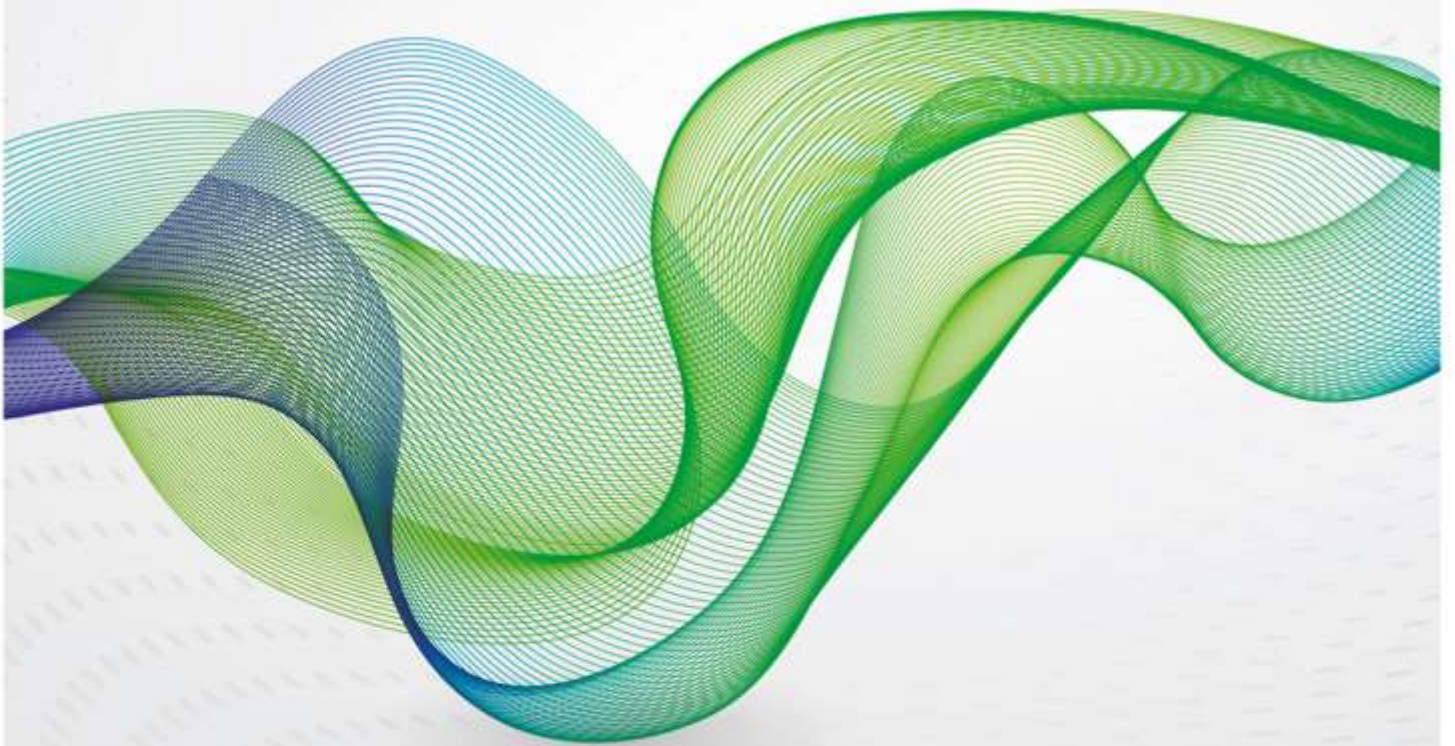


March 2024

Follow the Money: Understanding Russia's oil and gas revenues



Introduction

Revenues from Russia's oil and gas industry have long been one of the most important metrics for researchers of the Russian economy. These revenues have accounted for between 30 to 50 per cent of total federal budget revenues over the past decade, making them the most important single source of cash for the Kremlin. The Russian oil and gas sector contributes about 20 per cent of the country's GDP on average, with wide fluctuations due to global price cyclicity and - more recently - to trade restrictions imposed by the West amid the conflict in Ukraine and Russia's efforts to re-direct its oil and gas exports to new markets.¹

With drastically reduced public information about the Russian energy sector, statistics on Russia's budgetary revenues from oil and gas from Russia's Ministry of Finance are one of the few remaining information sources for researchers.² These statistical series are released monthly and provide information on the overall amounts and the composition of oil and gas revenues of the Russian budget by tax type. Tracking the changes in value and the composition of the oil and gas state take is key to understanding and evaluating the state policies toward the sector and the overall state of Russia's economy. This report attempts to translate the numbers on Russia's oil and gas revenues into informative insights.

The context: resilience to sanctions through tough trade-offs

Russia may never be as strong as it looks, but neither is it as weak as it seems – and the country has proven this throughout its difficult history. During the past decade Russia's economy has demonstrated remarkable resilience to external shocks. The crises have included the first round of sanctions and trade restrictions in 2014-2015 after the Crimea takeover, dwindling oil prices in 2015-16 which hit Russia hard, the contraction of demand amid the COVID-19 pandemic in 2020, and the 'sanctions from hell' in 2022-23, following the current conflict in Ukraine.

Russia's default policy responses to the current external pressures have followed the recipe which has proved successful for the economy during previous "perfect storms", obviously with some modifications as a result of lessons learned and also with the introduction of new policy elements designed to address new challenges, technology transfer problems in particular. In very broad terms, the key goals of Russia's present economic strategy are as follows:

Firstly, to achieve macroeconomic stabilization by means of currency depreciation to keep the state budget in balance and help exporters remain competitive; secondly, to preserve Russia's foreign exchange reserves, change their composition to reduce exposure to the US dollar and the euro, and avoid capital flight; thirdly, to implement import substitution policies to deal with the constraints resulting from international sanctions, and, fourthly, to conduct counter-cyclical investment across the energy value chain, while seeking to diversify the Russian economy away from dependence on hydrocarbons over the long term. Russia's overall anti-crisis policies can be characterized as state dirigisme overlaid with elements of neo-liberal macroeconomic policies especially with regards to the exchange rate policies and efforts to control inflation.

Trying to achieve all of these goals at the same time has proven problematic, with inevitable trade-offs emerging between the policy of the weak ruble and inflation reduction targets, between reduced hard currency earnings and growing investment requirements, and between plans for self-sufficiency and critical dependency on certain Western know-how and technologies. The availability and affordability of advanced technologies remains a problem and a potential drag on longer-term economic growth, but in a situation where the Kremlin has decided to follow a 'fortress Russia' strategy, a policy favouring the

¹ <https://www.statista.com/statistics/1322102/gdp-share-oil-gas-sector-russia/>

² https://minfin.gov.ru/ru/statistics/fedbud/oil?id_57=122094-

[svedeniya_o_formirovani_i_ispolzovanii_dopolnitelnykh_neftegazovykh_dokhodov_federalnogo_byudzheta_v_2018-2024_godakh](https://minfin.gov.ru/ru/statistics/fedbud/oil?id_57=122094-svedeniya_o_formirovani_i_ispolzovanii_dopolnitelnykh_neftegazovykh_dokhodov_federalnogo_byudzheta_v_2018-2024_godakh)

weak ruble and thus providing preferences to exporters at the expense of importers has been a difficult but unavoidable choice.

Clearly, Russia has been struggling to address its dependency on imports of high-tech items and advanced technologies but it has managed to secure the supply of the most needed inputs despite the sanctions introduced by the US, the EU, and their allies by relying on trade with the so-called 'friendly countries', most importantly China but also intermediaries set up in the former CIS countries, Turkey, and in the Middle East. In cases where technological solutions are unique, Russia has been trying to find acceptable substitutes to the sanctioned items, sacrificing some efficiency for the sake of expediency.

Oil and gas exports from Russia have been instrumental to its resilience as a means of financing social obligations at home and purchasing critical foreign imports. In 2022-23, following the introduction of a trade ban by the US and the EU, Russia managed to redirect its crude oil and refined product exports to Asia which prevented a forced reduction in oil output.³ This in turn has secured a continuous flow of oil revenues into Russia's budget.

Table 1 contains the time series for selected key macro-economic indicators that illustrate the above points.

Table 1: Russia - Selected macro-economic indicators

<u>Year</u>	<u>GDP Growth,</u> <u>percent</u>	<u>Inflation,</u> <u>percent</u>	<u>Exchange</u> <u>rate, year</u> <u>average,</u> <u>RUR/USD</u>	<u>Federal</u> <u>Budget</u> <u>Revenues,</u> <u>billion \$</u>	<u>Foreign debt</u> <u>as share of</u> <u>GDP,</u> <u>percent*</u>	<u>Foreign</u> <u>currency</u> <u>reserves,</u> <u>billion \$**</u>	<u>Price of Urals</u> <u>crude oil</u> <u>blend, \$/bbl</u>
2000	10.0	20.1	27.8	40.8	n/a	12.5	26.2
2001	5.1	18.8	29.2	54.6	n/a	28.0	22.8
2002	4.7	15.1	31.3	70.4	n/a	36.6	23.7
2003	7.3	12.0	30.7	84.3	n/a	47.8	27.2
2004	7.2	11.7	28.8	119.0	36	76.9	26.8
2005	6.4	10.9	28.3	181.0	34	124.5	50.6
2006	8.2	9.0	27.1	231.4	32	182.2	61.1
2007	8.5	11.9	25.6	304.5	36	303.7	69.3
2008	5.2	13.3	24.9	373.0	29	478.8	94.4
2009	-7.8	8.8	31.8	231.1	38	426.3	61.1
2010	4.5	8.8	30.4	273.4	32	439.5	78.2
2011	4.3	6.1	29.4	386.8	26	479.4	109.4
2012	4.0	6.6	31.1	413.6	29	498.6	110.5
2013	1.8	6.5	31.9	408.1	32	537.6	107.9
2014	0.7	11.4	38.6	375.6	29	509.6	97.6
2015	-2.0	12.9	61.3	222.8	38	385.5	51.2
2016	0.2	5.4	66.8	201.4	40	368.4	41.9
2017	1.8	2.5	58.3	258.8	33	377.7	53
2018	2.8	4.3	62.9	309.3	28	432.7	70
2019	2.2	3.0	64.6	312.3	29	468.5	63.6
2020	-2.7	4.9	72.1	259.5	31	554.4	41.7
2021	5.9	8.4	73.7	343.1	26	595.8	69
2022	-1.2	12.0	68.4	407.1	17	630.6	76.1
2023	3.6	7.4	85.8	328.2	13	582.0	63

*At the year end

**At the year start. In 2022 the EU froze about \$280 billion worth of Russia's currency reserves.

Source: Author, Rosstat, Central Bank of the Russian Federation, Ministry of Finance

³ <https://www.oxfordenergy.org/publications/russian-oil-output-increases-in-2022-amid-unprecedented-western-sanctions-whats-next/>

To summarize, during the past decade Russia has supported its export-oriented industries when prices have fallen, created conditions for import substitution in many domestic sectors that have not been critically dependent on Western technologies and expensive equipment, and has kept inflation in check, at least so far.

Russia's economy has performed relatively well as measured by GDP. Especially noteworthy is the robust GDP growth of 3.6 per cent reported by Rosstat for 2023, boosted by aggressive military spending and consumption-led growth fueled by sharp increases in payments to military personnel serving in the war zone and their families, as well as hikes in pensions and social payments. Money supply in Russia increased by 20.1 per cent in 2022 and 8.5 per cent in 2023, according to Russia's Central Bank, evidence of Keynesian-type policies implemented in a Russian style.⁴

Average GDP growth between 2010-2023 was around 1.9 per cent. For the period 2014-2023, however, it averaged a mere 1.1 per cent, significantly lower than the global average of 2.7 per cent. (See Figure 1)

Figure 1: Russia's GDP, 2000-2023



Source: Rosstat

Russia's economic growth is expected to slow during 2024 but will remain on par with growth in its peer group of developing countries. In its most recent January 2024 assessment the IMF raised its GDP estimate for Russia this year to 2.6 per cent from its previous forecast of 1.1 per cent growth, citing the strong stimulus in the form of government spending as the primary reason for the upgrade.⁵

The concern for the government, however, is the possibility of low percentage growth for Russia (much like the situation for many developed economies) during the next decade as compared to average world economic growth and to rates of growth amongst its peer group of emerging market and developing economies. This means that unless there is another spike in global commodity prices during the next few years, Russia could fall behind its key international competitors in economic development and its share of the world GDP could shrink.

⁴ <https://www.interfax.ru/business/940002>

⁵ <https://www.ft.com/content/21a5be9c-afaa-495f-b7af-cf937093144d>

The state giveth and the state taketh away: balancing monetary and fiscal priorities

With the increased volatility of its export earnings in the past few years, Russia's first-response actions have focused on monetary policy instruments, namely keeping relatively high levels of government spending and managing the budget deficit via a sharp depreciation of the ruble, thus increasing proceeds from traditionally significant commodity exports.

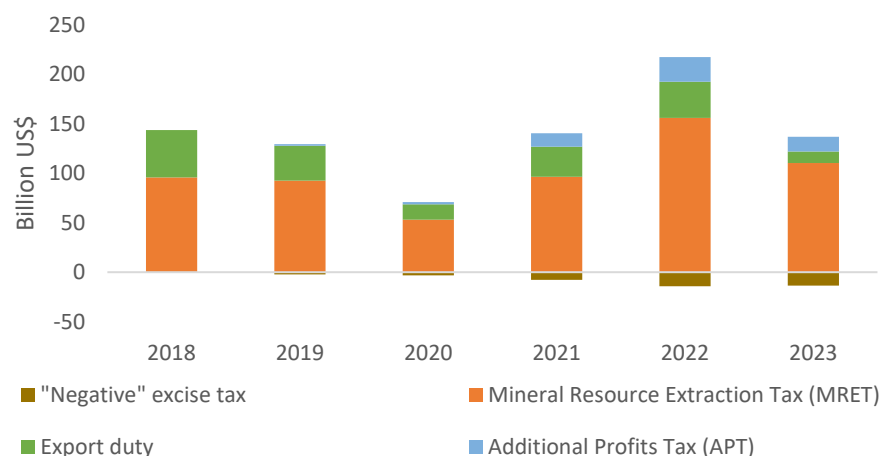
The weak ruble had produced a miracle of import substitution in Russia's food manufacturing industry and agriculture by the middle of the 2010s as imported products became prohibitively expensive thus giving domestic producers a booster shot. This successful import substitution for most food items by the middle of the last decade became one of the most important factors in partially shielding the Russian population from extremely high inflation levels during 2022-23 (food represents a major expense item in the consumer basket for most Russian people). Inflation in 2023 was estimated at 7.4 per cent, a moderation after a spike to 12 per cent in 2022, compared to the historical lows of 3 per cent in 2019 and 4.9 per cent in 2020.⁶

Another important factor in protecting the population from inflationary pressure has been the so-called 'inflation-minus' tariff policy, under which state-regulated tariff hikes for gas, electricity, and transportation each year remain lower than the expected inflation.

By way of adjusting to new economic realities, most Russian people with low and moderate incomes have changed their consumer choices for basic necessities in favour of domestically produced goods and services which turned out to be acceptable substitutes. The rich have maintained their lifestyle using a wider spectrum of imported items, which they clearly can afford. As a result, the social contract holds for now, embedded in the legacy paternalistic expectations and historically high 'pain threshold' of Russia's population.

In addition to making sure that the macro-economic monetary policy maintains the overall level of state revenues, the government has also used fiscal policies to protect the current and future tax take from the oil and gas sectors, the twin workhorses of the Russian economy. Fiscal adjustment has also helped achieve other policy targets (most importantly, to keep retail petroleum prices at the pump from escalating sharply). Many of these measures were designed and implemented before the sanctions against Russia were introduced but also proved to be instrumental in shielding state revenues from external pressure. The changes in the composition of the fiscal instruments that Russia applies to its oil and gas sectors are presented in Figure 2.

Figure 2: The composition of Russian oil and gas revenues by type, 2018-2023



Source: Author, Ministry of Finance

⁶ <https://www.interfax.ru/business/940012>

The starting point for the latest round of petroleum tax reform was the need to address multiple distortions that emerged from the tax treatment (or rather mistreatment) of the sector by the early 2010s. Since the transition to a market economy in the 1990s, the Russian government has been using fiscal instruments that relied on taxing the gross revenues of Russian oil producers – the so-called Mineral Resource Extraction Tax (MRET) and the export duty (export tax). From a state perspective, the administrative simplicity of these levies represented a clear advantage. The potential downside was that these levies did not take costs into account and thus could be detrimental for high-cost projects and new developments.

To account for oil price cyclicity and in order to tax windfall price revenues, sliding scale formulae for both MRET and the export tax were introduced, linked to the price of Urals crude on international markets. When oil prices were high, the state tax take would increase to about 90 per cent, and when oil prices were low, it would decline to shield producers and secure their minimum operating margins. As long as the legacy of Soviet era investments could be relied on, this was a second-best but reasonably rational trade-off for Russian planners to choose, and indeed the tax system worked reasonably well and survived the global oil price crashes of 2009, 2015, and 2020.

Whereas mineral royalties are usually site-specific, the philosophy of the Russian MRET was of a ‘one-size-fits-all’ tax. Over time the Russian tax administrators have had to accept the reality: an oil production tax should reflect the differences in project economics that are a function of site-specific mineral rents. The flip side of relying on a gross revenue type of taxation for Russian oil has been its negative impact on the economics of many Russian brownfield sites and also on new big-ticket projects. From a project development perspective the tax burden was all front-end loaded, and the distribution of risks favoured the state over producers.

Russia’s fiscal authorities had been reluctant to embrace the idea of a full-scale transition to oil taxes that would be sensitive to costs or profits (a few early Production Sharing Agreements (PSAs) are exceptions that prove the general rule) for a fear of tax base manipulation by oil companies. At the same time, ad hoc state interventions to address the problems of non-performing oil fields were increasing and numerous exemptions and rate reductions to MRET flourished in Russia during the 2010s. These primarily addressed the cases of depleted fields, and also new fields in regions that were lacking developed infrastructure. As Russia’s production base deteriorated and more new fields were brought into production, the share of assets that had different MRET exemptions reached almost 60 per cent by 2020. Indeed, Russia’s Ministry of Finance was concerned that by 2035 the output with reduced rates of MRET would reach 90 per cent of the total. It was against this backdrop that the idea of replacing ad hoc exemptions with a systemic solution in the form of the additional profits tax (APT) started to gain traction.

The APT, a cash flow-based alternative to MRET for certain fields, was introduced in Russia on 1 January 2019, initially with limited application to a few pilot projects. In 2021 it was finally moved from the pilot stage to a more widespread application. The tax rate was set at 50 per cent after deducting production and transportation costs which resulted in a significant reduction in tax terms for mature fields, while taxes for new fields were slightly improved as well.⁷ The main advantage of APT from a producers’ perspective was the immediate expensing of capital costs (in contrast to a lengthy process of expensing via depreciation deductions under general taxation rules under the old system). In 2021 APT receipts reached USD 13.7 billion accounting for 11 per cent of all collected oil and gas federal taxes, in 2022 USD 24.7 billion (15 per cent), and in 2023 USD 15.1 billion (15 per cent).

The importance of the introduction of APT and its growing role in the portfolio of fiscal instruments in Russia is that the Russian government’s ability to be flexible and to recognize the need for providing incentives to oil producers has been a vital element of oil production resilience in Russia in the past few years. This is a definite improvement from a long-term planning perspective for Russian oil developers as they move to the next generation of higher-cost projects that require investment incentives.

Another set of fiscal distortions in the Russian oil sector that had to be addressed during the 2010s was related to the uneven tax treatment of the upstream and downstream sectors. This policy, an integral

⁷ <https://www.nalog.gov.ru/rn77/taxation/taxes/ndd>

part of the so-called 'tax manoeuvre' has been designed to re-balance the tax burden and to reduce the effective subsidy to the Russian downstream sector that went too far and lasted too long, resulting in a net loss to the Russian economy.⁸ Under the plan, the differentiated export taxes on Russian crude oil and various refined products were to be gradually phased out by 2024. At the same time, the MRET (the Russian equivalent of an upstream royalty) was to be increased to compensate for the shortfall from the reduced export tax.

The policy of shifting the emphasis in the tax burden on the oil companies away from export taxes and to the MRET was designed and implemented well before the first sanctions against Russia were introduced in the wake of the Crimea takeover in 2014. But the measure has turned out to be handy for the Russian state as the move has effectively shielded the state budget from the volume reduction of exports of crude and refined products out of Russia. Since the tax base for MRET is extracted volumes, the Russian government has ensured its tax base will not be affected by how much the companies are exporting, at least in the near term. The measure shifts the burden of adjustment to the external trade restrictions on Russian exporters of oil and gas who arguably have greater flexibility than the federal budget in adjusting their expenditure. Clearly, this does not solve the problem but merely extends it into the future, when, as apparently the logic of the Russian government goes, Russia will be able to redirect its export flows of energy to the so-called 'friendly countries'.

It is the nature of complex tax systems that improving one element may result in cascading effects that create undesirable outcomes in other parts of the system. To re-establish the balance, multiple adjustments or the introduction of new elements is usually required. While export taxes for crude oil and refined products represented significant shares of value of export sales, they were simultaneously acting as a wedge between petroleum prices in the global markets and the Russian domestic market, effectively subsidizing Russian consumers of motor fuels. As the 'tax manoeuvre' was gradually phasing out export taxes, export parity levels increased,⁹ exposing the Russian domestic fuel market to global price volatility and pushing up fuel prices in Russia (all other things being equal).

To regain some indirect control and to keep gasoline prices in the domestic market in check, in 2019 the Russian government decided to introduce a special mechanism of the so-called 'negative excise tax' that effectively subsidizes Russian oil companies for keeping retail fuel prices at the pump relatively stable (significantly lower than in Europe and moderately lower than in the US in hard currency terms) even during oil price spikes in the global markets. The negative excise tax works as follows: when global prices for petroleum are higher than the established threshold, the state effectively provides a subsidy to the oil companies allowing them to keep wholesale product prices and retail prices at the pump relatively unchanged. The amount of the subsidy is higher when global oil prices spike, so the state is effectively sharing the price windfall with the industry on the condition that the industry behaves as a 'good citizen' and does not pass higher prices on to the motorists. At the same time, the established threshold made sure that the state take was sufficient for the budget even during a low oil price environment. In 2020 oil prices were very low for most of the year due to global lockdowns and the resulting contraction of demand, so the effective subsidy only amounted to USD 3.1 billion. In the next three years, amid higher global oil prices and the resumption of Russian petroleum exports, the negative excise tax (the budgetary transfer to Russian refiners) grew robustly, to USD 7.7 billion in 2021, USD 14.3 billion in 2022, and USD 13.7 billion in 2023. As stated earlier, while not a perfect market solution,

⁸ See <https://www.oxfordenergy.org/publications/russias-heavy-fuel-oil-exports-challenges-and-changing-rules-abroad-and-at-home/>

⁹ Export parity principle is based on the concept of a producer being able to choose freely between selling their product to either the export or domestic market. For producers in a net exporting country the equilibrium price will be equal to the international price minus all costs associated with the exports, such as transportation, customs fees, export duties, etc. If the export netback price is higher than the price in the domestic market, exports will go up, reducing domestic supply and pushing up domestic prices, until the market clears. Russia's export tax serves as a wedge between international and domestic prices for crude oil and individual refined products. Therefore, changing the level of oil export taxes and the relative differentials has immediate consequences for domestic crude and refined product prices via the mechanism of the export parity price formula. For example, reducing the export tax on crude oil would lead to much higher acquisition prices for Russian refineries and reduce their refining margin. Reducing the export tax on light refined products would increase domestic wholesale prices for gasoline and diesel (and support the refining margin) but would quickly increase end-user prices at the pump and feed into overall inflation.

the measure has become a second-best instrument for reining in inflation in Russia and exercising control over politically-sensitive motor fuel prices.

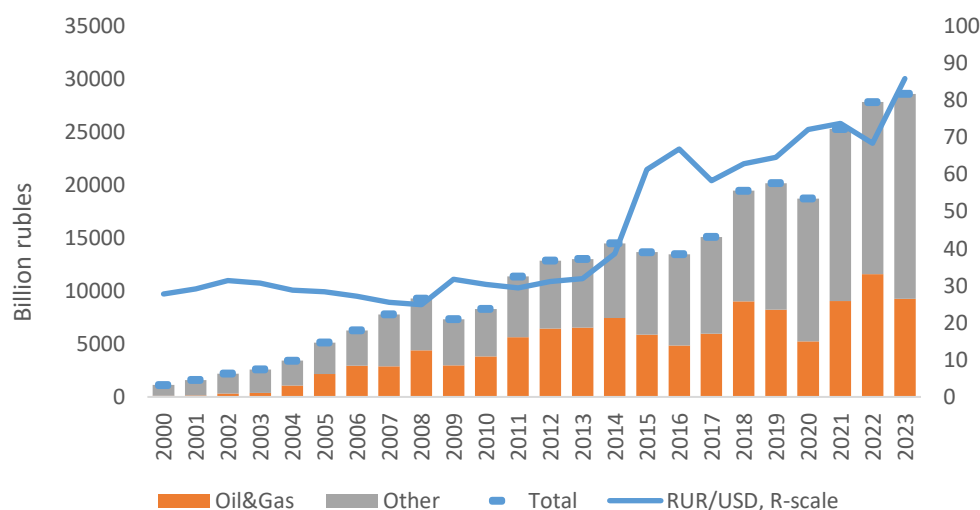
Analyzing Ministry of Finance data

The previous section explaining the context of Russia’s economic developments in the past few years and the evolution and changes in the composition of the Russian oil and gas take was a necessary requirement to lay the groundwork before analyzing the Ministry of Finance’s time series for oil and gas revenues.

As stated earlier, oil and gas revenues have been, and will remain, key to Russia’s overall economic performance and resilience to crises. They accounted for over 50 per cent of Russia’s federal budget revenues in 2011-2014, while during the low-price environment for oil and gas in 2016 this dependency was reduced greatly to 36 per cent and only 28 per cent in 2020, but the situation was quickly reversed when oil prices rebounded. An analysis of Russia’s federal budget revenues provides important insights.

As can be seen from Figure 3, the continuing increases in state revenues after 2014 (with the exception of the pandemic-driven trends in 2020) have coincided with dramatic depreciation of the ruble. A weak ruble has been a policy choice and has partially shielded the budget from exposure to highly cyclical export revenue streams that are beyond the control of the Russian government.

Figure 3: Russia’s Federal Budget Revenues, 2000-2023

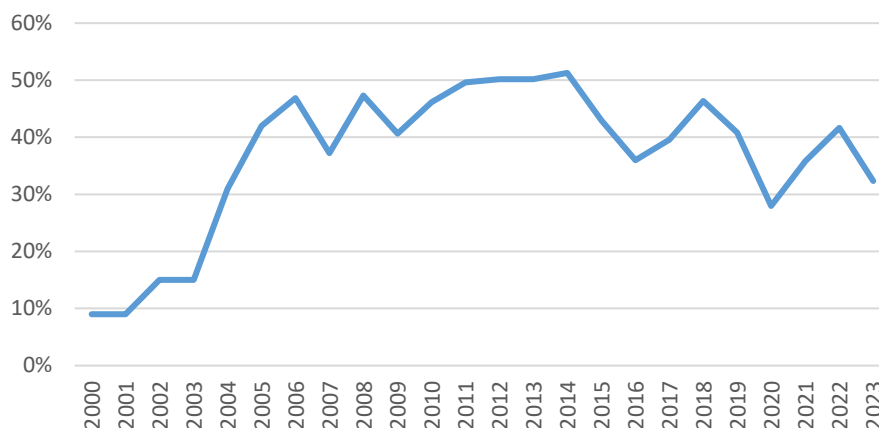


Source: Author, data from multiple reports by Russia’s Ministry of Finance

Another trend worth noting is the robust growth in non-oil and gas revenues that reached 19.4 trillion rubles in 2023, double levels seen in 2014. In 2023, the year-on-year (y-o-y) growth in non-oil and gas revenues of 19.2 per cent offset the y-o-y decline in oil and gas revenues of 20.2 per cent and ensured an overall growth of federal budget revenues of 2.8 percent y-o-y. The composition of non-oil and gas revenues has not been reported by Russia’s Ministry of Finance, but it is reasonable to assume that a significant contribution came from the historically significant Russian exports of metals, petrochemicals, and agricultural products and was also a function of the growing domestic economy and higher proceeds from corporate and personal income taxes.

Yet another remarkable takeaway from the Figure 3 is the lessening role of oil and gas revenues as a percentage of the total federal revenues. While accounting for about 50 per cent of the total in 2011-2014, Russia’s federal budget revenues from oil and gas declined to 42 per cent in 2022, even amid an extremely high energy price environment, and to only 32 per cent in 2023 (See Figure 4).

Figure 4: Share of oil and gas revenue in federal budget

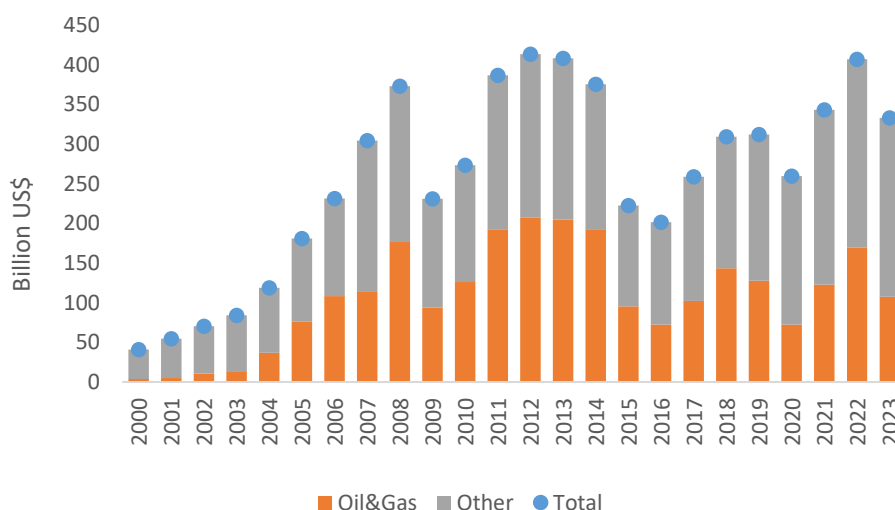


Source: Author, Ministry of Finance

Clearly, this is a result of the restrictions on Russian oil and gas exports since 2022. Russia has lost the European gas market and has had to re-direct export flows of its crude oil and refined products away from Europe and towards Asia. This dramatic change in logistical arrangements has resulted in the need for significant price discounts necessary to build up new logistical chains, secure new markets, and lure new customers.

When measured in US dollar terms, revenues have been affected by the weakening ruble since 2014, but have demonstrated a sustained revenue stream since then. In 2022 total federal budget revenues amounted to USD 407 billion (including USD 170 billion from oil and gas), just a bit shy of the record levels achieved in 2012-13 during USD 100+ oil prices. In 2023, amid lower prices for oil and gas and with a further weakening of the ruble, total revenues declined to USD 333 billion, with the contribution from oil and gas amounting to USD 108 billion (see Figure 5).

Figure 5: Russian federal budget revenue (USD)



Source: Author, Ministry of Finance

Suffice to say, the dollar values are useful as comparative indicators but are less relevant for assessing the ability of the Russian government to meet its near-term budgetary targets which are set in rubles. The data series from the Ministry of Finance presented in Table 2 allows comparison of the amounts

needed by the state each year from the oil and gas industry in order to meet budgetary targets with the actual budgetary receipts from the industry.

Table 2: Base vs. extraordinary oil and gas revenue

(billion Russian rubles)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Total oil and gas revenues	9017.8	7924.3	5235.2	9056.5	11586.1	8822.4
Base oil&gas revenues	4756.3	4967.4	5557.6	5889.5	6508.9	8000.1
Extraordinary oil&gas revenues	4261.4	2956.8	-322.3	3167.0	5077.4	822.2
Purchases (Sales) of foreign currency and gold	4216.3	2936.6	-289.7	3107.0	1220.6	1022.3
(billion US\$)						
Total oil and gas revenues	143.4	122.6	72.6	122.9	169.5	102.8
Base oil&gas revenues	75.6	76.8	77.0	79.9	95.2	93.2
Extraordinary oil&gas revenues	67.7	45.7	-4.5	43.0	74.3	9.6
Purchases (Sales) of foreign currency and gold	67.0	45.4	-4.0	42.2	17.9	11.9

Source: Author, Ministry of Finance

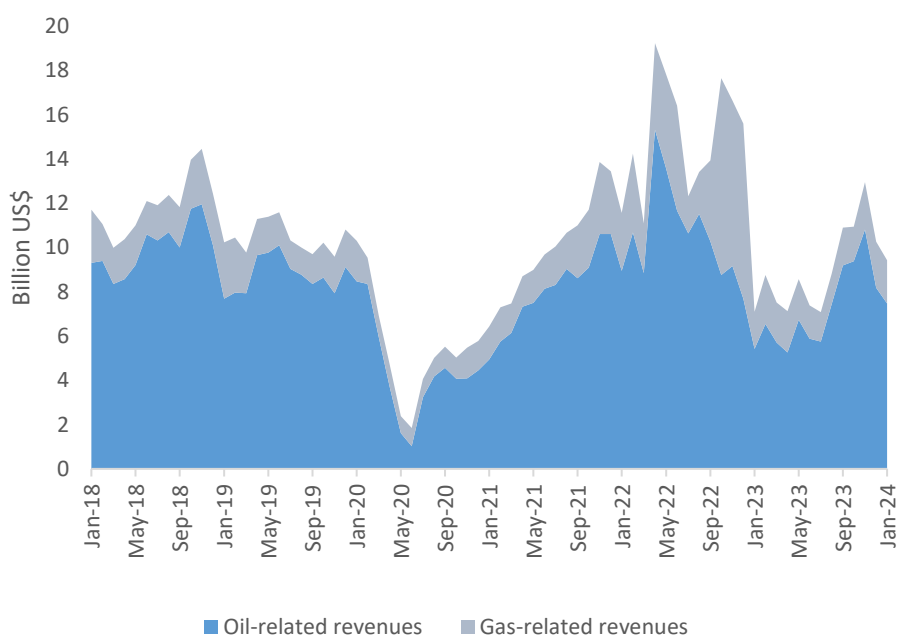
One conclusion from the data in Table 2 is the changing trend: prior to 2023 the so-called 'base' revenue from oil and gas (the contribution from the sector that the budget needs to be balanced) was significantly lower than actual oil and gas revenues. The extraordinary revenues from oil and gas, that is the amounts exceeding the base revenues, were used to build up reserves in the form of convertible currencies or gold and accumulated in a 'rainy day' fund. The story behind the numbers is budgetary austerity embedded in very conservative oil and gas price assumptions used by Russia's economic planners in making budgetary projections. The sterilization of extraordinary oil and gas revenues by way of holding very significant foreign currency reserves was deemed necessary to avoid the negative effects of the 'Dutch disease'. The year 2020, the clear outlier in the set, was a year of global economic shocks when the state had to compensate for a gap in revenue by selling some of the currency and gold reserves accumulated during the 'fat' years, an example of counter-cyclical state intervention. Remarkably, in 2023 the projection for 'base' oil and gas revenues was quite optimistic and very little extraordinary revenue was generated. This change of approach was clearly motivated by the EU's freeze of close to USD 280 billion, or almost half of Russia's total hard currency reserves after the start of the conflict in Ukraine. Now, instead of sterilizing a significant portion of available oil and gas proceeds abroad by converting them into dollars and euros, the Russian government has decided to use the flow of export revenues from oil and gas to increase budgetary spending in rubles.

Another factor worth noting is the key role of oil-related revenues for the Russian budget as opposed to gas-related revenues. Oil exports matter because of money, gas exports matter because of influence: for many years this principle has been the cornerstone of Russia's export strategy. Petroleum is a fungible commodity which can be relatively easily redirected towards alternative markets if arbitrage opportunities emerge. In contrast, pipeline gas usually locks in buyers and sellers in a long-term relationship.

About 80 per cent on average of the total oil and gas take for the Russian budget during 2018-2023 accrued from the oil side (see Figure 6).¹⁰

¹⁰ For the purposes of this calculation MRET on condensate was assigned to 'oil-related' revenues in spite of the fact that most condensate in Russia is produced by Gazprom and Novatek whose main business is gas production. Gas condensate is often referred to as 'light crude oil' and its marketing is similar to that of crude oil. The fungibility factor has been key to Russia's resilience to trade restrictions against its energy sector. Russian oil companies managed to re-direct the trade flows of fungible petroleum products to alternative markets in a matter of a few months. In contrast, pipeline gas deliveries that depend on fixed infrastructure are more vulnerable to trade embargoes since it takes years to build new pipelines.

Figure 6: Monthly receipts: Oil versus gas



Source: Author, Ministry of Finance

At the same time, the monthly revenue series demonstrate significant volatility and two relatively short-term but significant outliers: the middle of 2020 and Q42022. In these instances, oil-related and gas-related revenues were almost at parity, at minimum absolute levels in 2020 and close to maximum absolute levels at the end of 2022. Each instance deserves a brief explanation.

The dwindling revenue from oil in 2020 under the double whammy of shrinking demand and low prices amid the COVID-19 pandemic was the result of lockdowns and the drop in consumption due to extremely low activity in the global mobility sector. Russian oil revenues suffered from both volume and price effects. In contrast, Russian gas exports to Europe declined only moderately in volumetric terms, by about 5 per cent in 2020, in a situation when the competing LNG flows to Europe contracted sharply amid very low prices.¹¹ The decline in gas revenues in 2020 was primarily due to the negative price dynamics. As a result, the shares of oil-related and gas-related contributions to the Russian budget became almost equal in June 2020 at very low absolute levels.¹²

In 2022 the market pendulum swung back and energy prices increased, with gas prices in Europe breaking historical records. The volumes of Russian gas exports were high in Q1 2022 but started to decline rapidly after the start of the conflict in Ukraine. The price windfall momentum for Gazprom was so strong, however, that the proceeds from gas exports in 2022 exceeded all expectations. The Russian government, the majority shareholder in Gazprom with just over 50 per cent stake, was facing a dilemma: whether to distribute record-level dividends to all shareholders or introduce an ad hoc additional tax. It promptly chose the latter option, instructing the company not to pay dividends to shareholders in 2022 and denying other non-state shareholders their share of the growing pie.¹³ At the same time, the Russian government approved a one-time hike in MRET for gas for Gazprom that was

¹¹ For several months during 2020 gas prices in Europe fell below the levels of short-run marginal costs for US LNG plants causing shut-ins.

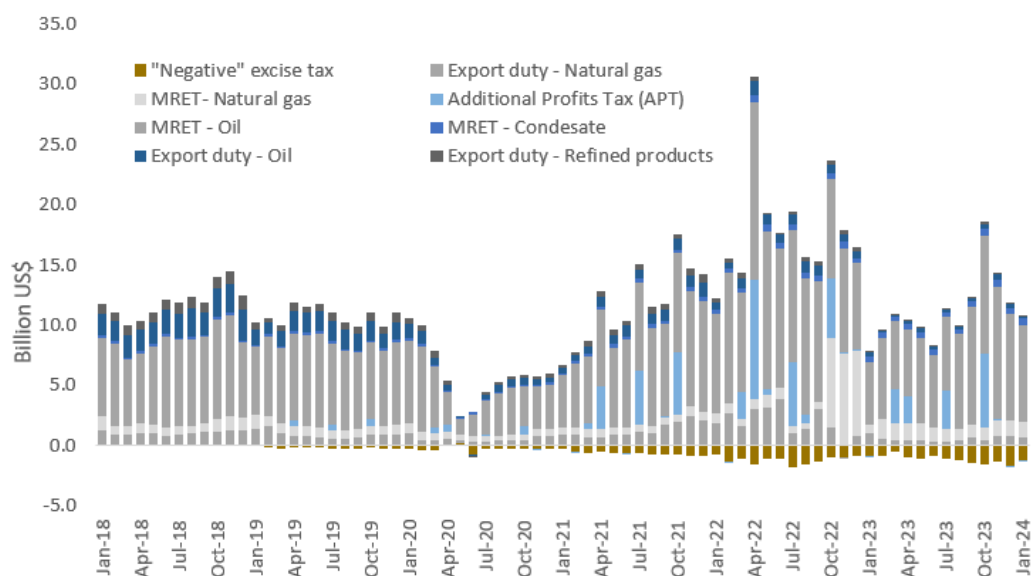
¹² Oil-related revenues still accounted for 56 per cent, and gas-related revenues for 44 per cent of the oil and gas take in June 2022.

¹³ <https://www.reuters.com/business/energy/gazproms-2022-net-profit-falls-1226-trillion-rbls-2023-05-23/>

effective between October-December 2022 and allowed the channeling of 100 per cent of windfall profits into state coffers.

It is also worth noting that an additional factor creating increased volatility in monthly budgetary receipts from oil and gas during 2021 to the present is due to a technicality: the fact that the additional profits tax (APT) is paid on a quarterly basis while other taxes are paid monthly (see Figure 7).

Figure 7: Monthly composition of Russia's oil and gas revenues



Source: Author, Ministry of Finance

The Western decision to cut imports of Russian energy in 2022 was a tremendous challenge to the established energy trade. For Russia, the near-term shock of having to re-direct the flows of its energy exports to different markets and find alternative customers has been softened by the price windfall as global prices for all fossil fuel commodities, including oil, coal, and especially natural gas have been robust during the past year. Russia's export revenues in 2022 set historical records, helping to finance the transition to new export schemes. But in terms of redirecting volumes to new markets the story of Russia's fungible oil and refined product exports has been markedly different from the story of Russia's infrastructure-constrained pipeline gas exports.

Russia has managed to quickly find alternative markets for its crude oil and refined products in Asia with relatively minor financial losses. It had to meet its share of the production cuts agreed within OPEC+ but exports of crude are not subject to quotas. Russian crude oil and condensate production in 2022 was 535.4 million tonnes, and exports amounted to 242 million tonnes (about 4.9 mbd). In 2023 Russia produced 530.6 million tonnes of crude and condensate and exported 234.3 million tonnes. According to Alexander Novak, Russia's First Deputy Prime-Minister in charge of the energy complex, Asia-Pacific accounted for 82 per cent of Russian exports of liquids in 2023, suggesting a successful diversification strategy away from Europe, formerly the key market for Russian crude and products, achieved in record time.¹⁴

This pivot has been facilitated by the Kremlin's tacit acceptance of a reduced tax take, at least temporarily, as a significant portion of the oil price windfall has been retained by the exporters (and used to build new logistical chains to Asia) at the expense of the Russian budget in the first half of 2023.¹⁵ Compared to former exports to Europe, the netbacks to the exporters on the new trade routes

¹⁴ <https://www.interfax.ru/business/944802>

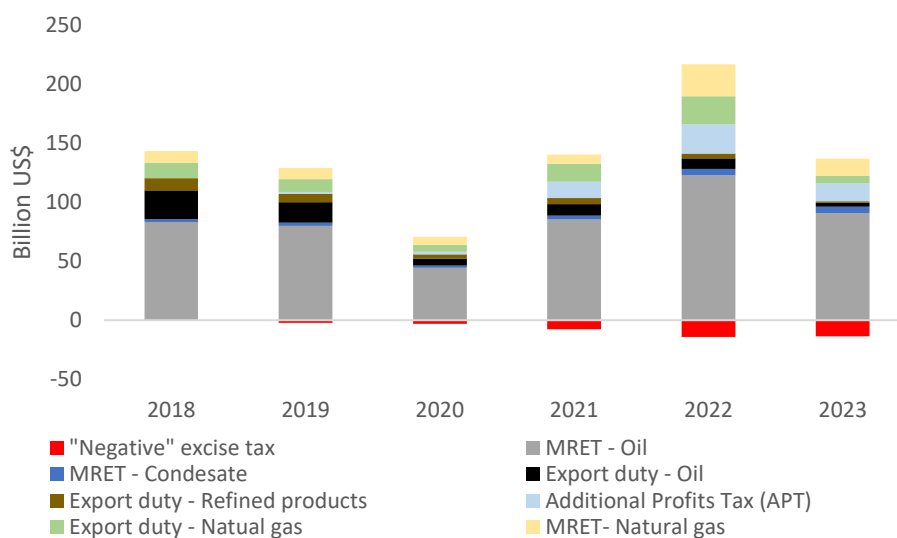
¹⁵ That was primarily due to the use of international price benchmarks for Russian crude (the quotations for Urals crude as defined by Argus that lost their relevance in the new conditions) rather than the actual sales prices in the statutory tax formulae

and rents for the Russian state are lower due to longer transportation distances, complicated logistics, and price discounts to new customers but, on balance, Russia's ability to sustain and protect its niche in the global crude and product markets despite unprecedented trade restrictions could be considered an important achievement. It has allowed Russia to avoid a forced reduction of oil output, defying the earlier pessimistic expectations by many a market watcher.

But the situation with Russian pipeline gas is markedly different. Having lost access to most of the pipeline export infrastructure to the European gas market in 2022, Russia had to drastically reduce its gas output and consequently increase its spare productive capacity. Russian gas output fell dramatically, from 763 bcm in 2021 to 676 bcm in 2022 (an 11 per cent drop y-o-y) and further to 638 bcm in 2023 (a 6 per cent drop y-o-y). In 2023 Russian pipeline gas exports to Europe (excluding Turkey) declined to about 25 bcm, a far cry from about 150 bcm achieved in 2021. Conversely Russia increased its pipeline gas exports to China via Power of Siberia in accordance with the planned ramp up of deliveries to 22.7 bcm in 2023 from 15.1 bcm in 2022. Pipeline deliveries to Turkey were close to 23 bcm in 2023, about the same as in 2022.

Despite the loss of Europe's gas market, Russia's net oil and gas revenues in 2023 remained almost unchanged from pre-crisis levels of 2021. They clearly declined relative to the records set in 2022, but that year was an outlier owing to high oil prices and the unprecedented hikes in gas prices. But as stated above, gas-related revenues have not been key to the overall level of Russia's oil and gas take. As can be seen from Figure 8, most of the revenues come from the oil side in the form of MRET for oil and condensate, additional profits tax, and export duties on crude oil and refined products.

Figure 8: Annual oil and gas revenues by tax and industry



Source: Author, Ministry of Finance

In 2021 the budgetary receipts from natural gas (MRET and export tax) amounted to USD 23.1 billion, representing 19 per cent of total net oil and gas revenues. In 2022 the contribution from gas spiked to USD 51.2 billion, representing 30 per cent of the net total, and in 2023 it normalized at USD 20.8 billion, or 20 per cent of the net total. Moreover, the bulk of gas revenues now comes from MRET on natural gas, while the budgetary contribution of the export tax from pipeline gas exports has bottomed out at USD 6.6 billion, a mere 6 per cent of the net total.

determining the tax obligations of Russia's oil producers. Currently, the Russian government is considering different options for modifying the calculation mechanisms in the Russian oil and product taxes that would protect the state's tax take and introduce a new balance of interests between the state and the hydrocarbon producers.

In summary, Russia's budget has been secured by fiscal revenues from the oil business, and Russia's oil production has been sustained by its success in redirecting crude oil and refined product exports from Europe to Asia.

Conclusion

In the absence of previously available statistical series from Russia's oil and gas sectors, the data on the oil and gas revenues of the Russian federal budget regularly released by the Ministry of Finance provides up-to-date information on the tax take in Russia's oil and gas industries and allows for indirect evaluation of the trends in these key sectors of the economy. The stories behind the numbers reveal Russia's budget resilience to external shocks through flexible fiscal policies and creative adaptation to the changing conditions. They also support the notion of 'bending, not breaking' industry performance under the pressure of the sanctions.

In the short term Russia has been much more robust than many expected. Many questions remain, however. How sustainable are Russian macroeconomic and fiscal policies in the medium term? How long can the government support last and where will the finance for new projects come from? What will be the medium term impact of a weaker ruble on inflation? What could the impact of slower technology development be on the segments of the oil and gas industry that require the application of advanced technological solutions, (for example, in LNG business)? Will the new reliance on China and India as primary export markets for Russian oil and gas provide sufficient profit margins for the Russian exporters? While all these questions are beyond the scope of this paper, they represent key signposts for monitoring Russia's future economic performance.