OPPORTUNITIES FOR GVCs TO DRIVE RUSSIA'S FUTURE ECONOMIC GROWTH

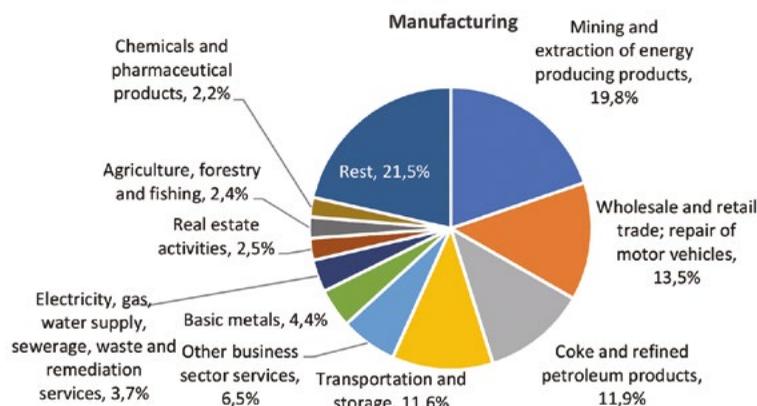
Russia has important opportunities to promote upgrading into advanced manufacturing and services GVCs. Increasing the domestic value added through GVC participation can include engaging more firms and workers (densification), but also integrating higher value-added products, functions, and processes (Taglioni and Winkler 2016). Opportunities for Russia include: (i) deepening and expanding GVC participation in manufacturing, in particular in commodity-intensive sectors such as chemicals, metals, and the food value chain (functional and product upgrading); (ii) upgrading into more complex GVCs such as higher value-added segments within these manufacturing sectors and strengthening the role of higher value-added modern services that can be embodied in manufacturing exports or exported directly (functional and product upgrading); and, (iii) facilitating FDI and spillovers which act as a catalyst for Russian GVC upgrading, due to the potential to deliver productivity and technological spillovers (process upgrading).

#### Deepening and expanding GVC participation in manufacturing

Diversifying into commodity-intensive manufactured export sectors can help strengthen linkages between GVC actors and local suppliers, capture more domestic value added, and benefit a larger part of the economy. Given Russia's specialization in commodities, the country should seize the opportunity to expand commodity-intensive manufacturing such as chemicals, metals, and food production, which is a form of functional upgrading away from commodity exports only. In addition, backward linkages of manufacturing exports to domestic supplying sectors are more diversified compared to mining and business services, where a large share of linkages is within the sector (Figure 10). This implies that the gains from GVC participation in manufacturing could spread more equally across the economy, also leading to reduced macroeconomic volatility.

Improving export sophistication, even of moderate complexity goods for which Russia has a revealed comparative advantage, could be further exploited. Russia continues to rely on commodity exports, and the country exports considerably more goods than services – although the value of the latter has been rising. Over the past five years, notable gains in competitiveness in merchandise exports have been observed in food, machinery, and equipment, which saw the highest growth in volume terms. However, Russia's overall export basket suffers from low levels of sophistication. Notably, Russia continues to specialize in basic tasks within the metals and chemicals value chains that require less

Figure 10: Russia's manufacturing exports show more diversified linkages to domestic upstream sectors



Source: OECD-WTO TiVA 2018 release. 2015 data.

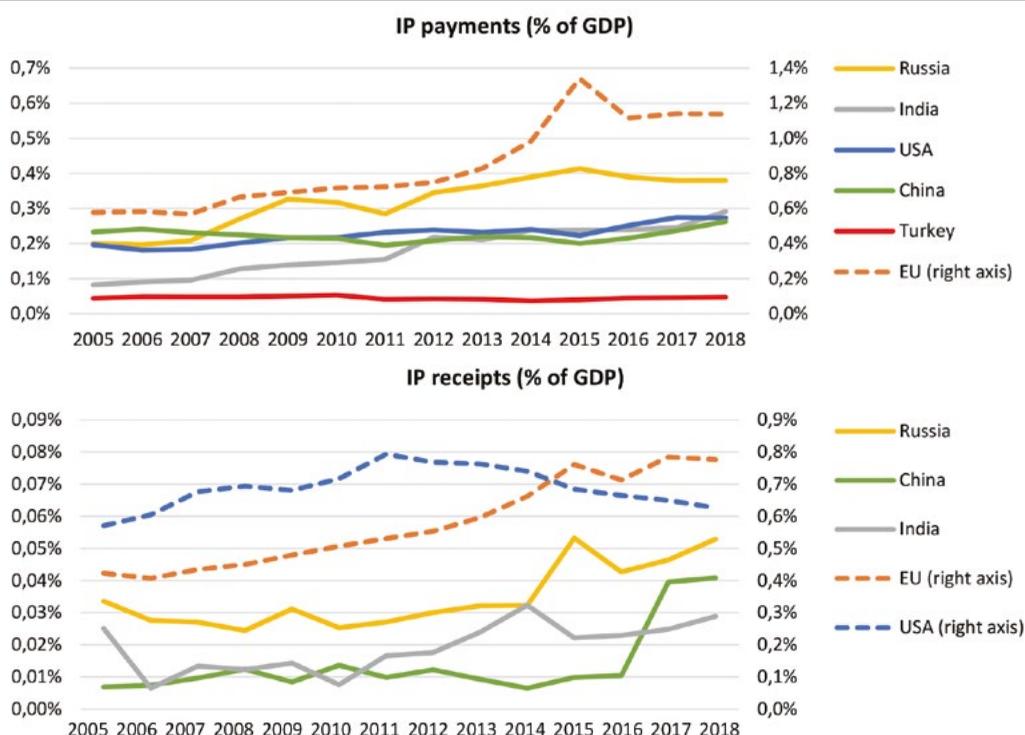
This chart shows the distribution of domestic upstream sectors providing inputs to the manufacturing export sector in Russia.

transformation and create less domestic value addition, revealing room for product upgrading. For example, Russia's metal exports are dominated by manufactures of basic metals such as copper, aluminum, and nickel, while fabricated metal products such as parts, containers, structures, or household articles play a much smaller role.

## Upgrading into more complex GVCs

**High value-added services provide opportunities for Russia to generate new high-productivity, high-paying jobs compatible with a high-income economy.** Services are an escalator for economic development. Productivity growth in services has been a key driver of GDP growth for OECD countries as well as developing countries. Services such as those involved in manufacturing (e.g. research, development, design, and marketing and product servicing), as well as logistics, education, medical, and other professional services, provide opportunities for Russia to diversify. The country's payments on intellectual property (IP) as a percentage of its GDP are now higher than for most comparator countries except the EU, following a strong increase over the past years, and IP receipts are higher than in China and India (Figure 11). This could reflect the country's effort to not only benefit from foreign technology (IP payments), but also to innovate (IP receipts).<sup>4</sup> However, export growth of Russia's services sector has so far been weak, particularly in modern services which high-income countries increasingly rely on.

**Figure 11: Russia's IP payments and receipts as percentage of GDP grew strongly over 2005-2018**



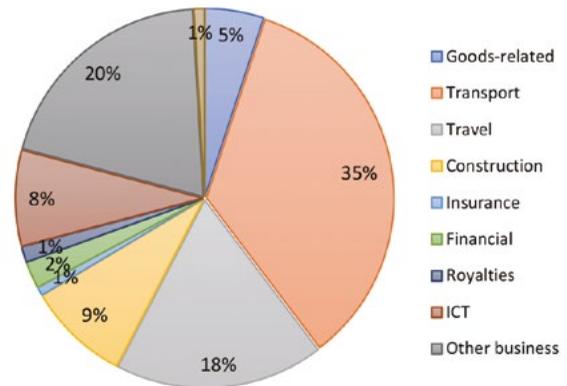
Source: Own illustration. Data: World Development Indicators.

Note: IP receipts data for Turkey only available for two years. IP data are based on Balance of Payments data covering payments and receipts between residents and nonresidents for the authorized use of proprietary rights (such as patents, trademarks, copyrights, industrial processes and designs including trade secrets, and franchises) and for the use, through licensing agreements, of produced originals or prototypes (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast).

<sup>4</sup> A sectoral analysis reveals that almost 70 percent of IP payments are spent on information and communication technologies (ICTs). One hypothesis could be that this is related to strong increases in military expenses over the same time period (Moscow Times 2019). IP receipts are collected from various sectors, in particular retail and wholesale trade (39 percent), manufacturing (28 percent), and ICTs (19 percent).

While there is untapped potential to grow modern services, Russia's services exports remain concentrated in lower productivity traditional activities such as transport and travel. In recent years, modern services, such as financial, business, and ICT services, have witnessed dynamic growth. Nevertheless, Russia's services exports remain concentrated in traditional services (notably transport and travel, which accounted for more than half of total service exports in 2018) (Figure 12). Russia's shares of both traditional and modern services exports in GDP are lower than would be expected given the country's level of economic development, implying scope for expanding exports of both.

**Figure 12: Traditional services and markets dominate Russia's services exports**  
(composition of Russia's services exports, 2018)

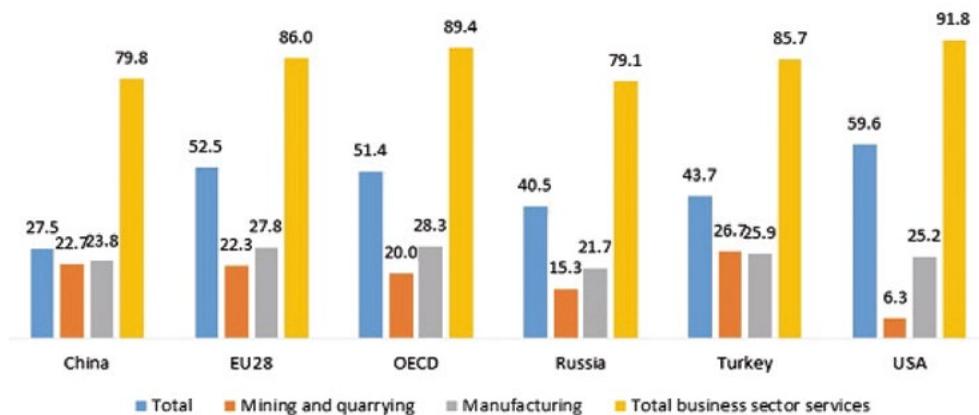


Source: Authors' calculations based on data from UNCTAD.

In an effort to achieve functional upgrading, Russia could also increase the share of domestic services that are embodied in its manufacturing exports. Building a dynamic domestic services sector is a necessary condition for manufacturing to thrive and plays an important role in economic diversification. Access to high-quality and efficient services is a necessary enabler for Russia to leverage global integration through higher value-added participation in both regional and global value chains. To facilitate changes in the services sector necessary to support exports, a focus on forward linkages is therefore necessary. In terms of domestic services integration with other sectors, improved access to services inputs—such as financial, ICT, and professional services—would positively affect the productivity and performance of downstream firms in Russia, boosting the prospects for export diversification and growth in all sectors.

Russia's domestic services value-added share embodied in its manufacturing exports is lower than that of most other comparator countries despite an increase in recent years. Domestic services account for 40.5 percent of total exports in value-added terms (Figure 13) but this is mostly driven by inputs to services exports themselves. The share of domestic services in non-services exports in Russia is much lower compared to its peers. For example, Russia's domestic services value-added share embodied in its manufacturing exports is less than 22 percent, compared to 28 percent across the EU and OECD countries (with the exception of Canada). Similarly, the domestic services value-

**Figure 13: Russia's share of domestic services in non-services exports is lower compared to its peers**  
(Domestic services value added in exports (%), by export category, 2016)

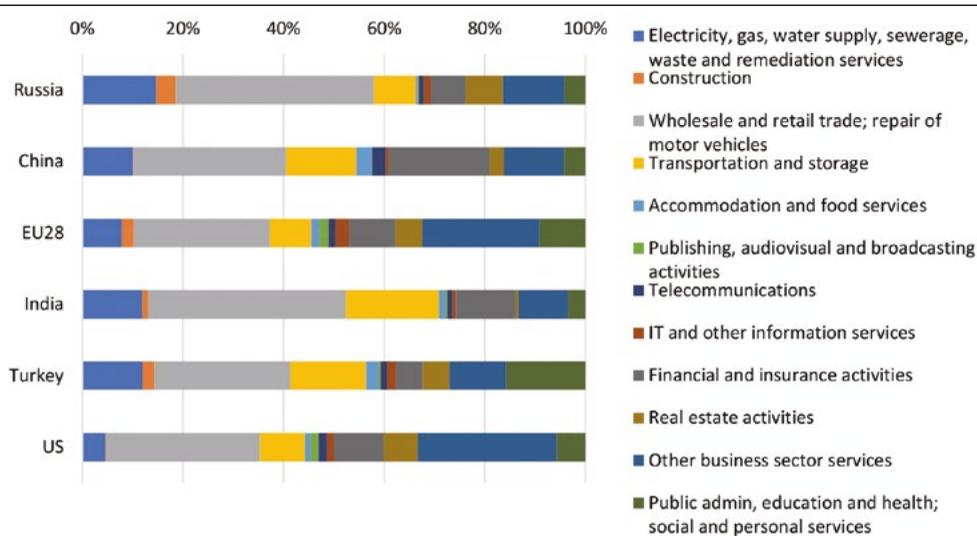


Source: OECD-WTO TIVA 2018 release. 2016 estimates.

added share is only 15 percent in mining, while it is more than 20 percent in all the comparator countries except for the USA and Norway. Even within the business services sector, Russia's share of domestic services value-added is less than 80 percent, behind most comparators, especially the USA with its share of 92 percent. There is, therefore, scope for Russia to increase value addition by further embedding domestic services, particularly in its non-services sectors.<sup>5</sup>

**Compared to peer countries, manufacturing in Russia relies most strongly on traditional services inputs and less on modern services.** In manufacturing, domestically-supplied modern services such as business services, ICT, and financial services only make up about 22 percent of services inputs. This is the lowest of all comparator countries except Turkey, with modern services accounting for 35 percent of services inputs in China, 37 percent in the EU, 24 percent in India, 41 percent in the USA, and 20 percent in Turkey (Figure 14). Thus, there appears to be room in Russia to increase modern domestic service provision into manufacturing sectors. It is also worth noting the relatively high share of electricity, gas, and water inputs in Russia compared to other comparator countries, which is consistent with the capital-intensive manufacturing processes used.

**Figure 14: The share of modern services used for manufactured exports in Russia is relatively low**  
*(Composition of domestic services value added in manufactured exports, Russia and comparator countries, 2015)*



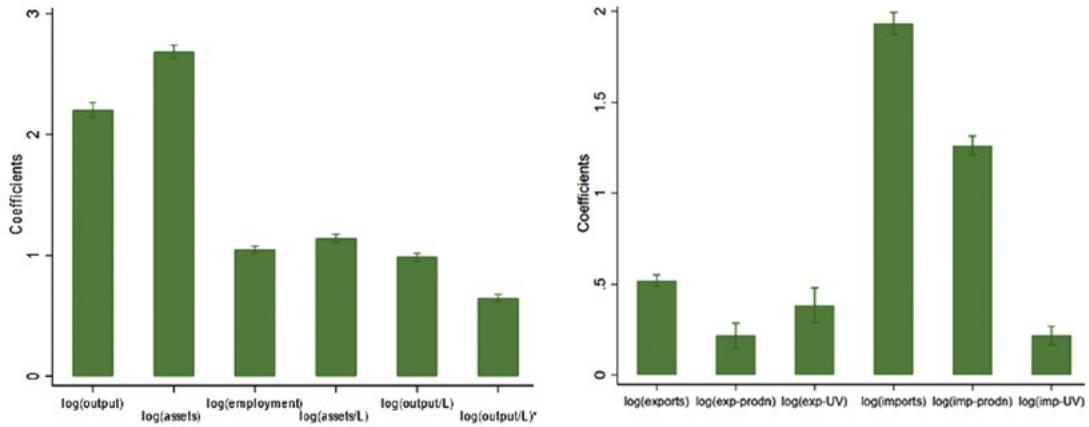
Source: TiVA 2018 release.

## Facilitating FDI and spillovers

**FDI can act as a catalyst for Russia's GVC upgrading. In Russia, multinational firms are investing more in fixed capital, creating more and better jobs and registering a higher productivity (Figure 15).** The labor productivity of multinationals is twice as high as that of Russian firms after controlling for capital intensity, suggesting better management and improved processes and technologies. And, they are more successful in tapping into GVCs than Russian firms. Even among GVC participants, foreign participants trade more products at higher unit values than domestic participants. Multinationals that export sell nearly 20 percent more products abroad at a 46 percent higher unit value than their domestic counterparts. On average, multinationals can act as a catalyst for Russia's GVC upgrading.

<sup>5</sup> A possible explanation for Russia's low domestic services participation in exported value-added is that competing services imports displace domestic suppliers, but the evidence provided in Chapter 3 does not support this.

**Figure 15: Multinationals are larger, more productive and more successful in tapping into GVCs**

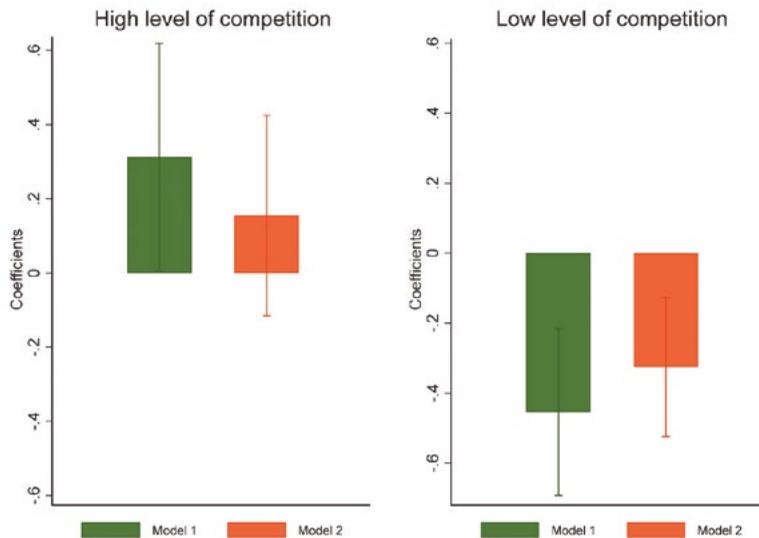


Source: Authors based on firm-level data from Ruslana and the Russian Customs.

Note: “assets” refers to fixed assets and “L” refers to employment. \* indicates the regression controlling for capital intensity. “prodn” denotes the number of products and “UV” denotes unit value. The bars represent the performance premia of multinationals over Russian firms for the outcome variables. The height of a bar indicates the estimated premium and the capped spike reports the 95% confidence interval.

**The extent to which Russian firms benefit from FDI spillovers depends significantly on whether the industry is competitive.** Productivity spillovers from foreign to domestic firms are positive in competitive markets. A 10 percentage point increase in the output share of multinationals is associated with a 3 percent rise in the labor productivity of Russian firms in the same industries (Figure 16). Competition limits monopolistic behavior, allowing more productive firms to enter and grow and less productive incumbents to exit. In markets with higher contestability, domestic firms are more productive. Therefore, they are more likely to benefit from technology spillovers. In sharp

**Figure 16: Spillovers from foreign firms to domestic firms in Russia are positive in sectors with more competitive markets**



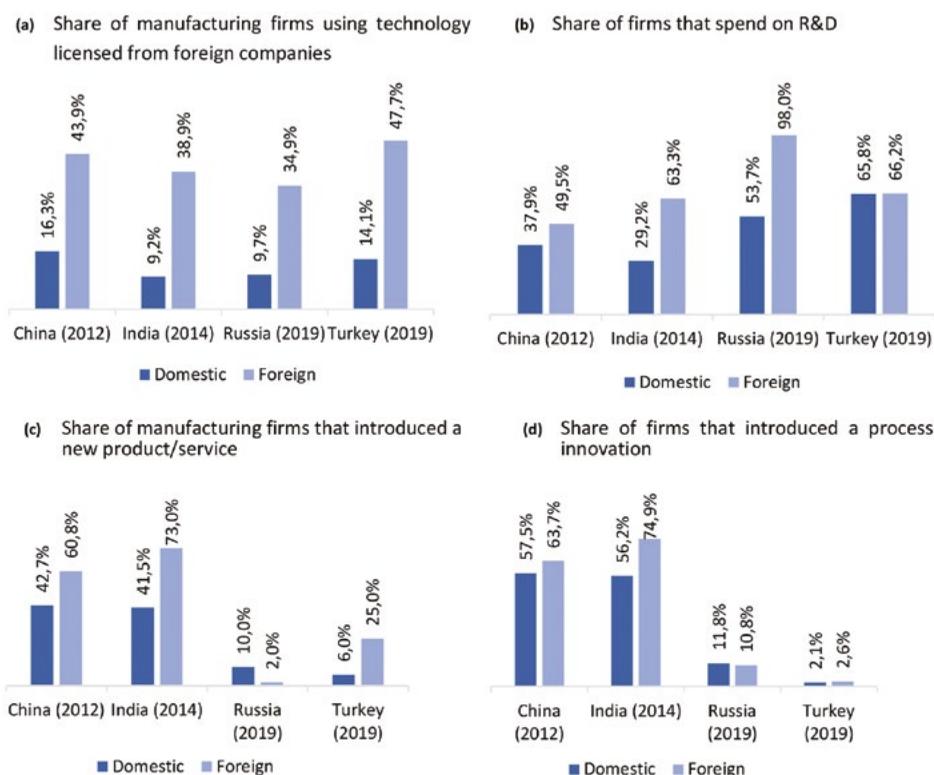
Source: Authors based on a panel data of firms operating in Russia from Ruslana.

Note: The bars represent the estimated impact of the presence of foreign firms in the same manufacturing industry on the labor productivity of domestic firms. The height of a bar indicates the estimated impact and the capped spike reports the 95 percent confidence interval. The colors of the bars represent the regression model: green for a model including the presence of foreign firms in the same industry, their presence in upstream industries and in downstream industries, and year fixed-effects; orange for a model also including the labor productivity of the domestic firm in the previous year.

contrast, spillovers are negative for firms in uncompetitive markets, and the magnitude of the impact is larger than on average—the same change in the share of multinationals will lead to a 4 percent decline in productivity. Multinationals invest in both types of markets.

**Increasing technology licensing and innovation would boost the potential for technology spillovers from foreign firms in Russia.** According to Enterprise Surveys, just 35 percent of foreign firms in Russia use technology licensed from foreign companies – which could serve as a proxy for higher technology intensity – compared to a coverage reaching about 40 percent or more in Russia’s peer countries, in particular Turkey (Figure 17, panel a). Despite the apparent low potential for technology spillovers in Russia currently, the coverage of foreign firms that spend on research and development (R&D) is extremely high, reaching 98 percent (panel b). The high coverage should not mask the fact that foreign manufacturing firms in Russia also often fail to innovate. The share of firms introducing a new product is just 2 percent, by far the lowest among peer countries (panel c). Foreign firms are only slightly better at innovating new processes (panel d). In both cases, foreign investors in China and India show shares of 60 to 70 percent. However, national intellectual property payments and receipts data show that Russia is spending a relatively high and increasing amount on intellectual property as a percentage of its GDP, even exceeding the USA, and it also receives higher receipts on intellectual property than China and India. These numbers suggest that Russia is making important strides in benefiting from technology spillovers and innovation.

**Figure 17: While many firms in Russia spend on R&D, few firms innovate**



Source: Own illustration. Data: Enterprise Surveys.

Note: Foreign ownership = 10% or more foreign ownership share. The graphs show the percentage of domestic versus foreign firms, respectively, not controlling for sectoral or other differences. These differences are not statistically significant, i.e. differences in firm size or sector allocation between foreign and domestic firms can also explain differences in technology and innovation patterns.

## 4. POLICY RECOMMENDATIONS FOR RUSSIA TO SEIZE THE GAINS FROM GVC OPPORTUNITIES

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**While sanctions remain an important constraint to Russia’s trade and investment, there are various policy measures that Russia can nonetheless take to make its business environment more conducive to economic diversification and GVC upgrading.** Key policy recommendations fall broadly into three areas, namely: (i) trade policy reforms to reduce trade costs and promote participation and upgrading in GVCs; (ii) measures to enhance the role of domestic and traded services in the economy; and (iii) facilitating FDI and spillovers through improved institutional and regulatory quality and reduced restrictions. Before discussing each in more detail, these recommendations need to be contextualized along three dimensions.

**First, Russia needs to be cautious of import substitution policies in the longer run and explore new ways to diversify its economy and exports.** Import substitution policies are associated with challenges as a strategy to raise quality and competitiveness of domestically produced goods. Since 2014, Russia has been expanding import substitution policies – supported by a “Made in Russia” strategy, limiting access of foreign companies to public procurement – to reduce its dependency on imports, especially from Western countries. Import substitution programs are currently in place for 22 industries such as pharmaceuticals, medical, radio-electronics, transport, construction, and metallurgy, affecting about 2,000 products. While backward GVC participation in manufacturing remained constant overall (although at low levels), the drop was especially large in electrical equipment, motor vehicles, and other transport equipment which may be a result of these programs. However, this strategy has shown mixed results in terms of achieving higher domestic production levels, in large part because of low availability and quality of inputs and dependence on imported machinery and equipment from Western countries. Where goals are being achieved – notably in the agricultural sector – a shift to exporting has indeed taken place. Yet, domestic retail prices for food products have risen while production rose only moderately in volume terms, which indicates that in this sector the cost of this policy has predominantly fallen on Russian citizens.

**Second, some of the most important steps to supporting inclusive growth through GVC participation are synonymous with good practice structural reforms, in particular, making state presence more effective including through increasing competition.** Multinationals in Russia account for significant shares of investment, employment, and output: between 2012 and 2018, they accounted for 9 percent of total fixed assets investment, 7 percent of total employment in Russia’s modern sectors, and 15 percent of total output. Multinationals are on average larger, more capital intensive, and more resilient to economic shocks. This is not surprising given their control of proprietary assets, their ability to exploit firm-level economies of scale, and their location-related advantages. Consequently, multinationals in Russia are seven times more likely to participate in GVCs than comparable domestic firms, crowding them out. However, the main inhibiting factor that prevents Russian firms from benefitting from the presence of multinationals is a lack of competition. Such negative spillovers from multinationals are present only in monopolistic sectors. Spillovers from multinationals to Russian firms are positive in sectors with competitive markets. Lack of competition is also a major constraint to boosting the role of services in Russia.

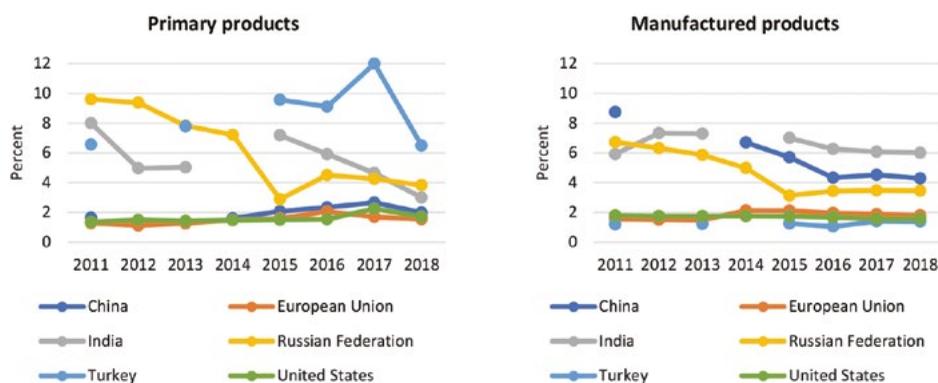
**Third, diversification of Russia’s exports has been progressing only slowly as the economy remains structurally highly dependent on hydrocarbons.** This underscores that economic diversification is possible, but more is needed. The share of mineral fuels in Russian exports dropped to 62.1 percent in 2019, compared to 70.6 percent in 2013. Russia’s concentrated export structure is coupled with a low complexity of its export basket compared to other countries at similar income levels. The Economic Complexity Index (ECI) shows that the principal contribution to Russia’s export growth has been provided by moderate complexity products, notably cereals, and iron and steel products, while processes of structural transformation remain largely absent. Besides low complexity, Russia struggles with low long-term export survival rates. Yet, some diversification has been achieved as 17 new products (for example, corn, precious metals ore, soybean oil) have been added to Russia’s export basket since 2003, equivalent to US\$54 of per capita income in 2018. However, the overall export volume of these new products remains limited. In the past five years, Russia has started more actively pursuing non-energy non-commodity export promotion policies to encourage

diversification, including by establishing the Russian Export Center, which supports firms, and creating the National Project on International Cooperation and Export with five federal programs. These projects include goals to improve global competitiveness in manufacturing, agriculture, and services.

## Trade policy reforms to reduce trade costs and promote participation and upgrading in GVCs

**Trade liberalization can improve access to high-quality inputs of both goods and services and expand effective market size, helping promote participation and upgrading in GVCs.** In particular, functional or product upgrading may require inputs from abroad to facilitate more sophisticated production at home. While import tariffs on manufactured and primary products have fallen strongly in Russia since its accession to the WTO in 2012, tariffs remain at levels above several peer countries (Figure 18). The weighted average of import tariffs on manufactured products in Russia fell from more than 6 percent in 2011 to 3.1 percent in 2015, but increased slightly to 3.5 percent in 2016-18. While Russian import tariffs on manufactured products are lower than in India and China, they are still twice as high compared to those imposed in the EU, the USA, and especially Turkey. And in terms of primary products, Russian import tariffs fell from almost 10 percent to 2.9 percent, but climbed back to 3.8 percent between 2016 and 2018. They remain significantly higher than in China, the EU, and the USA, highlighting room for further tariff reductions in Russia.

**Figure 18: Import tariffs on primary and manufactured products in Russia have fallen but they remain higher compared to some comparator countries**

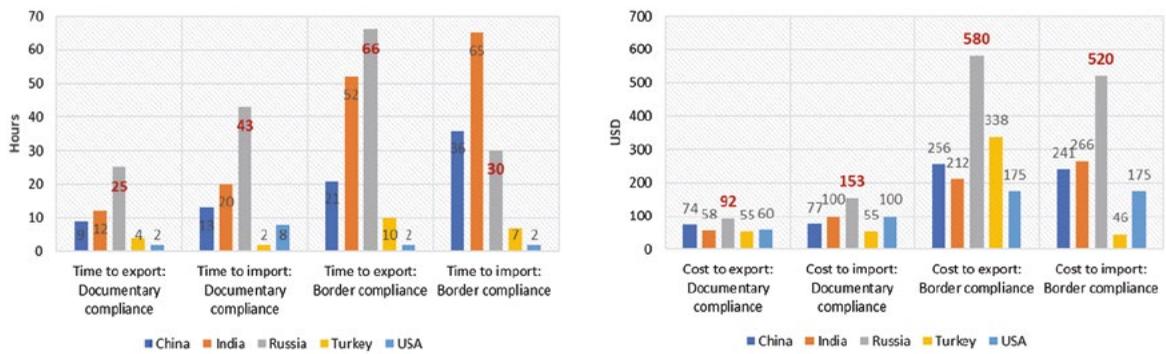


Source: WDI.

Note: Weighted import tariffs. Weighted mean applied tariff is the average of effectively applied rates weighted by the product import shares corresponding to each partner country.

**There is much scope to lower the time and costs of trading cross-border in Russia (Figure 19).** Exports in Russia are subject to lengthy documentary and border compliance procedures, taking an average of 25 and 66 hours, respectively, compared to only 4 and 10 hours in Turkey, or 2 hours each in the USA. Compliance times on the importing side only look better with regard to border compliance (30 hours), while documentary compliance takes an average of 43 hours, more than twice as long as in India, the second-lowest performer. The longer time required to import and export in Russia translates into significantly higher costs of roughly US\$670 for a standardized container of goods, compared to roughly US\$230-350 in China, India, and the USA.

**Figure 19: Russia faces the longest times and highest costs to trade across borders**

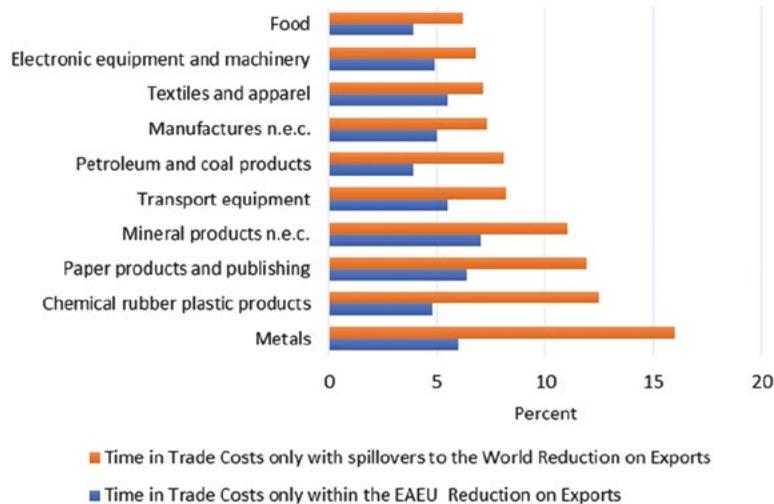


Source: *Doing Business Indicators 2020*.

**Lowering non-tariff trade costs could also help strengthen Russia’s participation in regional value chains (RVCs) and GVCs.** Estimates suggest that if Russia and other Eurasian Economic Union (EAEU) countries reduced time in trade costs, this would likely have strong impacts on trade with other EAEU member countries and likely participation in RVCs. A 20 percent reduction in the ad valorem equivalents (AVE) of the time in trade costs among EAEU members is found to lead to a 2 percent increase in Russian exports. Seven sectors in Russia are found to show an expected increase in exports of more than 8 percent: textiles and apparel; paper products and publishing; mineral products; metals; transport equipment; electrical equipment and machinery; and other manufactures. However, since the EAEU is not a well-integrated trading bloc globally, trade impacts are found to be much greater if there are spillovers to reducing trade costs with third countries. For example, if in addition to the 20 percent reduction in AVE of the time in trade costs on imports and exports within the EAEU there is a 10 percent reduction in AVE of the time in trade costs with respect to all external regions, then Russian exports could increase by 3.6 percent with 10 sectors witnessing an estimated increase in exports of between 9 and 19 percent (Figure 20).

**Figure 20: Reductions in non-tariff trade costs would deepen Russia’s integration in RVCs and GVCs**

*(Estimated annual percentage change in exports of goods in the Russian Federation from the EAEU reduction of time in trade costs in goods, with and without spillovers to the rest of the world. Results are the percentage change in exports from the initial equilibrium)*



Source: *Unpublished results from the model of Knobel et al. (2019)*.

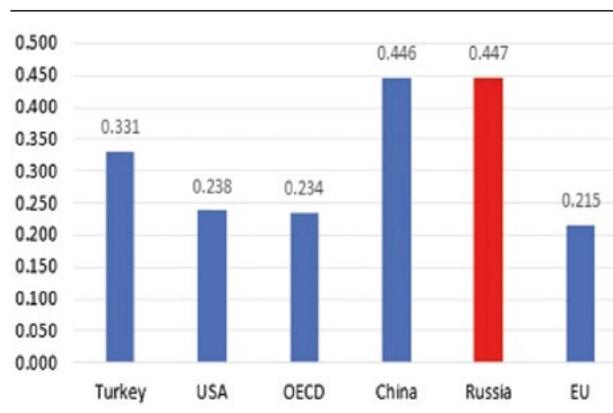
**A major component of non-tariff trade costs are complex and outdated technical regulations.** Standards that provide excessively detailed specifications of product characteristics and processes should be phased out, as should any standards that lack a firm scientific basis related to major policy objectives. Voluntary standards should be used in all other cases to govern other product attributes, such as quality, and should be set by private stakeholders. Aspects of products and production processes not tightly linked to major policy objectives may not need to be regulated at all. Private stakeholders may meet in national and international standards bodies when issues such as interoperability or agreement on a recognized set of product attributes arise. The emergence of international private technical standards in information and communications technology, in agro-food sectors and in the ISO process generally, provide illustrative examples.

## Measures to enhance the role of domestic and traded services in the economy

**Russia is trade restrictive especially in transport services, digital services, and towards the movement of natural persons particularly suppliers of computer, engineering, and architecture services.** Restrictive services trade not only affects services that are exported, but can also pose barriers to upgrading in more complex GVCs that rely on imported services. The overall Services Trade Restrictiveness Index (STRI) for Russia is almost twice the average for OECD countries, the EU, and the USA. Russia also exhibits a higher level of restrictiveness than Turkey but is on par with China (Figure 21). While Russia’s STRI score is above the OECD average in almost all sectors, it is especially closed in transport services. The country exhibits the highest restrictions in rail freight transport, cargo handling, and storage

and warehousing services (despite some improvements, Russia also shows the lowest performance across all sub-components of the World Bank’s Logistics Performance Index). Russia is the sixth restrictive of the 46 economies included in the OECD Services Trade Restrictiveness Index database in digital services such as computing, motion pictures, and sound recording. In computer services, there are relatively high restrictions on foreign entry as well as cumbersome regulations for the hiring of foreign professionals, including intra-corporate transferees, and independent and contractual service suppliers. Russia is also restrictive towards movement of natural persons. Among all countries in the OECD STRI database, averaged across all sectors, Russia is the fourth most restrictive in “mode 4” services trade (i.e. services provided by a foreign national as an independent supplier or employee of a service supplier). At the sector level, in terms of restrictions to the movement of people, Russia has a relatively high STRI in computer, engineering, and architecture services.

**Figure 21: Russia is services trade restrictive**  
(average STRI across all sectors, 2018)



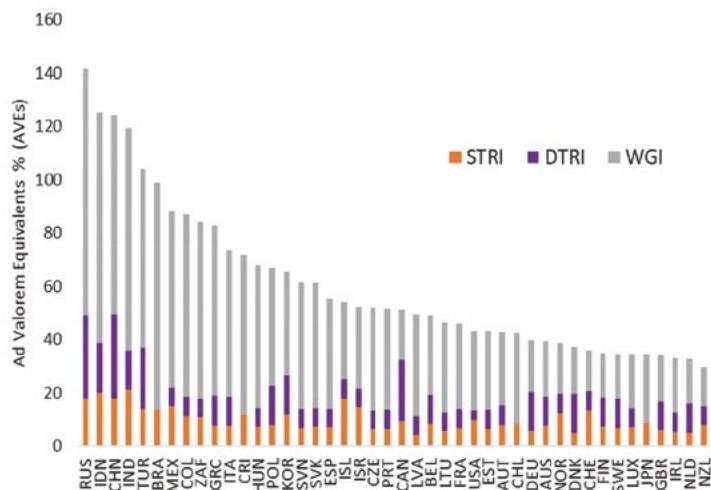
Source: OECD STRI (<https://stats.oecd.org/Index.aspx?DataSetCode=STRI>)

Note: The average score for the EU does not include the following EU members, for which data is not available: Bulgaria, Croatia, Cyprus, Malta, and Romania.

**Compared to other OECD countries, in Russia, other sources of trade costs in services are high, in particular institutional regulatory capacity of governments and regulators.** A large part of trade costs in services is driven by non-discriminatory aspects of trade policy. Factors such as the quality of the regulatory environment and the rule of law are important enabling factors, as is regulatory transparency. Such costs appear to be the highest for Russia among its peers (Figure 22).

**Figure 22: Russia’s trade costs in services are the highest among peers**

(Sources of services trade costs in terms of ad valorem equivalents)



Source: Van der Marel and Shepherd (2019).

Note: Services trade costs are estimated associated with market access policies in services and transparency measures as proxied by the OECD STRI (STRI); regulatory measures related to the cross-border movement of data as proxied by the Digital Trade Restrictiveness Index developed by the European Center for International Political Economy (DTRI); and the institutional regulatory capacity of governments and regulators as proxied by the simple average of the regulatory quality and government effectiveness indicators of the World Bank’s Governance Indicators (WGI).

**Policies to support services growth and deepen their integration in Russia can be divided into horizontal and vertical measures.** Horizontal measures include reducing distortions to competition, developing the skills base and human capital, and improving access to finance. Vertical measures would apply to key services sectors such as banking, insurance, telecommunications, tourism, health and education services, air transport, and rail.

**Horizontal (economy-wide) measures** include:

**Building up the stock of human capital to meet the demands of the services sector.** Most jobs in the modern services sector require technical/vocational, soft interpersonal, and problem-solving skills, which are often not acquired at school but instead through market-oriented technical and vocational institutions, with intensive on-the-job learning opportunities. This puts a premium on expanding vocational education programs in close collaboration with the relevant services industries to provide a market-ready, skilled employment base. Introducing incentives to adjust the content, forms, and methods of skills training by training providers, including firms themselves, would help. Facilitating the entry of foreigners with relevant skills for Russia’s services sector to temporarily alleviate some of the constraints could also be considered. This could include introducing guest worker programs and loosening entry requirements in sectors with labor shortages using a sector-based, skill-based approach. Russia could also move in the direction of countries that use various quota systems aimed at making decisions on admission of foreign workers on the basis of economic needs, and allow in certain cases lower-skilled foreign workers in guest worker programs, as well as certain services sectors to enter into direct agreements with the government to fill labor shortages.

**Increasing foreign exposure to services would also increase the performance and productivity of Russian firms in all sectors.** Promoting reforms that reduce the costs of services trade and FDI in upstream industries from both regional and global sources can serve as an engine for advancing Russian exports through inter-sectoral, product, and functional upgrading. In addition, developing a modern services-based economy also requires an open, investment-friendly, transparent, and sound regulatory environment for the services sector. Trade and investment reforms that reduce the costs that foreign services suppliers face in accessing the Russian market should be addressed (see section below on FDI).

**Improving access to finance and transportation.** Access to finance in Russia seems to be a larger issue for deepening services integration compared to electricity and water supply, ICT usage, and transportation (although transportation is a growing obstacle). If Russia's services sector is to grow, the capacity of the domestic financial sector to fund investments should also be improved. Beyond measures to promote competitive access by Russian firms to domestic debt and equity financing (CBR 2016), expanding access to finance will require i) continued efforts to close weak banks; ii) diversification of the financial sector away from the banking-sector-dominated model and diversification of financing products, especially those better suited to SMEs such as microfinance, guarantees, and leasing; iii) enforcement of market disciplines in the banking sector, including encouraging greater private sector participation; iv) improving the financial literacy of SMEs; and v) re-examining unnecessary and cumbersome requirements of currency regulation and control that adversely affect services exporters. More specifically, services exporters are bound by an obligation to repatriate earnings from export contracts and they face restrictions on handling foreign accounts. The existing requirements related to currency regulation impose restrictions on transborder payments for services using e-money, which presents a barrier to exports of services via the internet.

**Vertical (sector-specific) measures** apply to key services sectors such as banking, insurance, telecommunications, tourism, health and education services, air transport, and rail, and in essence involve removing sector-specific barriers to firms contesting services markets:

- *In financial services*, foreign capital and foreign quota limitations for the banking sector and insurance services, respectively, could be increased.
- *In insurance services*, prohibitions on the establishment of foreign branches for the provision of non-life and life insurance could be relaxed.
- *In telecommunications*, improving competition requires regulatory reforms - including establishing a national independent regulatory authority with enough institutional capacity to implement regulatory reforms and enforce ICT sector regulations - and setting standards and procedures for shared use of infrastructure. Exclusivity rights granted to the state-owned enterprise (SOE) Rostelecom to provide internet services to healthcare providers should also be revisited.
- *In transport*, efforts should be expanded to ensure that airlines have non-discriminatory access to airport facilities and services. Efforts should also be geared to reforming the designated carrier status for the national carrier on international routes. For rail services, the government could consider separating the infrastructure and services segments of Russian Railways (RZD).
- *In tourism*, measures could include the simplification of visa procedures and expansion of the e-visa system and developing and distributing advertising and information materials about tourism opportunities, including for healthcare and educational purposes. It is also necessary to expand opportunities for foreign tourists to have value-added tax (VAT) returned upon departure after purchasing goods in Russia.

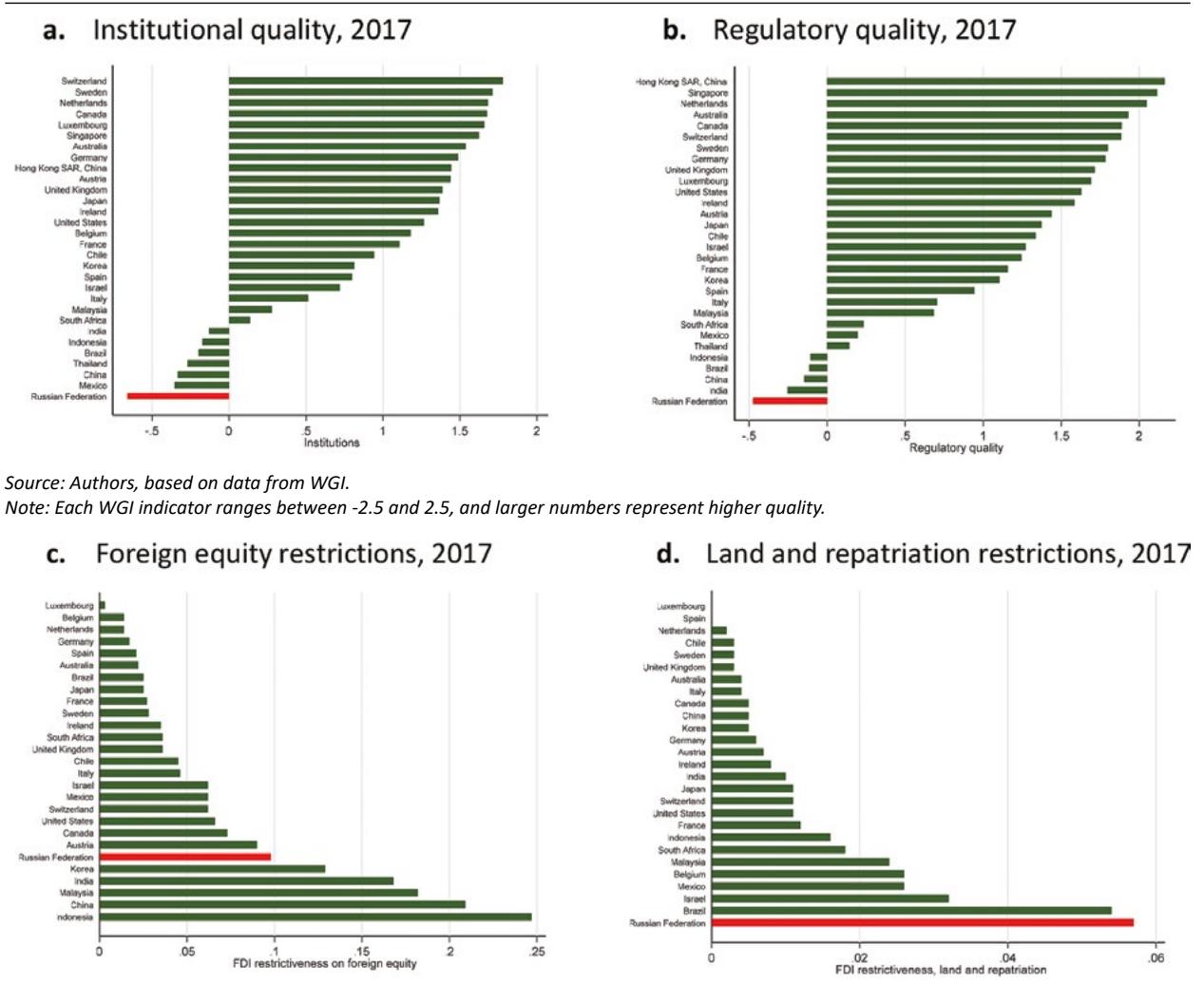
## Facilitating FDI and spillovers through improved institutional and regulatory quality and reduced restrictions

**A perception of low institutional and regulatory quality, the restrictiveness of the FDI regime, and high investor and expropriation risk are all factors deterring FDI in Russia.** Among the top 30 FDI destination countries, Russia is at the bottom in terms of the overall institutional and regulatory quality (Figure 23, panels a and b). It is also one of the most restrictive regimes among the top 30 destinations in terms of both foreign equity and land/repatriation restrictions (Figure 23, panels c and d). And even before the COVID-19 pandemic, Russia was assessed to be a relatively risky environment for investors. Among the same top FDI destinations, Russia comes close to the bottom of the list of the International Country Risk Guide (ICRG) on overall investor risk. Regarding expropriation risk, Russia is rated as the seventh riskiest destination of the 30 countries.

Policy measures to boost FDI and thus facilitate FDI spillovers would include:

**Establishing a national, empowered investment promotion institution with an extensive network of regional branches as a first step towards nurturing a better institutional environment for foreign investors.** Evidence suggests that a key element for effective FDI attraction and retention is a national-level investment promotion agency that is strategically aligned with the national development plan and corresponding FDI policies, has a strong institutional structure, and focuses on investor service delivery. Such agencies have played pivotal roles in a diverse set of countries such as Brazil, India, Ireland, Korea, and Vietnam. Indeed, investment promotion agencies at the subnational level are also important, especially in large decentralized countries. Countries such as Germany, Spain, the UK, and Ireland have successfully implemented models with strong networks of national and subnational investment promotion agencies. Russia has numerous institutions working on investment promotion at the federal and regional levels, however, there is no national-level institution coordinating functions across different agencies, with the capacity to provide the full set of services to foreign investors. Publicly available information on the performance of the various investment institutions is limited. While a comprehensive assessment of Russia's FDI institutional framework is required to determine how best to align it to good practice, the need for a more empowered national-level agency is evident. There is also a need for a national FDI strategy to provide the agency with strategic direction and outline the key principles governing the investment policy.

Figure 23: Perceptions of low institutional and regulatory quality in Russia deter FDI



Source: Authors based on data from the OECD.

Note: Each FDI restrictiveness index ranges from zero to a positive number, and greater values indicate high levels of restrictions.

**Simplifying foreign investment regulations and bringing about greater transparency is equally important.** Russia has a complex legal framework, including the Foreign Investments Law (FIL), the Strategic Investments Law (SIL), and New Investment Law (NIL) (i.e. Federal Law “On the Protection and Promotion of Capital Investments and the Development of Investment Activity in the Russian Federation”). A consolidated investment law that clarifies the institutional framework, investment entry, and protection rules would be preferable, signaling respect for property rights. Transparency on the applicable rules can also be improved. For example, the FIL provides that foreign investors can freely invest in Russia unless it is prohibited, but it does not expressly mention specific prohibitions and restrictions. There are restrictive measures on FDI across sectoral laws – for example in aviation, mass media, and banking sectors. The dispersed restrictions make it difficult for foreign investors to identify upfront the relevant rules. Some countries, including China and Ethiopia, address this issue by having a negative list of sectors and activities in which FDI is subject to conditions. Others provide updated policy summary documents every few months with an overview of the main restrictions.

**The most severe FDI restrictions come from the SIL, whose framework should be simplified and streamlined to reduce excessive discretion.** The SIL enumerates 42 strategic activities that are restricted for foreign investments. However, there is wide discretionary authority – an approval requirement may be imposed even on activities that are considered connected to strategic activities or that are believed to affect state defense and security. The ‘conditions’ for granting an approval are also not pre-determined or well defined. They can be imposed on a case-by-case basis, including in a separately signed Strategic Contract. In contrast, where countries choose to impose approval requirements for strategic interests, it is good practice to impose the requirement for a set of well-defined and limited activities, to outline clearly the process and requirements, and to prescribe time periods which are to be complied with. Excessive discretion is also seen in the availability of unbound exceptions to certain rules. Overall, discretion results in higher costs for foreign investors on top of the restrictions, and they should be reduced.

**Russia’s current legal framework provides key investment protection guarantees, but several are missing and others are incomplete.** For example, the FIL does not include the fair and equitable treatment clause, which protects investors from arbitrary state actions and guarantees due process. The FIL’s expropriation clause does not specify fully the legality conditions—that is, expropriation can only be conducted for public purpose, in a non-discriminatory manner, following due process, and on payment of prompt, adequate, and effective compensation— and does not explain the calculation of the compensation. The FIL’s provision on investor-state dispute settlement does not include any information on the options and procedures for dispute settlement. Importantly, there is a gap between the FIL and Russia’s international investment agreements (IIAs), with the latter providing more elaborate investor rights.

**The extensive use of stabilization clauses setting investors’ terms over long time horizons should be reevaluated.** For example, the NIL includes a provision on a «stabilization clause» that guarantees investors the stability of the regulatory and fiscal terms for the period of the project. However, stabilization clauses are not considered the ideal way of providing stability to investors because they come with significant drawbacks, such as challenges in implementation and distortionary effects. Having overarching clauses that also stabilize regulatory frameworks can ‘tie the hands’ of states even when legitimate changes may be needed. Therefore, instead of reliance on instruments like stabilization clauses, more emphasis should be put on broader systemic issues of transparency and investor protection.

**The implementation of investment protection rules, such as establishing investor grievance management mechanisms, should be enhanced.** Russia’s weak performance on several key indicators on investment protection, including indices on dispute settlement, which is fundamental to the effective enforcement of legal rights, reflects poor implementation. Russia has a high number of investor-state disputes, 26 publicly known ones. The most frequently alleged breach by investors is expropriation. To prevent costly investor-state disputes, and ultimately retain and expand investment, countries have been setting up investor grievance management mechanisms. This is particularly important for Russia, where foreign investors lack trust in domestic courts and where there are limited preferred dispute settlement options for investors, because it is not a Contracting State to ICSID (Russia signed the ICSID convention but has not deposited instrument of ratification). Overall, Russia could consider establishing concrete mechanisms for better implementation of investment protection rules and reducing investor risk.

**Greater domestic competition and stronger linkages to domestic suppliers would enhance the contribution of multinationals to the Russian economy.** Positive FDI spillovers cannot be taken for granted. While foreign investor characteristics are important, domestic firm capabilities to absorb spillovers and supportive policies are critical, too. Sufficient firm capabilities to develop supplier linkages with multinationals and benefit from technology spillovers are important. Competitive markets to limit monopolistic behavior and reduce a crowding out of firms have also shown to matter for spillovers. These findings are consistent with two recent World Bank reports that identified low capabilities of Russian firms and limited competition as key bottlenecks preventing multinationals from relying more on local suppliers. Addressing these issues through competition policy reforms and enhancing domestic firms' capabilities including through strategic linkage development programs is critical for Russia's GVC upgrading through FDI spillovers.

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# CHAPTER 1

## Recent Trade Trends in Russia\*

\* The chapter was prepared by Olga Emelyanova (Economist), Lucie Wuester (Consultant), Calvin Djiofack (Senior Economist), and Jagath Dissanayake (Consultant).



# 1. INTRODUCTION

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**This chapter assesses Russia's recent trade performance and investigates whether it has integrated more or less in the global economy over recent years.** The chapter assesses progress in export diversification and export sophistication. We also look at the recent trade policy measures in Russia. We explore Russia's trade potential with key trade partners, including the Organisation for Economic Cooperation and Development (OECD), European Union (EU), the Commonwealth of Independent States (CIS), the countries that have signed free trade agreements with the Eurasian Economic Union (EAEU-FTA), and China and India.<sup>6</sup> First, we benchmark Russia's openness to international trade against what is expected for its level of economic development. Second, we identify sectors in which Russia has a revealed comparative advantage (RCA) to discover the industries that may offer export diversification opportunities. Third, we use a gravity model of trade to compare Russia's current level of trade with our selected set of countries and country groupings with the level predicted based on structural factors. Finally, we use indicators of trade complementarity to see how Russia's export structure is aligned with the import structures of selected countries and country groupings.

**The chapter concludes that Russia's trade with some of the largest economies in the world is somewhat less than the level predicted by the model.** Russia has substantial untapped opportunities to grow its exports (including non-oil goods and services) to the EU, other OECD countries, and China.

**An analysis of Russia's trade complementarity, which measures the potential for trade between two economies in terms of how well the export structure of one economy matches the import structure of another economy, shows a high and improving trade complementarity with India, and increasing trade complementarity with other countries, including China.** Increasing trade complementarity with China has largely reflected increased oil and gas exports. The analysis also indicates potential for Russia to increase its exports of services, particularly transport services but also travel, goods-related services, and telecommunications, to both China and India.

**Russia's RCA in goods trade is concentrated in oil and gas products, agriculture and forestry, metals, and in services trade in construction and transportation.** The country has been gaining market share particularly in global exports of transport services and travel, which account for large shares of Russia's services economy, as well as in some smaller service sub-sectors, such as construction, telecommunications, financial services, government services, charges for intellectual property, and personal services.

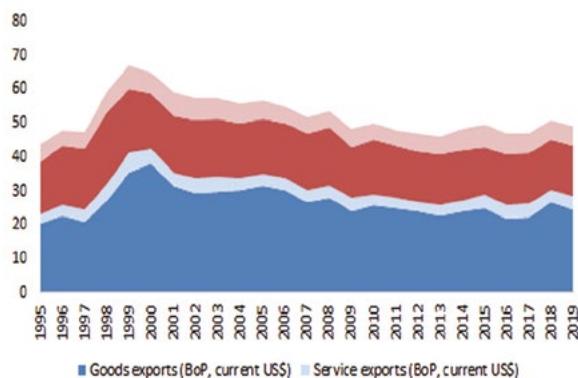
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<sup>6</sup> The list of countries in each country group is in the appendix.

## 2. RECENT TRADE TRENDS IN RUSSIA

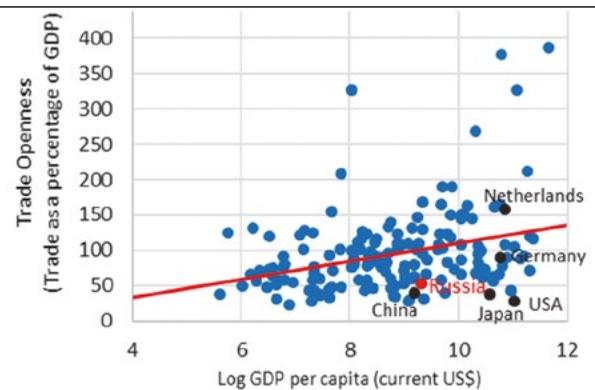
While Russia has integrated further into the world economy by joining the WTO and new trade agreements, the country's trade-openness is lower than expected based on the level of economic development. The trade-to-GDP ratio is one of the most basic indicators of openness to foreign trade and economic integration. By weighting the combined importance of exports and imports of goods and services relative to the size of an economy, the ratio indicates the level of integration between the domestic economy and world markets. There is a positive relationship between trade openness and per capita income: countries tend to trade more as incomes rise. Russia's trade openness decreased significantly compared to 2000 due to the structural changes that the economy underwent: in the early 2000s Russia's growth was supported by sizable investment and rising consumption, in part reflecting a catch-up from the previous decade's depressed domestic demand. Yet, Russia's trade-to-GDP ratio increased in 2019, compared to 2013 (Figure 1-1). The country's goods exports accounted for a large share of this; goods export-to-GDP ratio reached 24.6 percent in 2019, up from 22.8 percent in 2013. The REER depreciation and the new macroeconomic framework established by the government as a response to the double shock of a drastic fall in oil prices and economic sanctions supported this growth. Yet, comparing Russia to other countries, we see that in 2018 Russia's level of trade openness was in fact still considerably below that of other countries with a similar level of economic development (Figure 1-2). Meanwhile, trade openness may be somewhat misleading, since a low ratio does not necessarily imply high (tariff or nontariff) barriers to foreign trade but may be due to factors such as size of the economy and geographic remoteness from potential trading partners. Even though Russia's trade openness is low compared to countries with similar levels of economic development, its openness is higher than large economies like China, USA and Japan.

**Figure 1-1: Trade openness increased since 2013 (Trade to GDP ratio, percent)**



Source: WDI.

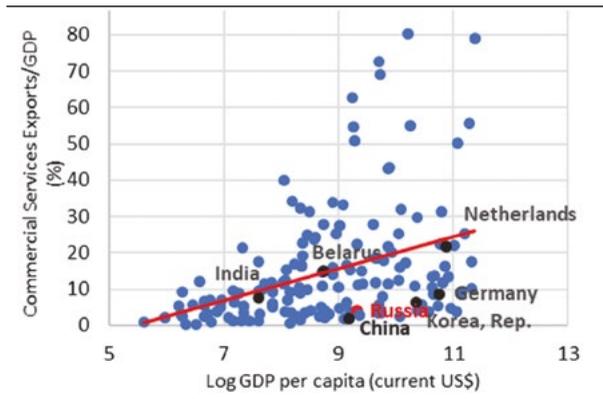
**Figure 1-2: Trade openness in Russia is lower than expected given national income level (2018)**



Source: WDI, Comtrade.

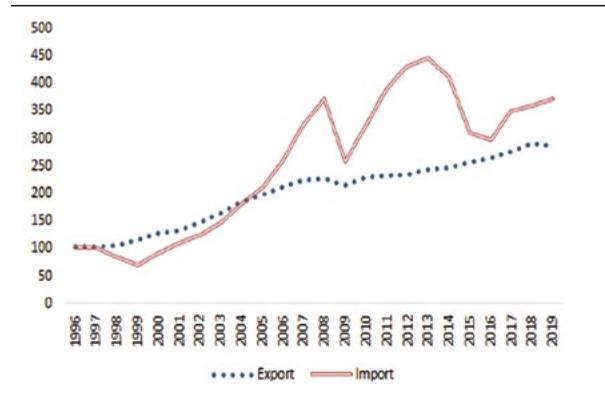
Russia's trade in services is also lower than what is expected for its income level. Services are increasingly important to international trade in the 21st century and are becoming more tradable with the advancement of technology. Services are also becoming more vital as inputs to traded goods. Scatter plots of commercial services exports and imports (as a share of GDP) against per capita income also suggest that countries tend to trade more services as incomes rise. The scatter plot also suggests that Russia trades less than what is expected for its income level, as do its top trading partners. This suggests the existence of untapped opportunities for Russia to grow its total exports, including services exports (Figure 1-3).

**Figure 1-3: Russia's commercial services trade is lower than what is expected for its per capita income, 2018**



Source: WDI.

**Figure 1-4: Import accumulated volume growth outperformed export volume growth in 1996 – 2019, percent, 1996 =100**

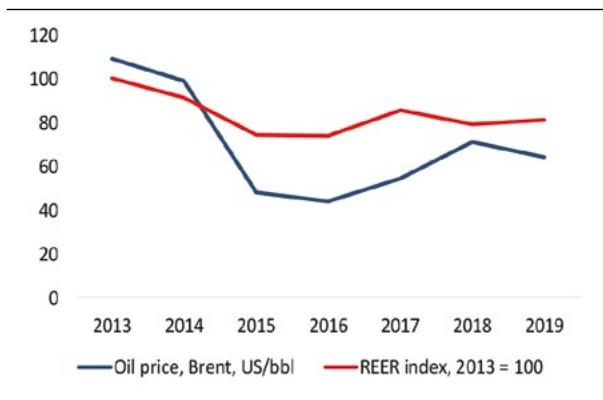


Source: Rosstat.

Despite import volume growth exceeding export volume growth in 1996 – 2019 (Figure 1-4), Russia has recorded a continuous goods and non-factor services trade surplus. This is attributed to the economy's high level of natural resource exports in crude oil and natural gas, covering deficits in services.

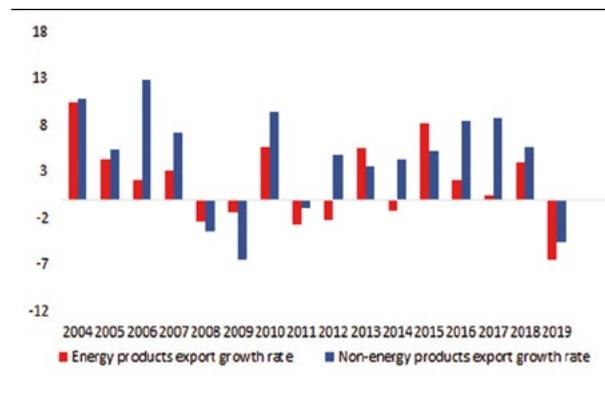
The double shock of international sanctions and slump in oil prices in 2014 resulted in the REER depreciation, which, coupled with a relatively supportive global environment, positively affected non-energy exports volume growth in 2015 – 2018 (Figure 1-5). Expanding exports was an important driver for GDP growth in 2015 – 2018, with non-energy exports growing faster than energy ones in 2016 to 2018 (Figure 1-6). The new macroeconomic framework, established by the government, which included switching to a flexible exchange rate regime, inflation targeting, fiscal consolidation, and introduction of the new fiscal rule, reduced Russia's dependence on oil price volatility and supported exports growth.

**Figure 1-5: The REER sharply depreciated in 2014, staying below 2013 levels as of 2019**



Source: WDI, Central Bank, Haver.

**Figure 1-6: Non-energy goods exports accelerated in 2014 - 2018**

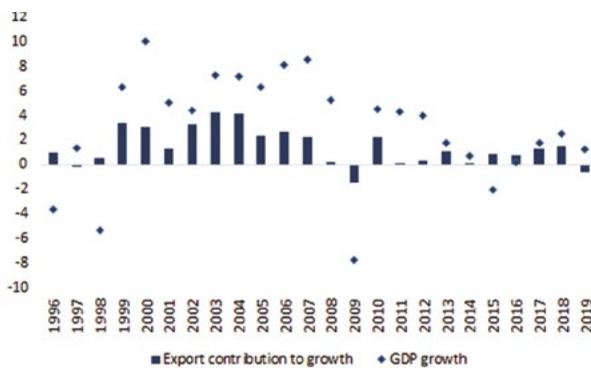


Source: Russian Customs.

In 2019, Russia saw negative export volume growth, in line with lower global demand, oil production cuts under the OPEC+ agreement as well as pipeline disruptions (Figure 1-7). In 2020, exports are expected to shrink by about 12<sup>7</sup> percent on the back of a slump in global demand and higher international trade costs on the back of the COVID-19 pandemic (Box 1-1).

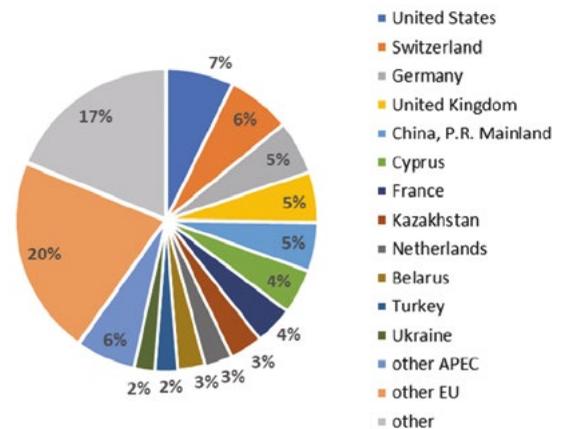
The regions Russia trades most with remain the Organisation for Economic Cooperation and Development (OECD), the European Union (EU), Asia-Pacific Economic Cooperation (APEC), and the Commonwealth of Independent States (CIS). Exports to the BRICS have risen since 2016 in absolute value but are mostly accounted for by exports to China (Figure 1-8). The share of Russia’s exports that flow to BRICS countries has steadily increased to 14.8 percent in 2018, compared to 8.5 percent in 2013. The share of imports from BRICS countries has also been rising, to 24.6 percent in 2018 from 18.5 percent in 2012. For services, 32 percent of value came from exports to the EU, 7 percent to the USA, and 6 percent to Switzerland (Figure 1-9). More than half of exported services in 2018 consisted of transportation and travel services (Figure 1-10).

Figure 1-7: Expanding exports was important GDP growth driver in 2015 – 2018



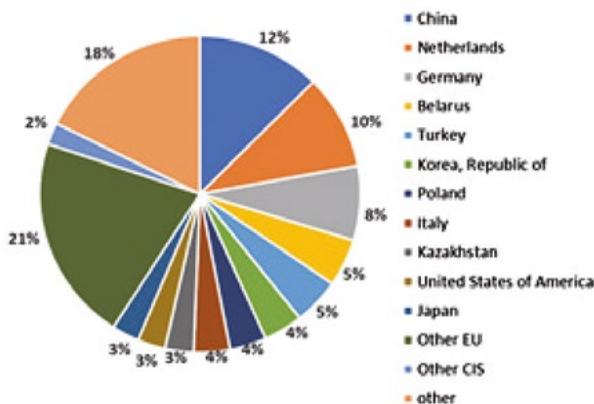
Source: Rosstat.

Figure 1-9: Russia exports services predominantly to the EU



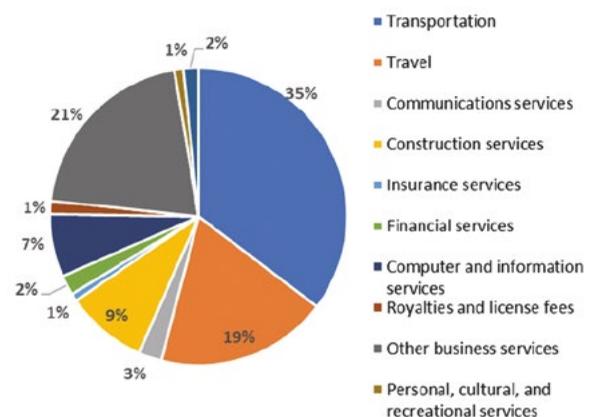
Source: CBR.

Figure 1-8: Russia mostly exports goods to the EU and China (2018)



Source: ITC.

Figure 1-10: Transportation and travel make up over half of services exports



Source: Comtrade.

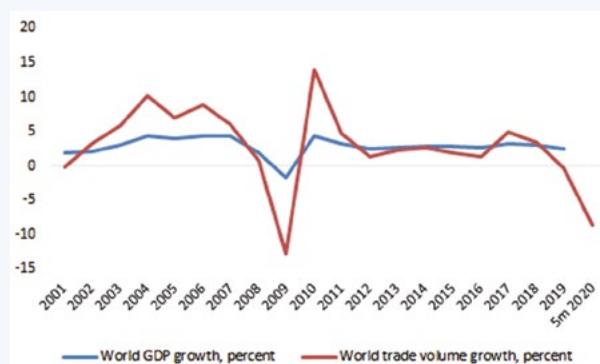
<sup>7</sup> Europe and Central Asia Economic Update. COVID-19 and Human Capital., World Bank, October 2020.

**New trade agreements of the Eurasian Economic Union (EAEU) could expand Russia’s export opportunities. Russia is a member of the CIS FTA and the EAEU customs union.** On October 1, 2019, the EAEU-Singapore FTA was signed. It incorporates trade in goods as well as regulation of trade in services and terms of investment. A provisional agreement with Iran entered into force on October 27, 2019, for the duration of three years, with limited reduced customs duties that only include about half of the total volume of trade between the parties. It mainly provides for lower duties for industrial and agricultural goods. An ‘economic cooperation agreement’ with China also entered into force at the end of October, which focuses on simplified trade procedures. On October 25, 2019, the EAEU-Serbia FTA agreement was signed, which was largely based on existing bilateral trade agreements Serbia had with Russia, Belarus, and Kazakhstan. These agreements follow from the EAEU-Vietnam FTA agreement that was signed in 2015 in conjunction with separate bilateral agreements with Russia and Belarus on supporting automotive manufacture in Vietnam. Since the latter agreement entered into force, the share of Russian exports to Vietnam has gradually increased, mostly accounted for by exports in grain, mineral resources, and iron ore. As the largest member state of the union, Russia has signed additional bilateral trade agreements within the framework of these EAEU FTAs; for instance, following the conclusion of the provisional EAEU agreement with Iran, Russia signed an additional bilateral agreement on duty-free import of wheat.

**Box 1-1 Global trade volume growth slowed down after the Global Financial Crisis and collapsed amid the COVID-19 pandemic**

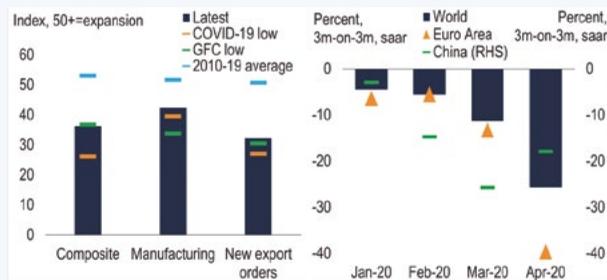
**Global trade volume growth slowed down after the Global Financial Crisis (Figure 1).** While average global trade volume growth at 5.9 percent, y/y, exceeded average global GDP growth by 2.5 pp in 2001 – 2007, it slowed down to 2.5 percent on average in 2011 – 2019 and lagged behind the global economy growth of 2.8 percent, y/y. Explanations of the structural slowdown in trade focus on several drivers that boosted the earlier globalization of production.<sup>3</sup> First, the sharp decline in tariffs during the 1990s and early 2000s—as transition economies opened up, developing countries joined the WTO, and high-income countries engaged in deeper integration—is thought to have temporarily boosted trade growth. Once the larger trade shares, consistent with lower tariffs, were reached, trade remained at elevated levels but did not continue to grow at the same pace. Second, the global value chains that were created in the 1990s, have matured (Ferrantino, Michael, and Taglioni 2014). Their growth came with a sharp increase in cross-border trade. Trade flows remain at higher levels but are no longer increasing at the same pace. Third is the rise of China (Hong, Lee, Liao, and Seneviratne 2015). China’s share in world merchandise exports (at current prices) reached 12 percent in 2010, compared to 4 percent in 2000. Its rapid gain in market share during the 1990s and 2000s was one of the major factors in the acceleration of global trade.

**Figure 1: Global trade volume growth slowed down after the Global Financial Crisis**



**In the second quarter of 2020, with the global economy falling into a sharp recession amid the COVID-19 pandemic (Figure 2), global trade flows have collapsed due to the fall in demand and to severe disruptions to value chains.** Global tourism – an important source of export receipts for many economies – has also plunged due to the pandemic. Daily counts of the number of commercial flights were down by more than three-quarters relative to last year as of early June. Global trade volumes are expected to fall double-digits in 2020.<sup>6</sup> The recovery is expected to be historically feeble, however, reflecting the exceptional character of the present crisis, as well as the length of time it will take to restore confidence, to replace bankrupted firms, and to establish virus-safe working and entertainment environments.

**Figure 2: Global activity has fallen into a recession**



Source: Haver Analytics; World Bank.

Note: GFC = Global Financial Crisis. PMI readings above 50 indicate expansion in economic activity; readings below 50 indicate contraction. COVID-19 low is April 2020. GFC low calculated over period 2009-19. Last observation is May 2020.

**Crude oil prices have plummeted since the start of the year, dropping 65 percent between January and April.** Brent crude oil prices averaged US\$23/bbl in April, a multi-decade low (Figure 6). Demand for oil has collapsed as a result of shutdowns from the pandemic and the severe fall in global economic activity, with the International Energy Agency projecting that oil demand declined by 18 percent in Q2 2020. The decline in prices was exacerbated by the breakdown of OPEC+ talks in early March, and a new production agreement announced on April 12 initially failed to boost prices. In part reflecting the imbalance between demand and supply, the price of WTI Cushing, the U.S. benchmark, briefly turned negative in April, although technical factors were also at play. However, oil prices have since recovered as production cuts have been implemented, and lockdown measures have started to be lifted in some countries, but they remain more than one-third lower than their January peak.

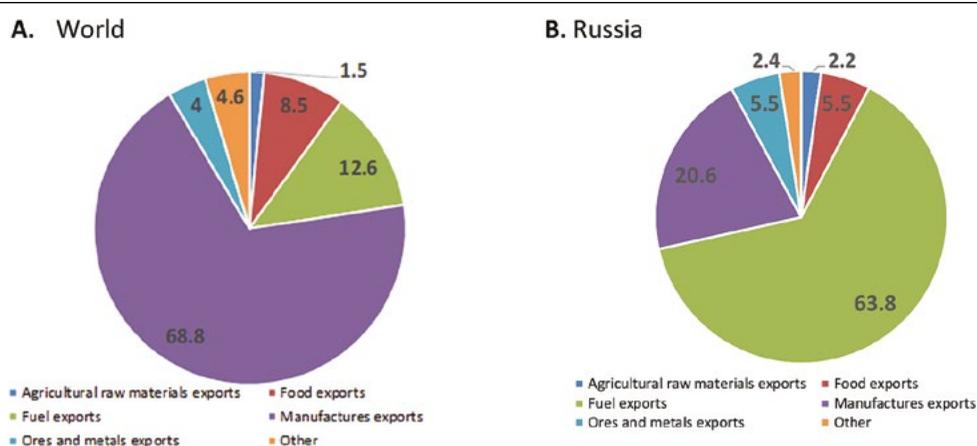
<sup>a</sup> Trade in transition, World Bank 2017.

<sup>b</sup> World Bank, Global Economic Prospects, October 2020.

### 3. RUSSIA'S EXPORT COMPOSITION IS DOMINATED BY ENERGY COMMODITIES

Russia is an important global exporter of goods, with exports mainly concentrated in energy commodities. In 2018, Russia was the 12th largest goods exporter in the world, with about 2.3 percent of world exports. In 2018, energy commodities accounted for about 64 percent of exports of goods. In 2018, Russia was the largest exporter of oil and wheat, the third largest exporter of cork and wood, the seventh largest exporter of iron ore and concentrates, and the 12th largest exporter of natural gas. Share of manufacturing exports in Russia is about three times less than the world's average (Figure 1-11). Russia exports considerably more goods than services, although the value of the latter has gradually been rising since 2015 (Figure 1-12).

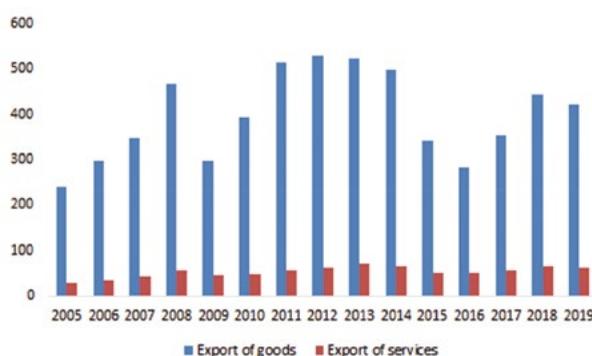
Figure 1-11: Share of manufacturing exports in Russia is about three times less than the world's average



Source: Comtrade.

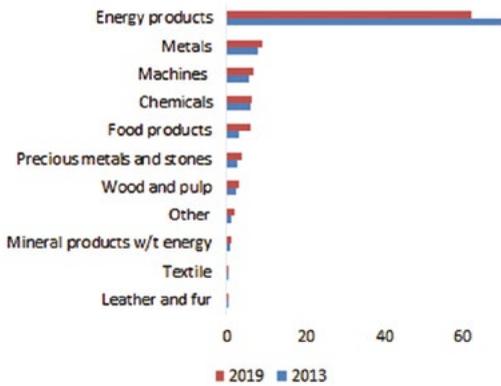
Russia's export diversification has been progressing slowly, as the economy remains structurally highly dependent on hydrocarbon export revenues. The share of mineral fuels in Russian exports has dropped to 62.1 percent in 2019, from 70.6 percent in 2013 (Figure 1-13 and Figure 1-14). Exports of crude oil and oil products make up the largest part of mineral exports, accounting for 46 percent of all goods exports in 2018, while gas accounts for about 11 percent of overall exports. In terms of export diversification, there has been small improvement, as seen from the share of the top 10 goods in total exports and Theil value in 2018 compared to 2013 (Figure 1-15). The renewed increased share of energy products in Russia's export portfolio was driven by higher oil prices. The share of oil and gas export in GDP was about 14 percent in 2019, where overall exports contributed 24 percent of GDP.

Figure 1-12: Goods export value exceeds that of services



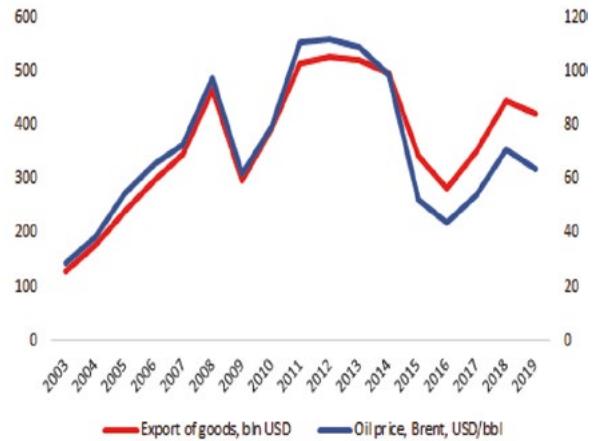
Source: World Bank.

**Figure 1-13: The share of energy products increased in 2018, compared to 2017 (percent)**



Source: Russian Customs Statistics.

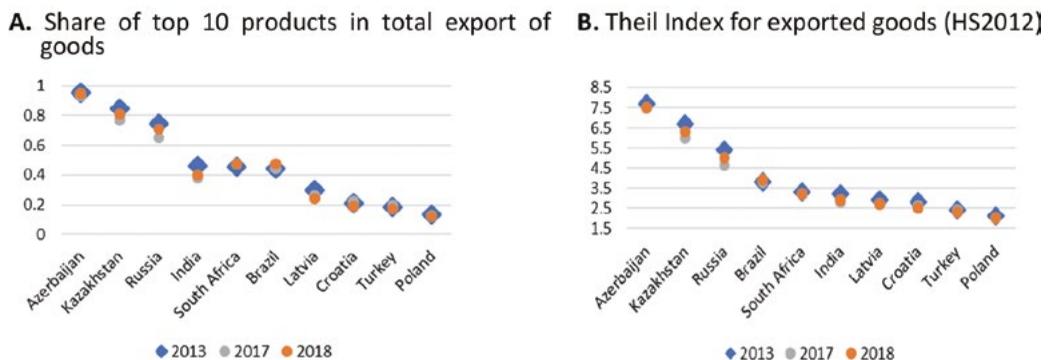
**Figure 1-14: Exports of goods and oil prices**



Source: Haver Analytics, CBR.

**Russia's low levels of export diversification are coupled with lower complexity of the export basket, compared to other countries with similar income levels.** The Economic Complexity Index (ECI) shows that the principal contribution to export growth has been provided by moderate- and high-complexity products, notably cereals and iron and steel products, while processes of structural transformation remain largely absent. Yet, some diversification has been achieved, as 17 new products (HS4 categorization) have been added to Russia's export basket since 2003, accounting for US\$54 of per capita income in 2018. However, the overall export volume of these new products remains limited. Moreover, the largest share of new products is constituted by mineral products (with three additional products accounting for 53.4 percent of new products) and agricultural products (11 products accounting for 41.3 percent). According to the ECI, a product is considered 'new' if it was absent 15 years ago ( $RCA < 0.5$ ) and is present today ( $RCA > 1$  for latest three years). These new products notably include: High temperature coal tar oils etc. (HS2707); precious metal ores (HS2616); corn (HS1005); soybean oil (HS1507); particle board and similar boards (HS4410); and legumes, dried (HS0713).

**Figure 1-15: Progress in export diversification remains stagnant (2013-2018)**

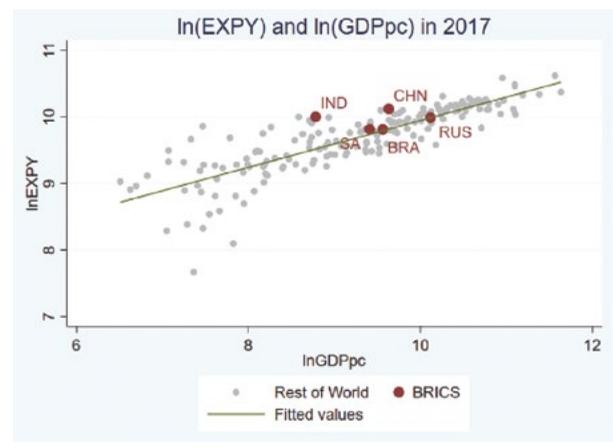


Source: Comtrade, WB staff calculations.

The sophistication of Russia's export basket, as measured by EXPY,<sup>8</sup> slightly increased in 2017, compared to 2013 (Figure 1-16). In essence, this measure indicates the level of income associated with a country's export basket, following the idea that a country that exports products associated with higher productivity levels will be more likely to experience higher growth rates.<sup>9</sup> Among the BRICS, Russia's EXPY levels are comparable to those of South Africa and India. Meanwhile, despite lower oil prices,<sup>10</sup> EXPY levels slightly increased for Russia in 2017, compared to 2013 (Figure 1-17).

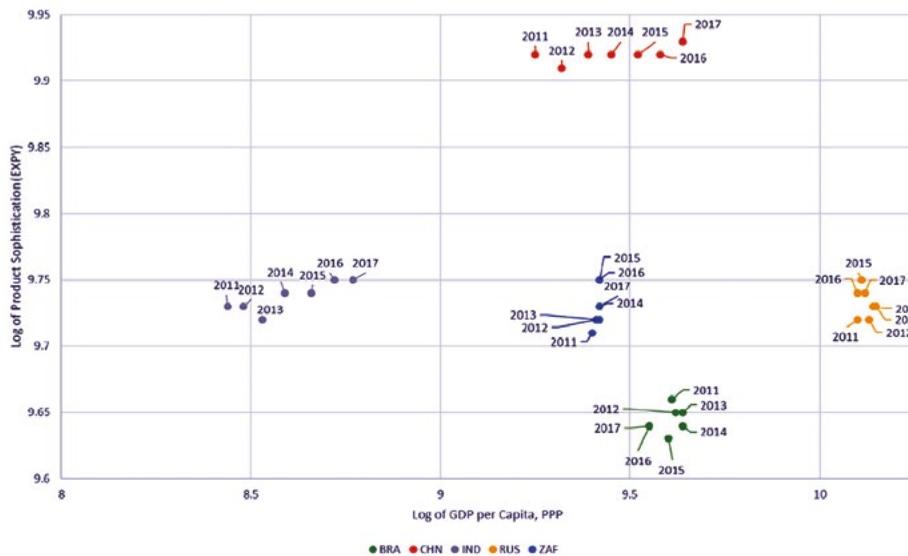
In line with sanctions and countersanction policies following 2014, Russia's dispersion of exports to different partners has diminished and sectoral concentration remains high. The Herfindahl-Hirschman Market Concentration Index (HHI) measures the dispersion of trade value across partners or sectors,

Figure 1-16: Russia's exports are relatively less sophisticated than its levels of GDP per capita implies



Source: WITS, CEPII BACI Database, WB staff calculations.

Figure 1-17: In 2017, EXPY levels slightly increased for Russia compared to 2013



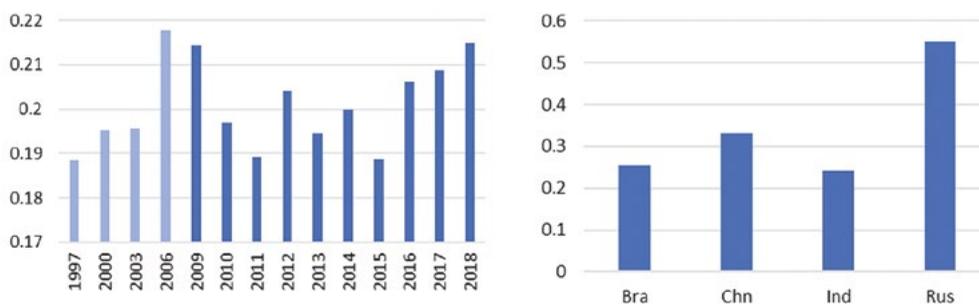
Source: WITS, CEPII BACI Database, WB staff calculations.

<sup>8</sup> EXPY – Index on export sophistication by Hausmann et al. (2006).

<sup>9</sup> Hausmann, R., Hwang, J., and Rodrik, D. (2006). What You Export Matters. *Journal of Economic Growth* 12 (1): 1-25. doi:10.1007/s10887-006-9009-4.

<sup>10</sup> EXPY is inflated by higher oil prices (Weldemicael 2012).

**Figure 1-18: Russia’s regional HHI (left) has risen, i.e. has become less diversified; the sectoral HHI (right) is relatively high, i.e. undiversified**



Source: Comtrade, WB staff calculations.

where an index value closer to 1 implies concentration in few markets/sectors, i.e. lack of diversification. Given the high concentration of energy products in Russia’s export basket, it is unsurprising that the sectoral HHI is very high for Russia, more than double the index values for Brazil and India (Figure 1-18).

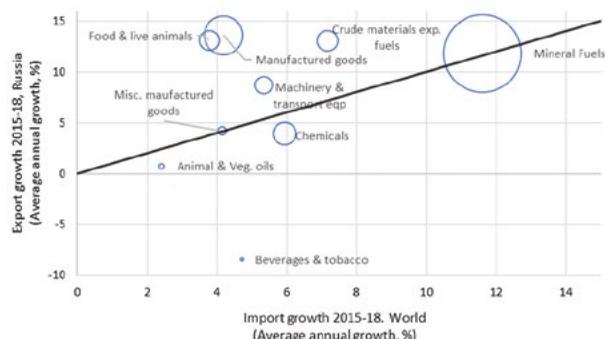
**In 2015–2018, Russia gained competitiveness in many merchandise export industries. In this period, in volume terms, food products, machines and equipment, and textiles recorded the highest growth (Figure 1-19).** Figure 1-20 compares the world import growth in different merchandise sectors (horizontal axis) and the export growth rate of Russia in these sectors (vertical axis) for 2015-2018. The size of the circles represents the importance of each sector in Russia’s export basket. Sectors above (below) the 45-degree line represent a gain (loss) in world market share. Russia has been gaining market share in manufactured goods, crude materials, food and live animals, and machinery and transport equipment (four out of nine industries). Russia has been maintaining its world market share in mineral fuel exports. However, overall goods exports value dropped by about 15 percent in dollar terms largely due to lower energy prices. The share of Russia’s export in the world export dropped from 2.7 percent in 2013 to 2.3 percent in 2018. Smaller oil revenues are forcing Russia to increase production in internationally competitive sectors. Yet the shift to increased competitiveness in the international market is mostly ahead for Russia, given overall slow progress in export diversification.

**Figure 1-19: Food products, machines and equipment, and textiles recorded the highest growth in 2014 - 2018**



Source: Russian Customs Statistics.

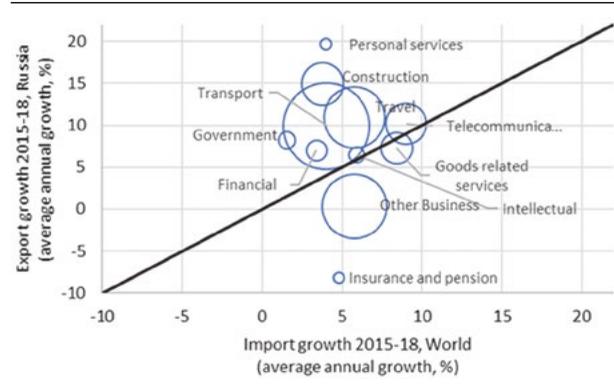
**Figure 1-20: Russia has been gaining the market share in manufactured goods, crude materials, food and live animals, and machinery and transport equipment**



Source: WB staff calculation using COMTRADE data.

**Russia has been gaining the world market share in many services export sectors (Figure 1-21).** During 2015-18, the growth rate of Russia’s export of transport services and travel — two important services export sectors in the Russian economy — exceeded the world import growth rate of those sectors. Russia’s export of several smaller services sectors also gained world market share over this period. Those sectors included construction, telecommunications, financial services, government services, charges for intellectual property, and personal services. Russia’s export of other business services and goods-related services, as well as insurance and pension services, lost world market share during 2015 to 2018.

**Figure 1-21: Russia has been gaining market share in several services export sectors**



Source: WB staff calculation using UNCTAD data.

## 4. RUSSIA'S REVEALED COMPARATIVE ADVANTAGE

Russia has a revealed comparative advantage (RCA) in several merchandise industries. We analyzed the merchandise sectors in which Russia has a comparative advantage using Balassa's revealed comparative advantage index.<sup>11</sup> The index gives a value greater than one for industries that have a comparative advantage. Table 1-1 suggests that Russia has a RCA in several merchandise sectors, predominantly natural resource-based industries.

**Table 1-1: Russia's RCA in selected merchandise sectors, 2018**

Sector	RCA in 2018
Wheat	9.7
Coal	7.3
Oil	5.7
Gas	4.8
Petroleum and coke products	4.7
Forestry	3.8
Iron and Steel	2.6
Non-ferrous metals	1.8
Other grains	1.7
Other mining	1.7
Lumber	1.5
Electricity	1.3
Vegetable oils	1.1

Source: WB staff calculations using COMTRADE data.

Russia has a RCA in construction and transport services. Russia has RCA indices of greater than one for both construction and transport services (Table 1-2). Russia's comparative advantage in the construction sector is visible through the construction of nuclear power plants in several emerging economies. In recent years, Russian companies have

**Table 1-2: Russia's comparative advantage index for services sectors, 2018**

Sector	RCA in 2018
Construction	2.57
Transport	1.08
Goods-related services	0.77
Government goods and services	0.68
Personal, cultural, and recreational services	0.53
Other business services	0.50
Telecommunications, computer, and information services	0.43
Travel	0.40
Insurance and pension services	0.16
Financial services	0.15
Charges for the use of intellectual property n.i.e.	0.11

Source: Authors' calculations using UNCTAD data.

<sup>11</sup> Technically, the revealed comparative advantage (RCA) index for country *i* in sector *j* is calculated as follows:  $RCA_{i,j} = \frac{x_{i,j}/X_i}{x_{w,j}/X_w}$  where  $x_{i,j}$  is exports from *i* in sector *j*,  $X_i$  is total exports of *i*,  $x_{w,j}$  is exports from the world in sector *j*, and  $X_w$  is total world exports.

constructed six nuclear power reactors in India, Iran, and China, and have several more projects under construction in many emerging markets.<sup>12</sup> Russia's comparative advantage in transport services is underpinned by its extensive network of roads and railways, and an air transportation system that connects with neighboring countries. Russia's comparative advantage in transport services also includes auxiliary services to the transport of oil and gas through pipelines.

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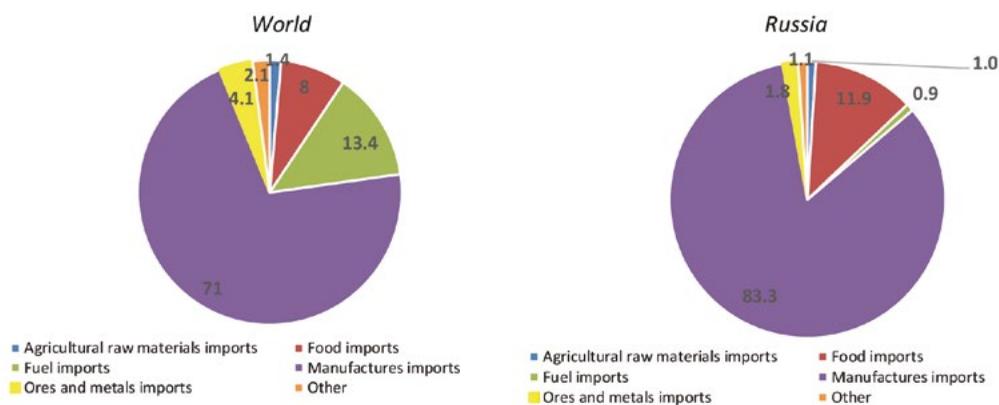
<sup>12</sup> <https://www.themoscowtimes.com/2019/05/09/russias-nuclear-power-exports-are-booming-a65533>

## 5. IMPORT COMPOSITION AND TRENDS

**Manufacturing goods dominate Russia's imports.** The share of manufacturing goods exceeds the world's average and reaches 83 percent (Figure 1-22). Russia's imports are more skewed to final goods (predominantly capital) than the world's average: 74 percent compared to 63.

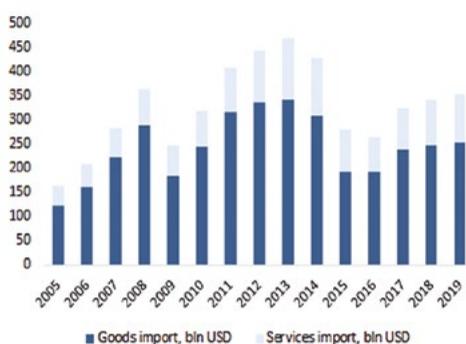
**Responding to the REER depreciation and drop in real GDP growth, imports shrank sharply in 2014.** With the economy having returned to positive growth trajectory and some ruble appreciation, imports picked up, yet its nominal value in 2018 remained about 24 percent below the level of 2013, and its volume was about 15 percent lower, which is consistent with the large terms of trade loss and the required change in the structure of the economy. The value of goods and services imports to Russia rose from US\$266 billion in 2016 to US\$343 billion in 2018 (Figure 1-23). Imports of goods make up 72.5 percent of this, while imports of services were 27.5 percent in 2018. Imports of goods come predominantly from China, accounting for 22 percent of all goods imports in 2018, followed by Germany, the USA, and Belarus (Figure 1-24 and 1-25). Imports of services are predominantly made up of travel (mostly personal) and other business services, which largely includes operational leasing services, architectural, engineering, and other technical services (Figure 1-26).

**Figure 1-22: Share of manufacturing in Russia imports is higher than the world's average**



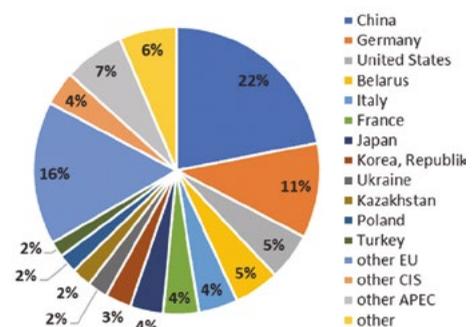
Source: Comtrade.

**Figure 1-23: Goods and services import value increased since 2016**



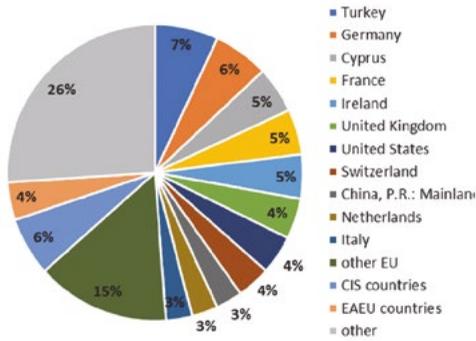
Source: World Bank.

**Figure 1-24: Russia mostly imports goods from the EU and China (2018)**



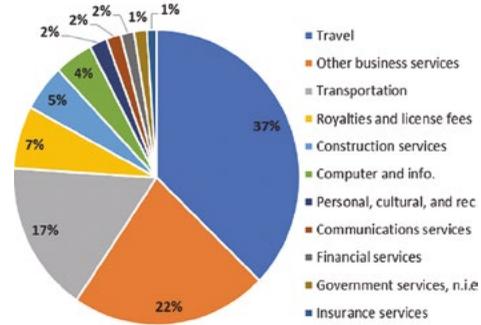
Source: ITC.

**Figure 1-25: Russia imports services predominantly from the EU**



Source: CBR.

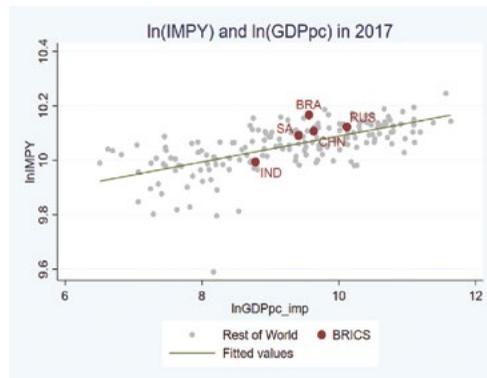
**Figure 1-26: Travel and business services make up over half of imports**



Source: Comtrade.

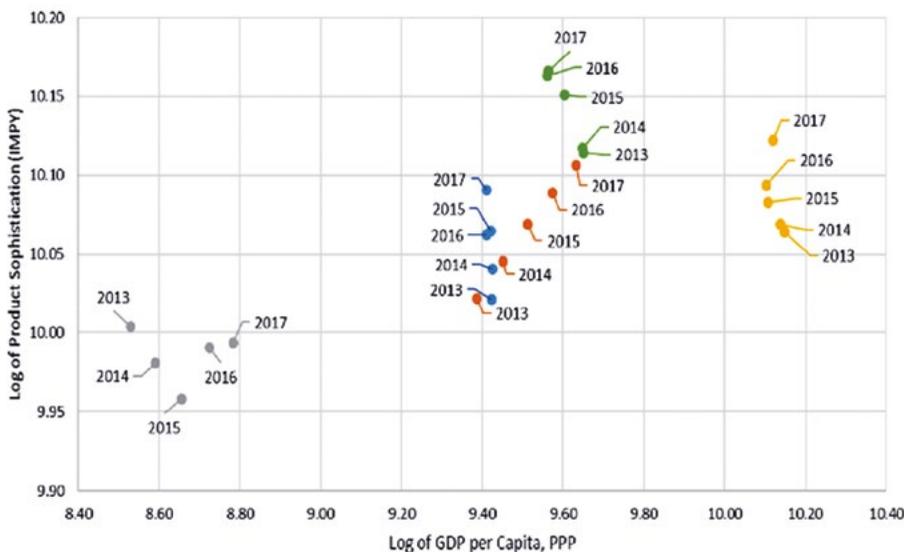
**Russia's import sophistication has risen in 2018 compared to 2013 (Figure 1-27).** Following the EXPY methodology, an index for import sophistication (IMPY) could be computed. If a country imports goods that are exported by richer countries, this index will be higher. Russia's import sophistication is high, exceeding levels of export sophistication, which is common for primary resource exporters and developing countries (Figure 1-28). The rising trend of import sophistication is supported by the fact that these imports mostly do not consist of intermediate products.

**Figure 1-27: Russia's imports are relatively more sophisticated than its levels of GDP per capita imply**



Source: WITS, CEPII BACI Database, WB staff calculations.

**Figure 1-28: In 2017, IMPY levels increased for Russia, compared to 2013**



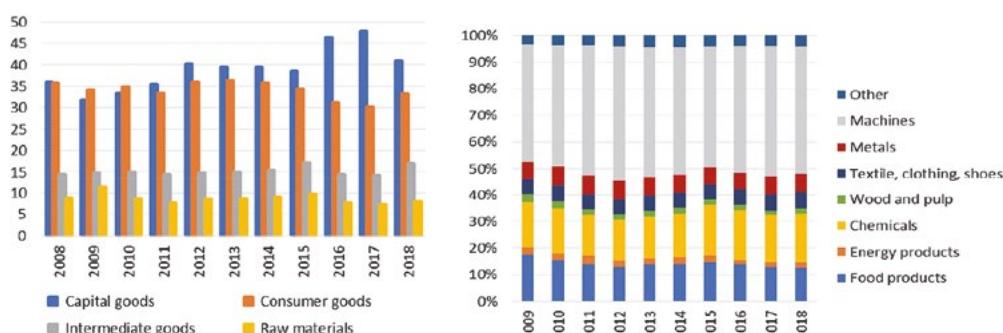
Source: WITS, CEPII BACI Database, WB staff calculations.

## 6. IMPORT SUBSTITUTION, EXPORT PROMOTION: THE ROLE OF FOREIGN INPUTS

Russia has introduced measures on import substitution, following the imposition of sanctions, and export promotion, to support economic growth and diversification. In general, import substitution strategies are associated with obstacles for competitiveness, aiming to decrease dependence on foreign imports while increasing innovation development and domestic production, without diminishing the quality of the goods produced. The difficulty associated with import substitution lies in the challenging balance of positive and negative potential outcomes; while import substitution seeks to achieve innovation development, and can reduce unemployment, it can also lead to diminished quality of products based on an initially low level of technological development, which can be reinforced by reduced economic efficiency in light of weaker external competition. Russia needs to be cautious of import substitution policies in the longer run and explore new ways to diversify its economy and exports. Therefore, it is important that Russia has also introduced goals of export promotion in its National Goals.

In response to ongoing U.S. and EU economic sanctions since 2014, Russia has adopted import substitution and technology policies to reduce its dependency on Western imports in an effort to set up its own alternative production systems and high-end technology research and development efforts (Figure 1-29). Following the imposition of sanctions, Russia restricted imports of certain agricultural products, and introduced measures favoring domestic manufacturers in pharmaceutical, transport, telecom, and software industries. Additionally, regulations have been passed limiting public procurement, requiring government agencies to purchase certain products from domestic producers under specific conditions (in this context, a domestic producer is specifically defined as a firm with at least 50 percent national ownership). At the end of April 2020, the government released a decree on the acquisition of foreign products for state purchases; a rule was established whereby acquisitions from foreign producers are prohibited where at least two domestic suppliers are present, with complete bans for products in the defense sector. The ban principally applies to products of mechanical engineering, shipbuilding, the automotive industry, machine tools, and furniture. The decree also introduces preferential terms for EAEU member states.

Figure 1-29: Share of consumer goods in imports dropped compared to 2013 (percent).



Source: WITS.

Source: Rosstat.

The Russian Government developed import substitution programs for 22 industries, covering approximately 2,000 products in the industries for pharmaceuticals, medical, radio-electronics, transport, construction, and metallurgy, as documented by the State Government Information System. According to the state industry information system, it was planned that in the timber industry the share of imports should decrease to 49 percent, in the oil and gas engineering industry to 55 percent, in the automotive industry up to 7 percent, in machine tools up to 75 percent, and in pharmaceuticals up to 33 percent. The import substitution and localization policy has been supported by the 'Made in Russia' strategy, to which additional product groups were added in February 2018.<sup>13</sup> Foreign companies

<sup>13</sup> Reg № 719-FZ

that want to supply the public sector or companies with state participation in Russia are faced with the fact that only «Made in Russia» products are permitted for the procurement procedures. The government spent approximately RUB600 billion on import substitution in 2018, of which about 20 percent came from the federal budget. The economic recovery plan, as announced in June 2020, contains a set of measures to support import substitution, which is currently estimated by the government at RUB1 trillion for the period 2020-2022. While backward GVC participation in manufacturing remained constant (at a low level), the drop was especially large in electrical equipment, motor vehicles, and other transport equipment which may be a result of these programs.

**Since 2015-2016, Russia has started more actively pursuing non-energy non-commodity export promotion policies to encourage diversification.** In 2015, the Russian Export Center was established to foster export development. In 2016, several federal programs for export promotion were approved in manufacturing, agriculture, and education. In 2018, the vector for non-energy non-commodity export promotion was anchored among the National Development Goals. Since 2018, the National Project on International Cooperation and Export with five federal programs<sup>14</sup> under its name is the main tool under which export promotion policies are concentrated.<sup>15</sup> This National Project aims to increase export of non-commodity goods from US\$135.1 billion in 2018 to US\$250 billion in 2024. Export of services is expected to grow from US\$57.8 billion in 2018 to US\$100 billion in 2024. Russia aims to improve its global competitiveness in manufacturing, agriculture, and services with export in these sectors reaching at least 20 percent of GDP. Additionally, Russia seeks to increase trade flows to specific export markets through the creation of special industrial zones and export hubs. Beyond CIS and EAEU members, these markets include South Asia (India, Vietnam, Singapore), the Middle East (Turkey, Iran, UAE, Saudi Arabia), and Africa (Egypt industrial free zone on Suez, Zimbabwe). In addition, Russia aims to improve logistics of cargo, and reduce administrative and regulatory barriers in international trade. However, given the negative impact of the COVID-19 pandemic on the global economy and Russia, the country has had to adjust and postpone its National Development Goals. Notably, the goal for non-energy non-commodity goods exports growth has been modified and now aims for 70 percent growth by 2030 from the base of 2020. The new goal requires changes in the National Projects which are planned to be finalized by end-October.<sup>16</sup>

**To implement these goals, the government has introduced a plan of supportive measures.** These measures will be backed by public expenditures directed both at private and public goods, yet more skewed to private goods. The total amount of public expenditure in the framework of the National Project is expected to reach about RUB1 trillion (US\$12.3 billion) in 2019 - 2024. For instance, the “single export window” information system is being introduced, a digital platform managed via the Russian Export Center. This is in line with goals to reduce administrative procedures and barriers in international trade, including the abolition of excessive requirements for export licensing and foreign exchange control. The Center, together with VEB and other development institutions, is also developing a joint program to finance projects for the creation (modernization) of export-oriented industries. The program providing interest-rate subsidies for non-energy non-commodity domestic exporters which take obligations on global competitiveness improvement is in place. In addition, aiming to promote “Export in Services,” the government recently approved regulations for the distribution of subsidies to promote the export of cinema and IT products.

**The increased focus of government policies on export promotion offers opportunities for growth and diversification.** There is a wide range of research demonstrating that export promotion agencies and export support programs not only provide a positive contribution to diversifying exports but also a positive impact on GDP. The World Bank, the International Trade Centre (ITC), and a wide number of researchers have provided significant empirical support to the case for export promotion. In 2010, Lederman, Olarreaga, and Payton, using a large World Bank database, concluded that export promotion agencies work and have a sizable impact on exports.<sup>17</sup> Using the same database, a recent cross-country study published by the ITC, with updated information for 14 leading European trade and investment promotion agencies, concludes that each dollar invested in trade promotion could potentially generate US\$87

<sup>14</sup> These programs are Industrial exports, Agricultural production, International trade logistics, Export of services, Systemic measures for international cooperation and exports development.

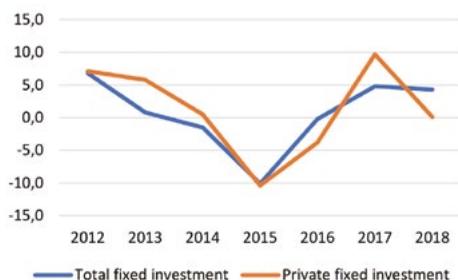
<sup>15</sup> Meanwhile, some other National Projects include elements for export promotion: for instance, the projects on SMEs and Education.

<sup>16</sup> National Projects are a six-year, US\$400 billion fiscal stimulus that the government had embarked on, pre-COVID.

<sup>17</sup> Lederman, Daniel, Marcelo Olarreaga, and Lucy Payton (2010). Export promotion agencies: Do they work? *Journal of Development Economics* 91 (2): 257-265.

of additional exports and a US\$384 increase in GDP.<sup>18</sup> Firm-level data studies also suggest that export promotion agencies and export support programs not only have potential to expand GDP and exports, but also to facilitate the diversification of exports both in terms of products and markets, particularly for SMEs.<sup>19</sup>

**Figure 1-30: Gross fixed capital investment, y-o-y, percentage change**



Source: Rosstat.

advantage. In Russia, low availability and quality of inputs mean that development of national production frequently requires import of technology and machinery, and suffers from a limited available workforce and investment levels (Figure 1-30).

**The strategy for import substitution in the past five years has shown mixed results in terms of achieving higher domestic production levels and decreasing import dependence.** Import substitution was initially stimulated by the ruble depreciation, while being supported by government spending. As the economy returned to a positive growth trajectory, imports started increasing, notably for foreign machinery and equipment, while import sources have shifted. In agriculture, aims were largely achieved and a shift to export promotion projects is taking place. However, national industry is currently heavily dependent on imported machinery and equipment, and the market shares of Russian companies in quality product categories are quite small. Restrictions on imports are intended to reduce dependence on foreign countries and diversify the domestic production structure, but such measures are counterintuitive to Russia's WTO membership (Box 1-2). Usually these measures target, for instance, the location of end-product assembly rather than the production of added value along the entire production chain.

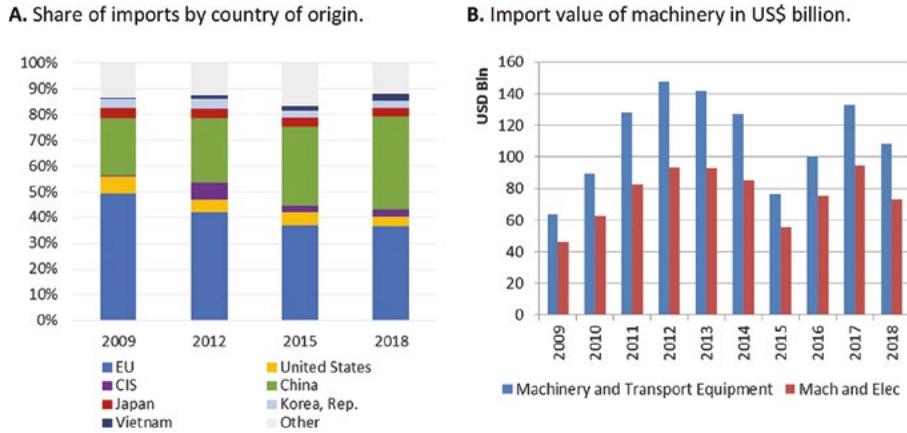
**Over the past years, the strategy for import substitution has shifted and industry-specific localization requirements have been tightened.** For instance, to recognize a motor vehicle as «Made in Russia», new minimum processing steps for key components, such as the engine, electronics, and transmission (a total of 11 operations), were defined, coming into effect gradually since 2018. To receive subsidies, foreign manufacturers must increase the level of localization to 60 percent and install engines from Russia in 30 percent of their vehicles. These measures are included in the new strategy for the development of the automotive industry until 2025, which was published in spring 2018. In the case of certain machinery and equipment, 42 components must in future originate locally and less than half of all components may be imported. The Federal Industrial Development Fund (FRP) grants low-interest loans to Russian manufacturers who produce certain products to replace imports, with a focus on the production of components. The overall import share of machinery and electronics sharply decreased between 2014-2015, at least in part in line with the ruble depreciation, but, as the exchange rate stabilized, the import value of machinery increased again (Figure 1-31).

**Given Russia's RCA in grain and emphasis on agriculture in import substitution policy, the government plans to invest more into export promotion in the agricultural sector (Figure 1-32).** The 2014 decree involved bans on imports of agricultural products, which included in particular meat, fish, dairy products, vegetables, and fruits. The main targets of the import substitution program, to reach a proportion of 80-99 percent of the national market

<sup>18</sup> Olarreaga, Marcelo, Sperlich, Stefan, and Trachsel, Virginie (2016). Investing in Trade Promotion Generates Revenue, International Trade Centre, Geneva.

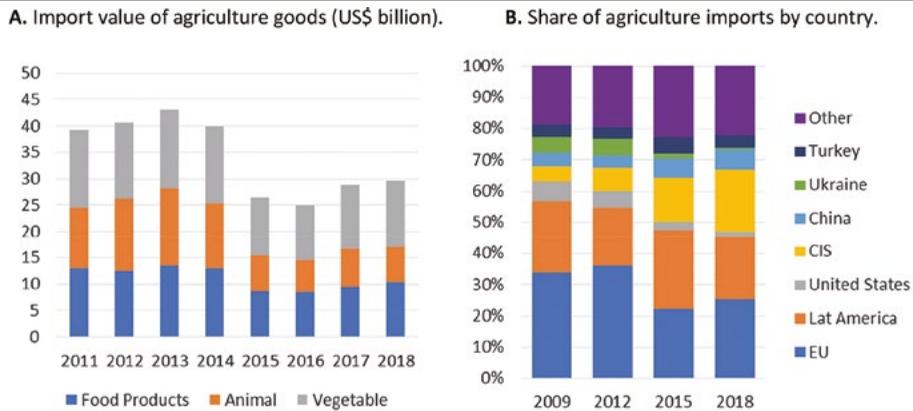
<sup>19</sup> Volpe, Christian and Carballo, Jeronimo (2008). Is export promotion effective in developing countries? Firm-level evidence on the intensive and the extensive margins of exports. *Journal of International Economics* 76: 89-106.

**Figure 1-31: Overall import share of machinery and electronics has increased, but source pattern has shifted**



Source: WITS, Russian Customs, WB staff calculations.

**Figure 1-32: The import value of agriculture and food products has decreased**



Source: WITS, Russian Customs.

with domestic agricultural goods, have been attained in most categories. Thus, a new doctrine was introduced in March 2019, outlining aims to move from import substitution to export orientation for agro-industrial and fishery complexes.

**While several agricultural products saw positive trends in terms of reaching a larger share of the domestic market, this was accompanied by rising food prices, resulting in welfare losses.** Having reached import substitution goals for some agricultural products, notably grain and meat, the government allocated RUB307.9 billion to agriculture development in 2019 (RUB197.7 billion in 2013), seeking more active export promotion in agriculture. Between 2013 and 2018, export values of agricultural goods increased from US\$16.8 billion to US\$25.8 billion. However, in the same period, retail prices for food products rose considerably, with the largest increase in prices of butter (+79 percent) and frozen fish (+68 percent), and actual production increased only moderately. Production rates for many agricultural products have not seen large increases; yet, production of pork meat and dairy products increased (Table 1-3). In fact, looking at the results of import substitution in the agricultural sector, a study by the Higher School of Economics found that consumer losses amounted to RUB288 billion (or RUB2000 for each Russian citizen per year), which were transferred to Russian producers and non-sanctioned importers, notably Belarus.<sup>20</sup>

<sup>20</sup> Kuznetsova, P, Turdyeva, N, Volchkova, N, (2018) Сколько стоят контрсанкции: анализ благосостояния, Journal of the New Economic Association.

**Table 1-3: Production of main types of import-substituting food products**

Product Group	2017 (thousand tons)	2018 (thousand tons)	2017-18 % change	2019H1 (thousand tons)
Meat	9765	10125	103.68	5728
Fish	4427	4460	100.73	2522
Vegetables and Fruits	114.9	110.6	96.32	69.4
Dairy	10477	10478	100.01	6057

Source: Rosstat, Haver, WB staff calculations.

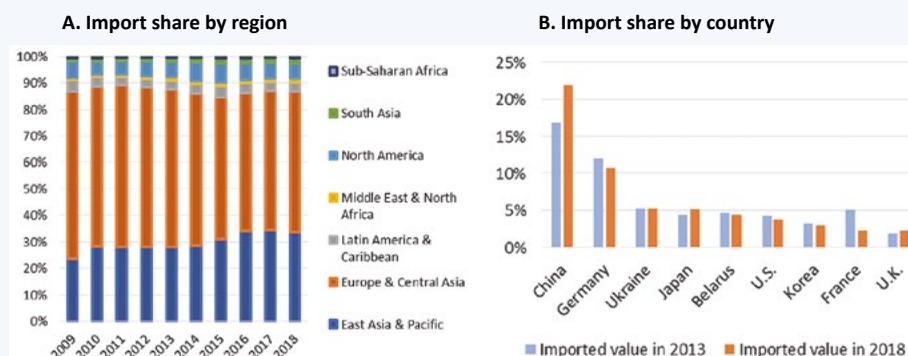
**This highlights the continuing dependence on foreign inputs and the limitations provided by shifting to other import sources.** In the agricultural sector, Belarus gains up to 30 percent of import shares after 2014, notably for dairy products. Moreover, the price hikes for consumers are at least in part explained by manufacturers’ persistent dependence on foreign equipment and other inputs. At the same time, the focus on increasing grain production has allowed for export promotion, in line with specific bilateral trade agreements. Investing in development of machinery and equipment is thus a priority to achieve import substitution, along with export promotion, taking into account Russia’s RCA.

**Box 1-2 Strategies need to support competitiveness**

**In order to promote exports in a diversified and sustainable manner, strategies need to support competitiveness and quality of domestically produced goods.** Exporters and manufacturers rely on foreign inputs, and import substitution goals can stand in the way of achieving higher domestic production results. Export promotion policies in the non-commodity, non-energy sectors can offer more sustainable support to domestic producers in expanding export ranges. To align various policies affecting foreign trade, the Russian government could adopt a foreign trade strategy (which the government does not have currently), which emphasises firm competitiveness.

**Since Russia joined the WTO in 2012, import duties have gradually been lowered.** Russia’s average trade-weighted most-favored-nation customs duty in 2018 was about 5 percent of the value of goods but varied starkly for different product categories and trading partners. Since Russia’s official entry to the WTO, the weighted average tariff rate fell from 8.1 percent in 2012 to 4.6 percent in 2018. In 2019, Russia fulfilled the overall obligations; in September, import duties on cars and airplanes were reduced from 17 percent to 15 percent and from 14 percent to 12.5 percent, respectively, in line with the targets. The remaining adjustment, scheduled for 2020, consists of introducing a flat tariff of 25 percent on pork. Accordingly, the highest average tariffs in place remain on food and animal products, while the lowest tariffs exist in minerals and machinery. In mid-2018, import customs duties for certain goods (including transport, road construction machinery, oil and gas equipment, metal processing equipment) from the USA were increased to levels between 25 and 40 percent.<sup>a</sup>

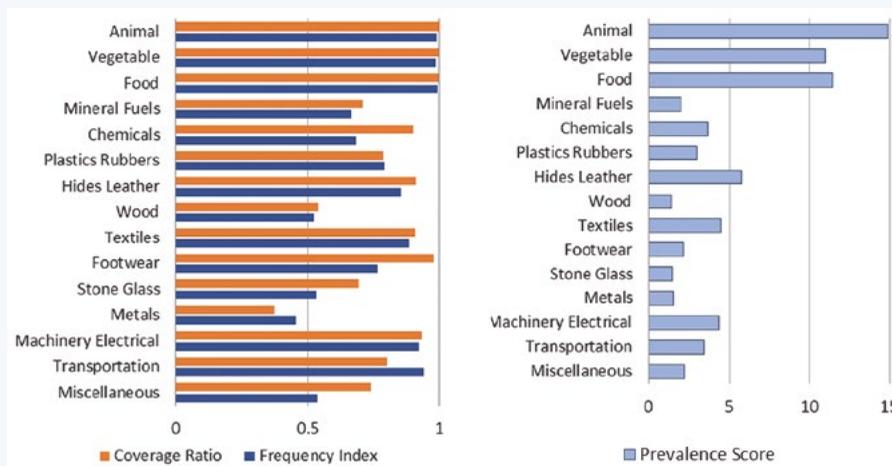
**Figure 1: Change in import share by region shifts east, in line with restrictions**



Source: WITS, Russian Customs.

**Yet, barriers to import remain relatively high, with additional friction created through sanction policies.** In line with the first WTO Trade Policy Review Mechanism on Russia in 2016, concerns were brought forward over sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT) measures, local content requirements, and customs control and import restrictions, as well as the transparency of certain policies. SPS trade restrictions notably include: bans on import of poultry and meat from the USA; pork and meat products from the EU (due to alleged African swine fever outbreaks, although this was found to be inconsistent with WTO obligations, making Russia subject to possible retaliatory measures); cheese; detergents; and confectionery from Ukraine. Overall, Russia's NTM coverage ratio in all sectors lies at 90.5 percent, with rates close to 100 percent in food, vegetable, and animal sectors, as well as for machinery and equipment; metals and wood see the lowest NTM coverage ratios (see figure B3-2); SPS import measures account for a 19.8 percent coverage ratio in all sectors, and TBT measures for 84.9 percent (WITS). Between 2014 and 2019, Russia saw the introduction of 380 protectionist measures (Global Trade Alert), targeting different markets and supporting a shift to partners in the CIS and in Asia (Figure B3-1). Several WTO disputes have ensued from sanctions and import substitution policies, with Russia as complainant and as respondent, including against the USA in regard to tariffs imposed on steel and aluminum products, and by the EU against Russian and EAEU tariff treatment on agricultural and meat products.

**Figure 2: NTMs usage of imports remains high, notably in the agri-food and machinery sectors**



Source: UNCTAD TRAINS, WITS.

<sup>a</sup> Government Order No. 788.

## 7. TRADE POTENTIAL: GRAVITY MODEL ANALYSIS

**We used a gravity model of trade to assess Russia’s trade potential with our selected countries and country groupings.** The gravity model sheds some light on how ‘natural’ Russia’s export linkages are and if there is potential to increase exports after considering other structural factors such as geographic proximity or economic size. After all, Russia is a large economy that appears to be already trading at higher levels than other large economies. Therefore, its lower level of openness relative to other countries at a similar level of economic development may be the norm rather than something that merits a raised eyebrow. To answer this question, we benchmark Russia’s bilateral exports by comparing observed bilateral trade outcomes with the predicted outcomes using a gravity model of trade. We can then assess whether bilateral exports are in line with what is expected given a country’s economic mass, bilateral distance, and other determinants included in the model (Box 1-3).

### Box 1-3 Benchmarking Russian bilateral export relationships using a gravity model of trade

The gravity model has been extensively used in international trade due to its intuitive empirical and theoretical appeal. Anderson and van Wincoop (2003), Feenstra (2004), and Baldwin and Taglioni (2006), among others, present exhaustive literature reviews on the gravity equation as applied to international trade. Our specification of the gravity model follows the micro-founded model of Helpman, Melitz, and Rubinstein (2008).

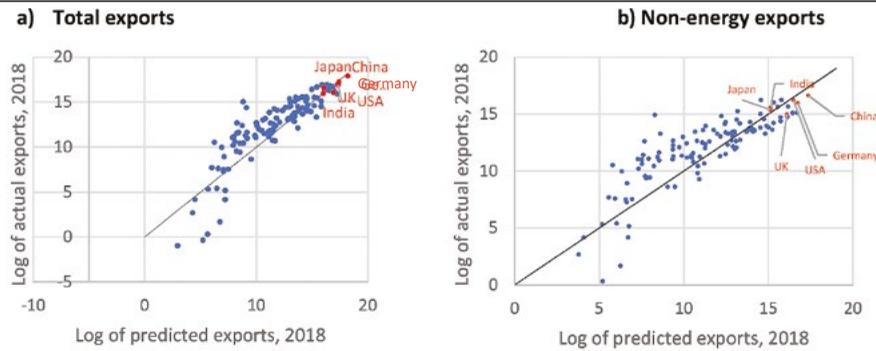
Specifically, we regress the log of bilateral merchandise exports for each year from 2005 to 2018 among 203 countries on the following bilateral characteristics: distance (great circle distance between the most important cities in terms of population), contiguity, common official language, colony, common colonial power, log of GDP, as well as time fixed effects, and time-invariant exporter and importer fixed effects.

The model controls for zero trade flows with the use of the Heckman sample selection correction method. When observations with non-existent bilateral trade are dropped, our dependent variable is not really measuring bilateral trade, but one contingent on an existing relationship. Therefore, an important variable left out of the model is the probability of being included in the sample; i.e., having a non-zero trade flow. To the extent that the probability of selection is correlated with GDP or distance, this has the potential to bias estimates.

There are several other ways to control for zero trade flows in the gravity framework, including Poisson Pseudo-Maximum-Likelihood (Poisson PML) estimator which outperforms alternatives such as linear-in-logs OLS (on the positives) and log of one plus exports (Santos Silva and Tenreyro 2011). However, Martin and Pham (2015) find that the Heckman method outperforms the Poisson PML.

**The results from the gravity model show that Russia under-trades with many of the largest economies in the world.** Figure 1-33 plots the results of the gravity model, with Russia’s predicted exports on the x-axis and its actual exports on the y-axis for all of Russia’s export relationships. The black line is the 45-degree line, the points below which show the countries that Russia under-trades with. The results show that Russia under-trades with many of the largest economies in the world, including the USA and China.

Figure 1-33: Russia's export potential in 2018 for total exports and non-energy exports



Source: Authors' estimates using COMTRADE, WDI, and CEPII data.

**Russia has significant potential to boost merchandise exports to China.** The gravity model showed that Russia significantly under-trades with China. The gap between actual and predicted trade flows is nearly 35 percent of Russia's current trade with China (Table 1-4).

**Russia also has potential to increase exports to the EU and OECD countries and the countries that have signed free trade agreements with the Eurasian Economic Union.** Russia exported more than US\$181 billion worth of goods to the EU in 2018 and more than US\$260 billion worth of goods to the OECD countries. Our modelling suggests that Russia has potential to increase exports to those economies further. It also has potential to increase exports by around US\$5 billion to the countries that have FTAs with the EAEU (based on 2017 data), which includes China. This potential is largely attributable to Russia's significant trade potential with China.

**The results from the gravity model show that Russia has little untapped potential in merchandise trade with India.** Russia's current level of exports to India is relatively small and there is little potential to improve that level further.

**Russia's current level of exports to the CIS countries is significantly higher than that predicted by structural factors.** The country's current level of exports to CIS countries is around US\$45 billion, which is more than double the level predicted by the gravity model. Belarus is the top export partner among the CIS countries, followed by Kazakhstan.

Table 1-4: Russia's export potential: trade with selected economies, 2018

Importer	Actual Trade (US\$ billions)	Potential Trade (US\$ billions)	Gap (% of actual exports)
China	58.9	79.6	35.2
India	8.5	8.8	4.3
OECD	260.8	273.5	4.9
EU	181.3	203.0	11.9
CIS	44.4	16.8	-62.1
EAEUFTA (2017 data)	49.8	54.8	10.1
ASEAN (2017 data)	11.1	6.3	-43.2
USA	21.6	33.4	54.7
Japan	15.6	9.5	-39.3

Source: Authors' estimates using COMTRADE, WDI, and CEPII data.

**Russia has significant potential to increase exports of non-oil products to many of the largest economies in the world.** To explore trade potential in non-oil and gas products, we excluded oil and gas from the bilateral trade relationships and re estimated the gravity model. In terms of non-oil exports, the gravity model results suggest that Russia has significant potential to increase exports to China, the OECD countries, and the EU (Table 1-4). It also has potential to increase trade to EAEU FTA countries, but that largely reflects the trade potential between Russia and China.

**Russia’s potential amount of non-oil and gas exports to China is more than double the actual trade flows.** This suggests that Russia has a large untapped export potential in China’s economy, not only in oil and gas products but also in other industries.

**Russia has large potential to increase non-oil product exports to the EU and OECD countries.** Russia’s actual non oil exports to the EU are only around a quarter of its total merchandise exports to that region. However, our modelling suggests that Russia has potential to more than double this. Russia also has potential to increase its current exports to the OECD by around 70 percent of its actual trade and to the USA by around 30 percent.

**Russia already exports more non-oil and gas products to CIS countries and India than predicted based on structural characteristics between the two countries.** Russia’s current level of merchandise exports to the CIS countries exceeds the level predicted by the gravity model by around US\$20 billion. This is around three times the level of its current non-oil exports to the region. Russia’s exports to India are also higher than what is predicted based on structural factors, but the gap between actual and predicted trade is small (Table 1-5).

**It should be noted that gravity model results discussed above are benchmarks based on structural factors such as distance between countries, contiguity, economic development, and having a common official language.** Structural factors are not the only determinants of the trade potential between countries. Countries could improve their trade potential in various other ways including negotiating trade agreements and pursuing active business and political relationships.

**Table 1-5: Russia’s export potential: non-oil and gas trade, 2018**

Importer	Actual Trade (US\$ billions)	Potential Trade (US\$ billions)	Gap (% of actual exports)
China	16.8	34.8	107.1
India	5.9	3.7	-36.1
OECD	79.7	136.1	70.8
EU	46.7	103.5	121.4
CIS	29.6	9.9	-66.4
EAEUFTA (2017 data)	16.6	24.9	50.2
ASEAN (2017 data)	4.1	3.1	-23.7
USA	10.9	14.3	31.2
Japan	4.8	3.6	-25.2

Source: Authors’ estimates using COMTRADE, WDI, and CEPII data.

## 8. EXAMINING RUSSIA'S TRADE COMPLEMENTARITY INDEX

**Russia's potential to improve trade also depends on the degree of trade complementarity between Russia and its trading partners.** The trade complementarity index (TCI) gauges the potential for trade between two economies by measuring how well the export structure of one economy matches the import structure of another economy. We calculated Russia's TCI with each of our selected economies separately for goods and services. The index is based on exports and imports at the disaggregated sectoral level, which are then aggregated into two indices (for goods and services) for each country pair. The index number varies between 0 and 100. The higher the index number, the higher the potential for that country to export to the other market.<sup>21</sup>

**Russia has a high and improving merchandise trade complementarity with India.** Russia's merchandise trade complementarity index with India is higher than that of any comparator economy considered in this study. It has increased by 16 percent since 2015. India's strong demand for oil and gas products, which matches Russia's export strength in those products, explains much of this strong and growing trade complementarity. However, structural factors, including the distance between the two countries, may have resulted in Russia having lower actual and potential trade with India compared to other comparator economies.

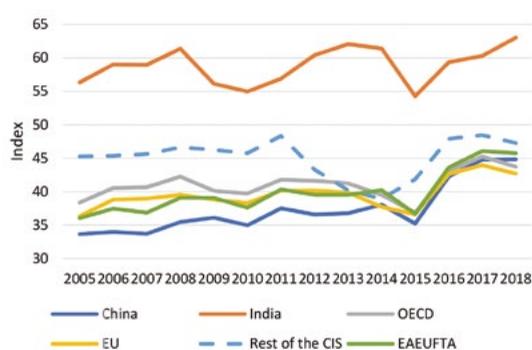
**Russia's trade complementarity with other comparator economies, including China, has improved in recent years (Figure 1-34).** It has increased by around 30 percent on average since 2015. This trend reflects the large and recently increasing value of oil and gas exports from Russia and import of the same products by other economies.

**Over the past decade, Russia's services trade complementarity with India has increased.** We recalculated Russia's trade complementarity indices with China and India only using data for services trade. The resulting indices (Figure 1-35) suggest that services trade complementarity between Russia and India increased by 14 percent from 2005 to 2018.

**Russia's services trade complementarity with China has shown signs of improvement in recent years.** Services trade complementarity between Russia and China trended down from 2005 to 2015 by 35 percent. However, it has shown signs of improvement since then. Recovery of Russia's export growth in travel and transport services contributed significantly to the recent improvement in trade complementarity between the two economies.

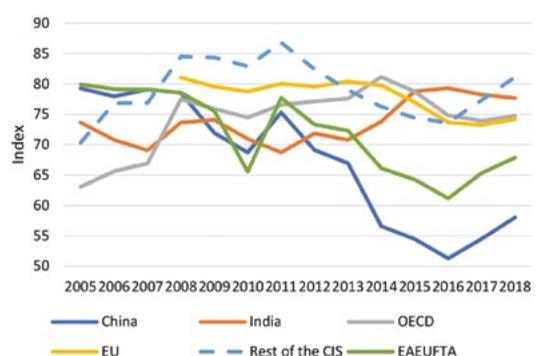
**Russia's services trade complementarity with other comparator economies has also shown signs of improvement.** Services trade complementarity with the EU, OECD, CIS, and EAEU-FTA countries declined between 2014 and 2016, as Russia experienced economic downturn. However, this trend has reversed since 2016 amid Russia's improved export growth.

**Figure 1-34: Russia's trade complementarity index (goods)**



Source: Authors' calculations using COMTRADE data.

**Figure 1-35: Russia's trade complementarity index (services)**



Source: Authors' calculations using UNCTAD data.

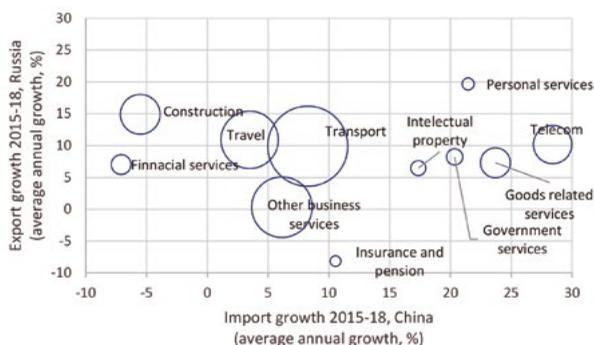
<sup>21</sup> The TCI between exporter  $i$  and importer  $j$  is calculated as:  $TCI_{i,j} = \left(1 - \sum_p \frac{x_{i,p}/x_i - m_{j,p}/M_j}{2}\right) * 100$  where  $x_{i,p}$  is exports from  $i$  in product  $p$ ,  $x_i$  is total exports of  $i$ ,  $m_{j,p}$  is imports of  $j$  in  $p$ , and  $M_j$  is total imports of  $j$ .

**Russia has potential to increase exports of transport services to China.** Figure 1-36 plots China’s import growth of different services sectors between 2015 and 2018 on the horizontal axis against the export growth rate of Russia on the vertical axis. The size of a circle indicates the importance of the sector in Russia’s export basket, with large export sectors having large circles. Figure 1-37 shows that China has recorded significant growth in imports of transport services, a large and growing export sector in Russia.

**Travel, goods-related services, and telecommunication are other sectors in which Russia has potential to export to China.** Russia has a relatively large and growing travel export sector that could benefit from China’s large and growing demand for tourism. China’s imports of goods-related services and telecommunication services have grown rapidly over the past three years, and are relatively large and growing sectors in Russia’s export basket.

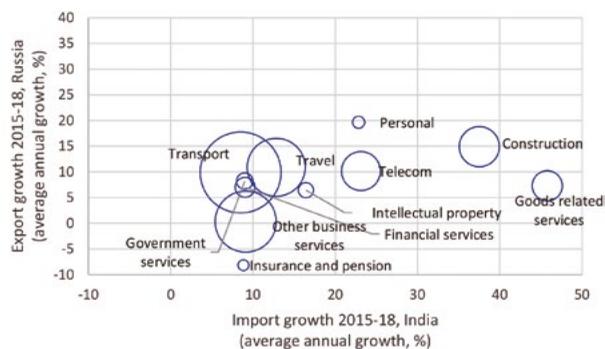
**Russia has potential to increase exports of many services to India.** Figure 1-37 is similar to Figure 1-36 but reflects the import growth rates in India instead of China. The figure shows that Russia’s significant export sectors that have high export growth rates — including transport, travel, telecommunications, construction, and goods-related services — are rapidly growing import sectors in India. This suggests that Russia has significant potential to improve exports of these services to India.

**Figure 1-36: Russia’s export growth vs. China’s import growth (services)**



Source: Authors’ calculations using data from UNCTAD.

**Figure 1-37: Russia’s export growth vs. India’s import growth (services)**



Source: WB staff calculations using data from UNCTAD.

## 9. CONCLUSION

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Russia has integrated further into the world economy by joining the WTO and new trade agreements, yet challenges posed by sanctions and hydrocarbon dependence in recent years have in part led to a trade openness (for goods and services) that is lower than expected, compared to countries with similar levels of income. In fact, the gravity model shows that Russia under-trades with many of the largest economies, with a potential to expand merchandise exports to China, as well as to raise trade with OECD countries, the EU, and countries which signed free trade agreements with the EAEU. The TCI suggests that complementarity exists in trade with India, but less with the EU, OECD, China, and EAEU FTA partner countries. Meanwhile, Russia's trade complementarity with the latter economies has improved in recent years.

As revealed by the gravity model for non-energy exports, to diversify the export basket, Russia has the potential to trade more with China, as well as to raise trade with OECD countries, the EU, and countries which signed free trade agreements with the EAEU. It is also important to consider the country's economic potential. The Revealed Comparative Advantage index suggests that such potential lies mostly in commodities trade, steel and metals, petroleum products, and some food products. To develop trade with already revealed potential the government rightly undertakes trade policy measures, for instance, in wheat (grain) export development, for which additional trade agreements have been signed. As moderate complexity products, cereals and wood products contributed most to Russia's export growth in 2014-2018. Over the past five years, notable gains in competitiveness in the merchandise industry have been observed in the food production, machines, and equipment sectors, which saw the highest growth in volume terms. However, the only slight improvement in the economy's export sophistication (as measured by EXPY) suggests that export promotion of moderate complexity goods for which Russia has an RCA can further be exploited. More active integration in GVCs (which cover about 70 percent of the global trade<sup>22</sup>) can pave the way to increasing export complexity in the long term.

The results of this study indicate a rising trend in Russia's trade complementarity with comparator economies in services. Russia's services RCA lies in construction and transportation, which have seen some rise in exports since 2016. However, currently, services exports see the highest shares and fastest growth in transport and travel services. Notably, Russia's comparative advantage in transport services may also include auxiliary services to the transport of oil and gas through pipelines.

Goods imports are more skewed to final goods (predominantly capital) than the world's average and the economy remains dependent on imported inputs for domestic production. The challenges of 2014, which led to the depreciation of the REER, caused a sharp drop in imports and a shift to import substitution policy. However, this strategy has shown mixed results in terms of achieving higher domestic production levels and decreasing import dependence, in large part because of continuous dependence on imported machinery and equipment. Where aims were achieved, notably in the agricultural sector, a policy shift to export promotion is taking place. Yet, retail prices for food products have sharply risen, while production rose only moderately in volume terms, which implies welfare losses. Russia needs to be cautious of import substitution policies in the longer run and explore new ways to diversify its economy and exports. Import substitution policies could prohibit the most effective and competitive of Russia's sectors and could weigh down on Russia's further exposure to GVCs.

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<sup>22</sup> Simachev Y., Fedyunina A., Kuzyk M., Danilcev A., Glazatova M., Averyanova Y. Russia in the global production, HSE, Moscow, 2020.

## APPENDIX

### Countries included in each country group

OECD	EU	CIS (and EAEU separately)	EAEU FTA
Australia	Austria	Armenia	China
Austria	Belgium	Azerbaijan	Iran
Belgium	Bulgaria	Belarus	Serbia
Canada	Cyprus	Kazakhstan	Singapore
Chile	Croatia	Kyrgyzstan	Vietnam
Czech Republic	Czech Republic	Moldova	
Denmark	Denmark	Russia	
Estonia	Estonia	Tajikistan	
Finland	Finland	Uzbekistan	
France	France		
Germany	Germany		
Greece	Greece		
Hungary	Hungary		
Iceland	Ireland		
Ireland	Italy		
Israel	Latvia		
Italy	Lithuania		
Japan	Luxembourg		
Korea	Malta		
Latvia	Netherlands		
Lithuania	Poland		
Luxembourg	Portugal		
Mexico	Romania		
Netherlands	Slovakia		
New Zealand	Slovenia		
Norway	Spain		
Poland	Sweden		
Portugal	United Kingdom		
Slovak Republic			
Slovenia			
Spain			
Sweden			
Switzerland			
Turkey			
United Kingdom			
United States			

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# CHAPTER 2

## Russia's Global Value Chain Integration: What Is the Potential for Diversification and Upgrading?\*

\* This chapter was prepared by Deborah Winkler (Senior Consultant, e-mail: [dwinkler2@worldbank.org](mailto:dwinkler2@worldbank.org)) for a larger assessment of Russia's integration in regional and global value chains which the Ministry of Economy and Development, Ministry of Finance, and Central Bank of Russia have requested from the World Bank. The author thanks Karlygash Dairabayeva for valuable input on Russia's export competitiveness and Shahid Yusuf for the case studies on the Republic of Korea and Vietnam. The author is grateful to Apurva Sanghi and Ian Gillson (Task Team Leaders) for their valuable guidance and to Olga Emelyanova, Michael Ferrantino, Yu Lie, and Sandeep Mahajan (World Bank), as well as Evguenia Bessonova and Andrey Sinyakov (Bank of Russia) for helpful comments. The findings of this paper are those of the author and do not necessarily represent the views of the World Bank or its member countries.



# 1. INTRODUCTION

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## 1.1 Motivation

**GVC participation provides opportunities for countries to promote structural transformation and advance development.** While industrialization in the past required a country to build the whole supply chain from scratch, countries today can enter GVCs in a certain segment of the chain that corresponds to the country's comparative advantage. Barriers to exporting have thus become much smaller. In addition, GVC participation helps countries absorb valuable foreign technology and know-how, and import inputs that they process and export in the form of goods, parts, components, and services (Taglioni and Winkler 2016). However, countries also need to be aware of the power relations in GVCs between the lead firm and other firms, and the scope for diversifying specific supply chain risk.<sup>23</sup>

**The WDR 2020 finds that GVCs, especially in manufacturing, magnify the traditional effects of trade.** They contribute to increased productivity, better jobs, and lower poverty. Participation in GVCs is determined to a large extent by what countries inherit: their location, endowments, market size, and the quality of institutions.<sup>24</sup> Nevertheless, policy choices, especially on trade, FDI, and connectivity, can make a big difference. International cooperation on trade is particularly critical, but cooperation beyond trade on taxes, subsidies, data, and competition is also needed (World Bank 2019).

**Against this background, this chapter seeks to address how Russia can diversify and upgrade through increased GVC participation.** Countries with large domestic markets such as Russia may feel less pressure to be integrated into GVCs compared to smaller countries. At the same time, resource-intensive countries, like Russia, tend to specialize into commodities GVCs. Russia's high sectoral concentration in commodities is both a challenge and opportunity for economic diversification. While the country currently shows high dependence on mining, there is an opportunity to strengthen its linkages to commodity-intensive manufacturing sectors.

**In particular, this chapter argues that Russia has the potential to diversify more strongly into commodity-intensive manufacturing sectors such as chemicals, metals, and the food value chain to capture more domestic value added and benefit a larger part of the economy.** However, Russia currently specializes more strongly in the lower-value added segments within these manufacturing sectors, so there is room to upgrade into more sophisticated manufacturing GVCs. In addition, backward linkages of export sectors to domestic supplying sectors are more diversified in manufacturing compared to mining and business services where a large share of linkages is within the export sector. This should not downplay the importance of direct mining and business services exports for the Russian economy, but implies that the gains from GVC participation in commodity-intensive manufacturing could spread more equally across the economy, also leading to reduced macroeconomic volatility.

**Throughout this chapter, Russia's performance will be compared, if possible, with other countries and groups including China, India, Turkey, the USA, and the EU.** The countries and groups vary in terms of their economic size and growth (Table 2-1). Compared to its comparators, Russia has the second smallest population of 144 million and shows the second smallest GDP in 2018. The country shows the third lowest GDP per capita, which is around \$2000 higher than in Turkey and China and substantially higher than in India, but much lower compared to the EU and particularly the USA. Russia's GDP growth rate of 2.3 percent between 2017 and 2018 was lower than in Turkey, the USA, and especially China and India, but slightly larger than the EU average.

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<sup>23</sup> The seller's risk refers to demand shocks, including end-market risks, and to a wide range of other downstream risks along the value chain. Similarly, the buyer's upstream risks refer to supply shocks on the sourcing side that result from unforeseen events or bottlenecks taking place along the value chain of upstream suppliers (Taglioni and Winkler 2016).

<sup>24</sup> In chapter 2 of the WDR 2020, location is the geographical distance to the major GVC hubs (China, Germany, USA); endowments relate to factor endowments with natural resources, capital, low-skilled and high-skilled labor; market size reflects a country's industrial and supplier capacity; and institutional quality reflects a country's political stability and quality of contract enforcement.

**Table 2-1: While Russia is smaller than most of its comparators, its GDP per capita lies in the middle spectrum**

Country/group	Population	GDP per capita (current US\$)	GDP (current billion US\$)	GDP growth (annual %)	Taxonomy group 2015
China	1,392,730,000	9,771	13,608	6.6	advanced mfg & serv
European Union	513,213,363	36,546	18,756	2.0	various
India	1,352,617,328	2,016	2,726	7.0	advanced mfg & serv
Russian Federation	144,478,050	11,289	1,658	2.3	commodities
Turkey	82,319,724	9,311	767	2.6	advanced mfg & serv
United States	327,167,434	62,641	20,494	2.9	innovative activities

Source: World Development Indicators and GVC taxonomy. 2018 data.

**More importantly, these countries consist of a diverse set of participants in GVCs.** A taxonomy of GVC integration by the World Bank differentiates between different GVC groups (WDR 2020). Among those countries that show integration in GVCs, one can distinguish four types: those specializing in commodities; those that specialize in limited manufacturing GVCs; those that specialize in advanced manufacturing and services GVCs; and those specializing in innovative GVC activities. The set of countries in this analysis range from countries specializing in commodity GVCs (Russia), to countries specialized in advanced manufacturing and services (China, India, and Turkey), to countries specialized in innovative GVC activities (USA). Countries that are members of the EU are mainly specialized in advanced manufacturing and services GVCs and innovative GVC tasks, but some are still at the limited manufacturing GVC stage.<sup>25</sup>

## 1.2 Identifying Russia’s GVC Specialization<sup>26</sup>

### Based on GVC Taxonomy

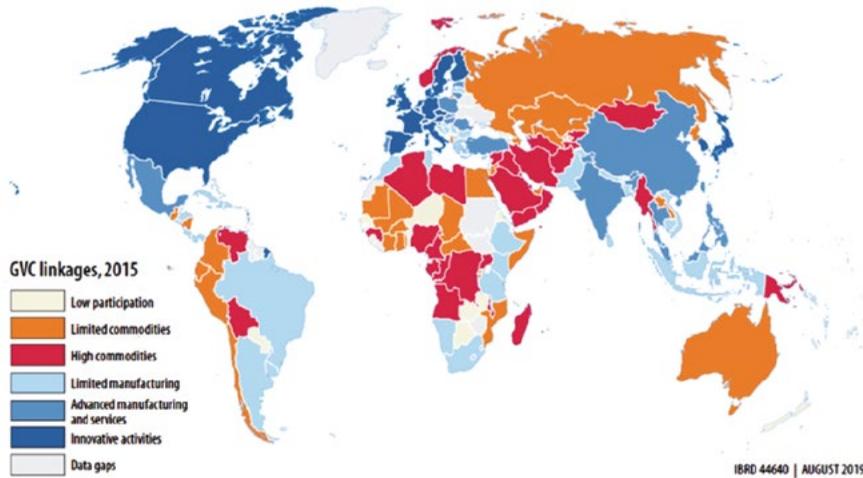
**This section applies the GVC taxonomy that has been introduced in the WDR2020 which allows to identify a country’s type of participation and characteristics within the same group.** The taxonomy classifies countries according to four types of GVC participation. Countries specializing in commodities have a significant share of agriculture and mining in their domestic value added that is exported, but a small share of manufacturing and limited backward GVC participation. Countries in the limited manufacturing GVC group export a limited set of manufacturing products, often alongside commodities exports, and have medium backward GVC participation. Countries that are part of an advanced manufacturing and services GVC export a high share of manufacturing and business services and have high backward GVC integration. Countries specializing in innovative activities GVCs have high backward GVC integration, spend a large share of their GDP on research and development, and receive a large share of GDP from intellectual property (World Bank 2019).

**According to the GVC taxonomy, Russia was part of the commodities GVC group in 2015 (Figure 2-1).** Other countries in the commodities group included Australia, Kazakhstan, and several countries in the Latin American and Sub-Saharan African regions, among others. By contrast, Russia’s comparators China, India, and Turkey specialize in advanced manufacturing and services, while the USA is part of innovative GVC activities. Similarly, most EU countries fall in one of these two categories. Splitting the group of commodity GVCs into three sub-groups reveals that Russia only shows a limited share, i.e. between 20 and 40 percent, of commodities in the domestic value added that is exported.

<sup>25</sup> EU countries in the innovative group as of 2015 include: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, Ireland, Netherlands, Spain, Sweden, and United Kingdom. EU countries in the advanced manufacturing and services group include: Estonia, Hungary, Lithuania, Poland, Portugal, Romania, Slovakia, and Slovenia. EU countries in the limited manufacturing group include: Bulgaria, Croatia, Cyprus, Greece, and Latvia. Luxembourg and Malta are not part of the taxonomy database.

<sup>26</sup> The scope of the analysis and datasets used are described in Appendix 1.

Figure 2-1: Russia is specialized in commodity GVCs



Source: GVC taxonomy for 2015. See World Bank (2019, p. 21).

**But Russia's case is different to typical countries in the commodities group, and its transition to more sophisticated GVC participation can also be expected to be different.** Over the full period 1990–2015, Russia has remained within the same taxonomy group, while some countries moved into limited manufacturing GVCs (e.g. Argentina, Cambodia, Costa Rica, Indonesia, Kenya, and South Africa) and others moved from limited manufacturing to advanced manufacturing and services (e.g. China, India, the Philippines, Poland, Thailand, and Turkey). Section 5.1 shows that Russia's case is different from typical countries in the commodities group that are characterized by relatively cheap labor and a smaller domestic market. Instead, Russia shares several characteristics with the group of advanced manufacturing and services GVCs, so its aspiration should be the latter group which is also reflected in the choice of comparator countries.

### Based on the Domestic Value Added in Exports

**In a second step, we study the domestic value added that is exported by broad sector, suggesting a large growth in mining and business services.** Appendix 2 illustrates the concept of value added embodied in gross exports. Our focus is on the domestic value added portion in gross exports (Appendix 3). Between 2005 and 2015, Russia's domestic value added in gross exports grew by 4.2 percent per year on average. Growth rates were highest in business services (in particular, IT and financial services) and mining, growing by around 5 percent per year. By 2015, mining made up almost a third of Russia's total domestic value added in exports, while business services represented more than 28 percent.

**By contrast, growth rates in manufacturing were below average at only 3 percent per year.** As a result, Russia's share of manufacturing in its total domestic value added in exports declined from 40 to 36 percent over the period 2005–15. Among the manufacturing sectors, coke and basic metals represent the largest sub-sectors. But while coke expanded its share in total domestic value added in exports from 12.9 to more than 15 percent, the share of basic metals dropped from 14.9 to 7.9 percent over the same period. Other relevant manufacturing sectors include chemicals (4 percent of total domestic value added in exports), followed by food (1.7 percent), other transport equipment (1.1 percent), and wood (1 percent).

**In summary, Russia's GVC integration is focused on the following sectors:**

- mining
- coke/metals
- chemicals
- machinery/transport equipment
- food products
- business services

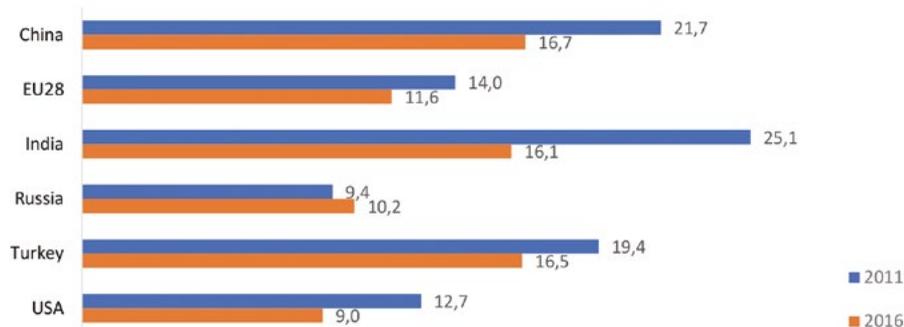
## 2. RUSSIA'S GVC INTEGRATION

### 2.1 GVC Integration as a Buyer

#### Country-level Analysis

Using the foreign value added portion in exports as a widely accepted measure of GVC participation, Russia shows low backward integration in GVCs compared to other comparators. A country's backward integration in GVCs can be measured as the foreign value added portion embodied in its gross exports as percentage of total gross exports (Appendix 2). Successful GVC participation is usually characterized by a high share of foreign value added in exports, as it allows a country to import the necessary know-how in the form of capital goods or technology and/or inputs to be able to export goods, components, or services. In 2015, Russia's backward integration in GVCs was 10.8 percent (Figure 2-2). It was on par with the USA, but lower than the EU average and much lower than in Turkey and even China, which both showed shares of around 17 percent each. Only the OECD showed lower average backward GVC participation.

Figure 2-2: Between 2011 and 2016 backward integration increased only in Russia



Source: OECD-WTO TIVA 2018 release. Note: Backward GVC integration = foreign value added in exports (% of exports). 2016 estimates.

Interestingly, Russia's backward integration in GVCs increased slightly since 2011, while all comparator countries showed a decline. India and China, in particular, saw their backward participation fall by 9 and 5 percentage points, respectively. China's development is supported by evidence that China is increasingly relying on domestic suppliers for its exports (e.g. Kee and Tang 2016). The decline in GVC participation across other countries has been attributed to a range of cyclical and structural factors (see chapter 1 in WDR 2020). One would need more updated data to determine whether the slight increase in Russia between 2011 and 2016, which stands in stark contrast to its peers, could be an indication that the country is moving away from the commodity GVCs group towards specialization in more sophisticated GVCs, in particular services (see sectoral analysis). Another explanation could be the impact of falling oil prices and/or currency depreciation, but it is difficult to predict their effects.

We also examine if Russia's increase in backward participation could be a general trend among commodity-exporting countries. Comparing Russia's backward integration to other commodity-intensive countries with some manufacturing activity like Australia, Chile, Norway, and Kazakhstan in the TIVA dataset shows divergent patterns: Australia's, Chile's, and Kazakhstan's backward integration dropped from 10 to 7.1 percent (Australia), from 15.8 to 12.4 (Chile), and from 8.3 to 7.7 percent (Kazakhstan), respectively, between 2011 and 2016, while only that of Norway increased, from 11.2 to 13.7 percent. Russia's slight increase in backward GVC participation thus seems not to be a general trend among commodity exporters, but could reflect more openness on the buying side in certain sectors which is assessed in the next section.<sup>27</sup>

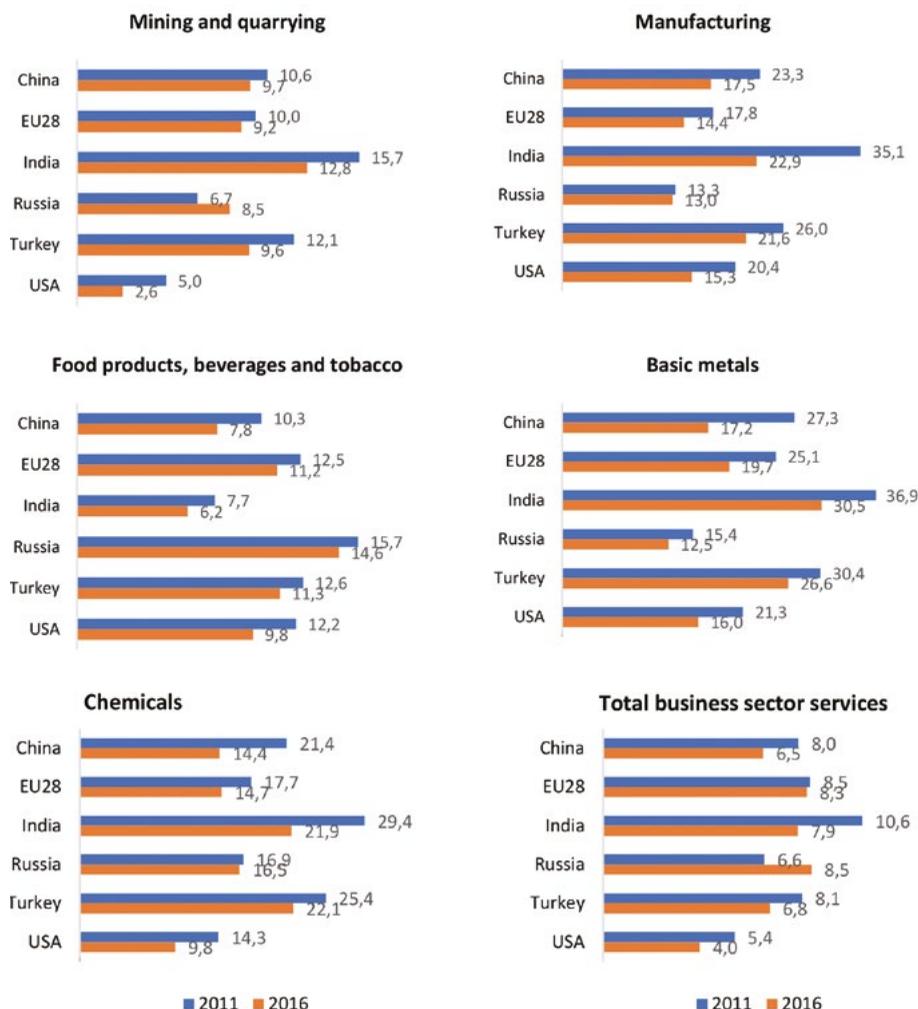
<sup>27</sup> Note that all of these countries experienced a currency depreciation, but it was stronger for Norway and Russia which may be another explanation for the increase (see also previous footnote).

## Sectoral Analysis

Russia's foreign value added share in exports increased in mining and business sector services and remained constant in manufacturing, which is in sharp contrast to its comparators, which saw their backward participation decline across all major sectors over the period 2011-15 (Figure 2-3). Russia's backward GVC integration in mining increased by almost 2 percentage points to 8.5 percent in 2016, which is now almost on par with China, the EU, or Turkey. The USA and Turkey experienced the largest drops. Similarly, Russia's backward participation in business sector services expanded by a similar extent reaching 8.5 percent in 2016, now showing the largest share among its peers. In manufacturing, Russia's backward participation remained roughly constant at around 13 percent, while other countries experienced major drops of between 3 (EU, OECD) and 5 percentage points (China, USA, Turkey).

Within the Russian manufacturing sector, backward integration declined in many manufacturing sectors, although it was small in key sectors (Appendix 4). In particular, backward integration in coke and refined petroleum products, the largest sector, remained at 8.1 percent over the 2011-2016 period. The decline was small in chemicals, too, especially compared to peers like China, OECD, and the USA. And despite Russia's substantial drop in backward GVC integration in basic metals by 3 percentage points, the decline is still smaller than all its comparators (Figure 2-3). The drop was especially large in electrical equipment, motor vehicles, and other transport equipment and may be linked to import substitution programs currently in place for 22 industries including radio-electronics and transport (see Chapter 1). Backward participation increased in textiles and apparel, non-metallic mineral products, and machinery and equipment (Appendix 4).

Figure 2-3: Backward integration in Russia declined slightly in manufacturing, but grew in mining and services



Source: OECD-WTO TIVA 2018 release. Note: Backward GVC integration = foreign value added in exports (% of exports). 2016 estimates.

In services, GVC participation has been especially dynamic in business services, with the exception of utilities (electricity, gas, water supply, etc.) (Appendix 5). Among the largest services sectors (see Appendix 3), transportation and storage show by far the highest foreign value added share of 8.9 percent in 2016, up from 5.8 percent a decade earlier. This could indicate a larger role of trade and GVC participation in Russia beyond commodity exports. Even the largest services sector, wholesale and retail trade, increased its backward GVC participation, as well as other business sector services. The largest expansion in backward GVC participation is found in smaller services sectors, in particular IT and other information services and telecommunications services, reaching between 13 and 14 percent in 2016 up from around 9 percent in 2011.

## Source Countries of Foreign Value Added

Russia relies predominantly on China, the USA, and Europe to provide foreign value added embodied in its exports, with China being the largest source country (Table 2-2). This section identifies the source countries of foreign value added in 2015. Table 2-2 reveals that China made up 14 percent of the foreign value added embodied in Russia's total exports. The USA and Germany accounted for another 9 percent, respectively, which was followed by Kazakhstan (5 percent). Among the top 20 source countries, which represent more than 70 percent of total foreign value added embodied in Russian exports, we find mainly other European countries, but also Japan, Korea, and India. The main source countries providing foreign value added to Russia are similar in the mining, manufacturing, and

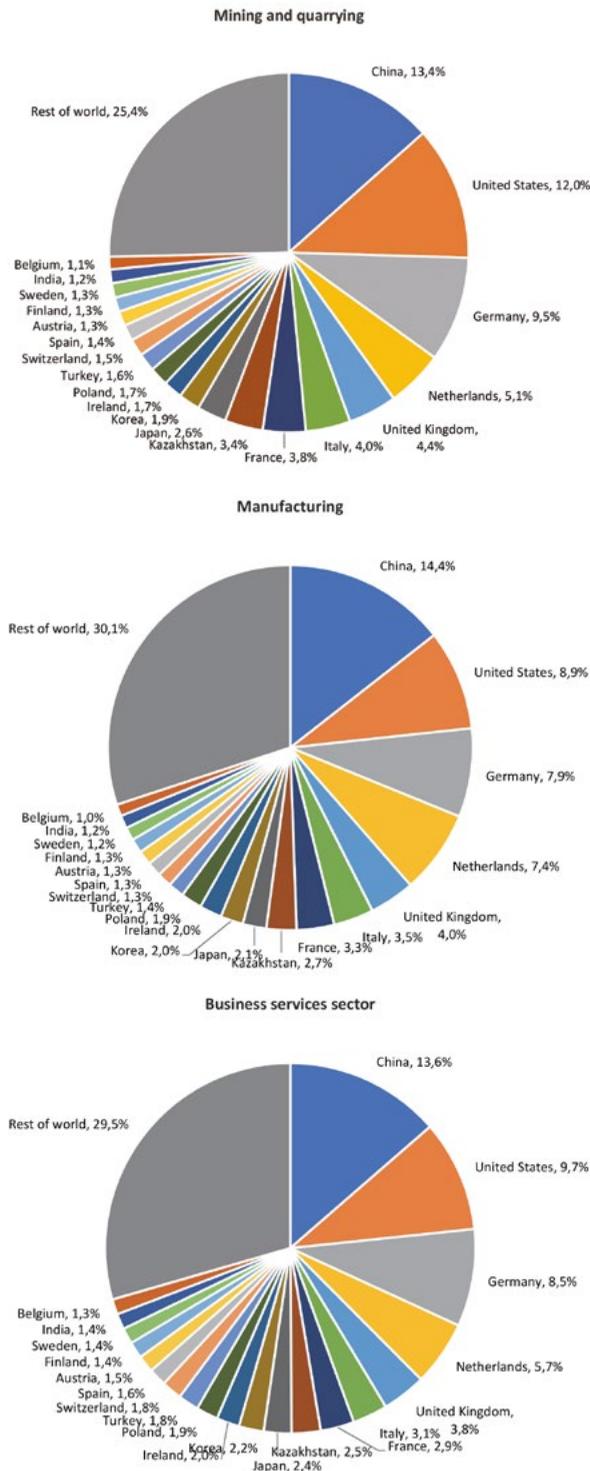
**Table 2-2: Russia relies predominantly on China, the USA, and Europe to provide foreign value added in exports**

Rank	Source country	FVA (m. US\$)	%
1	China	5,598	13.9%
2	United States	3,732	9.3%
3	Germany	3,568	8.9%
4	Kazakhstan	2,008	5.0%
5	United Kingdom	1,707	4.3%
6	France	1,573	3.9%
7	Italy	1,363	3.4%
8	Netherlands	1,151	2.9%
9	Japan	1,094	2.7%
10	Korea	824	2.1%
11	Turkey	764	1.9%
12	Poland	726	1.8%
13	Ireland	677	1.7%
14	Switzerland	607	1.5%
15	Spain	572	1.4%
16	India	542	1.4%
17	Finland	517	1.3%
18	Sweden	506	1.3%
19	Belgium	485	1.2%
20	Austria	471	1.2%
	<b>Top 20 source countries</b>	<b>28,485</b>	<b>71.0%</b>
	<b>Total foreign value added</b>	<b>40,147</b>	<b>100.0%</b>

Source: OECD-WTO TiVA 2018 release.

Note: 2015 data. TiVA only covers 64 countries plus Rest of World. An analysis of foreign value added from the Eurasian Customs Union is not possible using the TiVA database, as the latter only contains Kazakhstan and Russia as member countries.

**Figure 2-4: China, the USA, and Germany are the top three source countries of foreign value added in Russian exports of mining, manufacturing, and business services**



Source: OECD-WTO TiVA 2018 release. Note: 2015 data. TiVA only covers 64 countries plus Rest of World.

business services sectors, although import shares from the rest of the world are smaller for mining (Figure 2-4). It is important to state that the Rest of World, that is countries that are not part of the TiVA database, still represent between a quarter and 30 percent of foreign value added in Russia’s mining, manufacturing, and business services exports.

## 2.2 GVC Integration as a Seller

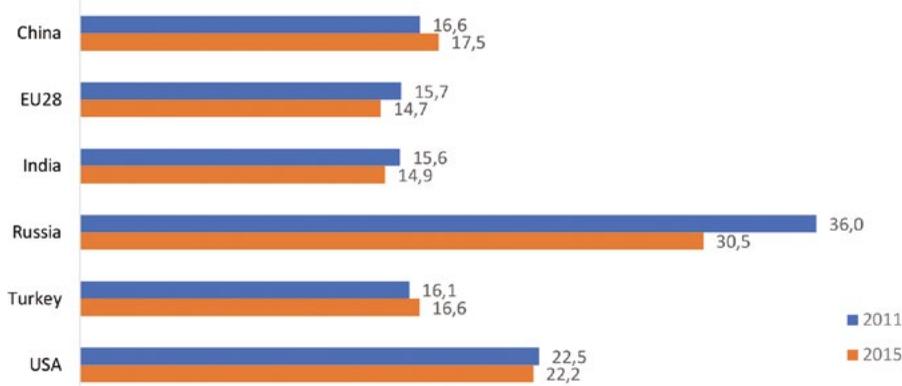
### Country-level Analysis

**On the selling side, Russia’s forward GVC integration dropped between 2011 and 2015, reflecting an increase in exports for final consumption abroad.** Forward GVC integration is defined as a country’s domestic value added portion that is used in its partner countries’ exports as a percentage of the country of origin’s total exports. It focuses on a country’s value added that is not directly consumed in the export destination, but re-exported. A higher forward GVC integration reflects that a country is exporting more intermediate goods and services used for other countries’ exports. A lower extent implies that a country’s exports consist largely of final consumption goods and services, or that it is simply not integrated in GVCs. 30 percent of Russia’s exports were embodied in foreign country exports in 2015, representing the highest share (Figure 2-5). The decline of total forward GVC participation by 6 percentage points since 2011 reflects the country’s lower weight of commodities in its export basket and towards goods and services for final consumption in recent years. All other comparators also show a decline in forward GVC integration, with the notable exceptions of China and Turkey which increased their linkages.<sup>28</sup>

**In line with the decline in forward GVC participation, Russia’s exported goods reveal a reorientation in recent years from raw commodities and processed fuels towards exports of intermediate goods and to a lesser extent final goods (Figure 2-6).** Between 2012 and 2017, the export share of raw materials in all exported goods

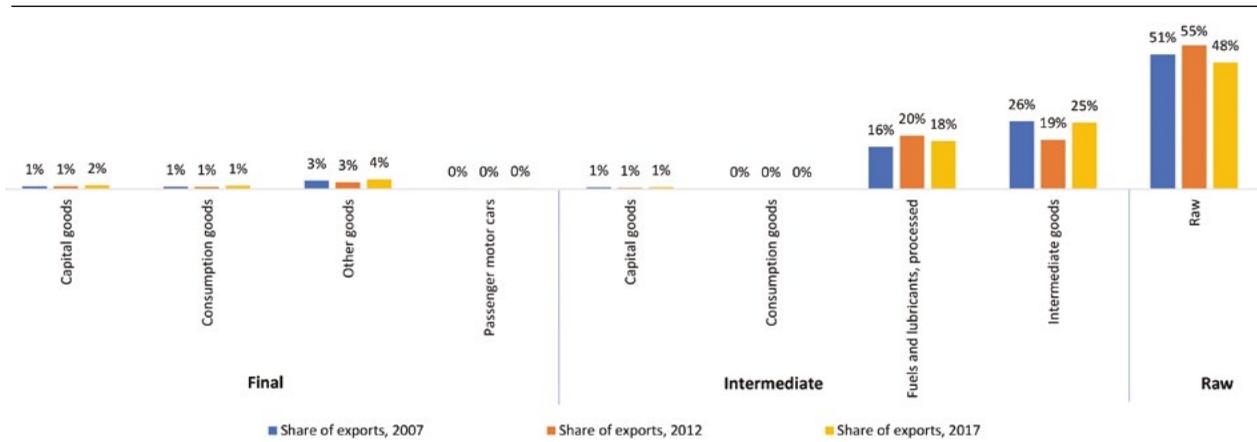
<sup>28</sup> Russia’s decline in forward participation seems to be a general trend among commodity-exporting countries reflecting falling world oil prices over the period. Comparing Russia’s forward integration to other commodity-intensive countries with some manufacturing activity like Australia, Chile, Norway, and Kazakhstan in the TiVA dataset shows similar patterns: Forward integration dropped from 33 to 26.8 percent in Australia, from 34.2 to 29 in Chile, from 38.4 to 35.1 percent in Kazakhstan, and from 37.1 to 32.1 percent in Norway, respectively, between 2011 and 2015. This declining trend reflects falling world oil prices which lower the share of commodities in these countries’ export baskets.

**Figure 2-5: Russia substantially lowered its forward integration between 2011 and 2015**



Source: OECD-WTO TIVA 2018 release. Forward GVC integration = Domestic value added embodied in third country exports (% of exports).

**Figure 2-6: Russia’s goods exports are concentrated in raw and intermediate products**



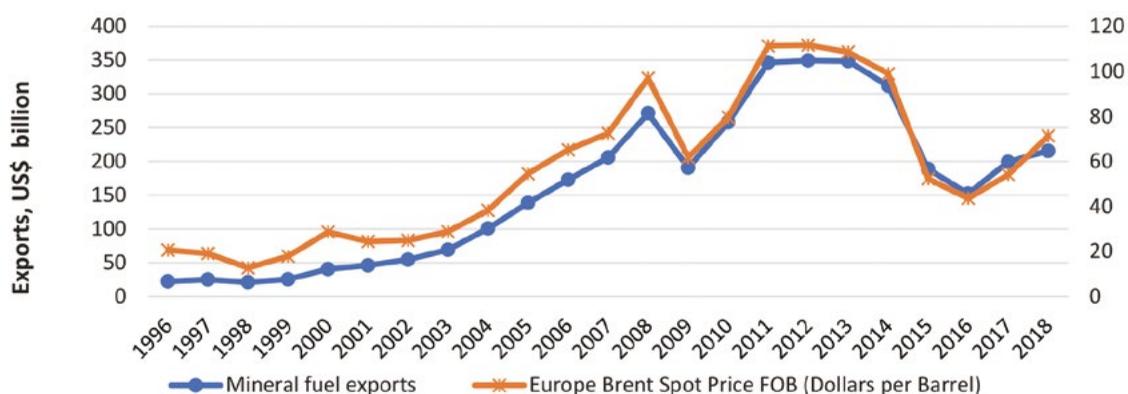
Source: COMTRADE mirror data, WITS, World Bank. Data is organized by BEC categories. The categories Raw, Intermediate, and Final were developed by the Kazakhstan Ministry of Economy and Budget Planning.

declined from 55 to 48 percent and that of processed fuels and lubricants from 20 to 18 percent. In other words, the share of commodity exports fell from 75 to 66 percent. Export shares of intermediate goods, by contrast, increased strongly from 19 to 25 percent over the same time, while export shares of final goods (in particular capital and other goods) grew to a lesser extent. Assuming that raw commodities and fuels are re-exported by Russia’s trade partners, this pattern is in line with Russia’s decline in forward participation over a similar period.

**This reorientation towards non-commodity exports in Russia’s export basket is closely linked to declining fuel exports and falling world oil prices.** While non-commodity export shares only made up 25 percent of total goods exports in 2012, their increase to 34 percent by 2017 is not new and had already been achieved in 2007 (Figure 2-7). The reorientation towards non-commodity exports in Russia’s export basket is related to the decline in fuel exports which, in turn, are linked to falling world oil prices. In 2007 and 2017, fuel exports from Russia were worth US\$200 billion, while they peaked to around US\$350 billion over the period 2011-13, due to higher prices per barrel.

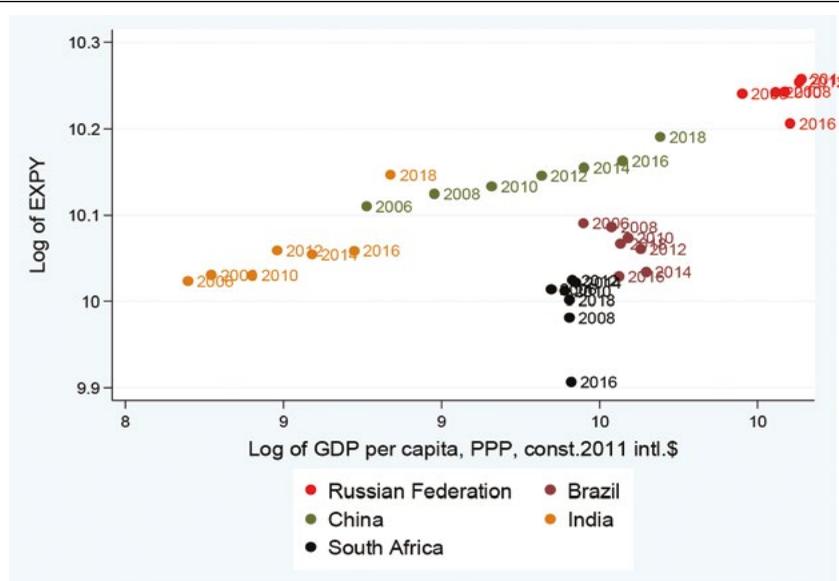
**Despite a higher reliance on non-commodity goods exports, Russia neglected to improve the quality of its export basket, while China and India improved on both fronts (Figure 2-8).** Hausmann, Hwang, and Rodrik (2006) argue that the level of product sophistication matters for economic growth. Countries that have a more sophisticated export basket, proxied by a measure named EXPY, enjoy accelerated subsequent growth while those with less sophisticated export baskets tend to lag behind – in essence, countries become what they export. But Russia’s export

Figure 2-7: Russia's mineral fuel exports are driven by world oil prices



Source: COMTRADE mirror data, WITS, World Bank. US Energy Information Administration data.

Figure 2-8: Russia neglected to improve the quality of its export basket between 2006 and 2018



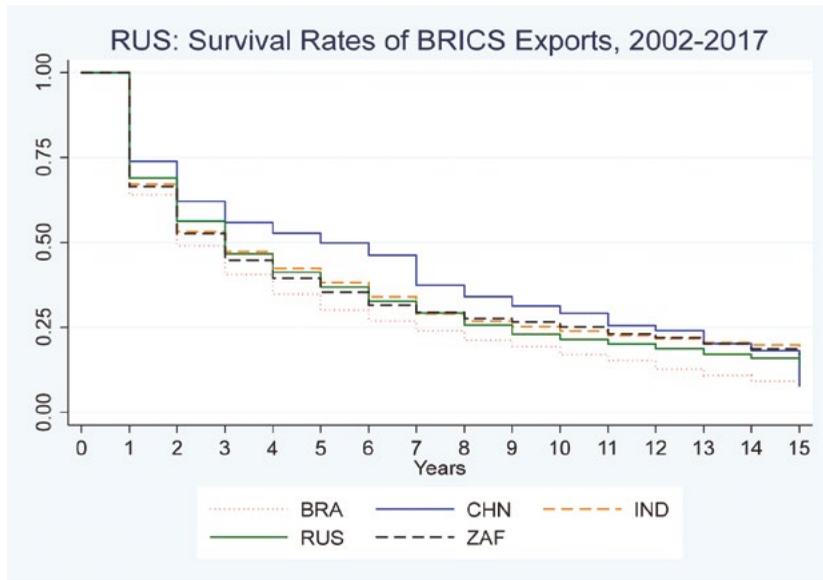
Source: COMTRADE data, WITS and WDI, World Bank.

Note: EXPY=level of technological sophistication, or country's expected GDP per capita. Real GDP per capita in purchasing power parity (PPP) in constant 2011\$.

basket sophistication did not improve over the period 2006-18, in stark contrast to China, which showed constant progression, and India, which caught up in more recent years. Russia rather resembles the two other commodity-exporting countries, Brazil and South Africa.

**And while short-term export survival rates of Russia's goods exports are high, the long-term survival rates trail most of its peers.** This section analyzes Russia's goods export survival rate in comparison with its peer countries between 2002 and 2017 using the Kaplan-Meier survival function. While Russia's goods exports have the second highest probability of survival between the first and the second year of around 70 percent after China (Figure 2-9), the probability of maintaining a relationship for 10 years drops to less than 25 percent, the second lowest after Brazil. However, there are strong differences in export survival across regions in Russia. A recent study found that regions with longer distances to end markets showed lower export survival, while a better quality of infrastructure and endowment with human capital were associated with a higher export survival (Kadochnikov and Fedyunina 2015).

Figure 2-9: Russia's long-term export survival rates trail most of its peers



Source: COMTRADE data, WITS, World Bank. Note: Mirror data.

## Sectoral Analysis

**Focusing on forward GVC participation, Russia's decline over the period 2011-15 was driven by a lower integration in natural-resource intensive sectors.** Russia's relative performance in its forward participation in GVCs is mostly due to natural-resource intensive sectors. Figure 2-10 illustrates forward linkages as measured by a sector's domestic value-added embodied in third countries' exports as a share of total exports. Because natural resources (e.g. mining, coke, chemicals, basic metals, etc.) are mostly used as inputs for further processing, countries that export them such as Russia are therefore upstream in the value chain and tend to exhibit strong forward participation. Russia's forward GVC participation in these sectors fell between 2011 and 2015, contributing almost 5 percentage points to the overall decline.

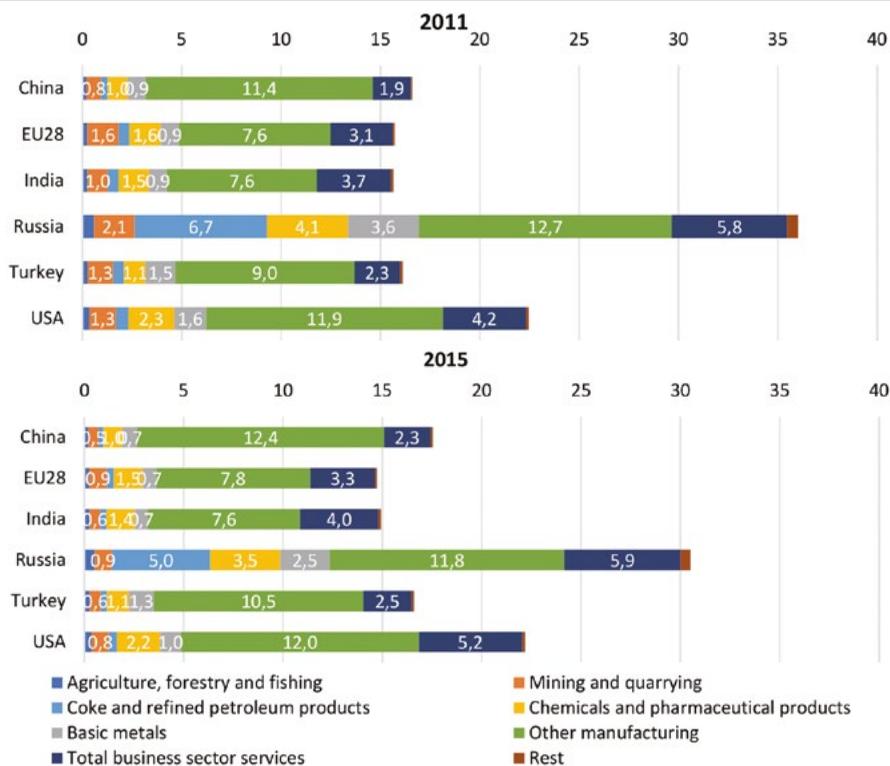
**Russia's contribution of other manufacturing to overall forward GVC participation also fell, while that of total business sector services remained constant.** This trend contrasts with the experience of most of its comparators where the contribution of these two sectors expanded over the period 2011-15. However, Russia's contribution of total business sector services is still the largest among its comparators at 5.9 percent of total exports, higher than that of the US (5.2 percent) and especially Turkey and China. Russia's contribution of other manufacturing is among the largest and comparable to China and the USA, at roughly 12 percent.

## Consumers of Russian Value Added

**Russia relies more strongly on final demand from abroad for its domestic value added than its comparators, especially from Europe (Figure 2-11).** The domestic value added embodied in final demand takes into account both direct final exports and indirect exports of intermediates through other countries to final consumers.<sup>29</sup> While domestic demand accounts for almost 90 and 87 percent of total demand for domestic value added in the USA and the EU, respectively, this share is only 75 percent in Russia. Even in China, India, and Turkey, domestic demand

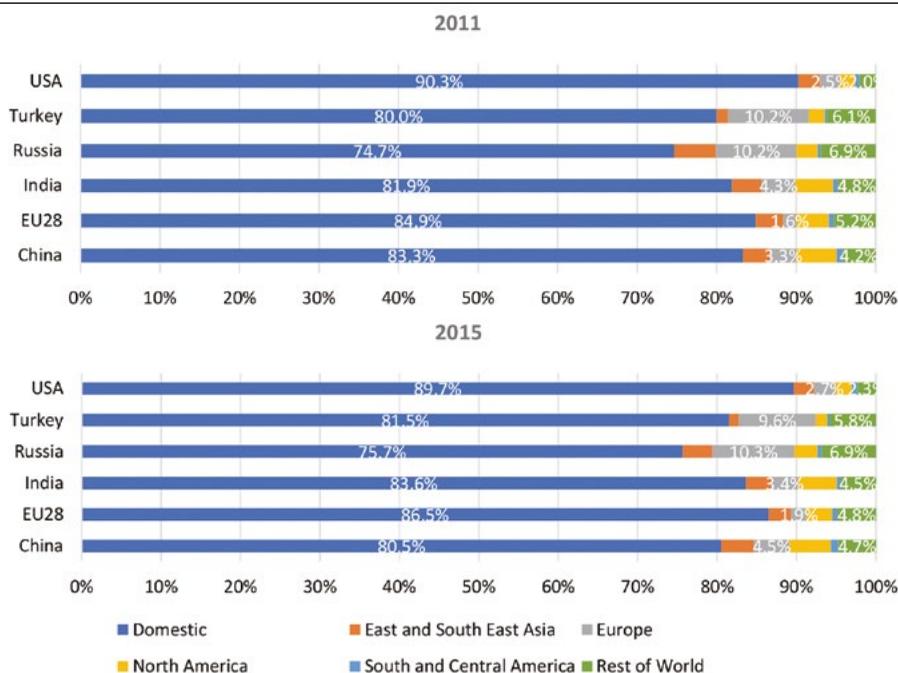
<sup>29</sup> This measure focuses on all the domestic value added (i.e. of intermediates and final goods/services) that is embodied in final foreign demand. It reflects how sectors are connected to consumers abroad even when there is no direct trade relationship between them. It is not identical with the forward participation measure that looks at those portions of a country's domestic value added in exports that cross at least two country borders.

Figure 2-10: Russia's decline was driven by a lower integration in natural-resource intensive sectors



Source: OECD-WTO TIVA 2018 release. Forward GVC integration = Domestic value added embodied in third country exports (% of total exports).

Figure 2-11: Russia relies more strongly on final demand from abroad for its domestic value added



Source: OECD-WTO TIVA 2018 release.

Note: The domestic value added embodied in final demand takes into account both direct final exports and indirect exports of intermediates through other countries to final consumers.

accounts for more than 80 percent of total demand for domestic value added. Russia depends most strongly on Europe absorbing 10 percent of total final demand for Russian value added. Between 2011 and 2015, reliance on the East Asia market declined, while that on the North American market grew slightly.

**Russia relies predominantly on China, the USA, and Germany as final consumers for its domestic value, with China being the largest source country (Table 2-3).** This section identifies the top 20 destination countries of Russian value added which consume 69 percent of Russian domestic value added excluding Russia's own consumption. China, the USA, and Germany alone consumed more than 29 percent, although they consume different products. While China and Germany demand predominantly Russian business services and mining, the role of mining is slightly lower for the USA. And while manufacturing also plays an important role for all three countries, China's demand for coke and refined petroleum products is relatively smaller than other manufacturing compared to Germany or the USA. Russian business services and mining and quarrying are the most important sectors for all other countries, too, with the exception of Kazakhstan for which other manufacturing plays a more important role than mining and quarrying.

**Table 2-3: China, the USA, and Germany are the top three final consumers for Russia's domestic value added**

		TOTAL	%	Agriculture, forestry and fishing	Mining and quarrying	Coke and refined petroleum products	Other mfg	Total business sector services
1	China	37,677	11.4%	1,574	12,286	1,993	5,878	13,485
2	United States	30,801	9.4%	480	7,017	4,118	4,973	12,195
3	Germany	28,472	8.6%	348	9,797	3,796	2,586	10,230
4	Italy	19,435	5.9%	237	8,815	1,248	1,770	6,208
5	Japan	13,308	4.0%	283	5,265	832	1,550	4,559
6	United Kingdom	12,135	3.7%	188	3,319	1,529	1,178	5,108
7	France	11,644	3.5%	153	3,343	1,246	1,260	4,899
8	Turkey	10,050	3.1%	775	1,951	789	2,246	3,608
9	Kazakhstan	9,740	3.0%	371	748	348	3,345	4,200
10	Poland	7,997	2.4%	112	3,058	429	1,121	2,766
11	India	7,659	2.3%	125	1,917	331	1,953	2,739
12	Korea	6,969	2.1%	267	2,315	684	791	2,490
13	Netherlands	6,172	1.9%	71	2,583	409	466	2,271
14	Spain	4,407	1.3%	76	1,524	441	527	1,563
15	Finland	3,990	1.2%	79	1,338	345	479	1,475
16	Sweden	3,719	1.1%	43	1,295	292	381	1,478
17	Belgium	3,702	1.1%	65	1,109	515	388	1,389
18	Czech Republic	3,573	1.1%	34	1,580	171	326	1,246
19	Austria	2,982	0.9%	33	780	155	289	1,527
20	Saudi Arabia	2,760	0.8%	345	515	147	547	1,024
	<b>Top 20</b>	<b>227,192</b>	<b>69.0%</b>					

Source: OECD-WTO TIVA 2018 release.

Note: 2015 data in million US\$. An analysis of final demand for Russian value added from the Eurasian Customs Union is not possible using the TIVA database, as the latter only contains Kazakhstan and Russia as member countries.

## 3. ECONOMIC UPGRADING IN GVCs

**This section gives an assessment of Russia's potential for economic upgrading in GVCs.** Economic upgrading is about getting more value added from a country's productive factors, improving the quality and quantity of those factors (especially labor skills and technological capabilities), redressing market failures, and engineering equitable distribution of opportunities and outcomes – which all add up to social cohesion. Increasing the domestic value added through GVC participation can include to engage more firms and workers (densification), but also to integrate higher value-added products, functions, and processes (Taglioni and Winkler 2016). Section 3.1 analyzes the country's scope for economic upgrading, as proxied by the upstreamness of imports and exports and their gap (see Appendix 6 for a description of the measure). Section 3.2 shows the potential for technology spillovers based on foreign firms' licensing and innovation behavior. The last section illustrates the typical development of forward and backward participation along the GVC taxonomy. Based on Russia's current integration trends in GVCs, we then assess Russia's stage in the GVC taxonomy and scope for economic upgrading.<sup>30</sup>

### 3.1 Scope for Economic Upgrading

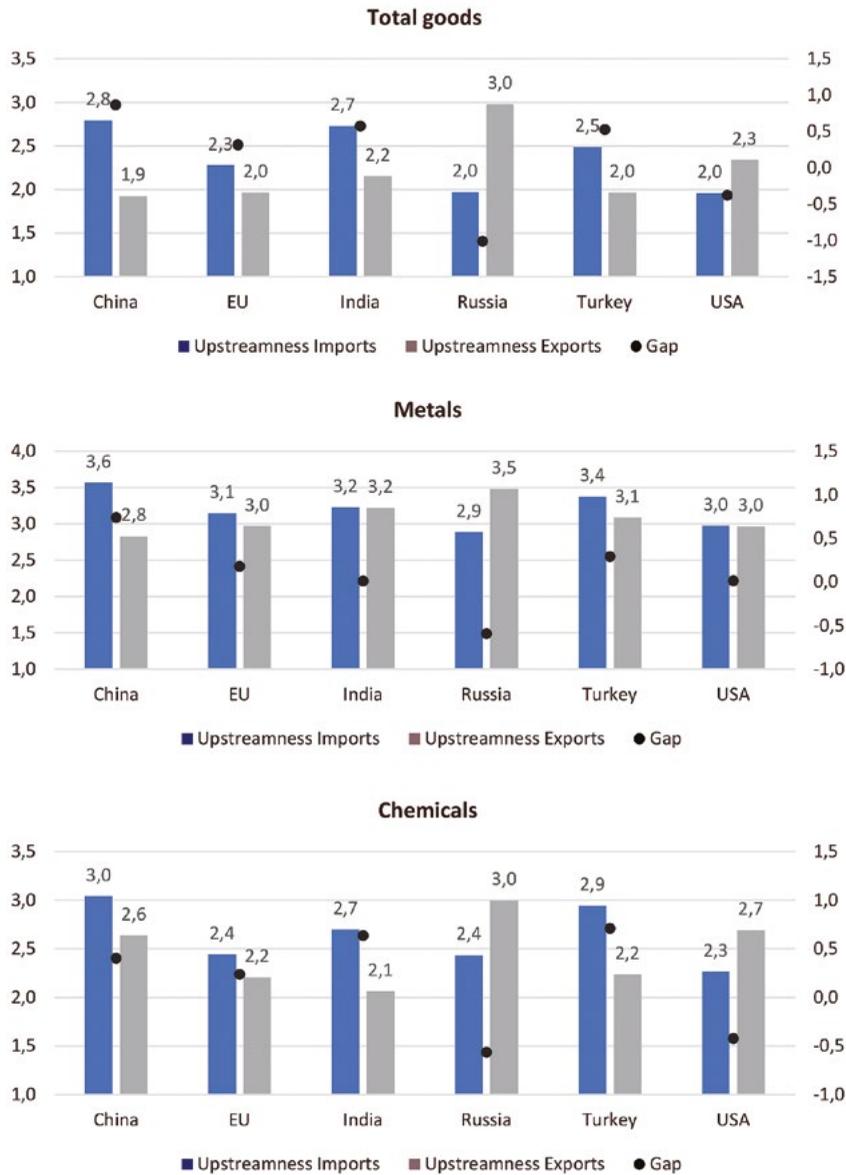
**Russia's goods export basket is very remote from the final consumer market, which is largely driven by its strong specialization in commodities, but even within commodity-intensive manufacturing sectors Russia's exports are more upstream compared to its peers.** Russia's goods export basket is very upstream, i.e. remote from final market demand (on average, three production stages) which is related to its strong focus on commodities (Figure 2-12). While metals exports are generally characterized by very high upstreamness, including in Russia's peer countries, Russia's metal exports are even further away from final demand relative to its peers. Similarly, in chemicals, Russia's exports are the most upstream, while they are closer to final demand in the EU, India, and Turkey. This alone could suggest Russia's specialization in tasks within the metals and chemicals value chains that require less transformation and create less domestic value addition. For example, Russia's metal exports are dominated by manufactures of basic metals such as copper, aluminum and nickel, while fabricated metal products such as parts, containers, structures or household articles play a much smaller role.

**At the same time, Russia's goods import basket is closer to the final consumer than that of its peers, indicating a smaller relative potential to increase domestic value added (Appendix 7).** Russia's gap between the upstreamness of imports and exports is negative, suggesting that the average number of production steps and, thus, opportunities to increase domestic value added along the chain are lower than elsewhere. The slightly negative gap in the USA is rather the reflection of a sophisticated consumer market and therefore intensive imports of finished consumer goods, rather than being a reflection of its exports. All other countries, especially China, show a positive gap. Russia's imports are, on average, two production stages away from final demand, compared to 2.3 stages in the EU, 2.5 stages in Turkey, 2.7 stages in India, and 2.8 stages in China. In metals, for example, all countries except Russia show a positive gap, while in chemicals, only Russia and the USA show a negative gap, pointing to unexploited opportunities to expand the domestic value added through product upgrading.

**Between 2011 and 2018, Russia's total goods exports moved closer to final demand, while imports moved slightly upstream, increasing the overall potential for economic upgrading.** A higher upstreamness of imports relative to exports could point to a larger potential to process imported inputs, add domestic value, and export those in the form of parts, components, or even final goods. However, there are strong underlying sectoral differences (Appendix 7). Since 2011, the upstreamness of imports has increased across all major sectors, except for metals and food and beverages. Exports moved closer to the final consumers in chemicals, textiles and footwear, and the transport sector, resulting in a significant reduction in the negative gap in the former two sectors and even a positive gap in the transport sector. This is also reflected in the overall negative gap which declined over the period 2011-18 (Appendix 8).

<sup>30</sup> We were unable to use the growth of domestic value added embodied in gross exports as a more direct upgrading measure because the latest available year in TiVA (2015/16) coincides with strong declines in exports in Russia resulting in negative growth rates over the period of interest.

Figure 2-12: Russia's goods exports are very remote from final demand, while imports are very close



Source: Own computations, adapted from Chor (2014) and UN Comtrade.

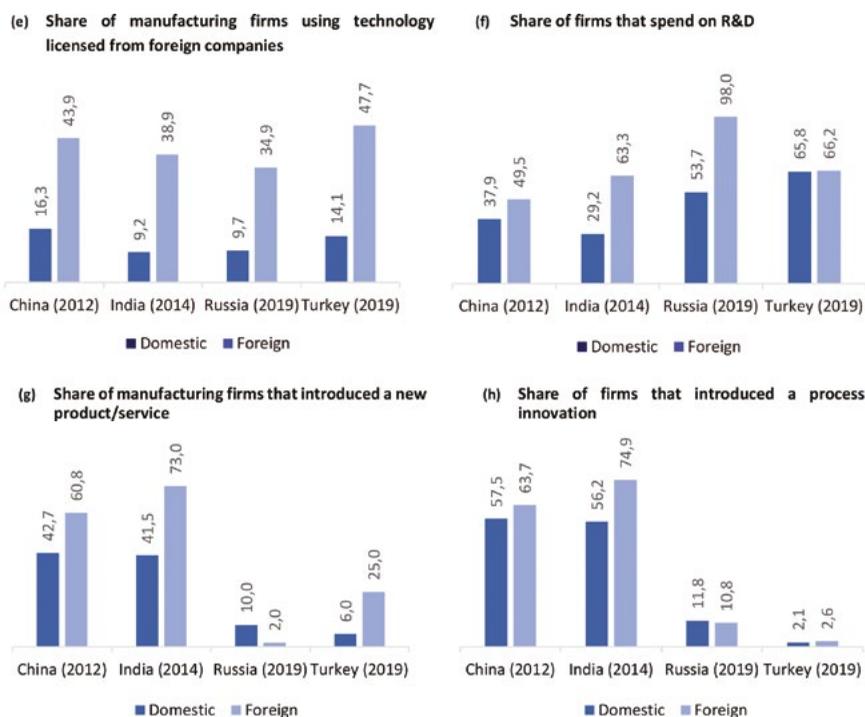
Note: 2018 data. Upstreamness measures the position of a country in the supply chain in terms of its distance (or number of production steps) to the final consumer. Upstreamness measures at the HS6 product level are used to compute the average upstreamness of a country's export and import baskets, based on the country's underlying HS6 goods exports (imports, resp.) and using the country's underlying export (import, resp.) shares as weights.

### 3.2 Scope for Technology Spillovers

The potential for process upgrading through technology spillovers from foreign investors in Russia seems to be limited, due to low technology licensing and innovation (Figure 2-13). According to the Enterprise Surveys, 35 percent of foreign firms in Russia use technology licensed from foreign companies – which could serve as a proxy for higher technology intensity – compared to coverage reaching around 40 percent or more in Russia's peer countries, in particular Turkey (panel a). Despite the low potential for technology spillovers, the coverage of foreign firms that

spend on R&D is extremely high, reaching 98 percent (panel b). The high coverage should not mask the fact that foreign manufacturing firms in Russia do not innovate. The share of firms introducing a new product or services is only 2 percent, by far the lowest among its peers (panel c). Foreign firms are only slightly better in innovating new processes (panel d). In both cases, foreign investors in China or India show shares between 60 and 70 percent. Low technology spillover potential from foreign investors reduces the potential for domestic suppliers to benefit from spillovers through GVC integration. FDI spillovers are examined in detail in Chapter 4 of this report.

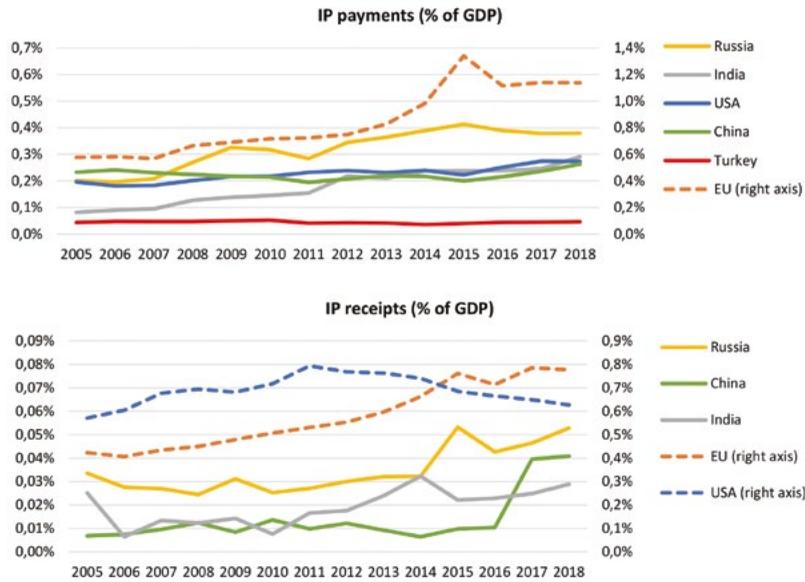
**Figure 2-13: Russia’s decline was driven by a lower integration in natural-resource intensive sectors**



Source: Own illustration. Data: Enterprise Surveys. Note: Foreign ownership = 10% or more foreign ownership share. Note: These differences are not statistically significant, i.e. differences in firm size or sector allocation between foreign and domestic firms can also explain differences in technology and innovation patterns (see chapter 4).

**Using national intellectual property payments and receipts data suggests a more positive picture for Russia (Figure 2-14).** The data cover payments and receipts between residents and nonresidents for the authorized use of proprietary rights and for the use of produced originals or prototypes and related rights. While the EU has spent more than 1 percent of its GDP on intellectual property in recent years (top panel, right axis), Russia’s payments as a percentage of GDP have doubled over the period 2005-2015, from 0.2 to 0.4 percent, although they showed a slight decline in the last three years of the period. This is followed by India, the USA, and China who spent between 0.25 and 0.3 percent of GDP on intellectual property, while Turkey shows a deceptively low share of 0.09 percent over the whole period. Interestingly, Russia’s receipts on intellectual property have also increased from 0.03 to 0.05 percent of its GDP over the period 2005-2018. While receipts for the EU and the USA are much higher, exceeding 0.6 percent (right axis), Russia fares well relative to China and India. These numbers suggest that Russia is making an effort not only to benefit from technology spillovers (IP payments), but also to innovate (IP receipts).

**Figure 2-14: Russia's IP payments and receipts as percentage of GDP grew strongly over 2005-2018**



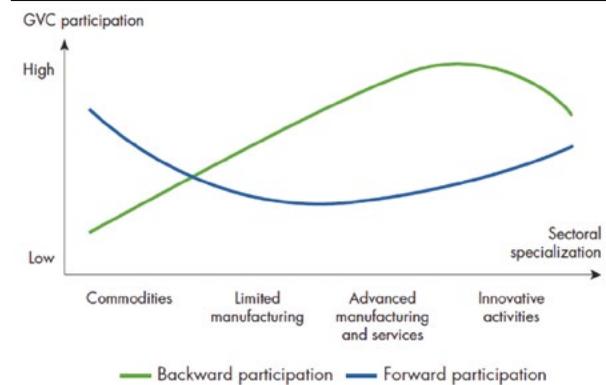
Source: Own illustration. Data: World Development Indicators.

Note: IP receipts data for Turkey only available for two years. IP data are based on Balance of Payments data covering payments and receipts between residents and nonresidents for the authorized use of proprietary rights (such as patents, trademarks, copyrights, industrial processes and designs including trade secrets, and franchises) and for the use, through licensing agreements, of produced originals or prototypes (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast).

### 3.3 Forward and Backward Participation along the GVC Taxonomy Groups

While some of the decline in Russia's forward GVC participation may be oil-driven, its combination with the increase in backward GVC participation and high expenditure and receipts on intellectual property could indicate a shift from the stage of commodities into more sophisticated GVCs (Figure 2-15). The abundance of natural resources or agriculture in a country is linked to high forward integration because commodities are used in a variety of downstream production processes that typically cross several borders. Participation in limited manufacturing reduces forward integration because commodities are less important in trade, and the manufacturing output at this stage (such as garments) is less likely to be used as inputs in destination countries. However, moving to advanced manufacturing and services GVCs, and especially innovative activities, increases forward participation. China's and Turkey's increase in forward GVC participation is in line with their upgrading from the group of limited manufacturing to advanced manufacturing and services. Backward integration is lowest for countries specialized in

**Figure 2-15: Average backward and forward GVC participation across taxonomy groups**



Source: WDR 2020 based on World Bank (2019, p.23).

Note: The approximate distribution is based on backward and forward GVC participation averages by taxonomy group for the period 2010-15. Within each group, there is variation across countries.

commodities and starts to expand for countries in the limited manufacturing group. Countries specializing in advanced manufacturing and services are highly reliant on imported inputs for exports. Backward participation is slightly lower for the countries in the innovative group because their activities are less dependent on imported inputs. One would need more updated data to determine whether the slight increase in Russia's backward participation between 2011 and 2016, which stands in stark contrast to its peers, could be an indication that the country is moving away from the commodity GVCs group towards specialization in more sophisticated GVCs.

## 4. LINKAGES TO DOMESTIC SUPPLIERS

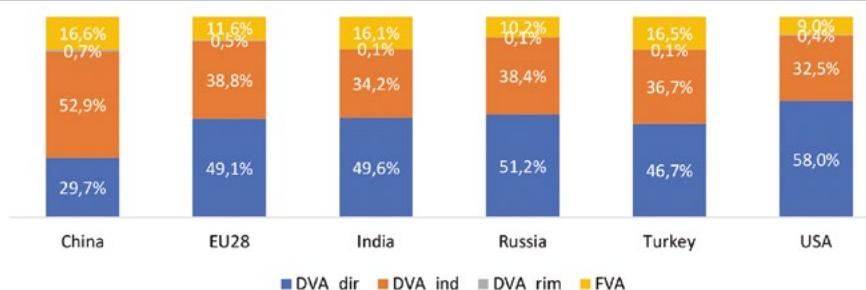
**One option to foster economic diversification and functional upgrading is to create and strengthen linkages between export sectors and supplying industries.** The goal of this section is therefore to identify sectors with a potential for strengthening linkages to domestic suppliers. While domestic sourcing seems to be at odds with backward GVC participation, they can be reconciled. A country's gross exports consist of a domestic and a foreign value added component. A higher foreign value added share in exports does not necessarily mean that there is less scope for domestic sourcing.<sup>31</sup> Moreover, the overall objective should not be to increase backward participation per se, but to rely on both imported inputs and domestically sourced inputs to increase the level of domestic value added embodied in its exports. In a first step, this section looks in more detail at the different components of gross exports, in particular the indirect domestic value added contribution of upstream sectors, followed by an analysis of inter-sectoral linkages.

### 4.1 Decomposition of Gross Exports

**Russia's gross exports rely more strongly on domestic value added from upstream sectors compared to its peers.** Domestic value added in exports can be further decomposed into the direct contribution of a sector, the indirect contribution of upstream sectors that supply inputs to that sector, and re-imported domestic value added (see Appendix 2 and Tagliani and Winkler 2016). The decomposition of gross exports reveals that Russia's domestic value added contribution of upstream sectors to gross exports was 38 percent in 2016, on par with the EU, higher than in the USA, India, and Turkey, but much lower than in China<sup>32</sup> (Figure 2-16). This represents an increase of 3 percentage points since 2015 (Appendix 9).

**Russia's lower reliance on domestic value added upstream sectors in 2015 was driven by the mining sector.** The indirect domestic value added contribution to exports in mining of energy-producing products is only one quarter, in other words these products are hardly processed in Russia but directly exported. The opposite is true for coke, where upstream sectors contribute more than half of the sector's export value. In other natural resource-intensive

**Figure 2-16: Russia's decline was driven by a lower integration in natural-resource intensive sectors**



Source: OECD-WTO TIVA 2018 release.

Note: 2016 data. DVA\_dir = direct domestic value added contribution, DVA\_ind = indirect domestic value added contribution, DVA\_rim = re-imported domestic value added contribution, FVA = foreign value added contribution.

<sup>31</sup> Interpreting an increasing foreign value added share in exports as domestic value added decline implies that both are substitutes. However, the foreign and domestic value added portions in exports (in levels), FVA and DVA, can have a complementary relationship. This is particularly important in the context of developing countries that enter a new GVC which requires foreign machinery and imported inputs to be able to create domestic value added. Without the foreign value added content, FVA, a country most likely would not be able to produce a product or engage in GVCs at all. If FVA grows at a faster pace than DVA, countries would still see backward participation expand, but their domestic value added in levels would not fall.

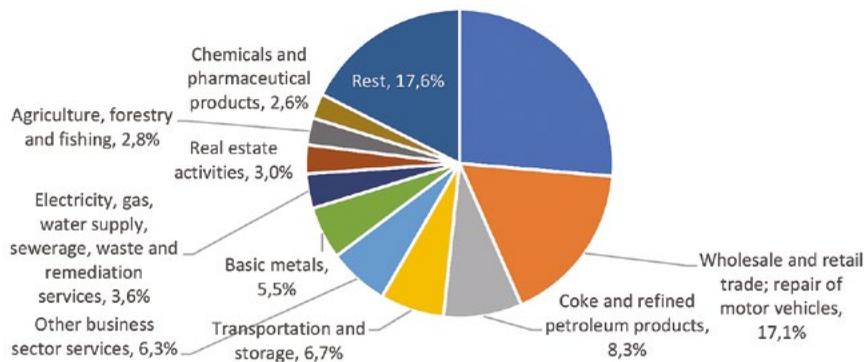
<sup>32</sup> Interestingly, China's upstream sectors make up more than half of the country's export value, while this share is less than a third in the USA. By contrast, the direct contribution of the export sector is 58 percent in the USA compared to less than 30 percent in China. This stark difference could point to a specialization in higher-value added exports of the USA.

sectors like basic metals, chemicals, and wood, we find a similarly high contribution of upstream sectors. In services, the contribution of upstream sectors is mixed. It is low in finance and insurance, real estate, and wholesale and retail trade, but highest in accommodation and food services, utilities, and publishing (Appendix 9).

## 4.2 Inter-sectoral Linkages

**Focusing on the source sectors of domestic value added embodied in Russian exports confirms the strong role of mining and coke, although business services also play an important role (Figure 2-17).** Mining and extraction of energy-producing products makes up more than a quarter of the total domestic value added portion in exports, while coke and refined petroleum products represent another 8 percent. Wholesale and retail trade is the second largest sector in the domestic value added in exports, representing more than 17 percent, while transportation and storage and other business sector services also contribute more than 6 percent each. In sum, mining and coke and business services represent almost two thirds of Russia’s domestic value added in exports in 2015.

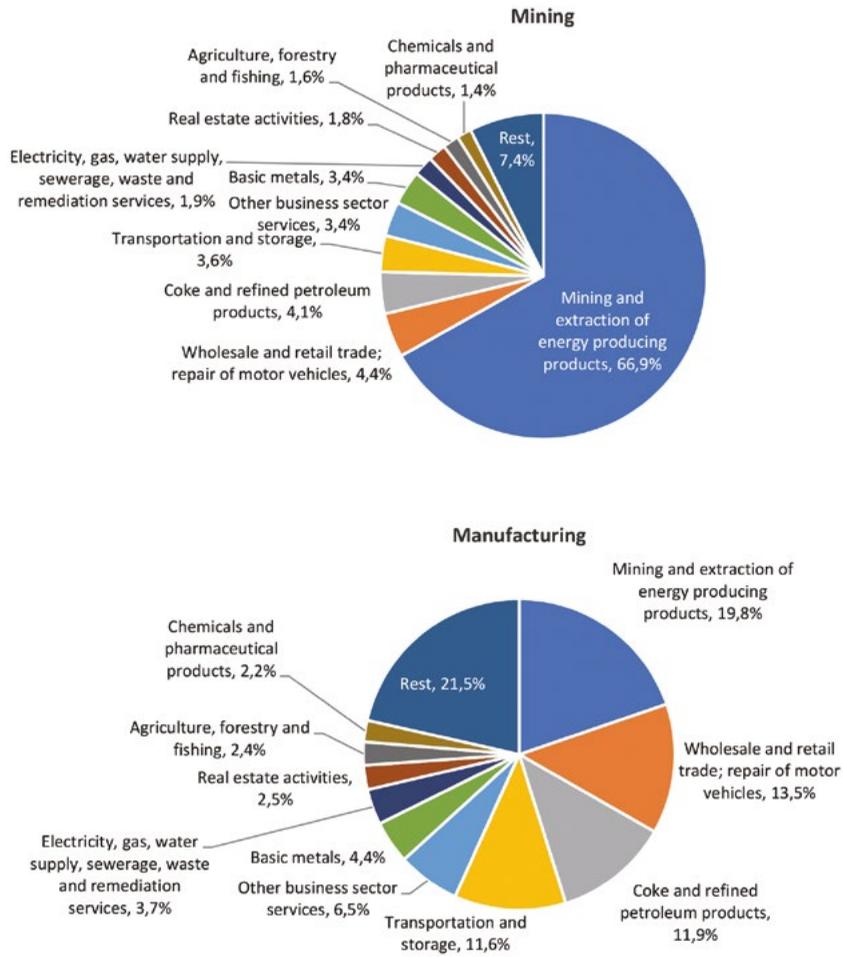
**Figure 2-17: Russia’s export sectors strongly rely on mining and trading to provide domestic inputs**



Source: OECD-WTO TIVA 2018 release. Note: 2015 data.

**The manufacturing sector has more potential for domestic value added creation through backward linkages to mining and business services (Figure 2-18).** While in mining, the largest contribution to the domestic value added in exports is generated within the sector (around two thirds), in manufacturing we find more backward linkages to commodities and business services. The top five source sectors of manufacturing domestic value added that is exported are all non-manufacturing sectors, namely mining, wholesale and retail trade, coke and refined petroleum products, transportation and storage, and other business services sectors, and represent more than 60 percent. In business sector services, the domestic value added in exports consists predominantly of value added created in other services sectors.

**Figure 2-18: Russia’s manufacturing exports show more diversified linkages to domestic upstream sectors**



Source: OECD-WTO TiVA 2018 release. 2015 data.

This chart shows the distribution of domestic upstream sectors providing inputs to the manufacturing export sector in Russia.

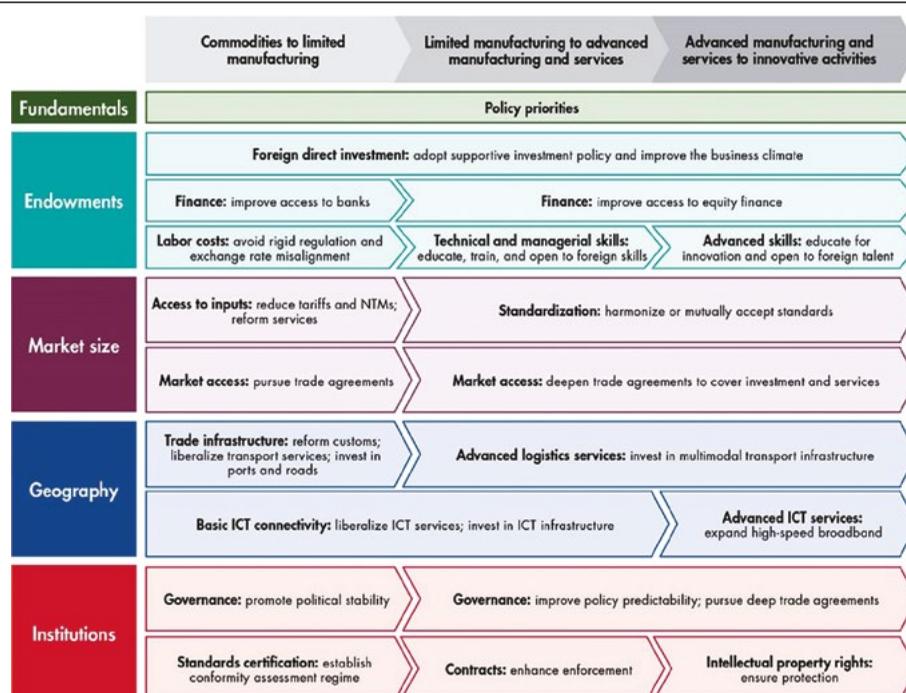
## 5. POLICIES SUPPORTING ECONOMIC DIVERSIFICATION AND UPGRADING THROUGH GVC INTEGRATION

This section identifies policies that could support economic diversification and upgrading through GVC integration. It first applies the strategic policy framework of GVC integration to Russia (World Bank 2019), which is based on an assessment of the country’s key challenges compared to other country types of GVC integration, followed by a benchmarking analysis of key policy priorities that currently prevent Russia from transitioning to the stage of advanced manufacturing and services GVCs.

### 5.1 Strategic Policy Framework

This section highlights a broad range of policies that can help countries accelerate GVC participation, to deepen the levels of participation, and to capture more of the gains from GVCs. But some policies are more salient than others, depending on the stage of GVC participation. Figure 2-19 is a summary of the policies that countries should consider as they plan their transition to the next stage of GVC participation. The framework focuses on four fundamentals – endowments, market size, geography, and the quality of institutions – which all determine a country’s GVC integration.

Figure 2-19: Different policy priorities underpin the transitions between types of GVC participation



Source: WDR 2020 (World Bank 2019, p. 187).

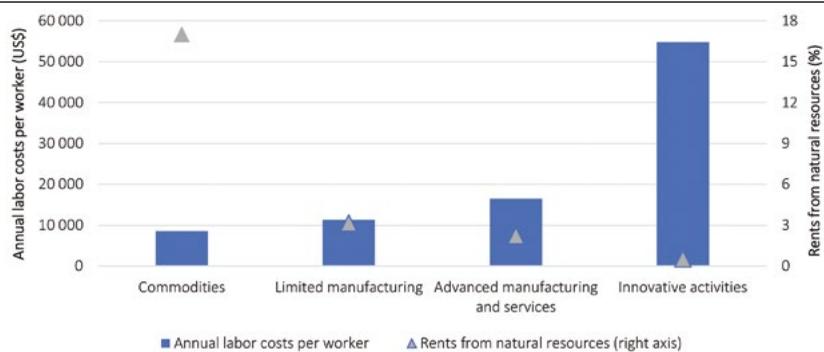
Note: ICT = information and communication technology, NTMs = non-tariff measures.

Choosing the right policies can shape each one of these fundamentals and thus GVC participation. Foreign capital, whether efficiency-seeking or resource-seeking, can enhance host country integration in GVCs. Trade liberalization can promote access to inputs and expand effective market size and promote participation in GVCs. Trade in parts and components within international production networks is highly sensitive to logistics performance and uncertainty in bilateral international transport times. And preferential trade agreements (PTAs) can enhance institutional quality and increase GVC participation. Deep PTAs cover legal and regulatory frameworks, harmonize customs procedures,

and set rules on intellectual property rights (World Bank 2019). The case of Vietnam shows how improvements in infrastructure, the business environment, and trade agreements helped the country attract FDI and become an emerging GVC player (see Appendix 10). The case of South Korea shows how the country managed to upgrade from specialization in low-value added to complex manufactured exports (see Appendix 11).

**Russia is part of the commodities GVC group and shares some key characteristics with other countries in the group in terms of extent of GVC participation, sectoral specialization, and quality of institutions.** Russia shares several features with other countries in the commodity GVC stage, such as limited backward GVC participation and a small share of manufacturing in the domestic value added exported. At the same time, forward participation is high, due to its high share of commodities in the domestic value added exported. Over the period 2006-15, Russia derived 15 percent of its GDP from natural resources, which is on par with the commodities group (Figure 2-20, right axis). In addition, Russia's relatively low institutional quality is on par with other countries in the commodity group (see also section 5.2).

**Figure 2-20: Countries specializing in limited manufacturing rely on low labor costs, and countries specializing in commodities derive almost a fifth of GDP from natural resources**



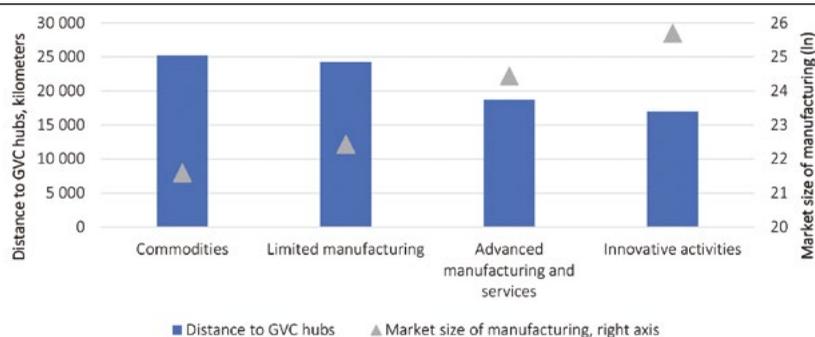
Source: World Bank (2019, p. 43). Data: Penn World Table, World Bank's WDI database, and GVC taxonomy for the year 2011.

Note: The left axis shows average annual labor costs and the right axis the average rents from natural resources as a share of GDP by GVC taxonomy group, with averages over 2006–15. The average of labor costs for countries specializing in commodities includes several high-income countries (such as Australia, Norway, and Saudi Arabia).

**Regarding other fundamentals, Russia is not comparable with the majority of countries in the commodity group (such as in Sub-Saharan Africa or Latin America) that are characterized by relatively cheap labor and a smaller market size.** Russia's average annual labor costs per worker were around US\$15,000 over the period 2006-15, much higher than the average US\$8,600 for countries in this group and in line with countries in advanced manufacturing and services GVCs like Turkey (Figure 2-20, left axis). With a population of 144 million and a manufacturing value added of 26.1 (in ln), Russia is also characterized by a relatively large domestic market which exceeds the average of countries in the innovative GVC activities (Figure 2-21, right axis). In addition, Russia's geographical location seems to be more advantageous with its proximity to both GVC hubs Germany and China, compared to many Sub-Saharan African or Latin American countries. Russia's total distance to the GVC hubs (including the USA) is around 15,000 kilometers, much lower than the average of countries in the commodities group (25,000 kilometers) (Figure 2-21, left axis). Focusing on geographical distance alone, however, masks Russia's dependence on the Northern Seas and thus remoteness from the main trade routes.

**Russia's upgrading trajectory therefore cannot be expected to look like that of a typical commodity exporter that aims to move into limited manufacturing GVCs.** In fact, several of Russia's fundamentals make it more challenging for the country to increase backward GVC participation. A recent cross-country analysis suggests that larger market size, endowment with land and natural resources, and a larger distance to GVC hubs are negatively linked to backward participation, but positively to forward participation. At the same time, endowments with low-skilled labor and capital are positively related to backward participation (Fernandes, Kee, and Winkler 2020). It is possible that commodity-intensive countries like Russia are suffering from Dutch Disease symptoms, where an increase in relative prices and wages of the tradeable sector (commodities) reduces the competitiveness of the manufacturing

**Figure 2-21: Countries specializing in commodities are more remotely located from the GVC hubs and have a smaller manufacturing market size**



Source: Own illustration, based on forthcoming publication on the GVC taxonomy (joint work by Aaditya Mattoo, Daria Taglioni, and Deborah Winkler). Data: CEPII, World Bank’s WDI database, and GVC taxonomy for the year 2011.

Note: The left axis shows total distance (in kilometers) to the GVC hubs China, Germany, and the USA, while the right axis shows the average market size of the manufacturing sector (value added in natural logarithms) by GVC taxonomy group, with averages over 2006-15.

sector and therefore creates barriers to backward participation. While Norway, another commodity exporter, also shows low overall backward participation (13.7 percent in 2016), its GVC integration of the manufacturing is much higher at 26 percent compared to only 13 percent in Russia (OECD TIVA). However, Norway is also much smaller and geographically and economically tied to the EU market, which enables backward participation.

**While that there may be no close comparators for Russia, Canada provides an example of a rather unique and striking trajectory Russia could take in transforming the structure of its economy from primary commodities to advanced manufacturing and services.** While in the early 1980s, Canada’s main export sectors consisted of minerals and metals, by the early 1990s the automobile industry emerged as a leading sector. In addition, new sectors emerged — specifically pulp and paper and oil/petroleum as did hydroelectricity. By 2015, Canada’s export structure showed an even distribution between commodities, manufacturing and services with the top sectors being automotives, machinery and equipment and energy, followed by metals and minerals and consumer goods. Other commodities such as forestry products and agricultural products have recovered as well, while services exports reported one of the highest growth rates (Cross 2016). Key to its success was trade with international markets and integration into key value chains, specifically those in the United States, which has been fostered by the Free Trade Agreement with the US in 1989 and that of the North American Free Trade Agreement (NAFTA) in 1994.

## 5.2 Key Policy Priorities to Promote Upgrading into Advanced Manufacturing and Services GVCs

**It is important to outline that upgrading into more advanced GVCs takes time. Only several countries managed to transition across GVC taxonomy groups over the period 1990-2015 (see section 1.2).** However, they have several policies in common. In particular, the growth of FDI inflows picked up significantly in the years prior to upgrading and continued after countries transition, especially for countries breaking into limited manufacturing GVCs (such as in Argentina, Cambodia, Indonesia, and South Africa). Similarly, manufacturing tariffs fell substantially in the years prior to such transitions and saw a continued decline in the five years after upgrading, in particular for countries transitioning into advanced manufacturing and services GVCs (such as in China, the Czech Republic, Romania, and Turkey) (World Bank 2019).

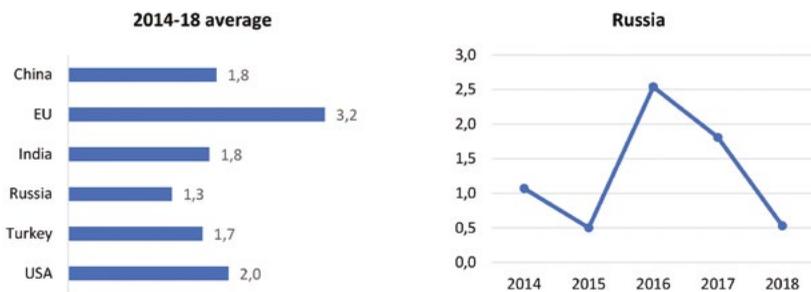
**Given its unique challenges, Russia has several options to promote upgrading into advanced manufacturing and services GVCs:** (i) by deepening and expanding its GVC participation in manufacturing, in particular commodity-intensive sectors such as chemicals, metals, and the food value chain (product and functional upgrading), (ii) by upgrading into more complex GVCs which includes moving into higher-value added segments within these

manufacturing sectors and strengthening the role of higher-value added services that can be embodied in manufacturing exports or exported directly (product and functional upgrading), and also (iii) by facilitating FDI which acts as a catalyst for Russian GVC upgrading due to its potential to deliver productivity and technological spillovers (process upgrading). The following section identifies two bottlenecks – based on the strategic policy framework – that currently prevent Russia from transitioning to the stage of advanced manufacturing and services GVCs.

## Attracting FDI

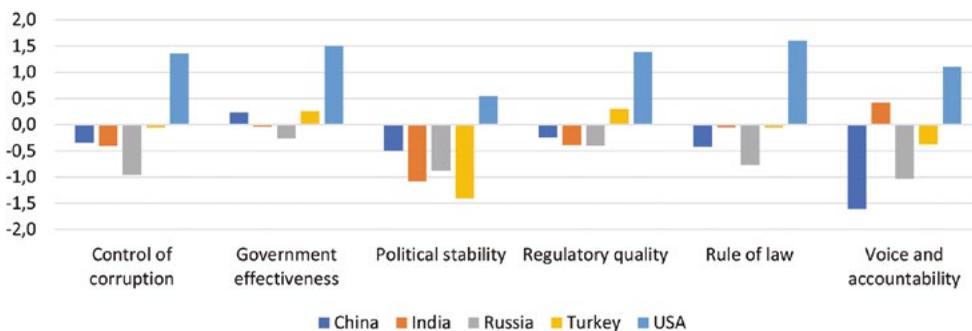
**While FDI acts as a catalyst for Russian GVC upgrading, due to its potential to deliver productivity and technological spillovers, FDI inflows are relatively low.** Russia’s FDI inflows as a percentage of GDP between 2014 and 2018 are relatively low (Figure 2-22, left panel), which could be related to lower governance and weak investor protection. FDI inflows are positively linked to backward participation (Fernandes, Kee, and Winkler 2020). But Russia’s net FDI inflows over the period 2014-18 represented only 1.3 percent of its GDP, the lowest among its comparator countries, in particular the EU and the USA (3.2 and 2 percent, respectively), but also China, India, and Turkey (1.7-1.8 percent). While FDI inflows to Russia had recovered in 2016 following two weak years, they dropped back to 0.5 percent in 2018 (Figure 2-22, right panel). Low FDI inflows could be related to lower governance, in particular with regard to corruption and rule of law, and to a lesser extent also government effectiveness and regulatory quality in Russia, compared to its comparators (Figure 2-23).

Figure 2-22: FDI net inflows as percentage of GDP in Russia are relatively low



Source: WDI.

Figure 2-23: Russia’s governance is relatively low in areas that relate to FDI



Source: World Governance Indicators. Note: 2011-2017 average.

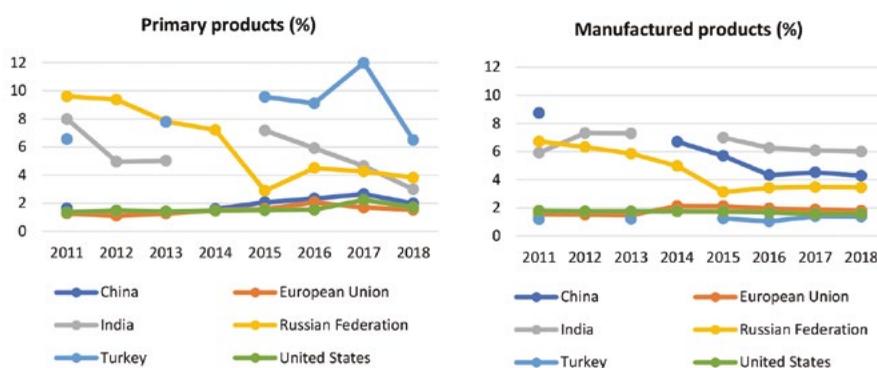
**Russia's governance is relatively low in particular in areas that relate to FDI.** A higher political stability is related to increased backward participation (Fernandes, Kee, and Winkler 2020). Russia shows low performance in political stability, rule of law, and regulatory quality, which all matter for a country's attractiveness to foreign investors (Figure 2-23). Political stability and absence of violence/terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Rule of law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Regulatory quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Russia shows the lowest scores in regulatory quality and rule of law, and the third lowest score in political stability after Turkey and India.

**Taking a closer look at Russia's components of Doing Business minority-investor protection reveals weaknesses in particular in the extent of disclosure, director liability, and ownership and control (Appendix 12).** The extent of disclosure index measures the approval and disclosure requirements of related-party transactions. The extent of director liability index measures when board members can be held liable for harm caused by related-party transactions and what sanctions are available. In both areas, Russia shows the lowest index among its comparators. The extent of ownership and control index measures the rules governing the structure and change in control of companies. Here, Russia shows the second lowest index after the USA.

### Liberalizing Trade and Improving Connectivity

**While trade liberalization can improve access to high-quality inputs, import tariffs in Russia are higher than in some other countries.** Trade liberalization can improve access to high-quality inputs of both goods and services and expand effective market size, helping promote participation and upgrading in GVCs. In particular, functional or product upgrading may require inputs from abroad to facilitate more sophisticated production at home. While import tariffs on manufactured and primary products have fallen strongly in Russia since WTO accession in 2011, several peers still show lower tariffs (Figure 2-24). Weighted average import tariffs on manufactured products in Russia fell from more than 6 percent in 2011 to 3.1 percent in 2015 but increased slightly to 3.5 percent in 2016-18. Those on primary products fell from almost 10 percent to 2.9 percent but climbed back to around percent between 2016 and 2018. While Russian import tariffs on manufactured products are lower than in India and China, they are still twice as high compared to those imposed in the EU, the USA, and especially Turkey. Higher manufacturing import tariffs are linked to reduced backward participation (Fernandes, Kee, and Winkler 2020). Import tariffs on primary products are highest in Turkey and Russia, while China, the EU, and the USA impose the lowest tariffs. This shows room for further improvement in Russia.

**Figure 2-24: Import tariffs on primary and manufactured products have fallen, but are still higher than in some other countries**

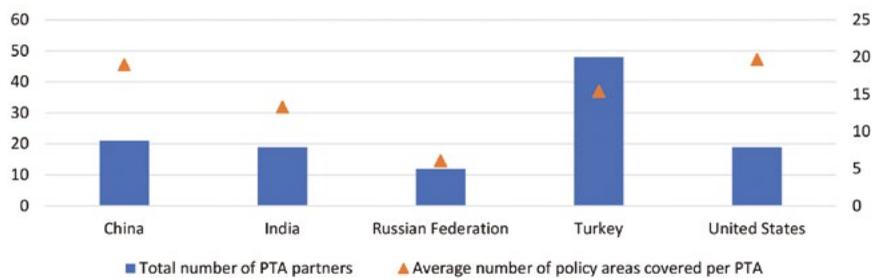


Source: WDI. Note: Weighted import tariffs. Weighted mean applied tariff is the average of effectively applied rates weighted by the product import shares corresponding to each partner country.

**In addition, there is much scope to lower the time and costs of trading across borders in Russia (Appendix 13).** Exports in Russia are subject to lengthy documentary and border compliance of 25 and 66 hours, respectively, on average, compared to only 4 and 10 hours in Turkey, or 2 hours each in the USA. Compliance times on the importing side only look better with regard to border compliance (30 hours), while documentary compliance takes on average 43 hours, more than twice as long as in India which is the second-lowest performer. The longer time required to import and export also translates into significantly higher costs for Russia of roughly US\$670 for a standardized cargo of goods, compared to roughly US\$230-350 in China, India, and the USA. Turkey is a peculiar case: its costs to export are around US\$380, but only US\$100 to import. Russia’s long time and high cost of trading is related to the country’s relatively poor logistics performance, which is trailing its comparators (see chapter 3).

**Finally, Russia also trails peer countries with regards to the number of policy areas covered by PTAs which could be driven by the low number of its preferential trading partners and institutional quality (Figure 2-25).** By 2017, Russia’s average number of policy areas covered in PTAs (out of 52 possible areas) was the lowest among comparator countries. Russia’s PTAs only covered 6 policy areas on average which compares with more than 19 policy areas for China and the USA, respectively, 15 for Turkey, and 13 for India in 2017 (right axis). Russia had only signed PTAs with 11 partner countries, compared to 19-21 in India, the USA, and China, and a staggering 48 in Turkey (left axis); these PTAs were established with Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The benefits of PTAs tend to go hand-in-hand with the institutional quality of trading partners, while PTAs can also enhance institutional quality and thus GVC participation.

**Figure 2-25: The total number of PTA partners and average number of policy areas covered per PTA in Russia is low**



Source: World Bank Deep Trade Agreements Database.

Note: 2017 data. Number of PTAs includes Customs Unions, Economic Integration Agreements, and Free Trade Agreements. There are 52 policy areas considered in the database.

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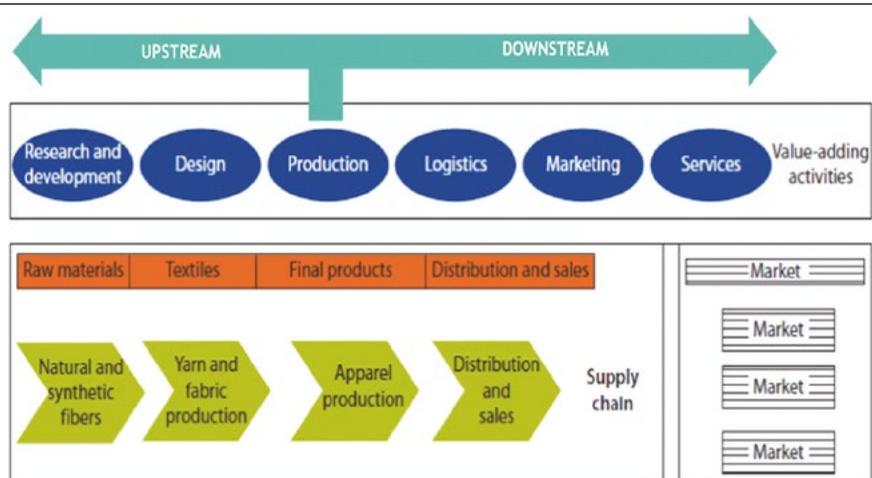
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## APPENDICES

### Appendix 1: Scope of the analysis

**This chapter focuses on global value chains as opposed to global supply chains.** The supply chain focuses on the physical transformation and transportation of raw materials (or inputs) to final products. A value chain, by contrast, embraces the full range of value adding activities in a supply chain, including research and development, design, input sourcing, processing, marketing, distribution, and customer support. Value added can be defined as the amount by which the value of a good/service is increased at each stage of its supply chain, exclusive of outside purchases. Figure A1 illustrates this difference for the apparel supply and value chain. In addition, GVCs have two more features: first, value addition happens across different geographical locations. And second, GVCs are governed by a lead firm which is typically the final producer or buyer, but can also include first-tier suppliers.

**Figure A1: The apparel value chain embraces the full range of value adding activities in the supply chain**



Source: Modified from Frederick and Staritz (2014).

**In addition, this chapter distinguishes between the buyer's and seller's perspective in GVCs.** Integrating a country's domestic firms into GVCs increases the possibility for GVC spillovers through exporting to a buyer abroad or supplying to a foreign firm in the country (seller's perspective). But countries should also consider from a buyer's perspective the opportunities that GVC participation can provide. Firms can join existing GVCs through importing parts and components that are used in production at home without the need to build a complete array of value chains at home (Taglioni and Winkler 2016).

**The analysis makes use of various datasets and classifications, ranging from the GVC taxonomy, to gross trade, to trade in value added, to firm-level data.** There is no single classification, dataset, or measure that allows to identify a country's position in GVCs. The GVC taxonomy that has been introduced in the WDR2020 (World Bank 2019) differentiates between four types of GVC participation (commodities, limited manufacturing, advanced manufacturing and services, and innovative activities) and allows to identify a country's type of participation and common characteristics across taxonomy groups. The use of gross trade data from UN Comtrade allows to identify the main import and export data at a detailed HS6-digit product level and, combined with informed classifications, whether trade is in final or intermediate goods (UN Comtrade).

**However, gross trade data do not reveal the domestic and foreign value added portions of trade.** The development of value-added trade data represents a fundamental step forward in understanding GVC trade, in particular the GVC segment a country specializes in. These are based on international input-output data which, like national input-output data, allow assessment of inter-sectoral linkages, but additionally include the source and destination countries and sectors of value added trade. This analysis uses the newly released OECD-WTO 2018 TiVA data. One challenge for the analysis is the last year in the dataset ending in 2015, with 2016 estimates being available for some indicators. Given Russia's trade slowdown during this period – which is related to its currency depreciation, the drop in oil prices, and sanctions – we limited the core of the analysis to indicators that are measured in shares rather than levels, assuming that relative magnitudes are more stable.

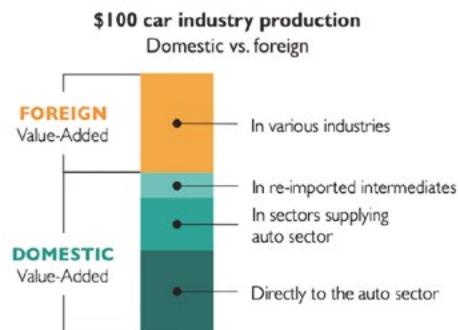
**As a result, this chapter draws on various measures at the country and sector level to identify Russia's extent of GVC integration as a buyer and seller, and its sectoral specialization.** GVC integration as a buyer is mainly captured by the foreign value added embodied in a country's or sector's exports. On the selling side, GVC participation is captured by the domestic value added embodied in foreign country exports as a percentage of a country's total exports. Another measure is the domestic value added embodied in foreign final demand. The use of several measures allows to look at different angles of GVC participation.

**While it is important to identify the extent of GVC integration and sectoral specialization, another main question addressed in this chapter is the scope for economic upgrading in Russia including through backward linkages.** We apply the concept of upstreamness of imports and exports as well as their gap to capture the potential of a country for economic upgrading. In addition, this analysis studies linkages to domestic suppliers, by decomposing gross exports into the sources of value added creation. The decomposition allows to identify not only the country that creates the value added in exports (domestic versus foreign), but also the sector of origin (intra-industry versus upstream). Finally, we perform a gap analysis comparing Russia's characteristics with those that are required from countries specializing in more sophisticated GVCs in the taxonomy.

## Appendix 2: Decomposition of gross exports and the concept of value added

Analyzing trade on the basis of value added rather than gross flows more accurately accounts for a country's economic relevance (by avoiding double-counting) and reflects a country's domestic and international linkages. Trade in value added data are based on international I-O tables which allow to differentiate between domestic and foreign value added embodied in exports. In most cases, the source countries (of foreign value added) and destinations (of domestic value added) can also be identified.

This graph shows the decomposition of gross exports in the automotive sector into (i) the foreign value added, and (ii) the domestic value added portions.



- The domestic value added portion of exports consists of three components: (i) the direct value added contribution within the automotive sector, (ii) the indirect contribution of upstream sectors supplying to the automotive sector, and (iii) re-imported intermediates.
- This graph also illustrates that gross export data include the foreign value added component embodied in gross exports. The foreign value added portion of exports, both in shares and levels, is broadly used as a measure of backward GVC integration.

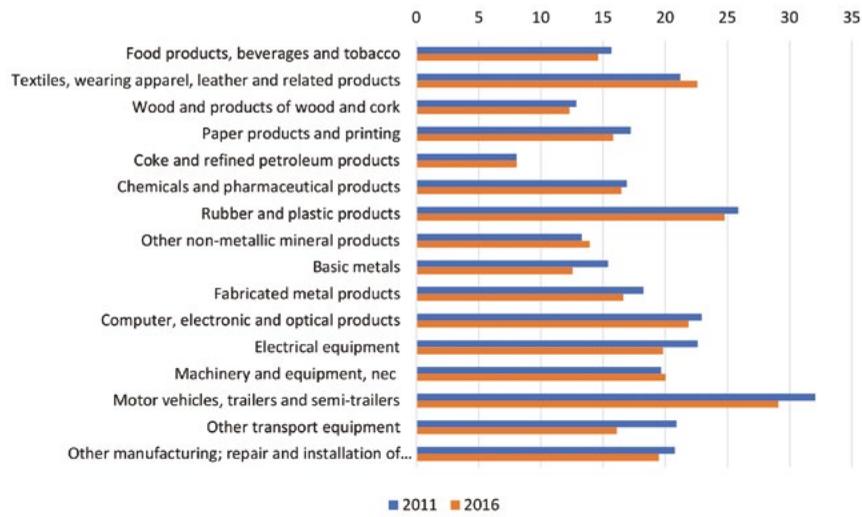
Source: Modified from Taglioni and Winkler (2016). Adapted from Baldwin and Lopez-Gonzalez (2013).

## Appendix 3: Domestic value added embodied in exports, Russia, 2011 and 2015

IND	Industry	Value (million US\$)			Percent of total		
		2011	2015	CAGR	2011	2015	Diff.
<b>DTOTAL</b>	<b>TOTAL</b>	<b>464,181</b>	<b>331,573</b>	<b>-8.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>
<b>D01T03</b>	<b>Agriculture, forestry, and fishing</b>	<b>8,352</b>	<b>6,927</b>	<b>-4.6%</b>	<b>1.8%</b>	<b>2.1%</b>	<b>0.3%</b>
<b>D05T09</b>	<b>Mining and quarrying</b>	<b>146,233</b>	<b>106,657</b>	<b>-7.6%</b>	<b>31.5%</b>	<b>32.2%</b>	<b>0.7%</b>
D05T06	Mining and extraction of energy-producing products	135,611	100,272	-7.3%	29.2%	30.2%	1.0%
D07T08	Mining and quarrying of non-energy producing products	9,998	5,461	-14.0%	2.2%	1.6%	-0.5%
D09	Mining support service activities	623	924	10.3%	0.1%	0.3%	0.1%
<b>D10T33</b>	<b>Manufacturing</b>	<b>177,517</b>	<b>120,284</b>	<b>-9.3%</b>	<b>38.2%</b>	<b>36.3%</b>	<b>-2.0%</b>
D10T12	Food products, beverages, and tobacco	5,461	5,219	-1.1%	1.2%	1.6%	0.4%
D13T15	Textiles, wearing apparel, leather, and related products	473	455	-1.0%	0.1%	0.1%	0.0%
D16	Wood and products of wood and cork	4,525	3,479	-6.4%	1.0%	1.0%	0.1%
D17T18	Paper products and printing	3,130	2,345	-7.0%	0.7%	0.7%	0.0%
D19	Coke and refined petroleum products	76,653	51,054	-9.7%	16.5%	15.4%	-1.1%
D20T21	Chemicals and pharmaceutical products	23,755	13,151	-13.7%	5.1%	4.0%	-1.2%
D22	Rubber and plastic products	1,253	1,251	0.0%	0.3%	0.4%	0.1%
D23	Other non-metallic mineral products	1,130	1,132	0.0%	0.2%	0.3%	0.1%
D24	Basic metals	44,445	26,132	-12.4%	9.6%	7.9%	-1.7%
D25	Fabricated metal products	4,959	2,684	-14.2%	1.1%	0.8%	-0.3%
D26	Computer, electronic, and optical products	2,092	2,191	1.2%	0.5%	0.7%	0.2%
D27	Electrical equipment	1,626	1,355	-4.5%	0.4%	0.4%	0.1%
D28	Machinery and equipment, nec	2,491	2,136	-3.8%	0.5%	0.6%	0.1%
D29	Motor vehicles, trailers, and semi-trailers	1,656	1,753	1.4%	0.4%	0.5%	0.2%
D30	Other transport equipment	3,188	3,613	3.2%	0.7%	1.1%	0.4%
D31T33	Other manufacturing; repair and installation of machinery and equipment	683	2,335	36.0%	0.1%	0.7%	0.6%
<b>D35T39</b>	<b>Electricity, gas, water supply, sewerage, waste and remediation services</b>	<b>1,660</b>	<b>904</b>	<b>-14.1%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>-0.1%</b>
<b>D41T43</b>	<b>Construction</b>	<b>1,070</b>	<b>572</b>	<b>-14.5%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>-0.1%</b>
<b>D45T82</b>	<b>Total business sector services</b>	<b>128,151</b>	<b>95,325</b>	<b>-7.1%</b>	<b>27.6%</b>	<b>28.7%</b>	<b>1.1%</b>
D45T47	Wholesale and retail trade; repair of motor vehicles	73,351	49,019	-9.6%	15.8%	14.8%	-1.0%
D49T53	Transportation and storage	28,128	26,290	-1.7%	6.1%	7.9%	1.9%
D55T56	Accommodation and food services	3,630	2,698	-7.1%	0.8%	0.8%	0.0%
D58T60	Publishing, audiovisual, and broadcasting activities	441	474	1.9%	0.1%	0.1%	0.0%
D61	Telecommunications	1,463	1,425	-0.7%	0.3%	0.4%	0.1%
D62T63	IT and other information services	1,413	1,963	8.6%	0.3%	0.6%	0.3%
D64T66	Financial and insurance activities	1,700	1,948	3.5%	0.4%	0.6%	0.2%
D68	Real estate activities	1,201	671	-13.5%	0.3%	0.2%	-0.1%
D69T82	Other business sector services	16,826	10,836	-10.4%	3.6%	3.3%	-0.4%
<b>D84T98</b>	<b>Public admin, education and health; social and personal services</b>	<b>1,198</b>	<b>905</b>	<b>-6.8%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.0%</b>

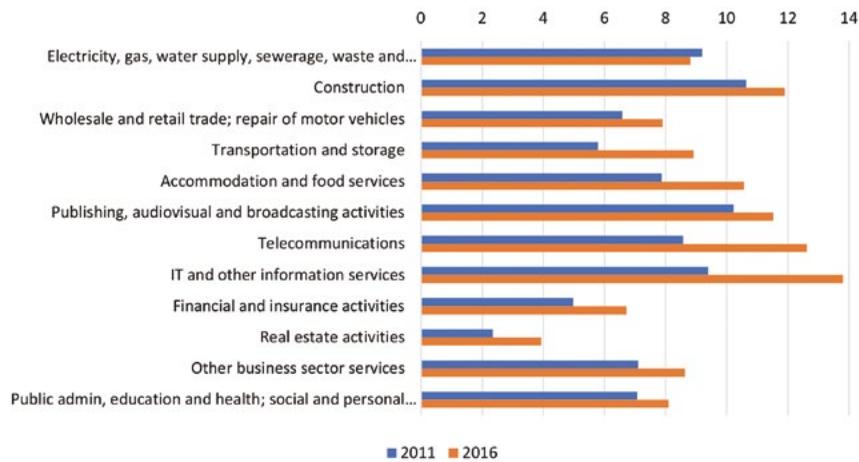
Source: Own illustration. Data: OECD TiVA 2018 release. Note: blue cells = high values, red cells = low values, relative to column.

## Appendix 4: Russia's backward integration in manufacturing declined across most sub-sectors



Source: OECD TiVA 2018 release. 2016 estimates.

## Appendix 5: Russia's GVC integration increased in all services sectors except utilities



Source: OECD TiVA 2018 release. 2016 estimates.

## Appendix 6: Measuring upstreamness of export and import baskets

**The concept of upstreamness<sup>33</sup> measures the position of a country in the supply chain in terms of its distance (or number of production steps) to the final consumer.** From the perspective of apparel production in the supply chain, yarn and fabric production and natural and synthetic fibers are upstream inputs, while distribution and sales are downstream inputs (Appendix 1 Figure A1). The measure of upstreamness at the detailed product level is used to compute the average upstreamness of a country's export and import baskets, based on the country's underlying HS6 goods exports (imports, resp.) and using the country's underlying export (import, resp.) shares as weights.<sup>34</sup> A high upstreamness of a country's export basket indicates a large distance to the final consumer and reflects high forward GVC participation. A small upstreamness of a country's import basket reflects a lower potential for economic transformation, i.e. imports are mainly consumed domestically.

**The difference (gap) between a country's upstreamness of imports and exports can indicate the country's scope for domestic transformation and economic upgrading.** A positive gap between the average upstreamness of a country's import and export baskets indicates that exports are relatively more downstream (closer to final demand) compared with the import mix. This is the case in economies where the manufacturing sector has been a key source of export-led growth, such as China, Vietnam, Thailand, and Korea. Conversely, a negative gap indicates that a country's export basket is more upstream than its import basket. This is the case in economies whose exports are concentrated in agriculture products and primary commodities, such as Brunei Darussalam, Australia, and New Zealand.

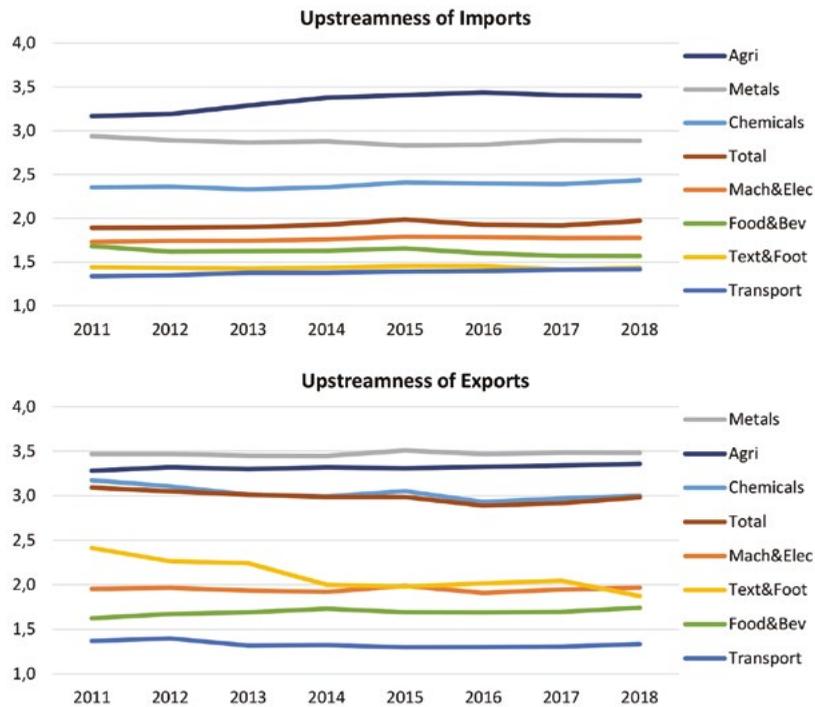
<sup>33</sup> The concept of distance to final demand or "upstreamness" was developed by Antràs, Chor, Fally, and Hillberry (2012). It measures the number of downstream stages between producers and final consumers.

$$\text{Formally, the measure of upstreamness of sector } s \text{ is computed as: } U_s = 1 * \frac{F_s}{Y_s} + 2 * \frac{\sum_{u=1}^N d_{su} F_u}{Y_s} + 3 * \frac{\sum_{u=1}^N \sum_{v=1}^N d_{sv} d_{vu} F_u}{Y_s} + \dots$$

where  $Y_s$  is the total output of the sector,  $F_s$  is the value of that output that goes to final uses (final consumption or investment), and  $d_{su}$  is the value of output from sector  $s$  that is required by sector  $u$  to produce \$1 of the latter's output. With that definition, a sector that has its entire output channeled to final uses, namely with  $F_s = Y_s$ , will have  $U_s = 1$ .

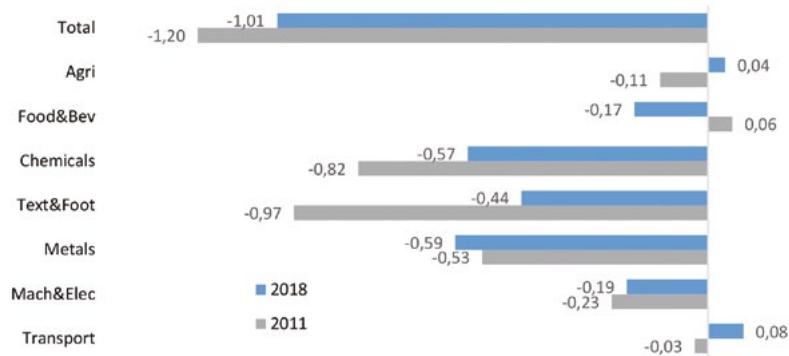
<sup>34</sup> Chor (2014) calculates a measure of the production line position, or upstreamness, for 426 industries (279 of which are manufacturing) using 2002 data from U.S. input-output (I-O) tables. The average position of a country's exports from final demand can then be calculated as the average upstreamness measure for each industry, weighted by the importance of that industry in the country's export basket (Tagliani and Winkler 2016).

## Appendix 7: Russia's exports moved closer to final demand, while imports moved slightly upstream



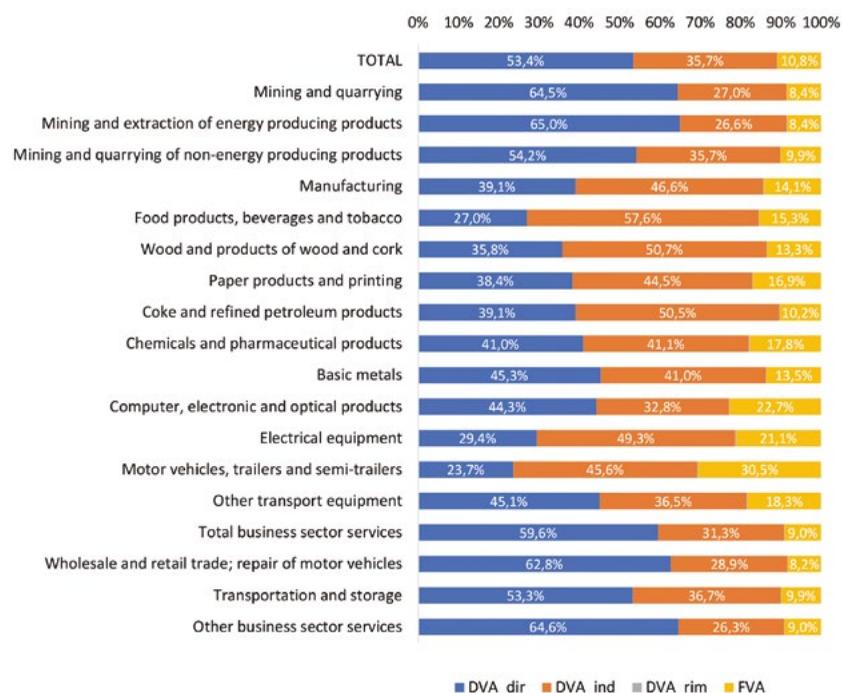
Source: Own computations, adapted from Chor (2014) and UN Comtrade.

## Appendix 8: The negative gap between upstreamness of goods imports and exports fell in Russia



Source: Own computations, adapted from Chor (2014) and UN Comtrade.

## Appendix 9: Linkages to domestic upstream sectors are particularly high in commodity-intensive manufacturing sectors



Source: OECD-WTO TIVA 2018 release.

Note: 2015 data, since sectoral estimates for 2016 are unavailable. DVA\_dir = direct domestic value added contribution, DVA\_ind = indirect domestic value added contribution, DVA\_rim = re-imported domestic value added contribution, FVA = foreign value added contribution.

## Appendix 10: Vietnam's example of GVC-led growth

In 1990, Vietnam's per capita GDP was a paltry US\$95, poverty (below US\$1.90 per day) was widespread (almost 40 percent), exports mainly of agricultural commodities amounted to 36 percent of GDP and growth had barely recovered from a low of 2.8 percent in 1986 to 5 percent in 1990. Three decades and a steady dribble of reforms later, Vietnam has morphed into a middle-income economy with per capita GDP of more than \$2,700 in 2019 and poverty reduced to 2 percent. From the turn of the century, Vietnam's growth averaged 6.6 percent propelled by high domestic and foreign investment and upward spiraling exports.

Much of this export-led rise is the result of Vietnam's integration into GVCs and associated FDI. The production of agricultural and manufactured exports directly employs five million Vietnamese workers, with another seven million employed in activities supplying firms linked to exporters.<sup>35</sup> Vietnam's integration into a number of GVCs (e.g. electronics, telecoms, garments) was aided by its low labor costs, and its geographical location adjacent to one of the principal hubs (China)<sup>36</sup> as well as several of the most active Southeast Asian participants in the global trade network – Malaysia, Thailand, and Indonesia.<sup>37</sup> Vietnam took aim at export-led growth through policy action in several areas, including (1) infrastructure; (2) tailoring the business environment so as to attract FDI; and (3) international trade agreements.

<sup>35</sup> Dollar (2019) <https://www.brookings.edu/blog/order-from-chaos/2019/04/15/how-global-value-chains-open-opportunities-for-developing-countries/>

<sup>36</sup> Li, Meng and Wang (2019) <https://www.oecd.org/dev/Global-Value-Chain-Development-Report-2019-Technological-Innovation-Supply-Chain-Trade-and-Workers-in-a-Globalized-World.pdf>

<sup>37</sup> World Bank (2019) <https://www.worldbank.org/en/publication/wdr2020>

Connecting to value chains requires infrastructure to enable production, bring goods to gateways, and ship goods out of the country. Vietnam was proactive in this regard, in recent years spending twice the global average on infrastructure.<sup>38</sup> Construction of trunk and rural roads and the improvement of inland waterways – supported by ODA – eased transport bottlenecks and ensured that the expanding farm and industrial output could be delivered to gateway ports and airports. By investing in these gateways and by augmenting logistics capabilities, Vietnam further tightened its linkages with GVCs aided by improving Logistics Performance Indicators (Vietnam LPI ranking in 2018 was 39th),<sup>39</sup> although the quality of infrastructure remains an issue undermining the competitiveness of its exports.

<sup>40</sup>

Another facet of infrastructure development in Vietnam is the creation of numerous industrial zones with 249 in operation. These zones are close to the principal trunk routes, seaports, and airports. They provide investors with essentials such as “warehouses, sources of electricity and water, wastewater treatment plants, garbage disposals, fire prevention systems, improved telecommunications, access to banks and post offices, logistic services, and internal roads”. Some 8,000 projects have been initiated by foreign firms in the zones with US\$145 billion committed as a testimony to the attractiveness of the zone plus associated infrastructure package for the FDI that has integrated Vietnam into GVCs.<sup>41</sup>

The business environment hinges on the mix of tax and other incentives for investors, as well as on institutions and regulations that determine factors such as ease of firm entry, competition, property rights, contract enforcement, and others. In 2007, Vietnam was ranked 104th on the Doing Business index, but has brought its ranking down to 70th in the 2020 Doing Business survey.<sup>42</sup> As a result, the volume of FDI has risen fairly steadily. Registered capital investment during 2017-2018 averaged US\$35.5 billion annually and cumulative investment at the end of 2018 equaled US\$360 billion. Given the focus on production for export, 59 percent of the FDI was in the manufacturing sector, with Korea the lead investor followed by Japan.<sup>43</sup> Samsung is the single largest investor having ploughed US\$17 billion into six factories. Smartphones and other equipment produced by Samsung account for 28 percent of Vietnam’s exports.

Vietnam’s participation in GVCs was furthered by its entry into a large number of trade agreements, multilateral, regional, and bilateral. In 1995, Vietnam became the seventh member of ASEAN. Adoption of the AFTA agreement and a normalization of ties with the USA further strengthened trading links, both regional and trans-Pacific. During the 1990s, Vietnam entered into bilateral trade agreements with 72 countries and established trade relations with 165 countries. Accession to the WTO in 2007 was the next major step. Over the past decade, Vietnam has signed or negotiated 12 bilateral and multilateral free trade agreements (FTAs) with Japan, the Republic of Korea, and the EU (the EVFTA was signed in June 2019). Vietnam will sign the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CP-TPP) in 2020. Deep Agreements, such as the Japan–Vietnam Economic Partnership Agreement, Korea–Vietnam free trade agreement (FTA), and the ASEAN–Australia–New Zealand FTA, can be particularly advantageous. In addition to tariffs, they cover policies affecting trade in goods and services as well as behind the border regulations governing competition policy, intellectual property, public procurement, and safety, packaging, and labelling requirements.

*Source: Modified from Yusuf (2020a).*

<sup>38</sup> <http://blogs.worldbank.org/voices/accelerating-vietnams-path-prosperity>; 97% of households had access to electricity by 2013.

<sup>39</sup> <https://lpi.worldbank.org/international/global/2018>

<sup>40</sup> <https://www.vietnam-briefing.com/news/infrastructure-vietnam.html/> Vietnam’s infrastructure ranking was 77th according to the WEF Competitiveness report 2019. [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

<sup>41</sup> <https://www.vietnam-briefing.com/news/vietnam-industrial-zones-how-to-pick-location-for-your-business.html/>

<sup>42</sup> <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020>; Vietnam was 67th ranked on the WEF’s Competitiveness Index. However, airport connectivity and liner shipping connectivity rankings were 22nd and 19th respectively. [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

<sup>43</sup> China would be counted as the second largest investor if the FDI from China is lumped together with investment from Hong Kong and the British Virgin Islands.

## Appendix 11: Republic of Korea's example of value chain upgrading

The Republic of Korea is a charter member of the East Asian Tiger community. Its development path has informed the widely imitated export-led growth strategy. Korea was one of the earliest participants in the cross Pacific production network at a time when MNCs from the USA were beginning to source some of their products from East Asian economies with a comparative advantage in labor-intensive manufacturing industries. However, what distinguishes Korea from other East Asian Tiger countries that relied on FDI, is that the government's industrial policy restricted FDI and favored the building of Korean-owned manufacturing capabilities. Korea's entry into GVCs was through the export of processed low value-added items, but it soon diversified into chains through which flowed higher value-added and technologically advanced products.

In the 1960s, Korea's comparative advantage was in labor-intensive tasks that added minimal value. Industrial policy introduced by the Park Chung Hee regime initiated a process of rapid diversification and upgrading to increase the domestic value added in existing product lines and to shift the focus towards higher value-added, medium, and high-tech products. Among the industries targeted by the government were: iron and steel, automobiles, shipbuilding, electronic components and consumer products, chemicals, and heavy machinery. The objective was to groom lead firms that could in time encompass not just assembly, but also research, design, marketing, and after sales services. Korea's industrial strategy proved to be remarkably successful. Exports as a share of GDP were a mere 7 percent in 1965. By 1987, the share had risen to 35 percent and in 2012 it peaked at 56 percent.<sup>44</sup> Early in the 1960s, Korea's exports consisted of mineral and agricultural resource-based products. By the 1990s, these had been displaced by of increasingly complex manufactured products.<sup>45</sup>

What accounts for this value chain upgrading? In the early stage of development, Korea was aided by FDI, which broadened the industrial base, transferred technology, inculcated workforce skills, and began hooking Korean firms to GVCs. However, it was the government's decision to develop advanced industries that initiated the structural transformation of the manufacturing sector. To do this, the state empowered rising, privately owned Korean corporations (e.g. Hyundai, Samsung, Daewoo) and committed them to making Korea into an industrial powerhouse. Tax breaks, financial benefits<sup>46</sup> along with the export opportunities created by trade liberalizing GATT Rounds,<sup>47</sup> released entrepreneurial energies that were ultimately responsible for the Korean Miracle. The examples of the auto and semi-conductor industry showcase the transformation.

Korea's auto industry has its roots in the Auto Industry Promotion Policy introduced in 1962. Korean firms entered into joint ventures with the likes of Mazda, Nissan, and Ford to assemble cars using imported inputs (CKD kits). To build indigenous capability, only joint ventures were permitted by the government. Starting in 1969, intensive R&D efforts, in particular by Hyundai, led to the introduction of the first Korean-made car, the Pony. In developing the Pony, Hyundai tapped into the automobile GVC and procured technologies from a number of foreign suppliers. It sourced the transmission and engine from Mitsubishi; the body was designed by Italdesign; Ogihara Moulding from Japan provided the car molding, while a British company, Perkinson, assisted with body assembly. Technology transferred by Ford that had partnered with Hyundai for more than 10 years, enabled the company to build and operate a dedicated assembly line for the new vehicle.

<sup>44</sup> <https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=KR>

<sup>45</sup> Yoo (2017) <http://www.kdijep.org/assets/pdf/830/jep-39-2-1.pdf>

<sup>46</sup> These included grants, loans, and export financing at preferential rates from state owned or controlled financial institutions, wastage allowances, and others. Government procurement that reduced risks was another inducement. When carrots did not deliver the desired results, the government was ready to use the stick of visits by tax collectors, the withdrawal of contracts, and the drying up of credit to firms performing below par. Firms were judged by their ability to meet export targets and rewarded or punished accordingly.

<sup>47</sup> From the mid-1960s through the mid-1990s, global trade was expanding at a 7+ percent per annum rate.

A protected domestic market, aggressive pricing, and government incentives enabled Hyundai to carve out a share of the domestic market, but the Pony sub compact launched in 1975 was not an exportable product. Rapid technology acquisition was the key to success with the newly emergent domestic auto parts industry taking the lead in close collaboration with Hyundai and the other Korean assemblers. While reverse engineering and research contributed to localization, parts manufacturers relied on joint ventures to access advanced technologies. Just 10 years after the launch of the Pony, Hyundai had become a key player in the GVC for automobiles, with a growing market share in North America and Europe.<sup>48</sup> Once they were able to extend their reach beyond assembly into marketing, financing, logistics, maintenance, and repair, Hyundai and other Korean auto manufacturers were able to realize the full earnings potential of the automobile value chain.

The Long-Term Plan for the Promotion of the Semiconductor Industry introduced in 1981, with the planned investment of US\$400 million by the government, energized an industry hitherto focused on the assembly of components and final consumer products.<sup>49</sup> Samsung, Goldstar (now LG), and Hyundai Electronic (now SK Hynix) turned their attention to intermediate components higher up the value chain<sup>50</sup> and began actively seeking technology that would close the gap with Japanese and American producers. Korean firms turned to licensing and financing smaller firms in Silicon Valley that needed to raise cash and were willing to share their product and process technology. The chaebol also set up sentinel research centers in electronic industry hotspots in North America and Europe to gather industrial intelligence. These activities were complemented by an intensification of domestic research that accelerated technology assimilation along with massive investment in advanced manufacturing facilities.<sup>51</sup> In 1988, a quarter of Korea's exports were comprised of electronic products. By the 1990s, Korea had become a major force in the production of the most complex and expensive components (DRAM/memory chips), electronic sub-assemblies, displays (e.g. TFTLCDs), and mobile devices.

In summary, the Korean industrial and GVC integration strategy accelerated and sustained GDP growth because, from the outset, Korea pursued a wide spectrum approach that sought to internalize most of the product value chain, which in turn was straddled by one or more lead (Korean) multinational firms. Without such a strategy, Korea's development would have likely followed a different course -- similar to that of some of the Southeast Asian economies, some of which may be caught in a middle-income trap. Instead, Korea took control not only of manufacturing but also of the high value services, recognizing at an early stage that more of the value would in the long run accrue from the latter rather than the former.

*Source: Modified from Yusuf (2020b).*

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<sup>48</sup> Hyundai is currently the fifth largest auto producer in the world.

<sup>49</sup> Japanese firms such as Panasonic, American firms such as Fairchild, IBM, and Motorola, and European firms such as Nokia began assembling products in Korea in the second half of the 1960s.

<sup>50</sup> Assembly operations, e.g. of TVs and cell phones, were transferred offshore first to China and later to Vietnam and elsewhere in Southeast Asia.

<sup>51</sup> Competition among the chaebol engaged in manufacture of electronic components speeded the upgrading process. VerWey (2019) [https://www.usitc.gov/publications/332/journals/chinese\\_semiconductor\\_industrial\\_policy\\_prospects\\_for\\_success\\_jice\\_aug\\_2019.pdf](https://www.usitc.gov/publications/332/journals/chinese_semiconductor_industrial_policy_prospects_for_success_jice_aug_2019.pdf)

## Appendix 12: Investor protection in Russia would mostly benefit from improvements in extent of disclosure, director liability, and ownership and control

Economy	Extent of disclosure index (0-10)	Extent of director liability index (0-10)	Ease of shareholder suits index (0-10)	Extent of shareholder rights index (0-6)	Extent of ownership and control index (0-7)	Extent of corporate transparency index (0-7)
China	10	4	5	5	6	6
India	8	7	7	6	6	6
Russia	6	2	7	5	4	6
Turkey	9	5	6	6	6	6
USA	7	9	9	2	3	5

Source: Doing Business Indicators 2020.

## Appendix 13: Russia faces the longest time and highest cost of trading across borders

Economy	Time to export: Documentary compliance (hours)	Time to import: Documentary compliance (hours)	Time to export: Border compliance (hours)	Time to import: Border compliance (hours)	Cost to export: Documentary compliance (US\$)	Cost to import: Documentary compliance (US\$)	Cost to export: Border compliance (US\$)	Cost to import: Border compliance (US\$)
China	9	13	21	36	74	77	256	241
India	12	20	52	65	58	100	212	266
Russia	25	43	66	30	92	153	580	520
Turkey	4	2	10	7	55	55	338	46
USA	2	8	2	2	60	100	175	175

Source: Doing Business Indicators 2020.

# CHAPTER 3

## “Servicifying” the Russian Economy\*

\* This chapter was prepared by Ian Gillson, Deborah Winkler, Karen Muramatsu, Irina Rostovtseva and Laura Gomez-Mera.



# 1. INTRODUCTION

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**Over the past two decades, Russia's growth has been supported by sizable investment, rising consumption, exports of energy products, and through greater openness and external orientation of its manufacturing sector.** While deepening integration in goods through increased downstream participation in GVCs, including into more complex value chains, as well as more extensive geographical deepening with new trading partners remains a priority for Russia, rapid technological advances—especially the ICT revolution and the fragmentation of supply chains globally—have changed the nature of economic transformation. In particular, high value-added services such as those involved in manufacturing (e.g. research, development, design, and marketing and product servicing) as well as logistics, education, medical, and other professional services, provide opportunities for Russia to generate new high-productivity, high-paying jobs compatible with a high-income economy.

**Building a dynamic domestic services sector is also a necessary condition for manufacturing to thrive and plays an important role in economic diversification.** Services are an escalator for economic development (Hollweg et al. 2015). First, services themselves offer an important avenue for export growth and diversification. Second, they are an important determinant of export competitiveness in other sectors, since access to quality services as inputs to production is critical for manufacturing performance. For example, modern services such as professional services and information and communication technologies (ICT), as well as traditional services such as transport, are key inputs for other sectors such as manufacturing and agriculture. While labor productivity growth in services in developing countries tends to be low – even for those countries that have otherwise seen rapid economic growth – it has been shown that services have been a key driver of GDP growth for upper-middle income countries and developed countries as the importance of services increases with income. Access to high-quality and efficient services is therefore a necessary enabler for Russia to leverage global integration through higher value-added participation in both regional and global value chains.

**The business climate for foreign services providers also has important implications for manufacturing performance.** Services trade plays a key role in increasing the productivity of services sectors and serves as a transmission channel for new technologies and knowhow. Openness in the services sector is therefore part and parcel of a comprehensive growth-enhancing trade policy. The benefits of liberalizing services and goods markets can be mutually reinforcing, the full potential of each not being realized without adequate openness in the other.

**Russia's Services Export Development Strategy aims to create conditions that ensure sustainable growth of the country's services exports with a view to achieving more than US\$100 billion in revenues by 2025.** The strategy aims to create the pre-conditions for improving the competitiveness of Russia's services in global markets and establishing the domestic conditions that will be attractive for investors based on regulatory and fiscal reforms to support export activities in areas that may be lagging compared to other countries (Ministry of Economic Development 2019).

**This chapter seeks to explain how the services sector can contribute to Russia's competitiveness and integration into the global marketplace.** It focuses on two complementary roles that the services sector plays: (i) as a source of jobs, output, and exports in itself; and (ii) as inputs into the production of other goods and services for export (a process known as servicification). The objective is to shed light on the ways the services sector has contributed to Russia's competitiveness and integration into the global economy. The remainder of the chapter is structured as follows. Section 2 benchmarks Russia's services output and services exports against comparator countries (the EU, the USA, China, OECD average, and Turkey) including in value-added terms. Section 3 investigates the impact of services input provision on productivity in Russia. Section 4 discusses the constraints to deeper integration of the services sector in the Russian economy. Section 5 presents the main findings and makes policy recommendations.

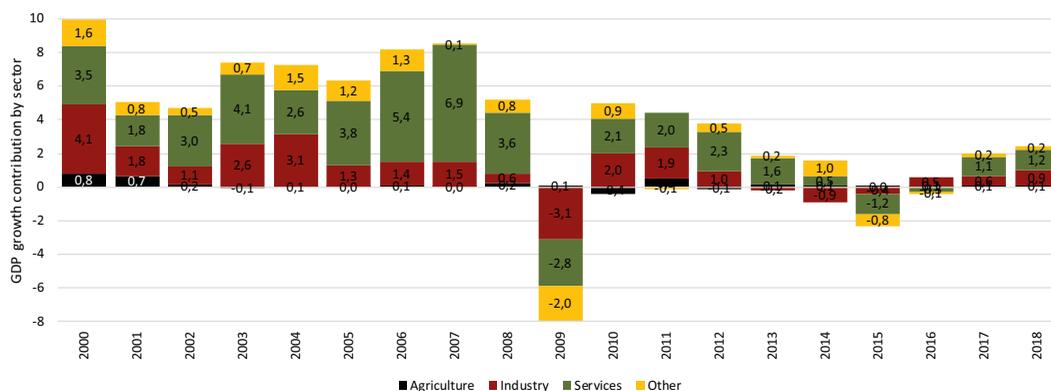
## 2. RUSSIA'S SERVICES PERFORMANCE AND DEGREE OF INTEGRATION

### The services sector has been an important engine of growth for the domestic economy

Over the past two decades, the services sector has been an important driver of Russia's economic growth. Between 2000-18, growth in services accounted for more than 50 percent of the country's total GDP growth, with an average contribution to GDP growth of 2 percentage points. The contribution to growth in recent years has slightly decreased, from 2.3 percent in 2012 to 1.2 percent in 2018 (Figure 3-1).

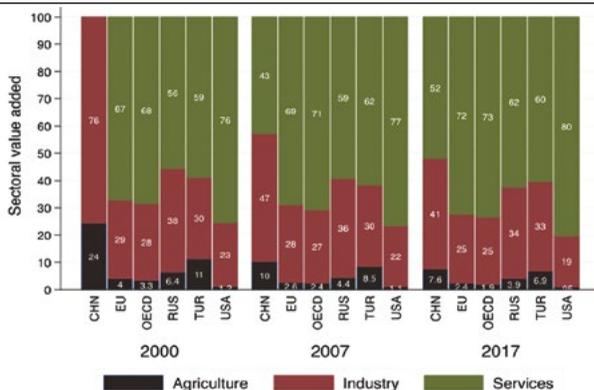
As in other upper-middle-income countries, the services sector accounts for the largest share of GDP in Russia, although the share of services in value added remains below that in more advanced comparator countries suggesting untapped potential to grow the sector. In 2017, services contributed 62 percent to Russia's GDP in value-added terms up from 56 percent in 2000 as the relative importance of manufacturing and agriculture have declined. However, the contribution of services to total value added in Russia is low relative to developed countries, such as the USA (80 percent in 2017) and the EU (72 percent), but remains above other upper-middle-income countries such as China (52 percent), and Turkey (60 percent) (Figure 3-2). Since Russia has a relatively large industrial base, possibilities to grow the services sector might include companies outsourcing services such as logistics and transport that are still performed in-house, or for services to develop through supporting these manufacturing activities.

Figure 3-1: Services have made a significant contribution to Russia's overall GDP growth in the past two decades (Sectoral contribution to growth, 2000-2018)



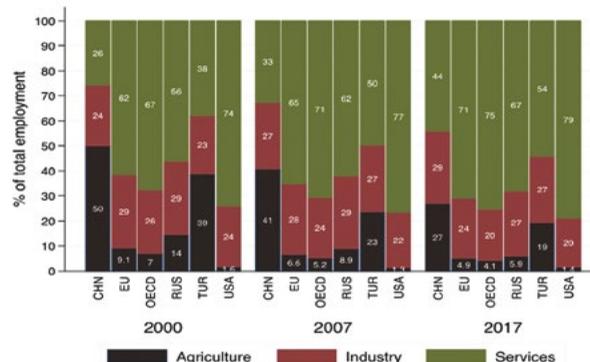
Source: Authors' calculations based on data from WDI.

Figure 3-2: Compared to other upper-middle-income countries, the contribution of services to value added in Russia is high (Sectoral value-added shares, 2000-2017)



Source: Authors' calculations based on data from WDI.

Figure 3-3: The services sector has become an increasingly important source of employment (Employment by sector, percent of total employment)



Source: Authors' calculations based on data from WDI.

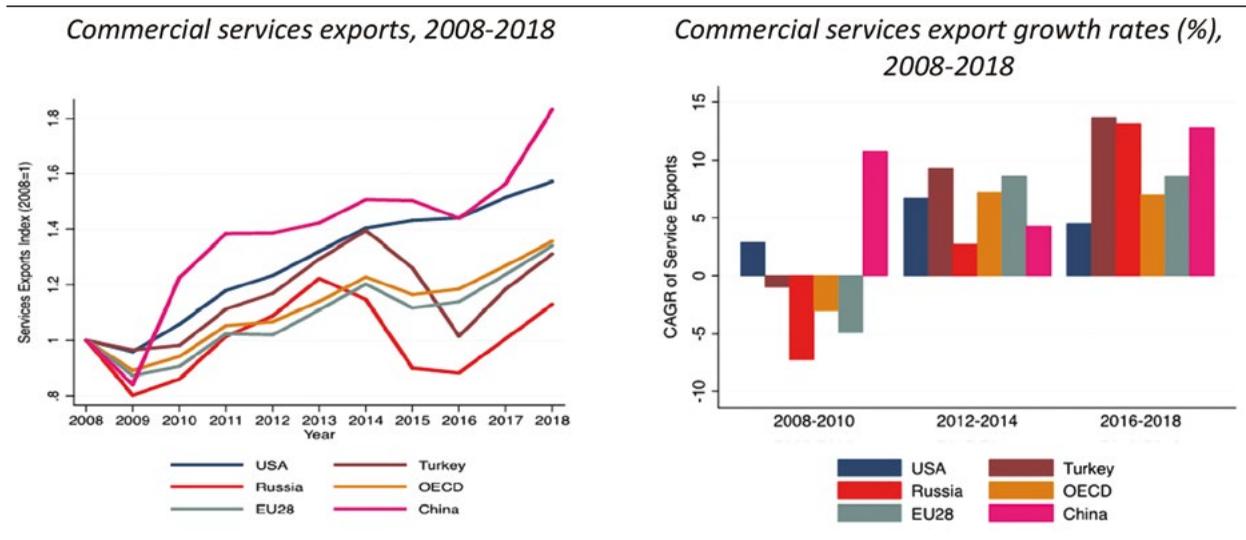
The services sector in Russia is labor-intensive and accounts for a large and growing share of employment. In 2017, services employed 67 percent of the labor force, up from 62 percent in 2017 and 56 percent in 2000 (Figure 3-3). The services employment share is higher than in Turkey or China but remains below that in the Euro Area, the USA, and average for the OECD.

### Russia’s export growth in services has been weak

Despite the importance of services to Russia’s economic growth, the economic recession of 2015-16 and sanctions imposed by some of Russia’s key trading partners – as well as Russian counter-sanctions against them – have adversely affected services trade. Since 2014, Australia, the EU, Japan, Norway, Switzerland, Ukraine, and the USA, have restricted financial transactions and investments in the oil sector.<sup>52</sup> Sanctions have limited the international operations of Russia’s largest banks and limited Russian firms to acquire foreign debt or make cross-border financial transactions. Sanctions have also restricted exports of services such as finance and insurance related to Russian infrastructure projects in telecommunications, transportation, and energy. In response, Russia has also imposed counter-sanctions on imports of agricultural products, raw materials, and food and animal products such as live pigs, fat, and offal. There have also been other shocks – the oil price decline and relative price changes (ruble depreciation) to balance trade flows and external financing – that have also had an impact on trade. Russia’s services imports by value declined by 26 percent between 2013 and 2018, while Russia’s services exports declined by 8 percent.

Russia’s services export performance has been weaker than in comparator countries. Commercial services exports fell dramatically following the Financial Crisis in 2008 before recovering between 2010 and 2013. Services exports then resumed their decline on the back of sanctions in the following year (Figure 3-4, left panel). Stronger export growth has resumed since 2016, with services exports increasing 13 percent between 2016 and 2018 (Figure 3-4, right panel).

Figure 3-4: The growth trajectory of Russia’s services exports has been uneven



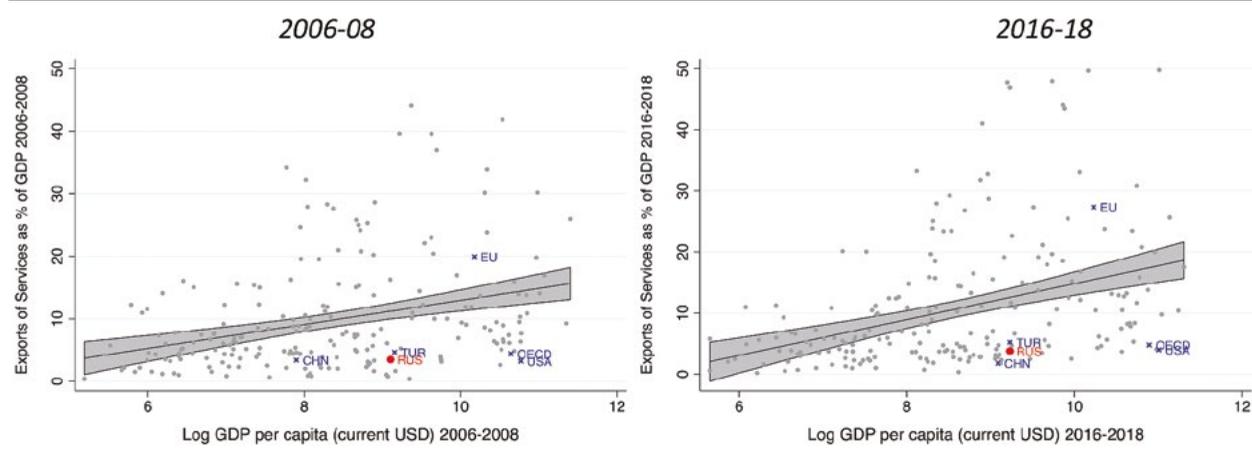
Source: Authors’ calculations based on data from UNCTAD.

In terms of services export intensity, Russia is below expected levels and is surpassed by most comparator countries. The degree to which a country engages in exporting services is often associated positively with its level of development. Considering services exports as a percentage of GDP – a measure of export intensity – Russia’s services export intensity is below expected levels given the country’s income per capita and comparators such as the EU and OECD. While Russia’s services export intensity improved slightly – from 3.4 percent in 2006-2008 to 3.8 percent in 2016-2018 – it remains below all comparator countries except China (Figure 3-5).

<sup>52</sup> The particular nature and timing of the economic sanctions varies by participant.

**Figure 3-5: Given Russia’s income per capita, its services export intensity is below expected levels and is low among comparator countries**

(Commercial services exports (% GDP) vs. income level)

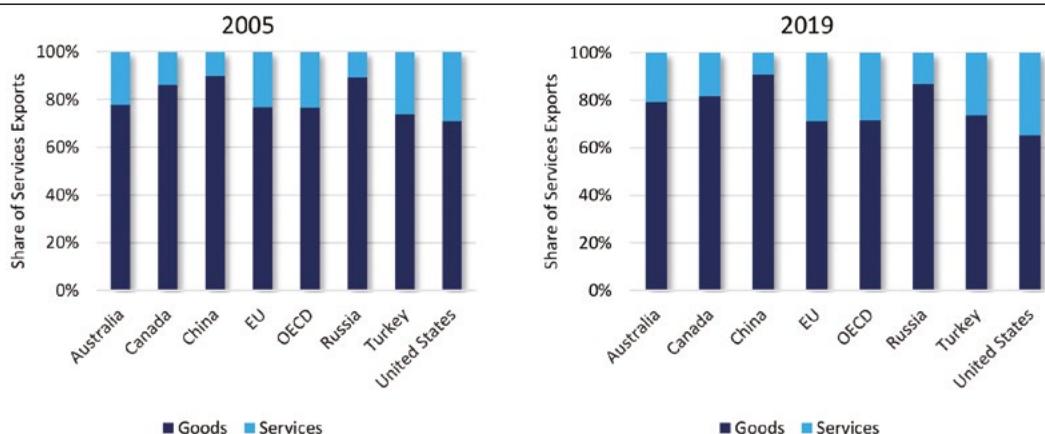


Source: Authors’ calculations based on data from WDI.

While the share of services exports in Russia’s total exports has increased, it still exhibits a lower reliance on services exports than comparator countries (Figure 3-6). The expansion in Russia’s services exports has been faster than the expansion of its goods exports. In 2005, services accounted for 11 percent of total Russian exports and increased to 13 percent in 2019. However, Russia has a lower share of services in its total exports compared to all comparator countries except China. Indeed, the share of services in Russia’s total exports is less than half the shares for the USA, the EU, and OECD.

**Figure 3-6: Russia exhibits a lower reliance on services exports**

(Share of services in total exports (%), 2005 vs. 2019)

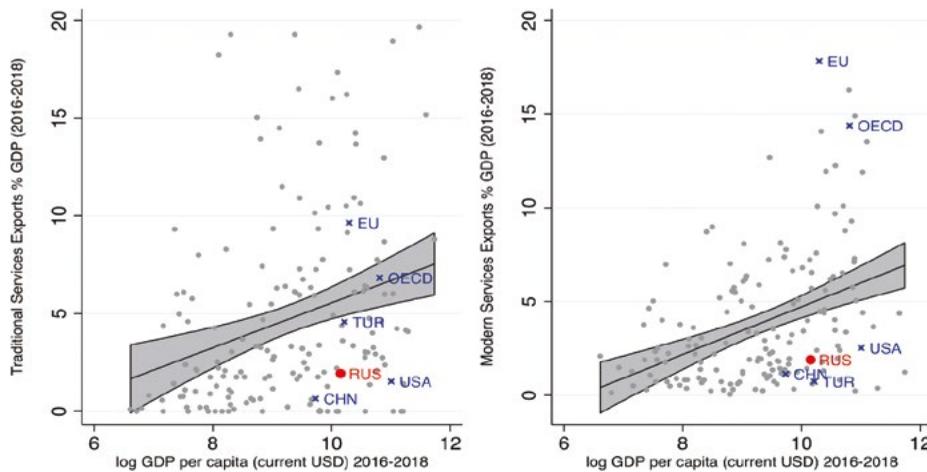


Source: Staff calculations based on data from WDI.

**Russia’s services exports remain concentrated in transport and travel, while the share of modern services is modest**

**Russia’s services exports are concentrated in traditional activities.** While in recent years some ‘modern’ services, such as financial services, telecommunications, and ICT, have witnessed dynamic growth rates, Russia’s exports in ‘traditional’ services such as transport and travel – which require face-to-face intervention – have been doing better than other categories of modern services such as insurance services – which can be traded across borders without

**Figure 3-7: Most high-income countries rely more heavily than Russia on exports of modern services**  
*(Traditional and modern services exports vs. GDP per capita, 2016-2018)*

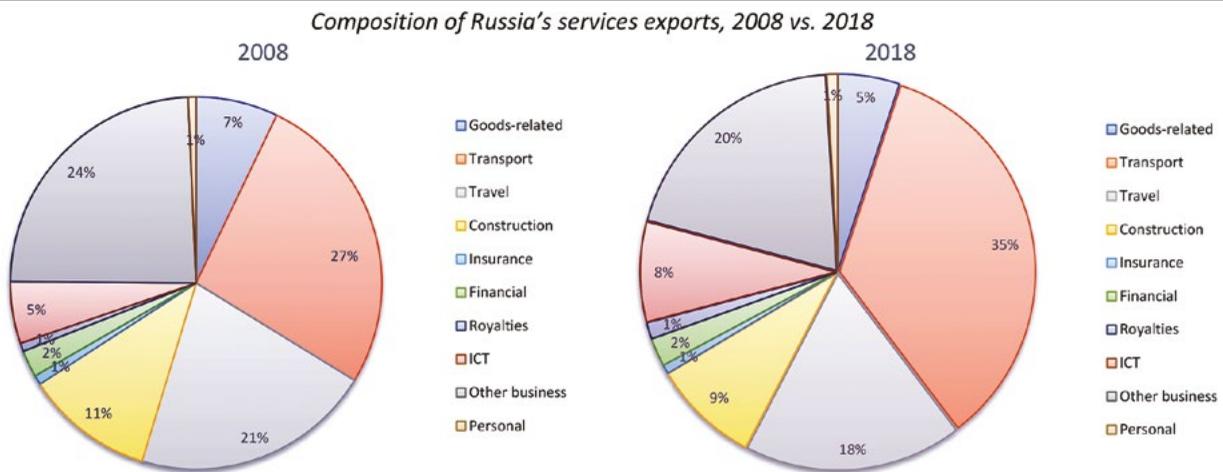


Source: Authors' calculations based on data from WDI.

requiring proximity between users and suppliers. Russia's shares of both traditional and modern services exports in Russia's GDP are lower than would be expected given the country's level of economic development, implying scope for expanding exports of both. Most high-income countries rely on exports of modern services (Figure 3-7).

**Among traditional activities, transport and travel dominate, accounting for more than half of total Russian services exports in 2018.** Tradable transport services include sea transport, air transport, and road transport, as well as courier services. The share of transport services exports in Russia's total services grew from 27 percent to 35 percent of total services exports between 2008 and 2018. Travel, in contrast, slightly decreased in importance between the two periods (Figure 3-8). Construction, the third largest category, also shrank from 11 percent to 9 percent of total exports over the past decade. Russia has a Revealed Comparative Advantage (RCA) in construction, goods-related, and transport services (Table 3-1). Russia's RCA in the first two categories decreased between 2005 and 2018, reflecting falls in the share of these services in total services exports over the period. In contrast, Russia's RCA in transport services grew from 1.5 in 2005 to 2.0 in 2018. Cargo freight accounts for 35.8 percent of the total value of transportation services; passenger freight accounts for 30.5 percent and auxiliary services for 33.7 percent. By transportation types, air transport alone accounts for more than half of Russia's transportation services exports, followed by sea transportation which accounts for about one-quarter.

**Figure 3-8: Traditional services dominate Russia's services exports**



Source: Authors' calculations based on data from UNCTAD.

**Table 3-1: Russia maintains a Revealed Comparative Advantage (RCA) in construction, goods-related, and transport services**

	2005			2018			CAGR (%)
	Value (US\$ million)	Share (%)	RCA	Value (US\$ million)	Share (%)	RCA	
Construction	3,313	11.5	5.4	5,614	8.7	4.6	4.1
Goods-related	2,318	8.0	2.3	3,236	5.0	1.4	2.6
Transport	9,125	31.6	1.5	22,089	34.1	2.0	7.0
Other business services	5,792	20.1	1.0	12,736	19.6	0.9	6.2
ICT	1,041	3.6	0.4	5,260	8.1	0.8	13.3
Travel	5,870	20.3	0.8	11,486	17.7	0.7	5.3
Financial	390	1.4	0.2	1,480	2.3	0.3	10.8
Insurance	323	1.1	0.5	474	0.7	0.3	3.0
Personal	187	0.6	0.6	585	0.9	1.0	9.1
Royalties	256	0.9	0.2	876	1.4	0.2	9.9

Source: Authors' calculations based on data from UNCTAD.

**Russia is the fourth largest exporter of construction services in the world.** The share of Russian construction services exports in world construction services exports is 4.8 percent. Its main revenues derive from subcontracting contracts for construction work within Russia concluded with non-resident companies, mainly from CIS countries accounting for 76 percent of its construction services exports in 2017. The remaining export revenues come from construction by Russian companies at facilities abroad, including nuclear and other energy facilities (the State Atomic Energy Corporation Rosatom has the world's largest portfolio of projects for the construction of power units for nuclear plants); electricity networks; and transport infrastructure (Ministry of Economic Development, 2019). The main importing countries of Russian construction services are Belarus, Bangladesh, and Romania.

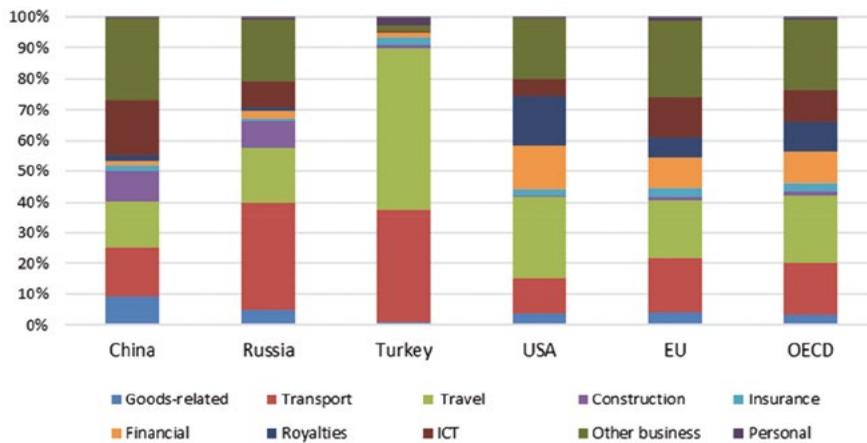
**Tourism is also a particularly promising sector of Russia's services economy.** Russia has high tourism potential. There is growing demand for traditional Russian resort destinations. Popular activities include excursion tours (to Moscow, St. Petersburg, and the cities of the "Golden Ring" – Vladimir, Suzdal, Novgorod, Rostov the Great); winter hunting and fishing (a developing area of domestic tourism); adventure tourism (e.g. rafting along the rivers of Altai, horse riding along the banks of the Volga); and ecological tourism (which is actively developing in reserves and national parks). However, at present, the country occupies a minor place in the world tourism market, accounting for less than 1 percent of global revenues. In 2016, international tourist arrivals to Russia totaled 24.6 million (Lavrova and Plotnikov 2018). According to the Border Guard Service of the Federal Security Service of the Russian Federation, the main nationalities of tourists in Russia in 2017 were Chinese (29 percent), German (11 percent), Korean (6 percent), American (6 percent), Israeli (4 percent), the British (3 percent), and Italian (3 percent). A key barrier to growth of the sector is visa requirements. Russia has quite complicated rules for entering the country compared to countries with more developed tourism sectors. For example, the number of countries with which Russia has a visa-free arrangement (just 47 in 2018) does not correspond to its tourism potential. Russia also does not fully utilize e-visa opportunities (Ministry of Economic Development 2019). Tourism development has also been hindered by a lack of efforts to promote Russian tourism abroad and a unified marketing strategy especially in high potential areas such as eco-tourism.

**Expansion of modern domestic services, such as financial and professional services, remains a key challenge.** Modern services differ from traditional services, which demand face-to-face interaction. Delivery of modern services is less dependent on physical infrastructure and more dependent on reliable telecommunications and electrical

supplies. Examples of such services include ICT, banking, insurance, business, remote access services, transcription of medical records, call centers, and education. In addition to being important inputs into production, modern services exhibit higher productivity and generate high-skilled and better-paid jobs. However, many modern services sectors have relatively low employment intensity and require higher educational levels.

**The share of Russia’s modern services exports in total exports remains lower than in all comparator countries, except Turkey (Figure 3-9).** For example, while traditional services still account for half of China’s services exports, the share of modern services in total Chinese exports has expanded considerably, from about 20 percent in 2005 to 50 percent in 2018. In terms of diversification of the services export basket, Russia compares poorly to the USA, the EU, and OECD countries.

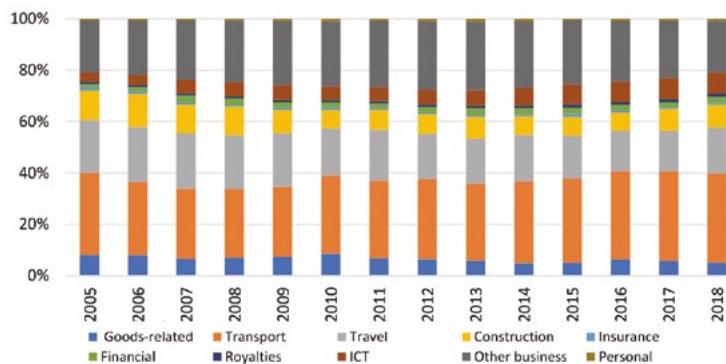
**Figure 3-9: Russia’s proportion of modern services in total services exports is lower than most of its peers**  
(Services export composition, 2018)



Source: Authors’ calculations based on data from UNCTAD.

**Nevertheless, despite remaining at very low levels the proportion of some modern services in total services exports has grown rapidly.** Modern services export growth has been driven by increases in financial, business, and ICT services, which have been very dynamic. The value of business services exports, including professional, management consulting, technical, and trade-related services, more than tripled between 2005 and 2013, reaching US\$18 million, but has since fallen to US\$12.7 million in 2018. While the share of business services fell between 2008 and 2018, the share of ICT services grew (Figure 3-10). In fact, as Table 3-1 (last column) shows, the categories that have experienced the highest growth rates over the past 13 years have all been modern activities: ICT (14 percent), financial services (12 percent), royalties and other intellectual property rights charges (11 percent), and personal services (10 percent).

**Figure 3-10: Some categories of Russian modern services exports have shown dynamic growth**  
(Services exports composition, 2005-18)



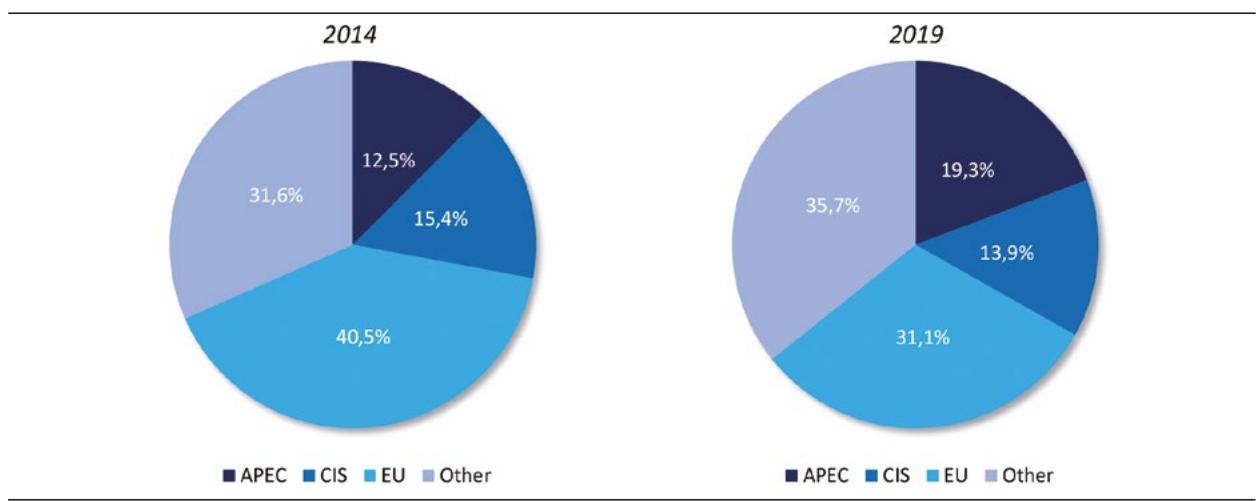
Source: Adapted from Maliszewska and Arenas (2018).

**There may also be potential to increase the export of other modern services such as medical and education services.**

For medical services, the number of foreign patients in Russian hospitals increased significantly from 20,000 to more than 110,000 between 2007-17, generating export earnings of more than US\$250 million in 2017 (Ministry of Economic Development 2019). Most foreign patients come from CIS, Southeast Asia (China, North Korea, Vietnam), the Middle East (Israel, Bahrain), and Europe (Germany and the Baltic States). The government is now trying to promote medical tourism to Russia and increase the number of foreign patients treated to 1.2 million by 2024. The priority areas for the expansion of medical exports are in cardiology, oncology, ophthalmology, and neurosurgery. Most medical services in Russia are more cost competitive than those in comparator countries such as the USA, Germany, and Israel. New biomedical and information technologies are also actively being developed in the sector within Russia, for example nuclear medicine technologies for oncological and cardiovascular diseases. With the support of the State Atomic Energy Corporation Rosatom, work is under way to create a network of nuclear medicine centers. For education services, the number of foreign students in full-time education at Russian universities increased from 60,800 in the 2000/01 academic year to 200,800 in 2015/16. The total number of foreign students educated at all Russian institutions increased from 319,500 in 2005/06 to 562,800 in 2015/16 (Ministry of Economic Development 2019). According to the Ministry of Science and Higher Education, the total income derived from the provision of tuition and accommodation to foreign students was US\$1.54 billion in 2015/16, equivalent to the value of Russian exports of telecommunications equipment, electronics, and household appliances in the same year. Most students are from CIS (72 percent in 2015/16) and East Asia (14 percent). Promising areas for the development of education services exports are in engineering and technical specialties where Russia has significant competitive potential.

**Russia exports services mainly to countries with which it has close historical ties.** In terms of the geographic structure of Russia’s services exports – and unlike in the supply of non-resource based, non-energy products – the share of the CIS is much lower, and the role of the Asia-Pacific Economic Cooperation is less significant, but the European market is much more important. An important opportunity for Russia to increase its services exports, therefore, is to penetrate new markets, especially large, fast-growing markets in Asia, such as India and China. Between 2014 and 2019 the importance of the EU as a destination for Russia’s services exports declined from 40.5 percent of the total to 31.1 percent (Figure 3-11). The share of APEC countries in Russia’s total services exports grew from 12.5 percent to 19.3 percent over the same period, mainly due to an increase in the share to China and the USA. Annually China alone now accounts for between 35-40 percent of Russia’s services exports to APEC.

**Figure 3-11: Russia continues to export services to markets with close historical ties**  
(Share of Russia’s services exports by destination, 2014 vs. 2019)



Source: Central Bank of Russia.

**Russia has preferential trade agreements (PTAs) with a number of countries that include provisions on services trade.** The Eurasian Economic Union (EAEU) Customs Union and Economic Integration Agreement between Russia, Belarus, Kazakhstan, Armenia, and the Kyrgyz Republic has provisions on both trade in goods and services. The EAEU has also negotiated PTAs with Vietnam, Iran, Singapore, and Serbia.

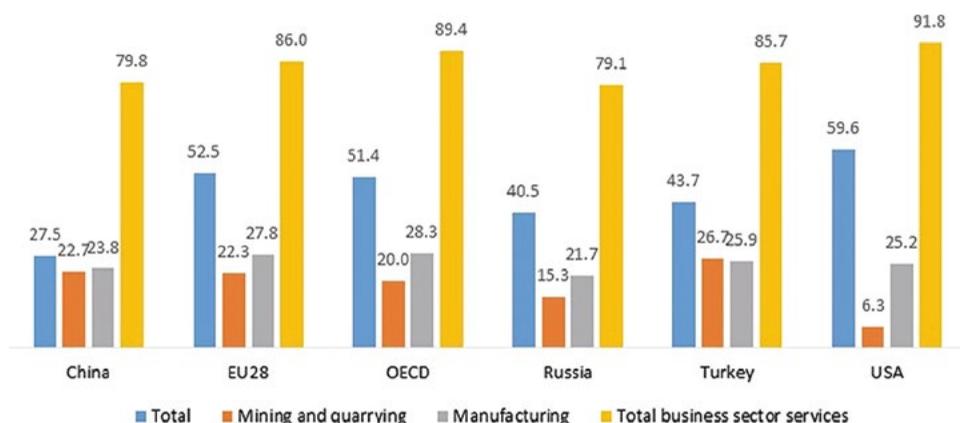
### The services sector has relatively low value-added linkages with other export sectors

**Good-quality, efficient, and productive inputs are important for competitiveness.** Because of the value chain linkages between sectors of an economy, the competitiveness of an upstream sector that is used as input to production is important for the competitiveness of other downstream sectors. Forward linkages from the services sector could include, for example, a manufacturing firm hiring accountants or lawyers for the launch of a new factory or hiring ICT professionals to design a new website for online sales. If these inputs are supplied by domestic providers (as opposed to being imported), then these show up as domestically produced value-added inputs in manufacturing, agriculture, or services output (referred to as “value-added linkages”).

**Linkages with manufacturing also allow countries to take control of higher value-added services in which more of the long run value from GVCs accrue.** The servicification of manufacturing has been ongoing for some time and the diffusion of digital technologies has enlarged the value that services contribute to manufacturing. For example, in Korea, which has successfully integrated and upgraded into GVCs over the past 60 years, the services intensity of computers and electronics products is close to 40 percent (Liu et al. 2019) – see Annex 1. The technological revolution that is sweeping manufacturing industries, such as automobile production with the introduction of autonomous vehicles, will also make services an even more important component of GVCs. Clearly, firms that can combine manufacturing with a full spectrum of services will have an edge over others and be able to extract the maximum value from GVCs.

**Russia’s services sector provides relatively little support to export activities, especially in manufacturing.** In Russia, domestic services account for 40.5 percent of total exports in value-added terms (Figure 3-12) but this is mostly driven by inputs to services exports themselves. The share of domestic services in non-services exports is much lower compared to comparator countries. For example, Russia’s domestic services value-added share embodied in its manufacturing exports is less than 22 percent, compared to 28 percent across the EU and OECD countries. Similarly, the domestic services value-added share is only 15 percent in mining, while it is more than 20 percent in all comparator countries except for the USA. Even within the business services sector, Russia’s share of domestic services value-added is less than 80 percent, on par with China but behind all other comparators, including the USA, which shows a share of 92 percent. Thus, there is scope for Russia to increase value addition, particularly in its non-service sectors, by further embedding domestic services.

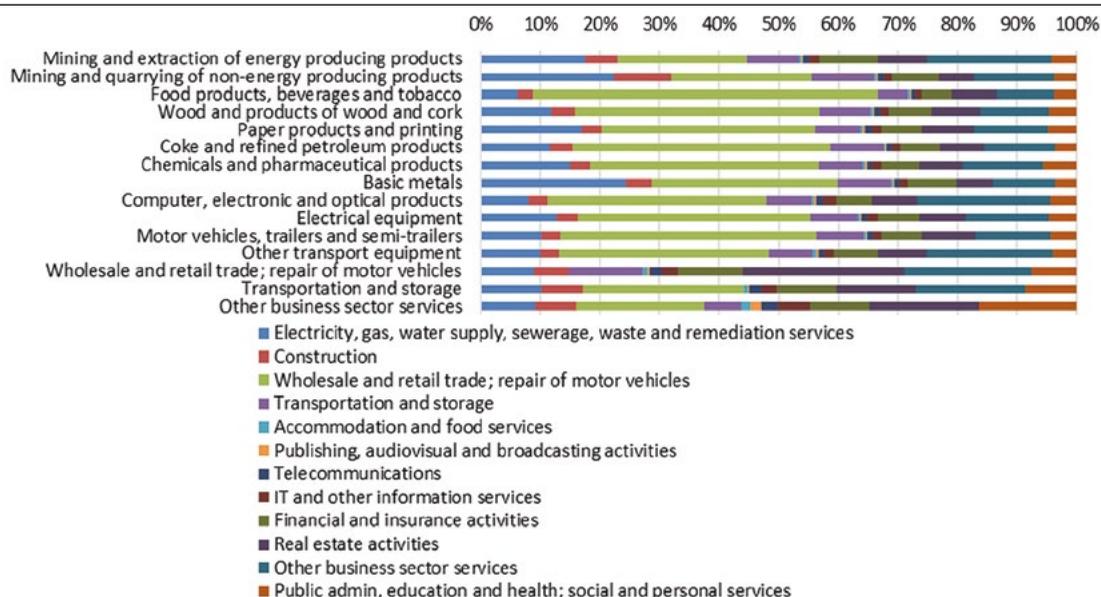
**Figure 3-12: Russia’s share of domestic services in non-services exports is lower than most comparator countries** (Domestic services value added in exports (%), by export category, 2016)



Source: OECD-WTO TiVA 2018 release. 2016 estimates.

**The manufacturing and agricultural export sectors rely most strongly on traditional domestic services inputs.** Wholesale and retail services account for about 40 percent of all domestic services inputs to these sectors (Figure 3-13). At a more disaggregated level, domestic modern services are mostly used as inputs to mining and extraction of energy products, computer and electronic products, transport equipment, and to other services. For example, ICT inputs are most strongly used in the business services sector, representing 8 percent of all services inputs. Financial services are most strongly used by other services sectors, such as wholesale and retail, transportation, and business services, typically accounting for more than 10 percent of all services inputs in those sectors.

**Figure 3-13: Domestic modern services are mostly used as inputs to energy, retail, transportation, and electronics**  
(Composition of domestic services value added in exports for disaggregated productive sectors, Russia, 2015)



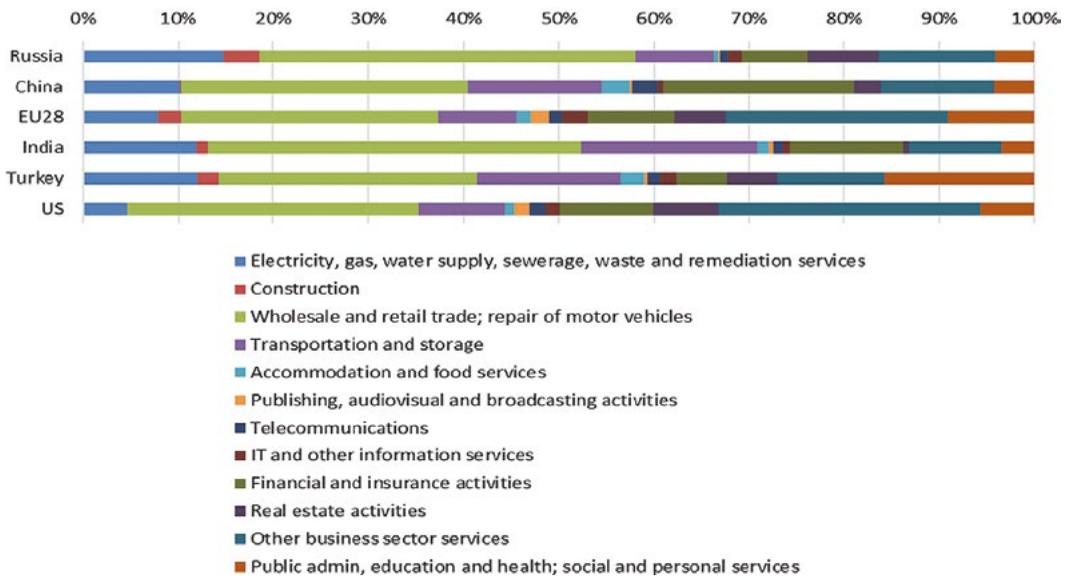
Source: TIVA 2018 release.

Note: Excludes inputs to the same sector.

**Russia uses a lower share of domestically sourced modern services in the production of its manufactured exports compared to comparator countries.** In manufacturing, domestically supplied modern services such as business services, ICT, and financial services make up about 22 percent of services inputs. This is the lowest of all comparator countries except Turkey, with modern services accounting for 35 percent of services inputs in China, 37 percent in the EU, 24 percent in India, 41 percent in the USA, and 20 percent in Turkey (Figure 3-14). Thus, there appears to be room to increase modern domestic service provision into manufacturing sectors in Russia. It is also worth noting the relatively high share taken by electricity, gas, and water inputs compared to other comparator countries, consistent with the capital-intensive manufacturing processes used in Russia.

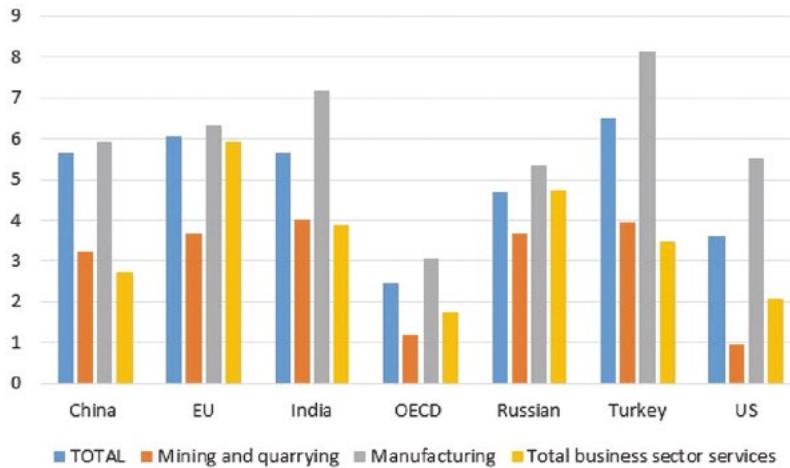
**A possible explanation for Russia's low domestic services participation in exported value-added is because competing services imports displace domestic suppliers, but the evidence does not support this.** Figure 3-15 analyzes foreign services value-added in exports by broad sector for Russia and its comparator countries. It does not appear from the analysis that foreign services used in Russia's exports are crowding out domestic services inputs. On the contrary, Russia shows one of the lowest shares overall, and especially in mining and manufacturing.

**Figure 3-14: The share of modern services used for manufactured exports in Russia is relatively low**  
 (Composition of domestic services value added in manufactured exports, Russia and comparator countries, 2015)



Source: TiVA 2018 release.

**Figure 3-15: Foreign services providers in Russia’s exported value-added do not appear to be disproportionately crowding out domestic services providers compared to other countries**  
 (Composition of foreign services value added in manufactured exports, Russia and comparator countries, 2015)



Source: TiVA 2018 release.

### 3. THE EFFECTS OF SERVICES SECTOR PERFORMANCE ON RUSSIA'S PRODUCTIVITY

**One dimension of service sector performance is how the quality of services input provisions affect the productivity and performance of downstream firms in Russia.** This analysis investigates the extent to which the performance of firms in Russia is affected by perceived (subjective) and actual (objective) difficulties in procuring quality services inputs, with the latter being the most important for making policy recommendations. Firm-level data from the World Bank Enterprise Surveys, which contain information on firms' inputs and outputs, was used to calculate a measure of firm productivity: labor productivity. The methodology applied and the detailed regression results are presented in Annex 2.

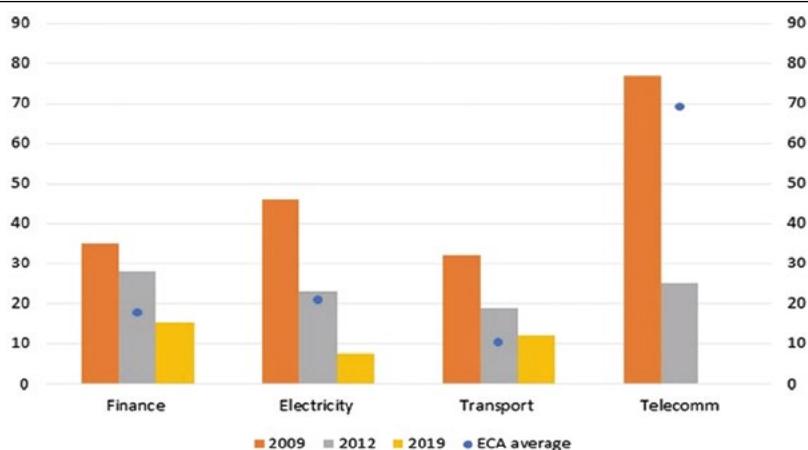
#### Global and regional evidence suggests firm productivity is affected by the quality of business service provision

**The results show that productivity performance is heterogeneous across firms.** As typically found in the literature, firms that are more integrated in the global marketplace show productivity premia when compared to others in the same country and same sector. For example, exporters in the ECA region in the sample are 22-23 percent more productive than non-exporters. Foreign-owned firms in ECA are also substantially more productive than domestic firms.<sup>53</sup> In addition, the age of a firm and the size matters (Table 3-5 in Annex 2).

**Cross-country evidence suggests that firm productivity is affected by poor service provision.** Global evidence suggests that access to finance, measured through averages of firms' perceptions, also affects the performance of firms. The lower the scores given by firms to these services, the lower the estimated levels of labor productivity (Table 3-5 in Annex 2). When looking at the ECA region, access to finance and transport services have the largest effect on firms' performance. For electricity and telecommunications, the effect is not well-determined.

**Limiting the sample to Russian firms, the quality of services inputs is also shown to matter.** Repeating the exercise using a smaller sample of just Russian firms, firms' perceptions of the quality of transportation, power supplies, and financial services, are all significantly associated with firm performance as measured by labor productivity (Table 3-5 in Annex 2). Russian firms perceive access to finance and the quality of transportation services to be the greatest constraints to their performance, although since 2009 there have been significant improvements (Figure 3-16).

**Figure 3-16: Perceptions on access to quality Russian services have been improving**  
(Percentage of firms that consider service provision to be a major/severe obstacle to performance)



Source: Enterprise Surveys.

<sup>53</sup> Defined as firms with more than 10 percent foreign ownership; this level is used by statistical agencies in many countries (e.g. U.S. Bureau of Economic Analysis). It is also the amount defined in the IMF's Balance of Payment Manual.

## In Russia, improved access to bank finance, fewer interruptions to electricity and water supplies, and increased email and website use would have a positive impact on firm productivity

The results also show a statistically significant association between objective measures of access to finance, electricity and water, and ICT services, and firm performance. Aside from survey respondent perceptions, the effects of different types of services on firm productivity were also analyzed using measures of services performance.<sup>54</sup> The results are summarized in Table 3-2.

**Table 3-2: Summary table of productivity determinants based on objective measures of services' performance**

Type of service	Indicator	Expected effect on productivity	Russia	ECA	All countries
Access to finance	Reliance on internal funds for investments	Negative	ns	Ns	(-) <sup>***</sup>
	Reliance on internal funds for working capital	Negative	(-) <sup>***</sup>	(-) <sup>***</sup>	(-) <sup>***</sup>
	Reliance on bank finance for investments	Positive	ns	Ns	(+) <sup>***</sup>
	Reliance on bank finance for working capital	Positive	(+) <sup>***</sup>	(+) <sup>***</sup>	(+) <sup>***</sup>
	Collateral (% of loan)	Negative	ns	Ns	(-)
Electricity/water	Power outages (number)	Negative	ns	Ns	ns
	Power outages (duration)	Negative	(-) <sup>***</sup>	Ns	(-) <sup>***</sup>
	Losses due to power outages	Negative	ns	(-) <sup>***</sup>	(-) <sup>***</sup>
	Water supply incidents	Negative	(-) <sup>***</sup>	(+) <sup>***</sup>	ns
	Own generator	Positive	(+) <sup>***</sup>	(+) <sup>***</sup>	(+) <sup>***</sup>
ICT/Telecommunications	Email users	Positive	(+) <sup>***</sup>	(+) <sup>***</sup>	(+) <sup>***</sup>
	Website	Positive	(+) <sup>***</sup>	(+) <sup>***</sup>	(+) <sup>***</sup>
Transportation	Products lost in transit (% value)	Negative	ns	(-) <sup>**</sup>	(-) <sup>***</sup>
	Exports lost during shipping (% value)	Negative	ns	Ns	(-) <sup>*</sup>
	Products lost in transit due to theft (% value)	Negative	(+) <sup>*</sup>	Ns	(-) <sup>***</sup>

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

<sup>54</sup> Labour productivity was regressed on objective indicators of services performance, using the firm characteristics used above—exporter status, foreign ownership, age and size—as additional covariates and controlling for sectors, countries, and years with each type of service analyzed independently (finance, electricity and water, ICT/telecommunications, transport—see Table 3-6, Table 3-7, Table 3-8 and Table 3-9 in Annex 2) and then for a smaller sample of just Russian firms (Table 3-10 in Annex 2).

**In Russia, firms with access to bank financing and relying less on internal funds for raising capital, and those using email and with their own website, show higher labor productivity.** While firms perceive the quality of transport to be associated with their lower productivity performance, using actual measures this is found not to be the case. While losses due to transportation weaknesses undermine productivity for firms globally and to some extent in ECA countries, they appear to be less of an issue for Russian firms.

**Inadequate electricity and water services also significantly undermine firm performance.** The longer the power outages and the more frequent the number of water supply incidents, the more labor productivity is affected. Improved water supply services appear to have a more positive impact for Russian firms than for other firms in the ECA region and globally

### **A reduction of barriers to foreign participation in business services in Russia would also increase the productivity of all firms in the economy that use business services and have a positive effect on real income**

**Another dimension of services sector performance is how FDI affects the availability of services in sectors that use them as inputs and that result in total factor productivity gains to the broader economy.** Several studies that use firm-level data support the finding that FDI, and the availability of business services in particular, result in productivity gains (Francois and Hoekman 2010). One would therefore expect ceteris paribus that if Russia reduced barriers to FDI in business services that this would lead to an increase in FDI and access to business services in Russia, which would lead to increased output and exports in all sectors including manufacturing.

**To examine this issue, a global computable general equilibrium (CGE) model was used to examine the impact of a reduction in barriers to FDI in business services.** The CGE model of the EAEU developed by Knobel et al. (2019) contains eight regions: Russia, Armenia, Belarus, and Kazakhstan (the four EAEU countries); plus the EU, the USA, China, and an aggregate for the rest of the world. The model has 28 sectors, with FDI in business services.<sup>55</sup>

**The results show an increase in Russian exports of all manufactured goods.** A scenario is examined in which EAEU countries reduce their barriers to FDI in business services by 50 percent from other EAEU countries and by 25 percent from other countries (Tarr 2020). The data show that all four of the regions of the model outside the EAEU have FDI in business services sectors of Russia. The results show an increase in Russian exports of all products of 1.2 percent (i.e. GVC impacts for all goods sectors) with a real income gain for the country of 1.23 percent of total consumption. The largest estimated increases in exports are for transport equipment (4.3 percent), mineral products (3.5 percent), and chemicals (2.5 percent) (see Table 3-3).

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<sup>55</sup> The model is based on background studies conducted in the four EAEU focus countries on estimates of the ad valorem equivalents (AVEs) of barriers against FDI in business services. The AVEs for Russia used in the model are: water transport (38.7%); air transport (55.9%); communications services (1.9%); financial services (11.0%); insurance (27.3%); and business services (28.3%). It is also based on background studies used to estimate the shares of business services sectors that are captured by firms from the various regions in the model.

**Table 3-3: A reduction in barriers to FDI in business services would increase exports from all manufactured goods sectors**

*(Estimated annual percentage change in Russia's exports from a reduction in EAEU barriers to FDI in business services)*

<b>Sector</b>	<b>Percentage change in exports</b>
Food	1.0
Wood products	1.5
Paper products and publishing	1.4
Petroleum and coal products	0.9
Chemicals, rubber, and plastic products	2.5
Mineral products	1.9
Metals	3.5
Transport equipment	4.3
Electronic equipment and machinery	1.7
Other manufactures	0.9
Agriculture	0.2
Forestry	0.8
Fishing	0.5
Textiles and apparel	1.2
Leather products	1.1
Electricity, gas, and water	1.1
Construction	0.6
Public administration, recreational, and other services	1.4
<b>Total</b>	<b>1.2</b>

Source: Tarr (2020).

## 4. CONSTRAINTS TO DEEPER INTEGRATION OF SERVICES IN THE RUSSIAN ECONOMY

**This section examines those constraints that are adversely affecting the performance of services in the Russian economy.** The main findings in the previous sections were: i) Russia's services exports are mainly in 'traditional' as opposed to 'modern' activities; ii) despite recent increases in modern services exports, there has been relatively little change in the composition of Russia's services export basket over the past decade; iii) there has been relatively limited domestic services integration in exports of manufacturing; and iv) improved access to, and performance of, services inputs would positively and significantly affect the productivity and performance of downstream firms in Russia. What factors might explain why Russia has not been able to develop a modern services sector and better integrate services into its exports?

### Services firms in Russia most frequently report access to finance, tax rates, and weak transportation as their biggest obstacles to doing business

According to World Bank Enterprise Surveys, access to skills and practices of the informal sector are also considered to be important constraints (Table 3-4). For services firms, infrastructure of utilities appears to have improved, and the use of banks or suppliers for financing has expanded too. However, more services firms complain of transportation being their biggest obstacle to doing business in 2019 than in 2012. Some results for services firms, like the improvement in access to finance since 2012, likely reflect both reforms adopted in the intervening seven years as well as the impact of the response to sanctions in providing subsidized access to finance. The results also reflect a very significant improvement in infrastructure and the regulatory environment, which is reflected in the Doing Business results over this period (Russia was ranked 120<sup>th</sup> in Doing Business 2012, and 28<sup>th</sup> in Doing

**Table 3-4: A reduction in barriers to FDI in business services would increase exports from all manufactured goods sectors**

*(Estimated annual percentage change in Russia's exports from a reduction in EAEU barriers to FDI in business services)*

Top Subgroup Level	Manufacturing			Services		
Year	2009	2012	2019	2009	2012	2019
Practices of the informal sector	5.8	6.9	4.1	6.2	7.0	10.8
Political instability	8.4	6.8	2.7	8.0	8.0	6.4
Inadequately educated workforce	11	6.5	6.1	16.4	6.4	8.0
Access to finance	31.5	14.1	19.6	13.7	15.0	13.8
Tax rates	16.0	39.1	36.3	17.5	35.4	19.6
Corruption	8.0	7.9	7	11.9	8.2	6.1
Transportation	0.2	3.4	9	0.1	3.7	11.6
Access to land	2.1	6.6	0	6.5	3.0	2.4
Business licensing and permits	7.9	2.4	2.8	8.0	5.0	6.4
Crime, theft, and disorder	0.2	0.1	0	2.0	1.1	3.4
Tax Administration	3.0	1.0	9.5	2.0	2.2	7.5
Electricity	1.7	2.5	1.3	2.1	1.7	1.1
Courts	0.2	0.3	0	0.2	0.7	0.7
Labor regulations	1.2	0.3	1.1	5.1	0.5	0.7
Customs and trade regulations	2.8	2.1	0.2	0.4	2.1	1.4

Source: World Bank Enterprise Surveys.

Business 2020). While the analysis portrays Russia in a post-sanctions environment – distinctly less connected to global markets, less innovative, and with an unlevel playing field between public and private sectors that hinders competition. The following sections discuss some of these constraints in more detail.

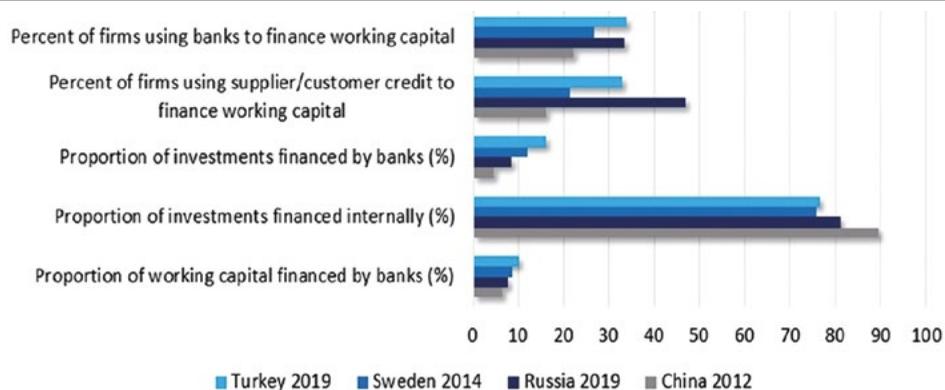
### Limited access to finance poses an obstacle to services sector development, particularly for SMEs

**Access to finance appears to be a constraint for Russian firms and especially those in the services sector.** According to World Bank Enterprise Surveys, 13.9 percent of services firms surveyed in 2019 identified access to finance as a major obstacle to doing business. This relates to the fact that some services sector firms – especially SMEs and startups – lack the physical assets needed as collateral to access funding.

Russia’s financial sector has been developing rapidly but still provides limited support to domestic investment. The financial sector in Russia has witnessed rapid growth over the past decade with assets reaching 170 percent of GDP in 2015. However, its capacity to finance domestic investment is being constrained. According to the Global Competitiveness Index for 2019 (WEF 2019), Russia ranks 43rd out of 140 overall, but ranked just 95th on financial market development, significantly lower than Brazil (55th), India (40th), China (29th), the USA (3rd), and Turkey (68th). Difficulties in accessing financing, specifically credit, is a key obstacle.

**Most firm investments are financed internally or from state resources, relying less on banks to finance working capital.** In a world of perfect financial markets, any investment project that is profitable will be financed irrespective of the availability of internal funds, as credit will be readily available. This helps firms to invest and to innovate. However, Russian firms appear to confront difficulties when trying to obtain financing from external sources. The ratio of bank credit to the private sector as a proportion of GDP is among the lowest of comparator countries. According to FinStats,<sup>56</sup> Russia’s bank credit-to-GDP ratio was 76 percent in 2018 compared to OECD members (141 percent), the EU (94 percent), the USA (186 percent), and China (161 percent). Only India (50 percent) and Turkey (68 percent) had lower ratios. In Russia, the financial structure of firms reflects a bias toward the use of internal funds and state resources, not only for financing working capital, but also for investment projects (Figure 3-17). For example, 81 percent of investments are financed internally among Russian firms, the highest percentage of all comparator countries (using Sweden as a proxy for the EU and OECD) except China. Similarly, just 8.3 percent of investments in Russia were financed by loans and lines of credit from banks, compared to 16 percent in Turkey and 12 percent in Sweden. The supply of formal credit to Russia’s private sector therefore appears low. The limited access to global capital markets due to economic sanctions also limits firms’ sources of funding.

**Figure 3-17: Russian firms rely more on internal financing and state resources for investments and less on external sources compared to most comparator countries** (Revealed objective indicators on access to finance)



Source: World Bank Enterprise Surveys.

<sup>56</sup> <https://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS>

**SMEs in the services sector are particularly under-served.** Russia's banking sector remains focused on corporate lending primarily to support large and state-owned enterprises. Through limitations on collateral, a limited range of financial products tailored to SMEs, and weaker financial knowledge and skills, SMEs in Russia experience a higher rejection rate for loan applications and more than two-thirds of SMEs that need a loan are credit constrained (either discouraged from applying for a loan or rejected) compared with less than one-third of large firms (World Bank 2016).

**Innovations in Russia's services sector itself would help reduce constraints associated with access to finance.** FinTech are banking and financial services delivered using new technologies. They involve digital solutions for banking, payments, transfers, foreign exchange, wealth management, and insurance. The FinTech sector in Russia has been growing quickly over the past few years, valued at more than US\$810 million at the end of 2018 (12 percent larger than in 2017), employing 3,600 workers (Deloitte 2018), and with great expansion potential to serve those firms and segments of society that struggle to access traditional financial institutions. Most of the sector in Russia is currently focused on payments, money transfer, and online lending, with some areas such as peer-to-peer lending, crowd investment, and cryptocurrencies yet to be regulated.

**Unnecessary and cumbersome requirements of currency regulation and currency control also adversely affect services exporters.** More specifically, services exporters are bound by an obligation to repatriate earnings from export contracts and restrictions on handling foreign accounts. The existing requirements related to currency regulation impose restrictions on transborder payments for services provided using e-money, which presents a barrier to exports of services via the internet (Ministry of Economic Development 2019).

### Skills gaps are a critical constraint to services sector development

**The capacity for Russia to further develop modern services and upgrade along key value chains will rely heavily on developing its skill base.** Several services sectors have been found to be significantly more skill-intensive than many goods industries (van der Marel 2012) and this is reflected in trade patterns. Examples include modern services such as computing and business services. These services tend to be ICT intensive and just like goods can be unbundled in the value chain. Human capital endowments are therefore critical to the export of modern services.

**Despite high levels of formal education attained by Russian workers, the quality and content of education is not building the skills demanded by a modern services sector.** According to OECD estimates for 2016, 54 percent of Russia's adults have attained a tertiary education, giving Russia the second-highest attainment of tertiary education among 35 OECD member-countries. Russia's higher education sector is rapidly evolving, with its top universities receiving financial incentives and advisory support for raising educational and research results to the highest international standards. According to the Federal Services for State Statistics, between 1995 and 2010, the share of employees with less than secondary education declined from 47 to 24 percent. Nevertheless, a skills gap persists in the country. For modern services, a combination of interpersonal (oral communications, teamwork, customer service), problem-solving (leadership, solving complex tasks, planning), and technical (use of IT equipment, languages) skills are most needed. However Russian employers report especially severe shortages of problem-solving and interpersonal skills (World Bank 2016).

**The Russian education system, despite its high attainment levels, is therefore facing challenges in developing high-order and social skills that are needed by Russian services firms, particularly providers of modern services.** The problem is in part explained by the legacy of the centrally-managed education system. While the skills development infrastructure is no longer exclusively guided by the state as both the provider and consumer of educational services, the mechanisms that would link employer demand for skills with educational supply are not fully formed. For example, vocational training is lacking, and the number of private education and training providers is small. Public institutions often conduct education based on traditional and outdated concepts, content, and practices that do not adequately respond to the needs of the private sector.

**While Russia has recently initiated several policy measures to establish a better institutional environment for human capital development, incentives are still needed to ensure quality and relevance of skills training and for services firms to invest in human capital.** Russia has recently introduced a National Qualifications System that

revised many education standards based on labor market demands. In 2012, Russia became a member of the international WorldSkills movement which sets modern standards for the provision of vocational training. Russia's own national development agencies (e.g. Skolkovo, Rosnano, RVC, the Bortnik Foundation, Agency of Strategic Initiatives), with support from the government, are also providing financing and training for establishing a stronger innovation structure and enhanced R&D capacity. Despite these important initiatives, most education and training providers continue to focus on formal certification of graduates through diplomas and, even though performance-based budgeting has been introduced in tertiary education, the financing of education institutions and staff salaries still depends on inputs such as the number of students. Services firms rarely influence the supply of skills training by participating in educational institution management processes and quality assessments. And while most OECD countries provide incentives for services firms to invest in skills development, such as training workers or offering internships through the provision of subsidies or tax incentives, such mechanisms are underutilized in Russia. Russian services firms see little benefit in spending their own resources on an education system that delivers the wrong skills for their needs.

### **Weak transport connectivity – especially road – results in economic isolation from markets and hinders Russia's economic growth prospects**

**Russia's transport connectivity infrastructure is aging.** In the best-connected regions, travel to the main trading partners averages less than 42 hours but it can take up to eight times longer for the least connected regions (World Bank 2016). Improving both the quality and the capacity of transport and logistics services are therefore critical to Russia being able to grow a globally integrated economy, and to meet this challenge it will need to tackle several connectivity gaps.

**Russia's transport network is huge but remains unevenly distributed geographically.** Transport is also of uneven quality, especially in the road network which is among the lowest of comparator countries and is increasingly viewed as a key constraint to the country's competitiveness (Annex 3). Russia lacks a nationwide highway and about three-quarters of regional roads do not meet national standards, which raises the cost of road transportation. Due to weather conditions in many remote areas, the road network does not provide reliable connections – more than 40 percent of Russia's total land mass does not have reliable access to the network because many of the roads are seasonal. More than 50 percent of the local road network is unpaved resulting in uneven geographic accessibility.<sup>57</sup> In 2011, a roads fund was created with revenues from excise taxes and transport tax to support road repairs and to allow for the planning of public roads of both federal and regional importance.

**Traffic congestion on Russia's main road network results in additional transport costs and in cities contributes to long commuting times hindering services competitiveness.** The areas most affected are those not connected to the main railway network and road transport systems or are distant from the west of the country where the main services hubs are located (Donchenko 2013). Connectivity to Russia's largest urban centers (Moscow and St. Petersburg) is less of a challenge for areas nearby but growing congestion in large urban areas poses a significant challenge for intra-urban and regional traffic. In particular, the lack of an efficient public transport system and an absence of measures to manage transport demand limit the economic benefits of agglomeration.

**Demand for rail services is high but repairs to Russia's extensive rail network are not keeping pace with wear and tear.** Rail is the key mode of transport in Russia. The country has the third largest rail network in the world with 85,281km of rail, of which about 34,000km is electrified. Rail has a critical role in Russia's freight transportation, accounting for 45.3 percent of total freight transport in 2015 (WTO 2016) and nearly 90 percent if pipelines are excluded (Weaver 2013). The high share of rail reflects the country's geography and the economic importance of commodity production (coal, oil, metals, and ores) and heavy industry (e.g. construction materials). Improving the quality of Russia's rail infrastructure is particularly important because rail dominates freight transport in servicing large Russian industries with raw materials that often have no other alternative to rail.

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<sup>57</sup> Public road density at 37km/1,000km<sup>2</sup> is low compared to, for example, that in Canada (100km/1,000km<sup>2</sup>). Density increases to 110km/1,000km<sup>2</sup> in the European part of Russia but falls to as low as 6km/1,000km<sup>2</sup> in the Far East.

## Limits to competition and regulatory restrictions in services limit the ability to deepen foreign linkages

**Competition from both domestic and foreign providers of services is a key driver of efficient allocation of resources and competitiveness through allowing the entry of high productivity firms and the exit of lower productivity ones.** Competition helps to shape the incentives of firms and boosting competition can increase productivity growth. State participation in the economy can affect firms' incentives to compete. In addition to playing a regulatory role, governments also intervene directly as both sellers and buyers of services through the presence of state-owned enterprises (SOEs) and public procurement processes. While SOEs can be justified to achieve strategic or social objectives – particularly in those country cases of an otherwise absent private sector – they may distort the playing field if the state acts simultaneously as a market player and a regulator. Similarly, public procurement rules that do not foster effective competition among market participants can restrict the efficient allocation of resources among firms.

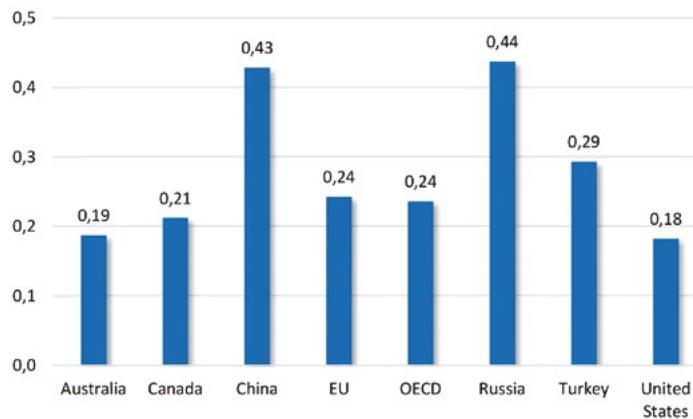
**Improving competition in Russia's services sector would boost productivity.** The government has a high level of direct participation in the economy both as a seller and a buyer. SOEs in Russia operate in particularly concentrated markets and especially in the services sector. SOEs account for at least one-third of the economy and public procurement by government departments, and amount to 29 percent of GDP with just 12.7 percent of government contracts awarded privately in 2017 (World Bank, 2019b). Many of Russia's SOEs use ad hoc procurement and single source methods that are not competitive and there is not a single set of procurement rules. In addition, Russia's SOEs are often the largest firms in many of the services sectors in which they operate. For example, in banking there is Rosselkhozbank, Sberbank, and VTB; in energy there is Gazprom, Rosneft, and Transeft; Aeroflot and Russian Railways in transport; and Avtodor in construction. Furthermore, in some services sectors such as telecommunications the market has also seen significant consolidation in recent years where the largest market entrant – with 17 percent share as of 2019 – is being acquired by the incumbent SOE. In the air transport sector, the SOE is increasing its market share by taking over the operating rights of firms that have left the market: the market share of airlines excluding the top five declined from 39 percent in 2008 to 12 percent in 2012 (World Bank 2019b). Restrictive regulations also reinforce the advantageous position of SOEs. Such measures include explicit forms of discrimination that are protectionist in intent by reserving a market for domestic incumbents. For example, Rostelecom – the state-owned incumbent in the telecommunications sector – has exclusive rights to provide internet services to federal and municipal healthcare providers and Aeroflot – the national carrier – has limited competition on some international routes due to its designated carrier status. The state-owned railway company RZD and its subsidiaries are vertically integrated in the infrastructure and freight/passenger services sectors with competitors in the past facing challenges in accessing rolling stock.

**Deepening linkages between local and foreign investors and firms in the services sector would also increase productivity.** Working with foreign firms and exporting to foreign markets both regionally and globally helps domestic firms boost their productivity by forcing them to meet higher quality and performance standards often applied voluntarily by multinationals and foreign buyers. The positive effect on productivity is magnified when domestic services firms are part of regional or global value chains where they can face stiffer global competition and benefit from spillover effects from more continuous interactions with foreign partners.

**Despite progress with opening services trade to foreign providers, Russia still has considerable potential to leverage greater exposure to international competition as a driver of efficiency and productivity gains.** Russia adopted significant liberalization in the context of its WTO accession in 2012. The number of sectors covered by its services commitments is large – Russia made specific commitments on 11 services sectors and 116 sub-sectors (WTO 2016). However, significant limitations remain. For example, for foreign services suppliers wanting to establish a commercial presence in Russia there are restrictions relating to land acquisition, privatization, and the type of commercial presence. There is also a lack of commitments related to the use of subsidies, which allows the Russian government to discriminate in favor of domestic suppliers. Finally, regarding the temporary movement of natural persons (Mode 4), the commitments made apply to intra-corporate transferees and business visitors only – they do not include commitments on independent providers of contractual services.

**Compared to comparator countries, Russia is services trade restrictive.** The OECD has developed a services trade restrictiveness index (STRI) which measures the impact of regulations affecting trade in services across 22 sectors and allows an assessment of aggregate quantitative and qualitative measures such as quotas, licensing and authorization criteria, establishment requirements, discriminatory measures, and joint venture requirements, and to compare these measures with those in other countries. The indices are measured between zero and one, in which one is the most restrictive. The OECD STRI covers all OECD countries plus Brazil, China, Costa Rica, India, Indonesia, Malaysia, Russia, and South Africa. In 2019, the overall STRI for Russia was almost twice the average for the OECD, the EU, and the USA. Russia also exhibits a higher level of restrictiveness than Turkey but is on par with China (Figure 3-18).

**Figure 3-18: Russia is services trade restrictive (Average STRI across all sectors, 2019)**

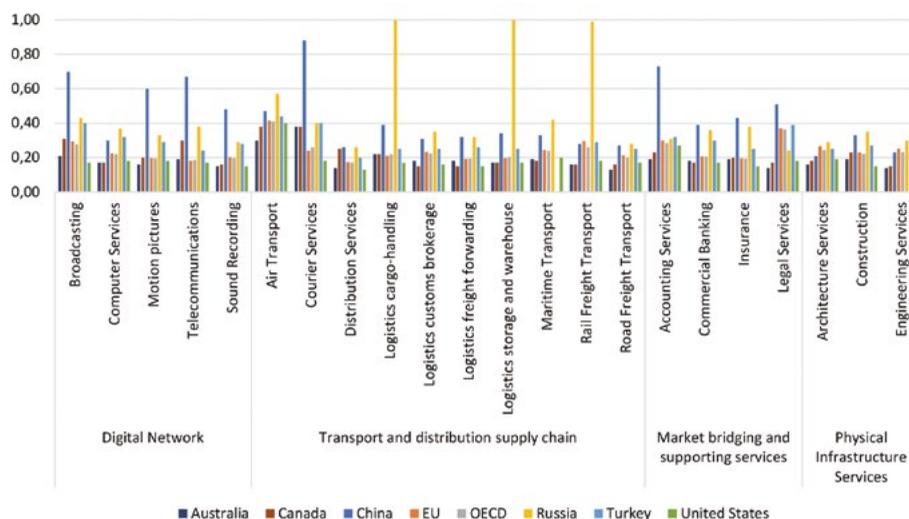


Source: OECD STRI (<https://stats.oecd.org/Index.aspx?DataSetCode=STRI>)

Note: The average score for the EU does not include the following EU members, for which data is not available: Bulgaria, Croatia, Cyprus, Malta, and Romania.

**While Russia’s STRI score is above the OECD average in almost all sectors, it is especially closed in transport services.** Russia exhibits the highest restrictions in three sectors: rail freight transport, cargo handling, and storage and warehousing services (Figure 3-19). This reflects high restrictions to foreign entry, barriers to competition,

**Figure 3-19: Russia is most trade restrictive in transport services (STRI by sector, 2019)**



Source: OECD STRI (<https://stats.oecd.org/Index.aspx?DataSetCode=STRI>).

Note: The EU countries used in the calculations include averages of STRIs for Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden.

restrictions to the movement of people, as well as issues of regulatory transparency and other discriminatory measures. In rail transport, for example, Russian Railways is the only company providing railway infrastructure and locomotive traction services.<sup>58</sup> In logistics, cargo-handling, and storage and warehousing, a statutory monopoly controls these services in all airports, ports, roads, and rail terminals.

**Russia's trade openness is also more restrictive compared to comparator countries in physical infrastructure services and digital services such as computing, motion pictures, and sound recording.** In these sectors, Russia is the sixth most restrictive of the 46 economies included in the OECD STRI database. In computer services, there are relatively high restrictions on foreign entry as well as cumbersome regulations for the hiring of foreign professionals, including intra-corporate transferees, independent, and contractual service suppliers. In 2015, the Russian government introduced a requirement that certain personal data collected in Russia be stored in local servers. In 2016, the threshold for foreign equity allowed in broadcasting companies was lowered to 20 percent. By contrast, in legal and accounting services, Russia's STRI is below the average for all countries included in the database.

**Russia is also restrictive in movement of natural persons.** Averaged across all sectors, Russia is the fourth most restrictive in mode 4 services trade among all countries in the OECD STRI database. At the sector level in terms of restrictions to movement of people, Russia has a relatively high STRI in computer, engineering, and architecture services (see Annex 4).

**Other sources of Russia's trade costs in services are also high compared to other OECD countries.** A large part of trade costs in services is driven by non-discriminatory aspects of trade policy. Factors such as the quality of the regulatory environment and the rule of law are an important enabling factor, as well as regulatory transparency. Using a gravity model estimation, van der Marel and Shepherd (2019) find that the bulk of non-discriminatory trade costs are found in the governance structure of a country and that among OECD countries these governance costs appear to be highest for Russia (Annex 5). In the Russian context, governance weaknesses deriving from regulatory uncertainty, difficulty protecting property rights, and a perception of corruption, undermine investment decisions. A lack of transparency and predictability for licensing and operating requirements also weighs heavily on all services industries. Regulatory requirements for business activities and business operating standards make it difficult for businesses to operate. The requirements are also a source of corruption and harassment leading to regulatory uncertainty that negatively affects investment. Many of the existing standards are outdated or not directly concerned with consumer protection, which is the focus of modern risk-based licensing regimes.

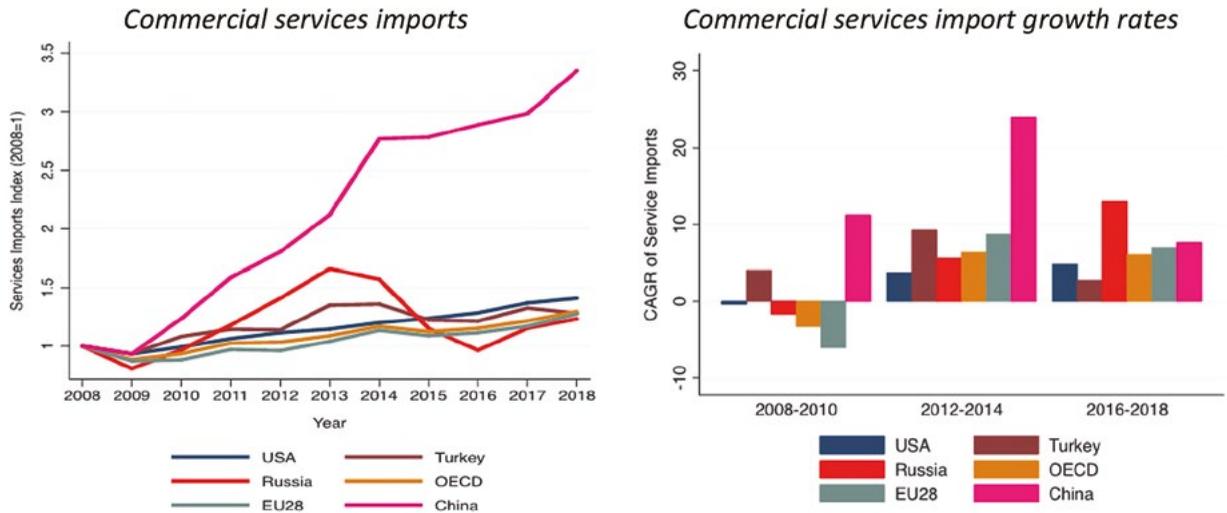
**While Russia is embarking on reforming the regulatory system facing services, it remains a mammoth task.** Recent legislation has attempted to reform the business inspection regime, balancing public interests with those of business while moving away from unnecessary red tape, inefficient enforcement, and rent-seeking behavior. However, a key challenge is the sheer size and scope of Russia's regulatory system as the legislative base, including technical regulations, is simply too large to be revised in its entirety. This means that progress in the short term will need to be driven by better delivery of existing regulations through, for example, the use of risk profiling as the basis for inspections.

### **Services import growth has been low limiting the potential for Russia to boost its export competitiveness and integration into GVCs**

**Russia's services imports are concentrated in travel and transport services but import growth has been weak.** In response to ongoing U.S. and EU sanctions since 2014, Russia has adopted import substitution and technology policies to reduce its dependency on western imports in an effort to set up its own alternative production systems and high-end technology research and development efforts. Consequently, while services import growth rates were higher in the period 2016-2018 than in 2012-2014 (Figure 3-20), Russia's services imports have grown more slowly than all comparator countries over the past decade. The importance of travel and transport services in Russia's total services imports has decreased over the same period while the share of modern services imports – including financial, ICT, and other business services – has increased (Figure 3-21).

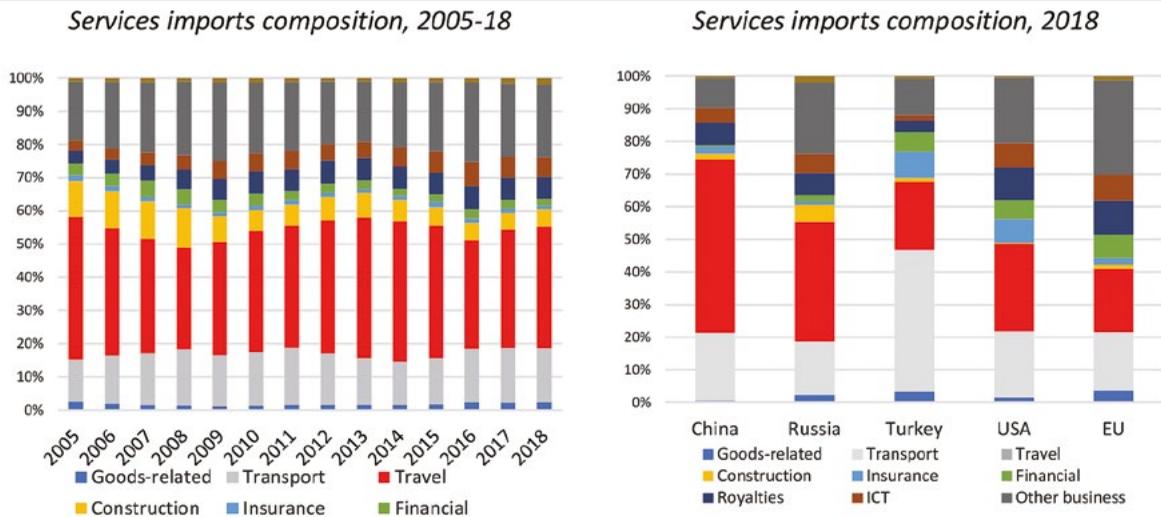
<sup>58</sup> Although foreigners can provide rail services by operating the rolling stock, they must rely on Russian Railways for locomotives to pull them on the infrastructure. In addition, since 2017, subsidies granted for the acquisition of rail transport equipment cannot be granted to foreigners.

**Figure 3-20: Russia's services import growth has been weak due to import substitution policies**



Source: Authors' calculations based on data from UNCTAD.

**Figure 3-21: Russia's services imports are concentrated in travel and transport, but the importance of modern services imports has been increasing**



Source: Authors' calculations based on data from UNCTAD.

**Attracting efficiency-seeking FDI is needed to both improve Russia's participation in GVCs and diversify its exports.**

The decline in net FDI inflows over the past five years and weak services import growth are likely to limit the potential for Russian firms to increase their export competitiveness and participation in GVCs. Low levels of FDI and services imports will affect Russia's economic growth performance. Even before the recent drop in FDI, investments were largely orientated towards the domestic market (market-seeking investments) and have not contributed to shifting production and exports towards higher technology or higher value-added products (efficiency-seeking investments). Most FDI has been motivated by the size and characteristics of Russia's domestic market, in part to obtain access to otherwise closed segments of the economy in some sectors. Efficiency-seeking FDI is needed for Russia to improve its participation in GVCs.

## 5. POLICIES TO SUPPORT FURTHER SERVICES INTEGRATION IN THE RUSSIAN ECONOMY

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**While the services sector has played a critical role in Russia’s economic growth over the past couple of decades, its full potential has not yet been realized due to the impact of economic sanctions imposed externally but also numerous domestic constraints.** As described earlier, Russia’s experience over the past 20 years confirms the importance of services for economic diversification and their impact on economic growth. However, Russia’s overall services export growth has been mainly in traditional (as opposed to modern) activities, and there has been little change in its services export basket over the past decade. The analysis also finds that there has been relatively limited domestic services integration in exports of manufacturing products and that improved access to services would improve the productivity of all firms in the economy. Limited success can be associated with limited competition and regulatory restrictions, including those that limit the foreign exposure of Russian services firms; distortions associated with the direct intervention of the state in the economy; and business climate issues (specifically skills, access to finance, and weak transport connectivity).

**Looking ahead, Russia could be well-suited for the export of new services if some of these constraints are addressed.** For example, modern services such as financial, business, and ICT services have been very dynamic and offer Russia the prospect of exploiting new high value-added markets. To facilitate changes in the services sector necessary to support exports, a focus on forward linkages is necessary. In terms of domestic services integration with other sectors, improved access to services inputs—such as financial, ICT, and professional services—would positively affect the productivity and performance of downstream firms in Russia, boosting the prospects for export diversification and growth in all sectors.

**Realizing these gains requires strong horizontal and sector-specific initiatives.** Such initiatives include: taking steps to foster competition in key services industries; undertaking reforms to increase Russia’s exposure to foreign services suppliers; developing the skills base needed to support higher value-added services; improving access to finance (especially for SMEs) to help start and grow new services enterprises; and boosting transport connectivity, especially for road, to better link Russia’s regions to the global economy.

**While some of these reforms can be supported in the context of multilateral trade negotiations, they can all be undertaken unilaterally.** For example, while Russia has undertaken important commitments in the context of the GATS to reduce restrictions to foreign participation in its services sector, Russia’s services regime remains relatively restrictive.

### Horizontal initiatives will be necessary to realize the potential of the services sector and strengthen its role in diversification

While there are specific barriers unique to certain types of services, there are also problems that have an adverse effect on the export of services as a whole:

**Limiting the discretion with which government departments and SOEs in Russia procure services would help foster greater competition.** The absence of a single procurement framework has resulted in SOEs often using procurement methods that do not ensure competition. In the short-term, methods should be explored to limit single-source procurement including developing guidance on when this is permitted (e.g. for small contracts) and enforcement of the rules. In the medium term, the legal framework governing SOE procurement should be changed by making the range of pro-competitive procurement methods exclusive and limiting the scope for SOEs to use other methods.

**Russia needs to build up its stock of human capital to meet the demands of the services sector.** Russia needs to ramp up the skill level of both its current and future workforce by making deep and broad educational investments in its youth—which will yield long-term returns—as well as practical, applied, and short-skill upgrades for its existing workers. Most of today’s and tomorrow’s jobs in the modern services sector will require technical/vocational, soft

interpersonal, and problem-solving skills which are often not acquired at school but instead through market-oriented technical and vocational institutions, with intensive on-the-job learning opportunities. Therefore, in addition to strengthening traditional education programs, Russia should enhance and expand its vocational education programs in close collaboration with the relevant services industries to provide a market-ready, skilled employment base. In particular, it should:

- Introduce incentives to adjust the content, forms, and methods of skills training by training providers, including firms themselves. Firms should be awarded for investing in the human capital of their employees as well as for working with the broader education system to design vocational education and training programs. Mechanisms for quality assessment and evaluation of educational services are also required.
- Increase the capacity of skills development providers as well as the range of education and training programs available, especially vocational training involving services sector specialists from the private sector and aligning practices used in services sectors with those taught in education institutions.
- In the interim, facilitate the entry of foreigners with relevant skills for Russia's services sector to temporarily alleviate some of the constraints. Almost 90 percent of migrants coming to Russia are from countries where the average skills of workers are lower than in Russia (World Bank, 2016). Taking measures to increase the contribution of foreign countries to the stock of skills in Russia could therefore be an effective way of overcoming the skills gap in the short run. This could include introducing guest worker programs, and loosening entry requirements in sectors with labor shortages using a sector-based, skill-based approach. Russia could also move in the direction of other countries, which use various quota systems aimed at making decisions on admission of foreign workers on the basis of economic needs, allow in certain cases lower-skilled foreign workers in guest worker programs, and allow certain services sectors to enter into direct agreements with the government to fill labor shortages.

**Increasing foreign exposure to services would also increase the performance and productivity of Russian firms in all sectors.** Promoting reforms that reduce the costs of services trade and FDI in upstream industries from both regional and global sources can serve as an engine for upgrading Russian exports. In addition, developing a modern services-based economy also requires an open, investment-friendly, transparent, and sound regulatory environment for the services sector. Trade and investment reforms that reduce the costs that foreign services suppliers face in accessing the Russian market, including policy constraints and bureaucratic procedures, should be addressed.

### **Sector-specific initiatives will also be needed to support services**

**Removing sector-specific barriers to firms contesting services markets would also reduce the dominance of incumbent firms and SOEs in critical upstream and downstream services sectors.** Russia should also follow international practice to help level the playing field between the state and the private sector by: i) limiting the ability of SOEs to access finance and incentives that are not available to private competitors; and ii) moving the control of SOEs from line ministries to independent holding entities. For example, in financial services foreign capital and foreign quota limitations for the banking sector and insurance services, respectively, could be increased taking into account the need to balance financial stability and autonomy of monetary policy with increased efficiencies that arise from the globalization of financial services. For insurance services, prohibitions on the establishment of foreign branches for the provision of non-life and life insurance should be relaxed. In telecommunications, improving competition requires regulatory reforms – including establishing a national independent regulatory authority with enough institutional capacity to implement regulatory reforms and enforce ICT sector regulations – and setting standards and procedures for shared use of infrastructure. Exclusivity rights granted to the SOE Rostelecom to provide internet services to healthcare providers should also be revisited. In the air transport sector, efforts should be expanded to ensure airlines have non-discriminatory access to airport facilities and services as well as reforming the designated carrier status for the national carrier on international routes.

**Developing the tourism market – including for medical and education purposes – in Russia requires effective mechanisms to enhance the competitiveness of the industry and streamline regulations.** For example, measures would include simplification of visa procedures and expansion of the e-visa system; and developing advertising and information materials on tourism opportunities, including for healthcare and educational purposes, in Russia and distributing these on the internet and at major Russian and international tourism exhibitions. The latter would include further development and improvement of promotion mechanisms of the national tourism center ‘Visit Russia’. It is also necessary to expand opportunities for foreign tourists to have value added tax returned upon departure after purchasing goods in Russia.

**If Russia’s services sector is to grow, the capacity of the domestic financial sector to fund investments should also be improved.** In 2016, the Central Bank of Russia drafted a strategy for financial market development (CBR 2016). The strategy aims to promote competitive access by Russian firms to domestic debt and equity financing, and sets out a roadmap for development of capital markets and the non-bank financial sector, as well as improving financial inclusion for SMEs. Beyond these measures, expanding access to finance will require: i) continued efforts to close weak banks; ii) diversification of the financial sector away from the banking-sector-dominated model and diversification of financing products especially those better suited to SMEs such as microfinance, guarantees, and leasing; iii) enforcement of market disciplines in the banking sector including increasing private sector participation in the sector; and iv) improving the financial literacy of SMEs.

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## APPENDICES

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### Annex 1: The role of services in Korea's transition to a GVC hub

Korea was one of the earliest participants in the Pacific production network at a time when U.S. multinational firms were beginning to source some of their products from East Asian countries with a comparative advantage in labor-intensive manufacturing. Japanese and U.S. FDI in manufacturing industries in Korea from the mid-1960s contributed to Korea's entry into early GVCs. While entry was initially through the export of low value-added items of garments and footwear, using mostly imported inputs, it soon diversified into chains through which flowed higher value and technologically advanced products.

In the late 1960s, Korea initiated policies to rapidly diversify the economy and to upgrade and increase domestic value added in existing products and to shift its industrial center of gravity towards higher-value products which were more capital, skill, and services intensive. The objective was to develop lead firms that could undertake not just manufacturing but also high-value research, design, marketing, and after sales services.

The strategy proved to be very successful. In 1965, Korea's exports as a share of GDP were 7 percent but had risen to 56 percent by 2012. During this time, Korea sustained near double digit growth through expanding and diversifying its exports. In the 1960s, Korea's exports comprised mineral and agricultural resource-based products. By the 1990s, these had been displaced by increasingly complex manufactured products with Korea now being one of a small group of countries to capture much of the value from two highly lucrative GVCs: electronic products and transport equipment.

What accounts for this success? In the early stages of its development, Korea was aided by FDI which broadened its industrial base, transferred technology, boosted workforce skills, and began linking the country into GVCs. To then develop more advanced industries that initiated structural transformation, the government empowered privately owned firms (e.g. Hyundai, Samsung, Daewoo) and provided them with tax incentives, financial support, and market access opportunities through trade liberalization in the context of the GATT. In the auto industry, government support and Hyundai's own intensive efforts resulted in the internalization of much of the value chain, including high-value services such as research and design. Once they were able to extend their reach beyond manufacturing into marketing, finance, logistics, maintenance, and repair, Hyundai and other Korean auto manufacturers were able to capture much more of the value chain. A high percentage of value added in producing a vehicle is derived from services (30-40 percent) with most profits coming from post-production services.

Similarly, in shipbuilding, Hyundai Heavy's (HHI) shipyard established a design department in 1978. Through the 1980s, HHI purchased ship designs from overseas and also licensed technology to build new types of higher-value ships, such as LNG carriers. During the late 1980s, it made advances in developing protective coatings, welding techniques, and in core technologies relating to ship propulsion, engine performance, and hull design. As with auto production, Korea's value chain in shipbuilding now extends beyond construction and design to the increasingly lucrative post-production services which now account for more than 30 percent of the cost of the ship itself and generate revenues throughout the life of the vessel.

None of these services could have been developed without upgrading the skills of the workforce. HHI and other companies (e.g. Samsung, Daewoo) recruited talent from other sectors and took advantage of training offered by foreign firms (e.g. British shipyards). Korean universities and training institutions were also training enough graduates with the skills demanded by industry.

In the semiconductor industry, the Long-Term Plan for the Promotion of the Semiconductor Industry introduced in 1981, together with a US\$400 million investment by the government, energized an industry that had originally been focused on the assembly of components and final consumer products by Japanese firms such as Panasonic; U.S. firms such as IBM and Motorola; and European firms such as Nokia that had established assembly facilities there in the 1960s.

Korean firms such as Samsung, LG, and SK Hynix turned their attention to producing intermediate components higher up the value chain, transferring assembly operations for TVs and cellphones offshore first to China and later Vietnam. They began actively seeking technology that would close the gap with Japanese and U.S. producers by licensing and financing smaller firms in Silicon Valley that needed to raise cash and were willing to share their product and process technologies. The Korean firms also set up research centers in electronic industry hotspots in the USA and Europe complemented by domestic research.

Korean firms are now a major force in the production of the most complex and expensive components (memory chips), displays, and mobile devices. They are also now integrated device manufacturers that control all steps in the production process: R&D, design, manufacturing, assembly, testing, packaging, and after sales services.

*Source: Adapted from Yusuf (2020).*

## Annex 2: Evidence of the impact of services use in firm productivity

### Methodology: Estimating the impact of services inputs quality on firms' productivity

How does access to quality services inputs affect firms' performance in Russia? Answering this question requires access to a dataset containing comparable measures of quality services input provision and of firms' performance in downstream sectors. Then, it is necessary to test whether a systematic relationship exists between the two. The approach follows that of Arnold, Mattoo, and Narciso (2008).

The dataset comes from the World Bank Enterprise Surveys. The measure of firms' performance chosen is labor productivity (the ratio of output to total labor costs).

The performance of services sectors is also obtained from the Enterprise Surveys. Subjective measures of local services performance, which are firms' valuations of how much of a constraint they consider electricity, telecommunications, transport, and access to finance for their businesses, are used. Firms are asked to select, on a scale from 0 to 4, whether they consider each of these dimensions to be: not an obstacle for their operations (0), a minor obstacle (1), a moderate obstacle (2), a major obstacle (3), or a severe obstacle (4).

The empirical strategy consists in regressing the measure of productivity on measures of the performance of services, controlling for factors that are typically identified in the literature as relevant for firms' performance, which include firm's export status, foreign ownership, firm's size, and firm's age. In addition, country-year fixed effects are included to eliminate the potential of distortions due to changes in the relative values of the different currencies in which output, wages, intermediates, and capital stock are expressed and to eliminate the effect of country-year unobservable factors that may affect both productivity and the perception of services' quality, as well as sector fixed effects to control for time-invariant and sector-specific unobservables.

Concerns about endogeneity arise because it is possible that poor performance affects firms' perceptions of the obstacles that services input provision represent. This would imply a bias upwards in the coefficient linking services performance with productivity. This makes a specification that links firm-level perceptions of services quality with firm-level productivity inappropriate. The empirical strategy, following Arnold et al. (2008), consists of aggregating the individual firm's responses to the services-related questions on the right-hand side at the regional level, within each country. This reduces the influence that an individual firm's performance has on the regressor. In addition, it is likely to better summarize the quality provision of services in a given region.

The chosen specification is as follows:

$$\mu_i = \alpha_{ct} + \gamma_s + \beta \text{Serv Performance}_r + \pi X_i + \varepsilon_i \quad (1)$$

where  $\mu$  is the indicator of productivity (labor productivity),  $\alpha$  is a country-year fixed effect,  $\gamma$  is a sector fixed effect,  $\text{Serv Performance}$  is a vector of perception based on indicators of obstacles represented by access to finance, electricity, transport, and telecommunications, that vary at the regional level,  $X$  is a vector of controls varying at the firm level, and  $\varepsilon$  is an error term assumed orthogonal to the regressors.

## Cross-country regression results

Table 3-5: Labor Productivity Determinants based on Perception of Services' Performance

	Dependent variable: labor productivity											
	Russian firms	ECA firms	Global	Russian firms	ECA firms	Global	Russian firms	ECA firms	Global	Russian firms	ECA firms	Global
Exporter	0.459*** (0.0654)	-0.234*** (0.0434)	0.00379 (0.0256)	0.463*** (0.0657)	-0.219*** (0.0440)	0.0138 (0.0256)	0.464*** (0.0657)	-0.232*** (0.0437)	0.0163 (0.0255)	0.397*** (0.0641)	-0.216*** (0.0437)	0.0154 (0.0257)
Foreign firm	0.695*** (0.117)	0.475*** (0.0701)	0.368*** (0.0381)	0.675*** (0.115)	0.497*** (0.0713)	0.331*** (0.0381)	0.684*** (0.116)	0.476*** (0.0707)	0.301*** (0.0381)	0.662*** (0.112)	0.508*** (0.0711)	0.318*** (0.0380)
Firm age	0.00214 (0.00186)	-0.0085*** (0.00124)	-0.00042 (0.0007)	0.00220 (0.00186)	0.00761*** (0.00129)	-0.000183 (0.000667)	0.00229 (0.00187)	-0.00790*** (0.00127)	-0.000330 (0.000666)	0.000803 (0.00174)	-0.009*** (0.00131)	-0.00053 (0.000668)
Firm size	3.20e-05 (2.88e-05)	0.00018*** (5.68e-05)	6.00e-05** (2.96e-05)	3.28e-05 (2.83e-05)	0.00021*** (5.60e-05)	7.34e-05** (3.05e-05)	3.55e-05 (2.92e-05)	0.000199*** (5.45e-05)	8.02e-05*** (3.07e-05)	4.32e-05* (2.53e-05)	0.00021*** (5.61e-05)	8.17e-05*** (3.06e-05)
Finance obstacle	-1.006*** (0.168)	-3.976*** (0.177)	-1.098*** (0.0793)									
Electricity obstacle				-0.775*** (0.139)	0.287*** (0.0897)	-0.00051 (0.0559)						
Transport obstacle							-0.43*** (0.153)	-1.921*** (0.154)	1.084*** (0.0911)			
Telecoms obstacle										0.945*** (0.0599)	0.416*** (0.0511)	0.510*** (0.0325)
Constant	18.90*** (0.0822)	12.69*** (0.0282)	14.28 (0.0822)	18.52*** (0.0193)	18.40*** (0.0123)	14.03 (0.0123)	18.47*** (0.0209)	12.45*** (0.0256)	13.84 (1.741)	18.21*** (0.0137)	12.32*** (0.0244)	13.88 (1.284)
Observations	4,147	17,714	78,482	4,147	17,714	78,482	4,147	17,714	78,482	4,147	17,714	78,482
R-squared	0.125	0.085	0.020	0.124	0.060	0.017	0.120	0.066	0.019	0.170	0.063	0.020

Robust standard errors in parentheses \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

Table 3-6: Productivity Analysis using Objective Measures of Access to Electricity and Water Services

Dependent variable	labor productivity	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms
Exporter		0.318*** (0.0226)	0.153*** (0.0569)	0.482** (0.233)	0.357*** (0.0205)	0.159** (0.0621)	0.524*** (0.187)	0.321*** (0.0135)	0.192*** (0.0290)	0.46*** (0.0666)	0.412*** (0.0166)	0.21*** (0.0362)	0.53*** (0.0797)
Foreign firms		0.513*** (0.0335)	0.392*** (0.0793)	0.248 (0.323)	0.490*** (0.0308)	0.381*** (0.0919)	0.136 (0.269)	0.456*** (0.0205)	0.385*** (0.0459)	0.68*** (0.117)	0.431*** (0.0285)	0.35*** (0.0646)	0.81*** (0.152)
Firm age		0.006*** (0.000607)	0.0014 (0.00191)	0.00548 (0.00710)	0.005*** (0.000548)	-0.000731 (0.00196)	0.00197 (0.00480)	0.006*** (0.000367)	0.000781 (0.00087)	0.00244 (0.002)	0.0044*** (0.000464)	0.0005 (0.0011)	0.0003 (0.002)
Firm size		-2.94e-05 (2.49e-05)	-5.39e-05 (9.6e-05)	7.38e-05 (6.74e-05)	-3.06e-05 (2.26e-05)	-4.20e-05 (0.0001)	9.92e-05 (6.2e-05)	-1.60e-05 (1.26e-05)	-8.21e-05 (5.10e-05)	3.76e-05 (2.9e-05)	9.96e-06 (1.63e-05)	-2.2e-05 (3.9e-05)	5.5e-05** (2.6e-05)
Losses due to		-0.009*** (0.0008)	-0.01*** (0.003)	-0.0075 (0.006)									
Power outages													
Power outages													
(duration)													
Power outages													
(number)													
Water supply incidents													
Own generator													
Constant		8.507*** (0.404)	12.37*** (0.374)	12.85*** (0.0568)	14.35*** (0.292)	10.35*** (0.312)	11.49*** (0.0151)	17.13*** (0.267)	10.11*** (0.136)	11.4*** (0.0452)	16.19*** (0.420)	9.6*** (0.411)	11.5*** (0.007)
Observations		30,689	3,934	483	36,026	4,225	667	77,582	17,050	4,120	38,694	7,276	1,701
R-squared		0.715	0.728	0.179	0.715	0.680	0.159	0.751	0.691	0.118	0.765	0.681	0.113

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

Table 3-7: Productivity Analysis using Objective Measures of Access to Finance

	Dependent variable: labor productivity														
	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms	Global	ECA firms	Russian firms			
Exporter	0.304*** (0.0134)	0.161*** (0.0283)	0.427*** (0.0657)	0.273*** (0.0191)	0.163*** (0.0397)	0.387*** (0.104)	0.290*** (0.0135)	0.162*** (0.0286)	0.436*** (0.0663)	0.263*** (0.0192)	0.164*** (0.0397)	0.387*** (0.104)	0.292*** (0.0244)	0.258*** (0.0538)	0.234 (0.159)
Foreign firms	0.456*** (0.0204)	0.358*** (0.0432)	0.660*** (0.119)	0.454*** (0.0273)	0.374*** (0.0571)	1.041*** (0.161)	0.464*** (0.0206)	0.367*** (0.0432)	0.688*** (0.119)	0.462*** (0.0275)	0.378*** (0.0571)	1.046*** (0.161)	0.457*** (0.0396)	0.415*** (0.0830)	0.751* (0.407)
Firm age	0.00564*** (0.000362)	0.000638 (0.000791)	0.00187 (0.00191)	0.00666*** (0.000525)	0.00109 (0.00105)	0.00123 (0.00250)	0.00544*** (0.000365)	0.000486 (0.000793)	0.00164 (0.00191)	0.00651*** (0.000529)	0.00117 (0.00105)	0.00133 (0.00250)	0.00363*** (0.000674)	-0.003* (0.00148)	-0.014*** (0.00371)
Firm size	-2.13e-05* (1.27e-05)	-6.54e-05 (4.91e-05)	3.62e-05 (3.03e-05)	-3.5e-05*** (1.34e-05)	-8.34e-05 (5.61e-05)	8.21e-06 (2.73e-05)	-2.28e-05* (1.30e-05)	-7.01e-05 (4.97e-05)	3.18e-05 (3.10e-05)	-2.90e-05** (1.36e-05)	-8.62e-05 (5.66e-05)	5.17e-06 (2.96e-05)	-2.12e-05 (2.09e-05)	2.80e-05 (2.1e-05)	8.81e-05** (3.43e-05)
Internal funds	-0.002*** (0.0002)	-0.002*** (0.0003)	-0.0045*** (0.0007)	-0.0005** (0.0002)	0.0003 (0.0004)	0.0006 (0.0009)									
Working capital															
Investments															
Bank finance															
working capital															
Bank finance															
Investments															
Collateral															
Constant	13.72 (0.138)	10.23*** (0.138)	13.27*** (0.114)	11.26*** (0.840)	9.465*** (0.225)	13.67*** (0.0495)	17.12*** (0.283)	11.07*** (0.127)	14.49*** (0.0903)	11.26*** (0.851)	9.484*** (0.223)	14.80*** (0.0962)	13.47*** (0.405)	9.269*** (0.290)	14.30*** (0.180)
Observations	77,074	16,996	4,099	31,062	6,729	1,442	75,769	17,012	4,099	30,558	6,731	1,443	14,307	3,048	476
R-squared	0.753	0.699	0.128	0.767	0.722	0.166	0.755	0.698	0.123	0.769	0.722	0.166	0.822	0.789	0.218

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

**Table 3-8: Productivity Analysis using Objective Measures of Quality of Telecommunications**

Dependent variable labor productivity						
	Russian firms	ECA firms	Global firms	Russian firms	ECA firms	Global firms
Exporter	0.367*** (0.0810)	0.208*** (0.0388)	0.246*** (0.0145)	0.425*** (0.0654)	0.131*** (0.0281)	0.220*** (0.0135)
Foreign firms	0.563*** (0.140)	0.333*** (0.0585)	0.385*** (0.0215)	0.665*** (0.116)	0.357*** (0.0424)	0.399*** (0.0199)
Firm age	-0.00384* (0.002)	-0.00242* (0.00124)	0.0048*** (0.00038)	0.00121 (0.00188)	-6.48e-05 (0.0008)	0.00436*** (0.00036)
Firm size	2.9e-05 (5.72e-05)	-9.42e-05 (6.81e-05)	-5.1e-05*** (1.36e-05)	2.91e-05 (3.08e-05)	-0.0001* (5.40e-05)	-6.15e-05*** (1.34e-05)
Email users	0.55*** (0.0958)	0.514*** (0.0429)	0.660*** (0.0157)			
Website				0.261*** (0.0429)	0.334*** (0.0225)	0.452*** (0.0114)
Constant	10.95*** (0.0958)	9.365*** (0.163)	16.63*** (0.267)	18.42*** (0.00563)	8.885*** (0.0901)	17.77
Observations	2,966	11,594	69,328	4,139	17,676	78,308
R-squared	0.163	0.728	0.763	0.126	0.696	0.755

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

**Table 3-9: Productivity Analysis using Objective Measures of Quality of Transportation Services**

Dependent variable labor productivity									
	Russian firms	ECA firms	Global firms	Russian firms	ECA firms	Global firms	Russian firms	ECA firms	Global firms
Exporter	0.509*** (0.0673)	0.174*** (0.0292)	0.337*** (0.0147)			1.800* (1.083)	0.513*** (0.0664)	0.184*** (0.0288)	0.340*** (0.0146)
Foreign firms	0.639*** (0.123)	0.358*** (0.0447)	0.439*** (0.0235)	0.887** (0.345)	0.318*** (0.0745)	0.291*** (0.0351)	0.674*** (0.123)	0.347*** (0.0446)	0.431*** (0.0233)
Firm age	0.0023 (0.00195)	0.0003 (0.000798)	0.0046*** (0.00039)	0.00353 (0.00682)	-5.42e-05 (0.00127)	0.0031*** (0.0007)	0.00198 (0.00193)	0.000280 (0.000798)	0.00458*** (0.000390)
Firm size	4.14e-05 (2.80e-05)	-5.54e-05 (4.78e-05)	-1.99e-05 (1.47e-05)	7.3e-05** (3.4e-05)	-2.7e-05 (3.84e-05)	-7e-05*** (2.33e-05)	3.84e-05 (2.82e-05)	-6.77e-05 (4.89e-05)	-2.43e-05 (1.51e-05)
Products lost in transit (% value)	0.0103 (0.00608)	-0.0076** (0.00339)	-0.0125*** (0.00150)						
Exports lost during shipping (% value)				0.0451 (0.0321)	0.0130 (0.0156)	-0.0104* (0.00633)			
Products lost in transit due to theft (% value)							0.0187*** (0.00717)	-0.0026 (0.00264)	-0.0089*** (0.00155)
Constant	11.43*** (0.0310)	-56.43 (66.61)	-167.5 (2,173)	17.01*** (0.129)	9.120*** (0.732)	8.884*** (1.203)	12.81*** (0.0907)	9.678*** (0.111)	19.82*** (0.258)
Observations	3,944	15,921	62,289	201	2,512	10,260	3,972	16,063	62,820
R-squared	0.118	0.697	0.756	0.201	0.696	0.808	0.121	0.699	0.757

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

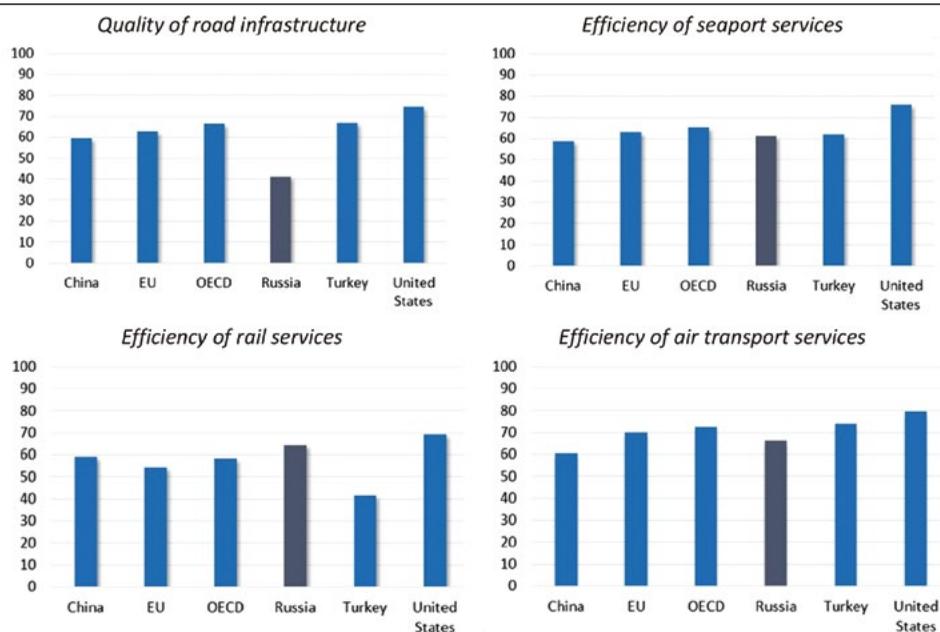
**Table 3-10: Productivity Analysis using Objective Measures of Services Performance for Russia**

Dependent variable labor productivity							
Exporter	0.524*** (0.187)	0.53*** (0.0797)	0.43*** (0.0655)	0.367*** (0.0810)	0.425*** (0.0654)	0.427*** (0.066)	0.436*** (0.0663)
Foreign firms	0.136 (0.269)	0.81*** (0.152)	0.65*** (0.118)	0.563*** (0.140)	0.665*** (0.116)	0.66*** (0.119)	0.688*** (0.119)
Firm age	0.00197 (0.00480)	0.0003 (0.002)	0.0014 (0.0018)	-0.00384* (0.00201)	0.00121 (0.00188)	0.0019 (0.0019)	0.00164 (0.00191)
Firm size	9.92e-05 (6.2e-05)	5.5e-05** (2.6e-05)	2.77e-05 (3e-05)	2.86e-05 (5.72e-05)	2.91e-05 (3.08e-05)	3.62e-05 (3.03e-05)	3.18e-05 (3.10e-05)
<b>Electricity, water &amp; telecommunications</b>							
Power outages duration	-0.01*** (0.004)						
Water supply problems		-0.28*** (0.102)					
Own generator			0.32*** (0.0543)				
Email users				0.555*** (0.0958)			
Website					0.261*** (0.0429)		
<b>Finance</b>							
Internal funds finance						-0.0045*** (0.0007)	
Working capital							
Bank finance working capital							0.005*** (0.00106)
Constant	11.49*** (0.0151)	11.5*** (0.007)	11.5*** (0.006)	10.95*** (0.0958)	18.42*** (0.00563)	13.27*** (0.114)	14.49*** (0.0903)
Observations	667	1,701	4,117	2,966	4,139	4,099	4,099
R-squared	0.159	0.113	0.125	0.163	0.126	0.128	0.123

Robust standard errors in parentheses. Sector and year FE. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Authors' calculations based on Enterprise Surveys (data for Russia is pooled for 2012 and 2019).

### Annex 3: Russia's quality of road transport infrastructure lags comparator countries



Source: WEF (2019).

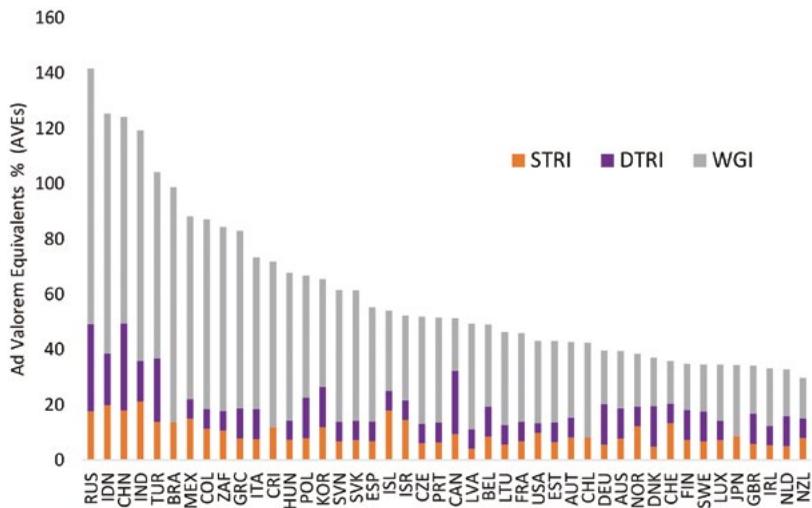
Note: Scores are on a 0 to 100 scale, where 100 represents the optimal situation or 'frontier'

## Annex 4: Boosting Mode 4 services trade

Delivery of services frequently requires cross-border movement of services suppliers, both temporary and longer-term in the form of contractual service suppliers (CSS), independent service suppliers (ISS), and intra-corporate transferees (IC). In addition to excessively restrictive regulation and heterogeneity in legal requirements and practices, these services suppliers are also constrained by “red tape” associated with the implementation of regulatory policies such as visa processes, which explains why the share of mode 4 trade in total global services trade is so low – less than 5 percent according to the WTO. Regulatory measures can include the requirement of prior nationality or citizenship to practice or that foreign service providers take a local exam or completely re-do the university degree, practice, and exam in the domestic country. These are generally unnecessarily restrictive and can be eliminated or streamlined significantly. Similarly, relaxing labor market tests and quotas for CSS, IS, and IC, as well as limitations on the duration of their stay in the importing country, is likely to go a long way in liberalizing Mode 4 trade. Countries also frequently impose limitations on duration of stay for CSS, ISS, and IC, which impose recurrent visa application and associated costs, especially on frequent service providers. There is considerable heterogeneity in the duration of stay across countries, ranging from only one year for Switzerland, Costa Rica, Finland, Israel, and Turkey (across service professionals) to four years in the case of Australia and Denmark (but only two years for ISS); four-five years for the UK; and five years in the case of China, Japan, Latvia (but only one year for IS), and South Africa (though only four years for IC). Cutting the time and costs associated with obtaining a business visa can also facilitate Mode 4 trade. Again, there is considerable heterogeneity across countries. The average cost of obtaining a business visa in 2017 for OECD countries was US\$82. Colombia is among those countries charging the most at US\$297, and Japan the least at US\$7. The average number of documents needed to obtain a business visa in the year 2017 was 10 across the OECD, with Austria and France both needing the most at 16, and the UK the least at 2. Likewise, visa processing times in 2017 varied from as high as 32 days for Canada, to as low as 1 for Japan. The OECD average was 15 days. The granting of multiple-entry business visas can also help. While all 45 countries in the OECD STRI database allow multiple-entry to business visitors, this is not the case for aircrew, seamen, and truck drivers for Costa Rica, Greece, Iceland, Korea, Lithuania, Mexico, South Africa, the UK, and the USA. Only four countries (Canada, Denmark, Indonesia, and Japan) provide visas on arrival or exempt visas for temporary entry/transit of crew across services sectors. Most other countries are found to be rather restrictive along this dimension with six countries (China, Ireland, Russia, South Africa, Turkey, and the USA) being completely restrictive across all sectors. Moving towards multiple-entry visas for services providers in all sectors, providing opportunities for e-visas/visas on arrival, and/or exempting visas for temporary entry/transit of services providers would significantly facilitate Mode 4 trade. For example, the Italian Embassy in Riyadh and the Italian consulate in Jeddah have introduced a new facilitation mechanism for Saudi businessmen and investors to facilitate trade and investment between the two countries. Specifically, applicants who have a «declaration of invitation» from a firm operating in Italy are exempt from submitting certain supporting documents.

*Source: Shingal (2019).*

## Annex 5: Russia's trade costs in services are high



Source: Van der Marel and Shepherd (2019).

Note: Services trade costs are estimated associated with market access policies in services and transparency measures as proxied by the OECD STRI (STRI); regulatory measures related to the cross-border movement of data as proxied by the Digital Trade Restrictiveness Index developed by the European Center for International Political Economy (DTRI); and the institutional regulatory capacity of governments and regulators as proxied by the simple average of the regulatory quality and government effectiveness indicators of the World Bank's Governance Indicators (WGI).

# CHAPTER 4

## Foreign Direct Investment and Investment Policy<sup>\*</sup>, <sup>\*\*</sup>

\* The preparation of this chapter is led by Yue Li of the Global Investment Climate unit. The team consists of Priyanka Kher, who co-led the assessment of investment regulatory framework, and Sebastian Franco Bedoya, Yan Lui, Dayo Ojaleye, Stavros Poupakis, Marc Reichel, and Xiao'ou Zhu. The preparation of the work greatly benefited from guidance and suggestions by Apurva Sanghi, Ian Gillson, Renaud Seligmann, Christopher Miller, Sandeep Mahajan, Christine Zhenwei Qiang, Wim Douw, Peter Kusek, Denis Medvedev, Arti Grover, and Deborah Winkler.

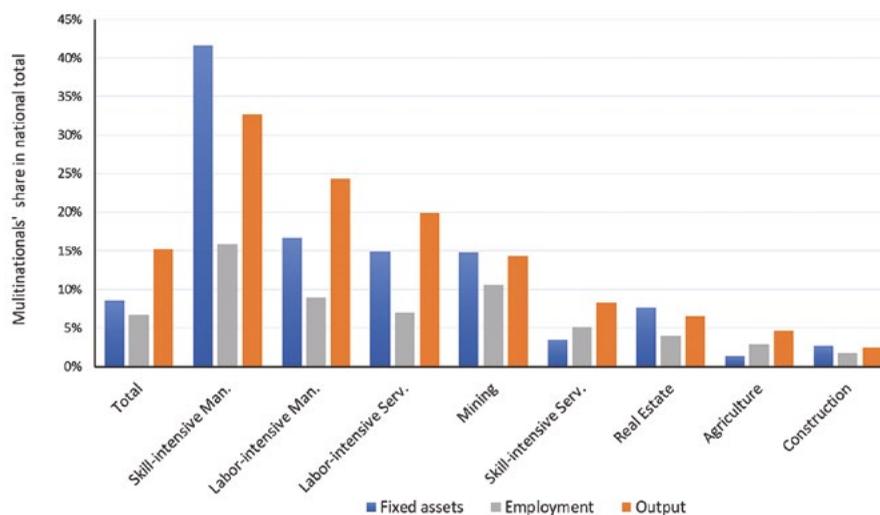
\*\* The chapter summarizes the key findings from a background study. For technical details and more explicit expositions please refer to the study, Li, Yue, and Priyanka Kher. 2020. "Foreign direct investment and investment policy: An analysis for the Russian Federation." World Bank. Mimeo.



# 1. A SOLID PERFORMANCE

**Multinational firms are important players in Russia’s economy.** In line with the standard approach in economics, multinational firms are defined here as enterprises that operate in Russia as affiliates of one or more foreign companies holding at least half of their equity. Such firms accounted for 9 percent of total fixed assets investment and 7 percent of total employment in Russia’s modern sectors in 2012-2018. Together, they contributed more than 15 percent of total output (Figure 4-1). They were most prominent in capital- and skill-intensive manufacturing industries, where they were responsible for a third of total output.

**Figure 4-1: Multinationals account for significant shares of investment, employment, and output**



Source: Authors, based on firm-level data from Ruslana.

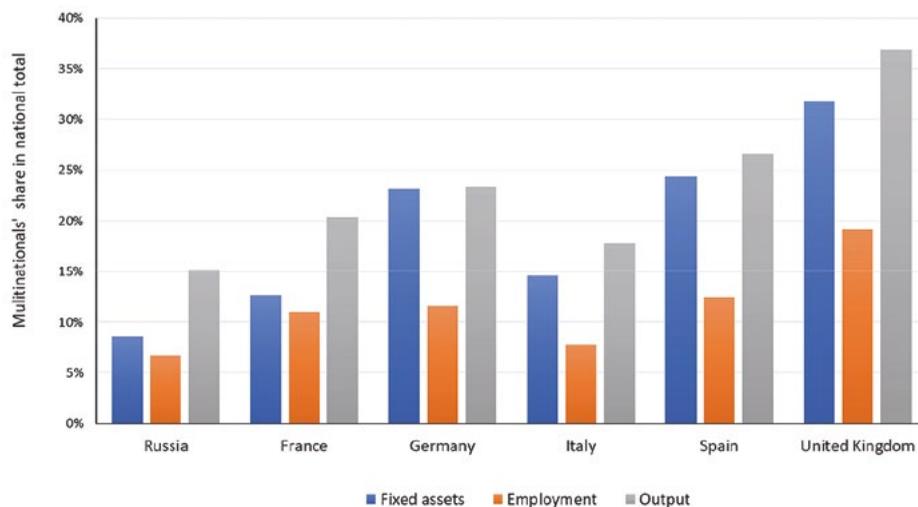
Note: Capital- and skill-intensive manufacturing industries include chemicals, metal, rubber, machinery, automobiles and other transportation equipment, electronics, computers, and pharmaceuticals. Capital- and skill-intensive services include utilities, transport and logistics, information, financial, business, and professional services.

**The pattern is consistent with what is observed in selected OECD countries, but the shares of multinationals in Russia’s economic activities are smaller than in these comparators (Figure 4-2).** For example, in the UK, foreign affiliates accounted for 32 percent of fixed asset investment, 19 percent of employment, and nearly 37 percent of total sales over 2012-2016. For France, the numbers are 13 percent, 11 percent, and 20 percent, which are considerably higher than the numbers for Russia.

**Among multinational firms, the relative importance of sectors changes depending on the metric of measurement.** The investment of multinationals concentrates in extractive industries (27 percent), which is followed by labor-intensive manufacturing industries and skilled services. But, in terms of employment and output, labor-intensive services and labor-intensive manufacturing sectors account for the lion’s share (Figure 4-3).

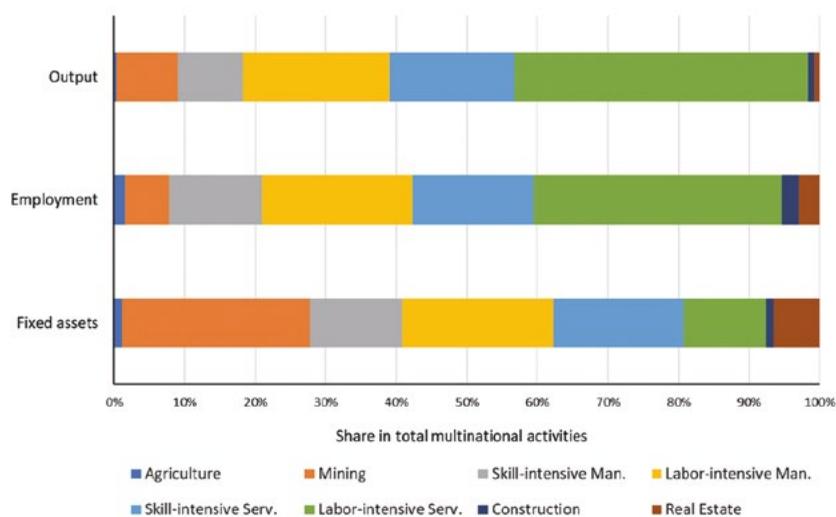
**Multinationals register a solid performance in Russia. Multinationals are on average larger, more capital intensive, and more productive than Russian firms.** This is not surprising given their control of proprietary assets, their ability to exploit firm-level economies of scale, and their location-related advantages (Antras and Helpman 2004; Havranek and Irsova 2011; Navaretti and Venables 2006; Rojec and Knell 2018). The average multinational is nearly seven times as large as the average Russian firm in terms of fixed asset investment, five times as large in employment, and more than 13 times as large in total output (Figure 4-4). The average multinational is also four times as capital intensive and more than five times as productive as the average Russian firm.

**Figure 4-2: However, the shares of multinationals in Russia are smaller than in comparator countries**



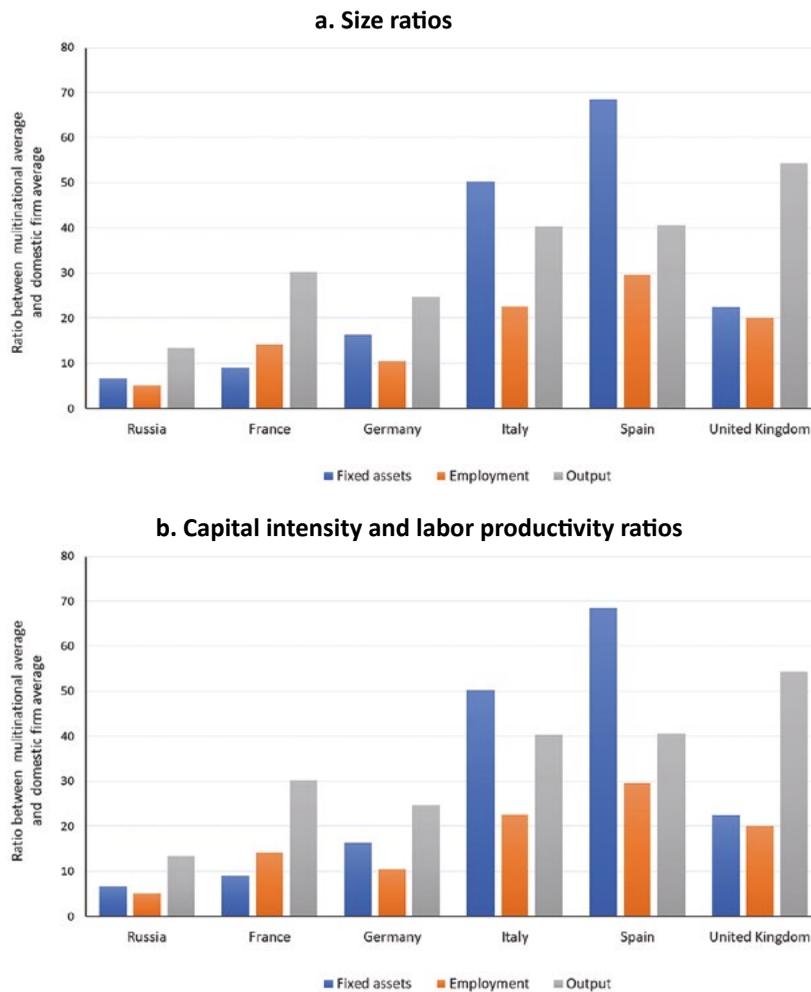
Source: Authors, based on data from Ruslana and OECD AMNE. Firm-level data over 2012-2018 for Russia, aggregate data over 2012-2016 for comparators.

**Figure 4-3: Multinationals' investment concentrates in mining but employment does not**



Source: Authors, based on firm-level data from Ruslana.

**Figure 4-4: Multinationals are larger and more productive than domestic firms in Russia as well as in comparator countries**



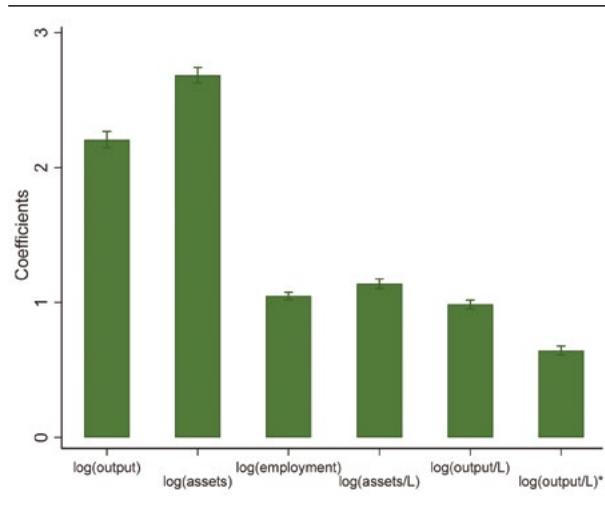
Source: Authors, based on data from Ruslana and OECD AMNE. Firm-level data over 2012-2018 for Russia, aggregated data over 2012-2016 for comparators.

Note: "L" refers to employment.

**The performance of multinationals is stronger than that of domestic firms in OECD countries too, but in Russia the productivity gap is significantly larger than the size gap.** The main reason is that Russian firms are larger than domestic firms in OECD countries.<sup>59</sup> The capital intensity and labor productivity gaps between multinationals and domestic firms are higher in Russia than in OECD countries, suggesting even higher productivity premium in Russia. However, this may be partly due to composition effects, such as differences in firms' ages and in sectoral characteristics.

<sup>59</sup> This may be partly driven by the coverage bias of ORBIS data that covers large firms better.

**Figure 4-5: Multinationals are larger and more productive after controlling for composition effects**



Source: Authors, based on firm-level data from Ruslana.

Note: "assets" refers to fixed assets and "L" refers to employment. \* indicates the regression controlling for capital intensity. The bars represent the performance premia of multinationals over Russian firms for the outcome variables. The height of a bar indicates the estimated premium and the capped spike reports the 95% confidence interval.

Multinationals start with a much higher labor productivity than indigenous firms and become even more productive over time. In sharp contrast, Russian firms' labor productivity declines consistently as they age.

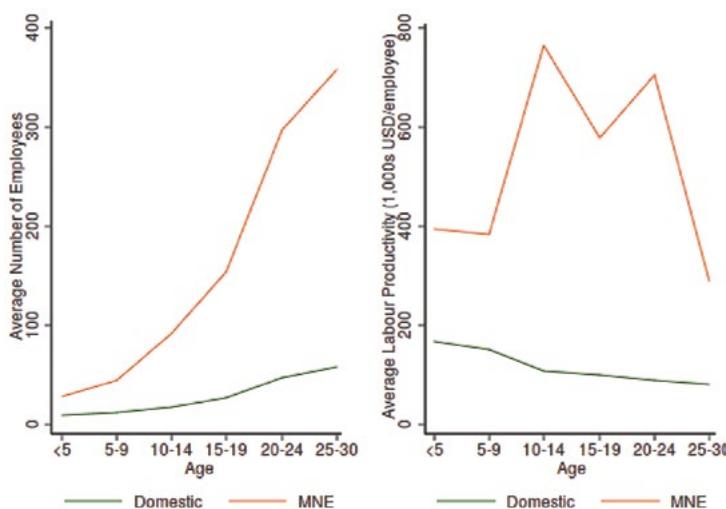
**Multinational firms significantly outperform Russian firms even after controlling for composition effects.**

They are investing nearly 13 times more in fixed assets, hiring twice as much labor, and producing eight times more output than indigenous firms. On average, the capital intensity and the labor productivity of multinationals triples, or nearly triples, that of Russian firms. By design, the comparison is for firms of similar age and takes sector-specific time trends into account to reduce compositional effects (Figure 4-5). The labor productivity of multinationals still doubles that of Russian firms after further controlling for capital intensity, suggesting indeed more efficient ways to manage, produce, and market goods and services.

**Multinational firms also show great dynamism over their life cycle. Based on a synthetic cohort analysis, multinationals and Russian firms start at comparable levels of employment.**

But they grow much more rapidly as they age (Figure 4-6). The average multinational reaches around 300 employees 20 years after entering the Russian market, while the average Russian firm only grows to about 50 employees. These results are robust after controlling for sector characteristics. And,

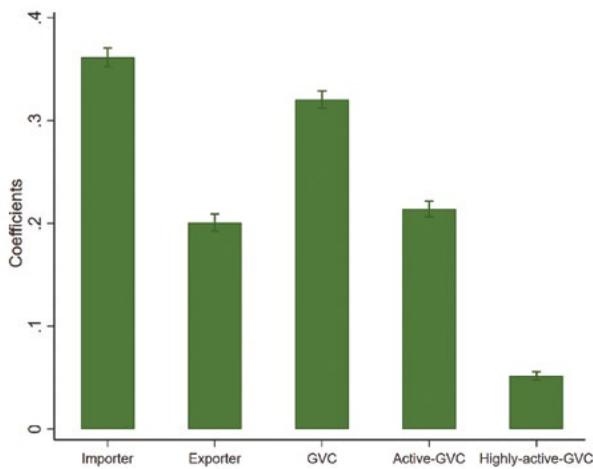
**Figure 4-6: Multinationals show more dynamism over their life cycle than Russian firms**



Source: Authors, based on firm-level data from Ruslana.

Note: The red line represents the average performance of multinationals for different age groups and the green line represents the average performance of Russian firms, after controlling for sector fixed effects.

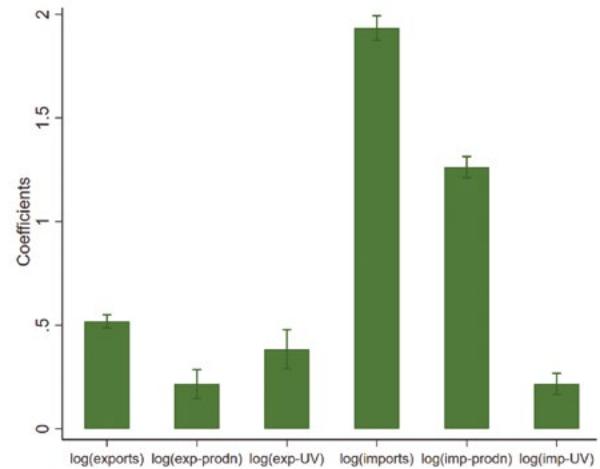
**Figure 4-7: Multinational firms are more successful than Russian firms in tapping into GVCs**



Source: Authors, based on firm-level data from Ruslana and the Russian Customs.

Note: The bars represent the performance premia of multinationals over Russian firms for the outcome variables. The height of a bar indicates the estimated premium and the capped spike reports the 95% confidence interval.

**Figure 4-8: Foreign GVC participants trade more products at higher unit values than domestic ones**



Source: Authors, based on firm-level data from Ruslana and the Russian Customs.

Note: "prodn" denotes the number of products and "UV" denotes unit value. The bars represent the performance premia of multinationals over Russian firms for the outcome variables. The height of a bar indicates the estimated premium and the capped spike reports the 95% confidence interval.

**Multinationals are successful at tapping into GVCs.** The analysis based on matched firm- and customs data finds that the average multinational tends to export and import more than the average domestic firm. Consequently, their probability to participate in GVCs is over 30-percentage point higher than domestic firms of similar age, after sector-specific time trends are accounted for (Figure 4-7). And, they also have significantly higher tendencies to be active- and highly active-GVC participants.<sup>60</sup>

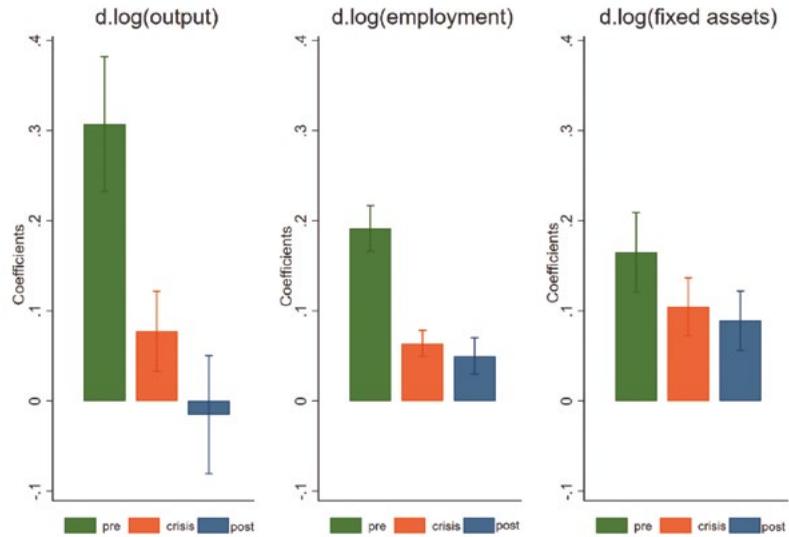
**Even between GVC participants, foreign participants trade more products at higher unit values than domestic participants (Figure 4-8).** Russian firms are also heterogeneous and domestic GVC participants perform better than other Russian firms. However, among importers, multinationals still purchase 2.5 times more products from international markets with a higher quality (24 percent). Among exporters, they sell nearly a fifth more products abroad at a 46 percent higher unit value.

**Multinationals have shown to be relatively robust.** During the 2014 economic crisis, multinationals did not shed labor or reduce investment at a rate faster than domestic firms. Instead, their employment and investment are proven to grow faster (or decline slower) than Russian firms (Figure 4-9). The comparison is for firms with similar economic characteristics. The results are consistent regardless of whether the sample is restricted to firms that entered before the crisis or those that entered during the crisis. The difference is the most pronounced regarding investment, with foreign affiliates registering a 10 percent higher growth rate. For employment growth, the difference is 5 percent.

**Immediately after the crisis, they have also shown to be resilient.** During 2015-2016, multinationals' investment and employment continued growing faster than in Russian firms, by 8 percent and 2 percent higher. But their total sales did not. This pattern suggests that multinationals might be quicker in getting ready for the economic recovery despite the continued stagnation in sales immediately after the crisis. One reason for this phenomenon could be because the intra-firm trade between the affiliates and parent firms (or other affiliates) can help sustain demand (or inputs supply) and absorb part of the shock in host economies, leaving the affiliates less affected.

<sup>60</sup> Firms' value of trade from matched firm-custom data to define their GVC participation statuses and the intensity of their participation. Firms that either export or import in a year are defined as GVC participating firms. A firm is an average participant if its export and import values are both below the respective median values. A firm is an active participant if either export or import is above the respective median value. A firm is a highly active participant if both export and import are above the medians.

Figure 4-9: Multinationals have shown to be more robust and resilient than Russian firms



Source: Authors, based on firm-level data from Ruslana.

Note: The bars represent the performance premia of multinationals over Russian firms for the outcome variables. The height of a bar indicates the estimated premium and the capped spike reports the 95% confidence interval. The colors of the bars represent the time periods: green for pre-crisis (2012-2013), orange for crisis (2014-2015) and blue for post-crisis (2015-2016).

## 2. LIMITED SPILLOVERS ON RUSSIAN FIRMS

**Productivity spillovers from multinationals to Russian firms are negative on average.** For the average Russian manufacturer, a 10 percent increase in the output share of multinationals in the same industry is associated with a decline of labor productivity by 1.4 to 1.6 percent (Table 4-1). This impact is in line with the findings in the literature for other countries, with estimates ranging from -2.7 percent in Venezuela to -0.6 in Romania, and -1.6 in Ukraine (Aitken and Harrison 1999, and Damijan et al. 2013, respectively).<sup>61</sup> These estimates on horizontal spillovers account for vertical spillovers due to the presence of multinationals both upstream and downstream.

**Negative productivity spillovers from multinationals suggests that they may be crowding out Russian firms.** Negative spillovers in the same industry could be driven by lower demand for domestic products following foreign entry by multinationals. It forces domestic competitors to spread fixed costs (including hired labor) over a reduced scale of production. They could also result from a greater reliance on imports by multinationals. The co-location of their foreign suppliers could also intensify the substitution effect in supplying industries, and lead to fewer varieties and higher prices of inputs.

**Table 4-1: Productivity spillovers from multinationals to Russian firms in the same industry are on average negative**

	Log (output per worker)					
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Horizontal</b> <sub>s,t-1</sub>	-0.143**	-0.150**	-0.155**	-0.154**		
	(0.073)	(0.072)	(0.070)	(0.070)		
<b>Forward</b> <sub>s,t-1</sub>	1.267	0.345			0.982	
	(1.591)	(1.463)			(1.424)	
<b>Backward</b> <sub>s,t-1</sub>	-1.043		-0.82			-0.796
	(0.677)		(0.622)			(0.622)
<b>log(output per worker)</b> <sub>it-1</sub>	0.435***	0.435***	0.435***	0.435***	0.435***	0.435***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Observations	84001	84001	84001	84001	84001	84001
R-squared	0.515	0.515	0.515	0.515	0.515	0.515
Firm fixed effects	Y	Y	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y	Y	Y

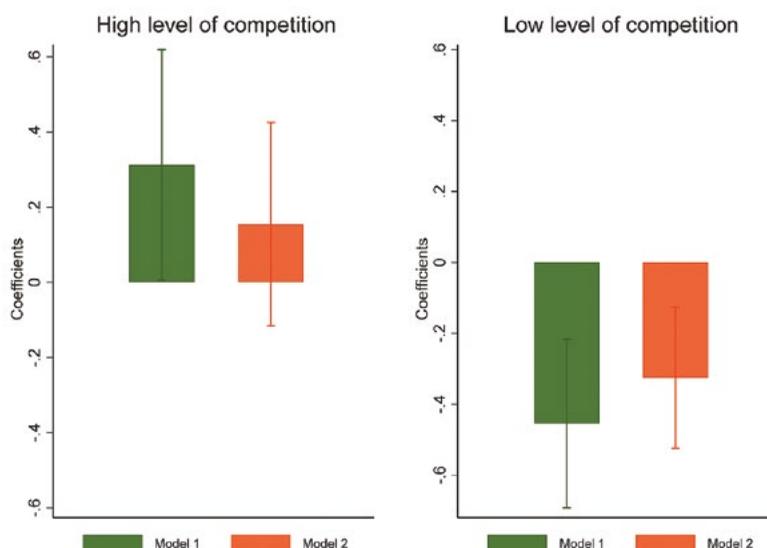
Source: Authors, based on firm-level panel data from Ruslana.

Note: Standard errors are reported. Significant levels: \*0.1 \*\*0.05\*\*\*0.01.

**However, productivity spillovers are positive in industries with more competitive markets.** Using the Herfindahl-Hirschman index as the proxy for competition, industries are classified into those with more competitive markets and those with less competitive ones. Horizontal spillovers become significantly positive for firms in more competitive markets. A 10 percentage point increase in the output share of multinationals in the same industry is associated with a 3 percent rise in the labor productivity of Russian firms in these industries (Figure 4-10). In sharp contrast, spillovers are negative for firms in less competitive markets, and the magnitude of the impact is larger than on average—the same change in the share of multinationals will lead to a 4 percent decline in productivity.

<sup>61</sup> In a meta-analysis, Havranek and Irsova (2011) find that horizontal spillovers are insignificant across studies. In a recent survey, Rojec and Knell (2018) concludes that positive horizontal spillovers are less likely to take place.

**Figure 4-10: Spillovers from foreign firms to domestic firms in Russia are positive in sectors with more competitive markets**



Source: Authors, based on firm-level panel data from Ruslana.

Note: The bars represent the estimated impact of the presence of foreign firms in the same manufacturing industry on the labor productivity of domestic firms. The height of a bar indicates the estimated impact and the capped spike reports the 95% confidence interval. The colors of the bars represent the regression model: green for a model including the presence of foreign firms in the same industry, their presence in upstream industries and in downstream industries, and year fixed-effects; orange for a model also including the labor productivity of the domestic firm in the previous year.

Competition limits monopolistic behaviors, allowing more productive firms to enter and grow and less productive incumbents to exit. In markets with higher contestability, domestic firms are more productive. Therefore, they are more likely to benefit from technology spillovers. Conversely, in less competitive markets, it is easier for multinationals to exert monopolistic power. Admittedly, Herfindahl-Hirschman index is a partial measure on firm market power and monopolistic behavior. Data availability does not allow the computation of more refined measures such as firm markup. However, the results reveal a potential dynamic productivity loss of high market concentration and low competition—the loss due to lower productivity spillovers from FDI overtime, even if incumbent domestic firms may enjoy static productivity advantages in such markets.

**For more productive Russian firms, the presence of multinationals in downstream industries leads to greater GVC participation and more exports.** An analysis on how FDI spillovers may affect domestic firms' exports or imports suggests that foreign entry benefits more productive firms through backward linkages. Multinational presence in downstream industries is shown to be positively related to a domestic firm's possibility to actively participate in GVC—a 10-percentage point increase in the presence of multinationals in downstream sectors is associated with a 3-percentage point rise in the probability (Table 4-2). A 10-percentage point increase in the presence of multinationals in downstream sectors is correlated with a 40 percent increase in exports. Both active GVC participants and exporters are much more productive than average Russian firms.

The finding suggests that firm productivity is critical for Russian firms to benefit from FDI, especially through backward linkages. Firms with higher productivity can better withstand increased competition associated with foreign entry, may have a higher absorptive capacity, and are also more likely to be cherry picked by multinationals as suppliers.

**Multinationals have potential to indirectly benefit the Russian economy, but it requires domestic conditions, such as contestable markets and sufficient firm absorptive capacity.** These findings are consistent with recent World Bank reports that highlight the importance of fostering competition and firm capability for productivity growth, and identify low capabilities of Russian firms as a key bottleneck preventing multinationals from relying

**Table 4-2: For more productive firms, the presence of multinationals in downstream industries leads to greater GVC participation and more exports**

	Active GVC	Active GVC	Active GVC	Exports (log)	Exports (log)	Exports (log)
<b>Horizontal</b> <sub>s,t-1</sub>	-0.022	-0.02	-0.023	-0.505	-0.493	-0.494
	(0.017)	(0.017)	(0.017)	(0.430)	(0.430)	(0.430)
<b>Forward</b> <sub>s,t-1</sub>	0.045	0.297		-11.407	-0.404	
	(0.311)	(0.283)		(12.957)	(11.666)	
<b>Backward</b> <sub>s,t-1</sub>	0.285		0.293*	5.517*		4.422*
	(0.183)		(0.167)	(2.842)		(2.556)
<b>log(output per worker)</b> <sub>i,t-1</sub>	0.005***	0.005***	0.005***	0.302***	0.301***	0.305***
	(0.001)	(0.001)	(0.001)	(0.070)	(0.071)	(0.070)
Observations	84054	84054	84054	4579	4579	4579
R-squared	0.005	0.005	0.005	0.096	0.092	0.095
Firm fixed effects	Y	Y	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y	Y	Y

Source: Authors, based on firm-level panel data from Ruslana and the Russian Customs.

Note: Standard errors are reported. Significant levels: \*0.1 \*\*0.05\*\*\*0.01.

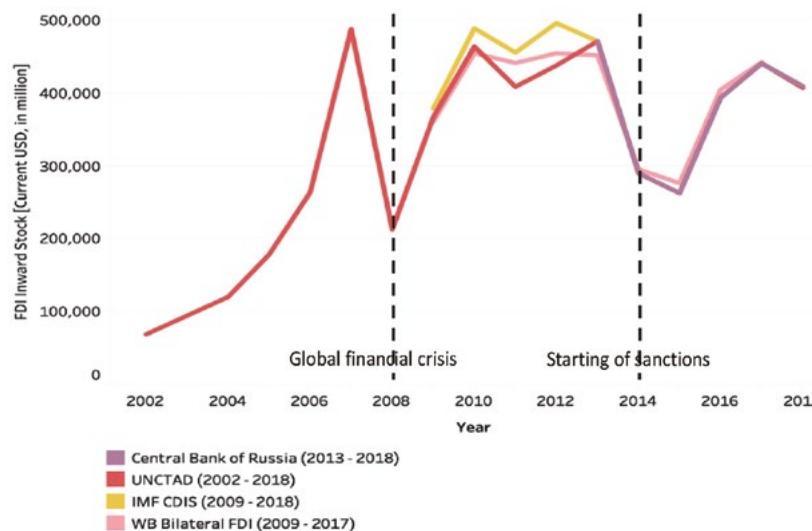
more on local suppliers. For example, a survey of 54 major multinationals suggests that the vast majority would like to source more material inputs locally, but this is hampered primarily by quality issues of domestic products and by the lack of compliance certification with management and production systems (World Bank 2019; World Bank 2020a). Addressing these issues through competition policy reforms, firm capacity enhancing and strategic linkage programs are critical for foreign investments to help integrate Russia more with global markets and to generate much anticipated positive spillovers to Russian firms.

### 3. NOT AS GOOD AS FDI TO OTHER COUNTRIES

The findings above on multinationals' direct and indirect host economy effects are not surprising. Multinationals can indeed address the credit constraints faced by most developing countries, and they can also mitigate the scarcity of technology and managerial skills that limit private sector competitiveness in Russia. In spite of these advantages, inward FDI in Russia underperforms those in other countries.

**The inward FDI stock has been on a plateau of around US\$450 billion, after a rapid accumulation in early 2000.** On the back of the country's brisk economic growth, Russia's FDI inward stock accumulated rapidly in the 2000s, increasing from US\$70 billion in 2002 to nearly US\$500 billion in 2007 (Figure 4-11). The growth of inward FDI stock was interrupted by the 2008-2009 Global Financial Crisis, witnessing a sharp dip around 2008 and a rebound in 2009. However, since 2010, the inward position has been on a relative flat plateau, hovering around US\$450 billion. During 2014-2015, worsening external environments—including economic sanctions imposed by some of Russia's key investment partners and falling of world oil prices—coupled with ongoing structural vulnerabilities put the economy in stagnation. Inward stock was severely affected by the economic downturn but resumed accumulation in 2016. In 2018, inward stock returned to the pre-crisis level and stood at US\$410 billion. The trend is consistent across different sources of data.

**Figure 4-11: Russia's inward FDI stock has been on a plateau, after a rapid accumulation in early 2000**

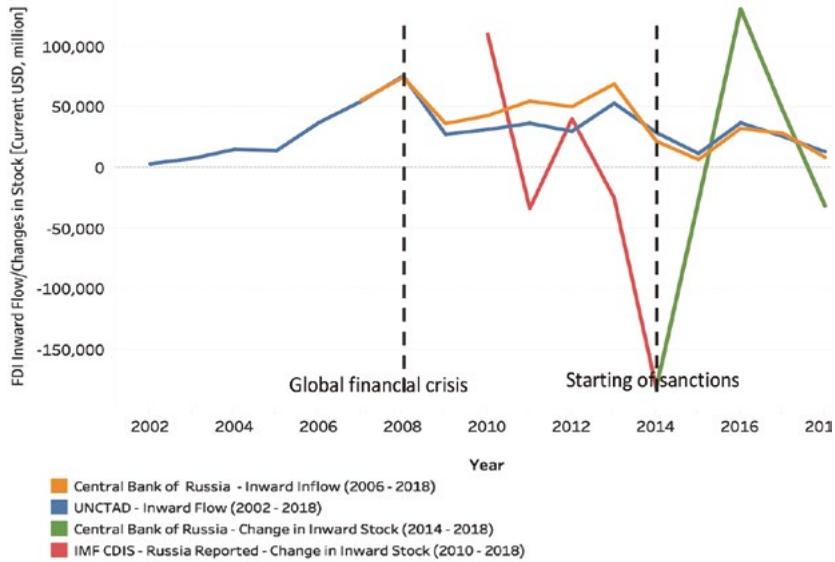


Source: Authors, based on data from the Central Bank of the Russian Federation, UNCTAD, IMF CDIS, and World Bank Bilateral FDI database.

**Recent variations are mainly driven by shocks and by valuations and exchange rate fluctuations (Figure 4-12).** Sanctions and Russia's counter-sanctions since 2014 increased uncertainties, exposed the economy's structural vulnerabilities, and adversely affected investors' sentiments and their valuations of assets in Russia. The falling oil prices further led to severe exchange rate deterioration, which adversely affected the value of investment stock directly as well as contributed to the worsening of valuations and divestments. As a result, Russia's inward stock witnessed a decline of US\$181 billion in 2014, which was, by and large, accounted for by fluctuations in these other factors.

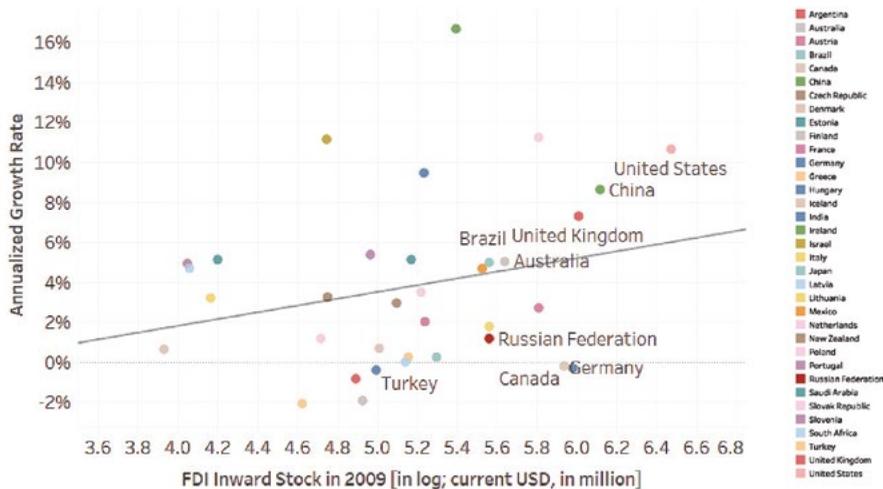
In comparison with FDI to other countries, FDI growth has been lackluster over the past decade and stock has accounted for a smaller share of the overall economy in Russia than globally. At less than 2 percent per year, inward FDI growth has been flat over 2009-2018. By comparison, FDI to countries such as Australia, Brazil, the UK, and the USA has grown by more than 5 percent (Figure 4-13). As a result, the stock of Russia's inward FDI amounts to 30 percent of GDP, against 40 percent globally, 50 percent for Australia and Canada, and 70 percent for the UK (Figure 4-14).

Figure 4-12: Recent variations are driven by shocks and by valuations and exchange rate fluctuations



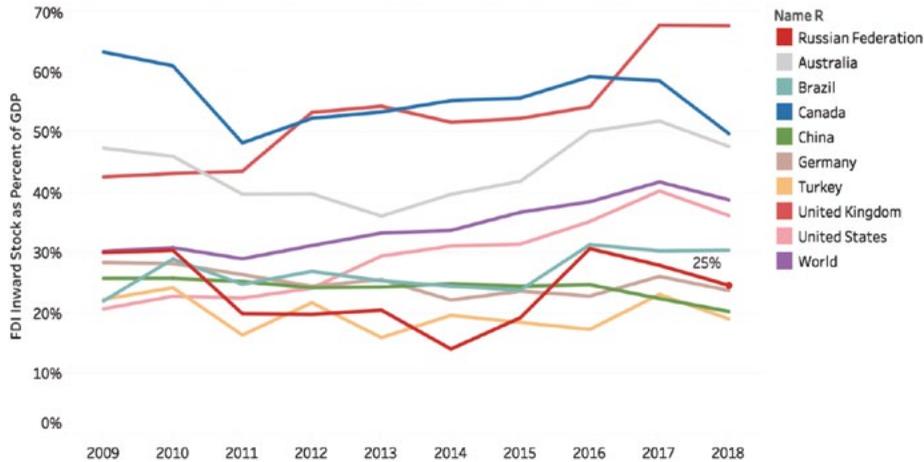
Source: Authors, based on data from The Central Bank of the Russian Federation, UNCTAD, IMF CDIS, and WB Bilateral FDI database.

Figure 4-13: FDI growth has been lackluster over 2009-2018



Source: Authors, based on data from The Central Bank of the Russian Federation and OECD.  
 Note: The trend is for 35 top FDI destination countries.

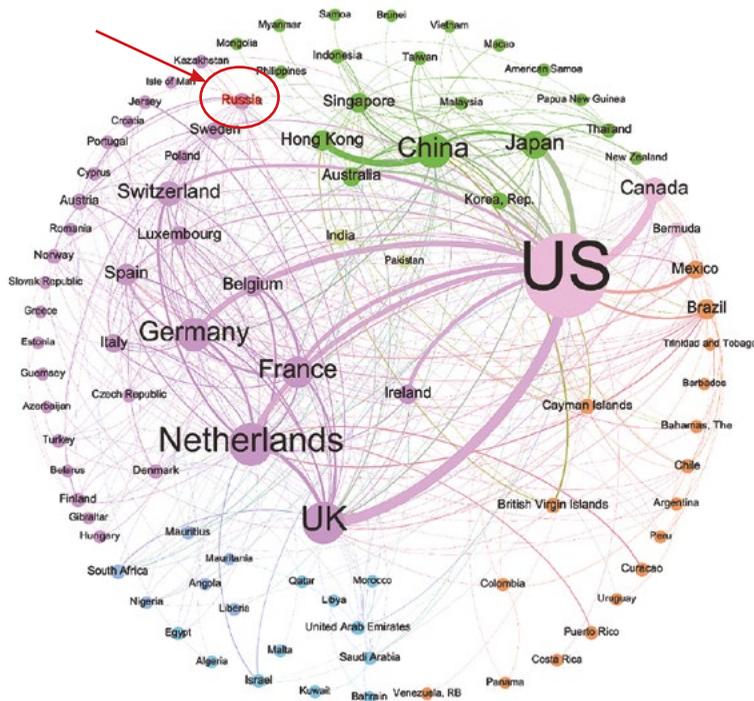
**Figure 4-14: Inward FDI amounts to a lower percentage of GDP in Russia than globally**



Source: Authors, based on data from The Central Bank of the Russian Federation, OECD, and WDI.

**Russia also occupies a second-tier position in the global FDI network.** A network analysis finds that the USA, the UK, China, Germany, France, and Canada stand out as the dominant nodes of the “real” FDI network (weighted degree greater than 1,000), whereas Russia stands in the mid-range, reflecting a limited influence globally but of reasonable importance in Europe (Figure 4-15). Within Europe, Russia’s weighted degree and eigenvector centrality

**Figure 4-15: Russia occupies a second-tier position in the global FDI network**



Source: Authors, based on data from Damgaard et al. (2019).

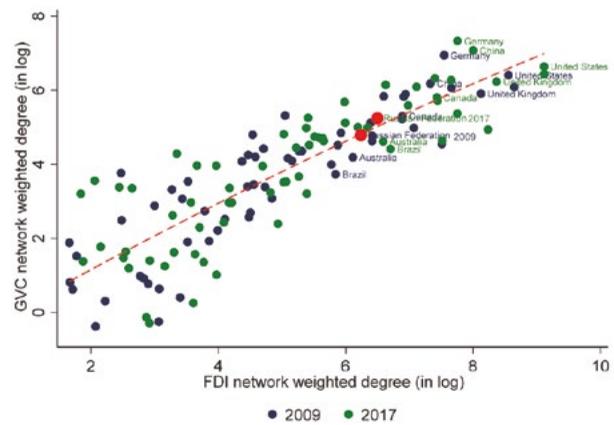
Note: The graph depicts the network of global “real” FDI stocks in 2017. Each node represents an economy with the size representing the weighted degree. Each link represents the existence of the FDI connection between the corresponding pair of economies, with the width of the link indicating the value of the bilateral FDI stock. Links with less than US\$5 billion FDI stock are excluded. The colors indicate regions.

are both around the top 25 percentile, suggesting its reasonable importance in the regional network. And, after controlling for weighted degrees, Russia's clustering coefficient turns out to be lower than most economies in Europe and globally.

**Over time and across countries, positions in the FDI network and in the GVC network tend to be correlated, suggesting that investment and trade are complements. Russia lags behind comparators on both fronts (Figure 4-16).** Russia is also a second-tier node in the global GVC network, dominating the networks of fuel and iron core but playing a peripheral role in some archetype GVC networks, such as electronics. Being measured by weighted degree, Russia has improved its influence in both networks following the trend line. However, the improvements are unimpressive in comparison with the achievements of several comparators. For example, Australia and Brazil have significantly narrowed their gaps with Russia, and Canada and China have widened their leads over Russia.

**Overall, Russia attracts less FDI from high-technology countries.** The benefits FDI brings to host economies can vary considerably depending on its origin. Technology spillovers through inward FDI are more likely when the countries of origin have a technological edge over the host economy (Du et al. 2011; Fortanier 2007; Irsova and Havranek 2013; Keller 2010; Rojec and Knell 2018; Zhang et al. 2014). However, FDI from a selected group of OECD countries – whose R&D expenditures are high relative to GDP than on average – account for only 12 percent of Russia's inward FDI, compared to 22 percent in Turkey and 60 percent in Canada (Figure 4-17). Admittedly, the metric is partial in capturing the conceptual idea. However, the result is suggestive of the potential for Russia to strategically diversify its investments among partners.

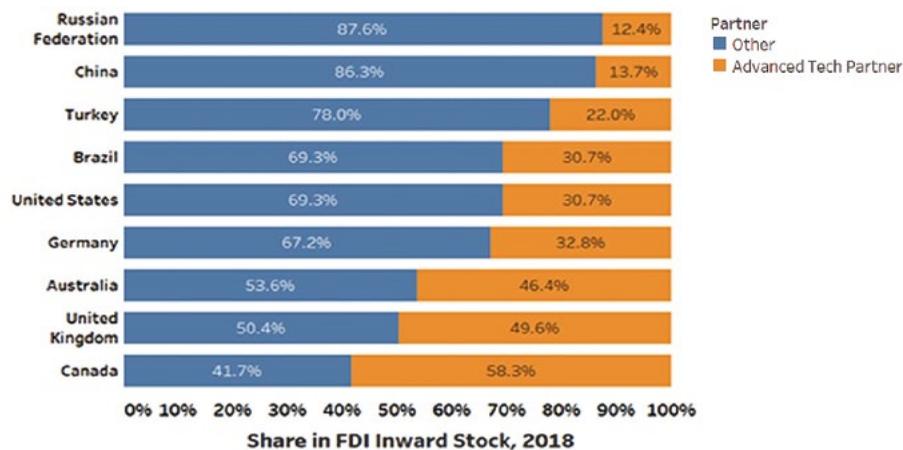
**Figure 4-16: Positions in the FDI network and in the GVC network tend to be correlated. But Russia lags behind comparators on both fronts**



Source: Authors, based on data from Damgaard et al. (2019) and EORA.\*

\* Weighted degree represents the first-order influence of an economy and essentially measures the share of the economy in global FDI stock. Eigenvector centrality indicates the second-order importance. It considers the relative importance of all countries connected to an economy, capturing the idea that an economy is critical because it has strong ties with other important economies. Clustering index measures the transitivity and link correlation. It captures the extent to which the countries connected to an economy are also linked with each other (Chandrasekhar 2016; Chaney 2014; Newman 2003; Tagliani and Winkler 2016; Scott 2000).

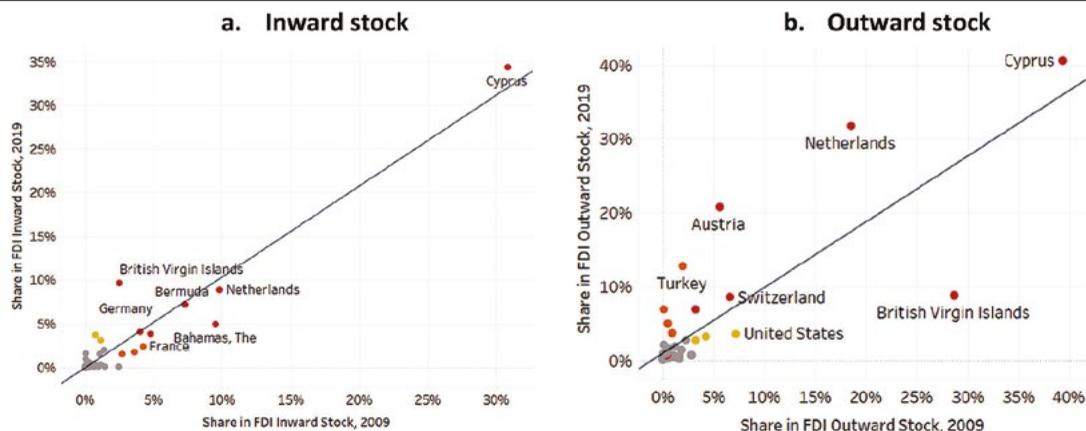
**Figure 4-17: Russia attracts less FDI from high-technology countries than comparators**



Source: Authors, based on data from IMF CDIS and OECD.

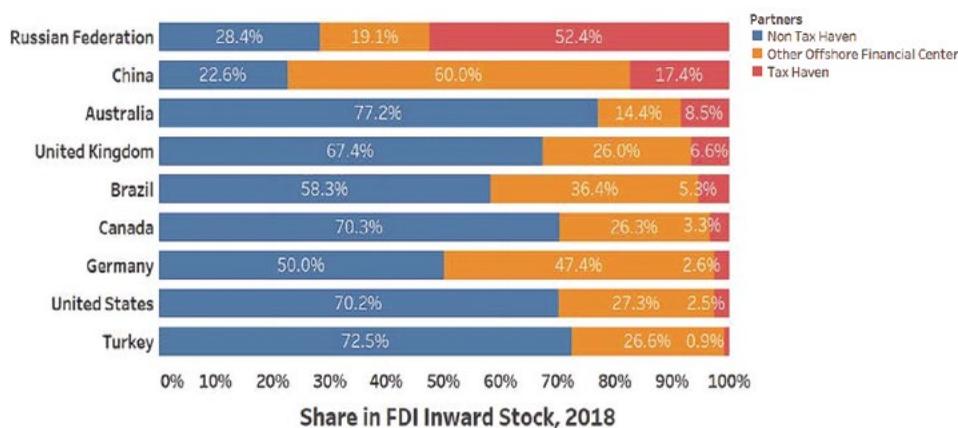
Note: The countries with intensive private R&D are defined as the OECD countries with an above average R&D expenditure as a share of GDP in 2018, including Israel, South Korea, Switzerland, Sweden, Japan, Austria, Germany, Denmark, Finland, the USA, and Belgium.

Figure 4-18: Key offshore financial centers have consistently ranked as Russia’s top FDI partners



Source: Authors, based on data from IMF CDIS.

Figure 4-19: Russia attracts more FDI from tax havens than comparators



Source: Authors, based on data from IMF CDIS and OECD.

Note: The tax haven group includes 28 commonly known low-tax offshore financial centers. The other offshore financial center group includes five offshore centers with a high level of real economic activities.

**Conversely, the value addition for the host country is diminished when FDI is used for institution arbitrage or tax optimization.** Yet, round-trip investment remains an issue for Russia, showing little improvement after the 2014 economic crisis (Figure 4-18).<sup>62</sup> Key offshore financial centers, including Cyprus, Bermuda, the Bahamas, British Virgin Islands, and Jersey have consistently ranked as the top source countries for inward FDI stock. And these places have enjoyed equally high ranks as the destinations for outward FDI stock. The pattern has not changed much during the crisis. It indicates a considerably large fraction of Russia’s direct investment continues circulating through tax havens.

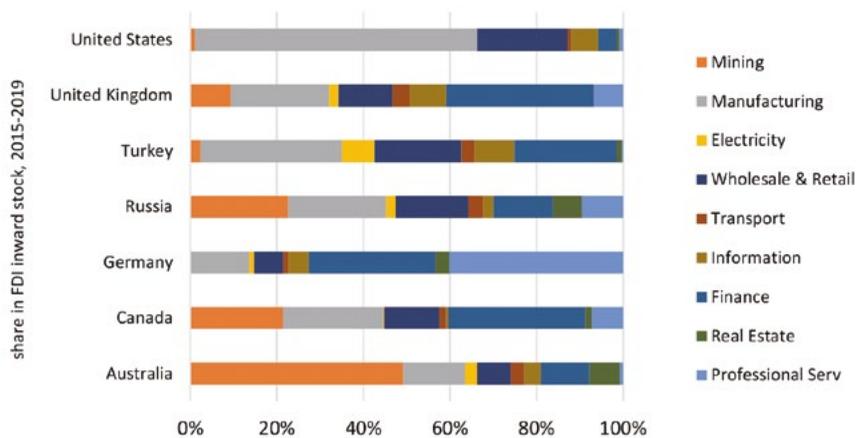
**As a result, Russia attracts more FDI from tax havens than most comparator countries.** In 2018, 52 percent of Russia’s inward investment originated from tax havens, and this was mirrored by an equally substantial share of outward FDI from Russia to these destinations (Figure 4-19). The corresponding shares are much lower in most comparators, despite the increasing involvement of offshore financial centers in the financial arrangements of multinationals. For example, the numbers are less than 30 percent for Australia, Canada, Turkey, and the USA.

<sup>62</sup> Round-tripping FDI is defined as the transfer of funds abroad, in most cases to tax haven destinations, to bring some or all investment back as foreign investment. Studies have shown that both financial and institutional reasons are behind round-tripping in Russia (Ledyeva et al. 2013, 2015).

**The sectoral composition of Russia’s inward FDI is driven by natural resources more than skills.** More than a fifth of Russia’s inward FDI stock is in mining industries, building on the country’s comparative advantage in petroleum, natural gas, and coal mining (Figure 4-20). Manufacturing industries altogether account for another fifth. Regarding tertiary sectors, direct investments are split between labor-intensive services, primarily wholesale and retail trade sectors, and knowledge-intensive services, such as finance and professional services. And almost two thirds of the flows over 2015-2019 continue to concentrate in mining industries, which accounted for a much lower share before the 2014 economic crisis (Figure 4-21). Investment in fuel extraction has increased both absolutely and relatively. In contrast, changes in investment flows have weakened the importance of services since the crisis.

**There is, however, an encouraging difference between mergers and acquisitions and greenfield investments.** Nearly 50 percent of M&A activities continued concerning oil, natural gas, and mining. This is despite the economic downturn and a decline of M&A in these industries in absolute terms (down by 14 billion). On the other hand, the

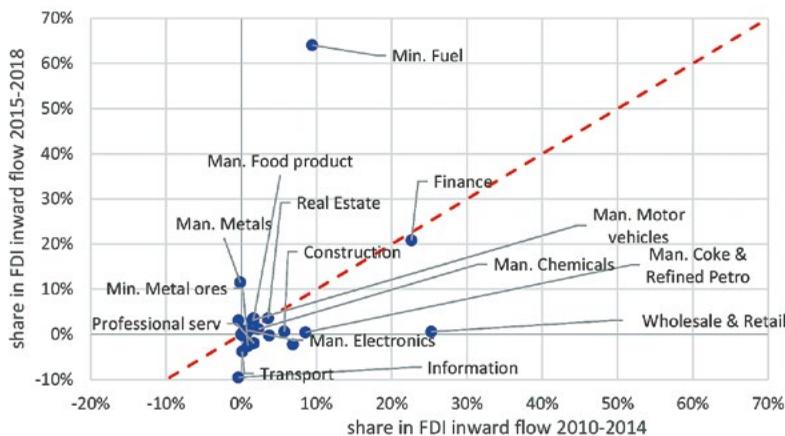
**Figure 4-20: The sectoral composition of Russia’s FDI stock is driven by natural resources**



Source: Authors, based on data from the Central Bank of Russian Federation and OECD.

Note: 2019 for Russia and latest available year over 2015-2018 for other countries. ISIC Rev 4 Section-level classification is used. Top sectors are shown and the total FDI of these sectors are rescaled to 100 percent.

**Figure 4-21: Almost two thirds of the flows continued to concentrate in mining industries**



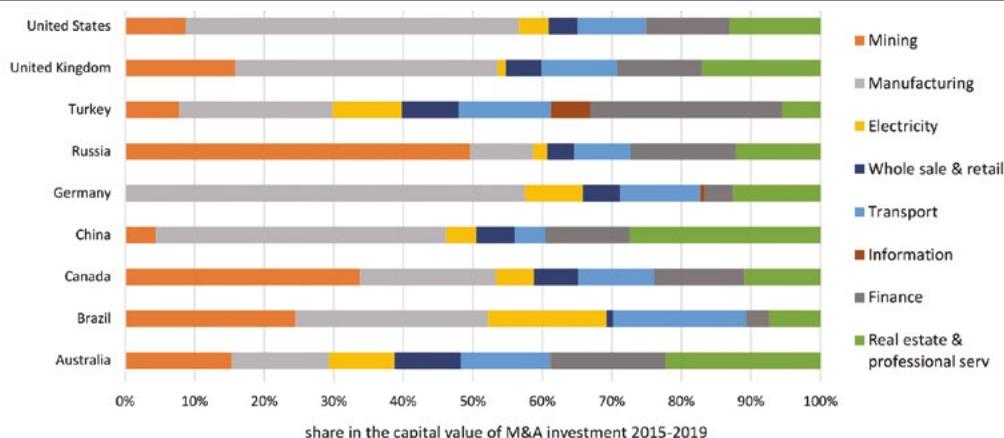
Source: Authors, based on data from The Central Bank of Russian Federation.

Note: ISIC Rev 4 classification is used with total 28 sectors covered. Only top sectors are shown.

importance of manufacturing has dropped (from over a quarter to 10 percent) with food and basic metals industries seeing the largest declines. In comparison with other countries, the share of M&A in extractive industries is higher in Russia, even compared to other natural resource-abundant countries, such as Australia and Canada (Figure 4-22).

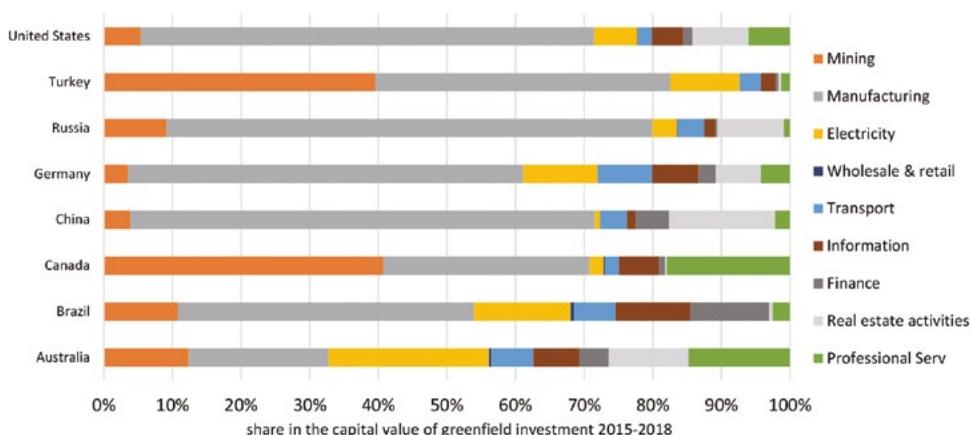
**In contrast, greenfield investments favor manufacturing industries more with almost 70 percent of greenfield investments going to manufacturing industries both prior to and after the 2014 economic downturn.** Greenfield investments have also moved away from oil, natural gas, and mining, with a nearly 50 percent drop after the crisis.<sup>63</sup> Greenfield investments play an important role in technology transfers, and those in knowledge-intensive sectors can crowd in domestic entry into the same sectors. However, in Russia, the importance of capital- and knowledge-intensive sectors in greenfield investments have declined since the 2014 economic crisis. The share of capital- and knowledge-intensive sectors is significantly lower than in other countries (Figure 4-23). This suggests considerable scope for sectoral diversification even in greenfield investment.

**Figure 4-22: Nearly half of M&As continued concerning oil, natural gas, and mining in 2015-2019**



Source: Authors, based on the M&A data compiled by Thomson & Reuters.  
 Note: ISIC Rev 4 classification is used with total 28 sectors covered. Only top sectors are shown.

**Figure 4-23: The lion's share of greenfield investments went to manufacturing industries in 2015-2018**



Source: Authors, based on the greenfield investment data from the fDi market database of Financial Times.  
 Note: ISIC Rev 4 classification is used with total 28 sectors covered. Only top sectors are shown.

<sup>63</sup> The reported capital investment values of greenfield investments are noisier than the M&A data because they are a combination of announced values and estimates. As a robustness check, the sectoral composition is computed based on the number of projects and the main conclusions hold.

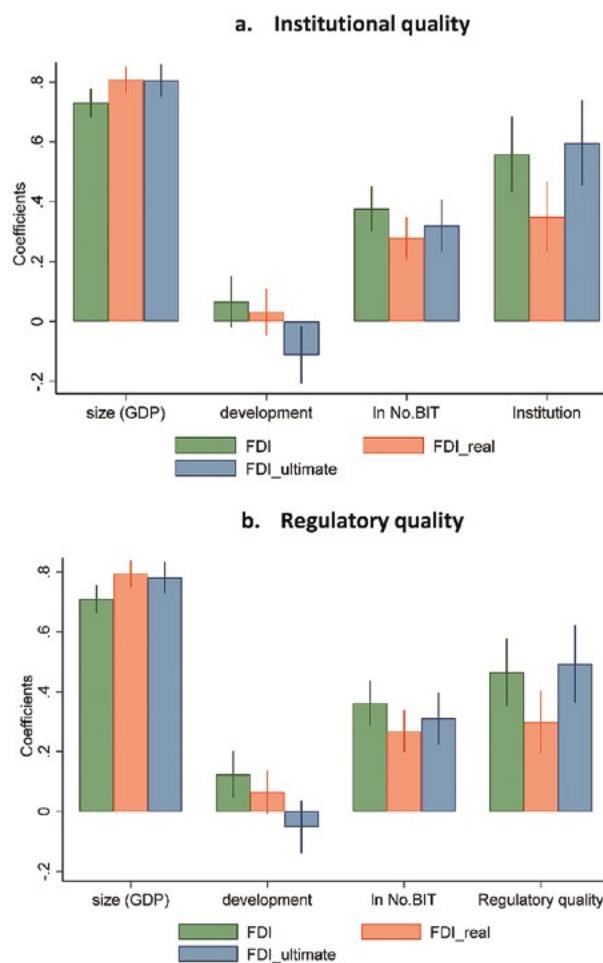
## 4. DRAGGED DOWN BY DOMESTIC FACTORS

The challenge for Russian policymakers is to realize the untapped potential of FDI. To address this question, a gravity model of “real” FDI stocks was estimated using cross-country data over 2009–2017, following Head and Ries (2008).<sup>64</sup> Gravity models predict exchanges – trade, investment, or migration – between pairs of countries based on their “distance”, their economic weight, and their respective stage of development, human capital, institutions, and policy environment. The “distance” includes much more than geographical proximity, as it also covers other frictions and linkages. The larger the economic weight of the countries and the smaller the distance between them, the higher the predicted FDI stock linking two countries. More importantly, the analysis allows predicting how improvements to the institutional and policy environment would affect inward FDI. In conjunction with the analysis, a policy and regulatory review by legal experts is undertaken to offer a detailed, up-to-date understanding of Russia’s investment framework (covering information available as of June 1, 2020), allowing for benchmarking and reform identification.<sup>65</sup>

The findings from the gravity modeling analysis and the policy review suggest three broad areas for improvement: institutional and regulatory quality, FDI restrictions, and investor risks.<sup>66</sup>

First, improving institutions, and especially regulatory quality, can be effective in attracting and retaining FDI. The gravity model was estimated using the Worldwide Governance Indicators (WGI) as a measure of institutional and regulatory quality across countries.<sup>67</sup> The results indicate that good institutions and an adequate regulatory environment not only make a difference in attracting FDI, but can even make up for a low stage of development (Figure 4-24). The finding is consistent with the conclusions of existing studies. For foreign investors, high-quality institutions reduce fixed costs associated with establishment as well as transaction costs between headquarters and subsidiaries. The finding is also corroborated by the 2019 Global Investment Competitiveness Surveys: investors rank countries’ legal and regulatory environment as one of the top three factors for investment, behind only political and macroeconomic stability, and ahead of considerations such as low taxes and low input costs.

Figure 4-24: Improving institutions, and especially regulatory quality, can be effective



Source: Authors, based on various data.

Note: The bars represent the estimated coefficients for the explanatory variables. The height of a bar reports the point estimate and the capped spike on top of a bar reports the 95% confidence interval. The colors represent the FDI data used.

<sup>64</sup> See Li and Kher (2020) for details on the gravity modelling.

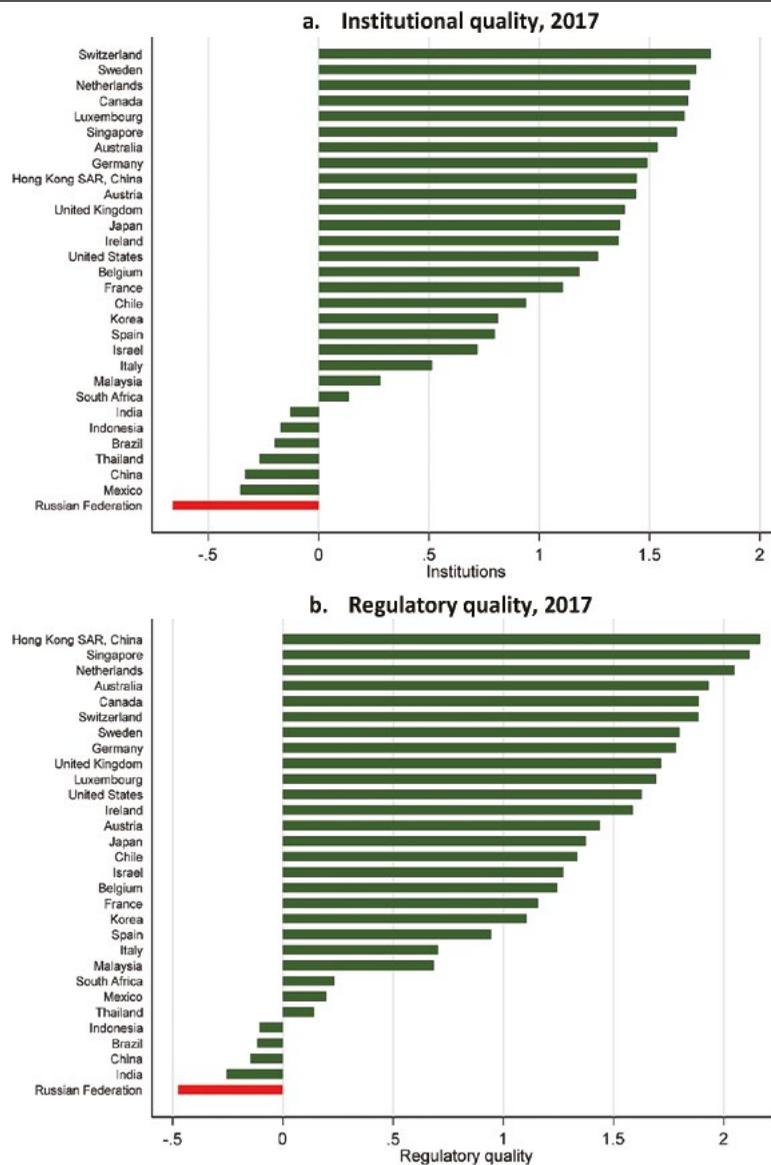
<sup>65</sup> See Li and Kher (2020) for details on the regulatory review.

<sup>66</sup> The results from the gravity analysis also support the effectiveness of bilateral investment treaties (BIT) in FDI attraction. The number of these treaties are positively correlated with inward FDI to the host economy. However, Russia does not stand out as lagging behind in terms of the quantity of BITs with 64 enforced treaties. Meanwhile, quality of BITs needs attention (See Appendix Table 4-A1 and Li and Kher (2020) for details).

<sup>67</sup> The Worldwide Governance Indicators (WGI) cover six broad dimensions: regulatory quality, rule of law, government effectiveness, control of corruption, voice and accountability, and political stability (Kaufmann, Kraay, and Mastruzzi 2010).

The gains can be sizable because there is a large scope for Russia to catch up on institutional and regulatory quality. Among the top 30 FDI destination countries, Russia comes at the bottom of the WGI rating regarding overall institutional quality. Among the six categories covered by WGI, the host country's regulatory quality stands out as having the most robust relationship with inward FDI. But regulatory quality is one of the categories in which Russia performs less well, and its rating has only been slightly improved in recent years (Figure 4-25). However, the large gap can be turned into an opportunity. The gains can be substantial even from a modest improvement. For example, among the top 30 FDI destinations, Indonesia is ahead of Russia by four countries on the WGI regulatory quality rating. Holding everything else static, if Russia were to catch up with Indonesia, Russia's inward FDI could increase by as much as 11 percent. In addition, institutional quality is found by the literature to be an important complementary factor for foreign investment to help integrate the host economy with global markets and to generate much anticipated positive spillovers to indigenous firms (Alfaro 2015).

**Figure 4-25: The gains can be sizable because there is a large scope for Russia to catch up on institutional and regulatory quality**



Source: Authors, based on data from WGI.

Note: Each WGI indicator ranges between -2.5 and 2.5 and larger numbers represent higher quality.

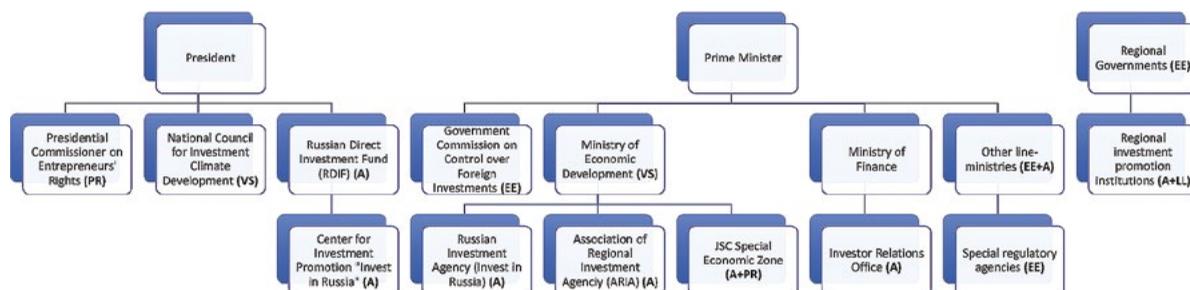
**Addressing the heterogeneity of institutional development across Russian regions could have a significant effect on FDI attraction as well.** Russian regions differ not only in the levels of economic development and geographical positions but also in institutional and regulatory quality. Research on FDI entry decision-making in Russia also suggests that foreign investors tend to establish new businesses in the regions showing a higher level of institutional development. This is particularly true for non-round tripping investment (Ledyaeva et al. 2013; Zaytseva 2016).

**Establishing a national, empowered investment promotion institution with an extensive network of regional branches could be the first step towards a better institutional environment for foreign investors.** Evidence suggests that a key for effective FDI attraction and retention is a national level investment promotion agency that is strategically aligned with the national development plan and corresponding FDI policies, has a strong institutional structure, and focuses on investor service delivery (Harding and Javorcik 2013; Heilbron and Whyte 2019; Hornberger et al. 2011; Kurul and Yalta 2017). Such an agency has played a pivotal role in a diverse set of countries such as Brazil, India, Ireland, Korea, South Africa, and Vietnam. Investment promotion agencies at the subnational level are important, especially in large decentralized countries. With deep knowledge of the local business environment, value proposition to investors, and strong ties to local agencies, they can promote a subnational location more effectively. Nonetheless, ensuring coordination between the subnational and national agencies regarding FDI priorities is key. Countries such as Germany, Spain, the UK, and Ireland have successfully been able to implement models with a strong network of national and subnational investment promotion agencies. Russia has numerous institutions working on investment promotion – at the federal (more than 10) and regional levels (Figure 4-26). However, there is no national level institution, coordinating functions across different agencies, with the capacity to provide the full set of services to foreign investors. There is also a need for a national FDI strategy to provide the agency with strategic direction, and to outline the key principles governing the investment policy.

**While a comprehensive assessment of Russia’s FDI institutional framework is required to determine how best to align it to good practice, the need for more effective national-level agencies are evident.** Publicly available information on the performance of the various investment institutions is limited. In a recent survey, Russia’s Ministry of Economic Development (MED) indicates it has an expansive mandate, such as regulatory functions, administration of incentives and special economic zones, tourism promotion, and innovation and investment promotion (World Bank-WAIPA Survey 2020). Combining regulatory functions with promotion is contrary to good practice, as is having an investment promotion agency with a very broad mandate (Box 4-1). Human capacity, insufficient resources, and investment facilities were other constraints for effective performance identified through the survey.

**Simplifying foreign investment regulations and bringing about greater transparency is equally important.** Russia has a complex legal framework, including the Foreign Investment Law (FIL), the Strategic Investment Law (SIL) and New Investment Law (NIL) (i.e. Federal Law “On the Protection and Promotion of Capital Investments and the Development of Investment Activity in the Russian Federation”). A consolidated investment law that clarifies the institutional framework, investment entry, and protection rules would be preferable, signaling respect for property rights. Transparency on the applicable rules can also be improved.

**Figure 4-26: Russia has many institutions working on investment promotion**



Source: Authors, based on official information.

Note: The bold letters in brackets behind each institution indicate the institutions’ functions in line with the Investment Lifecycle: VS for Vision & Strategy; A for Attraction; EE for Entry and Establishment; PR for Protection & Retention; LS for Linkages & Spillovers.

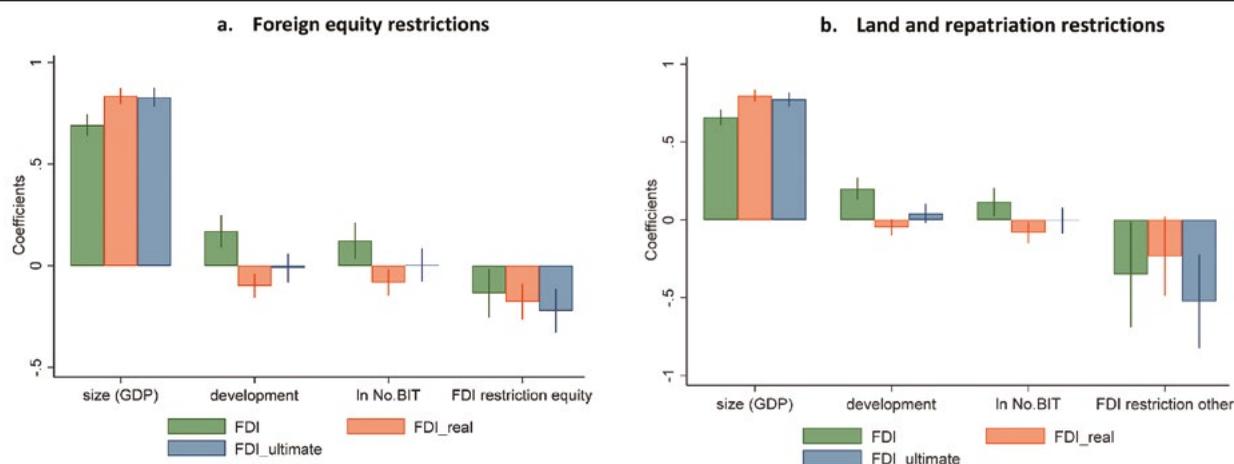
## Box 4-1 The Key Principles for Effective FDI Institutional Arrangements

- A strong alignment across government that stems from a clear national development plan or objective, vision, or strategy—including FDI—with clear priorities and sequencing;
- Government support for FDI promotion from the highest level (for example, the president or prime minister) that directly or indirectly champions the needed policy, legal, regulatory, and institutional reforms;
- Systematic and reform-oriented consultation with the private sector;
- A strong, clear, and uncontested mandate for each institution that also stems from the national development objectives and avoids any possible conflicts of interest;
- Sufficient and sustained financial and human resources to properly deliver the mandate of each agency;
- A clear focus on results management; and
- Strong partnerships and coordination mechanisms with both public and private sectors at both national and subnational levels to ensure consistency between institutions.

Source: Authors based on Heilbronn and Whyte (2019).

**Second, removing excessive foreign investment restrictions matters for FDI attraction and retention.** Explicit or implicit restrictions on foreign control of resources or sectors exist side-by-side with incentives to foreign investment in many developing countries. The OECD FDI Regulatory Restrictiveness Index is one of the measures used to capture the policy environment when estimating the gravity model.<sup>68</sup> The results show that excessive restrictions and discriminatory rules against foreign investors significantly deter inward FDI (Figure 4-27). Among the four categories of the index, foreign equity restrictions appear as the most harmful, which is the dominant form of restrictive measures in most countries. Other types of restrictions, such as land and repatriation restrictions, also show up as deterring factors. These restrictions act as either full entry barriers or additional costs to foreign investors.

Figure 4-27: Removing excessive foreign investment restrictions matters

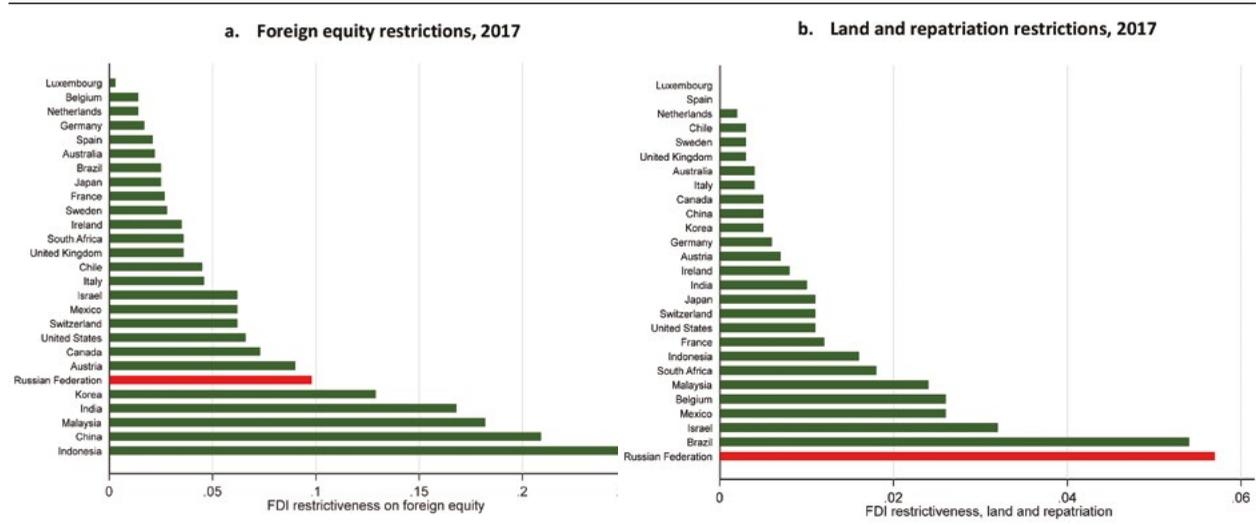


Source: Authors, based on various data.

Note: The bars represent the estimated coefficients for the explanatory variables. The height of a bar reports the point estimate and the capped spike on top of a bar reports the 95% confidence interval. The colors represent the FDI data used.

<sup>68</sup> The OECD FDI Regulatory Restrictiveness Index are classified into four categories: foreign equity restrictions, discriminatory foreign investment screening and approval requirements, restrictions on the employment of foreign key personnel, and restrictions on land purchase, repatriation of profits, and capital.

**Figure 4-28: The gains from lowering barriers to FDI will be substantial because Russia was one of the most restrictive regimes**



Source: Authors, based on data from the OECD.

Note: Each FDI restrictiveness index ranges from zero to a positive number and greater values indicating high levels of restrictions.

**The gains from lowering barriers to FDI will be substantial, especially at a time when the world is becoming more restrictive following the COVID-19 crisis.** According to the OECD index, in 2019, Russia was one of the most restrictive regimes in the top 30 FDI destination countries, in terms of both foreign equity, and land repatriation (Figure 4-28). Its levels of restrictive measures on screening and personnel are also high. What is more worrying is that the restrictiveness faced by foreign investors in Russia has increased in recent years. It is consistent with the global trend in which barriers against FDI have reached the highest level in two decades. And the trend has intensified during the COVID-19 pandemic as countries have taken sudden regulatory measures to respond to the health crisis, some of which may negatively affect investments. However, if Russia could remove excessive restrictions on foreign investors at this juncture, the economy will stand a better chance for a post-crisis recovery. For example, regarding foreign equity, if Russia were to reduce its level of restrictiveness to the level of Mexico's, Russia's inward FDI could potentially increase by 6 percent.

**The FIL provides that foreign investors can freely invest in Russia unless it is prohibited, but it does not expressly mention specific prohibitions and restrictions.** And there are restrictive measures on FDI across sectoral laws and the SIL. For example, the Air Code of the Russian Federation limits foreign participation in Russian air carriers to 49 percent. Additionally, the SIL imposes restrictions on foreign investors undertaking investments in strategic companies—Russian companies conducting business activities of strategic importance to national defense and state security (Table 4-3). The dispersed restrictions make it difficult for foreign investors to identify upfront the relevant rules. Some countries, including China, Ethiopia, and Vietnam, address this issue by having a negative list of sectors and activities in which FDI is subject to conditions. For example, compared to China's 2018 version of a negative list, the number of items on the 2019 negative lists has reduced from 48 to 40 in the national list, and 45 to 37 in the free trade zones list. Others provide updated policy summary documents every few months with an overview of the main restrictions.

**At present, the most severe FDI restrictions come from the Strategic Investments Law, whose framework needs to be simplified and streamlined to reduce excessive discretion.** The SIL enumerates 42 strategic activities being restricted for foreign investments. Several of the restricted sectors and activities are technology intensive – for example, manufacturing of aviation equipment, encryption instruments. These restrictions potentially impede Russia's ability to attract high skill, knowledge-intensive FDI. The rationale and effectiveness of restricting FDI in these sectors can be re-visited to ensure they are justified and are achieving the intended policy objectives. Additionally, there is wide discretionary authority—an approval requirement may be imposed even on activities that

**Table 4-3: List of Major Restricted Sectors**

<b>Restricted Sectors</b>	<b>Scope of Activity</b>
Nuclear	Nuclear facilities, handling of nuclear materials, radioactive substances, radioactive waste, using such materials for R&D; design and engineering of nuclear facilities and equipment, and nuclear and radiation safety activities
Weapons and military equipment	Development, manufacturing, repairing, disposal, trading; manufacturing and trading in main parts of arms, shells, and shell components; developing, manufacturing, and disposal of ammunition and components;
Industrial	Manufacturing explosive materials for industrial use and distribution
Aviation	Enforcement of aviation security; developing, manufacturing, repairing, and testing aviation equipment
Space	Space activities
Broadcasting	TV and radio broadcasting to areas where resides 50% or more of the population of a constituent territory of Russia
Natural monopolies	Services provided by certain registered natural monopolies in following areas: <ul style="list-style-type: none"> <li>• transportation of oil and oil products via main pipelines;</li> <li>• transportation of gas via pipelines;</li> <li>• transmission of electric and heat energy;</li> <li>• railroad transportation;</li> <li>• services of transportation terminals, ports, and airports;</li> <li>• services in the areas of electric and postal communications.</li> </ul>
Telecommunications	Activities conducted by a company that has a dominant position (as defined in competition law) in the following markets: <ul style="list-style-type: none"> <li>(a) communication services rendered on all Russian territory (other than internet access services);</li> <li>(b) fixed telephone service on the territory of five or more constituent territories of Russia;</li> <li>(c) fixed telephone service on the territories of cities of federal importance (Moscow, Saint-Petersburg, Sevastopol)</li> </ul>
Metals and metal products	Activities conducted by a company that has a dominant position in production and sale of metals and alloys used for weapons and military equipment
IT and encryption devices	Development, production, distribution, and engineering maintenance of encryption aids, informational and telecommunication systems protected with encryption aids that are subject to licensing, information encryption services
Electronic bugging and debugging equipment	Detecting electronic bugging equipment in the premises and technical devices (except if such activities serve internal needs of a legal person); development, production, sales, and purchasing for reselling special technical debugging equipment by legal persons involved in entrepreneurial activity
Biotechnology	Activities using agents of infections
Meteorological and geophysical processes	Works on modifications of hydro-meteorological and geophysical processes and phenomena
Natural resources	Geological surveys and exploration and production of natural resources in the subsurface areas with federal status; harvesting aquatic biological resources
Media	Printing activities exercised by an economic entity with the capacity to print at least 200 million print sheets per month; editing and publishing periodical print publication with circulation of at least 1 million copies for each issue
<b>Restricted Sector</b>	<b>Sector Specific Foreign Participation Restrictions</b>
Banking	Up to 50% foreign equity
Insurance	Up to 50% foreign equity
Mass media	Up to 20% foreign equity
Air Transportation	Up to 49% foreign equity

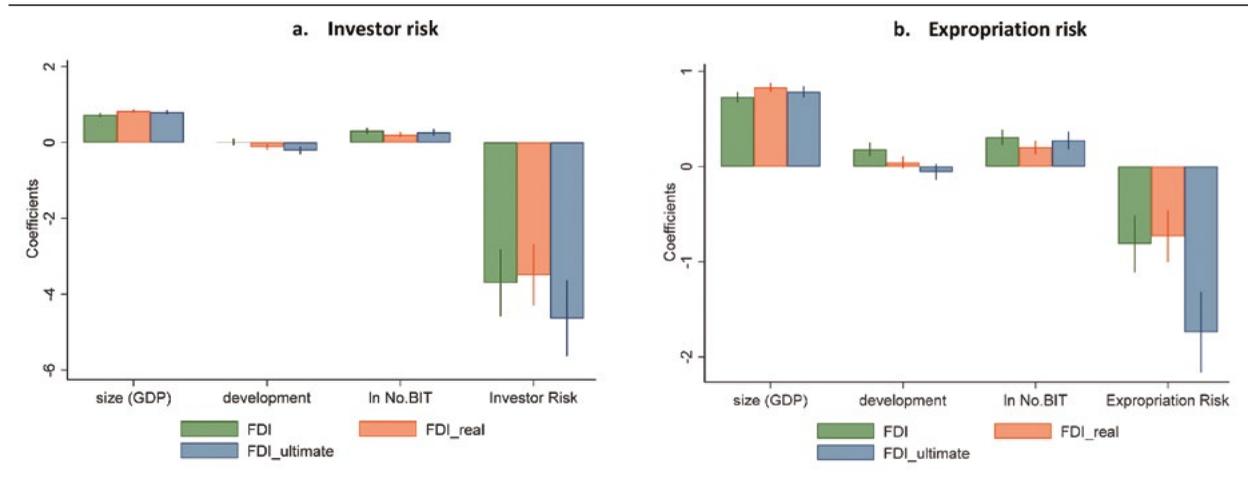
Source: Analysis by Baker McKenzie based on Russia's laws and regulations.

Note: The table is based on a review of 32 specific sectors identified for the purpose of this research. The list of sectors is therefore not exhaustive. See Li and Kher (2020) for details.

are considered in some way connected to strategic activities or that are believed to affect state defense and security. The 'conditions' for granting of an approval are also not pre-determined and well defined. They can be imposed on a case-by-case basis, including in a separately signed Strategic Contract. In contrast, where countries choose to impose approval requirements for strategic interests, it is good practice to impose the requirement for a set of well-defined and limited activities, to clearly outline the process and requirements, and to prescribe time periods which are to be complied with. Excessive discretion is also seen in the availability of unbound exceptions to certain rules. Overall, discretion results in higher costs for foreign investors, on top of the restrictions, and should be reduced.

**Third, lowering investor risk would be beneficial for FDI attraction and retention.** The International Country Risk Guide (ICRG) rating was used as a measure of investor risk when applying the gravity model.<sup>69</sup> The analysis finds that high overall investor risk in a host country, consisting of political, financial, and economic considerations, significantly discourages foreign investors. And foreign investors also react strongly to high expropriation risk and uncertainties on contract by reducing investment in a host country (Figure 4-29). Multinationals are especially vulnerable to uncertainty and need to continue balancing risk and reward. Given FDI's high sunk costs, foreign investors face severe time inconsistency problems when dealing with their local subsidiaries and host economy governments. Growing pandemics, natural disasters, financial, and other man-made crises also expose countries across the world to increased systematic risk. Empirical studies have shown that firms exposed to higher risk and greater uncertainty have lower investment and hiring in advanced economies.

**Figure 4-29: Lowering investor risk would be beneficial**



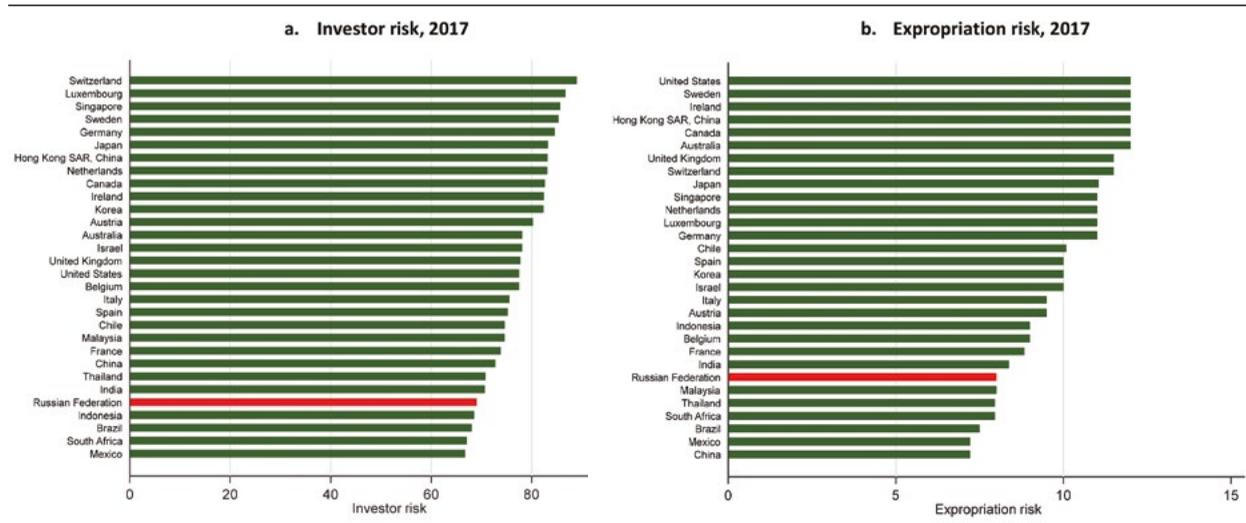
Source: Authors, based on various data.

Note: The bars represent the estimated coefficients for the explanatory variables. The height of a bar reports the point estimate and the capped spike on top of a bar reports the 95% confidence interval. The colors represent the FDI data used.

**Improving investor protection will help foreign investors navigate the rising tide of uncertainty.** Even before the COVID-19 pandemic, Russia was assessed as a relatively risky environment for investors. Among the top 30 FDI destination countries, Russia comes close to the bottom of the ICRG list on overall investor risk. Regarding expropriation risk, Russia is rated as the 7th riskiest destination out of the 30 (Figure 4-30). The pandemic also presents an unprecedented source of investor risk, affecting multinationals particularly hard. It came as both a supply- and a demand-shock, and hit almost simultaneously global economic powerhouses, with an unknown depth and duration. Amid the COVID-19 outbreak, political risk has intensified globally because of policies such as essential supply chains nationalization and exchange control restrictions. There are also concerns around non-performance of contracts – by the government as well as by local suppliers. In this context, addressing issues and grievances of

<sup>69</sup> The ICRG risk rating has been widely used by businesses for risk assessment and business planning. It comprises 22 variables in three subcategories of risk: political, financial, and economic.

**Figure 4-30: Even before the COVID-19 pandemic, Russia was assessed as a relatively risky environment for investors**



Source: Authors, based on data from the PRS Group.

Note: Each ICRG indicator ranges from zero to a positive number and greater values indicate lower levels of risk.

existing investors, to ensure their continuity and retention, is critical. Should Russia lower internal risk factors and enhance overall investment protection, the economy will become more attractive for both existing and potential foreign investors.

**Russia’s current legal framework provides key investment protection guarantees, but several guarantees are missing, and some are incomplete.** For example, the FIL does not include the fair and equitable treatment clause, which protects investors from arbitrary state actions and guarantees due process. The FIL’s expropriation clause does not specify fully the legality conditions—that is expropriation can only be conducted for public purpose, in a non-discriminatory manner, following due process and on payment of prompt, adequate, and effective compensation – and does not explain the calculation of the compensation. The FIL’s provision on investor-state dispute settlement does not include any information on the options and procedures for dispute settlement. Importantly, there is a gap between the FIL and Russia’s IIAs, with the latter providing more elaborate investor rights. The FIL could also include some clear exceptions under which investor rights may not apply—for example non-discriminatory, time-bound exceptions to the currency transfer guarantee for prudential supervision and balance of payments difficulties. Not only will this balance investment protection with the state’s legitimate right to regulate, it will also increase transparency.

**The extensive use of stabilization clauses setting investors’ terms over long time horizons should be reevaluated.** For example, the NIL includes a provision on a «stabilization clause» that guarantees investors stable regulatory and fiscal terms for the period of the project. However, stabilization clauses are not considered the ideal way of providing stability to investors, because they come with significant drawbacks, such as challenges in implementation and distortionary effects. Having overarching clauses that also stabilize regulatory frameworks, can ‘tie the hands’ of states even when legitimate changes may be needed. Therefore, instead of reliance on instruments like a stabilization clause, more emphasis should be paid on broader systemic issues of transparency and investor protection.

**The implementation of investment protection rules needs to be enhanced, such as establishing investor grievance management mechanisms.** Russia’s weak performance on several key indicators on investment protection reflects poor implementation, including indices on dispute settlement, which is fundamental to the effective enforcement of legal rights. Russia has a high number of investor-state disputes: 26 publicly known ones. The most frequently alleged breach by investors is expropriation. To prevent these costly investor-state disputes, and ultimately retain and expand investment, countries have been setting up an investor grievance management mechanism (World Bank 2019).

This is particularly important for Russia, where foreign investors lack trust in domestic courts and there are limited preferred dispute settlement options for investors because Russia is also not a member of ICSID. Institutions such as Commissioner for Entrepreneurial Rights, and the Ombudsman have been set up - however their effectiveness is unclear. The majority of cases received by these agencies reportedly relate to administrative barriers, discrimination of companies, exceeding of authority by public officials, customs regulations, and property rights protection. Overall, Russia should consider establishing concrete mechanisms for better implementation of investment protection rules and reduce investor risk.

**Beyond the three reforms targeted to FDI, greater domestic competition and stronger linkages would enhance the contribution of multinationals to the Russian economy.** Multinational firms significantly outperform domestic firms and directly drive productivity growth and GVC participation in Russia. But their positive spillovers cannot be taken for granted. They require domestic conditions such as competitive markets to limit monopolistic behavior and reduce crowding out. Sufficient firm capability to form supplier linkages with multinationals and benefit from economy of scale and technology spillovers are also needed. These findings are consistent with recent World Bank reports that highlight the importance of fostering competition and firm capability for productivity growth and identify low capabilities of Russian firms as a key bottleneck preventing multinationals from relying more on local suppliers. Addressing these issues through competition policy reforms, the enhancing of firm capacity and strategic linkage programs is critical for foreign investments to boost Russia's global integration and the productivity of its domestic firms.

**Overall, Russia needs to consider a more strategic vision and approach to foreign investment-led economic diversification and GVC participation.** The COVID-19 crisis presents unprecedented challenges to the world economy but also potential opportunities to countries that stand ready. A reconfiguration of GVCs is almost inevitable as companies and countries try to diversify their suppliers and manage risks. In this context, Russia needs to integrate further into factory Europe, deepening its ties with high-technology investment partners and targeting efficiency-seeking and strategic asset-seeking FDI in knowledge-intensive activities, while leveraging its human capital and ensuring improved investment conditions.

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## APPENDIX

**Table 4-A1: Summary of findings assessing Russia’s sample IIAs**

Clause	Findings (Sample IIAs)
<b>National Treatment (NT) and Most-Favored Nation Treatment (MFN)</b>	Older BITs do not have a NT clause and most of the NT clauses in place lack the qualification of “in like circumstances” and are not clear regarding its scope. Not all sample IIAs have a MFN clause. The Guidelines include a wide range of further possible exemptions that impact the strength of the clauses. It is recommended to include/update the NT and MFN clauses by clarifying their scope as well as reducing possible exemptions in the Guidelines to the well-established ones related to, for example, Regional Economic Integration Organizations or Double Taxation Agreements.
<b>Fair and Equitable Treatment (FET)</b>	Most of the sample IIAs have FET and FPS clauses. However, they merely mention the rights. There are no qualifications regarding the interpretation and scope of these clauses, which can open the door for potential disputes. It is recommended to update the FET and FPS clauses by providing details on their interpretation and scope. In this respect, the Guidelines (2016) should include negotiation guidance for the FET and FPS clauses.
<b>Protection against expropriation</b>	Although all sample IIAs include indirect expropriation, the conditions for lawful expropriation and adequate compensation differ. The Guidelines (2016) include all basic conditions and requirements for the protection against unlawful expropriation. In this sense, they provide a good model for the (re-) negotiations. Missing, however, are exceptions that may have a negative effect on the investment but should not fall under the expropriation clause because they concern the state’s right to regulate.
<b>Transfer of funds</b>	All IIAs include a transfer of funds clause. Most of them provide guidance for the interpretation of the term funds with an illustrative list. More details on the possible restrictions may be given though - for example, exception regarding balance of payment situations where any restriction is timebound, non-discriminatory, and in good faith.
<b>Promotion of transparency</b>	Though the EAEU and the Guidelines (2016) include appropriate transparency requirements, the other Sample IIAs do not. Since transparency of the applicable legislation is important for investors, all IIAs should guarantee it.
<b>Balance between investment protection and preserving public policy space</b>	The EAEU Treaty protects the policy space of the signatories and the Guidelines (2016) include appropriate guidance to protect the state’s policy space. However, the Sample IIAs do include sufficient references to flexibilities needed for the right to regulate.
<b>Investor obligations and responsibilities</b>	None of the Sample IIAs have a clause on investor obligations and responsibilities in place.
<b>Enforcement</b>	The IIAs and guidelines include the basic elements of ISDS. They give the investor the choice of ad hoc and institutional ISDS and the available procedures. Missing, however, are some additional elements to increase predictability, efficiency, and legitimacy of the ISDS process, for example, the narrowing of the ISDS subject-matter scope (e.g. limiting treaty provisions subject to ISDS, excluding policy areas from the ISDS scope), opening the process up to the public and third parties, enhancing suitability and impartiality of arbitrators, increasing efficiency of proceedings, or limiting remedial powers of ISDS tribunals.

Source: Authors.

Note: The table summarizes the main findings of a comparative review of investment protection provisions in Russia’s sample IIAs, the Negotiating Guidelines, and new generation IIAs.



# **RUSSIA INTEGRATES**

Deepening the country's integration in the global economy