

Sanctions vs Strategy:

a sectoral case study of Russia's sanctions response
strategies for preserving the status quo



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Objective

The aim of this capstone research is to formulate a case study of strategies pursued by the Russian state, state-owned enterprises, and parastatal enterprises to mitigate the effects of U.S. sanctions on Russian entities following the 2014 Ukraine conflict, and compare results to find common attributes across sectors which determined success or failure of a given strategy.

This research looks at strategies pursued across the energy and financial sectors (the most heavily sanctioned), the most prominent sanctions case from the mining sector, as well as strategies deployed by the Russia Direct Investment Fund and Russia's public sector in response to sanctions, in order to form a broad overview of how Russia's most crucial economic levers dealt with sanctions. For each sector, the context in which sanctions came is established, the specific sanctions restrictions outlined, the effects of sanctions determined, the strategies pursued explained in detail, the effects of strategies on mitigating sanctions' effects documented, and the effectiveness and impact of the strategies determined. At the end, by comparing responses across sectors, conclusions are drawn about common attributes behind success and failures of strategies, which can be useful to both U.S. and Russian policymakers as they hone sanctions design and counter-strategies respectively, as well as businesses and investors navigating the Russian financial landscape amidst the sanctions environment.

Though the E.U. joined U.S. sanctions following the Ukraine conflict in its early stages, this research focuses primarily on U.S. sanctions since the 2014 Ukraine conflict broke out. Furthermore, though 558 Russian entities ranging from corporations to government officials to individuals remain sanctioned by as of this date (OFAC, 2020), this research focuses on sanctions against large enterprise entities; sanctions against individuals are only considered when impacting a large enterprise owned by a sanctioned individual. Additionally, Russia's limited countersanctions response is beyond the scope of this research.

Introduction

Sanctions have increasingly become the primary instrument of American and European (to a slightly lesser extent) foreign policy against Russia. The west frames sanctions as punitive measures designed to discourage alleged Russian state-sponsored activities deemed to cross red lines (Ukraine sovereignty violation, supporting Syrian President Assad, election interference, amongst others), whereas the Russian establishment sees sanctions as part of NATO's unilateral declaration of a second Cold War (Karaganov, 2018).

Regardless of whether one views US and EU as out of line or justified in imposing sanctions on Russia, it is hard to dispute the consequences they've had on the Russian economy, impacting not just public and private sectors, but Russians' daily livelihoods as well. The ruble dropped 41% against the dollar in 2014, causing compounding inflation and falling real wages of Russians (Picardo, 2018). This result coupled with falling oil prices, capital flight, and global operational restrictions triggered a prolonged recession in the Russian economy. That recession is only recently showing signs of recovery and macroeconomic stability, due to an orchestration of lowering deficits, repatriating foreign reserves, maintaining balanced budgets by allowing the ruble to float (which passed the recessionary and inflationary costs on to consumers), and other careful financial maneuvers to protect critical industries (Miller, 2018).

In spite of the recent recovery, it has been in Russia's strategic interest to make its economy resilient and immune to the recession and inflation that Russians experienced as a result of sanctions, as US sanctions have only increased in intensity over the past four years. For Russia to maintain economic stability, particularly since the brunt of sanctions kicked in during 2014, there has been a need to examine Russian companies and institutions' exposure to international commerce and banking systems prone to sanctions, and the options available to minimize these exposures and maintain an inflow of capital.

Types of Sanctions

Economic sanctions, whether passed through major sweeping actions such as CAATSA or individual acts, work through three core means: business embargoes, asset freezes, and transaction blockages. Sanctions come in two forms: Specially Designated National (SDN) lists and Sectoral Sanctions.

SDN sanctions resulted in U.S. based asset freezes and dollar transaction blockages. Due to the dominance of the dollar as a preferred reserve and trade currency, US sanctions in particular have a far-reaching effect beyond its borders. As the sanctions-enforcing body OFAC explains,

"any transaction carried out by a foreign financial institution involving a designated entity or individual is prohibited from being routed through a U.S. institution (which is the case for the vast majority of dollar-denominated transactions), and such transactions through the United States will be blocked... even if a transaction passes for a millisecond through New York on its way to the final transaction point"
(Szubin, 2018).

U.S. employed SDNs to both target perceived members of President Putin's inner circle, and blocked transactions from any organization with SDN majority ownership, as was the case for the Kremlin list sanctions of April 2018 (Treasury, 2018a). US's goal was to bring about a network effect to further prevent business transactions beyond those in dollars via a "reputational risk:"

"We also find that non-U.S. financial institutions around the world often will refuse to do business with SDNs even if they are not legally required to do so – a step that reflects the reputational risk of doing business with someone on our SDN List and that underscores the gravity and sweeping impact of U.S. sanctions"
(Szubin, 2018).

In contrast, sectoral sanctions on the other hand were applied across most of the Russian energy and financial sectors, and to the Russia Direct Investment fund. Sectoral sanctions prohibited U.S. financial institutions from lending to a sanctioned entity for a maturity period beyond either 30 or 90 days, depending on the specific provision outline. This essentially meant the sanctioned entity was unable to raise capital in most overseas capital markets, as most financial institutions relied on U.S. for dollar-based interbank loans. Crucially, transactions were not blocked in sectoral sanctions.

However, sectoral sanctions carried reputational risk as well, and to enforce this reputational risk, to varying degree U.S. also imposed secondary sanctions on non-U.S. entities found to be transacting with the primary designated entity, which was most prominent in the case of Chinese and Russian oil enterprises doing business with sanctioned entities in Crimea, Iran, North Korea, and Venezuela.

Timeline of major sanctions

April 28, 2014 - In the first round of Ukraine sanctions targeting “Putin’s inner circle,” Igor Sechin, the CEO of Rosneft, was added to a Specially Designated National (SDN) list. However, at the time, Rosneft was not directly impacted as Sechin was not the majority owner of Rosneft (Guardian, 2014a).

July 16, 2014 - The U.S. Treasury imposed sectoral sanctions on two major banks (Gazprombank and VEB) and energy companies (Novatek and Rosneft), along with eight arms companies (RFE/RL, 2018)

July 29, 2014- The U.S. imposed sectoral sanctions “aimed at sectors of the Russian economy, including armaments, energy, and finance” Those specifically targeted include VTB, Bank of Moscow, and the Russian Agricultural Bank (RFE/RL, 2018)

August 6, 2014- U.S. places restrictions on the export of “various oil and gas technologies” to Russia (RFE/RL, 2018)

September 12, 2014- U.S. Treasury “bans U.S. companies from supplying goods and technologies to Gazprom, Lukoil, Transneft, Gazprom Neft, Surgutneftegaz, Novatek, and Rosneft. Assets of five Russian defense companies frozen, including Almaz-Antey. Capital market restrictions imposed on six Russian banks: Sberbank, Bank of Moscow, Gazprombank, Russian Agricultural Bank, VTB, and Vneshekonombank” (VEB) (RFE/RL, 2018)

December 23, 2016 - The United States sanctions 23 Russian subsidiaries of Russian banks already sanctions (RFE/RL, 2018)

July 27, 2017- CAATSA Act is passed to punish Russia’s continued involvement in Ukraine and alleged interference in 2016 election. Significant transactions with Russian arms exporters were subject to sanctions, as well as corporation on “shale, deepwater, and Arctic offshore projects ... of Rosneft, Gazprom Neft, Lukoil, and Surgutneftegaz, in which their stake is more than 33 percent” (Ivanova and Lavrov, 2019).

April 6, 2018- “Kremlin List” sanctions announced – Treasury imposes SDN blocking sanctions on 38 Russian oligarchs and companies held by them to punish Russian “malign activity” worldwide (Treasury, 2018a)

February 18, 2020 - Two of Rosneft’s subsidiaries (TNK Trading and Rosneft Trading SA) handling between 70 and 80 percent of Venezuela’s oil exports via the Venezuelan state oil company PDVSA are sanctioned (CSIS, 2020).

Russia's Financial Sector Sanctions Strategies

Financial Sector Sanctions Context

When designing Ukraine sanctions in 2014, U.S., and to a lesser extent the European Union, sought to punish state instruments deemed to be aiding the financing the annexation of Crimea by exploiting Russia's dependency on foreign capital inflows, and imposed measures which would inflict pain due to the sudden cutoff of external financing. This was achieved by targeting state-owned banks deemed to have links to financing operations in Ukraine, and "banks owned by, or otherwise linked with, individuals deemed to be close to the Russian leadership" (Connolly 2018, p. 169).

In *Russia's Response to Sanctions*, University of Cambridge Professor Richard Connolly recounts the origins of financial sector sanctions:

"The first financial sanctions were imposed almost immediately after the annexation of Crimea. On March 18, both the United States and the EU imposed restrictions on individuals and legal entities that were deemed to constitute the leadership's "inner circle," and who had been judged to have been involved in undermining the territorial integrity, sovereignty, and independence of Ukraine (Council Regulation 269/ 2014) (Executive Order 13660). ...At this early stage, financial sanctions did not affect the wider sector, although this began to change in the summer.

In July, both the EU and the United States widened financial sanctions to include prohibitions that prevented individuals and entities from the EU and United States from trading bonds, equities, and related brokering services for products with a maturity period of over ninety days for several state-owned financial organizations and their subsidiaries. The EU included Sberbank, VTB, VEB, Gazprombank, and Rosselkhozbank (Council Regulation 833/2014). The United States initially included Gazprombank and VEB on July 15, although the list was quickly expanded on July 29 to include VTB, Rosselkhozbank, and, in a move that was not replicated by the EU, Bank of Moscow. Sberbank was finally included in the US list on September 12. In September, the debt financing restrictions were tightened by reducing the maturity period for new debt issued by the targeted banks from ninety days to thirty days (EU Council Regulation 960/2014). Japan, Norway, Switzerland, Australia, and a number of other allies of the EU and the United States adopted similar restrictions. " (Connolly 2018, p. 170).

Thus, Russia's largest banks, Sberbank and VTB, as well as Gazprombank and the state development bank VEB found themselves subject to sectoral financial sanctions and unable to raise capital in most overseas capital markets, as western investors were barred from lending to them beyond a maturity period of 30 days. Crucially, their transactions were not blocked, which was the fate of smaller state-owned bank including Rossiya and SMP designated under the SDN scheme.

Impact of Financial Center Sanctions

The most direct effect of sanction contagion was in capital flight from both Russian oligarchs and foreign investors. A combination of low oil prices, which were historically correlated with net investment flows into Russia, sanctions on Russia's leading financial institutions, and the risk of the further expansion of sanctions to expand greater portions of the Russian economy triggered this capital flight. Despite the fact that sanctions were targeted at specific sectors and individuals, many nonsanctioned entities also experienced problems in accessing capital. The available pool of capital within Russia was reduced, pushing the cost of

capital higher. This contributed to a reduction in overall investment - flows of inward foreign investment also declined after the imposition of sanctions. In 2014 alone, over \$150 billion of capital was moved offshore amidst sanctions panic (UPI, 2015). That this occurred alongside the reduction in oil prices was to be expected - However, unlike previous crises, IFDI flows did not recover strongly when oil prices began to grow again.

Together, the four banks affected by both EU and US sanctions (i.e. Sberbank, VTB, Gazprombank, and Rosselkhozbank), accounted for around half of total banking assets in Russia in 2014 (Connolly 2018, p. 171). Other Russian banks that were not explicitly targeted by sanctions found themselves experiencing “soft” sanctions in the form of increased transactions costs as nonsanctioned Russian banks faced stricter scrutiny when accessing foreign capital (Orlova, 2014). Uncertainty rose, and with it the risk premium paid by nonsanctioned financial and nonfinancial firms when seeking to access capital, both from abroad and from within Russia. This resulted in an increase in the cost of long-term capital for both sanctioned and nonsanctioned entities alike, as can be seen in the sudden increase in risk premium during the peak of sanctions in 2014:



Figure 6.9 Change in risk premium in Russia, 2013–2017 (basis points)
Source: Bank of Russia (2017)

(Connolly 2018, p.183)

The intended and actual impact of sanctions targeting the financial sector was, therefore, felt by a considerably larger section of the economy than just the small number of state-owned banks contained in the official sanctions lists. As those Russian firms and banks that had relied on Western finance began to experience difficulties in refinancing existing debt and in accessing new loans, they hoarded foreign exchange

reserves in the expectation that existing loans would need to be repaid. Further pressure on the ruble came as foreign capital left the country and as Russian firms sold rubles to purchase foreign currency that would be needed to service foreign currency denominated debt. When the decline in oil prices accelerated toward the end of the year, the ruble fell in line with it, causing a growing sense of panic to engulf Russian financial markets. This panic intensified in December 2014 when the Central Bank of Russia employed seemingly opaque measures to help state-owned Rosneft raise \$10.8 billion to meet its scheduled foreign debt repayments -this resulted in the ruble losing nearly 20 percent of its value in just one day (Bloomberg, 2014c).

Financial Sector Strategies Employed by Russian State and Banks

The Russian state developed a multifaceted response that was intended to both reduce the impact that sanctions had upon the economy in the short run, and raise the resilience of the economy to similar measures in the future. The policy response to financial sanctions comprised a mixture of measures intended to promote the simultaneous “russification” and diversification of financial flows. In the financial sector, Russification involved domestic, state-controlled sources of capital used to fill the void created by the sudden stop of foreign capital inflows. Informal capital controls were implemented to boost the repatriation of foreign currency from private and quasi-state oligarchs and to reduce gross outflows of capital. With a the longer term diversification view, the Russian authorities reduced the financial system’s vulnerability to the threat of further sanctions by creating a new national electronic payments system and by continuing to bolster the domestic banking system. The latter involved the removal of weak and financially risky banks while simultaneously providing capital to state-owned banks. Moves to reduce the domestic financial system’s vulnerability to external pressure were accompanied by efforts to seek out alternative sources of foreign capital, both through the cultivation of closer links with a number of non-Western economies, and through state participation in the financial sector.

Strategy 1- Informal capital controls – capital repatriation amnesties

The initial strategy adopted towards shielding the financial sector from sanctions, combating capital flight, contain the ruble fall, and inject funds to shore up the domestic financial sector was “informal” capital controls. This took the form of laws and directives to facilitate prominent export-oriented firms and their leaders (i.e. prominent Russian oligarchs) abroad to repatriate capital stored offshore. Cumulatively, about \$2 trillion was estimated to have fled Russia in the last five years preceding sanctions through offshore schemes (TASS, 2014a). Thus, Deputy Finance Minister Sergey Shatalov claimed “deoffshorization is an important issue in ensuring national security” (TASS, 2014a).

As much of said funds were stored in tax havens, a key agenda for the Russian government was to facilitate the return of capital of via a “carrot and stick” based approach. The initial step taken by President Putin to repatriate capital in 2014 was to amend the law on re-onshored capital taxation, which was announced during his annual address to the Federation Council. The “anti-offshore law” designed to return Russian capital from foreign tax shelters mandated “Russian tax residents to declare undistributed profits of controlled foreign companies....The law also stipulate(d) penalties for failure by controlling persons to fully declare and pay taxes into the Russian budget. The penalty for such violations (would) amount to 20% of the unpaid tax but no less than 100,000 rubles (\$2,120)...Failure by controlling persons to submit information or failure to submit authentic information (would) entail a penalty of 100,000 rubles for each controlled

company...At the same time, the existing Russian legislation stipulates criminal responsibility for tax evasion.” (TASS, 2014a). The Deputy Finance Minister estimated that “The implementation of the new tax law will yield an additional 150-200 billion rubles (\$3-4.3 billion) in tax revenues for the Russian budget annually... Meanwhile... taxation of controlled foreign entities will yield up to 20 billion rubles (\$425 million) a year.” (TASS, 2014a).

This was followed by a letter sent to the heads of all state-owned and parastatal enterprises, in which the governor of the Central Bank of Russia encouraged prominent business leaders and offshore account owners to exchange their foreign currency for rubles provided by the central bank and then instructed them to coordinate their sales of foreign currency with the bank (Nabiullina, 2014). To facilitate this policy, personnel changes and appointments were made at the Central Bank of Russia “to improve the flow of communication surrounding central bank actions and to help coordinate the authorities’ response to the mounting currency and banking crises.” (Connolly 2018, p. 175). The deputy governor of the Central Bank of Russia, “Ksenia Yudaeva, with responsibility for monetary policy, was replaced by Dmitri Tulin” (Bershidsky, 2015). It was rumored that Russia’s Security Council, “a body not known for its tendency to involve itself in economic affairs, encouraged his nomination.” (Connolly 2018, p. 175).

The “stick” was complemented by “carrots” of avoiding domestic tax penalties to encourage capital repatriation. In mid 2015, President Putin introduced provided a tax amnesty for all Russians illegally hiding money in offshore accounts, provided the funds were taxed or repatriated. “Businesses and wealthy individuals who choose to declare their foreign assets before the end of 2015 (would) avoid the risk of prosecution and a bill for tax arrears” (CNN Money, 2015). Finance Minister Anton Siluanov summarized the bill as “immunity from criminal, administrative and tax punishment within the framework established by the law and in relation to transactions performed before January 1, 2014, if the wrongdoings committed involved the formation of the declared property items and transactions connected with the acquisition of these assets.” (UPI, 2015) . The initial tax amnesty period was proposed to last 1 year, until June 30th, 2016, after which point the 13% tax on offshore profits would resume.

To complement this amnesty scheme, Finance Minister Siluanov also prepared a \$3bn government bond designed for wealthy Russians, who may fall foul of a US “oligarch list” being prepared as part of the new sanctions, to repatriate capital stashed abroad. President Putin, who had long called on Russia’s oligarchs to bring their assets back to Russia, approved the new bonds on discounted terms in 2015 (FT, 2018). At that time, estimates on returned capital during the next year were expected to realistically be 10% of 2014 outflow, or \$15 billion (TASS, 2015). However, there remained a net outflow of capital throughout 2015, \$57 billion, and 2016 \$18 billion (UAWIRE, 2018).

Towards the end of 2017, President Putin extended the amnesty period - the 13% tax on profits realized overseas then repatriated to Russia was scrapped entirely, and “to exempt entrepreneurs who transfer business from abroad to Russia from paying income taxes” (Russia Briefing, 2017). At the same time, this “carrot” was complemented by yet another “stick” in the form of the Russian government introducing Controlled Foreign Company (“CFC”) rules, namely “automatic exchange of information for tax purposes between Russia and many other jurisdictions have forced Russian tax residents to restructure their foreign assets” (Trojanov et. al, 2018). CFC rules made it much harder for offshore money to be stored in secret. Still, this second waive of carrots and sticks, known as Amnesty 2.0 from March 2018 to February 2019, still failed

to reverse capital outflow, as \$24 billion left Russia in 2017 and \$63 billion in 2018 amidst fallout from widening sanction on prominent Russian enterprises (UAWire, 2020).

Despite the lack of success in bringing back capital, “Amnesty 3.0” was extended from June 1, 2019, to February 29, 2020, with an eye towards being “especially designed to boost recently established domestic offshore zones in Russia’s Kaliningrad Region and Primorsky Region, or so called Special Administrative Regions (SAR).” (Moscow Times, 2019). Amnesty 3.0 allowed Russian businessmen to “be exempt from personal income tax...(and) retain all their guarantees in exchange for repatriation of funds and state registration of foreign companies they control in SARs.” (Moscow Times, 2019).

Results:

Predictably, Amnesty 3.0 also failed to bring back capital, with a loss of \$27 billion in 2018 (UAWire, 2020). “According to the Bank of Russia, during the five years of amnesty, there has been a net outflow of \$189.6 billion (UAWire, 2020). Unsurprisingly, the Amnesty program came to an end in February 2020.

Rather than reversing the bleeding of capital from the Russian economy as hoped, the Carrot and stick repatriation amnesty program instead managed to simply slow down the trend. It is worth noting that even these “carrot and stick” capital repatriation measures would not have been possible if the Russian government had not been actively involved in controlling capital flows through formal and informal measures. In formulating dis- incentives for offshoring and incentives for repatriation, the Russian government was made to start breaking with its previous “laisses-faire” approach and instead resume its traditional centralized control approach.

Strategy 2- Recapitalizing state-owned banks

The informal capital controls and repatriation helped coffer up domestic reserves, which in turn was used to recapitalize state-owned banks. Faced with external financing restrictions, Russian banks’ self – reliance was crucially needed for survival. This was achieved by “bailouts” for state-owned banks during the peak of the capital crunch crisis in 2014-15.

In early 2015, the Russian government developed an anti-crisis package, an important part of which included a focus on recapitalizing the most important state-owned banks through the provision of around 1.4 trillion rubles (around \$22 billion at the time) (Connolly 2018, p. 176). Over the course of 2015, the capital of state-owned or state-linked banks grew by nearly 900 billion rubles, compared with less than 100 billion rubles for other banks (Mau 2017, p. 198)

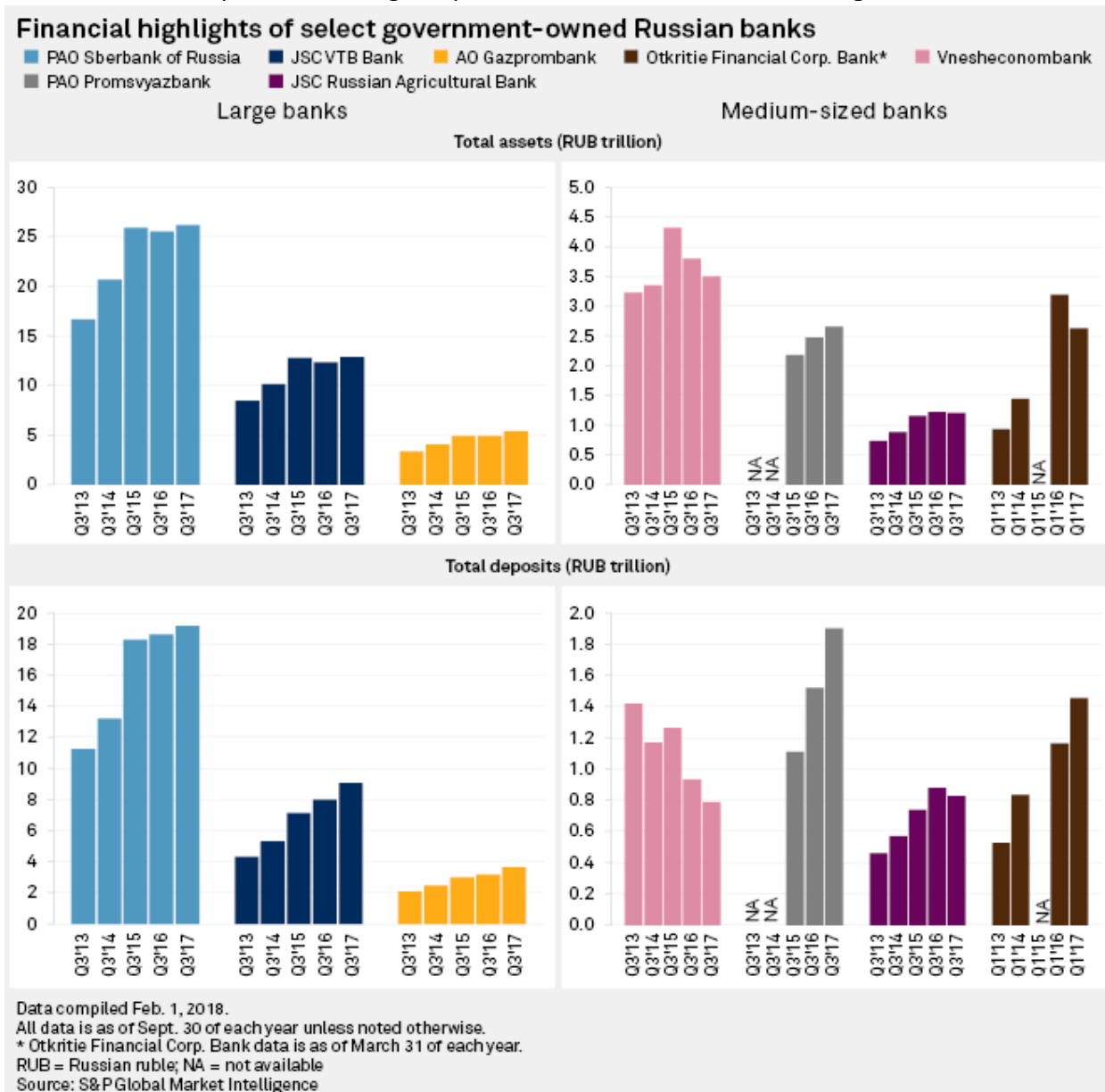
In parallel, additional and significant state support was extended to state-majority (parastatal) banks. According to estimates by Fitch, somewhere in the region of two trillion rubles of state assistance, approximately 2.5 percent of 2014 GDP, was extended to parastatal banks between 2014 and 2017 (Astapenko, et al, 2017). This support took the form of direct transfers from the federal budget (c. 260 billion rubles), support from the National Welfare Fund (c. 850 billion rubles), and state bonds issued to finance the recapitalization of banks. A large proportion of the capital held by VTB, VEB, Gazprombank, and Rosselkhozbank – all subject to sanctions – was provided by the state after sanctions were imposed – VTB was

the largest recipient of aid, with a \$2.6 billion bailout in late 2014 and 2015 (Connolly 2018, p.176). By contrast, it is worth noting that Russia's largest bank, Sberbank, was not forced to rely on state support, largely because it continued to attract the largest share of domestic deposits.

Results:

By fortifying the domestic financial system at a time when it was effectively cut off from external capital, the Central Bank successfully enhanced Russia's capacity for self-reliance. In turn, these banks were expected to ensure that Russia's most important enterprises would enjoy access to credit that was increasingly scarce due to capital outflows.

The results of the 2015 bailout can be seen in the jump in assets and deposits of Russia's largest banks post the 2015 bailout, despite 2015 being the peak of the financial crisis following sanctions and low oil prices:



(S&P Global, 2018a)

Strategy 3- Consolidation and russification of smaller banks

In parallel to recapitalizing banks, the central bank also continued the process of cleaning up – or “sanitizing” – the domestic banking system. This process had been underway since well before the imposition of sanctions and the decline in oil prices, and was intended to ensure that smaller banks that were either close to bankruptcy or were engaging in excessively risky activities were merged with larger banks, which in turn were provided with capital injections from the Central Bank (Connolly 2018, p.177). However, the turbulence that struck the financial system in 2014–2015 was not used as an excuse to postpone this policy. Instead, the Central Bank strengthened regulatory and macroprudential requirements. At the peak of the consolidation period between 2013 and 2017, around 350 banks were removed from the market (IMF, 2017). In total, 2,600 of just over 3,000 private banks lost their licenses between 2000 and 2017 (S&P Global, 2018a).

Results:

As the number of smaller private banks declined, the share of state-owned banks in Russia’s banking sector rose to 80% of total banking sector assets while the state’s share of lending increased to 70%, (Movchan, 2017). The government’s portfolio included a majority stake in Sberbank, Russia’s largest bank, and VTB, the country’s second biggest bank (S&P Global, 2018a)

Moody’s critically observed “[Central bank] ownership creates a conflict of interest between its interest as a bank owner and its function as a bank regulator and may undermine the quality of its supervision” (S&P Global, 2018a). This both undermined the Central Bank’s role as an independent supervisor and consolidated private financial sector activities by an increasingly widening government control, lowering investor confidence (S&P Global, 2018a).

Strategy 4- Inter-Bank Financing via Correspondent Accounts

On a more pragmatic implementation level, to maintain operational liquidity and some degree of external financing amidst the sanctions environment, the top Russian banks devised a scheme using internal and external correspondent accounts. The new scheme was actively drafted by banks with the involvement of Russia’s finance ministry and the Central Bank.

The scheme relied on at least one major Russian bank avoiding sanctions and being able to retain access to foreign currencies via correspondent accounts with major overseas banks, whereby other Russian banks would then set up or upgrade existing correspondent accounts with that bank to shift currency around. Both Sberbank and VTB were subject to restrictions on raising capital in the west but , not blacklisted, unlike most of banks working with Russia’s defense sector. As documented by Reuters, “Publicly available documents show VTB has correspondent accounts with Sberbank and VEB, while Russian Agriculture Bank has accounts with VEB, VTB, Gazprombank, SberbankVEB has such accounts with Sberbank and Gazprombank...Sberbank, VTB, VEB, Gazprombank and Russian Agriculture Bank have correspondent accounts with the central bank as well” (Reuters, 2019a). As the bulk of correspondent accounts were denominated in rubles, with only a handful in U.S. dollars and euros, this scheme would allow “Leading Russian banks... Sberbank, VTB, Gazprombank and others... access to U.S. dollars or other major foreign currencies by using so-called correspondent accounts...retain(ing) at least short-term access to the global financial system” (Reuters, 2019a). Moving dollars and foreign currencies between themselves via correspondent accounts would require

“one bank in the chain... to have a U.S. dollar correspondent account with a U.S. bank as there would still be a need to make external settlements, necessitating a bridge” (Reuters, 2019a).

The goal of this scheme was to “help avoid a panic if one or several big banks are cut off from dollar transactions” as well as “complicate tracking currency transfers between the banks (thus) making (transactions) harder for overseas authorities to spot” (Reuters, 2019a) according to a former Central Bank official interviewed by Reuters.

Results:

Compared to Iran, whose banking sector was also heavily sanctioned, the Russian financial sector staved off at least domestic banking runs during the peak of the crisis through this scheme, which reduced the sanctions pass-through to Russian consumers (Connolly 2018, p.186). At the same time, it was acknowledged that this arrangement would represent a temporary solution “which might last for three or four months and buy the banks time to find an alternative, while also reassuring customers” (Reuters, 2019a). The risk of “a spike in currency transactions by the banks which had not been sanctioned and were dealing with the foreign correspondent bank” arousing suspicions was discussed, but was still weighed more pragmatic than the alternative strategy: “a sanctioned bank could use correspondent accounts directly with the central bank although that would raise the risk of the central bank itself being hit with sanctions and therefore, is unlikely” (Reuters, 2019a).

Strategy 5 - Special Purpose Bank and Special Purpose Exchange to relieve sanctions pressure from mainstream financial sector

As the correspondent account scheme was not sufficient to minimize secondary sanctions risk exposure, in early 2018, Promsvyazbank, Russia’s ninth largest bank by assets, became a “special-purpose bank for serving military-industrial-complex businesses... in a maneuver that will help it avoid new US sanctions” (FT, 2018). Promsvyazbank was specifically earmarked by the government to provide credit to entities under sanctions so that other lenders could offload the risk of being sanctioned under the CAATSA act (Reuters, 2019a).

Continuing the trend of nationalization mentioned previously, the central bank took over a failing Promsvyazbank in 2017 to prevent its collapse. Then the Russian finance ministry made Promsvyazbank a specialized defense lender so as to protect local firms from risks associated with U.S. sanctions. The aim was to make the bank a “lightning rod for international penalties... so that other players can give up the [weapons] business and avoid being sanctioned (FT, 2018). Promsvyazbank maintained its existing operations —focused on lending to small and medium-sized businesses — and was recapitalized by \$3.5bn during the first quarter of 2018, after which it was transferred to Russian state ownership (FT, 2018). Previously, the Kremlin had classified the list of banks allowed to work with the defense industry and limited disclosure of defense tenders. Promsvyazbank took over defense sector lending from the major lenders including Sberbank, VTB, and Alfa-Bank, which indicated a desire to cease working with Russian defense companies in order to retain access to western capital and maintain domestic deposit stability (FT, 2018).

Promsvyazbank was not only converted into a special purpose bank, but also used to set up a special purpose stock exchange created explicitly for sanctioned companies to list their bonds. By setting up a new trading venue, separate from the Moscow exchange, the government sought to kill two birds with one stone: 1. allow sanctioned companies to raise funds in the domestic market, and 2. shield the Moscow Stock exchange (MICEX) and associated un-sanctioned domestic financial market from the unpredictable ebb and flow of US foreign policy.

Relying on two state-owned, domestic-focused banks, which had little to no exposure to western capital markets, eased the pressure on parastatal banks which continued to operate abroad, such as Sberbank and VTB (Sberbank remains listed on the London Stock Exchange). The finance ministry selected Promsvyazbank, the failing bank reconverted to lend to sanctioned companies in Russia's defense sector, and Russian National Commercial Bank (RNCB, known as RNKB locally), one of the Kremlin's main vehicles for funding the Crimean peninsula, to run the exchange (FT, 2019). RNKB was sanctioned in 2015 for its Crimean dealings (FT, 2019).

The exchange was formally launched in January 2020, after extensive technological checks to ensure non-leakage of data (RT, 2020). The platform was set to work only in the ruble zone, attracting those willing to invest risk secondary sanctions. "Companies could issue stocks for certain backers, while foreign investors are likely to avoid participating in it due to Western sanctions... Those investors who would dare to buy sanctioned financial assets are likely to be targeted by US sanctions regardless of the size of transactions, It is not the type of platform that will likely attract new investors, but there are investors already interested in those companies and they get a new [financial] instrument...." according to the head of the investment at BCS Broker (RT, 2020). At least two companies anonymously announced that they would like to trade on the stock exchange, according to Deputy Finance Minister Moiseev (RT, 2020). It was previously reported that the platform would be based on the Saint Petersburg Currency Exchange, though it's unclear if this was included in the final implementation (RT, 2020). The net result was the platform becoming "an image-building instrument for sanctioned companies and also be a transitional phase before listing either on the Moscow Stock Exchange or foreign platforms after sanctions are lifted" (RT, 2020).

Results:

As of April 2020, Promsvyazbank has yet to be sanctioned, though it was included in the August 2018 proposed "Sanctions Bill from Hell," predating its conversion into a sanctions-avoiding bank, along with Sberbank and VTB (Brown and Rudnick, 2018) Still, it was prepared for US to blacklist it in "any sanctions scenario" after it took over the sanctioned defense portfolios of Russia's major banks, according to a memo it released on Interfax (Reuters, 2019b). In April 2019, Promsvyazbank was set to take over Evrofinance Mosnarbank, which was sanctioned a month earlier for allegedly attempting to evade U.S. sanctions on Venezuela (S&P Global, 2019). VTB and Gazprombank, both majority state-owned, held a 25% stake in Evrofinance Mosnarbank, which was earlier slated to be transferred to Russia's Federal Agency for State Property Management, but Promsvyazbank was determined more appropriate due to its dedicated sanctions-avoiding purpose (S&P Global, 2019). Furthermore, Promsvyazbank has been financing major Russian defense transactions worth \$5 billion with at least India and Turkey, and possibly China as well (Cast.ru, 2019) since being converted into a sanctions-avoiding bank.

Due to the deliberately anonymous and securitized nature of the special-purpose sanctions-avoiding stock exchange, it is difficult to measure its operational success by any objective metrics, though since its setup Deputy Finance Minister Moiseev has stated that Russia has no plans to issue more government debt denominated in US dollars (FT, 2019).

Strategy 6- Creating domestic payment alternatives to standard international systems

In a broader sense, the fact that US sanctions targeted all transactions that even momentarily pass through US financial institutions, coupled with the on-off threats of the SWIFT transactional system leaving Russia as it did Iran, created a need for Russia to pursue alternate solutions to SWIFT for its financial and banking transactional needs. Though there existed a few smaller alternatives to SWIFT, including CHIPS, CHAPS, BOJNet, FedWire, Western Union, MoneyGram and Ripple (FraudAid, 2011), Russia could not rely on them as long term stable substitutes for all its internal and external transactions, as their reach was limited and there was a regulatory and political risk of US pressuring said systems to avoid Russia as well.

Given this looming threat, since 2014 Russia started developing its own direct transaction exchange system, as well as its alternate credit card processing system, to reduce its long term reliance on the dominant systems of SWIFT as well as Visa/Mastercard, which could be prone to sanctions and exit the country on short notice. Russia developed and introduced the Mir Credit card payment system in 2015 after Crimea-connected Russian banks were disconnected from Visa and Mastercard services due to sanctions. Both MasterCard and Visa were required to clear their transactions in Russia through this system. Simultaneously in 2014-2015, Russia also developed the SPFS system for transfer of financial messages on its proprietary CyberFT information messaging backbone network (*CyberPlat*, 2017) and began progressively phasing in its implementation throughout the country.

Results:

As of April 2018, three years after its launch, SPFS was in use by all major Russian banks, as well as major commodities exporting companies including Gazprom, Rosneft, and Rostec (RT, 2018a), which according to Deputy PM Dvorkovich made Russian firms and financial institutions “ready to switch off SWIFT” (RT, 2018b). Despite this internal positive outlook, SPFS was facing significant challenges with implementation and inter-operability as of Dec 2016 including Automated Banking System (ABS) messaging formatting, inter-bank agreements, additional security requirements, system availability limited to working hours, and high transaction and support costs (*CyberPlat*, 2016).

As of March 2017, less than two years from launch, 90 percent of ATMs in Russia were ready to accept the Mir payment system according to Central Bank Governor Elvira Nabiullina (RT, 2017). By November 2017, the Mir payment card system – promoted under the banner “Your card is free from external factors. Created in Russia” – had been issued to nearly twenty-five million users, although a large proportion of these users – ten million – were so-called *byudzhethniki*, or people dependent on the state for income (Zubkov, 2017). Around 380 banks operating in Russia accepted the new card, with around 120 banks able to issue the cards (RFE/RL, 2017).

However, Mir raised transaction costs in Russia – Mir cost banks 50 percent more than international cards, and the fact that Visa and MasterCard were obliged to use the CBR’s settlement system raised their costs of operation in Russia (Shestopal 2015). Eventually, Mir proved more compatible with the SWIFT

international electronic payments that Mir was developed to replace: by 2017, SWIFT had reduced the price of clearing payments using Mir (Connolly, 2018).

Russia's ultimate path to restoring stability and promoting growth in light of sanctions belied in not just using Mir and SPFS as stop-gap domestic measures, but rather enabling a viable alternative to OFAC's sweeping jurisdiction reaches by internationalizing Mir and SPFS as standard payment systems and integrating them with other prominent alternatives to SWIFT to allow seamless transactions across currencies. Towards this end, Russia launched efforts attempted at integration of SPFS with China's CIPS and UnionPay transaction system counterpart (TASS, 2014b) as well as integrating it across the Eurasian Economic Zone (EEZ) consisting of mostly CIS countries (RT, 2015), in addition to expanding Mir credit card payment use and inter-operability in Europe (RT, 2016).

Strategy 7: Lobbying – the experience of VTB and Andrei Kostin

While most Russian banks were focused on building resiliency to sanctions via self-sufficiency mechanism, VTB attempted lobbying instead. Operating under Ukraine sanctions since 2014, VTB's CEO Andrei Kostin repeatedly sought to convince US policymakers in State and Treasury Departments that VTB posed no threat to US.

Starting in April 2015, Kostin engaged lobbyist Mike Manatos of Manatos & Manatos based in New York, who was a close confidant of Democratic Senator and Presidential Nominee Hillary Clinton (CPI, 2018). Kostin also simultaneously engaged Rick Boucher and Michael Borden, heads of government strategies practice at Sidley Austin, who were respectively a former Democratic congressman from Virginia and former senior counsel to the House Financial Services Committee (CPI, 2018).

The lobbying activities included inviting State Dept officials to Bolshoi Ballet galas sponsored by VTB, arranging direct meetings with the House Foreign Affairs / House Financial Services Committees. VTB paid Manatos & Manatos and Sidley Austin a combined \$1.2 million between 2015 and 2018, according to disclosures filed with the Department of Justice (CPI, 2018). The lobbying was initially registered effective April 2015 under the Lobbying Disclosure Act, a mild domestic lobbying disclosure regime (CPI, 2018). The firms initially fell afoul of the Foreign Agents Registration, FARA, which required requires lobbyists for foreign clients to report all "political activities chronicling emails, phone calls and meetings in order to identify malign influence, but under pressure Sidley Austin registered its VTB work in October 2015 and Manatos & Manatos subsequently registered under FARA on behalf of VTB in May 2016 (CPI, 2018).

Though VTB issued statements insisting the objective of the lobbying "is to promote VTB Group's business interests in the United States. Our work with them is not related to sanctions," in the official disclosure Manatos & Manatos stated its work was to influence government actions "that affect the imposition of US sanctions on Russian-affiliated banks" - which invited the scrutiny of U.S. media and Justice Department officials alike, just as the Mueller report was topping news in U.S. (CPI, 2018).

Results

As reported by the Center for Public Integrity, the seniormost State Dept official who met Kostin, sanctions policy coordinator Daniel Fried, accepted the meeting only to verbally convey the official state dept policy to Kostin: "There are no changes on the horizon for our sanctions policy... the sanctions would stay in

place until the Ukraine situation was resolved in accordance with what is known as the Minsk accords” (CPI, 2018).

Not only did the sanctions remain in place, but in April 2018, after 5 years of lobbying, US Treasury Department nevertheless announced new sanctions against Kostin himself in April as part of the “Kremlin list” of oligarchs benefitting from the Kremlin “attempting to subvert Western democracies and malicious cyber activities” (CPI, 2018). Ironically, one of the sponsors of the legislation was Rep. Elliot Engel, whom Kostin had attempted to lobby during a meeting in 2017. The Specially Designated National (SDN) sanctions against Kostin meant no American could engage in financial dealings with him or provide services to him, which resulted in Kostin disengaging from VTB’s lobbying.

End Results

Through a combination targeted state interventions and coordination of policy with the largest banks, the Russian state was able to successfully recapitalize the most important banks to maintain liquidity in the economy, stabilize its budget, slow down capital flight, and control ruble volatility. By 2017, this was helping to generate a greater sense of financial stability in Russia- risk premiums associated with lending to Russian entities declined to presanctions levels, indicating that foreign perceptions of Russian entities’ ability to service existing debt burdens were more sanguine and less driven by fear of the potential impact of sanctions (see figure 6.9 in impact section). Fiscal budgets were balanced, inflation was brought under control, and unemployment was stabilized. Compared to Iran, largely under sanctions simultaneously. Russia did not see the same levels of ruble devaluations and inflation levels. Domestic deposits largely remained safeguarded, with panic selling staved off (Miller, 2018).

By mid-2018, as GDP growth rate resumed the pre-sanctions 1.5-2% range, Central Bank governor Elvira Nabiullina, responsible for much of the policy response to sanctions, told CNBC “The Russian economy has pretty much emerged from and has recovered, reaching growth rates close to potential” But she cautioned that higher growth rates should be pursued alongside structural reforms in Russia, and that growth in itself should not be pursued at the expense of stability - “But I would like to stress... that structural reforms of this kind should go together with macroeconomic stability...a rise in economic growth rates should not be to the detriment or at the expense of ... macro-stability, low inflation, a well-balanced budget deficit” (Ellyatt, 2018).

Analysis and Conclusions

Sanctions forced Russian policymakers to develop adaptive measures that changed the nature of the financial system’s integration with the global economy, as prior to the imposition of sanctions, Russia’s financial system had become progressively more integrated with the Western-dominated sections of the global financial system, and the structure of the Russian economy caused capital inflows to be highly correlated with developments in the global oil market. Due to official measures taken to insulate Russia from both the impact of sanctions and the withdrawal of capital that accompanied a decline in oil prices, Russian banks became largely non-reliant on Western capital to finance their activities, and inward investment (along

with ruble exchange rates) became somewhat decoupled from oil prices. Thus, the resources of the state were deployed in a way that not only reduced impact of sanctions in the short term but laid the foundations for a more resilient financial system in the future.

The level of coordination to align strategies and schemes between the state, Central Bank, private banks, and businesses with differing interests was only possible because of state influence and intervention. This was evident in the correspondent banking scheme. The state was furthermore able to successfully separate the “risky” transactions such as defense ones. An outcome of this process, however, was that the state’s influence over the banking system rose, as was seen in the state-takeover of smaller banks impacted by contagion from sanctions.

At the same time, the coordination of policies was not enough to prevent capital flight in spite of three generous capital repatriation amnesty schemes, demonstrating a systemic lack of trust in the Russian financial system by oligarchs impacted most by its policies. Furthermore, the large-scale “russification” of smaller banks came with the double-edged sword of de-risking the sector from liquidity leaks while widening government control, preventing crucial small-business lending out of de-risking, and undermining the Central Bank’s role as an independent supervisor, thereby lowering investor confidence. Finally, attempted lobbying efforts by VTB to de-sanction itself backfired and resulted in harsher sanctions against VTB’s chief.

RDIF: foreign investment diversification in a sanctions grey zone

Context and Strategic Overview

In the short run, russification of financial capital and services accounted for the bulk of the Russian response to financial sanctions, as it was difficult to have quickly replace the lost inflows of capital with capital from non-Western sources. Nevertheless, the Russian government, state agencies, and state-controlled firms accelerated efforts to seek out new sources of capital. Towards this end, the Russian state accelerated its participation in multilateral financial organizations where Russian influence would be greater and where Western sanctions would not undermine its access to capital. In 2014, Russia became a founder member of the BRICS Development Bank, a multilateral development bank established by Brazil, Russia, India, China, and South Africa, designed to support public and private projects through loans, equity participation, and other financial instruments. Russia held equal shares and voting rights in the bank, with Russian firms and the state possessing the right to apply for capital to support projects focused on infrastructure and the environment. In 2015, Russia became one of the founding members of the China-led Asian Infrastructure Investment Bank, with the Russian government supplying the third-largest injection of capital into the venture. This gave Russian firms easier access to capital to participate in jointly financed infrastructure projects across Eurasia and the Asia-Pacific region. It also meant that Russian firms could tap an alternative source of foreign investment. More recently, Russia also planned to issue renminbi-denominated government bonds by early 2020, amidst increasing interest by Chinese investors to purchase Russian debt in the local currency (RT, 2019).

Russia's participation in these multilateral institutions that were not dominated by Western countries constituted an important component of both opening up new sources of capital and building non-Western institutional structures. These sources of funding also had the potential to provide a more stable, less volatile source of foreign capital that is not as highly correlated with oil prices as Western capital proved to be. Russian officials devised new incentives to attract investment in selected sectors of the economy, with attractive returns offered to foreign investors.

One state-backed initiative in particular was used as a vehicle to attract foreign investment- the Russian Direct Investment Fund (RDIF), an organization created in 2011 by then Prime Minister Dmitry Medvedev and chaired by former a Goldman Sachs executive, Kirill Dmitriev, to support strategic partnerships between Russian and foreign firms by providing matching funding to investment projects. RDIF was set up as a subsidiary of Vnesheconombank (VEB), the original Russian Development Bank dating back to its founding by Lenin as the Russian Commercial Bank in 1922.

RDIF's unique co-investing model was initially set up at its inception in 2011 to build confidence against political risks of expropriation of FDI by Russian authorities. When RDIF was founded in 2011, PM Medvedev specifically introduced the practice of matching overseas private capital with state funds to "overcome

western funds' reluctance to invest in a country many viewed as corrupt, prone to state meddling and plagued by a law-of-the-jungle legal system" (FT, 2014).

To display independent decision-making, RDIF recruited an international board of advisors, a group that included American private equity executives like former IMF head Dominique Strauss-Kahn, David Bonderman of TPG and Stephen A. Schwarzman of the Blackstone Group. Mr. Bonderman specifically emphasized that "the investments in Russia would be transparent and make commercial decisions, not political decisions." in a video posted on RDIF's website (Kramer, 2016). Along with the TPG and Blackstone executives, the fund recruited prominent investor superstars including Leon Black of Apollo Global Management; Richard M. Daley, the former mayor of Chicago; Kurt Björklund, a leader of European investment firm Permira; and Chinese and Middle Eastern fund managers - "by lending their names to the fund's advisory board, these financial heavyweights were supposed to ensure that money did not flow to political pet projects. The first wave of deals focused on bread-and-butter investments in companies building out Russia's infrastructure and catering to the middle class" (Kramer, 2016). RDIF was known for its "professionalism" and "having a state-backed friend as co-investor (enabling) "open doors" and help secure regulatory approvals" by western firms operating in Russia including Siguler Guff and Baring Vostok which co-invested with RDIF (FT, 2014).

Sanctions and Activity Restrictions

VEB was transformed 2007 as special-purpose development bank, pumping it with funds that would be used for financial bailouts that private-sector banks wouldn't touch. VEB was said to be used to aid the Kremlin's favored oligarchs; reportedly handing out \$8 billion in secretive loans to get Russian oligarchs to snatch up plants in eastern Ukraine and extending \$4.5 billion to aluminum mogul Oleg Deripaska to help save his beleaguered company in 2009, and for special projects like the \$50 billion Sochi Olympics in 2014. VEB became seen as a "quasi-ministry" as President Putin reportedly took personal charge of big decisions, and from 2005 to 2015 both its debts and its holdings skyrocketed – by 2014 VEB had ran up \$18bn in foreign debt (QZ, 2017).

On July 16th 2014, VEB found itself placed on the Sectoral Sanctions Identification List (SSIL) for its links to the Kremlin's activities in Ukraine. On September 12, 2014, the sanctions against VEB were amended to reduce the maturity period of financing permissible from 90 to 30 days.

SSIL restrictions specifically prohibited new long-term financing, long-term debt, and equity transactions by U.S. persons, prohibiting:

- "New financing to, or for the benefit of, the VEB-owned entities, where such financing has a maturity period of longer than 90 days (if provided between July 16, 2014 and September 11, 2014) or 30 days (if provided on or after September 12, 2014)."
- "Transactions or dealings in new debt issued by, on behalf of, or for the benefit of VEB entities, where such debt has a maturity period of longer than 90 days (if issued between July 16, 2014 and September 11, 2014) or 30 days (if issued on or after September 12, 2014)."

- “Transactions or dealings in new equity issued by, on behalf of, or for the benefit of VEB entities, if such equity was issued on or after July 16, 2014.” (Masspoint LLC, 2015)

Because VEB owned RDIF, these restrictions in particular de facto applied to RDIF as well, as per US Dept of Treasury’s 50% rule: “This is so because the relevant VEB-owned entities, while not previously listed on the SSIL, have nevertheless been subject to Sectoral Sanctions since July 16, 2014. The VEB’s sanctioned status as of July 16, 2014 as imputed to its owned entities on the same day of operation of OFAC’s 50% rule, which attaches to entities owned 50% or more by one or more SSIL entities” (Masspoint LLC, 2015).

Crucially, the SSIL sanctions did not block transactions or prohibit financial transactions not explicitly mentioned in the directive. The SSIL directive stated:

- “U.S. banks may continue to maintain correspondent accounts for the VEB-owned entities, so long as such accounts do not support prohibited financing, debt, or equity transactions”
- “All other activities” with SSIL entities “or involving their property or interests in property are permitted.”
- “Importantly, Sectoral Sanctions measures are not “blocking” actions that would require U.S. Persons to block the property or interests in property of SSIL entities. OFAC has indicated that SSIL entities subject to Directive 1 will not be designated as Specially Designated Nationals” (Masspoint LLC, 2015)

Treasury’s explicit goal was to deter business with VEB (and by virtue of ownership, RDIF) due to a “self-imposed” assessment of de facto risk reputational risks, sanctions expansion, and consequent secondary sanctions: “parties ... that have current or planned business involving the RDIF, other VEB-owned entities, or entities owned directly or indirectly by them should acquaint themselves with relevant sanctions and take steps to assess any potential legal, commercial, or reputational risk that may flow” (Masspoint LLC, 2015)

Thus, RDIF found itself operating in a “sanction grey zone” whereby new debt and equity financing was restricted, but other types of financing not mentioned in the directive allowed, and firms were urged to carefully assess reputational risk of doing business with RDIF.

RDIF’s Sanctions Grey Zone Strategies

Strategy 1. Clarification and Confidence-Building:

Strictly speaking, RDIF’s co-investing activity did not constitute raising debt or building equity in its own or VEB’s owned-funds, but rather partnered direct investing into third party ventures both in Russia and abroad. Thus, the effects of sanctions did not amount to activity restrictions but rather a loss of investor confidence due to being associated with sanctions as well as the loss of reputation for being independent from geopolitics, as was envisioned during its inception (FT, 2014).

Hence RDIF’s short-term response to the sectoral sanctions belied in confidence building with investors and clarification of its particular investing model not being subjected to restrictions. Immediately after the announcement of the initial sectoral sanctions, RDIF issued a statement on July 31, 2014 which read:

“The sectoral sanctions imposed against certain Russian companies and their subsidiaries affect only specific transactions which relate to long term financing of these companies by US and European entities in the form of equity or debt. All other transactions are permitted.

RDIF does not directly attract equity or debt financing but instead invests only its own funds together with co-investors. We have never attracted such direct financing and are not planning to do it in the future. Accordingly the sanctions do not affect RDIF investment activity in any way.

Pursuant to RDIF constitutional documents the Fund is not allowed to acquire control in any company and therefore there is no impact on our portfolio companies as well.”
(RDIF, 2014)

After VEB was sanctioned, boardmembers Mr. Schwarzman and Mr. Bonderman withdrew their names from the published list of advisers in 2014 (Kramer, 2016). Kurt Bjorklund of Permira and Former Chicago Mayor stepped down from the fund's supervisory board, and references quietly disappeared from the fund's website (Horwitz and Braun, 2014).

To risk further alienation from western investors, RDIF found itself issuing clarification on its co-investing activity not being restricted, as Mr. Dmitriev told Financial Times “we have no political agenda. We’re not violating sanctions. Co-investing with us is not prohibited... There are forces in Russia that are good for the world economy. We are one of them...the RDIF’s 50 investment professionals focus on transactions that make good financial returns” (FT, 2014).

Results:

Shortly after the initial sanctions against VEB, Dmitriev noted RDIF had accumulated \$6 billion from blue-chip foreign companies and made a 23 per cent return on its stake in Moscow’s stock exchange, which went public last year (FT, 2014). Though overall foreign investment in Russia fell after the 2014 sanctions, RDIF shifted its co-investor attraction activities eastward – “90 per cent of the capital we raised came from Asia and the Middle East” (FT, 2014). This move crucially included co-investing with the sovereign wealth funds of prominent U.S. allies, as explained in strategy 4.

Strategy 2. Lobbying and Public Relations

Simultaneous to affirming the non-applicability of sanctions, in order to burnish its image proactively in the eyes of US regulators and investors alike, RDIF employed two “reputation management” firms during (at least) September and October 2014. RDIF paid Manhattan-based Goldin Solutions \$30,000 a month for its reputation management assistance, and Washington D.C.-based lobbying firm Capitol Counsel LLC \$45,000 a month to “provide accurate information to the U.S. Department of Treasury regarding recent transactions made by RDIF” (Conroy, 2014). RDIF had previously employed Goldman Sachs to help improve its standing among foreign investors for a \$500,000 contract over 3 years (Bloomberg, 2013).

Unlike the VTB-hired lobbying firms, both firms filed FARA disclosures immediately- Goldin's disclosure stated "RDIF retains Goldin Solutions Inc. for media engagement and related strategic efforts" (Conroy, 2014). Capitol Counsel's FARA disclosure was far more direct and specific about the goal of RDIF- "Recent press articles have significantly misstated the lobbying and PR role and function of RDIF... To help address this concern, Capitol Counsel proposes to assist the RDIF in correcting the press reports by working with the U.S. investors and the international investment community to educate the [Obama] administration and major policy makers as to the role of RDIF and its relationship with U.S. business and investors" (Conroy, 2014). RDIF specifically sought to create "distance between RDIF's operations and its parent bank and board member, which are facing U.S. sanctions" (Conroy, 2014).

Results: RDIF added to sectoral sanctions

While joint investments continued, RDIF found itself explicitly added to the same sanctions VEB was subjected to a year later. On July 30, 2015, the U.S. Department of Treasury made explicit the sanctioned status of RDIF by adding it to the Sectoral Sanctions Identifications List (SSIL) given VEB's ownership of RDIF (Masspoint LLC, 2015).

Though legally did this not change the status of RDIF's restrictions owing to OFAC's 50% ownership rule, OFAC furthermore cautioned investors against becoming complacent in RDIF's co-investing activities being permissible- "given the fluidity of Ukraine/Russia-related events and sanctions measures in response, parties should not assume that OFAC's current position cannot change or that Sectoral Sanctions measures will not be intensified" (Masspoint LLC, 2015). Thus, RDIF's lobbying and public relations activities did not pay off as hoped.

Strategy 3. Ownership Separation from VEB

The sanctions grey zone under which RDIF had been operating thus far grew smaller as a result of being explicitly sanctioned. As a response, RDIF decided it was in its best interest to separate ownership and management from VEB in 2016.

This separation was being contemplated from the initial SSIL sanctions against VEB in 2014. Initially, the plan was to transfer RDIF from state ownership to the central bank to avoid SSIL sanctions (AI-CIO, 2014). In the actual March 2016 transfership that took place, the RDIF Management Company was reorganized as a non-public stock company wholly owned by the state, and transferred to Russia's Federal Property Management Agency, Rosimushchestvo (which was not sanctioned). Russian State Duma deputies introduced a special bill to facilitate the process, "not(ing) that the generally accepted practice worldwide is to create investment funds as independent instruments for implementing state investment policy (RDIF, 2016).

In its press release regarding the change in ownership, RDIF briefly mentioned the systemic risks associated with VEB yet continued to maintain operational partnership:

- "The RDIF's presence in VEB Group is mostly formal: the fund is independently managed, and on its supervisory board is only one VEB representative. Last year officials began to discuss the new structure

along with a discussion about the ability to resolve the financial problems of VEB itself. Due to its status as a subsidiary of VEB, RDIF was subject to sectoral sanctions.”

- "A separate law will make the investment process, the management process, more transparent. In fact, in the context of the restructuring the Vnesheconombank (VEB) Group, splitting off various structures has been discussed. We plan to remain in close partnership with VEB. We believe that VEB as a development institution will be a vital partner for RDIF," Dmitriev said (RDIF, 2016).

The fund's management company was transferred initially, and plans to recapitalize were made “as soon as its account balances fall below 30 billion rubles” (RDIF, 2016).

Results:

At the time of management transfer, CEO Dmitriev specifically had noted that the fund was not expecting “any special changes to the restrictions regime” when asked whether sanctions against RDIF might be lifted upon its transfer to Rosimushchestvo (RDIF, 2016).

However, even the minimal appearance of a degree of separation from RDIF’s ownership change did not deter scrutiny from the U.S. government. RDIF remained added to the sectoral sanctions, and RDIF’s investments in US, such as those in the intra-city transport Hyperloop project, became subjected to national security reviews, whereas previously such reviews required a foreign controlling stake in a U.S. company (Banco, 2018a).

Strategy 4. Leverage from Intertwining with American companies, Diversifying Co-Investments, and Meeting with Trump Admin Representatives

Though never documented as a formal strategy, RDIF’s level of strategic partnerships with prominent American commercial giants, its sheer spread of diversified co-investments, especially with US allies, and informal meetings with quasi-representatives of the Trump administration all contributed to its leverage against further sanctions.

RDIF created this leverage by actively intertwining itself in co-investments with American counterparts. RDIF’s international board onboarded high-powered U.S.-based private-equity players, including Leon Black of Apollo Global Management, David Bonderman of TPG Capital, and Stephen Schwarzman of the Blackstone Group (Kramer, 2016). Prominent American co-investing partners with RDIF included:

- BlackRock Group, which co-invested \$50 million into a chain of private hospitals called Mother & Child together with RDIF (Kramer, 2016).
- JPMorgan Chase’s private investment arm One Equity Partners and Titan International Inc., who acquired a majority interest in a leading Russian tire maker Voltyre-Prom jointly with RDIF (Kramer, 2016).
- General Electric, which joint ventured in the construction of autonomous mini power plants for manufacturing facilities across Russia (Kramer, 2016).

- Virgin Hyperloop One, whom RDIF was an early-stage investor in, both using its own funds in 2016 and in a 2017 co-investment deal with the Chinese Investment Corporation, reportedly with an eye towards exporting the technology to build a hyperloop in Moscow (Banco, 2018a)

The intertwined co-investments and partnerships with U.S. corporate ventures gave RDIF leverage in the form of high blowback to American enterprises if it were sanctioned, as well as an image of positive relation-building. At the time of VEB's initial sanctions, USA Today noted that "western business connections are complicating efforts to bring economic sanctions against executives and companies closely aligned with Russian President Vladimir Putin's inner circle" as "the sanctions-free RDIF illustrates the Obama administration's struggle to achieve conflicting goals — punishing Putin's circle without damaging U.S. companies doing business in Russia" (Horwitz and Braun, 2014). Adding weight to this, in an interview with Financial Times shortly after the VEB sanctions were announced, Dmitriev expressed his hopes peace talks over Ukraine would lead to sanctions being lifted- "Sanctions are not just negative for Russia...they are negative for Europe and the US. They just lead to slowing down the Russian economy, the European economies and the world economy." (FT, 2014). This was echoed in his remarks at the 2018 St. Petersburg International Economic Forum, where Dmitriev claimed RDIF was a force for good in improving US-Russia relations - "We believe we are doing good for our countries, because we are building economic and investment bridges that make our countries have good discussions and understand each other much better." and called for keeping economics and politics separate as a means of improving relations (Turak, 2018).

After 2014, RDIF announced a number of large-scale joint co-investment funds set up with Bahrain, Egypt, France, India, Italy, Japan, Kuwait, Qatar, Saudi Arabia, South Korea, Turkey, and UAE, in addition to multiple joint funds with Chinese counterparts (RDIF, 2020). Dmitriev explicitly hailed "12 new investment deals, including 6 with France" at the 2018 St. Petersburg International Economic Forum (Turak, 2018). RDIF's vast co-investments with prominent U.S. allies provided it with leverage to push back or stall further sanctions against the fund, including the 2018 proposed "sanctions bill from hell" which would have explicitly blocked transactions dealing with Russian sovereign wealth, as explained below.

The context of increasing U.S.-Russia mutual investments was furthermore used both by the heads of VEB and RDIF to meet informally with quasi-representatives of the Trump administration during the transition period from the presidential elections in November 2016 to Trump's inauguration in later January 2017.

The chairman of VEB, Sergei Gorkov, met Trump's advisor (and son-in-law) Jared Kushner in mid-December 2016 (Washington Post, 2017). The meeting came on the heels of another meeting between Kushner and Russia's U.S. ambassador Sergey Kislyak, in which the first step in establishing a possible "back-door" channel of communication between the Kremlin and Trump administration was discussed (Washington Post, 2017). Though exact discussion items were only brought forth in closed-door congressional hearings, speculation of possible quid pro quo favors between Trump and VEB was further aroused by news emerging of VEB helping fund the construction of the president's 65-story Trump International Hotel and Tower in Toronto (WSJ, 2017).

In parallel, RDIF head Dmitriev also met with a quasi-representative of the Trump administration, Blackwater ex-CEO Erik Prince, in the Seychelles during the transition period on January 11, 2017. Both parties

remained reclusive about the contents of the discussion, describing it as a spontaneous meeting over beer (Banco, 2018b). The Daily Beast, however, claimed it obtained a copy of a memo detailing the meeting written by Dmitriev sent to the Kremlin on the sidelines of the 2017 World Economic Forum (Banco, 2018b). The memo, which Dmitriev categorically denied, apparently proposed in part “joint RDIF fund with OPIC to support U.S. investment in Russia to make U.S. businesses competitive vs. subsidized Chinese business in Russia” (Banco, 2018b). Thus, though it cannot be verified if sanctions were explicitly discussed during either meetings, the heads of RDIF and VEB met Trump administration officials with an eye towards business proposals for improving US-Russia relations, positioning RDIF and VEB as indispensable in the improvement of bilateral relations and hence fostering goodwill as a buffer against the escalations of sanctions.

Result:

Between heightened press scrutiny of RDIF’s and VEB’s US-relations during the Mueller investigation and deteriorating US-Russia relations, both of the funds’ sanctioned status has maintained status quo thus far – being subject to sectoral but not SDN sanctions, i.e. new debt and equity restrictions but not blocked.

End Result: Weighing the RDIF’s co-investments during the “Sanctions Bill from Hell” hearings.

In August 2018, the status quo of only sectoral sanctions on RDIF and VEB was subject to change as part of the Defending American Security from Kremlin Aggression Act (DASKA) bill, otherwise known as the “Sanctions Bill from Hell” proposed by Sens. Lindsey Graham and Bob Menendez, which included blockages of Russian sovereign wealth transactions.

Ultimately, the bill was tabled. When the U.S. Senate deliberated this bill on September 6, 2018, key factors given consideration was Russia’s reliance to sanctions thus far and anticipated blowback to European and other allies if the bill were to take force. In the senate deliberations, RDIF’s activities constituted a major source of Russian leverage against sanctions. In discussing Russia’s resilience to sanctions, it was noted that “Russia's sovereign development platform, the Russia Direct Investment Fund (RDIF), has been a major vehicle for attracting foreign investment. The RDIF...built its resilience against sanctions and other shocks. Pledges include \$10 billion coinvestment funds with entities like Abu Dhabi's Mubadala, Saudi Aramco, various Chinese public and private companies, and smaller funds with European, South Korean, and Japanese entities...sovereign-to-sovereign coinvestments appear to have helped Russia mitigate the effect of sanctions” (GovInfo, 2018).

Furthermore, RDIF’s intertwined co-investments constituted major blowback risk to sanctioning Russian sovereign debt: “imposing sanctions on sovereign debt might further increase Russia's reliance on Chinese and GCC funding, as well as prompting Government efforts to repatriate capital from the U.S. and Europe, including via dedicated sovereign bonds. Targeting Russian sovereign debt would also raise some important precedents for global markets....there could be portfolio contagion effects if concentrated emerging market investors look to exit Russia quickly, selling to local actors. This in turn could add to volatility (rallies and selloffs) of a range of mostly European, Middle Eastern, and African higher-yielding assets, adding to political uncertainty...the net result might be a weaker global economy, greater uncertainty for U.S. exports,

and greater impetus towards new payment systems... Foreign investors...in Europe and Asia...would bear the brunt, something Members of this Committee may want to consider and weigh against possible damage to Russia” (GovInfo, 2018).

Thus, it can be seen that RDIF’s intertwining of co-investments was a major roadblock in preventing an escalation of sanctions against Russian sovereign wealth.

Analysis and Conclusions

The vast intertwined spread of RDIF’s co-investments amongst major U.S. allies gave RDIF leverage and ammunition against the further expansion of sanctions, due to the consequent repercussions from its allies’ own sovereign wealth funds that U.S. would suffer if it blocked transactions dealing with Russian sovereign wealth. Dmitriev hinted at this during the same remarks at the 2018 St. Petersburg Economic Forum- “As a sovereign wealth fund, sanctioning us strongly would create a precedent for other sovereign wealth funds to really pull their money out of the U.S. economy” (Turak, 2018).

Not only did its co-investments give RDIF leverage against sanctions expansion, but they also offered RDIF the opportunity to cite success stories as a path towards de-escalating U.S.-Russia relations. One of RDIF’s largest co-investment partnerships was with Saudi Arabia’s sovereign wealth funds, PIF and SAGIA, where \$10 billion, the amount of RDIF’s own seed funding, was committed in investments to improving infrastructure in Russian oilfields services and agricultural sectors (RDIF, 2015). Dmitriev cited the success of its partnerships with historic foe Saudi Arabia, as a precedent for repairing relations with the US in an interview with CNBC in 2019- “I’m sure the Saudi example is very interesting to try at some point to restore the relationship with the U.S., because if we could do it with Saudi Arabia in four years, why can’t we do it with the U.S. going forward?” (Turak, 2019).

RDIF continued to be used as an instrument to bring investment in Russia, despite being subject to sectoral sanctions. The uncertainty in the overall investment environment in Russia generated by sanctions, compounded by the fact that additional banks and nonfinancial enterprises were added to the list of sanctioned entities over the course of 2014–2016, did impact RDIF initially, but RDIF was nevertheless able to emerge relatively unscathed and continued to build its co-investment portfolios and bring in foreign investment into Russia unimpeded, especially amongst U.S. allies.

RDIF avoided an escalation of sanctions against it by careful maneuvering which didn’t violate any laws or guidelines. Its co-investment model helped it circumvent restrictions on new debt and equity. Its lobbying and public relations efforts failed in U.S., just like VTB’s efforts, but it nevertheless maintained investor confidence on a global scale. By separating its management from VEB, RDIF attempted to create an image of its co-investments not being associated with Russia sanctions, but this separation did not have any significant impact on its perception in either U.S. or abroad. More importantly, its intertwined coinvestments and outreach efforts prevented it from being targeted by more explicit sanctions which were proposed in 2018.

Russia's Energy Sector Response to Sanctions

Background

The energy industry is by far the most important engine of the Russian economy. As of 2019, Russia remained the world's largest exporter of oil and gas combined, the world's third-largest oil producer, and second-largest natural gas producer (BP, 2019). Oil and gas revenues have contributed directly to anywhere between 10 and 25 percent of GDP for any given year, depending on the price of oil and gas at any given point in time (Connolly 2018, p.82).

Industry revenues are shared throughout the Russian economy via rent-sharing mechanisms including taxes and price subsidies. Revenues generated by the oil and gas sectors finance government functions via formal taxes on hydrocarbon exports, and are redistributed throughout the economy by energy firms supplying inputs at prices to utility and manufacturing enterprises (Connolly 2018, p.82). Thus, activity through the Russian economy is driven by the value of energy export revenues. As a result, "this creates a 'demand hunger' in Russia, as state officials seek to ensure that there is a stable, preferably growing, source of income from the sale of hydrocarbons on global markets (Bradshaw and Connolly, 2016).

Crude oil and refined oil products accounted for the largest share of Russia's export revenues, followed by natural gas, as can be seen in figure 4.1 (Connolly 2018, p.81). Natural gas played an important role in Russia's export profile, but revenues plateaued since 2009, caused by slowing demand from Russia's principal gas customers in the European Union (Boussena and Locatelli, 2017). In recent years, Russia had made a concerted push to increase liquefied natural gas (LNG) as a share of exports, to meet rising demand worldwide - "in 2016, the global LNG trade hit a new record of 258 million tons, marking a third consecutive year of incremental growth... bolstered by large markets such as China, India, and Egypt...Russia's energy strategy envisages an increase in LNG supplies by 2035 to 12 percent from the current levels, which stands at less than five percent of the world LNG market" (Caspian News, 2017).

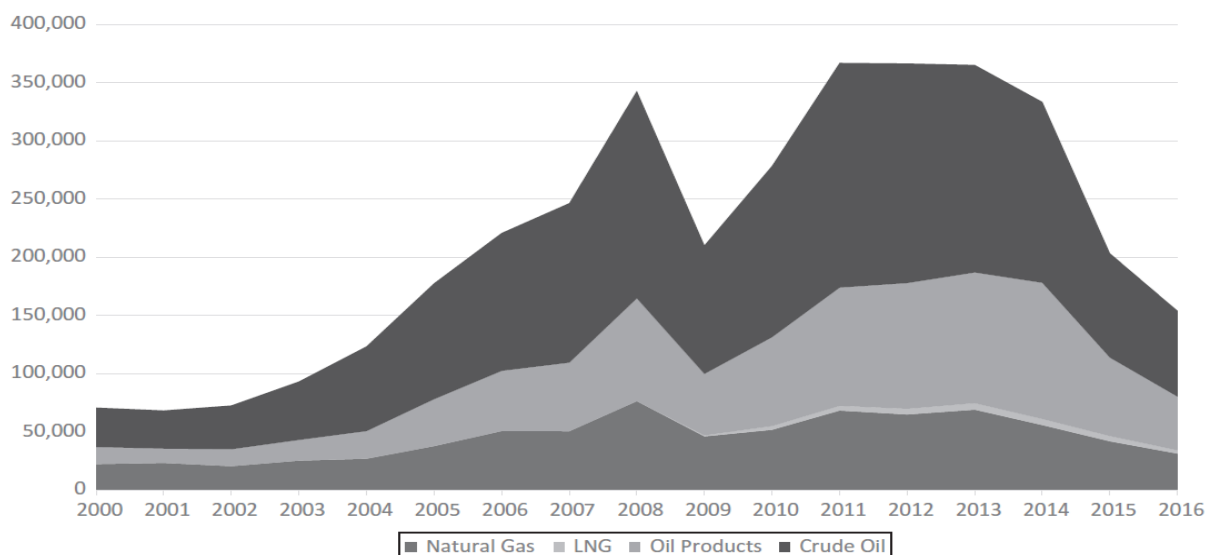


Figure 4.1 Oil and gas export revenues, 2000–2016 (USD bn, constant 2015 prices)

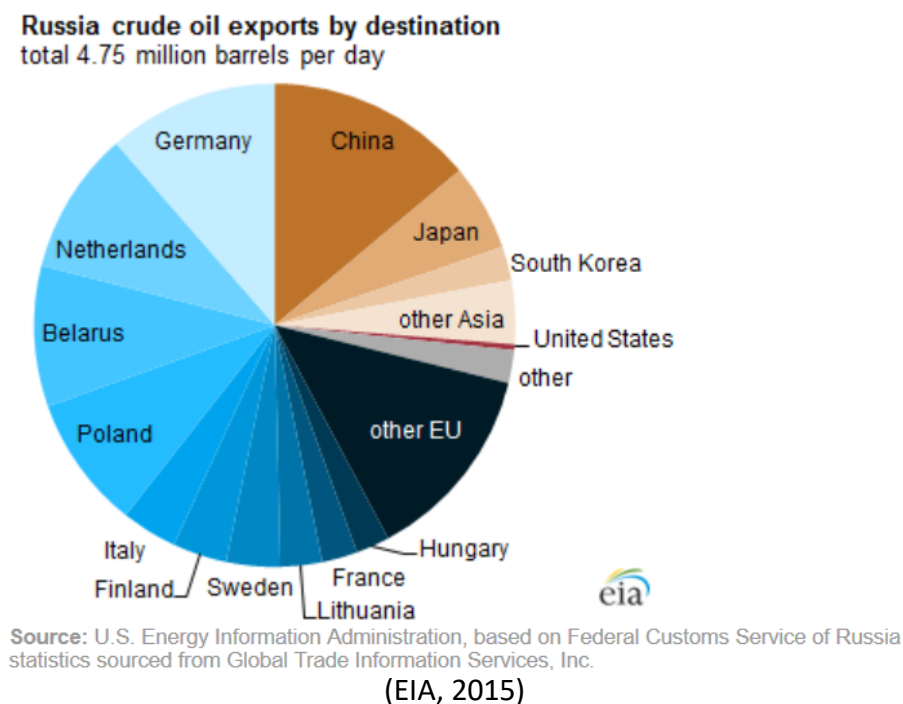
Source: Bank of Russia (2017)

(Connolly 2018, p. 81)

The jewels in Russia’s energy crown carried an internal rivalry between two state-owned enterprises - Rosneft, the world’s biggest listed oil company by volume, and Gazprom, the world's largest natural gas producing company by volume (BP, 2019). Both giants possessed drilling jurisdiction over the largest proven oil and gas reserves, respectively, by any firm (Rosneft, 2020 and Caspian News, 2017). Rosneft and Gazprom have been internally competing for each other’s product and export shares since their inception, with each’s subsidiaries occupying 3rd place output positions in the other’s primary product markets (Investopedia, 2015 and 2018). Both companies are 50-51 percent state-owned, with the rest of equity capital spread between domestic and partner investors (Gazprom, 2018 and Rosneft, 2020).

Among other Russian significant contributors to oil and gas production, Novatek, the second largest Russian gas producer, stood out as a key pillar of Russia’s LNG exporting strategy, in conjunction with its demand diversification strategy, which rose to prominence during the oil price crash of 2014-2016, as will be elaborated upon below. Medium sized firms including Lukoil, Sibur, and Surgutneftegas also aided demand diversification.

Due to historical relationships and supply routes from the former Soviet Union, the demand for Russian energy traditionally came from Europe. In 2014, before the advent of sanctions, almost three-fourth’s of Russia oil exports were destined for European countries:



After the disintegration of the Soviet Union in 1991, the Russian energy industry became more closely integrated with the global economy. Prior to 2014, the Russian oil industry relied on large volumes of imported equipment from a wide range of Western companies, as well as accessed the vast majority of its external capital from Western countries. This took the form of direct Western equity ownership in Russian energy firms and the provision of loans from Western banks to Russian energy firms. Of prime example, 20 percent of Rosneft has been held by BP since 2012 (Telegraph, 2020). Russian firms opened up to partial foreign ownership in the form of inward foreign direct investment, Russian firms acquired assets abroad in the form of outward foreign direct investment, and “as the number of joint ventures (JVs) rose, imports of equipment from a diverse range of countries increased and Russian firms utilized international capital to

finance projects” (Connolly 2018, p.78). Western oil giants were granted access to Russia’s energy reserves largely because they currently possess a comparative advantage in technology and know-how. The dependency on foreign equipment and technical expertise from ventures abroad, as of 2014 prior Russia’s sanctions response, is illustrated below:

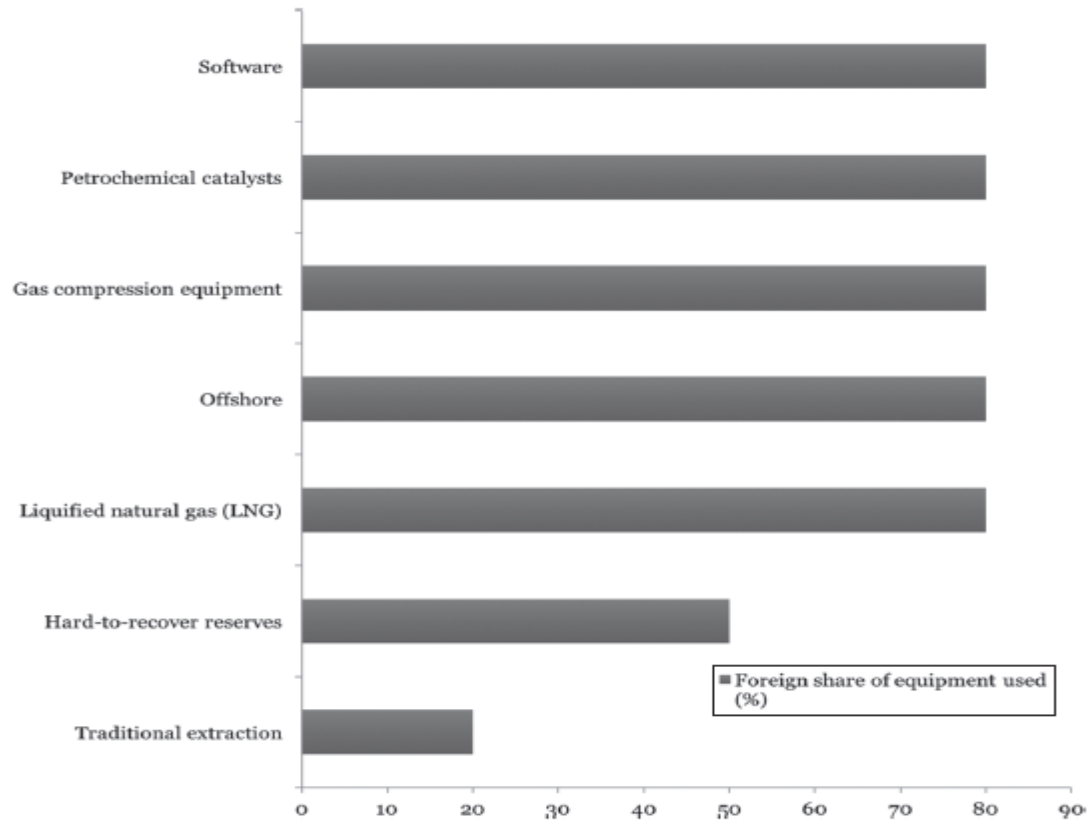


Figure 4.2 Import dependency in selected fields of oil and gas equipment, 2014

Sources: Neftegazavaya Vertikal’ (Importozameshchenie, 2015, p. 2)

(Connolly 2018, p. 89)

Hence, “due to its strategic importance, and because it was one of the most globally-dependent sectors of the Russian economy, the Russian energy industry was one of the most obvious targets for Western economic sanctions” on both financing and technical collaboration (Connolly 2018, p. 78).

Sanctions and Restrictions

Western sanctions against the Russian energy industry were introduced in several phases. For the U.S. part, sanctions were introduced by Executive Orders 13660-62 signed by President Barack Obama over the course of 2014.

In April 2014, in the first round of Ukraine sanctions targeting “Putin’s inner circle,” Igor Sechin, the CEO of Rosneft, was added to a Specially Designated National (SDN) list, which meant his US assets were frozen and a US visa ban was issued (Guardian, 2014a). However, at the time, Rosneft was not directly impacted as Sechin was not the majority owner of Rosneft (Guardian, 2014a).

The second phase, directive 2, applied sectoral sanctions to major energy producers Rosneft and Novatek and was introduced on July 17th, 2014. Restrictions on access to capital and technology were imposed

on Russian oil and gas companies. Directive 2 imposed “restrictions on any transaction operations, funding and any other operations on new tax obligation, of longer than 90 days maturity” for individuals and companies listed in the directive (Ivanova and Lavrov, 2019). The list of sanctioned companies initially only included Rosneft and Novatek. Hence, these tended to affect oil production the most, but the scope of the sanctions meant that some gas projects were also affected, if either deep-sea drilling equipment was used in extraction or the gas field also produced oil (Connolly 2018, p.78).

The third phase of sanctions was applied in September 2014. The third phase targeted Rosneft, Surgutneftegaz, Lukoil, and Gazprom Neft (the oil division of Gazprom), the last two of which appeared for the first time. In addition to prohibitions on the acquisition and use of technology, bans were issued on trading bonds and equity and related brokering services for products whose maturity period exceeds 30 days (reduced from the initial 90 days). According to Directive 4, American companies were prohibited from providing direct or indirect exportation supplies, re-exportation of goods, services (except for financial services) and technologies to Russian oil and gas companies including Gazprom, Novatek, Rosneft, Lukoil, Surgutneftegaz and Gazprom Neft (their properties or their interests in property) which could be used in support of oil exploration and production for deepwater, shale or Arctic offshore projects claimed by the Russian Federation (Ivanova and Lavrov, 2019). The scope of sanctions was expanded to include not only deliveries of equipment, but also the provision of services, the exchange of technical information with Russian firms, and, perhaps most importantly, the engagement of Western companies in JVs that were focused on the most technologically challenging projects. Technological sanctions focused on plans for the development of new “frontier” oil deposits, where production was currently low but scheduled to rise significantly over the coming decades, both offshore in the Arctic and onshore in the shale oil formations (Connolly 2018, p.78). Although they also affected technology used in enhanced recovery of oil in “brownfield” deposits, financial restrictions also affected the current operations of Russian energy firms (Ivanova and Lavrov, 2019).

In the fourth phase, on August 2017, President Donald Trump signed into law CAATSA - Countering America’s Adversaries Through Sanctions Act (H.R. 3364). On the legislative level the act enforced sanctions imposed by President Barack Obama under directive 4 under Executive Order No 13660-13662. CAATSA extended restrictions on cooperation of American nationals and companies (“United States persons”) with Russian on fuel and energy companies through amendments, “extending the range of shale, deepwater, and Arctic offshore projects subject to the restrictions and direct prohibition for participation by United States persons of all projects of Rosneft, Gazprom Neft, Lukoil, and Surgutneftegaz, in which their stake is more than 33 percent” (Ivanova and Lavrov, 2019). The amendment affected every international company participating in joint energy projects with Russia because the term “United States person” includes companies having representative bodies in the United States. The foreign projects of Rosneft and Lukoil were particularly at risk, as they had initiated multiple joint venture explorations already (Ivanova and Lavrov, 2019).

For the European part, financial restrictions were not applied to Gazprom, Lukoil, Novatek, or Surgutneftegaz. Sanctions imposed by EU countries differed from those imposed by the United States in so far as they deliberately avoided targeting gas production (Connolly 2018, p.94). “Although this still caused considerable complications for EU companies who did not want to fall foul of US sanctions, it did leave enough leeway for EU companies to maintain their exposure to the Russian market. There were also small but important differences between the US and EU legislation in the definitions of prohibited oil and gas extraction equipment. US sanctions applied to the licensing of Russia-bound supplies of equipment used in deepwater in hydrocarbon production, in the development of the Arctic shelf, and for extraction in shale oil deposits. The

EU sanctions, by contrast, applied to deep-water hydrocarbon production, but did not specify the minimum depth of production” (Connolly 2018, p.94).

While both sanctions regimes were broad in scope and precise in the financial and technological instruments that were targeted, there were several important loopholes that would dilute their full impact.

Crucially, the EU also “introduced a preapproval procedure for deals involving the supply of equipment to Russia. The authorized government bodies of the countries in which the exporting companies are registered must grant approval for the sale of such equipment. Moreover, the European authorities may issue a permit for delivery if the export is related to a commitment arising from a contract or agreement executed before August 1, 2014, i.e. before the EU sanctions were imposed.⁸ Known as the “grandfathering” provision, this has enabled some JVs to continue. By contrast, the US restrictions – enforced more consistently and vigorously by the Office of Foreign Assets Control – do not provide any exemptions” (Connolly 2018, p.94).

Furthermore, projects on Russian territory in which a stake of less than 33 percent is held by sanctioned Russian companies were not subject to the sanctions, and US sanctions did not affect the subsidiaries of Western oilfield service companies operating in Russia (Ivanova and Lavrov, 2019). Sanctions were targeted at adversely affecting Russia’s exploration and future production of oil; the short-term impact on production was not expected to be significant.

More recently, in April 2018 the US “Kremlin List” SDN sanctions designated high profile Russian energy oligarchs including Alexei Miller, the CEO of Gazprom, Gennady Timchenko, who held majority ownership of Sibur, Russia’s leading petrochemicals enterprise, and Vladimir Bogdanov, the director general and co-owner of Surgutneftegas, the fourth-biggest oil producer in Russia (Treasury, 2018). SDN designations meant their U.S. assets were frozen, U.S. firms were prevented from business dealings with them, and they were restricted from travel to the U.S. However, only Sibur was directly sanctioned as a result of the Kremlin list sanctions, as Miller did not himself own majority stake in Gazprom and Bogdanov’s stake in Surgutneftegas was minor.

Finally, in February 2020 two of Rosneft’s subsidiaries (TNK Trading and Rosneft Trading SA) handling between 70 and 80 percent of Venezuela’s oil exports via the Venezuelan state oil company PDVSA were sanctioned (CSIS, 2020). In response, Rosneft minority stakeholders including the BP and the Qatar Investment Authority pressured Rosneft to sell both subsidiaries to a state vehicle, Roszarubezhneft. Forcing Rosneft to withdraw from a key strategic partner for the Russian government (CSIS, 2020).

Effects of sanctions

The Russian oil and gas industry suffered from an immediate “sudden stop” in access to long-term external finance, at least on the terms enjoyed before the Ukraine conflict. This was a serious problem due to the large volume of external debt accumulated by Russia’s energy sector prior to 2014. The restrictions meant that some Russian firms – especially the most highly leveraged, such as Rosneft – faced immediate liquidity crises and struggled to refinance their existing stocks of external debt.

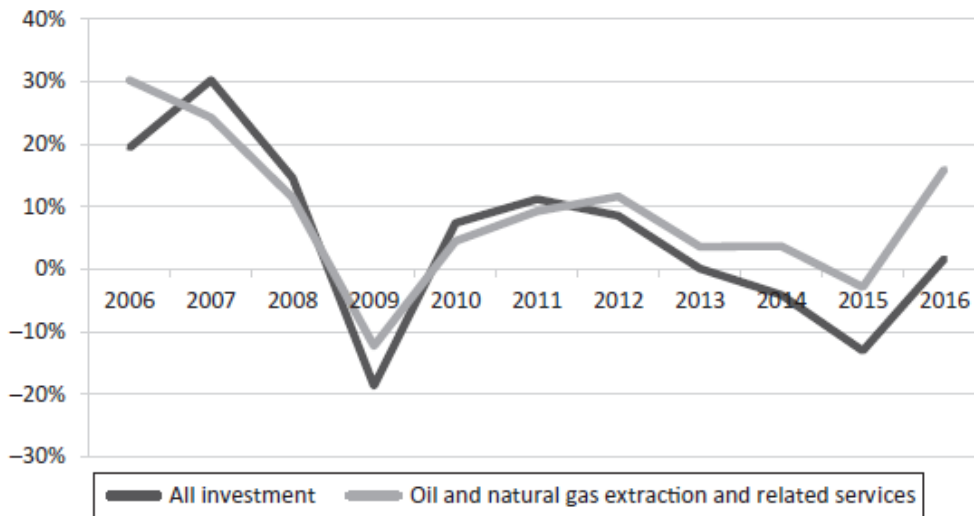
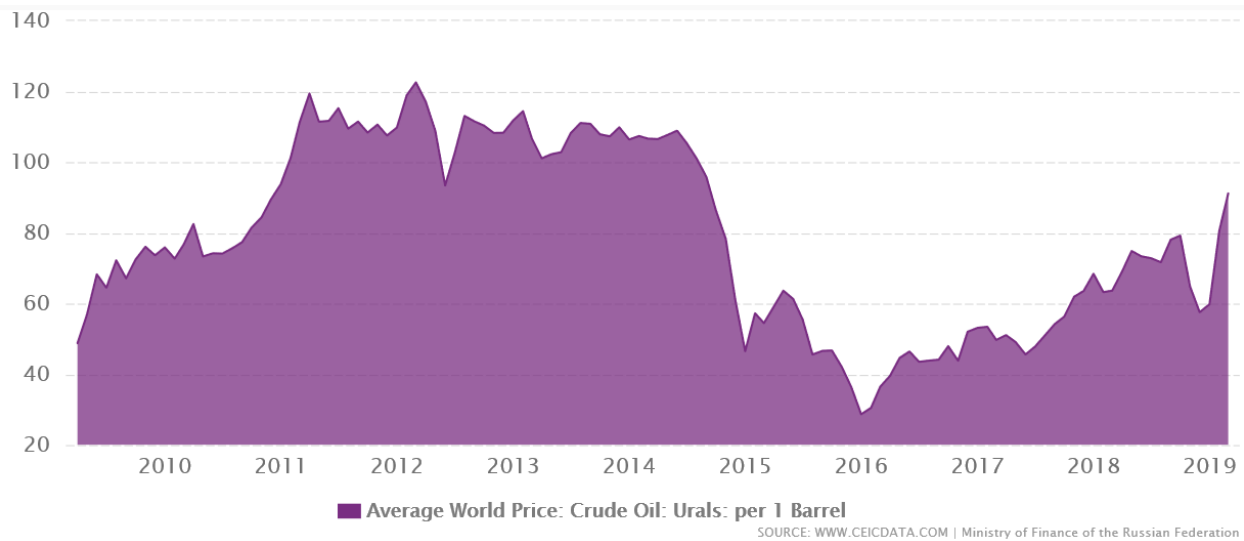


Figure 4.4 Investment in the Russian oil and gas industries, 2010–2016
(per cent annual change in value of investment, constant 2015 rubles)
Source: Federal State Statistics Service (2017); author's calculations.

(Connolly 2018, p. 108)

At the same time as sanctions, Russia's energy sector simultaneously experienced a drop in oil prices during 2014–2016. Caused by a boom in North American shale production, strong dollar, and slowing demand in China, the Brent crude oil price fell by 44 percent between June and December 2014 (VOX EU, 2015). Competing in the same homogenous market, Russia's Urals oil blend, which had been experiencing stable high prices above \$100 / barrel from 2011–2014, saw prices similarly fall to \$50–60 per barrel during the same period, which was sustained until 2018.



(CEIC, 2019)

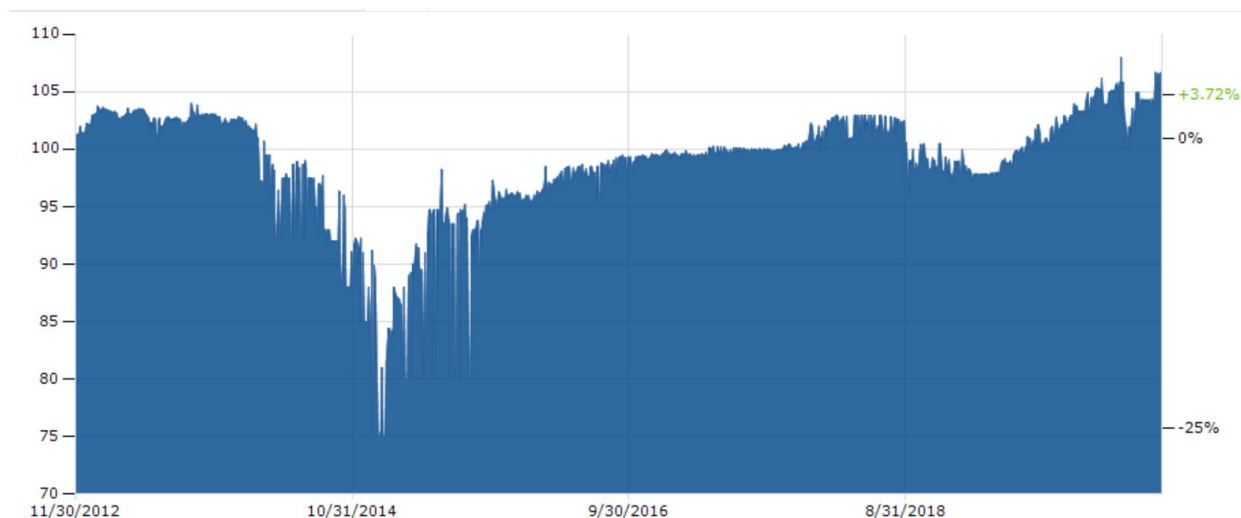
Hence, sanctions disrupted activity in the Russian energy industry, with the situation exacerbated by the steep decline in oil prices that began in 2014. Sanctions and western supply gluts saw Russia's oil and gas revenues, on which the Russian economy was largely dependent, experience a sharp drop similar to the aftermath of the 2008 financial crisis, as shown in figure 4.1 previously. Capital flight followed, causing ruble depreciation, and precipitated an economic recession described previously, which Russia recovered from only after careful fiscal maneuvering.

The sudden stop of external capital flows particularly affected Rosneft, due to its large stock of external debt. By the time sanction hit in 2014, Rosneft had accumulated \$43.8 billion in dollar-denominated debt (Rosneft, 2015a), with \$26.2 billion due to be repaid between July 2014 and December 2015, making sanctions especially hit its bottom line (Reuters, 2014a). A significant part of the maturing loans was an \$11.9 billion, two-year bridge loan that was signed in Feb. 2013 that backed Rosneft's acquisition of oil company TNK-BP - lenders included prominent western banks - BNP Paribas, Bank of America Merrill Lynch, Bank of Tokyo Mitsubishi, Barclays Bank, Citigroup, Credit Agricole CIB, ING, Intesa Sanpaolo, JP Morgan, Mizuho Bank, Natixis, Societe Generale and UniCredit (Reuters, 2015).

Rosneft and Novatek were forced into restructuring their external debt and financing arrangements so that they could continue to undertake investment in future production and finance existing operations.

Due to concerns about Rosneft's ability to pay its dollar-denominated debt on time, its bond price fell drastically and yields went up by 89 basis points to 6.22 % when sanctions were announced in July 2014 (Bloomberg, 2014a); when Rosneft had to borrow funds from the National Welfare Fund to stay afloat in December 2014, prices dipped to a historical low. Previously Standard & Poor's had cut Rosneft's bond credit rating to one notch above junk when Sechin was sanctioned in April 2014 (Guardian, 2014a). Of note, Gazprom did not list bonds until 2017.

Rosneft bond prices, in RUB:



(Business Insider Markets. 2020)

At an operational level, the joint ventures between Western and Russian oil and gas companies that were formed in the early 2010s to help develop Arctic (onshore and offshore), deep-water, and hard-to-recover oil and gas deposits were among the primary targets of the sanctions imposed in the summer of 2014. US firms – most notably Exxon-Mobil and Shell – were forced to freeze JVs on Russian soil in those areas affected by the sanctions regime as sanctions were enforced strictly by OFAC. ExxonMobil was forced to suspend cooperation with Rosneft in the Sakhalin I deep-water project and the production of heavy oil from the Bazhenov formation, as well as the joint venture between Rosneft and Exxon to develop deposits in the Kara Sea (Topalov, 2014). Both were suspended immediately after the announcement that the project had discovered commercial quantities of recoverable oil. Without Exxon's participation, Rosneft was unable to exploit this or other similar deposits (Oilcapital.ru 2014). Shell, after being a dedicated partner of Gazprom in

the Ust-Luga LNG project since 2015 and formalizing its technical concept as later as 2018, withdrew from the Ust-Luga Baltic LNG project with Gazprom in March 2019, after fears the final integrated version of the project would be too risky with regulatory authorities (TASS, 2019 and S&P Global, 2019b). Gazprom hit a hiccup without Shell's technical know-how, but was able to continue with a domestic partnership RusGasDobycha (TASS, 2019). Of note, the Ust-Luga LNG terminal was the source for the Nord Stream II pipeline subsequently built by Gazprom and meant to solidify gas supplies to Europe.

Moreover, the reduction in access to capital affected firms well beyond those officially sanctioned – mainly Rosneft, Gazprom Neft, and Novatek, – because of the fear outside Russia that sanctions could be expanded at a later point to encompass a wider range of companies. As a result of the sanctions regime, a number of other frontier projects in which foreign IOCs were involved with Russian partners to provide technology and know-how, were suspended.

Furthermore, the CEOs of Gazprom and Rosneft explicitly being sanctioned by U.S. (not EU) meant that Miller and Sechin had to “lower (their) public profile(s) and delegate to someone else his powers to clinch deals and raise financing now” (Reuters, 2018c). Given large dealings between Gazprom and European energy firms in particular, “to soothe the worries of the European partners, Miller will have to delegate his powers to an attorney” (Reuters, 2018c). Though “technically speaking, unlike for U.S. persons, foreign persons from the EU can meet and negotiate with Mr Miller” as EU did not sanction Miller or Gazprom, “the safest option (was) excluding Mr Miller from all business-related dealings” (Reuters, 2018c). Hence, at least at a CEO level, U.S. sanctions did serve as a deterrent to Europe, Gazprom's largest demand base, to avoid direct meetings. However, as elaborated later, large business deals including two new pipelines were signed between European companies and Gazprom post sanctions, indicating European reluctance to match U.S. pressure in light of its dependence on Russian gas imports. The fact that the strongest energy sanctions were U.S. unilateral ones meant their implementation was uneven.

Finally, the impact of sanctions was bore more directly by smaller and non-state controlled sections of the economy than the large state-owned enterprises dominating the energy and financial sectors, due to the state providing a safety net for the latter. Prof. Connolly noted – “The fact that investment continued to fall suggests that insufficient capital was available to satisfy demand. Of course, some large enterprises continued to access capital....politically important firms in the energy and defense industry, as well as no doubt well-connected firms in the construction sector, were able to fund investment, largely due to their close links with the state. However, this meant that the composition of investment shifted. Investment in the fuel and energy complex grew as the share of investment in nondefense manufacturing fell... This occurred despite the high-profile state campaign to support domestic production through import substitution. A perpetuation of these trends would cause Russia's economic structure to become even more dependent on energy extraction and exports, a characteristic that policymakers had identified as a threat to Russia's economic security” (Connolly 2018, p.186).

Response and Strategies:

Faced with a threat to Russia's economic security due to the sanctions imposed by the West, the Russian state sought a wide-ranging response that included efforts to: (1) seek “Russification” of finance, using public funds to finance energy firms facing debt crises; (2) seek external financing, particularly from China and Middle East, both by selling assets in State-Owned Enterprises and seeking new loans and direct investments from Chinese and Middle Eastern funds; (3) substitute strategically important Western technologies with

Russian-produced equipment; (4) open up new sources of demand for Russian energy while hedging against challenges posed to existing demand base. In doing so, a concerted effort to reduce dependency on Western capital, foreign extraction equipment, and European demand uncertainty was initiated.

Russification of Energy Capital : using public funds to bailout energy firms

Following the imposition of sanctions, the immediate priority for the Russian state was insuring that state-owned (e.g. Rosneft and Gazprom) and state-favored (e.g Novatek) oil and gas companies were insulated from the worst effects of sanctions to combat restrictions on loans and debt.

In order to repay a \$6.9 billion tranche of debt due at the end of 2014, Rosneft sought the help of both the Central Bank and commercial banks (Reuters, 2014b). Rosneft had initially requested its full debt amount, 2 trillion rubles (about \$42 billion) from Russia's National Welfare Fund (NWF), which would have amounted to two-thirds of the NWF's endowment, but the finance ministry was opposed to using the NWF for this purpose (Bloomberg, 2014b). Instead, Rosneft raised 625 billion rubles (\$10.8 billion) on the local bond market on December 14th, 2014, which was fast-tracked by the Central Bank acting as intermediate guarantor of the loan (Bloomberg, 2014c), and added to pressure on the ruble "because the market was expecting the oil producer to buy dollars with it" (Reuters, 2015). The next day, "after issuing its bond, Rosneft said it would not use the funds raised to buy foreign currency" (Reuters, 2015). On December 16, the day after Rosneft's disclaimer, the central bank increased its benchmark interest rate by 650 basis points to 17 percent, citing the need to curb increased devaluation and inflationary risks due to the Rosneft bond sale (Bloomberg, 2014c). This timing of this rate hike, occurring immediately after Rosneft issued the record bonds, caused a panic flight away from Russian bonds, resulting in a 20 percent depreciation of the ruble overnight (Bloomberg, 2014c and Kommersant, 2014). A similar exercise was performed a month later as Rosneft raised 400 billion rubles at a closed auction in the domestic bond market to service a debt repayment due in January 2015 (Reuters, 2015).

While Rosneft's privileged position with the Russian political economy enabled it to access much needed financial resources denied to other Russian firms, dozens of applications were made to access funds held in Russia's National Welfare Fund, which was designed to fund long-term investments that would help finance state pension obligations in the future. Novatek was able to secure 150 billion rubles (\$2.2 billion in 2015) of finance to prop up the Yamal LNG project from the National Welfare Fund (TASS 2015a). Lukoil, on the other hand, stated it "would not seek government support and would deal with the difficulties thrown up by sanctions on its own" and instead sought "access to [Russia's] bank of undistributed hydrocarbon reserves...after auction by federal agency Rosnedra." (Panin, 2014). Thus, in contrast to the state support spread across banks in the financial sector, Rosneft received the lion's share of state support, whereas Novatek received a much smaller amount and Lukoil indirect state support.

Demand Diversification and Consolidation

After the financial viability of crown jewels was ensured, the imposition of sanctions and accompanying uncertainty in the reliability of western demand accelerated the desire in Moscow to seek out alternative sources of demand for Russia's primary source of export revenues as part of its national security-linked "demand hunger." Traditionally the main source of demand for Russian hydrocarbons, especially gas, had been Europe. However, the geopolitical conflict between Russia and the West prompted Russian officials to hasten their efforts to expand Russian energy exports to Asia.

Expanding energy ties with Asia was a stated aim of government policy clearly expressed in the new national energy strategy designed until 2035, which was produced in late 2014 (Mehdiyeva, 2017). In order for Russia to maintain its position as a leading energy supplier against the backdrop of sanctions and the broader geopolitical conflict between Russia and the West, the 2035 energy strategy stated it was imperative that Russia should diversify the sources of energy demand, energy transit, and the technology used to extract energy, and also ensure that exports grow faster than production (Mehdiyeva, 2017). Threats to Russia's energy security – and by extension its national security – were identified as structural rather than cyclical, i.e. related to the intensification of competition from other hydrocarbon producers, especially the United States; the weak growth in demand from Europe; and the use of sanctions as a weapon to undermine Russia's position as one of the world's three most important energy producers, alongside the United States and Saudi Arabia (Mehdiyeva, 2017).

East Asia, and especially China, was described as the new source of power and vitality in the emerging global “polycentric” order. As such, many in the elite believed that Russia should be an integral part of East Asian political and economic structures so that Russia might maintain its status as a great power through a growing presence in the fastest growing geographic region of the global economy. Putin specifically identified the importance of China in this respect. The energy component of this *povorot na vostok* (“turn to the east”) strategy formed a crucial part of Russia's response to western sanctions. (Mehdiyeva, 2017). As a result, official thinking quickly settled on the need to cement closer energy ties with Asian countries, especially China, as part of a broader rebalancing of Russia's foreign policy away from excessive dependence on ties to the West.

Towards the objective of demand diversification, Gazprom and Rosneft launched high-stakes projects meant to enter new markets and solidify existing ones.

In 2013, when oil prices were still buoyant and before sanctions hit, Rosneft had signed a 35-year contract with the state-owned CNPC (China National Petroleum Corporation) to double its oil supplies to China– “Igor Sechin...said his firm will supply China with 300,000 barrels per day over 25 years starting in the second half of the decade, on top of the 300,000 bpd it already ships to the world's No.2 oil consumer” (Reuters, 2013). At \$270 billion, one of the largest oil supply contracts in the history of the global oil industry, this deal was so significant for Russia's long-term energy demand security that President Putin waited until the annual high-level St Petersburg International Economic Forum to reveal it - “The estimate of the sum of the contract in today's market prices is absolutely unprecedented - \$270 billion... total supplies could amount to as much as 900,000 bpd” President Putin proudly boasted (Reuters, 2013). The delivery scheme involved redirecting European supplies from East Siberian fields towards an expanded newly-built Kozmino port on its pacific coast (Reuters, 2013).

This was topped by an ever larger gas supply deal to China the following year. In May 2014, again in the presence of President Putin, CNPC signed a \$400 billion contract to buy natural gas from Gazprom over 30 years, the biggest purchase and sale contract in the history of the global gas industry, envisaging 38bn cubic metres of gas delivered each year. Notably, the terms of the deal were unfavorable to Gazprom, and thus larger strategic objectives drove its execution rather than profitability - “the Chinese managed to achieve a lower price than the Russians had wanted, and the deal will mean a loss for Russia, at least for the first several years after operations start in 2018. The price of the gas is about \$350 (£207) per thousand cubic metres... This is in the ballpark of what the Chinese had been insisting on, compared with Gazprom, which had reportedly been asking for \$400 per thousand cubic metres” (Guardian, 2014b)

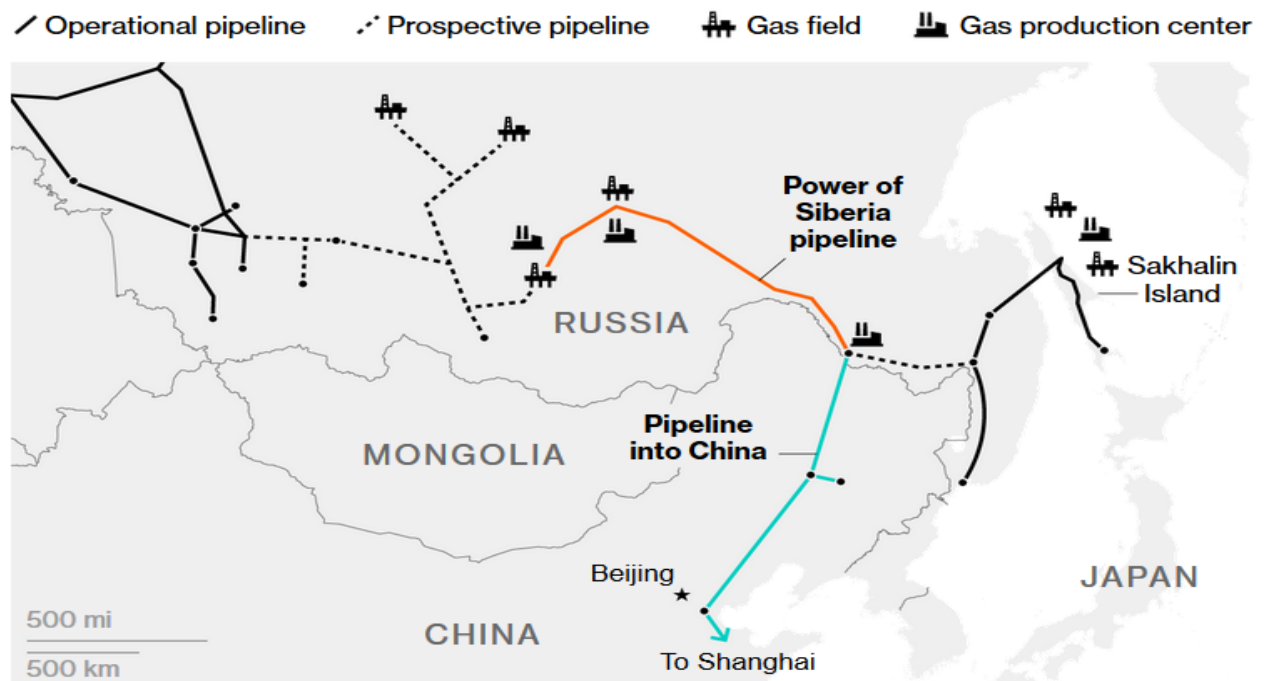
To compensate for this loss, President Putin exempted gas destined for China from taxes on resource extraction. In return, China reportedly offered to cancel import duties on Russian gas (Guardian, 2014b). Furthermore, Russia lifted an informal ban on foreign ownership of strategic assets, apparently opening the way for Chinese companies to take part in developing the gas fields and pipeline (Guardian, 2014). To facilitate this deal, as the Chayanda and Kovykta gas fields supplying Chinese demands were located deep into Russian territory in the depths of eastern Siberia, Gazprom undertook the construction of a brand new pipeline (the largest post-soviet pipeline), the Sila Sibiri (Power of Siberia) gas pipeline.

Bringing Siberian gas to China, the Power of Siberia pipeline would run 4,000km through swampy, mountainous and seismically active areas, connecting at the Heihe Chinese border to the 5111 km Chinese section of the China-Russia East Route natural gas pipeline, eventually terminating in Shanghai. As Gazprom was to invest \$55bn developing the project with CNPC investing \$20bn, the project was deemed to be unprofitable during its initial five years of operation, only breaking even after 2024 (Guardian, 2014). Gazprom thus attempted to secure prepayments for the gas supply, but ultimately could only manage to secure a \$2.2 billion loan, as discussed later.

The pipeline both served to support critical infrastructure in China’s Belt and Road corridor, and catalyzed China’s plan to boost its natural gas as a percentage of energy consumption to 10 percent by 2020, replacing coal as a source of power (NPR, 2019). Gazprom supplanted the pipeline by building gas usage infrastructure in China, including gas-fired power generation plants and underground gas storage in in China’s Heilongjiang and Jiangsu provinces. The pipeline furthermore served to bolster the Europe —China international transport corridor route, a key Belt and Road initiative artery - “In May 2017, Gazprom, CNPC, Russian Highways, and China Communications Construction Company Ltd. inked a Memorandum of Cooperation aimed at developing road infrastructure and promoting the use of liquefied natural gas as a vehicle fuel along the Europe —China international transport corridor route” (Gazprom, 2020).

New Route to Asia

Russia prepares for first gas pipeline supplies to China



Sources: Gazprom; Xinhua News Agency and Sinolink Securities Co.
(Bloomberg, 2019)

The Power of Siberia pipeline completed production and began its first deliveries in December 2019 - China planned to import 5 billion cubic meters of natural gas from 2020-24, ramping up to 38 billion cubic meters annually starting in 2024 (NPR, 2019).

Simultaneously, in June 2019 Novatek also created a joint venture with China's Sinopec and Gazprombank to deliver LNG to Chinese utilities. Capitalizing on the expansion of Novatek's two largest LNG projects, Yamal and Arctic LNG 2, both of which had sold significant 20-30 percent stakes to Chinese companies, during a state visit by Chinese President Xi Jinping to Russia, Novatek CEO Mikhelson stated the goal of the joint venture was "not only facilitate(ing) sales of LNG produced, but also open(ing) up opportunities for investments in one of the largest and the fastest-growing gas and LNG markets in the world... across the entire value chain from the extraction and liquefaction of gas to the sale of LNG to the customers" (S&P Global, 2019c).

Though the high volume deals with China aided Russia's goal of diversifying demand to new sources, Russia sought to consolidate and expand European demand in the face of geopolitical risk via the Ukraine conflict by constructing two new pipelines, Nord Stream 2 and TurkStream. As of 2014, Gazprom supplied about 40 percent of all European gas imports through three major pipelines: Nord Stream 1 through the Baltics, the Bratstvo ("Brotherhood") pipeline system that ran through Ukraine, and the Druzhba ("friendship") pipeline through Belarus (Bauomy, 2020). As a consequence, Gazprom was only sanctioned by U.S. and not EU. However, the reliability of the Ukraine route was repeatedly threatened because of Russia- Ukraine with conflict causing souring of relations, including threats to cut off gas, disputes over pricing, debt, and transit fees, and sabotage attempts (Bauomy, 2020). The Druzhba pipeline was also weaponized in periodic disputes over gas pricing with Belarus (Reuters, 2019c). As Europe's gas import demand continued to grow while intra-EU production was coming to a standstill, Gazprom was able to convince its European customers to support the construction of two new pipelines which bypassed Ukraine and Belarus, TurkStream and NordStream 2.

TurkStream delivered gas to Balkan countries via a southern delivery route, running from Russia to Turkey via the Black Sea, replacing the earlier-scrapped South Stream project. TurkStream started at a compressor station near Anapa, crossed the width of the Black Sea, and ended in Kiyıköy northwest of Istanbul. The offshore underwater parts were made up of two parallel pipelines- one connected to Turkey's existing gas network at Luleburgaz; the other connected to the Trans-Balkan pipeline system (Bauomy, 2020). Construction officially started in May 2017 and finished in January 2020, with gas flow starting on January 9th, 2020. The lines, manufactured by German, Russian and Japanese companies, carried the capacity to transit 31.5 billion cubic metres per year in natural gas (Bauomy, 2020). Each of the recipient countries in the Balkans and Central Europe was responsible for their own extension of the pipelines, as EU anti-monopoly rules stipulates that energy companies cannot own transit infrastructure and sell gas through it at the same time.



(Bauomy, 2020)

Simultaneously, the Nord Stream 2 pipeline was also being constructed by a joint venture Gazprom partook in to broaden the northern gas supply route, in parallel to the existing Nord Stream Pipeline through the Baltic Sea. However, Nord Stream 2 faced considerably more challenges to its completion than TurkStream.

Nord Stream 2 was conceived in June 2015 after an agreement to build and operate the second pipeline was signed between Gazprom, Shell, and European energy ventures E.ON, OMV, and Engie (Reuters, 2016a). Germany was the main proponent for the project, as it was dependent on imports for 98 % of its oil and 92% of its gas supply, and as of 2015 Russia supplied the majority of its oil and gas imports (40% and 35% respectively) (Stevens, 2019). As the creation of this joint venture was blocked by Poland's anti-monopoly rules, on 24 April 2017, Uniper, Wintershall, Engie, OMV and Royal Dutch Shell signed a new cost-sharing financing agreement for the 9.5-billion-euro (\$10.6 billion) project with Nord Stream 2 AG, a newly established subsidiary of Gazprom based in Switzerland (Reuters, 2016a). Construction started thereafter, with the new pipeline running alongside the existing Nord Stream expected to double the amount of gas being funneled through the Baltics to 110 billion cubic meters per year (Stevens, 2019). The 1,200 kilometer pipeline travels from Russia to Germany, but its proposed route enters the territorial waters and EEZ (Exclusive Economic Zone) of three other countries: Finland, Sweden and Denmark. Denmark delayed approval of the use of its EEZ, which in turn delayed the construction of the pipeline from mid 2019 to early 2020.

Nord Stream pipelines from Russia



(Stevens, 2019)

However, as construction was nearing 94% completion in December 2019, the project itself was sanctioned by U.S., citing geopolitical objections over Germany's dependence on Russian gas. As a result, construction on the pipeline was halted when the Swiss advanced pipeline laying firm Allseas pulled out (Stevens, 2019). In January 2020, Gazprom announced that it would complete the construction of Nord Stream 2 without the help of foreign companies. Gazprom subsequently partnered with Naftogaz for project completion, with construction now expected to finish either at end of 2020 or early 2021 (FT, 2020).

Though it remains to be seen how Gazprom can overcome technical and insurance related obstacles created by sanctions in completing and operationalizing Nord Stream 2 without its European pipeline expertise partners such as Allseas, given the construction costs already disbursed by Gazprom's joint venture projects, the partner companies are likely to push for its completion as well - so far, Germany has threatened counter-sanctions against the unilateral U.S. sanctions on Nord Stream 2 (Stevens, 2019).

With TurkStream completed and Nord Stream 2 94% complete, Gazprom has consolidated (and continues to increase) its share of European energy demand. Exploiting Germany's growing gas needs and Turkey and Balkan states' more cooperative attitude, Russia was able to circumnavigate both Ukraine and Belarus in its supply routes, thereby ensuring its energy demand security in the midst of geopolitical crises which threatened its supply routes - Europe remained Russia's largest gas customer despite being a party to energy sanctions against Russia.

Simultaneous to consolidating the European market, Gazprom and Novatek were able to leverage Russia's BRICS relationships to expand its footprint by entering the Indian and Brazilian markets. In 2018, Gazprom signed a contract with the Indian government gas-utility GAIL to export \$25 billion worth of LNG, 2.5

million tonnes per annum, over the next 20 years (IndiaTimes, 2018). The first shipment arrived in June 2018, shipped from the Yamal LNG site to Petronet's Dahej LNG terminal in Gujarat. The long-term contract allowed a price reduction – Gazprom agreed to base pricing on a three months average of Brent instead of the standard nine month average of Japanese customs-cleared crude (IndiaTimes, 2018). In 2019, Novatek subsequently formed a joint venture with India's H-Energy Corp to develop infrastructure for long-term LNG supplies to India, including co-developing future LNG terminals, with India's Petronet envisaging Novatek supplying natural gas supplies for power generation and joint marketing of LNG as a motor fuel in India (S&P Global, 2019d).

Both Gazprom and Novatek also simultaneously started operations in Brazil. In 2015, Gazprom Brazil was established and started to buy stakes in offshore fields and exploration areas tendered by Petrobras, assets worth \$13.7 billion (Caspian News, 2017). Gazprom started locally-sourced LNG operations in the country, importing Brazilian equipment for gas production at off-shore facilities, and constructing underground storage facilities for LNG (Caspian News, 2017). In 2018, Novatek shipped its first cargo of LNG fuel from Yamal to the Bahia regasification terminal owned by Petrobras. The proof of concept shipment was strategically symbolic to Russia's demand diversification efforts - Leonid Mikhelson, the CEO of Novatek, stated "this shipment represents our first LNG cargo produced by our own production to the Latin American market, and confirms the viability of our logistical model and unique geographical location of the Yamal LNG project to deliver competitively priced LNG to any part of the world" (Offshore Energy, 2018) .

As shipping LNG over long distances remained extremely cost-ineffective and Petrobras's base is tapping local gas fields off of Brazil's atlantic coast, no long term supply contract has materialized yet for Brazil or most of Latin America – rather, the shipment was "proof of concept" to demonstrate the potential "reach" of Russian gas as a competitor to the U.S. shale gas supplies which began flooding global markets in 2015 (Forbes, 2017). For India's LNG needs, geographical and geopolitical barriers remained which prevented energy supply volume on the same scale as Chinese imports- the distance an LNG tanker would have to travel from the Yamal Peninsula to India was too great to be cost-effective compared to middle eastern gas, and building a pipeline from Russia to India would be "enormously expensive and difficult since it would likely have to pass through either the Himalaya mountains or Pakistan" (Nikkei Asian Review, 2019)

Thus, despite significant initiatives underway on Russia's path towards achieving demand diversification as part of its energy strategy, Europe remained the base of demand. To maintain its hold on the base, in the face of U.S. shale gas entering the European market combined with political pressure exerted by U.S. on Europe to "boycott Russian gas," the Russian government since 2017 has allowed Gazprom and Novatek pricing flexibility to sell LNG "at any price" (Forbes, 2017). After Poland signed a five year deal with U.S. LNG exporters and Lithuania started receiving U.S. LNG shipments for the first time, both in late 2017, President Putin issued a temporary executive order allowing any LNG company operating in the Baltic LNG project and Sakhalin-2 project (namely Gazprom and Novatek) to sell natural gas at an "unregulated price" (Forbes, 2017). However, as both Poland and Lithuania kept up U.S. imports, Russia focused on Germany and the Balkan states, via Nord Stream 2 and Turkstream.

Joint Ventures and strategic investments

While Gazprom banked on new pipelines for its demand security, Rosneft expanded its portfolios of strategic investments and fostered joint ventures in a manner which diversified both production and delivery geographically.

Whereas US OFAC strictly enforced directive 4 on joint ventures as they related to arctic deepwater drilling, Rosneft's joint ventures remained largely untouched by EU, as EU regulations allowed its firms to enjoy more latitude in JVs with sanctioned Russian firms and their subsidiaries. This was because of both the "grandfathering" provision that enabled the continuation of projects that were initiated before sanctions were imposed, and the fact that home countries rather than the supranational EU bodies were tasked with implementation (Connolly 2018, p.110). As a result, most of the major joint ventures between European and Russian firms were able to continue, but any foreign joint venture drilling or refining partner with sanctioned firms involved in deepwater drilling had to de-risk by excluding U.S. dollar settlements and to excluding ties with U.S. entities through affiliated structures (Ivanova and Lavrov, 2019).

As Profs. Ivanova and Lavrov from the Higher School of Economics describe in their research "The Impact of Anti-Russian Sanctions Introduced by the U.S. on the Foreign Investment Activity of Russian Oil and Gas TNCs: The Lukoil and Rosneft Investment Strategy of Russian Oil and Gas TNCs During the Sanctions Period" in the International Organisations Research Journal, "the period from 2015–2017 was marked for Rosneft by the increase of its foreign expansion and planned implementation of already existing foreign projects in the field of hydrocarbon exploration and production and also in the field of refining. At the same time, Rosneft's senior management notes that extending the scope and geography of the business will require an increase of outward foreign investment amounts and will be accompanied by a range of difficulties, including those related to sanctions imposed against Russia and strengthened in 2017" (Ivanova and Lavrov, 2019).

Despite the risks in place, Rosneft undertook joint production projects across Africa, Latin America, Middle East, Europe, and Southeast Asia, supplementing joint exploration projects on Russian territory. While the details, challenges, and successes of each of Rosneft's joint ventures are beyond the scope of this study, the implications of certain prominent joint production projects are noteworthy to mention:

- In October 2015, Rosneft, in partnership with ExxonMobil, won the tender and received the right to undertake seismic exploration on the shelf of Mozambique. Thus, "despite the fact that partnership between Rosneft and ExxonMobil collapsed in Russia, it continued in a limited capacity abroad" (Ivanova and Lavrov, 2019).
- In May 2016, Rosneft acquired a 40 percent stake in the Petromonagas joint venture, which implements extra-heavy crude oil production projects in Venezuela. In December 2016, "Rosneft and the state-run oil company of the Republic of Cuba, Union CubaPetroleo (CUPET) signed an agreement to enhance oil production at Varadero-East Central Block" (Ivanova and Lavrov, 2019).
- "In May 2016, Rosneft signed an agreement with the Indonesian company Pertamina on the construction by 2022 of a Tuban oil refinery in Indonesia with a capacity of about 15 million tons per year and costing about \$13 billion. According to the agreement, Rosneft would control 45 percent of the project. The construction of such facility would allow the direct supply of Russian oil to Indonesian partners without intermediaries" (Ivanova and Lavrov, 2019).

- In December 2016, Rosneft signed a preliminary deal with a consortium of Japan Oil, Gas & Metals National Corp., known as Jogmec, Inpex Corp., and Marubeni Corp. for offshore exploration at a license to the southwest of Sakhalin Island (Connolly 2018, p. 106). However, the U.S. government objected to the project, “based on the principle that Washington’s Group of Seven allies should not “backfill” the sanctions by allowing their companies to carry out projects that U.S. companies would be prohibited from working on...As well as political pressure from its closest ally, Japan also risks falling foul of U.S. sanctions on Russia that prevent foreign companies exploring in deepwater with equipment that is 25 percent or more originated in the U.S.” (Japan Times, 2017). Since then, Japan negotiated an involvement in Arctic Russian oil and gas projects with U.S. treasury in a way which remained unsanctioned “Some of the license lies in waters shallower than 500 feet, which is not classified as deepwater under the sanctions.” (Japan Times, 2017). As a result, as of 2019 “Sodeco is part of the Sakhalin-1 production-sharing agreement with Rosneft, and Mitsui and Mitsubishi hold stakes in Gazprom-led Sakhalin-2. Jogmec works with Irkutsk Oil in East Siberia and has recently acquired a 10 per cent stake in a consortium with Mitsui in Arctic LNG 2, a gas liquefaction project in Russia’s north” (FT, 2019b).
- In August 2017, Rosneft’s acquisition of a 49 percent share of the Indian firm Essar Oil Limited (EOL),, for around \$13 billion, strengthened its presence on one of the world’s fastest growing oil markets, India (FT, 2017). This entailed acquisition of the, and high-tech oil refinery Vadinar. with a capacity of 20 million tons and a processing depth estimated at 95.5percent (Rosneft, 2016a). “Moreover in 2017 Rosneft received additional retail assets for foreign oil sales in India after the acquisition of a share in EOL, which has an extensive retail distribution network in India that contains 3,500 filling stations” (Ivanova and Lavrov, 2019). This deal raised the possibility of Rosneft’s acquired “daughter” – not being subject to restrictions due to Rosneft’s minority stake- purchasing sanctioned Western equipment at a future point for subsequent transfer to Rosneft (Connolly 2018, p. 106).
- “In October 2017, Rosneft invested \$1.125 billion in the acquisition of a 30 percent share in the project of the Italian energy giant Eni for the development of the large gas field Zohr, located on the deepwater shelf of Egypt...Participation in this project will provide Rosneft with additional experience in the development of offshore fields and will strengthen the country’s position in the African region” (Ivanova and Lavrov, 2019).

Thus, by participating in joint ventures exploring deposits, constructing refineries and building distribution capacities globally, Rosneft was able to simultaneously diversify its production sources beyond Russian territory, substitute its traditional reliance on western technologies with other countries’ expertise, and access new global distribution networks beyond its traditional Europe-centric base. With the exception of the Japanese partnership, most of these of these JVs evaded sanctions scrutiny from OFAC. As all of Rosneft’s global JV partners would have been impossible to alienate at once if U.S. had aggressively pursued enforcement of sanctions, it can be reasoned that diversifying its joint venture bases de-risked Rosneft’s exploration and drilling operations from a more wider enforcement of sanctions.

Seeking External financing via Oil Prepayments

To complement state support, Rosneft also sought out new sources of external funding to cushion itself from a debt crisis after finding itself under a liquidity crunch following sanctions. Leveraging its preexisting supply agreements, Rosneft was able to raise funds after being cut off from long term external financing.

As part of the \$270 billion long term supply deal to CNPC mentioned previously, Rosneft was able to arranged \$60-70 billion in upfront pre-payments, to be paid in dollars in order to help Rosneft pay off dollar-denominated debts (Reuters, 2013). Rosneft received \$15.5bn in each prepayment installment under the contract over 6 month intervals in late 2013 and early 2014 (FT, 2015). There was a short pause in late 2014 after sanctions were imposed, but prepayment installments resumed in 2015 – “in its third-quarter earnings statement on Wednesday, the indebted oil producer said it had taken prepayments worth 1.027tn roubles (\$15.7bn) under long-term supply contracts” (FT, 2015). The 2015 installment was “the first large wholesale financing received by a Russian-sanctioned entity from abroad” (FT, 2015).

The prepayment fund injection allowed Rosneft to manage its debts and become cash flow positive - net debts were cut by 39% to \$24.5bn in Q3 2015, and because Rosneft’s accounting did not count oil supply obligations under prepayment contracts as debt, the CEO claimed ample cash flow as a result – “Rosneft has more than 1tn roubles available for debt management” and to develop new remote Arctic fields (Rosneft, 2015a).

Simultaneous to receiving prepayments from its CNPC deal, Rosneft also leveraged its prior supplier relationships with western traders to continue raising funds in exchange for oil sales. In 2013, prior to sanctions, Rosneft had set up smaller medium-term supply agreements with European oil trading outlets. Prominent amongst these were Rosneft’s five year supply apply agreements with Glencore and Vitol, the world’s two largest oil trading houses, in exchange for a \$10 billion prepayment (Reuters, 2013a). Later in the year, Swiss trading house Trafigura had agreed to a similar deal by pre-paying Rosneft \$1.5 billion for receiving 10 million tonnes over 5 years (Reuters, 2013b) after Rosneft’s acquisition of its prior supplier TNK-PM, and Polish refiner PKN Orlen paid Rosneft \$7 billion to deliver 8 million tonnes of crude oil to the Czech Republic via the Druzhba pipeline (Reuters, 2013b).

Against these prior supply agreements, when “inflows from large international oil traders such as Glencore, Vitol ... dried up following the imposition of sanctions” (FT, 2015), in early 2015 Rosneft was able to use sanctions provisions allowing short-term financing for a period of up to 30 days to raise funds from Swiss trader Trafigura days before its February 13th deadline to repay a \$7 billion debt. Rosneft suddenly surged its short term oil sales to Trafigura in a move designed to quickly increase its cash flow - “Under an existing five-year financing agreement with Trafigura which began in mid-2013, Rosneft sells 150,000-200,000 metric tons of oil a month to the trader - a deal which is allowed to continue because it was struck before sanctions were imposed.... Now Rosneft has committed to sell around 500,000 tonnes of oil to the Swiss trading house in February to raise money to help repay its debt... The delivery of 500,000 tonnes of oil would represent an increase of 300,000-350,000 tonnes - worth about \$150 million at current prices - on Rosneft’s usual monthly allocation to Trafigura” (Reuters, 2015). The volume-boost deal with Trafigura was compensated by reducing shipments to Glencore and Vitol (Reuters, 2015).

Further Pivot to China - Securing Direct Loans, Stake Sales, Joining Silk Road Initiatives

Novatek, Russia's second-biggest natural gas producer and subject of sectoral sanctions, managed to both sell a significant stake to the Silk Road Fund and secure a direct loan from two Chinese Development banks in mid 2016 for the development of its high profile north-arctic Yamal liquefied natural gas plant, after an year of negotiations – “The \$27 billion Yamal development has pushed ahead amid concerns that U.S. sanctions limiting financing may derail its attempts to borrow” (Bloomberg, 2016, 2017). Novatek, which held a 50.1% stake in Yamal LNG, had been in talks with both domestic and foreign institutional investors since 2014, when sanctions forced a complete refinancing just as construction was about to start, and planned to cover about 65% of costs on the development with long-term loans taken by the Yamal venture itself (Bloomberg 2016).

In December 2015, China's Silk Road Fund agreed to buy a 9.9 percent stake in Novatek's Yamal LNG project for \$1.2 billion (IndiaTimes, 2015). The \$40 billion Silk Road Fund entered into binding agreements with Novatek during a state visit by Russian Prime Minister Dmitry Medvedev in the presence of Chinese Premier Li Keqiang (IndiaTimes, 2015). Simultaneously, the China National Petroleum Corp (CNPC) and French Oil company Total SA and were each sold a 20 percent stake in Yamal (Bloomberg, 2016). Yamal LNG's shareholders had invested directly about \$13 billion since 2014 towards what was envisioned as “the biggest project to produce liquefied natural gas in the Arctic” (Bloomberg, 2016). Furthermore, about \$6.4 billion of debt financing was secured in Russia, with 150 billion rubles (\$2.3 billion) provided by the National Welfare Fund in 2015 and \$3.9 billion provided by Sberbank PJSC and Gazprombank JSC, both of which notably themselves fell under sectoral sanctions (Bloomberg, 2016).

In a more direct sanctions-defying development, after an year of negotiations, Novatek was finally able to obtain three 15-year credit line facilities from Chinese institutional lenders to finance the Yamal LNG project- \$10.6 billion from the Export-Import Bank of China, \$1.5 billion from the China Development Bank, and \$790 million) from the Silk Road Fund (Bloomberg, 2016). The larger loan was denominated in euros, and interest was set at favorable terms for Novatek - the six-month euro interbank rate plus initially 3.3% at the construction stage and 3.55% after Yamal is fully commissioned (Bloomberg, 2016). The smaller loans were denominated in renminbi, set at the six-month Shanghai interbank rate with the same margins, with China Development Bank covering 54 percent of the facility in both currencies, according to Yamal LNG's filing (Bloomberg, 2016). Upon the completion of the loan agreements, Yamal's General Director Evgeniy Kot stated the agreements “allow to complete the project without additional funding by the shareholders... All the required external financing is now secured” (Bloomberg, 2016).

With Financing secured, Yamal LNG started producing a record 16.5 million tons of LNG per year from late 2017 despite a slump in oil and gas prices (Bloomberg, 2017). The first shipment of Yamal LNG's gas went to UK, “helping the U.K. to cope with cold winter weather and an unplanned shutdown of a clutch of its own North Sea fields. That the gas will end up in a European country that's backed sanctions against Russia may please many in Moscow...(as it) represents a gargantuan effort from the Russian establishment to demonstrate that one of President Vladimir Putin's flagship projects would not be derailed by sanctions” (Bloomberg, 2017).

Novatek also convinced two Chinese state-owned petroleum companies to each purchase a 10% stake in its secondary LNG plant, the Arctic LNG 2 project. Building on the success of Yamal, the China National

Petroleum Corporation (CNPC) and the China National Offshore Oil Corporation (CNOOC) each obtained a 10% stake in Arctic LNG 2, mirroring the 20% stake CNPC held in Yamal LNG (Arctic Today, 2019). Novatek retained a 60% stake in Arctic LNG 2.

Thus, despite Novatek being the subject of sectoral sanctions, the long-term financing and completion of Yamal and Arctic LNG 2 demonstrated a successful effort to secure long-term loans in spite of the majority ownership of Yamal and Arctic LNG 2 by a sanctioned entity, in defiance of OFAC's 50 percent ownership rule for sectoral sanctions. The fact that Novatek's high profile LNG plants weren't explicitly sanctioned indicates a lack of willingness on OFAC's parts to enforce sectoral sanctions against Novatek, unlike the enforcement most Russian energy giants faced. Furthermore, the launch of the project also became an integral part of Moscow's political pivot to China, which provided much of the financing (Bloomberg, 2017).

Gazprom was also able to tap Chinese financing post-sanctions. Unlike in Rosneft's case, Gazprom found itself unable to secure prepayments for its historic gas deal with China. When the deal with CNPC was signed, Gazprom said it hoped to receive a financing package — either in the form of prepayments for gas supplies or loans — worth \$25bn to help it build a new pipeline, the Power of Siberia. But the deal never materialized, as Beijing had pushed for interest rates that were higher than Gazprom was prepared to accept (FT, 2016). Instead, in March 2016, Gazprom was given a \$2.2 billion, five-year loan from the Bank of China, becoming Gazprom's largest loan agreement from a single credit institution (FT, 2016). The reason for the loan was reportedly “in order to keep investing in its big projects — including the Power of Siberia pipeline to China and possible new pipelines to Europe including Nord Stream 2 and Turkish Stream” (FT, 2016). In turn, it gave China, the world's biggest energy consumer, access to Russia's huge hydrocarbon reserves — “. Gazprom, which accounts for more than 10 percent of Russia's export revenues, (was) hoping that a \$55 billion project to supply gas to China will decrease its reliance on exports to Europe” (WSJ, 2016).

Another Russian petroleum giant which was able to strategically access Chinese capital by selling minority stakes was Sibur, Russia's largest gas processing and petrochemicals company with a parastatal status. Sibur was not under sectoral sanctions, but rather owner Gennady Timchenko and minority stakeholder Kirill Shamalov were both under the “Kremlin List” SDN sanctions due to their purported ties with President Putin. Timchenko was able to both raise capital for Sibur and in turn shield it from sanctions by selling 10% of Sibur shares for \$1.3 billion to Sinopec, a Chinese state-owned company and the country's largest oil refiner in December 2016 (FP, 2015). Following this sale, Timchenko became a “point man” for facilitating Chinese investments in the Russian energy sector, and was able to further secure the sale of another 10% of Sibur's stake to China's Silk Road Fund (Gabuev, 2016). From the Chinese perspective, the investments guaranteed energy security at a time of cheap prices for exclusive supply routes less prone to U.S. geopolitics (WSJ, 2016).

Thus, Russia's “pivot east “ towards China not only aided its demand security and diversification goals via new drilling and pipeline projects, but also allowed it to gain access to crucial financing from Chinese sources, including supply prepayments, loans, and stake sales, which traditional western investors shied away from following sanctions.

Raising further capital via Asset sell off – challenges faced by EDC and Rosneft due to sanctions

While Novatek was able to secure direct foreign financing from Chinese institutional investors and developmental banks for Yamal, other ventures found themselves facing challenges selling stakes in order to

maintain capital. After months of negotiations, in mid 2017 Russia's largest oilfield services company Eurasia Drilling Co. (EDC) was able to successfully sell a 13% stake in itself to the Russia-China Investment Fund (a coinvestment partnership between RDIF and China Investment Corp) and the UAE Sovereign Wealth Fund Mubadala in return for capital injection (the final purchase amount was not released to the public) (Reuters, 2017a).

Simultaneously in 2017, EDC had entered talks with US's largest oil services provider, Schlumberger, on selling a lion's share 51% stake for \$1.7 billion; but encountered significant obstacles due to the presence of sectoral sanctions. In 2015, Schlumberger had agreed to buy 45.65% of EDC, in order to gain access to the Russian production market where capital spending was sustained despite low oil prices, but the deal fell through after Russia's Federal Antimonopoly Service (FAS) repeatedly postponed its approval (Reuters, 2017b). The deal met with resistance in Russia's higher echelons of power who were worried that Schlumberger might seize control of Eurasia (Reuters, 2017b). During the second purchase attempt, in July 2017, an 'in principle' agreement was reached for a 51% stake sale, with the EDC CEO saying "I warmly welcome Schlumberger as our majority shareholder. It builds on our strategic alliance with Schlumberger since 2011" (Reuters, 2017c). Even Kremlin spokesman Dmitry Peskov weighed in, saying "Russia was, is and will be interested in foreign investment and in cooperation with foreign investors...a relevant decision is to be taken in each separate case by the government" (Reuters, 2017b). Indeed, the Schlumberger deal was subject to approval by Russia's Federal Antimonopoly Service again, which is where it dragged on for the next two years. In May 2018, the sale review was extended in light of the latest round of "Kremlin list" sanctions, with deputy head of FAS Andrei Tsyganov remarking "sanctions against Russia and against Russian citizens [make it] absolutely clear that such deals should be scrutinized ten times more thoroughly in such environment" (TASS, 2018). As part of the second phase of review, Schlumberger agreed to all the conditions proposed by FAS, including transferring key technologies to EDC and also selling the EDC stake back to Russia (at market price) if US sanctions against Russia are strengthened (S&P Global, 2019b). However, in January 2019 the sale was not permitted to proceed as "Moscow was reluctant to approve a deal that could significantly strengthen Russian dependence on western oil technologies in the strategic oil service sector amid sanctions and (was) now focusing on strengthening cooperation with Asian and Middle Eastern partners" (S&P Global, 2019b).

However, even Asian and Middle Eastern partners posed challenges due to sanctions during negotiations for stake purchases. As part of its efforts to raise capital in spite of restrictions, Rosneft complemented its oil supply contracts with asset sales to foreign buyers. In 2016, Rosneft sought to showcase an attempt to "privatize" and sell a 19.5% stake in itself. At face value, this stake was bought by the Qatar Investment Authority (QIA), Qatar's Sovereign Wealth Fund, along with commodities giant Glencore. However, it was later revealed that in order to get foreign investors on board, state-owned Russian bank VTB was forced to finance the acquisition itself by lending to QIA. The perilous journey Rosneft faced, described below, lends insights into the deterrence effect sanctions brought on western lenders.

In June 2016, the Russian government had publicly announced it would sell a 19.5% stake in Rosneft by the end of the year, to demonstrate "effective privatization" and that foreign investors were undeterred by sanctions. It was "billed as the deal that proved Russia remained open for business...hailed as proof that despite growing political isolation from the West the country could still attract global investors" (Reuters, 2018). The 10.2 billion euro (\$11.57 billion) privatization deal was designed to replenish Rosneft's coffers, depleted by falling energy prices and Western sanctions, despite the large prepayments received earlier

(Reuters, 2018). In order to follow through on this high-stakes deal, however, nearly all of the original goals for the acquisition had to be sacrificed eventually.

Rosneft initially started negotiations with the United Arab Emirates' sovereign wealth fund, Mubadala. Mubadala agreed to buy the stake, but negotiations hit a snag after Rosneft twice changed the price tag, prompting Mubadala to walk away from the deal (Reuters, 2018).

Rosneft then switched to talks with a combination of GPIF (the Japanese government pension investment fund) and state-run Japan Oil, Gas and Metals National Corp (JOGMEC). However, when the Japanese government entities insisted on linking it to progress in a territorial dispute with Russia dating back to the end of World War II, negotiations collapsed (Reuters, 2018).

Eventually, Rosneft settled on two new potential suitors: Qatar's sovereign wealth fund QIA and global commodities trader Glencore, neither of which was prepared to put up the entire asking price (Reuters, 2018). When facing financing hesitancy from foreign buyers before, Rosneft had gone to major Western banks, such as Deutsche Bank and JP Morgan, to finance transactions. But as large western lenders had announced no major new loan deals with Rosneft after sanctions were imposed in 2014, Rosneft had to turn to Intesa Sanpaolo, a mid-sized Italian lender which had little experience in large Russian corporate deals (Reuters, 2018).

By December 2016, financing for the sale was falling into place. QIA gave 2.5 billion euros and Glencore 300 million euros. The rest was debt, of which Intesa put up 5.2 billion euros. The balance would come from Russian banks. "The amount coming from the Russian banks was about \$2.5 billion...VTB was one of the banks that between them put up \$2.5 billion in loans... the other Russian banks involved were Gazprombank and Otkritie" (Reuters, 2018). Russian officials became confident of the sale materializing and "spoke publicly of a long-term partnership with the new Rosneft shareholders, Qatar and Glencore" (Reuters, 2018).

Just when the deal was about to be finalized in December 2016, however, the fear of secondary sanctions caused it to fall through- "For the larger portion of the financing — the 5.2 billion euros loaned by Intesa — the Italian bank's intention was to syndicate the loan, a common industry practice designed to spread the risk and dilute the burden on the bank's own capital... the syndication failed because European banks approached by Intesa were worried about the risk that providing finance for Rosneft, even if indirectly, would result in them falling foul of Western sanctions on Russia... Rosneft and (CEO) Sechin are both subject to U.S. sanctions" (Reuters, 2018).

Rosneft then sought Chinese financing instead - in September 2017, Sechin said a deal had been signed by Chinese energy firm CEFC to buy 14.2 percent of Rosneft from QIA and Glencore(Reuters, 2018). However, this deal fell through when CEFC's CEO fell under investigation by Chinese authorities (Reuters, 2018).

Finally, in May 2018, QIA agreed to take on the part of the stake that had been covered by Intesa – but "having a third party finance a large part of the acquisition was a condition for Qatar taking the stake" (Reuters, 2018). A new holding company was created, QH Oil Investments LLC. Officially, details of how the new deal with QIA was being financed were not made public. But nine sources with knowledge of the transaction told Reuters that VTB, the Russian state-owned bank, itself financed a large share of the acquisition, undermining the deal's stated aim to bring foreign money into the country (Reuters, 2018). VTB's financial data for September 2018 showed that VTB loaned 434 billion rubles (\$6.7 billion) for up to three years to unnamed foreign borrowers after having raised 350 billion rubles via loans from the central bank itself

(Reuters, 2018). The contribution from VTB was separate to the \$2.5 billion that VTB had provided to QIA at the end of 2016. Officially, however, VTB denied it issued a loan to the Qatar Investment Authority -“VTB has not issued and is not planning to issue a loan to QIA to finance the acquisition.” (Reuters, 2018). Explaining why the original deal had not stuck, Sechin told Russian state television the new shareholders were finding the cost of servicing the debt too high (Reuters, 2018).

Rosneft’s uphill battle in finding buyers or creditors to purchase the stake for nearly two years after the sale was first announced illustrates the challenges Russian energy giants faced in tapping international debt markets and hence bringing in hesitant investors on board who were willing to risk their own money. “In the end, to get foreign investors on board, Russia has had to loan them billions” (Reuters, 2018).

In contrast, Rosneft was able to sell stakes in its subsidiaries to foreign buyers with virtually no obstacles. During 2016, Rosneft sold a combined 49.9% (the entirety of minority stake, retaining a 50.1% controlling stake) in its subsidiary Vankorneft JSC oil field to a consortium of Indian state-owned and parastatal oil enterprises, in three phases. In May 2016 Rosneft sold 15% shares in Vankorneft to Indian state-owned procurement vehicle Oil and Natural Gas Company (ONGC) Videsh Ltd. for \$1.27 billion, in early October 2016 Rosneft sold 23.9% shares in Vankorneft to a consortium of Indian companies consisting of Oil India Ltd., Indian Oil Corporation Ltd., and Bharat PetroResources Ltd., and in late October 2015 Rosneft sold an additional 11% in Vankorneft to ONGC Videsh Ltd. (increasing its share to 26 percent) for \$930 million, thereby allowing India to more easily access Russian crude during a period of infrastructure development halt due to low prices (Rosneft, 2016b and IndiaTimes, 2017). Also in 2016, Rosneft sold 20% of its subsidiary Verkhnechonsk oil and gas field in Siberia for \$1.1 billion to Beijing Gas Group Co, in a deal designed to not only raise capital, but also aid demand diversification goals in conjunction with the Power of Siberia pipeline allowing Russia easier access to China's natural-gas market (China Daily, 2016).

Import substitution

Complementing efforts to diversify financing, an extensive import substitution plan was drafted in 2015 by PM Medvedev, with an objective to both quickly build domestic supplies (“russification”) for equipment and services. The plan envisaged switching away from importing equipment and services from Western firms to domestic firms where possible and toward non-Western firms where domestic expertise didn’t exist, in order to reduce Russia’s vulnerability to losing foreign equipment access due to sanctions. An increase in both the production and use of domestically produced, high-tech oil and gas extraction equipment for directional drilling and hydraulic fracturing was needed to shift from legacy practices to new methods for development of Russia’s frontier oil deposits. Frontier deposits were viewed as most important in civilian branches of the economy and hence deliberately targeted by sanctions. The import substitution plan saw the setup, centralization, and mobilization of institutional architecture and coordinated the activities of oil production companies determining demand for strategic concerted production efforts by Russian manufacturers, research and engineering organizations, coordinated by not only the Ministry of Energy and Ministry of Industry and Trade but also the Ministry of Education and the Ministry of Environmental Protection (Connolly 2018, p.96). PM Medvedev inaugurated the plan with the motto “we need our own technology, our own production and our own services market” (Medvedev 2016).

The plan was enabled by both direct funding and subsidized loans. Subsidized loans were launched towards this purpose from the Fund for Industrial Development (FRP), and the government allocated nearly

375 billion rubles (c. \$6 billion at average 2016 exchange rates) to direct state funding as well as capital released from Russian state investment funds to support the development of the 12 priority technologies for energy extraction equipment in Russia. The investment funds were used in the successful development of geonavigation equipment used in drilling by Surgutneftegaz, as well as advanced drills used in horizontal drilling by Gazprom Neft (Agenstvo Neftegazovoi Informatsii, 2016).

An important component was russification of the oilfield services sector market in Russia, one of the largest in the world, worth \$23B in 2015 and one of the key channels for technology transfer to Russia, including seismic services (production and exploration), drilling, well maintenance, enhanced oil recovery, and geophysical Services (Deloitte 2015). Until 2014, foreign firms dominated seismic research (IG Seismic Services, a joint venture between Schlumberger and Integra) and to a lesser extent, the drilling market – the largest by value of the oilfield services (Weatherford and ERIELL accounted for more than a third of the market) (Connolly 2018, p. 101). Because the oilfield services sector was considered an area of strategic importance by the Russian government, important initiatives were taken to reshape the oilfield services industry after sanctions were imposed in 2014.

A sustained effort to “russify” or expand the control of state-owned firms over a variety of oilfield services was underway soon after the imposition of sanctions. High-end technologies used in oilfield services were contained within the Government Commission on Import Substitution’s list of strategic technologies that require state support. The state-owned exploration firm Rosgeologiya was charged with enhancing domestic provision of exploratory drilling and turning the company into the dominant player in geophysical exploration. To this end, twenty-five smaller geophysical and scientific research companies were transferred to Rosgeologiya by a presidential order in February 2015 (Rosgeo, 2015).

Mergers and foreign acquisitions, especially by Rosneft, took place that expanded and consolidated its hold over segments of the oilfield services markets.

- In July 2014, Rosneft struck a deal to buy the drilling and well-servicing assets of oil and gas service company Weatherford International in Russia and Venezuela (Connolly 2018, p.101).
- Rosneft then reached an agreement with Seadrill in July 2014 to acquire a 30% stake in Atlantic Drilling Limited. However, Western sanctions resulted in the deal being suspended, with the two parties subsequently agreeing to prolong negotiations. When the deal eventually concluded in 2019, it enhanced Rosneft’s offshore capabilities (Connolly 2018, p. 102).
- Rosneft also acquired a subsidiary of the Canadian firm Trican Well Service Ltd, which provided high-quality pressure pumping services focused on the enhancement of production within the conventional oil industry in Russia (Rosneft, 2015b). As a result, Rosneft was able to enhance its own in-house technical expertise in horizontal drilling and fracking (Starinskaya, 2015).
- In October 2016, Rosneft acquired the government’s stake in Bashneft Public Joint Stock Company representing 50.08% of its charter capital. Rosneft received a positive synergetic effect from this deal - The capitalization and stock prices of the company increased, as did the production of liquid hydrocarbon (by 10%) and refining throughput (by 20%) (Ivanova and Lavrov, 2019). The quality of

refining assets was also improved and Rosneft gained access to additional infrastructure and new hydrocarbon production regions and sales markets (Ivanova and Lavrov, 2019).

In areas where Russian firms could neither acquire foreign firms with service specialty nor provide their own expertise, non-Western firms' partnership was sought. European share of oil and gas equipment imports declined at the expense of a rise in the shares of former Soviet (FSU) states (Belarus and Kazakhstan), South Korea and China, as shown in figure 4.3 below. "The Chinese share of the drilling rig market grew from 19% in 2013 to more than 35% in 2016. In offshore drilling platforms, the share of Chinese-produced vessels grew after 2013, rising from next to nothing to account for around a fifth of Russian imports in 2016" (Connolly 2018. P. 100). By 2016, most of the necessary adjustment had taken place and Russian energy firms were able to reduce imports to maintain operations unimpeded.

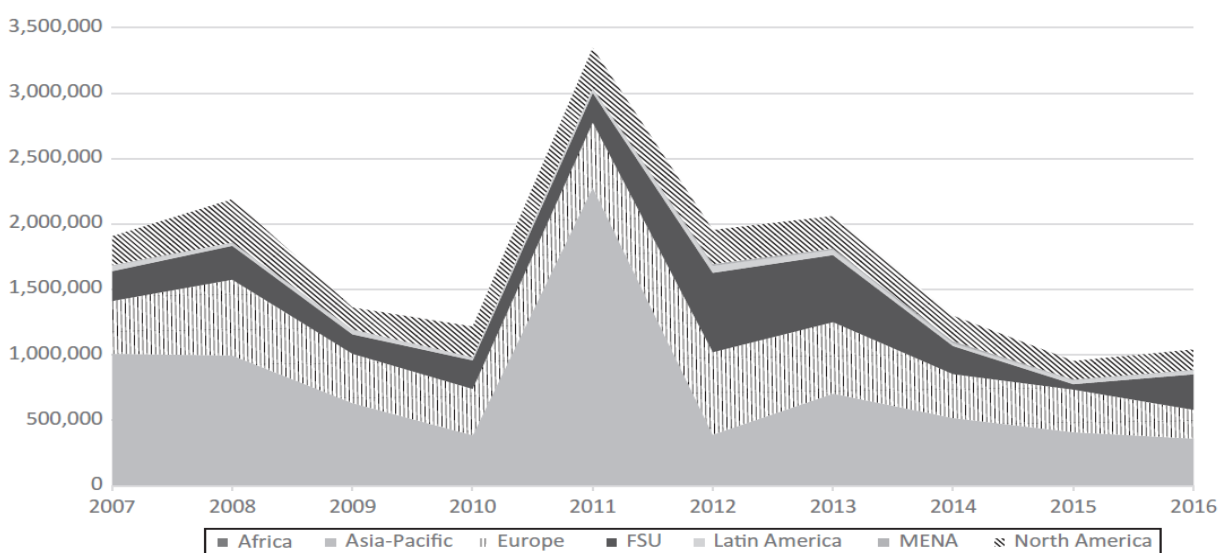


Figure 4.3 Volume and source of Russian imports: all categories of oil and gas extraction equipment, 2007–2016 (current USD, thousand)

Sources: International Trade Centre (ITC); United Nations Comtrade database; author's calculations

(Connolly 2018, p. 91)

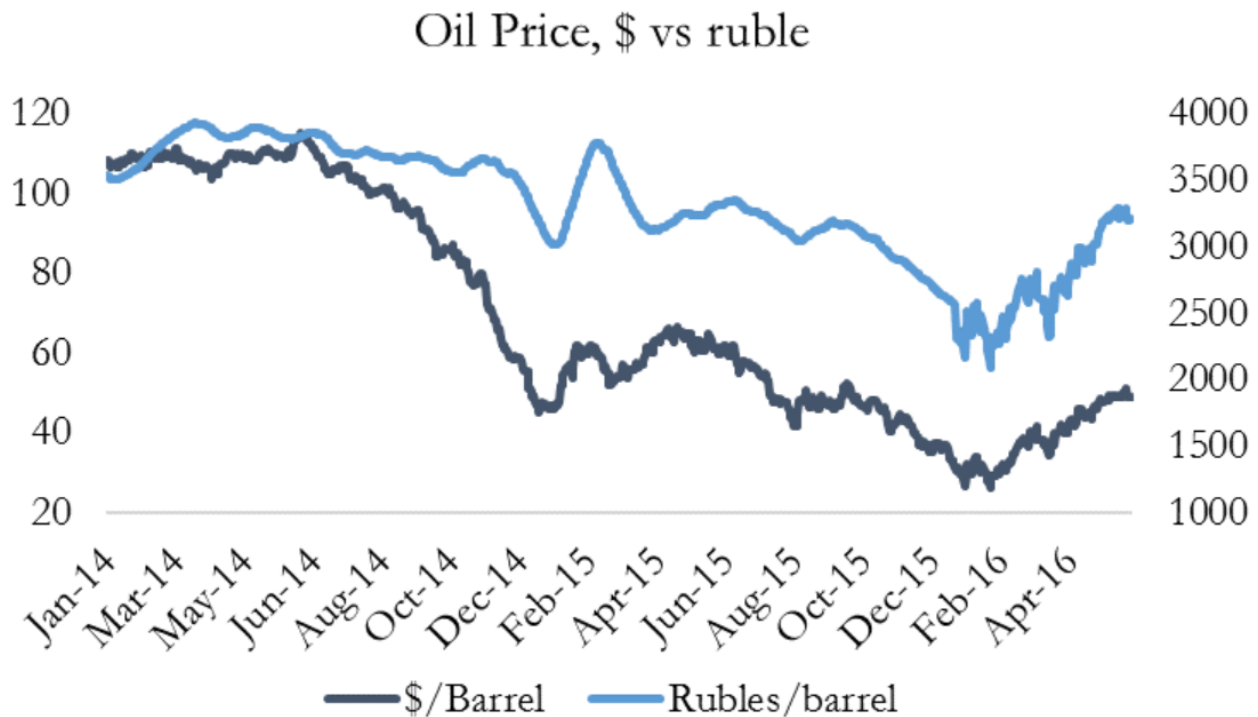
"Natural" offsets

The simultaneous depreciation of the ruble that accompanied the decline in oil prices helped boost the competitiveness of energy firms by reducing costs (largely denominated in rubles) relative to income (largely denominated in dollars), which maintained a steady stream of oil profits, and consequently, tax revenues, denominated in rubles.

As the Fletcher School's Prof. Chris Miller explains – "Russia balanced its budget via the second part of its crisis response, a sharp ruble devaluation that pushed the cost of adjustment onto the population. Roughly half of Russia's government revenue is funded via taxes on oil and gas, which is priced in dollars on international markets. Nearly all of Russia's government spending—salaries, pensions, and the like—occurs in rubles. Russia cannot control the price of oil, nor can it control how much oil it pumps. The Kremlin can,

however, control the ruble price of oil. Letting the ruble fall against the dollar means that the Kremlin gets more rubles for each barrel of oil it taxes. Though the price of oil collapsed in 2014 and 2015, the Kremlin let the price of rubles collapse, too. Thus, it received roughly the same number of rubles at the end of 2015 as it had in early 2014. Its budget, as a result, was not far from being balanced.” (Miller, 2018)

This effect is clearly illustrated in the below chart of oil price denominated in dollars vs rubles, whereby the latter didn’t experience as much of a “dip” due to the ruble depreciation partially “cancelling” out the drop in oil prices:



(Miller, 2018)

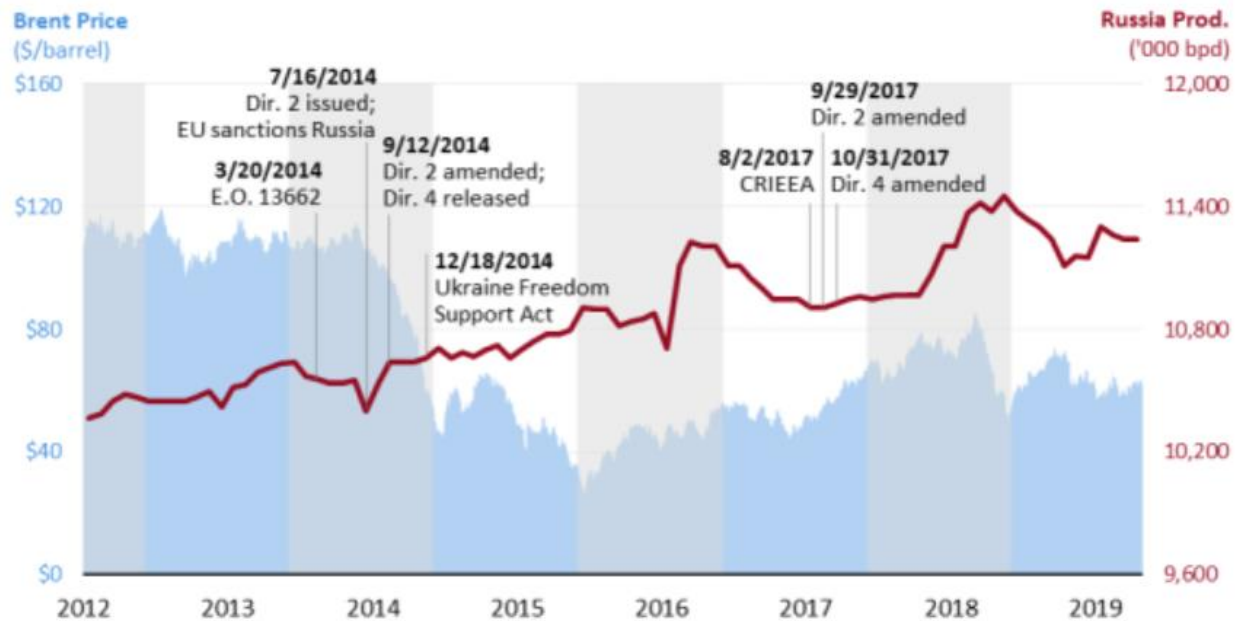
Results of strategies

Russian state-owned enterprises were able to ward off capital flight as a result of state-initiated strategic initiatives, foreign (primarily Chinese) partnerships, direct state support, and the indirect support provided by the exchange rate depreciation. By 2015-16 the rate of investment in the oil and gas sector was growing significantly faster than overall national fixed investment, as illustrated in figure 4.4 shown previously.

Russia’s ambitious import substitution program resulted in the gradual diversification of sources of imported oil and gas equipment, oilfield services, LNG technology, and catalysts used in oil refinery. Imports as a share of oil and gas equipment fell to 45% by year-end 2016 (exceeding the official goal of 5%), which was also partially due to decline of the ruble from 2013-2016 making imports more expensive (Connolly 2018, p. 112). Firms responded to incentives from state plus also price signals from ruble - investment in all machinery grew at 14% average annually, faster than overall investment (Connolly 2018, p. 112).

This allowed production to pick back up to pre-sanctions levels and even reach post-Soviet peaks. Crude oil extraction grew by 6.3% between January 2013 and January 2017, while exports grew even faster,

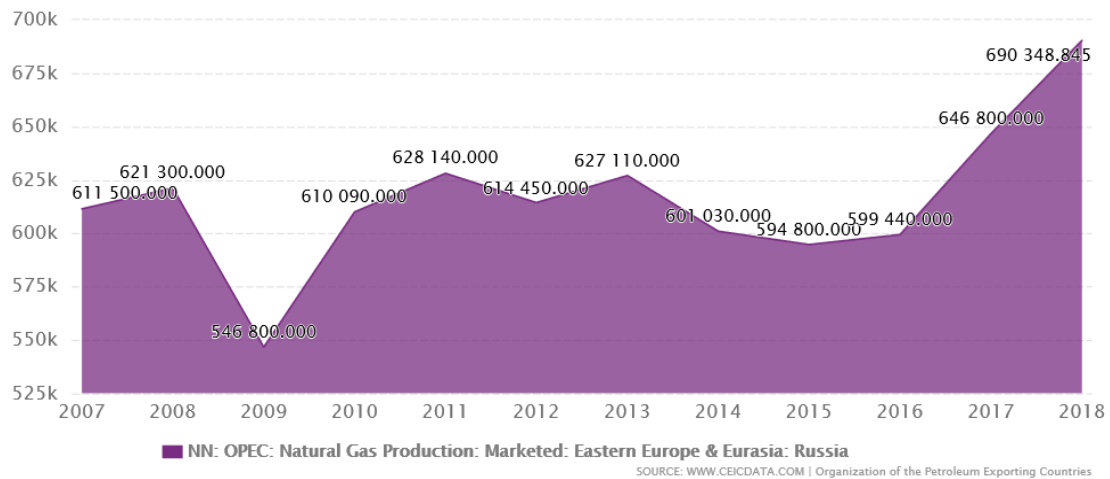
rising by 10.5% over the same period (Connolly 2018, p. 110). Indeed, before the end of 2016, when Russia entered into an agreement with OPEC countries to limit oil production, Russian output was at post-Soviet record high levels of 11.7 million barrels per day (Connolly 2018, p. 110). The timeline of Russian crude production superimposed on prices and sanctions is shown below – after 2015, all production plateaus occurred not due to sanctions but rather OPEC+ voluntary supply cuts to boost prices.



(Brown, 2020)

Gas production also grew to post-soviet peaks past 2016 once the price drop ended. The top producers, Gazprom, Novatek, and Bashneft all grew briskly between 2014 and 2016. Novatek's production increase was largely due to the start of operations in the new Yamal and Yardeyskoye fields, while Gazprom Neft expanded growth in its Prirazlomnoye and Novy Port fields in the Arctic and the Messoyakha field (FT, 2017). Much of its growth was due to the successful exploitation of hard-to-recover deposits using horizontal wells with multiple fracking, illustrating resilience in the face of technological sanctions caused by import substitution (Reuters, 2016b)

Russia's annual natural gas production pickup is shown below, in millions of cubic meters (hence each "k" represents billions of cubic meters):

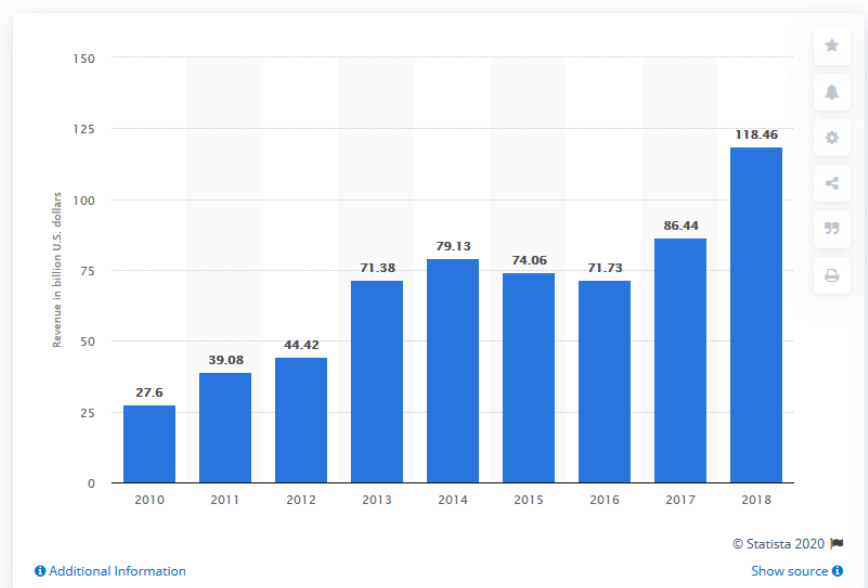


(CEIC, 2018)

As a result of capital diversification allowing sustained production, for the major crown jewels, “operating cash flow . . . exceeded total capital expenditure for the past three years [i.e. 2014–2016]” and, as a result, the Russian oil industry “has been able to self-fund itself during periods of high and low oil prices, despite the imposition of sanctions since 2014” (Henderson 2017, p. 7). Indeed, even when overall investment slowed in 2015, the ruble value of capital expenditure in upstream investment grew in each year between 2014 and 2016 (Henderson 2017, p. 7). The relatively healthy financial position of Russian oil firms enabled them to expand production drilling activity, which has in turn stimulated a faster rate of extraction (Henderson 2017, p. 4). As a consequence, after 2016 Revenues recovered well beyond pre-crisis levels for both Gazprom and Rosneft, as shown below:

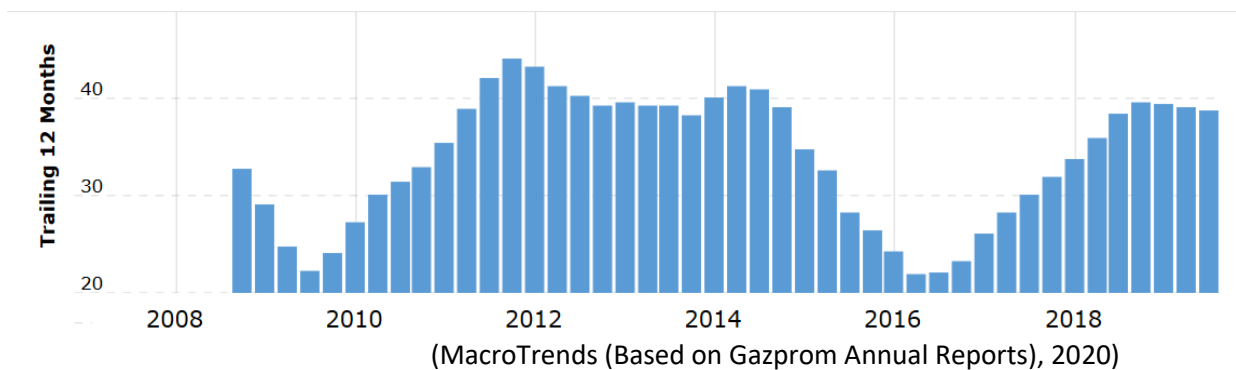
Rosneft's revenue from FY 2010 to FY 2018

(in billion U.S. dollars)



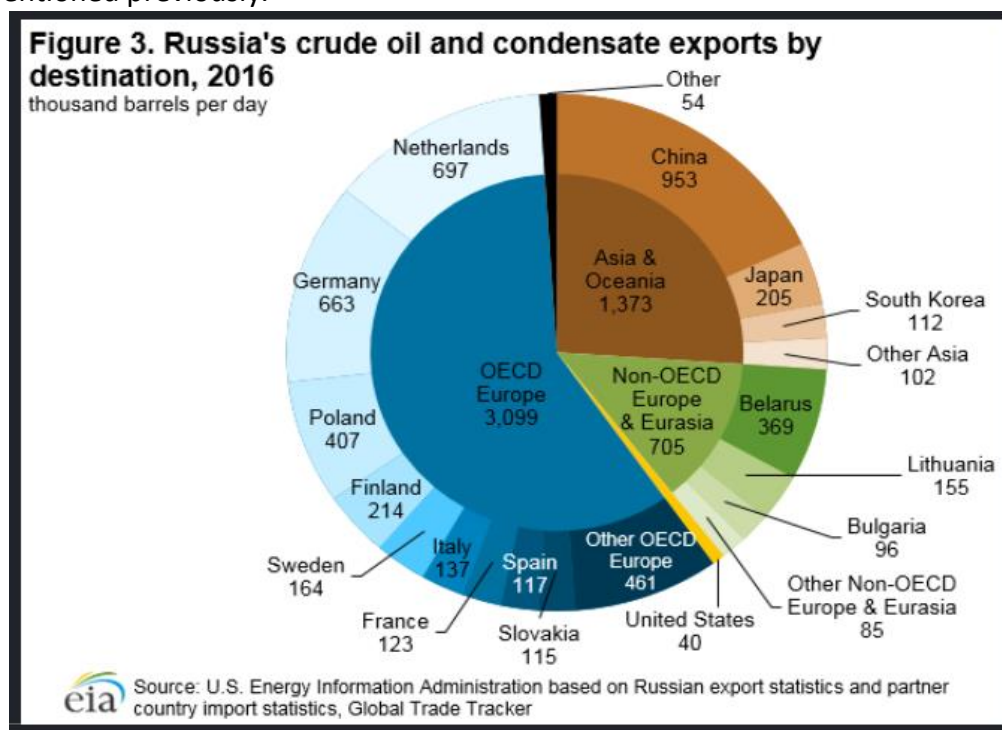
(Statista (based on Rosneft Annual Reports), 2018)

Gazprom revenue (in billions \$):



The diversification of capital sources as part of the pivot towards China resulted in Rosneft's bond price recovering, as was shown previously, and no major outflow of capital during the subsequent sanctions on Rosneft with its Venezuela dealings.

Notably, as a result of the large export deals secured in 2013-14, China soon became Russia's largest energy importer, receiving 18% of oil export share by 2016. On the gas front, Europe remained the top importer, though the Power of Siberia pipeline is expected to change this once imports start reaching capacity after 2024, as mentioned previously.



(EIA, 2017)

Analysis and Conclusions

It can reasonably be concluded that sanctions failed to effectively curtail the operations of Russian energy giants or serve as a deterrent to foreign cooperation. With the help of state intervention, state financing, and state mediation in securing deals with foreign capital, Russian energy crown jewels were able to stave off sanctions' lending and technology transfer restrictions, and ride out the low price period as well. The Russian state used its position at the apex of the limited-access system of political economy to undertake both

commercial and diplomatic initiatives to channel resources to favored enterprises that were considered to be strategically important, cushion favored enterprises from the worst effects of sanctions, and seek out alternative sources of demand for Russian energy, thereby successfully riding out both sanctions and low oil prices.

Russian efforts to substitute western knowhow, equipment, and technology with domestically produced alternatives as well as efforts to diversify the sources of demand for energy exports enhanced Russia's self-sufficiency and kept the industry afloat by reducing its vulnerability to external pressure from Western countries in the future. Russia's import substitution plan resulted in less dependency on both foreign technology and supply chains for oil and gas exploration. The need for western involvement in Russia's energy industry diminished, thus reversing many of the steps toward integration with the global oil industry that took place after the disintegration of the Soviet Union.

Unlike with the financial sector, however, the bulk of "savior capital" did not originate domestically from the National Welfare Fund but rather from China. The multi-billion dollar long-term supply agreements to China by Gazprom and Rosneft which were signed before sanctions not only enabled Russian energy demand diversification and security, but moreover helped stave off the effects of sanctions' long-term capital restrictions, and allowed them to stay financially afloat and expand operations. Rosneft was able to use Chinese supply prepayments to pay off its debts and increase its cash flow buffers, while Gazprom was able to use the loans it was offered from Bank of China to aid pipeline construction, further facilitating its demand diversification goals. Sibur was able to both boost its cash position and avoid being sanctioned by selling stakes to China previously owned by a sanctioned oligarch, while Novatek received a crucial lifeline in the form of direct loans at a time when the Yamal LNG project's future lay in limbo, allowing it to become the world's largest LNG supply station as planned.

However, not all was smooth sailing for crown jewels - prepayments could only help Rosneft until a certain limit. The challenges Rosneft faced during the financing of its stake sale process provide an understanding of challenges faced in obtaining foreign capital by Western lenders. Essentially, what started out as Rosneft's quest for Foreign Capital in the face of sanctions, seeking to emulate the success of RDIF in obtaining direct investment, ended up being essentially re-russification of Rosneft. Because of the fear of secondary sanctions, foreign sovereign wealth funds tried to de-risk by obtaining external financing for the acquisition, and eventually only Russian banks could provide the financing. Similar sanctions-risk deterrence was shown by Exxon and Shell decision to pull out of JVs and FAS's decision to block Schlumberger's EDC majority stake acquisition, but none of these proved detrimental to operations.

Gazprom's ambitious pipelines and Rosneft's multiple joint ventures created stable networks of production, refining, distribution and delivery, which mitigated the effects of political pressure on Europe to reduce energy dependency on Russia and kept production at record highs. The sheer diversity of joint ventures and partnerships served as a buffer to the expansion of sanctions due to the "blowback" of sanctions on allied countries' industries feared by congress (GovInfo, 2018).

At the same time, the scarcity of direct lending outside of China forced asset sales to raise foreign capital. Foreign ownership in Russian oil giants increased as a result of stake-selling recapitalization. Based on the cases analyzed in this research, Chinese state-owned oil enterprises purchased the bulk of foreign stakes,

followed by Gulf sovereign wealth funds and Indian state-owned oil enterprises. Western ownership decreased due to a mutual sanctions risk aversion, which arguably was part of the sanctions' goals. Essentially, China took over the void of cooperation, demand and investment left by Western players.

It is worthy to note that though Gazprom had a lower hand in negotiating gas price and financing terms with China, and the Power of Siberia was projected to run a loss due to construction costs the first five years, the pipeline construction nevertheless proceeded because security of demand objectives superseded profitability objectives. Due to sanctions pressure, commercial considerations for Russia's energy giants became less important than geopolitical gains - the prospect of a large and stable source of demand in future decades was far more important for Russia's gas sale security. At the same time, Gazprom was internally competing on Chinese natural gas sales with Rosneft, which was able to make inroads accessing China's domestic gas market and end-users via the Verkhnechonsk gas field sale and delivery partnership with Beijing Gas Corp, one of China's largest distributors of natural gas.

In the end, China becoming Russia's largest energy importer proved to be a net win-win decision. The "savior capital" and demand security which allowed Russia's energy crown jewels to stay afloat was reciprocated to China by stake purchases guaranteeing exclusive supplies at a time of low prices, financed by prices and terms favorable to Chinese conditions, in light of Russia not having many other financing options due to sanctions. More importantly, Russian pipelines aided China's Belt and Road infrastructure goals, especially the fuel infrastructure for the China-Europe corridor. President Putin's decision to appoint Gennady Timchenko as a point man in China deals helped advance both long term supply agreements and strategic investments, in spite of obstacles in terms of diverging interests with Chinese terms unfavorable to Russian companies, as well as the Belt and Road initiative running counter to Russia's traditional neighborhood influence (Gabuev, 2016).

Thus, while Russia's energy sector sanctions response strategy had an ideal goal of self-reliance, the diversification of capital and demand came with a heavy dependency on Chinese funding and Chinese demand alike. While the response strategy managed to minimize the impact of sanctions and reduced Russia's vulnerability to the expansion of Western energy-related sanctions in the future; it also made Russian energy exports beholden to Chinese terms, which is part of the reason why Russia is currently seeking to diversify energy exports further in the future towards newer fast-growing emerging markets - India, Africa, and Latin America, though of course shipping cost-effectiveness challenges remain (Caspian News, 2017).

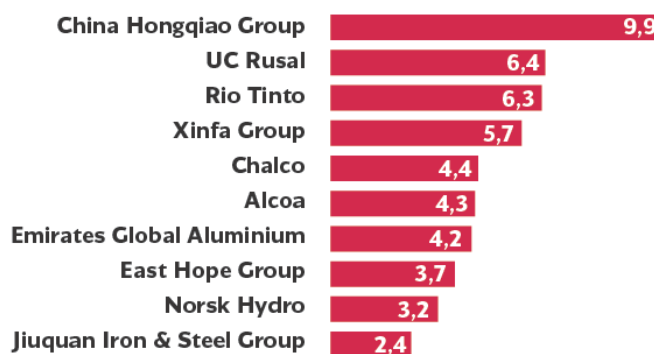
Mining Sector - Rusal's Sanctions Strategy

Sanctions were not limited to energy and financial sectors. By far the most significant private enterprise to be hit by sanctions outside the energy and financial sectors was United Company Rusal, Russia's largest aluminum mining conglomerate. However, Rusal's unique case demonstrates a rare example of a large corporation successfully maneuvering to "de-sanction" itself through a working out a "exit strategy" with U.S. Treasury, and offers insights into factors that enabled this unique de-sanctioning.

Background

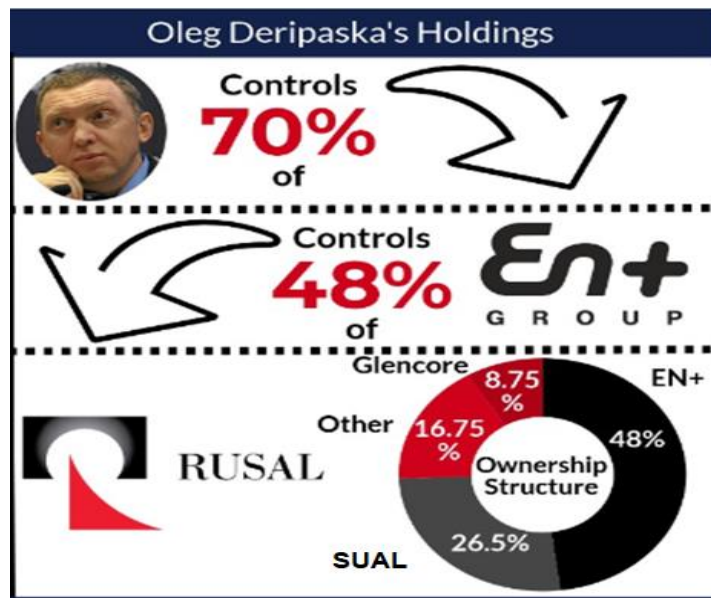
United Company Rusal was formed in March 2007 by the merger of Russkiy aluminiiy (the "original" Rusal), SUAL (Siberian-Urals Aluminium), and the alumina assets of swiss mining conglomerate Glencore (Rusal, 2018). Rusal grew operations rapidly over next decade, accounting for 9% of the world's aluminum, alumina (ore from which aluminum is made), and Bauxite production at its peak to become world's largest aluminium producer, only to be overtaken by China Hongqiao Group in 2015 (Bloomberg, 2015). At year-end 2017, Rusal's annual revenues were \$8 billion, coming from a global mining and refining network operating assets in 13 countries over five continents, employing over 61,000 people (Rusal, 2018).

Top 10 Aluminum Exporters by Market Share, 2017



(Rusal, 2018)

UC Rusal's biggest shareholders at the beginning of 2018 were the En+ Group, a minerals holding conglomerate with a controlling stake of 48.13%, followed by SUAL (26.50 %) and Glencore (8.75%); the remaining 16.75% shares were sold to the public (Atlantic Council, 2018). Crucially, EN+, Rusal, and SUAL were all founded and led by Oleg Deripaska, one of the most successful businessmen (and one of the most prominent oligarchs) in Russia. Rusal was established as a public limited company registered in the British island of Jersey, and its shares were traded on the Moscow Stock Exchange, Hong Kong Stock Exchange and European Stock Exchange (FT, 2018b.). A subsidiary for US Market, Rusal America, was established to explicitly supply American construction and manufacturing needs.



(Atlantic Council, 2018)

On January 30th 2018, as a follow up to CAATSA sanctions, Section 241 of which mandated further “sanctions on anyone determined to conduct significant business with Russian defense and intelligence sector... as well as “those who benefit from the Putin regime and play a key role in advancing Russia’s malign activities” within six months on being passed in August 2017, the U.S. Treasury Department released a “Kremlin List” naming the top 210 influential Russian oligarchs and officials (including 114 senior political figures close to President Putin and 96 oligarchs with a net worth of \$1 billion or more, a lot of whom were apparently copied from the Forbes Russia’s 100 Richest list) (CNBC, 2018a).

Oleg Deripaska’s name was on this list. The Treasury Dept stated “the inclusion of individuals or entities in any portion of the report does not impose sanctions on those individuals or entities,” but still, it ruffled feathers among those named. Seeing the list, in a pre-emptive action on March 15th, 2018, Oleg Deripaska stepped down as Rusal president and became a non-executive member of Board of Directors - Vladislav Solovyov filled in as President and became EN+ Executive director (CNBC, 2018b)

On April 6th, 2018, U.S. Treasury Dept . followed through on its CAATSA sanctions obligations and sanctioned seven Russian oligarchs and 12 companies they control, accusing them of "malign activity around the globe", along with 17 top Russian officials. Oleg Deripaska was explicitly sanctioned, as well as EN+ and Rusal due to his ownership (Deripaska was the majority owner in both EN+ group and SUAL).

Sanctions Restrictions

Deripaska was sanctioned under the “Specially Designated National” scheme, resulting in a blockage of all his assets, and, owing to his ownership and OFAC’s 50% Ownership rule, EN+ and Rusal were both sanctioned under the SDN scheme as well (Deripaska’s ownership in Rusal crossed the 50% threshold due to his ownership of SUAL as well), meaning any of their assets and transactions within US jurisdiction were blocked (Treasury, 2018a). This was different than the sectoral sanctions applied on the energy sector, whereby assets and transactions were not blocked but lending was restricted.

The designations specifically stated:

- ▶ “Oleg Deripaska is being designated pursuant to E.O. 13661 for having acted or purported to act for or on behalf of, directly or indirectly, a senior official of the Government of the Russian Federation, as well as pursuant to E.O. 13662 for operating in the energy sector of the Russian Federation economy. Deripaska has said that he does not separate himself from the Russian state. He has also acknowledged possessing a Russian diplomatic passport, and claims to have represented the Russian government in other countries” (Treasury, 2018a)
- ▶ “EN+ Group is being designated for being owned or controlled by, directly or indirectly, Oleg Deripaska, B-Finance Ltd., and Basic Element Limited. EN+ Group is located in Jersey and is a leading international vertically integrated aluminum and power producer” (Treasury, 2018a)
- ▶ “United Company RUSAL PLC is being designated for being owned or controlled by, directly or indirectly, EN+ Group. United Company RUSAL PLC is based in Jersey and is one of the world’s largest aluminum producers, responsible for seven percent of global aluminum production.” (Treasury, 2018a)

Deripaska’s assets were frozen, as were all of EN+ and Rusal’s assets that fell within U.S. jurisdiction, due to being blocked by SDN sanctions- according to Rusal’s lawyer at the time, “Rusal can’t pay in U.S. dollars and will face a technical default, even if they have cash. Because as soon as the payment is to be transferred, the U.S. bank will block that payment (Reuters, 2018d).

Further Restrictions on EN+ and Rusal included prohibition on “the divestiture or transfer of debt, equity, or other holdings,” “The exportation of goods from the United States” and “The unblocking of any property,” (Treasury, 2018- “GL 12”). A business wind down deadline was given until May 7, 2018 for withdrawing securities “necessary to divest or transfer debt, equity, or other holdings ... to a non-U.S. person, or to facilitate the transfer of debt, equity, or other holdings” (Treasury, 2018- “GL 13”) and until June 5, 2018 for concluding transactions “necessary to the maintenance or wind down of operations, contracts, or other agreements, including the importation of goods, services, or technology into the United States” (Treasury, 2018- “GL 12”).

Effects of Sanctions

Almost all of Rusal’s \$7.6 billion debt was dollar-denominated, making it difficult for the company to make repayments since the sanctions effectively cut off its access to the U.S. banking system and correspondent banks and creditors. Because Rusal was slapped with SDN rather than sectoral sanctions, any transactions at all involving U.S. financial jurisdictions, including all dollar-based payments, were blocked. Rusal thus risked technical default- according to Rusal’s lawyer at the time, The sanctions “may result in technical defaults in relation to certain credit obligations of the group” (Reuters, 2018d).

In the immediate aftermath, when markets opened on April 9th, 2018, Rusal shares dropped by 50% in the Moscow and Hong Kong stock exchanges:



(FT, 2018b).

Due to the amount of companies targeted at once in the Kremlin list sanctions, a micro-capital flight ensued - the MICEX index itself dropped by 8.5%. and the ruble slipped 4% against the dollar (FT, 2018b).

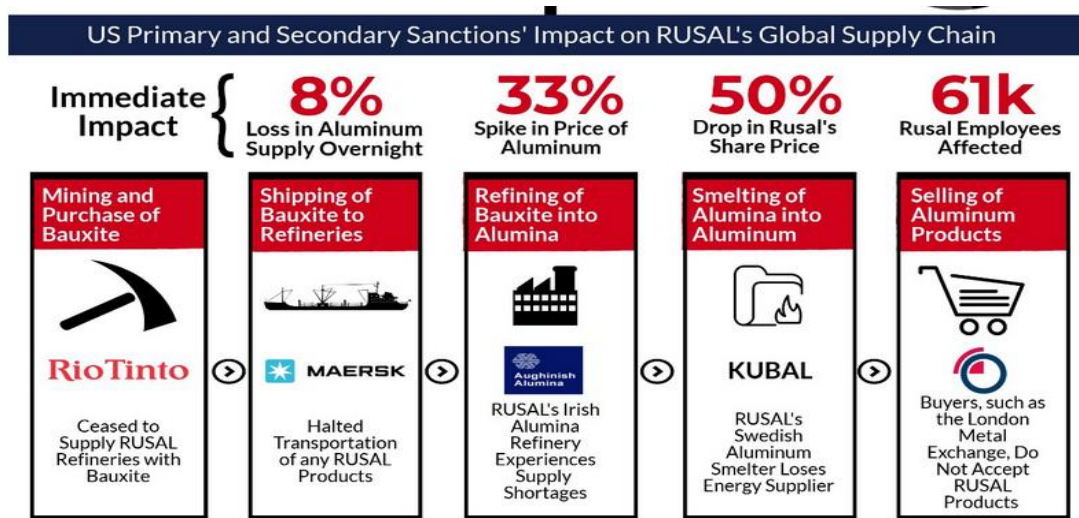


(FT, 2018b).

On the same day, The UK Financial Services Authority suspended EN+ Depository receipts, Rusal debt was removed from MarketAxess bond trading platform and the FTSE Russell's/ Bloomberg equity indices (Reuters, 2018c). Between April 11th and 13th, Rusal and EN+ shares were suspended from London Stock Exchange (LSE), London Metal Exchange (LME), Clearstream and Euroclear - all trading was frozen, and existing debt holders were stuck with their holdings (Reuters, 2018c). In short, all bond and debt issuance and trading was frozen.

Aluminum Industry Impact

Given Rusal's large market share and interdependence of global aluminum supply chains, the SDN sanctions on Rusal led to disruptions and supply shocks across the entire aluminum, alumina, and bauxite industries.

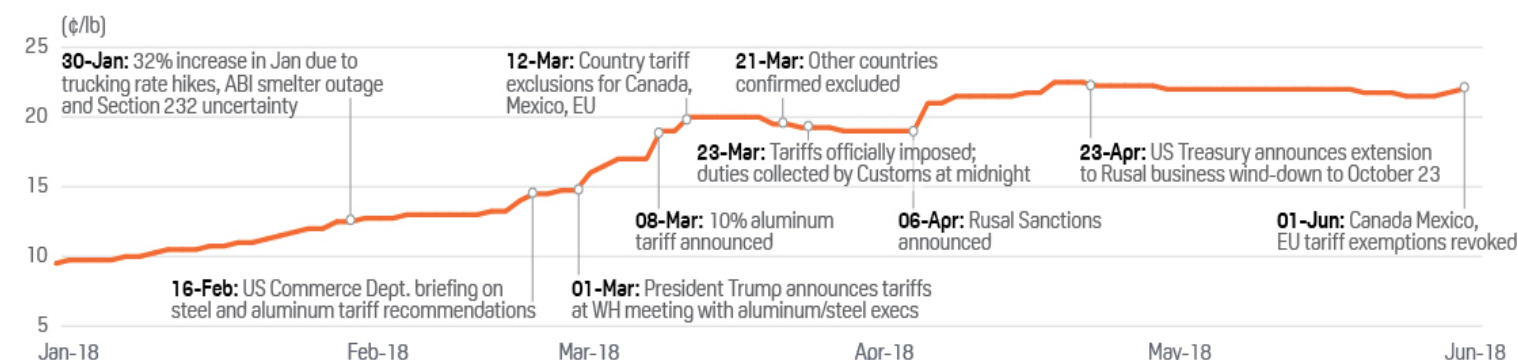


(Atlantic Council, 2018)

Aluminum supply chains across Europe were essentially ground to a halt, leading to stockpiling. Rusal had to shut down operations in its Aughinish Irish alumina refining plant due to not being able to receive payments, and stopped delivering alumina to Rio Tinto's Dunkirk aluminum smelter in France, Europe's biggest aluminum production facility - "Rusal's refining operations, which stretch from its Aughinish plant in Ireland to operations in Jamaica, are a vital cog in a global interlocking supply chain that's now been thrown into chaos" (Bloomberg, 2018c). Rusal declared force majeure on its shipments on April 11th, allowing it to leave contracts unfulfilled. Rio Tinto in turn stopped supplying Rusal with Bauxite ore, which was the core raw input for alumina refining (Bloomberg, 2018c). Rusal furthermore informed Trimet Aluminium it was halting alumina deliveries to the firm's smelter in the French Alps and three factories in Germany, in Essen, Hamburg and Voerde" (Reuters, 2018e)- Trimet was Germany's largest aluminum smelter, feeding Europe's largest automotive and manufacturing economy (Bloomberg, 2018c).

The supply shock caused Aluminum prices to jump by 25% when the markets opened on April 9th, from \$2000 to \$2500 per ton (Bloomberg, 2018c). The price calmed down later, but sanctions hit at a time when markets were already roiled from tariffs and production shortages. Prior to sanctions on Rusal, aluminum was caught in a tariff war between US, EU, Canada, and China, and the world's biggest alumina refinery, Norsk Hydro ASA's Alunorte plant in Brazil, was experiencing production cuts due to environmental leakage allegations in the Amazon river (Bloomberg, 2018c). Thus, sanctions on Rusal arguably could not have come at a worst time for the aluminum industry.

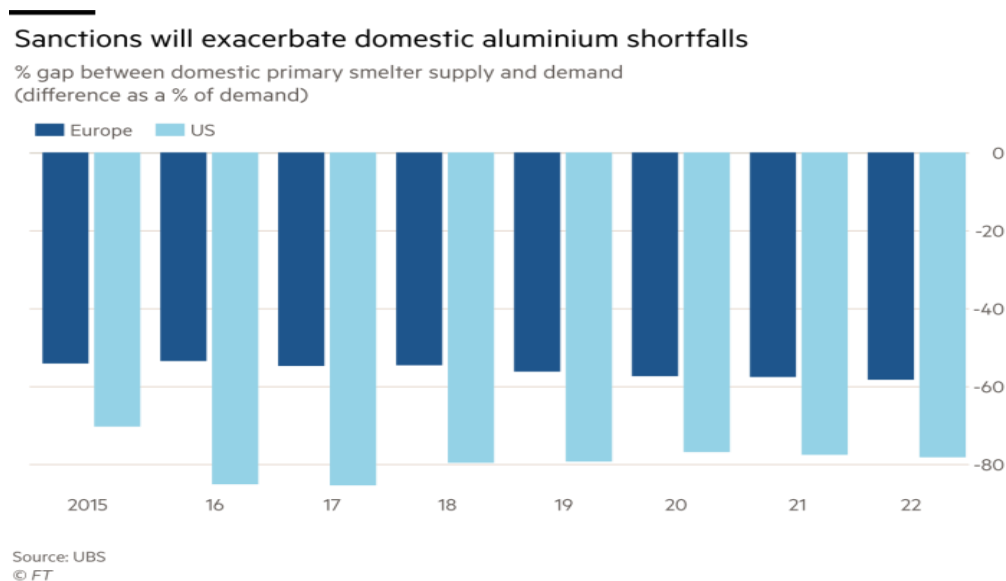
US ALUMINUM P1020 MIDWEST TRANSACTION PREMIUM: IMPACT FROM TARIFFS & SANCTIONS



Source: S&P Global Platts

As a result, the price rise did not help industry weather the supply shortages, as often happens in the oil industry- “the global chokepoint created by the sanctions means that many of the miners, refiners and smelters that should be benefiting from surging prices are actually facing challenges just to keep their operations running. For aluminum smelters, suspending operations is a worst-case scenario and restarting is very expensive” (Bloomberg, 2018c).

Rusal’s aluminum was hard to replace. Crucially, alumina and aluminum were not fungible commodities. Smelting plants were graded to the specific aluminum grain supplying them, and stringent certifications were required for alumina smelting. Chinese firms were the only ones with spare capacity, but offered lower quality and higher prices than Rusal, as they were new to the exporting scene (FT, 2018c). Changing suppliers took at least a year. Thus, alumina and aluminum refining plant shutdowns and production disruptions caused a significant aluminum supply shortage in both Europe and U.S. In 2017, 20% of European aluminum demand and 12% of U.S. demand (700,000 tonnes) were directly or indirectly imported by Rusal) adding to existing shortfalls due to production cuts and tariffs shown below (FT, 2018c and S&P Global, 2018ab).



(FT, 2018c)

Industrial Pressure on Treasury

In the days following the sanctions notice, heavy lobbying was pursued by both multinationals impacted by aluminum supply shortages and their countries’ governments.

Rio Tinto and Trimet complained directly to the U.S. Treasury, seeking a softening of the terms on Rusal (Reuters, 2018e). Boeing expressed concern to the U.S. government about shortages and rising aluminum prices. Auto giants Volkswagen and BMW complained about the impact of the sanctions on their businesses. The U.S. Carmakers Association and Aluminum Association raised concerns about the Rusal sanctions at meetings with the White House’s National Economic Council and the U.S. Trade Representative- “All made the same argument: a squeeze on the largest producer of aluminum outside China would hit businesses around the world, disrupting production of myriad goods from car and planes to cans and foil, and putting jobs at risk... in

addition to aluminum, carmakers were worried about a possible disruption to supplies of palladium, used in catalytic converters. Rusal doesn't produce palladium but it supplies soda to Norilsk Nickel, the world's biggest palladium producer" (Reuters, 2018e).

Furthermore, French, German, Irish and Italian governments also sought to convince Treasury of the impact of Rusal sanctions and sought to soften them. Rio Tinto contacted the French government and Trimet went to the German government, asking them to intervene with Washington (Reuters, 2018e). French Finance Minister Bruno Le Maire discussed the issue by phone with U.S. Treasury Secretary Steven Mnuchin in the days following the sanctions and then in person in the week of April 16, during IMF meetings in Washington - "We got in touch with the Americans as soon as it became clear there was an impact on some companies operating in France," adding that hundreds of jobs were at risk in France (Reuters, 2018e). Ireland's foreign ministry complained to the Treasury Secretary "after Dublin officials met Aluminium management on April 13 and were told the plant could shut down, threatening hundreds of jobs" (Reuters, 2018e). An Italian government source stated Rome also lobbied Washington to soften the sanctions - European governments "were worried the measures could lead to the closure of those plants and businesses in their countries that relied on Rusal supplies, and the potential loss of thousands of jobs. (Reuters, 2018e).

Result of External Pressure

The barrage of external pressure caused the U.S. Treasury to reconsider its initial hardline position. The Kremlin list Rusal sanctions were "supposed to be the toughest the United States has imposed on a listed Russian company since Moscow's 2014 annexation of Crimea" - the initial April 6th notice had given Rusal customers a deadline of 30 days to receive supplies from Rusal before dealings in dollars were prohibited - "Any individual or company that failed to comply would themselves face being shut out of the financial system, while the Treasury could seize any dollars paid to Rusal" (Reuters, 2018e).

However, after two weeks of relentless external pressure, the Office of Foreign Assets Control (OFAC) said it wanted to "mitigate the sanctions' impact on allies and industries that faced undesired collateral consequences" (Reuters, 2018e). On April 23, 2018, the U.S. Treasury eased restrictions on Rusal - OFAC "gave businesses six months instead of 30 days to wind down dealings with Rusal" - the wind down deadline was now October 23rd instead of June 5th and the divestment deadline was extended from May 7 to June 6th (Reuters, 2018e). This was the first of many deadline extensions to follow.

Crucially, Treasury furthermore offered Rusal an "olive branch" and said it "might lift the sanctions altogether if Deripaska ceded control of the company" (Reuters, 2018e). This olive branch was immediately seized upon by Rusal in devising its sanctions response strategy, as will be seen in the next section.

Treasury's announcement had an immediate market reaction, with aluminum prices falling as much as 10 percent from their spike after the April 6th sanctions (Reuters, 2018e).

Rusal's sanctions strategy

Rusal took the cue from Treasury and started working on a strategy of distancing itself from Deripaska. Rusal's first priority was to dis-associate from Deripaska, its founder who'd grown the business from its inception until that moment, as well as to demonstrate independent decision-making.

On May 24th, 2018, Deripaska resigned from both the Rusal and EN+ boards, which was followed by the resignation of all 7 EN+ appointed board members from the Rusal board (BBC, 2018 and FT, 2018j). Rusal released a statement explaining the resignation was made "In furtherance of the efforts that have been

made by the management of the group to protect the interests of the company and its shareholders since the OFAC Sanctions were imposed” (FT, 20118j). Shares climbed 7% in the Hong Kong stock exchange as a result (FT, 20118j). CEO Alexandra Bouriko, who was the former CFO under Deripaska appointed as his CEO replacement prior to sanctions in February, resigned as well, and was replaced by Evgeny Nikitin head of aluminum division (Telegraph, 2018). Glencore CEO Ivan Glasenberg Resigned from the a Rusal Board of Directors as well (Telegraph, 2018).

In response to these resignations, on June 1st Treasury extended the divestment deadline from June 5th to Aug 5th, 2018 (FT, 2018k).

Meanwhile, as a short term measure to maintain Rusal’s financial solvency, the Russian Finance Ministry offered Rusal support in the form of short term liquidity (specifically loans from Promsvyazbank, the state-owned bank specifically repurposed to finance sanctioned entities) (FT, 2018l) and later on in the year, allocated 10 billion rubles as a backup measure for state reserve aluminum purchases of 50,000 tonnes from Rusal (17% of its export value, should sanctions fail to be lifted (Reuters, 2018g).

The key difference in approach Rusal took from other sanctioned companies’ strategies is that Rusal did not count on state support for solvency but rather tried to indirectly work with OFAC. As the message of industrial impact was already conveyed by foreign governments and industrial giants alike, and Treasury had indicated its willingness to reconsider sanctions if Deripaska left Rusal, Rusal had to come up with an acceptable path to de-sanctioning itself which would be approved by Treasury.

Towards this end, Rusal engaged Lord Gregory Barker, the Chairman of the Deripaska’s En+ group holding the largest stake in Rusal and a former Tory MP, and Mercury LLC, a Washington DC – based lobbying group led by former Senator David Vitter (Bloomberg, 2019b).

Barker Plan

Lord Barker devised a multi-pronged proposal in June 2018 for rescuing Rusal from US Sanctions, and presented it to U.S. Treasury on July 5-12 in various iterations

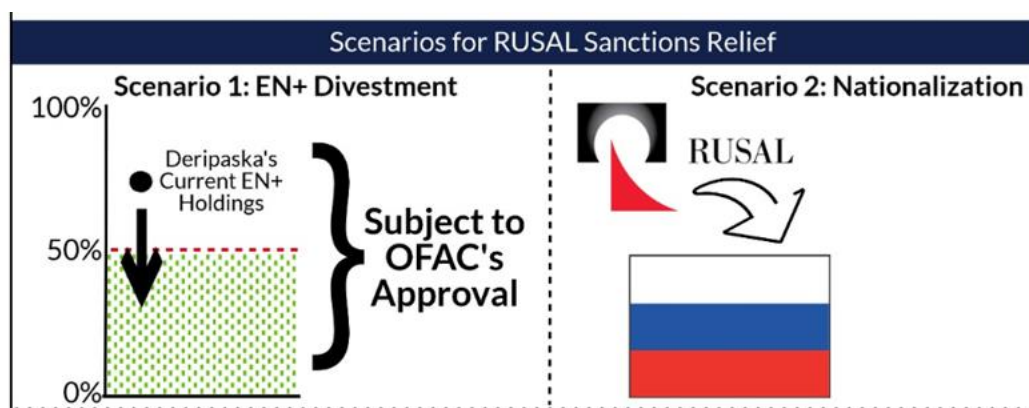
Components of the Barker Plan included:

- ▶ Oleg Deripaska reducing his En+ stake from 70% to 45%, resigning from the EN+ board, and being replaced by a “slate of independent board members” which Barker submitted on July 5th (Bloomberg, 2018d)
- ▶ Temporary transfer of Deripaska’s divested En+ shares to a VTB “blind trust” until sanctions are lifted, followed by selling the shares into the market to cover loans VTB had made to Rusal- VTB had been a key creditor to Mr Deripaska’s companies but ceased lending to EN+ in May (Bloomberg, 2018d)
- ▶ During the temporary period VTB would control shares, but voting rights would be controlled by two US citizens appointed by En+ “to help ameliorate concerns regarding the dispensation of certain En+ shares” (Bloomberg, 2018d)

Barker conveyed his plan through lobbying firm, Mercury LLC, to persuade the Treasury to drop sanctions against EN+ and Rusal if Deripaska would relinquish control. Barker asked for a temporary reprieve from U.S. sanctions for En+ and Rusal by Aug. 5 as the final phase of its plan- “Lord Barker and En+ are requesting that OFAC de-list En+, perhaps through the creation of a provisional, time-limited authorization to allow for

implementation of the final elements of the Barker Plan, on or before August 5,” according to the July 12th Treasury Dept filing Mercury LLC (Bloomberg, 2018d). August 5th was OFAC’s divestment deadline. Barker warned that any delay to lifting sanctions against EN+ and Rusal would be felt through the global aluminum industry, and the company would be at a “crippling disadvantage” if it remained on the sanctions list through August, as various transactions and regulatory approvals would need to happen “within the August-September time frame.” (Bloomberg, 2018d).

Using a carrot and stick approach, En+ accompanied its proposal with a warning it might consider a sale of Rusal to China or nationalization by the Russian government if it couldn’t secure a reprieve from the US. The July 12th filing stated “If the U.S. does not lift sanctions against it, En+ may look for “other avenues to resolve the current impasse... including being acquired by Chinese interests or nationalized by Russia...while the global aluminum market could see a repeat of the turmoil that followed the imposition of the sanctions in April” (Bloomberg, 2018d).



(Atlantic Council, 2018)

Results: Deadline Extensions

U.S. Treasury responded positively to the Barker plan, but did not immediately change its stance. On July 20th, eight days after the proposal was given, Treasury Secretary Mnuchin quipped in an interview with Reuters on the sidelines of the G20 summit “U.S. is open to lifting sanctions off aluminum giant Rusal... Our objective is not to put Rusal out of business” (Reuters, 2018f). Mnuchin acknowledged the Barker plan publicly and left the door open to interpretation of Treasury’s willingness to consider it- “the company has approached us on certain de-listing issues (from the Specially Designated Nationals List)...I’m not going to go into the exact specifics of what those proposals are and where we stand on them, but, yes, if we can find an acceptable solution, that is our objective” (Reuters, 2018f).

This off the cuff interview revelation with Reuters itself caused Rusal shares to jump 15% and aluminum prices to falls 7% simply on their own (FT, 2018h). Beyond those encouraging words, however, Treasury refrained from lifting sanctions against EN+ and Rusal, yet continued its pattern of deadline extensions. During the rest of 2018, divestment and business wrap up deadlines were extended four more times, in addition to the two extensions thus far.

On July 31st, Treasury extended the divestment deadline from the upcoming date of August 5, the sanctions relief date proposed in the Barker plan, to October 23rd (FT, 2018d). The *Financial Times* reported that “OFAC’s decision to extend the deadline, previously set for August 5, suggests that while Treasury

officials did not fully approve of the plan, they are willing to give Mr. Barker more time to develop it” (FT, 2018d). Thus, negotiations continued.

In September, it was reported that “Barker and his team of negotiators had all but reached a deal with the U.S. But the talks dragged on as U.S. politicians waited until after the mid-term elections in November to move forward with the deal” (Bloomberg, 2019b). Instead, Treasury offered two tweaks which reassures Rusal customers. On September 14th, OFAC released a statement allowing Rusal to sign new supply contracts with existing customers- “Transactions and activities that are not within the framework of a pre-existing agreement may be considered ‘maintenance’ if such activity is consistent with the transaction history between the person and the blocked entity before April 6 2018” (FT, 2018i). This announcement had the effect of “easing fears over its future output and raising hopes for a longer-term reprieve from sanctions” - Rusal’s Moscow-listed shares jumped 17.3 % on the news (FT, 2018i). On September 21st, the business wrap up and divestment deadlines were extended again from the earlier set October 23rd to November 12th (FT, 2018e)

On October 12th, the business wrap up and divestment deadlines were extended from November 12th to December 12th (FT, 2018f). In accompanying its extension, Treasury noted “EN+ and RUSAL have approached the US government about substantial corporate governance changes that could potentially result in significant changes in control. As the review of these proposals is ongoing, Office of Foreign Assets Control is extending the expiration date of related licenses until December 12” (FT, 2018f). Treasury was reportedly concerned about the VTB blind trust which the Barker plan proposed, but no modifications to the plan were agreed upon (FT, 2018f).

On November 9th, just after the midterm election the business wrap up and divestment deadlines were extended a final time from Dec 12th to January 9th, accompanied by a similar statement to the October one - “EN+, RUSAL, and GAZ are proposing substantial corporate governance changes that could potentially result in significant changes in control of these sanctioned entities. As the review of these complex proposals is ongoing, OFAC is extending the expiration date of related licenses until January 7” (FT, 2018g).

End Results

With the midterm elections over, Treasury finally moved to announce its intention to remove sanctions on EN+ and Rusal. On December 19, 2018, OFAC Director Andrea Gacki wrote a letter to Senate majority leader Mitch McConnell which stated “we wish to provide you with notification that Treasury intends to terminate the sanctions imposed on En+ Group plc (“En+”), UC Rusal plc (“Rusal”), and JSC EuroSibEnergo (“ESE”) in 30 days. En+, Rusal, and ESE have agreed to undertake significant restructuring and corporate governance changes to address the circumstances that led to their designation” (Treasury, 2018b) Treasury Secretary Mnuchin noted “Treasury sanctioned these companies because of their ownership and control by sanctioned Russian oligarch Oleg Deripaska, not for the conduct of the companies themselves... These companies have committed to significantly diminish Deripaska’s ownership and sever his control. The companies will be subject to ongoing compliance and will face severe consequences if they fail to comply.” (FT, 2018m).

Congress was then given 30 days to decide whether to approve the agreement. On January 14th, Democrat in the House of Representatives introduced a motion to maintain sanctions in opposition to Treasury’s notice- H.J.Res.30 “Disapproving the President’s proposal to take an action relating to the application of certain sanctions with respect to the Russian Federation” (Washington Post, 2019). Just before the vote, Minority Leader Chuck Schumer warned the Senate that providing sanctions relief “gives Vladimir Putin exactly what he wants at a time that Russia continues to run rampant over international norms, to meddle

in democratic elections, and to destabilize the world” (Washington Post, 2019). The House overwhelmingly passed the motion, 362 to 53, and it was sent to the senate. However, the measure was defeated on Jan. 16, “thanks in part to (senate majority leader) Mitch McConnell and strong lobbying efforts” (Washington Post, 2019).

A possible explanation for this was an unofficial deal Rusal had agreed to in which it would invest \$200 million at an aluminum rolling plant in Mitch McConnell’s district in Kentucky. Though not officially part of negotiations, Rusal agreed to take a 40 % stake in a new Ashland, Kentucky mill by Braidy Industries, which would be the largest new aluminum plant built in the US in nearly four decades (Washington Post, 2019). As part of the deal, Rusal would supply the new mill with 2 millions tonnes of its low carbon aluminium a year for the next decade, worth \$500 million, which the mill would roll into thin sheets and sell to car manufacturers in Michigan (FT, 2019c).

On January 27th, 2019, after the measure to block sanctions was defeated in the Senate, Treasury officially lifted sanctions against Rusal, EN+, and ESE. The terms of the de-sanctioning dramatically reduced Deripaska's control over the aluminum empire he built from former Soviet state-owned factories into the world's second-largest producer of aluminum:

- Oleg Deripaska's direct and indirect shareholding stake in EN+ was reduced from 70% to 45% with the 25% going to a VTB blind trust to be auctioned off.
- “Mr. Deripaska and VTB’s voting stakes will be handed to independent US nationals” (FT, 2018m).
- “Half of En+'s restructured board of directors will be comprised of U.S. or UK nationals and Rusal's current board chairman will step down” (Treasury, 2018b)
- EN+ and Rusal agreed to “unprecedented transparency by undertaking extensive, ongoing auditing, certification, and reporting requirements (Treasury, 2018b)
- “None of the transactions to be undertaken to divest Deripaska of his interests in these companies will allow Deripaska to obtain cash either in return for shares relinquished in, or from future dividends he may receive from, En+, Rusal, or ESE” (Treasury, 2018b)
- “Deripaska will remain sanctioned. All of Deripaska's property and interests in property, including entities in which he owns a fifty percent or greater interest, will remain blocked, and foreign persons will continue to be subject to secondary sanctions should they knowingly facilitate a significant transaction for or on behalf of Deripaska or entities in which he owns a fifty percent or greater interest” (Treasury, 2018b)

London Metal Exchange (LME) said it had lifted its suspension on storing Rusal-produced metal with immediate effect- “members may freely enter into contracts with Rusal and its affiliates,” which caused aluminum prices on LME to drop 1.4 % (Reuters, 2019d). Rusal Hong-Kong listed shares rebounded 9% on the lifting, their highest value since sanctions in April 2018 (Reuters, 2019d).

Financially, despite the chaos created in the 2nd quarter of 2018, Rusal was able to weather the rest 2018 relatively steadily, with 2018 revenues, gross profit, operating profit, and EBIT all exceeding 2017’s (even 2019’s revenue was lower):

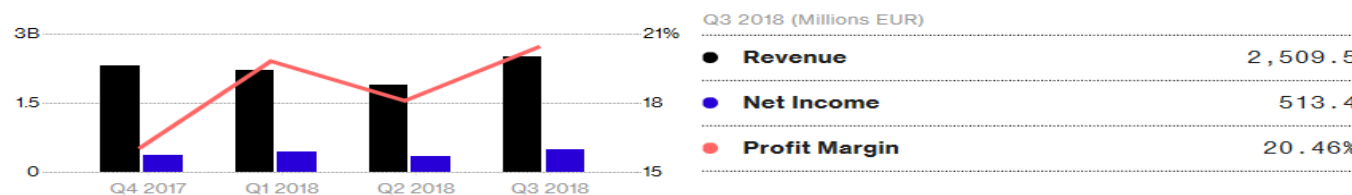
USD million (unless otherwise specified)	2019	2018	2017	2016	2015
Revenue	9,711	10,280	9,969	7,983	8,680
Adjusted EBITDA	966	2,163	2,120	1,489	2,015
Adjusted EBITDA Margin	9.9%	21.0%	21.3%	18.7%	23.2%
EBIT	87	1,481	1,523	1,068	1,409
Share of Profits from Associates and joint ventures	1,669	955	620	848	368
Pre Tax Profit	1,054	1,953	1,288	1,354	763
Profit	960	1,698	1,222	1,179	558
Profit Margin	9.9%	16.5%	12.3%	14.8%	6.4%
Adjusted Net(Loss)/ Profit	(270)	856	1,077	292	671
Adjusted Net Profit (Loss)/Margin	(2.8%)	8.3%	10.8%	3.7%	7.7%
Recurring Net Profit	1,273	1,695	1,573	959	1,097
Basic Earnings Per Share (in USD)	0.063	0.112	0.080	0.078	0.037

(Rusal, 2020)

Income Statement

Quarterly

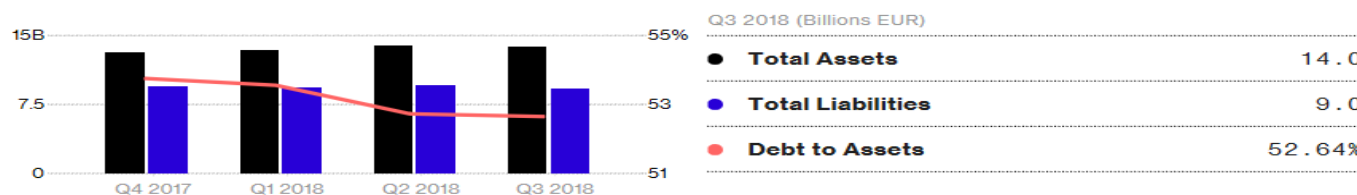
Annual



Balance Sheet

Quarterly

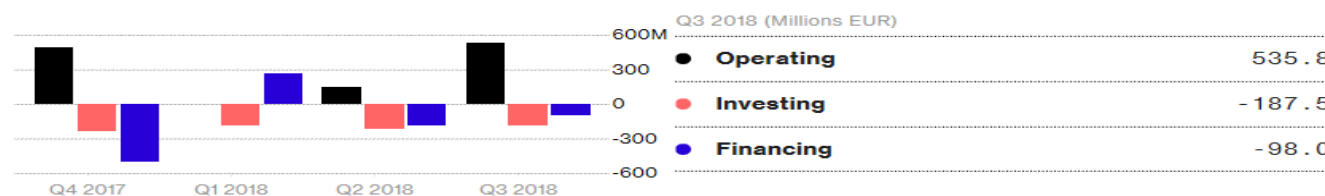
Annual



Cash Flow

Quarterly

Annual



(Bloomberg Terminal, 2018)

The Q3 recovery in spite of Rusal's sanctioned status was due to a combination of historically high market prices for aluminum, weaker ruble somewhat boosting export demand (Reuters, 2018h), Rusal's low

carbon aluminum brand and value-added products (aluminum alloys) taking a higher share of total output, (Rusal, 2019), Rusal's force majeure declaration allowing it to delay payments on its existing Eurobonds due in 2018 (Reuters, 2018d), issuing new \$1.5B of Eurobonds in January 2018 before sanctions (Rusal, 2019), eliminating dividends in 2018, and Rusal's 28% share in Norilsk Nickel undertaking metal stock sales and capital restructuring (Rusal, 2019). Rusal's Deliveries resumed in May after the first deadline extension, and the September allowance for new orders with existing customers helped pick up the pace on sales (Reuters, 2018h).

Analysis and Conclusions

Despite the initial slow pace of progress and relative recalcitrance shown by the Treasury department, the Barker Plan ended up being implemented, and Rusal was successful in its efforts to "de-sanction" itself. This was the first and most prominent case of Treasury willing to work with a major Russian enterprise, reversing the course of sanctions (and that too the harsh SDN sanctions) unlike other cases mentioned in this paper where more prominent lobbying failed to have any effect.

Rusal's strategy involved taking cues from Treasury statements to formulate the Barker plan, virtually excising Deripaska from direct or indirect control over his aluminum empire, appointing independent U.S. board members, and allowing Treasury unprecedented auditing transparency to guarantee the terms of de-listing.

Though the threat of Russian nationalization or Chinese takeover was accompanied with the Barker plan, this was not what persuaded the Treasury department to work with EN+ on a "one of a kind" joint de-sanctioning agreement. Rather, the relentless political and industrial pressure put on the Treasury department in the month following the April sanctions from entities ranging from foreign governments to domestic auto plants about the detriment to their operations from Rusal sanctions was too large to ignore. Even Russia hawk Anders Aslund, senior fellow at U.S. think-tank Atlantic Council, stated in May 2018, "They (the Treasury) destabilized the global aluminum industry. This is unprecedented and a massive over-reach" (Reuters, 2018e).

Rusal's status as the largest aluminum supplier outside of China was simply irreplaceable. Aluminum and alumina are not fungible commodities but rather graded with stringent certifications and tailored manufacturing specification, whereby changing suppliers takes at least a year. Even Rusal's competitor Rio Tinto's supply chain was dependent on alumina supplies from Rusal. Rusal supplied 20% of European and 12% of U.S. aluminum supplies, and Rusal's disruption meant an immediate halt in supplies and operational hurdles for the largest automotive and transport giants in Europe and U.S., causing risk of plant shutdowns and job losses if the disruptions continued. Furthermore, sanctions hit when aluminum markets were already roiled from tariffs and production shortages at Norsk Hydro's Brazil plant, the world's largest, reducing the scope for supplier substitution further.

Whereas industrial and political fallout put pressure on Treasury, it did not immediately give in to pressure and only allowed a slew of deadline extensions initially. Following through on the promised CAATSA sanctions on Russian oligarchs engaged in "malign activity," this reluctance served as leverage Treasury used to obtain terms favorable to U.S. from EN+ and Rusal. Deripaska's voluntary resignations from the board and replacement of his prior appointed boardmembers was not convincing for Treasury; the terms of de-sanctioning required Deripaska's stake in EN+ to remain blocked, at least half of EN+'s and Rusal's board of directors to be comprised of U.S. or UK nationals, Deripaska and VTB to relinquish voting stakes to independent US nationals, and unprecedented auditing, certification, and reporting to Treasury.

Finally, despite having EN+ agree in principle to its terms, Treasury waited until after the 2018 midterm elections to initiate the de-sanctioning process. Republicans feared the perception of being seen as “soft on Russia” and did not wish to let this become an opposition point in the midterm elections. However, after having lost control of the house in midterm elections, Republicans had a small window to act in the transition period before the new congress swore in. Mitch McConnell helped the senate narrowly defeat the House Democrat motion to block the de-sanctioning process, but did so in parallel with a seemingly under-the-radar \$200 million investment from Rusal at a new aluminum plant in his home district.

Thus, even though Treasury had in principle agreed to de-sanction Rusal due to industrial pressure, and the Barker plan had been agreed upon in principle before the elections, McConnell still enjoyed bargaining power after the elections before agreeing to support de-list Rusal. In its 2018 annual report, Rusal’s new CEO Evgeny Nikitin stated “*We are prepared to take any necessary actions, above and beyond what OFAC has required of the Company, to demonstrate the Board’s absolute commitment to transparency, accountability and good corporate governance, as we lead the business on to new achievements.*” (Rusal, 2019). The Kentucky investment deal and significant capitulation given of terms given to Treasury demonstrate the extent of the immense pressure EN+ and Rusal faced due to its sanctioned status, despite boosting its most profitable year in six years.

Fiscal Strategy Response

Background

Even before sanctions hit, a key priority for the Russian government was to insulate the economy out of its vulnerability to ups and downs in crude and natural gas prices. Traditionally, oil price were correlated with ruble exchange rates because of both oil revenue conversion from forex (received in dollars, converted to rubles) and foreign investment (including OFZ bonds, especially for Russian energy giants) rallies and pullouts correlated with oil prices:

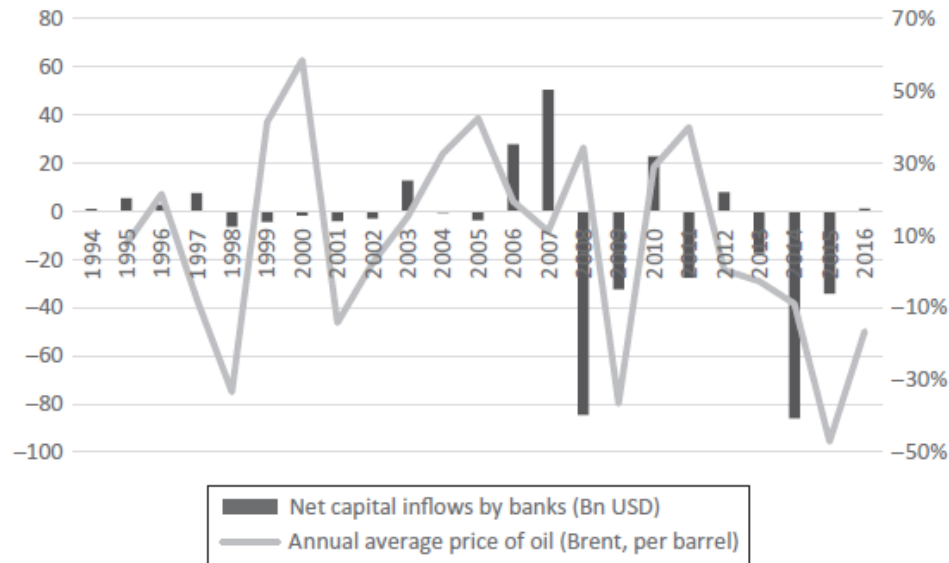


Figure 6.2 Annual change in crude oil prices and net private financial capital flows, 1994–2016 (net capital inflows by banks, billion USD on left axis; annual percentage change in annual average price of oil on right axis)

Source: Bank of Russia (2017); BP Statistical Review of World Energy (2017); author's calculations

(Connolly 2018, p. 164)



(Connolly 2018, p.174)

When crude fell off a cliff in late 2015 and Urals oil price dipped below \$40 a barrel, the ruble plummeted to its weakest level on record. With energy contributing to 40 % to budget income, the resulting purchasing power loss “gutted the finances of the government and households alike” in 2015 (Bloomberg, 2017b). Despite Russia and OPEC+ cuts to stabilize oil post 2017, the finance ministry warned “risks remain that it could again fall below \$40, with an equilibrium price seen between \$40 and \$50 over the next five to seven years” especially as US supply glut continued and demand weakened (Bloomberg, 2017b)– a prediction which later turned out to be the case in 2020.

During the dual crisis era of sanctions and low oil price from 2014-2018, pressure only increased on the Central Bank of Russia was to insulate devaluation pressures on the ruble, passed through as inflationary pressure on the economy, in order to carry on government operations and safeguard citizens’ purchasing power despite downward pressure on ruble from sustained low oil prices 2014-17 and continually increasing sanctions, as sanctions only accelerated capital flight. To counter-balance the revenue and investment cycles historically correlated with oil prices which traditionally drove ruble exchange rate, the government had to come up with a strategy to try to de-couple the ruble exchange rate from oil prices. In late 2016, it came up with a budget rule which attempted to do just that.

Overview of budget rule

The ruble-oil decoupling budget rule worked as follows: during periods of high oil prices, namely above \$40 / barrel, excess tax revenues were stored away in a special reserve part of the National Welfare called the Reserve fund and partially used to purchase forex reserves by selling rubles. During periods of low oil prices, below \$40 / barrel for an extended period, government can draw down its Reserve fund to finance the deficit and the excess forex reserves accumulated earlier were used to purchase rubles to prop up its value. Additionally, if the Reserve fund amount shrank below 5% of GDP, spending from it would be limited to 1 % of economic output a year, with the rest of the shortfall covered with borrowing or by reducing the non-oil deficit (Bloomberg, 2017b)

This anti-cyclical budget solution was meant to safeguard both fiscal and currency stability, to “saw the ruble-crude link apart in a bid to restrain swings” and “steer the economy through good times and bad” (Bloomberg, 2017b). Deputy finance minister Kolychev stated the importance of the new budget rule for insulating domestic conditions from external shocks: “we have to comply with the budget rule if we don’t want the ruble’s exchange rate, interest rates and the structure of prices to jump back and forth,” he said. “Now we are no longer just collecting revenue but also defending domestic conditions from volatility in oil” (Bloomberg, 2017b).

The Finance Ministry started implementing the rule in February 2017, following “a formula used to calculate monthly operations on the currency market in a mechanical way meaning there’s nothing discretionary about the volumes the Finance Ministry soaks up” (Bloomberg, 2017b).

Implementation, results, and sanctions roadblocks

During the first four months that the Central Bank (on behalf of the Finance Ministry) conducted its foreign-exchange purchases from February to May 2017, the ruble’s 30-day correlation with the price of Brent was reduced to 0.3, compared with 0.6 when the purchases began on February 7th, 2017, denoted by a circle in the graphic below (Bloomberg, 2017a).

Sanctions Strike

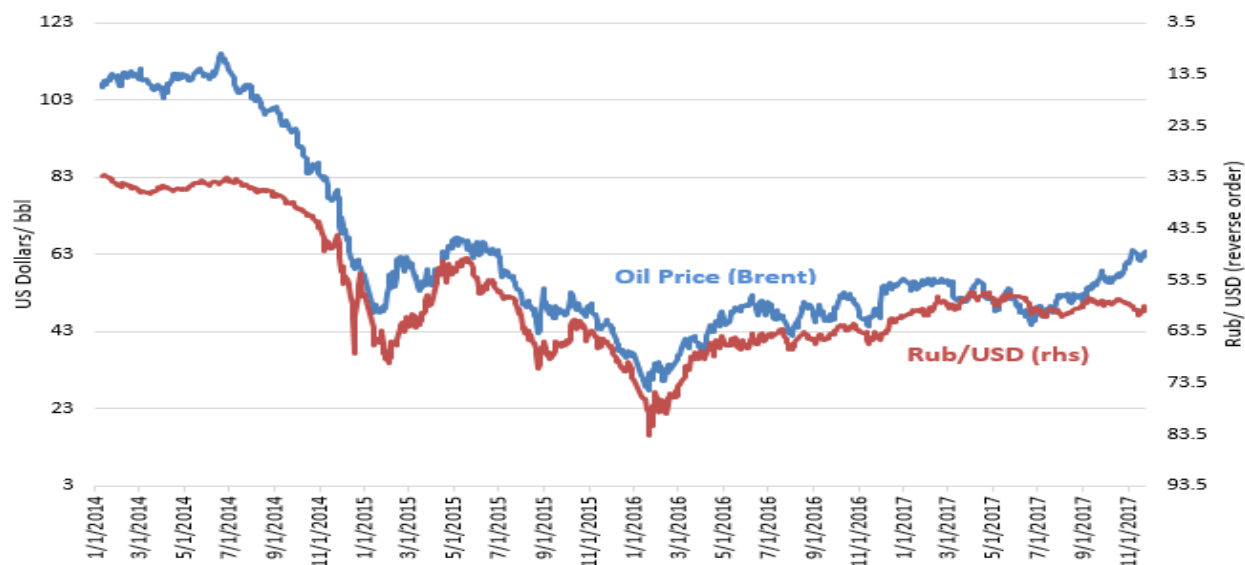
The ruble's correlation with oil is weakened by U.S. sanctions



Source: Bloomberg

(Bloomberg, 2017a)

After this initial success period, the ministry paused foreign exchange purchases for two months while still storing excess reserves; as a result the ruble-oil correlation started picking back up to previous levels again (Bloomberg, 2017a). Starting July 2017, purchases resumed again, and hence the correlation started declining again (Bloomberg, 2017a). Towards the end of 2017, as “Russia emerged from recession, with deepening macroeconomic stability a contributing factor...ruble and oil prices started diverging further since the rule became operational” (Sanghi, 2017). As oil prices rebounded at the end of 2017, the ruble value remained stable due to the excess forex purchases, which can be seen in the below chart compiled by the Chief Economist for World Bank Russia:



Source: Central Bank of Russia & World Bank staff calculations (Sanghi, 2017).

In early 2018, as oil prices continued their rally after an OPEC+ production cut deal, the foreign exchange purchases were not sufficient enough to temper the associated ruble appreciation, causing the ruble-oil correlation to pick back up again (Bloomberg, 2018a). However, in April 2018, the Kremlin list sanctions, the “toughest penalties yet on Russian companies as punishment for alleged elections meddling” weakened the ruble-oil correlation again suddenly - the ruble dropped a record 20% overnight despite a big rally in oil prices due to the number of critical parastatal enterprises sanctioned (Bloomberg, 2018a)

In the period following, until August 2018, to correct for this large depreciation, the Central Bank resumed foreign exchange purchases, and simultaneously started selling excess reserves to prop up the ruble as needed, with transactions averaging (10-20 billion rubles a day) (Bloomberg, 2018b). As a result, not only did the active intervention bring the ruble-oil correlation down again for an extended period, but ruble volatility also dropped 20% more than the previous year as the foreign exchange purchases limited fluctuations (Bloomberg, 2018a), which was the goal of the fiscal rule to begin with.

In August 2018, the risk of the “sanctions bill from hell,” which would have targeted Russian sovereign debt in its entirety, mounted before U.S. midterm elections, and made investors pull 500 billion rubles (\$7.5 billion) from local bonds despite crude blasting past \$80 per barrel (the highest level in four years), causing systemic depreciation pressure on the ruble again (Bloomberg, 2018a)

With capital flight putting pressure on the ruble value, the central bank suspended sales of rubles to purchase foreign exchange in an effort to steady the currency, helping pull it back from the lowest level in two

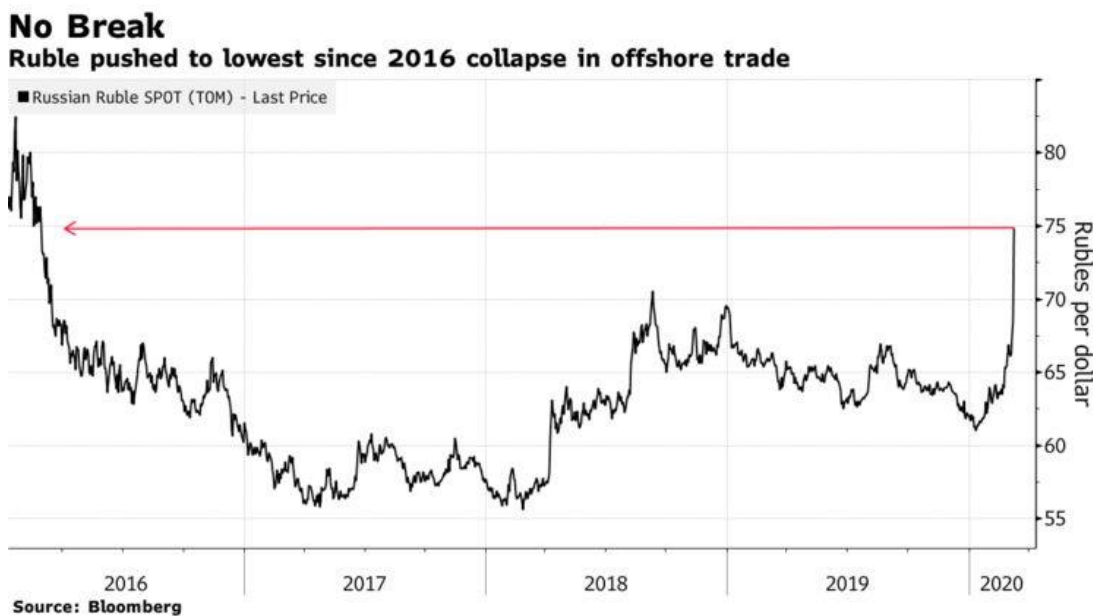
years. The central bank's announcement was the "first time the regulator has given a time frame for staying out of the market since the foreign-exchange-buying program began in early 2017. "This decision was made in order to increase the predictability of monetary authorities' actions and to reduce volatility on financial markets," the central bank said in a statement Thursday (Bloomberg, 2018b)

Because of the forex purchase pause, ruble depreciation slowed down but ruble-oil correlation resumed partly- "Even though the currency conversions are on hold, the Finance Ministry still squirrels away the oil windfall, pulling rubles out of circulation from the economy and taking some of the pressure off the exchange rate" (Bloomberg, 2018b)

Ruble support resumed in November 2018 after the previous hiatus, causing the ruble-oil correlation to dissipate again – "with oil charting its steepest drop in a decade, a comparable move in the ruble was nowhere to be seen....By the end of the month, the ruble had lost just 1.6 percent compared with Brent's 20 percent tumble" (Bloomberg, 2018b). Hence, the intended payoff of the ruble oil scheme was reached.

Budget Rule's Utility in Oil Price War

More recently, when oil prices dropped to decades-low \$20s-\$30s pbl (briefly even going "negative") in March 2020 due to the coronavirus shutdowns and Russia-Saudi price war, capital flight ensued, Russian bonds fell, and the ruble exchange rate initially collapsed to an almost all-time low of 75 per dollar (Bloomberg, 2020a).



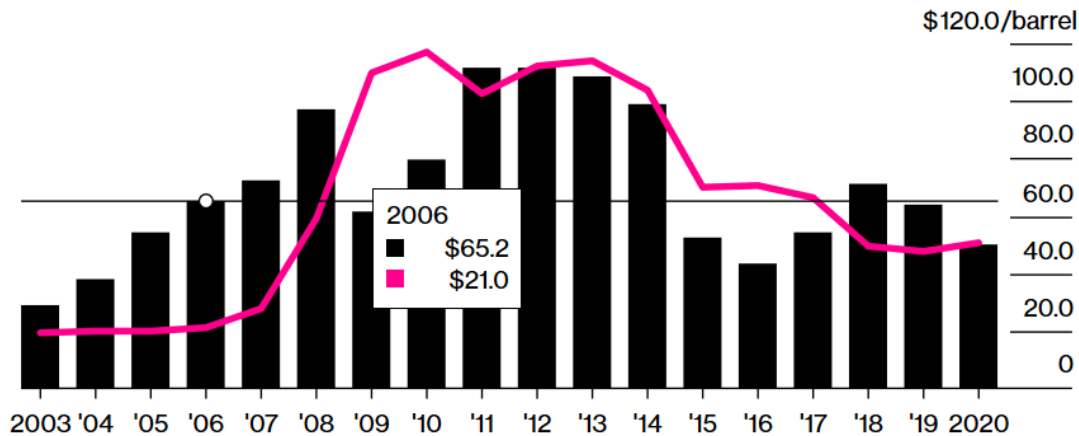
(Bloomberg, 2020b)

This time, the Central Bank of Russia not only paused foreign exchange purchases, but started proactive selling foreign exchange earlier than planned, with the oil price ceiling to activate the forex sales now widened to \$42.4 from the earlier \$40 pbl (Bloomberg, 2020a). The Central Bank stated "the decision to start the foreign-currency sales early is aimed at increasing the predictability of the actions of the monetary authorities and reducing volatility on financial markets amid significant changes in the world oil market" (Bloomberg, 2020a). To its credit, the implementation of the budget rule had helped lower Russia's break-even price of oil significantly:

Breathing Space

Russia's budget is better prepared for lower oil than six years ago

■ Actual oil price / Break-even oil price



Source: Nordea Bank

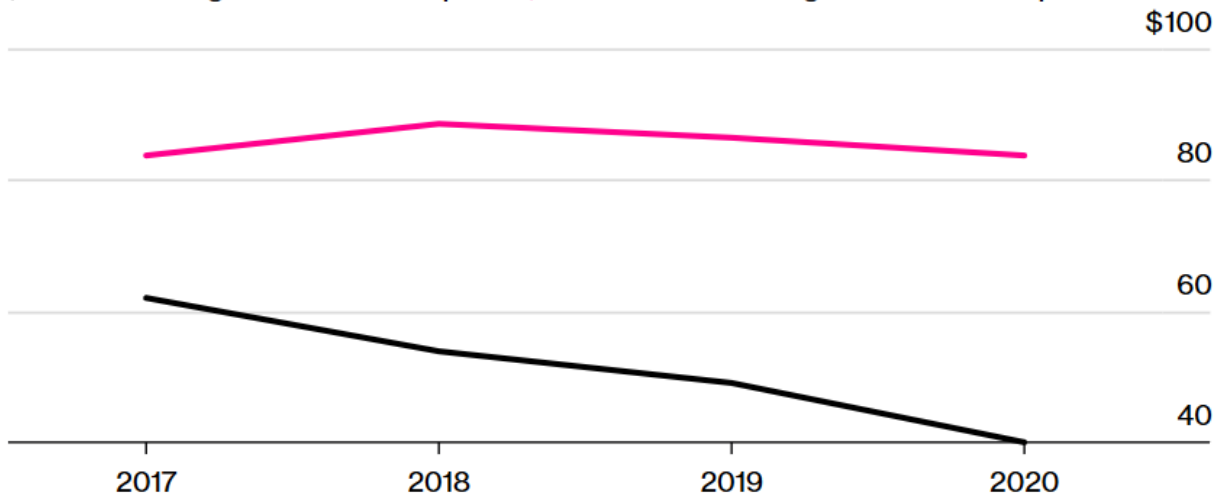
(Bloomberg, 2020a)

As a result, the Finance Ministry stated Russia's \$150 billion National Welfare Fund can "help the budget withstand a decade of crude prices as low as \$25 per barrel" (Bloomberg, 2020a). And thus, Russia was able to comfortably outlast Saudi Arabia in the price war, bringing it back to the negotiating table on April 9th to end the Saudi supply glut.

Making Do

The floating ruble helps Russia's budget to absorb price shocks

／ Russia's budget break-even oil price / Saudi Arabia's budget break-even oil price



Source: IMF for Saudi Arabia, IIF for Russia, for 2020 ruble assumed at 70/\$1

(Bloomberg, 2020a)

Analysis and Conclusions

In recent times, the budget rule designed to decouple ruble value from external shocks not only served its purpose, but also kept the Russian federal budget afloat during historically low oil prices and strategically gave Russia an upper hand in the price war that Saudi Arabia launched against it.

However, since its inception, the budget rule was not implemented in an even manner – both sanctions and sanctions threats caused a piecemeal deviation from the budget rule in order to support ruble value. In particular, the foreign exchange part of the budget rule was applied rather conservatively, and not actively pursued until recent months of historical oil price drops in the Russia-Saudi price war. Consequently, the ruble-oil correlation results followed a piecemeal up and down cycle as a result - neither the ruble value nor ruble-oil correlation ever remained “flat” as a result of the measures. In the end, however, the budget rule fulfilled its purpose – the forex purchase cycles did help maintain ruble stability (which also meant foregoing the traditional “rallies” with oil price) and reduce ruble volatility, serving as a buffer to better absorb external shocks during times of oil price drop and sanctions.

The ruble stability however came at a trade-off of government budget priorities – when the rule was formulated in 2017, former finance Minister Alexei Kudrin, who oversaw the creation of National Welfare Fund, was worried “The big danger is that we don’t support those areas that underpin the foundation of economic growth...The question is whether the country will be able to develop health care, education and infrastructure without an increase in spending,” (Bloomberg, 2017b). Kudrin suggested the crude-price cutoff at \$40 was “too tough,” with \$45 being a “reasonable compromise” (Bloomberg, 2017b). Indeed, the 2020 Russia-Saudi oil price war caused the oil price ceiling to activate the forex sales to be widened to \$42.4, proving that Russia was being too conservative early on.

Cross-Sector Insights and Conclusions

Summary of Strategies Pursued Across Sectors (with stated aim and reason behind success / failure)

Sector	Organization	Sanctions Strategy	Success	Aim	Reason
Financial	Min. Finance	Capital repatriation amnesties	Low	Maintaining liquidity (Prevent capital flight)	Offshore tax havens / lack of trust in Russian financial system
	NWF	Bailout / Recapitalizing state-owned banks	High	Maintaining liquidity	largest banks afloat, avoided bank panic
	Central Bank	Russification of smaller banks	Medium	Maintaining liquidity (De-risking)	Consolidated Risk
	Sberbank, VTB, VEB	Correspondent Accounts	High	De-coupling / Stability	State Coordination
	Promsvyazbank	“Sanctions Transaction” Bank / Exchange	Medium	De-coupling / Stability	“Lightning rod” which shielded other banks
	Central Bank	Alternative Payment Systems	High	De-coupling / Stability	Domestic adaptation
	VTB	Lobbying	Backfired	De-sanctioning	Deemed suspicious
SWF	RDIF	Co-investing partner assurance	High	Maintaining investments	Co-investing model
	RDIF	Lobbying	Backfired	De-sanctioning	RDIF added to SSIL
	RDIF	VEB separation	Waste	De-sanctioning	Nat'l security concerns
	RDIF	Intertwining with U.S. companies / allies' SWFs	High	Prevention of escalation	Co-investment blowback
Energy	NWF / Rosneft / Novatek	Bailout / Recapitalizing Energy Giants	High	Maintaining liquidity	Stayed afloat
	Rosneft / Gazprom	Demand Diversification - new deals and new pipelines	High	De-coupling / Stability	Large deals with China, Turkish Stream to S Europe
	Rosneft / Novatek	Joint Ventures – production / refining	High	De-coupling / Stability	Intertwined projects
	Rosneft / Gazprom	Oil Prepayments	High	Maintaining liquidity	Pre-existing agreements
	Novatek, Gazprom, Sibur	External financing from China	High	Maintaining liquidity	Mutually beneficial
	Rosneft, EDC	Stake Sales	Low	Maintaining liquidity	Sanctions / regulatory risk
	All energy firms	Import substitution	High	De-coupling / Stability	M&As, Asian technology substitution
Mining	Rusal	Re-organization (work with OFAC)	High	De-sanctioning	Industrial blowback
Fiscal	NWF, Min Finance	Fiscal Rule - Ruble-Oil Decoupling	Medium	De-coupling / Stability	Buffers stabilized ruble volatility

Sectoral insights summary – strengths and weaknesses of each sector

In the financial sector, the focus of sanctions response strategies was on resiliency, maintaining liquidity, and mitigating systemic risk. The parastatal nature of Russia's financial system enabled state intervention and coordination between commercial banks, the Central Bank, the Ministry of Finance, and prominent sanctioned enterprises. The sector was able to adapt quickly to the changing external environment and reorganize itself in a way that would not have been possible if the sector was operating more autonomously such as in the west. At the same time, the coordination of policies was not enough to prevent capital flight in spite of three generous capital repatriation amnesty schemes, demonstrating a systemic lack of trust in the Russian financial system by oligarchs impacted most by its policies. Furthermore, the large-scale "russification" of smaller banks came with the double-edged sword of de-risking the sector from liquidity leaks while widening government control, preventing crucial small-business lending out of de-risking, and undermining the Central Bank's role as an independent supervisor, thereby lowering investor confidence. Finally, attempted lobbying efforts by VTB to de-sanction itself backfired and resulted in harsher sanctions against VTB's chief.

RDIF on the other hand did not have to deal with as severe restrictions as sanctioned banks but rather maneuver in a sanctions grey zone, whereby it was stigmatized by sectoral sanctions but its coinvestments did not fall afoul of prohibited activity. RDIF maneuvered in this space by maintaining investor confidence on a global scale and intertwining its co-investments with sovereign wealth funds of U.S. allies, which factored into U.S. legislators' decision to not escalate sanctions against it. On the other hand, its lobbying and public relations efforts backfired in U.S., just like VTB's efforts. RDIF nevertheless attempted to create an image of distance between itself and the Russian state by separating itself legally from its parent development bank VEB, the *raison d'être* for sanctions against it, but this separation did not have any significant impact on its perception in either U.S. or abroad, and it remained on sectoral sanctions, though its co-investment model helped it circumvent restrictions on new debt and equity.

The energy sector thrived and expanded despite sanctions. Rather than relying mostly on state intervention like the financial sector, the energy sector was boosted by foreign capital, namely from China, serving as a much larger source of funds for initially struggling Russian energy giants which needed a financial lifeline and new demand sources. State support in securing large energy deals with Chinese buyers, which ultimately served as a larger volume savior of the sector in times of need, was as critical as state intervention via the Rosneft and Novatek's bond sale and import substitution program. Rosneft's myriad production and refining joint ventures and Gazprom's Turkish Stream and Power of Siberia pipelines both demonstrated successful energy distribution network intertwining as a means to mitigate financing and technological restrictions from energy sectoral sanctions. However, when relying on external capital as a financial lifeline, greater difficulties and strings attached were encountered by sanctioned entities. Stake sales helped smaller entities raise capital but not high profile sanctioned entities like Rosneft.

For Russia's mining sector, the very structure of the aluminum industry caused unprecedented damage to U.S. and European supply chains, forcing Treasury to reconsider sanctions on Rusal. Rusal's status as the largest aluminum supplier outside of China was simply irreplaceable, and aluminum and alumina were not fungible commodities. Hence Rusal's disruption meant an immediate halt in supplies and operational hurdles for the largest automotive and transport giants in Europe and U.S., causing risk of plant shutdowns and job losses if the disruptions continued. Rusal's strategy involved taking cues from Treasury statements to formulate the Barker plan, virtually excising Deripaska from direct or indirect control over his aluminum empire, appointing independent U.S. board members, and allowing Treasury unprecedented auditing transparency to guarantee the terms of de-listing. This persuaded Treasury to work with EN+ and Rusal on a "one of a kind" joint de-sanctioning agreement, albeit at a steep cost of ownership and governance control relinquishment.

Successes and Failures of Strategies

The strategies pursued by sanctioned Russian entities across sectors can be broadly categorized by their aim: 1) de-sanctioning, 2) maintaining liquidity / re-capitalization, 3) de-coupling from the west / maintaining stable operating conditions.

By far the only successful case of de-sanctioning was that of Rusal / EN+, as the other prominent de-sanctioning lobbying or kremlin-independence displaying efforts of RDIF and VTB bank backfired by arousing suspicion and resulted in an escalation of sanctions - VTB's CEO Andrey Kostin was slapped with SDN sanctions, whereas RDIF was explicitly added to the Sectoral Sanctions List after lobbying. However, what did help RDIF avoid an escalation of sanctions was its intricate co-investments which were intertwined with the sovereign wealth funds of some of U.S.'s closest allies.

Among strategies designed to maintain liquidity and re-capitalize sanctioned entities, the most successful strategies were direct bailouts, oil prepayments, external financing from namely Chinese sources in the energy sector, and RDIF's co-investing partner assurance; while the least successful strategies were capital repatriation amnesties due to both offshore tax incentives and a lack of trust in the Russian financial system, and Rosneft's attempted stake sales to QIA due to secondary sanction fears. The other strategy pursued towards maintaining liquidity, russification of smaller banks, worked for its stated purpose of de-risking the financial sector but came with severe consequences for Russian banks' lending abilities due to stakes consolidated by the Central Bank of Russia.

For strategies designed to de-couple from vulnerabilities in western financing and technology which could be exploited for sanctions, all strategies resulted in their stated objectives being met. The finance ministry was able to ensure relative ruble stability in spite of sanctions and low oil prices. The financial sector successfully maintained seamless operations in spite of sanctions through the correspondent account scheme, isolated sanctioned transactions and fundraising via Promsvyazbank, and was prepared for an escalation of banking sanctions from sectoral to blocking via the creation of alternative payment systems. The energy sector was able to diversify and consolidate demand to avoid geopolitically vulnerable chokepoints, implement a successful import substitution program and launch joint ventures with global partners to reduce dependency on historic western oil exploration technological partnerships.

Based on this, a SWOT matrix of Russia's sanctions response can be constructed, which may be useful to both Russian and U.S. policymakers when determining opportunities and weak points:

	Aiding Russia	Harming Russia
Internal to Russia	<u>Strengths</u> NWF bailouts and re-capitalization Correspondent accounts Alternative payment systems Import Substitution Ruble-Oil decoupling	<u>Weaknesses</u> Preventing capital flight Excessive russification Oil dependency – “demand hunger”
External to Russia	<u>Opportunities</u> External Financing Demand diversification / JVs Intertwining buffers Co-investments De-sanctioning working with Treasury	<u>Threats</u> Secondary Sanctions Fears Lobbying backfiring Sanctions on pipelines

Cross-sectoral comparative pattern recognition

When doing a comparison of similar strategies and measures across sectors, certain patterns can be discerned about factors behind their relative success:

Interdependence with U.S. and Allies’ interests

It can be clearly discerned that the more intertwined a designated entity’s operations were with both large American firms and U.S. allies’ interests, the more effectively blowback or collateral damage to intertwined entities served as a deterrent against sanctions. This was most prominent in the case of Rusal, whose supply dependency by American and European manufacturing was a push for deadline extensions and de-sanctioning, and RDIF, whose coinvestments with prominent U.S. allies’ sovereign wealth funds served as a deterrent to escalating sanctions against it.

Furthermore, Rosneft’s myriad production and refining joint ventures, and Gazprom’s Turkish Stream and Power of Siberia pipelines both demonstrated successful energy distribution network intertwining as a means to mitigate financing and technological restrictions from energy sectoral sanctions. However, as a counterexample to this, U.S.’s European allies’ interests, involvement, and investment did not serve as a deterrent in the case of Nord Stream 2, a project seemed so antithetical to U.S. interests despite blowback to Germany. The willingness to forego Germany’s interests was likely due to U.S.’s own competing interests in trying to obtain a greater share of the European LNG market, as well as the interests of Poland and Estonia, which were fearful of greater Russian energy dependency, thus preventing a “European consensus” from forming around the project.

Hence, collective blowback served as a greater deterrent than that on specific allies. This was also the case behind why, despite its intense lobbying efforts, VTB faced an escalation of sanctions from sectoral to SDN (against its CEO), whereas Sberbank did not. Multiple European allies had raised concerns to Treasury about the degree to which both Sberbank subsidiaries and Russian OFZ bonds were embedded in European financial networks and investment institutions respectively, and this concern was weighed during

congressional hearings on whether to escalate sanctions in the form of the “sanctions bill from hell” in August-September 2018 (GovInfo, 2018).

Coupling vs. Decoupling

At the same time, when the aim was not de-sanctioning but rather mitigating sanctions’ impact by reducing exploitable vulnerabilities, the merits of coupling vs decoupling depended on the sector.

In the financial sector, self-sufficiency, isolation, operating outside of the reach of western financial institutions and not depending on western technology were critical factors behind efforts to de-couple from vulnerabilities which could be exploited for sanctioning. The financial bailouts, correspondent account scheme, and alternative payment system design worked precisely because the Russian financial sector was not heavily intertwined with western lending institutions (barring subsidiaries).

In the public sector, the budget rule with foreign exchange purchases and sales was designed specifically to decouple the ruble from largely externally determined oil prices, and worked relatively well to ensure ruble stability and budget stability alike, but implementation was thwarted by intermittent sanctions and capital flight, thereby demonstrating the downsides of external vulnerabilities.

In the energy sector, decoupling helped with technological independence via import substitution but not so with capital requirements. Barring the one-time bond sale the Central Bank helped Rosneft with, Russian energy giants were made to rely on external rather than internal capital as a hedge against dried up western capital, as well as external partners for demand diversification and joint ventures. For a sector dependent on external demand for both its and the government budget’s survival, which ultimately drives “demand hunger” as a national security objective for the Russian state, decoupling was simply not possible.

Lobbying

When it came to lobbying, VTB and RDIF’s lobbying failed but Rusal’s direct engagement with OFAC worked. The industrial impact factor aside, this demonstrates that Treasury was far more amenable to negotiating with seemingly private entities than those deemed to be state-influenced. All three entities were sanctioned due to apparent “ties to the kremlin,” yet only Rusal was able to successfully demonstrate its independent decision-making, albeit at a steep cost of ownership and governance control relinquishment.

Internal vs. External capital

The bailouts from the National Welfare Fund were instrumental in serving as a savior of the financial and energy sectors- neither VTB nor Rosneft could have survived without the injection of bailout funds to maintain solvency at the height of the sanctions impact in 2014. In turn, VTB’s role was instrumental in maintaining stability by injecting critically needed capital in Rusal and Rosneft during times of peak crisis. The National Welfare Fund was also crucial in setting up the budget rule in order to ensure ruble stability.

However, in the energy sector, foreign capital, namely from China, served as a much larger source of funds for initially struggling Russian energy giants which needed a financial lifeline and new demand sources. In return for this lifeline, Russian energy giants sold considerable stakes to Chinese energy corporations and became more dependent on Chinese demand, finding themselves with no choice but to agree to unfavorable

terms when it came to pricing. When Rosneft attempted to diversify its financing by selling a stake to the Qatar Investment Authority (QIA), the difficulties it faced due to fears of secondary sanctions forced Russia's own VTB to lend the majority of funds involved to QIA. Thus, when relying on external capital as a financial lifeline, greater difficulties and strings attached were encountered by sanctioned entities.

On the other hand, RDIF successfully pursued a balanced operating model of co-investments, relying on half its own seed capital and half foreign capital for joint investments, thereby evenly spreading risk while not being beholden to terms of its investing partners.

Role of state intervention

State support and recapitalization of sanctioned entities were partially unique to the Russian context and partially in line with global anti-crisis measures.

Unique to the Russian context, the oil and gas sectors needed active state support to not only outlast sanctions, but prop up govt revenues and the National Welfare fund, the buffer behind the financial sector. Hence, state intervention not only directly aided the sector via the Rosneft bond sale and import substitution program, but more importantly, in securing large energy deals with Chinese buyers which ultimately served as a larger volume savior of the sector in times of need.

Furthermore, in line with global anti-crisis measures, the Russian state also needed to support and bailout the financial sector to prop up all other sectors dependent on banking services. This was enabled by centralized coordination for nearly all sanctions strategies pursued in the financial sector – capital repatriation amnesties, bailouts, russification of smaller banks, correspondent accounts scheme, special bank / exchange for sanctioned firms, and creation of alternative payment systems, none of which would have been possible had the Central Bank, Ministry of Finance, and Duma legislature not taken an active role in propping up the financial sector. Similarly, the ruble-oil decoupling budget rule involved active intervention by the state on the foreign exchange market to ensure relative ruble stability.

On the other hand, state intervention backfired when the state appeared to be helping with lobbying efforts. Both RDIF's and VTB's lobbying efforts included informal meetings organized by the Russian ambassador in Washington D.C. and Russian consulate in New York, which led to a sentiment of bribery-like impropriety at the State department. In turn, the respective lobbying efforts backfired and resulted in an escalation of sanctions (against VTB's CEO Andrei Kostin) or further scrutiny of transactions (against RDIF).

Thus, for maintaining liquidity and ensuring resilience, state intervention was critical, but when aiding de-sanctioning lobbying efforts, any semblance of state involvement was seen negatively as "kremlin manipulation" in the U.S and hence backfired.

Ownership changes

Sanctions resulted in ownership changes for Rusal, RDIF, Rosneft (including its subsidiaries), Sibur, and hundreds of independent smaller banks which were "russified."

Rusal and RDIF's ownership changes were specifically carried out to demonstrate independence from their problematic sanctioned owners. While Rusal's case succeeded in persuading treasury to consider de-

sanctioning it after the separation, RDIF's separation from VEB was largely seen as symbolic and did not have any material effects on sectoral sanctions against it. Thus, ownership changes were helpful in persuading Treasury only when prior terms were agreed upon.

In Rosneft and Sibur's case, stake sales were specifically designed in order to raise much-needed capital. Sibur succeeded in attracting Chinese capital by selling 10% stakes each to Sinopec and the Silk Road Fund, and Rosneft was able to sell a combined 49.9% stake in its subsidiary Vankorneft to Indian state-owned oil enterprises and a 20% stake of its subsidiary Verkhnechonsk to Beijing Gas Group Co. However, when Rosneft attempted to sell a 19.% stake in itself to QIA to raise capital, the fear of secondary sanctions drove traditional western financial backers away, thereby forcing VTB to fill the void instead. Thus, stake sales helped smaller entities raise capital but not high profile sanctioned entities.

Finally, the "russification" of hundreds of small private banks did de-risk the financial sector from liquidity leaks but prevented crucial small-business lending out of an abundance of de-risking, and undermined the Central Bank's role as an independent supervisor, thereby lowering investor confidence.

Conclusion

For a country heavily sanctioned across its critical sectors, Russia survived the worst of the impact by a series of coordinated strategies attempting to maintain operating conditions despite external pressure, re-capitalization, de-coupling from vulnerabilities, and de-sanctioning where possible.

Despite the capital flight and ruble depreciation following sanctions, Russia's prioritization of measures aimed at stability restoration helped avoid largescale inflation, bankruptcy and currency crises, allowing Russia to fare far better than compared to its oil producing sanctioned compatriots of Iran and Venezuela, albeit the latter were hit with more severe blocking sanctions more prevalently than Russia. In turn, the relative stability Russia experienced allowed it to maintain course on its foreign policy objectives, defying the very goal intended behind western sanctions.

Due to the parastatal nature of Russia's energy and financial sector enabling coordination between government and parastatal enterprises, measures to maintain liquidity and re-capitalize sanctioned entities, as well as measures designed to de-couple from vulnerabilities in western financing and technology were especially successful. In the financial sector, the state engineered direct bailouts, correspondent account schemes, isolating sanctioned transactions, and the creation of alternative payment systems. To ensure budget stability, the finance ministry was able to devise a scheme to maintain relative ruble stability in spite of sanctions and low oil prices. In the energy sector, the state was able to diversify and consolidate demand to avoid geopolitically vulnerable chokepoints, implement a successful import substitution program and launch joint ventures with global partners to reduce dependency on historic western oil exploration technological partnerships, and develop new sources of external financing, via oil prepayments and loans from namely Chinese sources. While the latter made Russian energy giants reluctantly agree to unfavorable pricing terms due to China's bargaining power and become prone to Chinese demand influence in the same way Eastern European countries were wary of Russian energy supply influence, the net benefit of new demand, large prepayments needed to pay off existing debt, and capital for new project infrastructure significantly outweighed the drawbacks for the Russian state.

However, the strategies in which the state had less control on the outcome, namely lobbying, capital repatriation amnesties and Rosneft's attempted stake sales to QIA, did not work as planned. By far the only successful case of de-sanctioning was that of Rusal / EN+, as the other prominent de-sanctioning lobbying or kremlin-independence displaying efforts of RDIF and VTB bank backfired by arousing suspicion and resulted in an escalation of sanctions (against VTB's CEO Andrei Kostin) or further scrutiny of transactions (against RDIF).

A lack of trust in the Russian financial system failed to stop capital flight, and the risk of secondary sanctions weighing heavily on traditional financiers of Rosneft prevented external capital flow to its high stake sale.

RDIF, on the other hand, was able to overcome systemic risk by its unique co-investing model. RDIF's intricate co-investments, intertwined with the sovereign wealth funds of some of U.S.'s closest allies, spread capital and risk evenly between itself and partner investors, thereby allowing it to continue attracting lucrative investments into Russia despite being subjected to sectoral sanctions. RDIF's successful co-investment model may serve as a helpful example of co-financing to sanctioned Russian firms in other sectors.

The insights from patterns observed across can be summed up as follows:

- The more intertwined a designated entity's operations were with both large American firms and U.S. allies' interests, the more effectively blowback or collateral damage to intertwined entities served as a deterrent against sanctions. The more non-fungible the commodity a sanctioned entity dealt with (e.g. aluminum) the greater the pressure on Treasury mounted.
- External contagion and collateral damage weighed more heavily on U.S policymakers when impacting a large number of allies and industries rather than a specific country, e.g. Germany.
- While state intervention was critical for maintaining liquidity and ensuring resilience, in de-sanctioning lobbying efforts any semblance of state involvement was seen negatively as "kremlin manipulation" in the U.S and hence backfired.
- Treasury was far more amenable to negotiating with seemingly private entities than those deemed to be state-influenced. Ownership changes were helpful in persuading Treasury only when prior terms were agreed upon.
- In the financial and public sectors, de-coupling aided Russia's sanctions mitigation scheme, whereas in the energy sector coupling with non-western powers (especially China) served as a savior of energy giants.
- Internal capital from the National Welfare Fund was crucial in maintaining resiliency in the financial and public sectors, and to a much lesser extent, the energy sector. VTB's role was instrumental in maintaining stability by injecting critically needed capital in Rusal and Rosneft during times of peak crisis
- In the energy sector, foreign capital, namely from China, served as a much larger source of funds for initially struggling Russian energy giants which needed a financial lifeline and new demand sources.

- However, when relying on external capital as a financial lifeline, greater difficulties and strings attached were encountered by sanctioned entities. Stake sales helped smaller entities raise capital but not high profile sanctioned entities like Rosneft.
- In the Russian economic ecosystem, state support in the energy sector was actively needed to not only outlast sanctions, but prop up government revenues and the National Welfare fund, the buffer behind the financial sector. State support in securing large energy deals with Chinese buyers, which ultimately served as a larger volume savior of the sector in times of need, was as critical as state intervention via the Rosneft bond sale and import substitution program.
- Energy revenues were helped by the “natural offset” of ruble depreciation and low oil prices “cancelling” out, thereby mitigating crisis impact. The budget rule also helped maintain ruble stability during swings in oil prices, albeit in a piecemeal rather than consistent manner.
- Excessive state intervention in the financial sector, namely aggressive “russification” of hundreds of small private banks designed to de-risk the sector and capital repatriation schemes to prevent capital flight, lowered investor confidence in the Russian financial sector, thereby becoming double-edged swords

The findings above can be used to modify the previous SWOT analysis by grouping strategies involving a financial component under the relative parameters of capital and sector coupling under which they thrived:

	De-coupled sector	Coupled sector
Internal Capital	<u>Strategies</u> Financial sector bailouts and re-capitalization Correspondent Accounts / Sanctions Bank / Alt Payment	<u>Strategies</u> Oil giant re-capitalization Import Substitution Ruble-Oil decoupling
External Capital		<u>Strategies</u> Energy - External Financing and Stake sales Demand diversification / JVs RDIF Co-investments

Hence, internal capital was crucial in de-coupling the financial sector, whereas the energy sector, inherently coupled with global demand, was aided by a combination of both external capital via Chinese oil prepayments, loans and stake sales, and internal capital in the form of Rosneft and Novatek bond sales and import substitution schemes. In RDIF’s case, the coupled nature of its co-investment scheme was critical in order to maintain external investments into Russia despite being subjected to sectoral sanctions.

The above patterns of factors determining the relative success of sanctions can be useful to both Russian and U.S. legislators to hone their future strategies or sanctions design, as well as businesses and investors navigating the Russian market amidst a sanction environment. As always, the outcome of the battle between a sanction or its counter-strategy will depend on understanding a combination of sectoral dynamics

and internal factors which go into the decision-making of the adversarial body, and this research hopes to have shed light into those dynamics from a neutral perspective.

Sources Cited

1. AI-CIO. 2014, September 2. "Russia Mulls Ring-Fencing SWF from Sanctions" <https://www.ai-cio.com/news/russia-mulls-ring-fencing-swf-from-sanctions/> Accessed May 2019.
2. Arctic Today, 2019, April 30. Malte Humpert. "China acquires 20 percent stake in Novatek's Arctic LNG 2 Project" <https://www.arctictoday.com/china-acquires-20-percent-stake-in-novateks-arctic-lng-2-project/> Accessed May 2020.
3. Astapenko, Aleksandra, et al. 2017, September 27. "Gosudarstvu prikhoditsya spasat' svoi banki" www.vedomosti.ru/finance/articles/2017/09/27/735465-gosudarstvu-spasat-banki Accessed January 2019.
4. Atlantic Council. 2018, May 18. Ole Moehr. "US Sanctions' Global Impact – A Case Study of RUSAL's Supply Chain" <https://www.atlanticcouncil.org/blogs/econographics/us-sanctions-global-impact/> Accessed May 2019.
5. Banco, Erin. 2018a, Aug. 30. The Daily Beast. "A Russian Sovereign Wealth Fund Is Trying to Make Elon Musk's Dream Come True" <https://www.thedailybeast.com/a-russian-sovereign-wealth-fund-is-trying-to-make-elon-musks-dream-come-true> Accessed May 2019.
6. Banco, Erin and Swan, Betsy. 2018b, Sep. 26. "Revealed: What Erik Prince and Moscow's Money Man Discussed in That Infamous Seychelles Meeting" <https://www.thedailybeast.com/revealed-what-erik-prince-and-moscows-money-man-discussed-in-that-infamous-seychelles-meeting> Accessed May 2020.
7. Bauomy, Jasmin. 2020, January 1. EuroNews. "TurkStream: Europe needs gas and Russia has it - the story behind that new pipeline" <https://www.euronews.com/2020/01/08/turkstream-europe-needs-gas-and-russia-has-it-the-story-behind-that-new-pipeline> Accessed May 2020
8. BBC News. 2018, May 25. "Oleg Deripaska resigns from Rusal amid US sanctions row" <https://www.bbc.com/news/business-44249933> Accessed December 2018.
9. Bershidsky, Leonid. 2015, January 15 "New Mr. Ruble Is Mr. Fixit of Russian Banks." www.bloomberg.com/view/articles/2015-01-15/new-mr-ruble-is-dr-doom-for-russian-banks Accessed January 2019.
10. Bloomberg. 2013, February 5. Jason Corcoran. "Russia Hires Goldman as Corporate Broker to Boost Image" <https://www.bloomberg.com/news/articles/2013-02-05/goldman-sachs-hired-by-russia-as-corporate-broker-to-boost-image> Accessed May 2019.
11. Bloomberg. 2014a, July 17. Vladimir Kuznetsov. "Rosneft Bonds Sink Most on Record as Sanctions Shut Debt Markets" <https://www.bloomberg.com/news/articles/2014-07-17/rosneft-bonds-sink-most-on-record-as-sanctions-shut-debt-markets> Accessed May 2020.
12. Bloomberg. 2014b, November 10. Stephen Bierman and Evgenia Pismennaya. "Rosneft Must Keep Hands Off Wealth Fund, Kudrin Says" <https://www.bloomberg.com/news/articles/2014-11-11/ex-finance-minister-says-rosneft-must-stay-away-from-state-fund> Accessed April 2020.
13. Bloomberg. 2014c, December 12. "Rosneft Gets Central Bank Help Refinancing \$7 Billion Loan." www.bloomberg.com/news/articles/2014-12-12/rosneft-s-10-8-billion-refinancing-driven-by-central-bank-cash Accessed April 2020.
14. Bloomberg. 2015, August 15. Martin Ritchie. "Hongqiao Gets to Top of the World and Sinks Most Since IPO" <https://www.bloomberg.com/news/articles/2015-08-31/china-hongqiao-gets-to-top-of-the-world-and-sinks-most-since-ipo> Accessed May 2020

15. Bloomberg. 2016, April 29. Stephen Bierman and Elena Mazneva. "Russia LNG Plant Gets \$12 Billion From China Amid Sanctions" <https://www.bloomberg.com/news/articles/2016-04-29/russian-lng-project-gets-12-billion-china-loans-amid-sanctions> Accessed May 2020
16. Bloomberg. 2017a, Dec 14. Jack Farchy and Elena Mazneva. "Russia Wins in Arctic After U.S. Fails to Kill Giant Gas Project" <https://www.bloomberg.com/news/articles/2017-12-14/russia-dreams-big-as-u-s-fails-to-kill-27-billion-gas-project> Accessed April 2020
17. Bloomberg. 2017b, May 31. Anna Andrianova and Evgenia Pismennaya. "Russian Currency War by Other Means Targets Ruble's Oil Link" <https://www.bloomberg.com/news/articles/2017-05-31/russia-wages-currency-war-by-other-means-to-untie-ruble-from-oil> Accessed February 2020.
18. Bloomberg. 2018a, December 5. Aine Quinn. "Piggy Banks and Punishment: How the Ruble's Oil Link Came Apart" <https://www.bloomberg.com/news/articles/2018-12-06/piggy-banks-and-punishment-how-the-ruble-s-oil-link-came-apart> Accessed February 2020.
19. Bloomberg. 2018b, August 23. Anna Andrianova and Alexei Anishchuk. "Bank of Russia Halts Ruble Slide by Stopping FX Purchases" <https://www.bloomberg.com/news/articles/2018-08-23/russia-central-bank-suspends-fx-buying-as-ruble-slides-further> Accessed February 2020.
20. Bloomberg. 2018c, April 17. Thomas Biesheuvel and Jack Farchy. "Russia Sanctions Throw Global Aluminum Industry Into Chaos" <https://www.bloomberg.com/news/articles/2018-04-17/russia-sanctions-throw-global-aluminum-supply-chain-into-chaos> Accessed December 2018.
21. Bloomberg. 2018d, July 25. Jack Farchy and Anna Baraulina. "En+ Ready to Implement Sanctions Relief Plan as Deadline Looms" <https://www.bloomberg.com/news/articles/2018-07-25/en-ready-to-implement-sanctions-relief-plan-as-deadline-looms> Accessed November 2018.
22. Bloomberg Terminal. 2018, Nov 1. "Rusal Quarterly Financial Results 2018" <https://www.bloomberg.com/news/terminal/P6YWRO6S972L> Accessed November 2018.
23. Bloomberg. 2019a, November 24. Olga Tanas, Anna Shiryayevskaya, and Dan Murtaugh. "How Russia-China Gas Pipeline Changes Energy Calculus" <https://www.bloomberg.com/news/articles/2019-11-25/how-russia-china-gas-pipeline-changes-energy-calculus-quicktake> Accessed May 2020
24. Bloomberg. 2019b, January 28. Jack Farchy and Yuliya Fedorinova. "How a British Lord Helped Push Trump to Lift Rusal Sanctions" <https://www.bloomberg.com/news/articles/2019-01-28/how-a-british-lord-helped-push-trump-to-lift-rusal-sanctions> Accessed May 2020
25. Bloomberg. 2020a, March 10. Natasha Doff and Aine Quinn. "Russia to Start Foreign Currency Sales After Ruble Wipeout" <https://www.bloomberg.com/news/articles/2020-03-10/bank-of-russia-to-start-foreign-currency-sales-after-oil-plunge> Accessed June 2020.
26. Bloomberg. 2020b, March 9. Andrey Biryukov. "Russia Readies Ruble Support As Currency Sinks in Offshore Trade" <https://www.bloomberg.com/news/articles/2020-03-09/russia-readies-ruble-support-as-currency-sinks-in-offshore-trade> Accessed June 2020.
27. Boussena, Sadek, and Catherine Locatelli. 2017. "Gazprom and the Complexity of the EU Gas Market: A Strategy to Define." *Post-Communist Economies* 29 (4): 549–564.
28. BP. 2019. "Country insight – Russia" <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/country-and-regional-insights/russia.html> Accessed April 2020
29. Bradshaw, Michael, and Richard Connolly. 2016. "Russia's Natural Resources in the World Economy: History, Review and Reassessment." *Eurasian Geography and Economics* 57 (6): 700–726.

https://www.tandfonline.com/doi/abs/10.1080/15387216.2016.1254055?src=recsys&journalCode=reg_e20 Accessed April 2020

30. Brown Rudnick LLP. 2018, August 17. "US Government Poised To Escalate Sanctions on Russia, With Some Likelihood of Implementing a Near Complete Trade Embargo"
<http://www.brownrudnick.com/alert/us-government-poised-escalate-sanctions-russia-likelihood-implementing-near-complete-trade-embargo/> Accessed January 2019.
31. Brown, Phillip. 2020, February 5. Congressional Research Service. "Oil Market Effects from U.S. Economic Sanctions: Iran, Russia, Venezuela"
https://www.everycrsreport.com/reports/R46213.html#_Toc31811398 Accessed May 2020.
32. Business Insider Markets. 2020, June 5. ROSNEFT OIL CO. 12-22 FLR Bond .
https://markets.businessinsider.com/bonds/rosneft_oil_company-bond-2022-ru000a0jt965 Accessed June 2020.
33. Caspian News. 2017, June 28. Mushvig Mehdiyev. "Russia Looks To Increase Gas Exports to Brazil"
<https://caspiannews.com/news-detail/russia-looks-to-increase-gas-exports-to-brazil-2017-6-23-53/> Accessed May 2020.
34. Cast.ru (via Bloomberg). 2019, July 15. <http://cast.ru/eng/comments/india-russia-seek-to-skirt-u-s-sanctions-threat-to-arms-deals.html> Accessed May 2020.
35. CEIC. 2018. "Russia Natural Gas Production: OPEC: Marketed Production"
<https://www.ceicdata.com/en/indicator/russia/natural-gas-production-opec-marketed-production> Accessed May 2020.
36. CEIC. 2019. "Russia Average World Price: Crude Oil: Urals: per 1 Barrel"
<https://www.ceicdata.com/en/russia/average-world-prices-crude-oil-export-price-crude-oil-export-duty/average-world-price-crude-oil-urals-per-1-barrel> Accessed April 2020
37. China Daily. 2016, Nov 9. "Rosneft sells 20% of huge field to Beijing Gas"
https://www.chinadaily.com.cn/business/2016-11/09/content_27316661.htm Accessed May 2020.
38. CNBC. 2018a, January 30. Natasha Turak. "US Treasury releases list of Russian oligarchs linked to Putin"
<https://www.cnbc.com/2018/01/30/us-treasury-releases-list-of-russian-oligarchs-linked-to-putin.html> Accessed May 2020.
39. CNBC. 2018b, Feb 23. "Russian magnate Deripaska to quit role as Rusal president"
<https://www.cnbc.com/2018/02/23/russian-magnate-deripaska-to-quit-role-as-rusal-president.html> Accessed May 2020.
40. CNN Money. 2015, June 9. "Putin pardons Russian tax exiles"
www.cnn.com/2015/06/09/news/economy/russia-offshore-cash-pardon/index.html Accessed May 2019.
41. Connolly, Richard. 2018. Russia's Response to Sanctions: How Western Economic Statecraft is Reshaping Political Economy in Russia. Cambridge: Cambridge University Press.
www.cambridge.org/9781108415026 ISBN 978-1-108-41502-6 Accessed January 2019.
42. Conroy, Bill. 2014, Nov 14. The Daily Beast. "Exclusive: Did This Manhattan Firm Help Shield a Russian Fund From Sanctions?" <https://www.thedailybeast.com/exclusive-did-this-manhattan-firm-help-shield-a-russian-fund-from-sanctions> Accessed May 2019.
43. CPI (Center for Public Integrity). 2018, May 31. "How a sanctioned Russian bank wooed Washington"
<https://www.pri.org/stories/2018-12-18/how-sanctioned-russian-bank-wooed-washington> Accessed May 2019.

44. CSIS. 2020, April 10. Antonio De La Cruz. "Rosneft's Withdrawal amid U.S. Sanctions Contributes to Venezuela's Isolation" <https://www.csis.org/analysis/rosnefts-withdrawal-amid-us-sanctions-contributes-venezuelas-isolation> Accessed April 2020
45. CyberPlat LLC. 2016. "Bank of Russia's system for transfer of financial messages (SPFS)" <https://cyberft.com/about/comprasion/spfs> Accessed December 2018.
46. CyberPlat LLC. 2017. "SWIFT, SPFS and CyberFT". <https://cyberft.com/about/comparison> Accessed December 2018.
47. Daily Mail. 2016, May 11. "Russian banker accused of being part of a Cold War-style spy ring in New York City pleads guilty to conspiracy" <https://www.dailymail.co.uk/news/article-3488293/Russian-banker-accused-Cold-War-style-spy-ring-New-York-City-pleads-guilty-conspiracy.html> Accessed May 2019.
48. Deloitte. 2015, October. "Russian Oilfield Services Market: Current State and Trends" www2.deloitte.com/content/dam/Deloitte/ru/Documents/energy-resources/2015-russian-oilfield-service-market-current-trends.pdf Accessed May 2020
49. Demirjian, Karoun. 2014, November 14. "Washington "Government bailouts — Russia's latest fad?" <https://www.washingtonpost.com/news/worldviews/wp/2014/11/14/government-bailouts-russias-latest-fad/> Accessed April 2020.
50. EIA: Energy Information Administration. 2015, August 6. "Russia is world's largest producer of crude oil and lease condensate" <https://www.eia.gov/todayinenergy/detail.php?id=22392#> Accessed April 2020
51. EIA: Energy Information Administration. 2017, Oct 31. Int'l: Russia. <https://www.eia.gov/international/analysis/country/RUS> Accessed May 2020.
52. Ellyatt, Holly. 2018, May 14. "Putin wants growth but we won't sacrifice stability, Russia's central bank governor says" CNBC. <https://www.cnbc.com/2018/05/24/putin-wants-growth-russias-central-bank-governor-says.html> Accessed December 2019
53. Forbes. 2014, Dec 26. Coppola, Frances. "The Great Russian Bank Bailout" <https://www.forbes.com/sites/francescoppola/2014/12/26/the-great-russian-bank-bailout/#367e966226ee> Accessed April 2020
54. Forbes. 2017, December 28. Kenneth Rapoza. "To Counter U.S., Russia Allows Gazprom To Sell LNG 'At Any Price'" <https://www.forbes.com/sites/kenrapoza/2017/12/28/to-counter-u-s-russia-allows-gazprom-to-sell-lng-at-any-price/#a56456a18ece> Accessed May 2020
55. FraudAid. 2011. "Other Wire Transfer Systems" [http://www.fraudaid.com/library/Wire Transfers/other-transfer-systems.htm#WESTERN](http://www.fraudaid.com/library/Wire%20Transfers/other-transfer-systems.htm#WESTERN) Accessed December 2018.
56. FT. 2014, September 21. Anne-Sylvaine Chassany and Henny Sender. "Russia's sovereign fund head struggles to stay above politics" <https://www.ft.com/content/f9b294ba-3ff2-11e4-936b-00144feabdc0> Accessed May 2020.
57. FT. 2015, Nov 25. Jack Farchy. "Rosneft's \$15bn financing beats sanctions" <https://www.ft.com/content/ed669468-935c-11e5-bd82-c1fb87b7af> Accessed April 2020.
58. FT. 2016, May 3. Jack Farchy. "Gazprom secures €2bn loan from Bank of China" <https://www.ft.com/content/ac5b1ee4-e159-11e5-9217-6ae3733a2cd1> Accessed May 2020.
59. FT. 2017, January 3. Jack Farchy. "Gazprom Neft Strives to Go It Alone in Russian Shale." <https://www.ft.com/content/993512c6-c609-11e6-9043-7e34c07b46ef> Accessed April 2020.
60. FT. 2018a, January 19. Henry Foy. "Moscow creates bank to help it avoid US sanctions" <https://www.ft.com/content/90c73fe4-fd15-11e7-9b32-d7d59aace167> Accessed August 2019.

61. FT. 2018b, April 9. Henry Foy and Miles Johnson. "Deripaska companies bear brunt of Russia sanctions fallout" <https://www.ft.com/content/1851fa26-3c09-11e8-b9f9-de94fa33a81e> Accessed April 2020.
62. FT. 2018c, April 23. Henry Sanderson and Neil Hume. "Aluminium groups warn Rusal sanctions risk smelter closures" <https://www.ft.com/content/a13dcc24-4489-11e8-803a-295c97e6fd0b> Accessed May 2020.
63. FT. 2018d, July 31. Henry Foy. "US extends sanctions deadline a third time for EN+, Rusal and Gaz Group" <https://www.ft.com/content/0c11840e-9503-11e8-b67b-b8205561c3fe> Accessed December 2018.
64. FT. 2018e, Sep 22. Henry Foy. "US delays imposition of sanctions on Deripaska's Rusal" <https://www.ft.com/content/71ca3200-be1b-11e8-8274-55b72926558f> Accessed December 2018.
65. FT. 2018f, Oct 12. Neil Hume. "US delays start date for sanctions on Deripaska's Rusal" <https://www.ft.com/content/2616733e-ce27-11e8-9fe5-24ad351828ab> Accessed December 2018.
66. FT. 2018g, November 9. Mamta Badkar. "US again extends sanctions deadline for Rusal" <https://www.ft.com/content/46cecf10-e45f-11e8-a6e5-792428919cee> Accessed December 2018.
67. FT. 2018h, July 22. Alice Woodhouse. "Rusal jumps after Mnuchin says US looking for sanctions relief" <https://www.ft.com/content/89948a04-8e21-11e8-b639-7680cedcc421> Accessed December 2018.
68. FT. 2018i, Sep 17. Henry Foy. "Rusal share price jumps after US sanctions concession" <https://www.ft.com/content/4058829e-ba51-11e8-94b2-17176fbf93f5> Accessed December 2018.
69. FT. 2018j, May 24. Edward White. "Deripaska resigns from board of sanctions-hit Rusal" <https://www.ft.com/content/43db5bae-5fb5-11e8-9334-2218e7146b04> Accessed December 2018.
70. FT. 2018k, May 31. Kadhim Shubber. "US extends sanctions deadline for EN+, Rusal and Gaz Group" <https://www.ft.com/content/0e6bcca0-6501-11e8-90c2-9563a0613e56> Accessed December 2018.
71. FT. 2018l, April 11. Henry Foy and Kathrin Hille. Russia ready to prop up Deripaska's Rusal as US sanctions bite <https://www.ft.com/content/4904f6d4-3d97-11e8-b7e0-52972418fec4> Accessed December 2018.
72. FT. 2018m, December 19. Courtney Weaver in Washington, Henry Foy in Moscow and Neil Hume in London. "US lifts sanctions on Oleg Deripaska-linked companies" <https://www.ft.com/content/3be0bc06-03b5-11e9-99df-6183d3002ee1> Accessed May 2020.
73. FT. 2019a, October 17. Martin, Katie and Seddon, Max. "Russia plans exchange for US-sanctioned companies to raise debt" <https://www.ft.com/content/9e21b2d6-f0ee-11e9-ad1e-4367d8281195> Accessed May 2020.
74. FT. 2019b, Dec 11. Nastassia Astrasheuskaya. "Japan lines up Russian Arctic oil investment" <https://www.ft.com/content/df288d08-1c14-11ea-9186-7348c2f183af> Accessed May 2020
75. FT. 2019c, April 15. Neil Hume. "Russia's Rusal plots first US investment since sanctions lifted" <https://www.ft.com/content/199925f6-5f46-11e9-b285-3acd5d43599e> Accessed May 2020
77. FT. 2020, January 28. Nastassia Astrasheuskaya. "Russia to go it alone on construction of Nord Stream 2 pipeline" <https://www.ft.com/content/a0f1b83c-41b4-11ea-bdb5-169ba7be433d> Accessed May 2020
78. Gabuev, Alexander. 2016, June 25. Foreign Policy. "China's Pivot to Putin's Friends" <https://foreignpolicy.com/2016/06/25/chinas-pivot-to-putin-friends-xi-russia-gazprom-timchenko-sinopec/> Accessed May 2020.
79. Gaddy, Clifford, and Barry Ickes. 2005. "Resource Rents and the Russian Economy." *Eurasian Geography and Economics* 46 (8): 559–583.
80. Gazprom. 2018, December 31. "Investors: Shares" <https://www.gazprom.com/investors/stock/> Accessed April 2020

81. Gazprom. 2020. "Foreign Partners: China" <http://www.gazpromexport.ru/en/partners/china/> Accessed May 2020
82. GovInfo. 2018, Sep 6. "OUTSIDE PERSPECTIVES ON RUSSIA SANCTIONS: CURRENT EFFECTIVENESS AND POTENTIAL FOR NEXT STEPS" <https://www.govinfo.gov/content/pkg/CHRG-115shrg32635/html/CHRG-115shrg32635.htm> Accessed May 2020.
83. Guardian. 2014a, Apr 28. Jennifer Rankin, and Alec Luhn. "Rosneft chairman added to US sanctions list" <https://www.theguardian.com/business/2014/apr/28/rosneft-chairman-us-sanctions-bp> Accessed May 2020.
84. Guardian. 2014b, May 21. "Russia Signs 30-year 400bn gas deal with China." <https://www.theguardian.com/world/2014/may/21/russia-30-year-400bn-gas-deal-china> Accessed May 2020.
85. Guriyev, Sergey. 2014, Dec 18. Moscow Times. "State Firm Bailouts Are Killing Russia's Ruble" <https://www.themoscowtimes.com/2014/12/18/state-firm-bailouts-are-killing-russias-ruble-a42435> Accessed April 2020
86. Henderson, James, and Tatiana Mitrova. 2016. Energy Relations between Russia and China: Playing Chess with the Dragon. Oxford: Oxford Institute for Energy Studies. <https://www.oxfordenergy.org/publications/energy-relations-russia-china-playing-chess-dragon/>
87. Henderson, James. 2017. Russian Oil Production Outlook to 2020. Oxford: Oxford Institute for Energy Studies. <https://www.oxfordenergy.org/publications/russian-oil-production-outlook-to-2020/> Accessed April 2020
88. Horwitz, Jeff and Braun, Stephen. 2014, Aug 31. USA Today. "Economic sanctions spare Western-tied Russian fund" <https://www.usatoday.com/story/money/business/2014/08/31/economic-sanctions-spare-western-tied-russian-fund/14822073/> Accessed May 2020.
89. IMF. 2017, December 5. "Russian Central Bank: The System Is Stable" www.imf.org/en/News/Articles/2017/12/01/na120517-russian-central-bank-the-system-is-stable Accessed December 2019.
90. IndiaTimes. 2015, December 18. "China's Silk Road Fund buys stake in Russian LNG project" <https://economictimes.indiatimes.com/news/international/business/chinas-silk-road-fund-buys-stake-in-russian-lng-project/articleshow/50235950.cms?from=mdr> Accessed May 2020.
91. IndiaTimes. 2017, May 31. "IOC, partners in talks to buy stake in Russia's Vankor field" <https://economictimes.indiatimes.com/industry/energy/oil-gas/ioc-partners-in-talks-to-buy-stake-in-russias-vankor-field/articleshow/58925580.cms?from=mdr> Accessed May 2020.
92. IndiaTimes. 2018, June 3. "India to import first Russian LNG tomorrow under long term deal" <https://energy.economictimes.indiatimes.com/news/oil-and-gas/india-to-source-1-5-billion-worth-of-lng-from-russias-gazprom-every-year-receives-first-shipment-today/64451322> Accessed May 2020.
93. Investopedia. 2015, Oct 5. "The 5 Biggest Russian Oil Companies" <https://www.investopedia.com/articles/markets/100515/5-biggest-russian-oil-companies.asp> Accessed April 2020
94. Investopedia. 2018, Oct 15. "The 5 Biggest Russian Natural Gas Companies" <https://www.investopedia.com/articles/markets/082615/5-biggest-russian-natural-gas-companies.asp> Accessed April 2020
95. Ivanova N., Lavrov S. 2019. "The Impact of Anti-Russian Sanctions Introduced by the U.S. on the Foreign Investment Activity of Russian Oil and Gas TNCs: The Lukoil and Rosneft Investment Strategy of Russian Oil and Gas TNCs During the Sanctions Period." *International Organisations Research Journal*,

- vol. 14, no 1, pp. 126–144 (in English). DOI: 10.17323/1996-7845-2019-01-08
<https://www.researchgate.net/publication/332867267> The Impact of Anti-Russian Sanctions Introduced by the US on the Foreign Investment Activity of Russian Oil and Gas TNCs The Lukoil and Rosneft Investment Strategy of Russian Oil and Gas TNCs During t
96. Japan times. 2017, Jul 14. "Japan-Russian oil exploration project meets with U.S. resistance"
<https://www.japantimes.co.jp/news/2017/07/14/business/japan-russian-oil-exploration-project-meets-u-s-resistance/#.Xukubed7nb0> Accessed May 2020
 97. Karaganov, Sergei. "The West's Unilateral Cold War." *Project Syndicate*. March 20, 2018.
<https://www.project-syndicate.org/commentary/west-and-russia-no-new-cold-war-by-sergei-karaganov-2018-03> Accessed August 2018.
 98. Kommersant. 2014, December 12. Yuri Barsukov. 'Rosneft' provela sekretnoye razmeshcheniye"
<https://www.kommersant.ru/doc/2631053> Accessed May 2020.
 99. Kramer, Andrew E. 2016, Jan. 22. "Russian Fund Under Scrutiny for Loan to Company Linked to Kremlin" <https://www.nytimes.com/2016/01/23/business/dealbook/russian-fund-under-scrutiny-for-loan-to-company-with-kremlin-ties.html#after-top> Accessed May 2019.
 100. Macro Trends. 2020. "Gazprom Revenue"
<https://www.macrotrends.net/stocks/charts/GZPFY/gazprom/revenue> Accessed April 2020.
 101. Masspoint LLC. 2015, August 7. "United States Adds Russian Direct Investment Fund, Other Russian Financial Services Actors to Sectoral Sanctions List"
<https://masspointpllc.com/publications/sanctions-anticorruption-moneylaundering-legal-analysis/amlsanctionsanti-corruption-publications/sectoral-sanctions-directive-1/> Accessed May 2019.
 102. Mau, Vladimir. 2017. *Russia's Economy in an Epoch of Turbulence*. New York: Routledge.
 103. Medevdev, Dmitri. 2016, January 26. Meeting of the Government Import Substitution Commission. <http://government.ru/en/news/21577/> Accessed May 2020
 104. Mehdiyeva, Nazrin. 2017. NATO Defense College. "When Sanctions Bite: Global Export Leadership in a Competitive World and Russia's Energy Strategy to 2035. Russian Studies Review"
<http://www.ndc.nato.int/news/news.php?icode=1014> Accessed May 2020
 105. Miller, Chris. 2018, May 14. "How Russia Survived Sanctions"
<https://www.fpri.org/article/2018/05/how-russia-survived-sanctions/> Accessed May 2020.
 106. Moscow Times. 2019, May 31. "Putin Signs Off on Extension of Capital Amnesty"
<https://www.themoscowtimes.com/2019/05/31/putin-signs-off-on-extension-of-capital-amnesty-a65822> Accessed January 2020.
 107. Movchan, Andrei. 2017. "Pamyati rossiyskikh bankov: kak perezagruzit' nerabotayushchuyu sistemu." RBK.ru <https://www.rbc.ru/opinions/finances/18/09/2017/59bf93dc9a7947cadd44a0b3> Accessed December 2019.
 108. Nabiullina, Elvira. 2014. "Letter from Central Bank"
www.cbr.ru/analytics/standart_acts/bank_supervision/423.pdf. Accessed May 2019.
 109. Neftgazovoi Informatsii. 2016, March 16. "Schetnaya palata RF sochla nedostatochnymi prinyatiye Minenergo mery po importozameshcheniyu. www.angi.ru/news.shtml?oid=2835240. Accessed May 2020
 110. Nikkei Asian Review. 2019, November 29. Dmitri Simes. "India-Russia ties deepen as energy partnerships grow" <https://asia.nikkei.com/Business/Energy/India-Russia-ties-deepen-as-energy-partnerships-grow> Accessed May 2020

111. NPR. 2019, December 2. Bill Chappell. "Russia Begins Sending Natural Gas To China As Putin And Xi Open New Pipeline" <https://www.npr.org/2019/12/02/784171826/russia-begins-sending-natural-gas-to-china-through-new-pipeline> Accessed May 2020.
112. OFAC. 2020. "Sanctions List Search" <https://sanctionssearch.ofac.treas.gov/> Accessed August 2020.
113. Oilcapital.ru. 2014, October 30. "Rosneft v sluchae okonchatel'nogo vykhoda Exxon iz proekta Karskogo morya ne budet iskat' partnera – Sechin." www.oilcapital.ru/company/255623.html Accessed May 2020
114. Orlova, Natalya. 2014.. "Financial Sanctions: Consequences for Russia's Economy and Economic Policy." *Voprosy Ekonomiki*. 2014;(12):54-66. (In Russ.) <https://doi.org/10.32609/0042-8736-2014-12-54-66> https://www.vopreco.ru/jour/article/view/729?locale=en_US Accessed December 2018
115. Panin, Alexander. 2014, Sep. 25. Moscow Times. "Facing Western Sanctions, Russia's LUKoil Asks Government for Oil Fields" <https://www.themoscowtimes.com/2014/09/25/facing-western-sanctions-russias-lukoil-asks-government-for-oil-fields-a39784> Accessed April 2020.
116. Picardo, Elvis. 2018, April 30. "How US & European Union Sanctions Impact Russia" *Investopedia*.. <https://www.investopedia.com/articles/investing/011515/how-us-european-union-sanctions-impact-russia.asp> Accessed July 6, 2018
117. PBS. 2014, Aug 29. "Russian fund with U.S. advisers eludes sanctions" <https://www.pbs.org/newshour/politics/russian-fund-u-s-advisers-eludes-sanctions> Accessed May 2019.
118. QZ. 2017, May 27. Max De Haldevang. "Sanctions, spies, and oligarchs: Putin's pet bank and its meeting with Jared Kushner" <https://qz.com/942624/sanctioned-veb-bank-handles-putins-pet-projects-has-close-ties-to-russias-security-services-and-met-with-trumps-son-in-law/> Accessed February 2019.
119. RDIF. 2014, July 31. "Press Release: Russian Direct Investment Fund's Statement" https://rdif.ru/Eng_fullNews/1098/ Accessed May 2019.
120. RDIF. 2015, July 7. "RDIF attracts major investment from the Middle East into the Russian economy: Saudi Arabia's sovereign wealth fund to commit USD 10 bn" https://rdif.ru/Eng_fullNews/1489/ Accessed May 2020.
121. RDIF. 2016, May 29. "Press Release: Duma deputies introduce bill to reorganize RDIF as state stock company" https://rdif.ru/Eng_fullNews/1660/ Accessed May 2019.
122. RDIF. 2020. "RDIF Partnerships" https://rdif.ru/Eng_Partnership/ Accessed May 2020.
123. Reuters, 2013a, June 21. Denis Pinchuk. "Rosneft to double oil flows to China in \$270 billion deal" <https://www.reuters.com/article/us-rosneft-china/rosneft-to-double-oil-flows-to-china-in-270-billion-deal-idUSBRE95K08820130621> Accessed April 2020.
124. Reuters, 2013b, June 21. "Trafigura joins Rosneft lenders with \$1.5 billion oil deal" <https://www.reuters.com/article/us-rosneft-deals-oil/trafigura-joins-rosneft-lenders-with-1-5-billion-oil-deal-idUSBRE95K0BF20130621> Accessed April 2020.
125. Reuters. 2014a, July 22. "Rosneft, other Russian firms face 2015 debt refinancing challenge-Moody's" <https://uk.reuters.com/article/russia-debt/rosneft-other-russian-firms-face-2015-debt-refinancing-challenge-moodys-idUKL2NOPX0R020140722> Accessed May 2020.
126. Reuters. 2014b, Dec 22. Lidia Kelly, Polina Devitt. "Top Russian oil firm Rosneft repays around \$7 billion in debt" <https://www.reuters.com/article/us-russia-crisis-rosneft-debt/top-russian-oil-firm-rosneft-repays-around-7-billion-in-debt-idUSKBN0K00NR20141222> Accessed April 2020.

127. Reuters. 2015, February 3. Gleb Gorodyankin and Dmitry Zhdannikov. "Exclusive: Rosneft raising money from Swiss trader as debt payment looms" <https://www.reuters.com/article/us-rosneft-funding-trafigura-exclusive-idUSKBNOL729N20150203> Accessed April 2020.
128. Reuters. 2016a, August 25. Vera Eckert, Oleg Vukmanovic. "Nord Stream 2 partners rework funding after joint venture collapses" <https://www.reuters.com/article/us-europe-russia-gas-pipeline/nord-stream-2-partners-rework-funding-after-joint-venture-collapses-idUSKCN1101LT> Accessed May 2020
129. Reuters. 2016b. Olesya Astakhova and Katya Golubkova. "Russian Oil Majors Raise Output of Hard-to-Recover Crude. September 26. www.reuters.com/article/us-russia-oilhard-to-extract-idUSKCN11W1JB Accessed May 2020.
130. Reuters. 2017a, June 1. "Russia, China, UAE funds agree Eurasia Drilling investment" <https://www.reuters.com/article/us-russia-edc-investments/russia-china-uae-funds-agree-eurasia-drilling-investment-idUSKBN18S6CP> Accessed May 2020
131. Reuters. 2017b, July 21. "UPDATE 2-Schlumberger buys Eurasia Drilling stake in test of Russia-U.S. ties" <https://www.reuters.com/article/eurasia-drilling-ma-schlumberger-idUSL5N1KC0OW> Accessed May 2020
132. Reuters. 2018a, April 13. Oksana Kobzeva. "U.S. sanctions will push Gazprom CEO into shadows: analysts" <https://www.reuters.com/article/us-russia-gazprom-miller/u-s-sanctions-will-push-gazprom-ceo-into-shadows-analysts-idUSKBN1HK2DT> Accessed May 2020.
133. Reuters. 2018b, November 9. Tatiana Voronova, Oksana Kobzeva, Dmitry Zhdannikov. "Exclusive: Russian state bank secretly financed Rosneft sale after foreign buyers balked" <https://www.reuters.com/article/us-rosneft-privatisation-exclusive-idUSKCN1NE132> Accessed May 2020.
134. Reuters. 2018c, April 13. "Actions taken on Russian firms by market institutions after new U.S. sanctions" <https://www.reuters.com/article/us-usa-russia-sanctions-companies-factbo/actions-taken-on-russian-firms-by-market-institutions-after-new-us-sanctions-idUSKBN1HK14V> Accessed May 2020.
135. Reuters. 2018d, April 10. "Sanctions expected to prevent Rusal from servicing Eurobond" <https://www.reuters.com/article/usa-russia-sanctions-rusal-eurobond/sanctions-expected-to-prevent-rusal-from-servicing-eurobond-idUSL8N1RM4TN> Accessed May 2020.
136. Reuters. 2018e, May 18. "How Rusal escaped the noose of U.S. sanctions" <https://www.reuters.com/article/us-usa-sanctions-rusal-insight/how-rusal-escaped-the-noose-of-u-s-sanctions-idUSKCN1IG3G6> Accessed May 2020.
137. Reuters. 2018f, July 20. "Exclusive: U.S. open to lifting sanctions off aluminum giant Rusal - Mnuchin" <https://www.reuters.com/article/us-g20-argentina-mnuchin-rusal-exclusive/exclusive-u-s-open-to-lifting-sanctions-off-aluminum-giant-rusal-mnuchin-idUSKBN1KA2VS> Accessed December 2018.
138. Reuters. 2018g, November 28. "Russia sets aside 10 billion rubles to buy aluminum" <https://www.reuters.com/article/us-rusal-government/russia-sets-aside-10-billion-rubles-to-buy-aluminum-idUSKCN1NX2FH> Accessed December 2018.
139. Reuters. 2018h, August 5. Diana Asonova and Donny Kwok. "Rusal profits surge despite U.S. sanctions" <https://www.reuters.com/article/us-rusal-results/rusal-profits-surge-despite-us-sanctions-idUSKBN1KR022> Accessed May 2020.
140. Reuters. 2019a, May 14. "Russia's top banks plot temporary sanctions workaround: sources" <https://www.reuters.com/article/us-russia-banks-accounts/russias-top-banks-plot-temporary-sanctions-workaround-sources-idUSKCN1QV22K> Accessed December 2019.

141. Reuters. 2019b, February 14. "Russia's Promsvyazbank is ready for any sanctions scenario – Interfax" <https://www.reuters.com/article/usa-russia-sanctions-promsvyazbank/russias-promsvyazbank-is-ready-for-any-sanctions-scenario-interfax-idUSR4N20802Z> Accessed May 2020.
142. Reuters. 2019c, December 31. "Factbox: Russia's oil and gas disputes with Belarus" <https://www.reuters.com/article/us-russia-oil-belarus-factbox/factbox-russias-oil-and-gas-disputes-with-belarus-idUSKBN1YZ0XW> Accessed May 2020.
143. Reuters. 2019d, January 27. Polina Ivanova and Patricia Zengerle. "Rusal shares soar, aluminum falls as U.S. lifts sanctions" <https://www.reuters.com/article/us-usa-russia-sanctions/rusal-shares-soar-aluminum-falls-as-u-s-lifts-sanctions-idUSKCN1PLOS1> Accessed May 2020.
144. RFE/RL. 2017, August 8. "Russia Steps Up Efforts to Cut Reliance on U.S. Dollar, Payments System." www.rferl.org/a/russia-steps-up-efforts-cut-reliance-us-dollar-visa-payments-system-mastercard/28664423.html Accessed December 2018.
145. RFE/RL. 2018, September 19. "A Timeline Of All Russia-Related Sanctions" <https://www.rferl.org/a/russia-sanctions-timeline/29477179.html> Accessed December 2018.
146. Rosgeo. 2015, February 23. Rosgeologia to Implement Measures towards Improving Operational Efficiency. <http://rosgeo.com/en/content/rosgeologia-implement-measures-towards-improving-operational-efficiency> Accessed May 2020
147. Rosneft. 2014, May 24. "Rosneft, Seadrill and North Atlantic Drilling Expand Cooperation" www.rosneft.com/news/pressrelease/240520143.html. Accessed May 2020
148. Rosneft. 2015a, March 4. "Rosneft declares about strong results for 2014" <https://www.rosneft.com/press/releases/item/174341/> Accessed May 2020.
149. Rosneft. 2015b, August 20. "Rosneft Closes the Transaction for the Acquisition of a Russian Oilfield Service Company from Trican Well Service Ltd." www.rosneft.com/news/pressrelease/20082015.html Accessed May 2020
150. Rosneft. 2016a. «Роснефть» приобретает 49% Essar Oil Limited <https://www.rosneft.ru/press/releases/item/184097/> Accessed May 2020
151. Rosneft. 2016b, Oct 15. "Press Release: Rosneft and ONGC Videsh Limited are completing the Preparation to Close the Deal for the Acquisition of an Additional stake of 11% share in Vankorneft JSC" <https://www.rosneft.com/press/releases/item/184105/> Accessed May 2020.
152. Rosneft. 2020. "Rosneft at a glance" https://www.rosneft.com/about/Rosneft_today/ Accessed May 2020.
153. RT. 2015, September 1. "Putin says dump the dollar" *Russia Today*. <https://www.rt.com/business/313967-putin-says-dump-dollar/> Accessed December 2018.
154. RT. 2016, September 26. "Russia's Mir credit card to go European" *Russia Today* <https://www.rt.com/business/360782-national-payment-mir-europe/> Accessed December 2018.
155. RT. 2017, May 23. "Russia's banking system has SWIFT alternative ready" *Russia Today*. <https://www.rt.com/business/382017-russia-swift-central-bank/> Accessed December 2018.
156. RT. 2018a, April 14. "Strategic Russian firm dumps SWIFT in favor of domestic bank transfer alternative" *Russia Today*.. <https://www.rt.com/business/424108-russia-rostec-swift-alternative/> Accessed December 2018.
157. RT. 2018b, Feb 13. "Russian banks ready to switch off SWIFT – official" *Russia Today*. <https://www.rt.com/business/418665-russia-banks-ready-shut-swift/> Accessed December 2018.
158. RT. 2019, Sep 11. "Russia to sell debt in Chinese yuan as Washington weaponizes dollar" . <https://www.rt.com/business/468544-russia-china-yuan-bonds/> Accessed May 2020.

159. RT. 2020, January 2. "Russia to launch stock exchange for sanctioned companies" <https://www.rt.com/business/475107-russia-sanctions-stock-market/> Accessed May 2020.
160. Rusal. 2018. "History" <https://rusal.ru/en/about/facts/> Accessed December 2018.
161. Rusal. 2019, April 29. "Annual Report: 2018" <https://rusal.ru/en/investors/financial-stat/annual-reports/> Accessed May 2020.
162. Rusal. 2020, March 31. "Annual Report: 2019" <https://rusal.ru/en/investors/financial-stat/annual-reports/> Accessed May 2020.
163. Russia Briefing, 2017, December. "President Putin Calls for 13 Percent Profits Tax on Repatriated Funds to be Scrapped". <https://www.russia-briefing.com/news/president-putin-calls-13-profits-tax-repatriated-funds-scrapped.html/> Accessed January 2019.
164. S&P Global. 2018a, February 5. "Threat of new US sanctions hangs over Russian banks as state stakes grow" <https://www.spglobal.com/marketintelligence/en/news-insights/trending/i0mfpbu9tgocifm8d2aupg2> Accessed December 2019.
165. S&P Global. 2018b, April 13. "Sanctions on Rusal to trigger 700,000-tonne aluminum shortfall in US" https://www.spglobal.com/marketintelligence/en/news-insights/trending/ugnnh5tae1qeftf_eluelg2 Accessed May 2020.
166. S&P Global. 2019a, April 23. "Russia could hand over sanctions-hit bank to Promsvyazbank" https://www.spglobal.com/marketintelligence/en/news-insights/trending/R_x9qD3CZApSTHc8YPqoXg2 Accessed May 2020.
167. S&P Global. 2019b, June 3. "Russian sanctions response hits energy cooperation: Fuel for Thought" <https://www.spglobal.com/en/research-insights/articles/russian-sanctions-response-hits-energy-cooperation-fuel-for-thought> Accessed May 2020.
168. S&P Global. 2019c, June 5. "Russia's Novatek inks preliminary deal to market LNG, gas in China" <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/060519-russias-novatek-inks-preliminary-deal-to-market-lng-gas-in-china> Accessed May 2020.
169. S&P Global. 2019d, Sep 4. "Russian Novatek signs MOUs with two Indian companies on LNG, gas" <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/090419-russian-novatek-signs-mous-with-two-indian-companies-on-lng-gas> Accessed May 2020.
170. S&P Global Platts. 2020, April 9. "As coronavirus roils commodity prices, time and perspective tell US aluminum market story" <https://blogs.platts.com/2020/04/09/us-aluminum-market-price-coronavirus/> Accessed June 2020.
171. Shestopal, Olga. 2015, Nov 26. "Правила игры: разбирает корреспондент отдела финансов Ольга Шестопал" Kommersant. <https://www.kommersant.ru/doc/2862321> Accessed May 2020.
172. Starinskaya, Galina. 2015, August 16. Vedomosti "Rosneft" pokupayet rossiyskiy biznes kanadskoy Trican" <https://www.vedomosti.ru/business/articles/2015/08/17/604984-rosneft-pokupaet-rossiiskii-biznes-kanadskoi-trican> Accessed May 2020
173. Statista (based on Rosneft Annual Reports). 2020. "Rosneft's revenue from FY 2010 to FY 2018" <https://www.statista.com/statistics/275777/rosneft-revenue/> Accessed May 2020
174. Stevens, Jordan. 2019, May 21. "Nord Stream 2 explained: What it is and why it's proving controversial" <https://www.cnbc.com/2019/05/21/nord-stream-2-explained-what-it-is-and-why-its-proving-controversial.html> Accessed May 2020
175. Szubin, Adam. "Sanctions 101, Part II of II: Enforcement and Effects" *US Dept of Treasury OFAC*. June 2, 2014. <https://www.treasury.gov/connect/blog/Pages/Sanctions-101-Pt-2-.aspx> Accessed July 2018

176. TASS News Service. 2014a, November 19. "Russia's parliament approves anti-offshore legislation" <https://tass.com/economy/760557> Accessed December 2019.
177. TASS News Service. 2014b, Sep 10. "Russia, China in talks to make alternative to SWIFT — deputy PM" <http://tass.com/economy/748916> Accessed December 2018.
178. TASS News Service. 2014c, May 21. "Gazprom to receive \$25 billion prepayment for gas supplies to China" <https://tass.com/economy/732511> Accessed May 2020.
179. TASS News Service. 2015, May 26. "Amnesty on capital is good news, but yield may prove lower than expected" <https://tass.com/opinions/785160> Accessed December 2019.
180. TASS News Service. 2018, May 3. "Schlumberger, Eurasia Drilling Company deal review extended due to sanctions" <https://tass.com/economy/1002790> Accessed May 2020.
181. TASS News Service. 2019, June 24. "Shell explains why it withdrew from Baltic LNG project with Gazprom" <https://tass.com/economy/1065298> Accessed May 2020.
182. Telegraph. 2018, May 25. Jon Yeomans. "Oleg Deripaska quits Rusal board with immediate effect as sanctions take their toll" <https://www.telegraph.co.uk/business/2018/05/24/rusal-boss-seven-directors-quit-sanctions-take-toll/> Accessed May 2020.
183. Telegraph. 2020, 18 February. Rachel Millard. "BP under pressure over Rosneft stake" <https://www.telegraph.co.uk/business/2020/02/18/oil-giant-bp-growing-pressure-rosneft-stake-amid-us-sanctions/> Accessed May 2020.
184. Topalov, Aleksei. 2014, August 15. ExxonMobil vygnali s Sakhalina. www.gazeta.ru/business/2014/05/15/6034441.shtml Accessed May 2020
185. Treasury Dept. 2018a, April 6. "Treasury Designates Russian Oligarchs, Officials, and Entities in Response to Worldwide Malign Activity" <https://home.treasury.gov/news/press-releases/sm0338> Accessed May 2020
186. Treasury Dept. 2018b, December 19. "Notice of Intended Removals; Ukraine-/Russia-related Designations; Cyber-related Designations" https://www.treasury.gov/resource-center/sanctions/OFAC-Enforcement/Pages/20181219_33.aspx Accessed May 2020
187. Troyanov, Cyril et. al. 2018, May "Renewed tax amnesty in Russia – analysis of the new rules" <https://www.altenburger.ch/current/newsletter/renewed-tax-amnesty-in-russia-analysis-of-the-new-rules> Accessed January 2020.
188. Turak, Natasha. 2018, May 23. CNBC. "Sanctions are a 'ridiculous thing' and companies are still happy to invest in Russia, sovereign wealth fund chief says" <https://www.cnbc.com/2018/05/23/sanctions-are-ridiculous-companies-still-investing-in-russia--rdif.html> Accessed May 2019.
189. Turak, Natasha. 2019, Oct 13. CNBC. "Russian wealth fund chief points to Saudi Arabia as a precedent for repairing relations with the US" <https://www.cnbc.com/2019/10/13/rdifs-dimitriev-saudi-arabia-a-precedent-for-fixing-us-russia-relations.html> Accessed May 2019
190. UA Wire. 2020, February 25. "\$190 billion withdrawn from Russian as capital amnesty program comes to an end" <https://uawire.org/190-billion-withdrawn-from-russian-as-capital-amnesty-program-comes-to-an-end> Accessed May 2020.
191. UPI. 2015, June 9. "Putin offers amnesty to Russians who repatriate offshore money" https://www.upi.com/Top_News/World-News/2015/06/09/Putin-offers-amnesty-to-Russians-who-repatriate-offshore-money/1211433879901/ Accessed May 2019.
192. VOX EU. 2015. February 25. Lutz Kilian. "Why did the price of oil fall after June 2014?" <https://voxeu.org/article/causes-2014-oil-price-decline> Accessed May 2019.

193. Wall Street Journal. 2015, January 22. " Alexander Kolyandr and Gregory L. White. "Russia's VTB Hurt by Sanctions, Interest Rates." <https://www.wsj.com/articles/russias-vtb-hurt-by-sanctions-interest-rates-1421933722> Accessed May 2019.
194. Wall Street Journal. 2016, May 3. James Marson and Andrey Ostroukh. "Gazprom Secures \$2.17 Billion Loan From Bank of China" <https://www.wsj.com/articles/gazprom-secures-2-17-billion-loan-from-bank-of-china-1457017070> Accessed May 2020.
195. Wall Street Journal. 2017, May 17. "Russian State-Run Bank Financed Deal Involving Trump Hotel Partner" Rob Barry, Christopher S. Stewart and Brett Forrest. <https://www.wsj.com/articles/russian-state-run-bank-financed-deal-involving-trump-hotel-partner-1495031708> Accessed May 2019.
196. Washington Post. 2017, June 1. David Filipov , Amy Brittain , Rosalind S. Helderman and Tom Hamburger. "Explanations for Kushner's meeting with head of Kremlin-linked bank don't match up" https://www.washingtonpost.com/politics/explanations-for-kushners-meeting-with-head-of-kremlin-linked-bank-dont-match-up/2017/06/01/dd1bdbb0-460a-11e7-bcde-624ad94170ab_story.html Accessed May 2019
197. Washington Post. 2019, August 14. Tom Hamburger and Rosalind S. Helderman. "How a McConnell-backed effort to lift Russian sanctions boosted a Kentucky project" https://www.washingtonpost.com/politics/how-a-mcconnell-backed-effort-to-lift-russian-sanctions-boosted-a-kentucky-project/2019/08/13/72b26e00-b97c-11e9-b3b4-2bb69e8c4e39_story.html Accessed May 2020
198. Zubkov, Igor. 2017, November 7. Karta "Mira". <https://rg.ru/2017/11/07/kartoj-mir-s-2018-goda-mozhno-budet-rasplachivatsia-po-telefonu.html> Accessed December 2018

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