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Russia Monitor 1

The Russian Economy Amidst the War and Sanctions

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In Cooperation with

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Summary and outlook

The marked turnaround in Russia's foreign trade this year has exerted strong downward pressure on the Russian rouble, which has lost around 30% of its value since January. *Global oil prices were declining (until recently), the EU import embargo on Russian oil depressed prices even further; and on top of all that, Russia lost a large slice of what has historically been its main gas market – the EU. As a result, goods exports declined by 32% in January-August, whereas imports surged by 17%, as the economic recovery gained momentum and new ways were found to circumvent the trade sanctions. In response to a weakening rouble and mounting inflationary pressures, the central bank has hiked its key rate in three stages since July, by a combined 5.5 percentage points, to 13%. These measures have been successful in stabilising the exchange rate for now, although the inflationary pressures will remain high in the coming months due to the pass-through of the past depreciation into consumer prices.*

Otherwise, the economy continues its recovery on the back of domestic demand, driven in large part by (war-related) fiscal stimulus – officially estimated at around 10% of GDP in 2022-2023. *In the first eight months of 2023, real GDP and gross industrial production picked up by 2.5% and 3%, respectively, meaning that the economic crisis has essentially been left behind, at least at the aggregate level. Among the main winners of the ongoing structural change have been those manufacturing industries that enjoy a large share of military production, as well as construction, and hospitality and catering. Official data suggest that capacity utilisation has reached very high levels, the labour market is extremely tight, and unemployment has plunged to an all-time low (although the latter is not supported by wiiw model estimations, which indicate that there are hidden imbalances in the labour market). The potential for economic growth based on idle production capacities has now been largely exhausted, so that new investments are becoming crucial.*

On the strength of recent performance, the wiiw growth forecast for this year has been revised upwards, to 2.3%. However, growth will likely slow to below 2% next year and in 2025, as higher interest rates constrain credit growth and cool domestic demand somewhat. *With no end in sight to the war, the current growth trajectory – based as it is largely on military fiscal stimulus – will likely continue for some time, despite the fact that the economy is suffering from increased labour shortages and is falling behind on the technological front, due to the Western sanctions. However, the longer the war lasts, the more addicted the economy will become to military spending; this raises the spectre of stagnation (or even outright crisis) once the conflict is over.*

Keywords: Russia, economic growth, labour market, monetary policy, fiscal policy, foreign trade, inflation, exchange rate, econometric modelling

JEL classification: C53, E24, E31, E52, E62, F10, F31, O52

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The Russian economy amidst the war and sanctions

ECONOMIC RECOVERY MOTORS ON – DESPITE MOUNTING CAPACITY CONSTRAINTS

Military production boom leading the way

The Russian economy is continuing its recovery from last year's slump. According to estimates by the Ministry of Economy, in August 2023 real GDP grew by 5.2% year on year,[1] bringing growth in the first eight months to 2.5%. During the same period, industrial production grew by 3% year on year, with those industries that enjoy a large share of military production leading the way. For instance, the production of finished metal products except machinery and equipment soared by 27.4%, largely on account of the 39.5% increase in the production of 'other metal products not included elsewhere', which include, inter alia, weapons and ammunition. Among other industries with a large share of military output were computers, electronic and optical products (+34.6%), other transport vehicles and equipment (+29.4%) and electric equipment (+23.2%). Crucially, the military production boom is being assisted by the fact that Russia reportedly imports most of the products it requires – including badly needed semiconductor chips – via third countries (Western trade sanctions notwithstanding).[2] It needs to be mentioned, though, that the current military production boom does not fundamentally change the basic industrial structure, which continues to be largely resource oriented. Mining accounted for around 26% of gross industrial production in July, and three industries – extraction of crude petroleum and natural gas, coke and refined petroleum products manufacturing and basic metals manufacturing – made up more than 40% of the total (Table 1).

Other sectors that recorded above-average growth included construction (+9.8% in the first half of 2023, in value-added terms) and hospitality and catering (+12.3%). Construction benefited in large part from the creation of military infrastructure in regions bordering Ukraine, as well as of transport and logistics infrastructure in the Far East, along the Trans-Siberian Railway (in the wake of the foreign trade reorientation towards Asia); meanwhile, the upsurge in hospitality and catering partly reflects the boom in domestic tourism, since travelling abroad has become so much more difficult.[3]

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[1] However, on a monthly (seasonally adjusted) basis, economic growth slowed somewhat: to 0.4%, after 0.6% in July.

[2] See e.g. https://verstka.media/rassledovanie-kak-v-rossiyu-popadayut-lyubye-sankcionnie-tovary, https://www.nytimes.com/2023/09/13/us/politics/russia-sanctions-missile-production.html, and https://www.agents.media/rossijskij-vpk-prodolzhil-poluchat-nemetskie-stanki-posle-nachala-vojny/.

[3] Direct flights between the EU and Russia were cancelled immediately after the start of the war, and most land borders were effectively closed during the subsequent months as well. Besides, EU visa procedures for Russians have become much more restrictive.

Table 1 / Structure of gross industrial production in July 2023, at NACE 2-digit level, in %

Industry	share in %
B: Mining	*25.81*
C: Manufacturing	*67.17*
D: Electricity, gas, steam and air conditioning supply	*5.23*
E: Water supply; sewerage, waste management and remediation activities	*1.78*
B06: Extraction of crude petroleum and natural gas	18.31
C19: Coke and refined petroleum products manufacturing	13.59
C24: Basic metals manufacturing	11.20
C10: Manufacture of food products	9.44
C20: Chemicals and chemical products manufacturing	5.07
C25: Fabricated metal products except machinery and equipment manufacturing	4.52
C23: Other non-metallic mineral products manufacturing	3.04
B09: Mining support activities	2.69
C30: Manufacture of other transport equipment	2.44
C28: Machinery and equipment not elsewhere classified manufacturing	2.08
C22: Rubber and plastic products manufacturing	2.07
B07: Mining of metal ores	1.99
B05: Mining of coal and lignite	1.99
C29: Manufacture of motor vehicles, trailers and semi-trailers	1.96
C26: Manufacture of computer, electronic and optical products	1.95
C27: Manufacture of electrical equipment	1.74
C33: Repair and installation of machinery and equipment	1.39
C11: Beverage manufacturing	1.32
C17: Paper and paper products manufacturing	1.27
E38: Collection, processing, and disposal of waste; processing of secondary raw materials	1.14
C21: Pharmaceuticals, medicinal chemicals and botanical products manufacturing	0.94
C16: Wood and cork products except furniture; straw and plaiting materials manufacturing	0.85
B08: Other mining and quarrying	0.83
C13: Manufacture of textiles	0.38
C31: Furniture manufacturing	0.38
C18: Printing and reproduction of recorded media	0.37
C32: Other manufacturing	0.37
E36: Water collection, purification, and distribution	0.36
C12: Tobacco product manufacturing	0.34
C14: Manufacture of wearing apparel	0.34
E37: Collection and treatment of wastewater	0.28
C15: Leather and related products manufacturing	0.12
E39: Provision of services in the field of pollution control and waste disposal	0.00

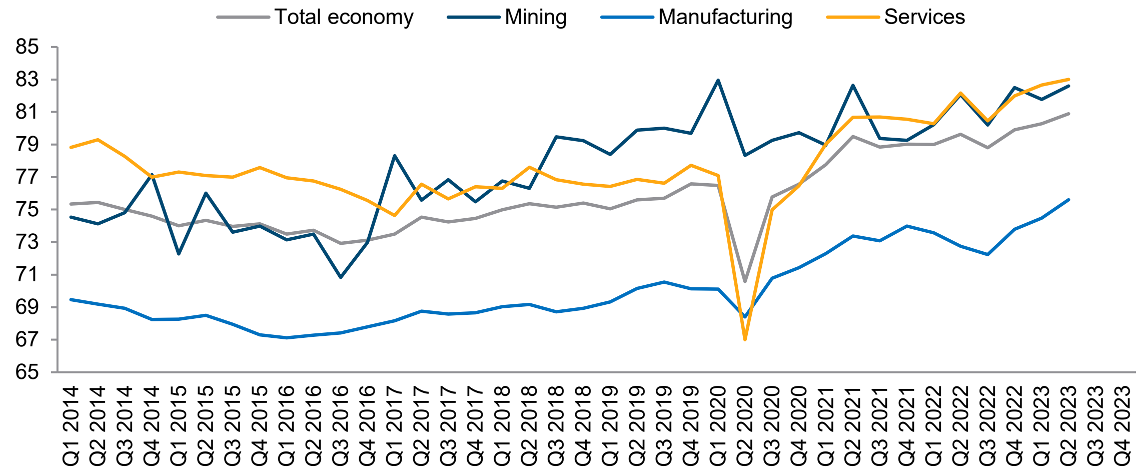
Note: Data on oil production has been classified since March 2023.
Source: wiiw calculations, based on Rosstat data.

In contrast, mining output declined by 1.3% in the first eight months, largely on account of a 12.7% decline in natural gas production (for more on this, see below). However, the mining of metal ores and other minerals recorded modest declines as well, reflecting the impact of Western sanctions and logistical difficulties in reorienting trade flows towards Asia. Within manufacturing, the main losers were pharmaceuticals (-5.1%), wood and cork products (-4.9%), printing and reproduction of recorded media (-2.8%), paper and paper products (-2.6%) and textiles (-1.5%). All of them have been affected to some degree by sanctions and/or the withdrawal of foreign firms. In contrast, the automotive industry – which was hit hard initially, as Western and Japanese car manufacturers left Russia *en masse* – has been recovering strongly month by month, as Chinese companies have stepped in.[4] As a result, its performance in the first eight months of 2023 was flat (year on year).

Economy on the verge of exhausting production capacity

The level of capacity utilisation in the Russian economy has been generally rising and, according to various surveys, now stands at historically very high levels. For instance, a survey conducted by the Central Bank of Russia (CBR) has found that by Q2 2023, it had reached 80.9% – an all-time high for CBR surveys (Figure 1).[5] That said, there are marked differences across the sectors: in manufacturing, capacity utilisation tends to be substantially lower than in mining and services. Another survey conducted by the Primakov Centre in May 2023[6] suggested an even higher level (90%) – the highest level recorded by that institute in recent history – while the labour utilisation rate was likewise found to be very elevated, at 97%, just 1 percentage point below the maximum value ever recorded.

Figure 1 / Rate of capacity utilisation, seasonally adjusted, in %



Source: Central Bank of Russia.

The latter figure squares with the evidence of a tight labour market and widespread labour shortages. By July 2023, the unemployment rate had plunged to a mere 3%, according to official (Labour Force Survey – LFS) statistics – an all-time low (although in reality, it is probably higher – more like 4-5%; for more on this, see the final section). On the one hand, after near-stagnation last year, employment growth has gained momentum, reaching 2.6% year on year in July 2023. On the other hand, labour supply has been shrinking for several years now on account of long-term demographic decline. The ‘partial’ military mobilisation announced in September 2022 (of up to 500,000 men) and the recent emigration of many Russians fleeing mobilisation and the increasingly repressive political regime have only served to aggravate this trend. According to recent estimates,[7] some 800,000 to 900,000 people have left Russia since the beginning of the war. While most have gone to countries that offer visa-free regimes (such as other CIS countries, Serbia, Israel and Turkey), the EU has recorded a surge as well.[8]

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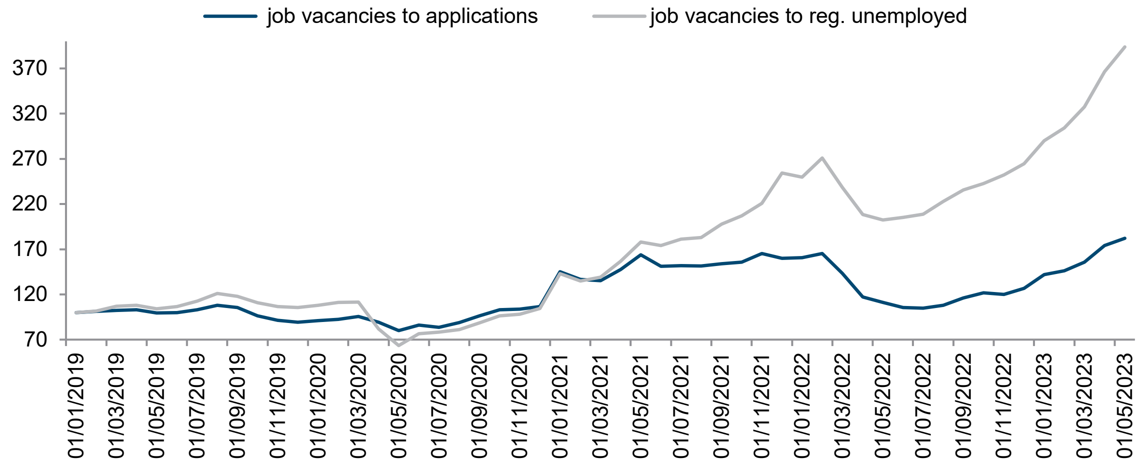
[4] The former Renault factory in Moscow, which has started producing Moskvich car brand using Chinese parts and components, is a case in point.

[5] Central Bank of Russia (2023).

[6] Aukutsionek et al. (2023).

As a consequence, the labour market has been increasingly tight – as indicated by the sharply rising number of job vacancies, in relation to both the number of job applications and the figures for registered unemployed (Figure 2). Labour and skill shortages are particularly acute in the IT sector, which has suffered from the recent exodus of many IT professionals. The structural mismatch also plays a role: workers laid off in sectors that are affected by sanctions and by the withdrawal of foreign firms often cannot be absorbed by those sectors that are booming, such as the arms industry. Labour and skills shortages are typically identified as likely to be among the key constraints on Russia's growth performance in years to come. However, there is a welcome demand-side effect: with employers forced to compete for labour, real wages are being pushed up – in H1 2023, earnings soared by 6.8%, becoming an important driver of the recovering private consumption.

Figure 2 / Labour market tightness, seasonally adjusted, January 2019 = 100



Source: Central Bank of Russia based on data from Rosstat and HeadHunter.

Import substitution to the rescue?

The high levels of capacity and labour utilisation suggest that the potential for economic recovery based on idle production capacities may now be largely exhausted. Under these circumstances, the continuation of economic growth will crucially hinge on new (labour-saving) investments and their productivity. Indeed, there is evidence of vibrant investment activity currently under way in Russia: fixed capital investment was up 7.6% in H1 2023, partly on account of the above-mentioned construction boom, but also in the wake of the realignment of production and logistic value chains by private businesses in response to the recent shocks of the war and sanctions. However, there are question marks hanging over the productivity of investments, given Russia's reduced access to Western technology.

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[7] 'Escape from war: New data puts the number of Russians who have left at more than 800,000 people', 28 July 2023, https://re-russia.net/en/review/347/

[8] According to Eurostat data, taken together, 26 EU countries (without Croatia, data for which are not available) issued around 110,000 first residence permits to Russians last year. That is 66% higher than the average for 2017-2019.

Unsurprisingly, the main beneficiaries of Western sanctions appear to be third countries. For instance, a survey conducted in August by the Gaidar Institute for Economic Policy found that 77% of Russian industrial companies are planning to purchase equipment from such countries as China, India and Turkey, compared to 59% a year ago.[9] Only 9% of companies have said that they are planning to purchase equipment from Western Europe (down from 55% in 2021),[10] and almost none from the US and Japan; meanwhile, the share of those planning to buy domestically produced equipment stayed the same, at 63%.

Overall, and despite the government's efforts to the contrary, when it comes to investment goods, the success of Russia's import substitution strategy appears questionable at best. This is also confirmed by the recent strong performance of imports, Western trade sanctions notwithstanding (for more on that, see the next section). According to the above-mentioned survey, 80% of industrial firms mentioned the lack of Russian-made substitutes as the main reason for opting for foreign equipment; 46% said the main reason was the inadequate quality of Russian-made substitutes; while domestic capacity constraints in the production of equipment ranked third in the list of reasons. Another recent survey conducted by the Higher School of Economics found that around two thirds of industrial enterprises were dependent on foreign equipment, with the coal industry, printing and textiles featuring among the most vulnerable sectors.[11] Successful import substitution is largely confined to industries where Russia had competitive strengths anyway; elsewhere, its success is much more modest – even when it is supported by massive investments, such as in the aviation industry[12] and the production of semiconductors.

RECENT TURNAROUND IN FOREIGN TRADE

While economic recovery is firmly under way on the back of strong domestic demand, Russia's foreign trade performance has recently suffered a dramatic reversal. Back in 2022, goods exports surged by 19.5% in US dollar terms, mostly on account of the high oil and natural gas prices in the EU – themselves largely a legacy of Russia's invasion of Ukraine. Imports of goods, by contrast, plunged 9% last year, as economic recession, Western trade sanctions and the withdrawal of many foreign firms from Russia sharply reined in both demand and the supply of imports. As a result, Russia's trade surplus, including services, surged to USD 292 billion last year, and the current account surplus rose to USD 236 billion, corresponding to 10.5% of GDP.

However, this year those trends have largely gone into reverse. Global oil prices have generally declined (Figure 3); moreover, the price spread between Brent and Russian oil widened – at least initially – following imposition of the EU import embargo (in December 2022 on crude oil and in February 2023 on oil products), although Russia then successfully reoriented the bulk of its oil exports to Asia.[13] It was not until July 2023 that oil prices started to rise again, in large part due to voluntary production cuts by

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[9] https://www.rbc.ru/newspaper/2023/09/04/64f0a32d9a794727112cf60f

[10] However, the share of industrial firms that would *prefer* to buy West European equipment has risen from 65% to 72%.

[11] ibid.

[12] https://topwar.ru/226524-silno-vpravo-programma-razvitija-otechestvennoj-aviaotrasli-gotovitsja-k-prizemleniju.html

[13] China and India now absorb more than half of Russia's oil exports.

Russia and Saudi Arabia (of 0.5 and 1 million barrels per day, respectively), while the Brent-Urals spread has narrowed recently.[14]

BOX 1 / RUSSIAN COMMODITY EXPORTS STRUGGLING

Overall exports

In Q1 2023, Russia exported USD 55 billion worth of fossil energy products to countries that report to the Comtrade platform, as well as China. Besides crude oil, which represents 56% of this export revenue, the fossil energy products include oil products, natural gas and coal. Export revenues in Q2 2023 likely remained at the same level, as indicated by monthly trade data (which are not yet fully reported for June). As compared to the reference period (the average of Q1 2018, Q1 2019 and Q1 2021), exports in Q1 2023 increased by 24%; however, they were 19% down on Q1 2022. Ship movements indicate that oil tankers departing from Russia unloaded 42% of their cargoes in countries (e.g. Turkey) that do not report crude oil imports to Comtrade and thus are not included in the above figures.[15] Hence, the totals above may significantly underestimate Russian export values. The expansion of exports to such non-reporting countries accounts (at least partly) for the decline in export values, compared to the previous year.

Coal

The export value of coal to all reporting countries, as well as to China, has stabilised in the region of USD 7 billion per quarter. Coal exports to China, which represent 62% of all observed Russian coal exports, fell from an average of USD 1.4 billion per month in H1 2023 to approximately USD 1.0 billion in both July and August. Bulk ship movements confirm a slowdown in coal exports during the months of June through August.

Crude oil

The export value of crude oil rebounded slightly: from USD 27 billion in Q1 2023 to USD 29 billion in Q2. India continued to expand its quarterly oil imports from Russia, which reached USD 12.3 billion in Q2. China’s imports of crude oil from Russia remained stable and at a high level in July and August. Despite these trends, oil tanker departures declined in July and August. This may indicate that India’s expansion of oil imports from Russia has already peaked.

Oil products

Russia’s exports of oil products have dropped substantially, from USD 13.2 billion in Q4 2022 to USD 9.6 and USD 7.9 billion in Q1 and Q2 2023, respectively. Turkey and China remain the primary importers of oil products from Russia. China’s monthly imports of oil products in July and August fell, however, from their peak values in May.

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[14] Figure 3 also demonstrates the price cap, set by the G7 at USD 60 per barrel for Russian oil shipments to third countries, has played little (if any) part in these developments. The price of Urals (Russian oil shipped to Europe) has exceeded the price cap since July 2023, while the price of ESPO (Russian oil shipped to Asia; this is precisely where the price cap was supposed to be binding) has *invariably* been higher than the cap.

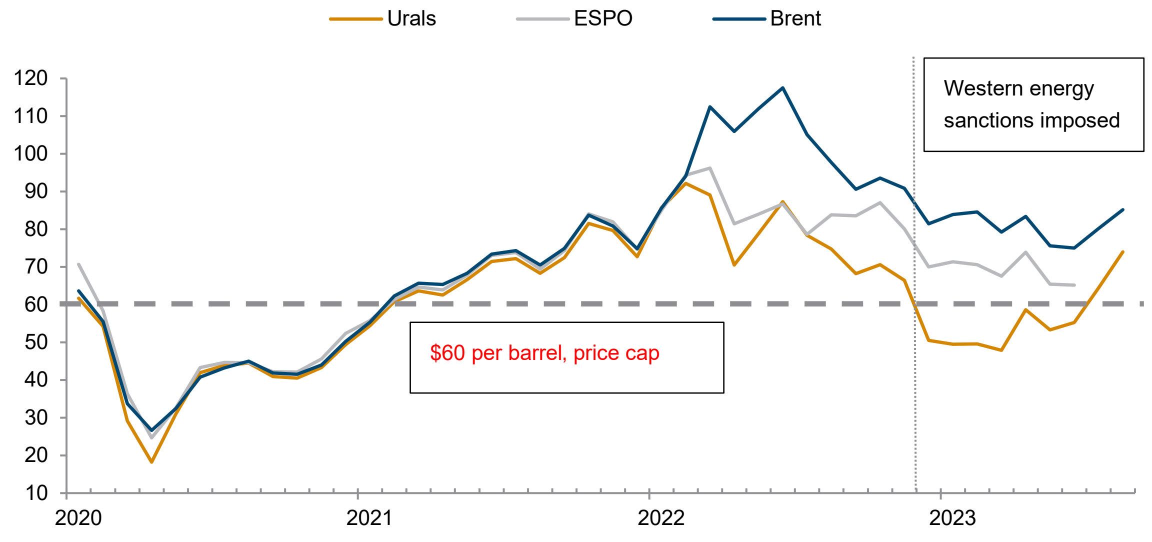
[15] The respective share in Q1 2022 stood at 23%.

Natural gas

Since September 2022, Russia's natural gas exports have declined steadily: in Q2 2023, they reached only USD 8.1 billion – approximately half of their value in Q3 2022. A drop in natural gas prices and reduced pipeline exports likely account for the bulk of this effect, which is also suggested by the constant exports of liquefied natural gas (LNG) via tanker.

Russia's exports of natural gas have also struggled: since the beginning of the war, the country has lost a large slice of its main gas market – the EU – largely on account of the mysterious destruction of Nord Stream 1 in September last year and Russia's own supply cuts via the Yamal–Europe pipeline (crossing Poland). At the same time, the limitations of the existing pipeline infrastructure (most Russian gas export pipelines currently run westwards) mean that it will take some time to fully reorient these gas flows to Asia. All in all, Russian goods exports declined by 32% in January-August 2023 (year on year, in US dollar terms). By contrast, imports surged by 17% (again, year on year), and since May 2023 have been at the same level as the 2021 average, as economic recovery gains momentum and new ways are found to circumvent the trade sanctions (see Box 2). The current account surplus in the first eight months of the year shrank by more than 85% year on year, putting pressure on the exchange rate.

Figure 3 / Oil price, in USD per barrel



Note: Urals price is estimated by the Russian Finance Ministry; ESPO stands for Eastern Siberia–Pacific Ocean export pipeline serving Asian markets; ESPO price 'free on board'.
Source: Central Bank of Russia, wiiw.

BOX 2 / SANCTIONS DISRUPT EU EXPORTS, BUT MISSING GOODS CAN BE PARTLY SUBSTITUTED

Here we cover Russia's monthly imports (in real USD terms) across origin countries, starting from January 2021.[16] We combine data from various sources. First, data on total monthly imports (until July 2023) are available from the Central Bank of Russia, which is the best source for the most recent data points. However, these data do not contain any additional information. Hence, to analyse trends across different origin countries and sectors, we turn to UN Comtrade and national sources, which provide trade data for 58 countries (EU27 plus 31 other countries, which accounted for 82% of all Russian imports in 2019)[17] at the product (HS6) level.[18] Data availability varies significantly across reporters, with some countries having patchy reporting records for the most recent months. For example, data for Azerbaijan and Uzbekistan are only available for January 2023 and then again for April 2023, whereas the EU27 and China provide regular data up until July and June 2023, respectively. These differences in reporting render cross-country comparisons challenging. However, in order to make our analysis as up to date as possible, we add all available months for all disaggregated country-specific time series. For example, when we refer to all the CIS countries covered in our sample, indicators that contain aggregated data only include data up to January 2023 – the latest available month for which all important countries report.[19]

We are particularly interested in how trade patterns of sanctioned goods change over time and across countries. To determine the sanction status of a good, we employ the ifo Institute's sanctions database, which combines information available through TARIC[20] and the relevant legal texts, in order to determine for each CN8 product whether its export from the EU to Russia is restricted. For many products that are affected by the EU sanctions regime, it is straightforward to identify their status, because their CN8 product code is listed in the respective legal text. However, there are two groups of products for which an unequivocal classification is not possible, because the sanctions are defined at an even more disaggregated level than CN8. First, some CN8 products (e.g. luxury goods, such as caviar) are only partially sanctioned; hence, not all tariff lines within the respective CN8 product are restricted.[21] Second, the EU legal documents refer to some products (e.g. dual-use goods, such as specific pumps) by describing them, instead of using the CN8 code. The rationale is that only a very specific technical design of a product can be used for military purposes (and should therefore be sanctioned), while similar goods without the crucial technical feature can still be exported. Again, an unambiguous definition of sanction status is not possible, because the trade data at CN8 are too aggregated to make these fine distinctions. We refer to goods that are partially sanctioned as 'other'; the remaining goods are non-sanctioned.

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[16] Russian imports were converted to USD and are adjusted for inflation (in constant 2018 US prices).

[17] National statistics: EU, Kazakhstan, China (Jan-June 2023); UN Comtrade: Andorra, Armenia, Australia, Azerbaijan, Barbados, Bolivia, Bosnia and Herzegovina, Brazil, Canada, China (Jan 2021-Dec 2022), Chile, El Salvador, Georgia, Guatemala, Guyana, Hong Kong, Iceland, India, Israel, Japan, Kyrgyzstan, Mauritius, Mexico, Moldova, Montenegro, Namibia, New Zealand, North Macedonia, Norway, Paraguay, Serbia (no data for December 2022), South Africa, Switzerland, Turkey, United Kingdom, United States and Uzbekistan.

[18] To calculate the share, we used trade data prepared by CEPII, which are available here: http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37

[19] Data are available for the following CIS countries: Armenia, Azerbaijan, Georgia (former member), Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan. No information is available for Belarus, Tajikistan and Turkmenistan.

[20] TARIC stands for *tarif intégré des Communautés européennes* (integrated tariff of the European Union).

[21] In these cases, the legal text contains the CN8 product code with a prefixed 'ex'.

To be able to compare trade patterns across time, the set of sanctioned and non-sanctioned products should be constant over time. Therefore, we define sanction status by the last available month – e.g. for India, data are available up to March 2023, hence all products that have been sanctioned up to that point are categorised as sanctioned.[22] Unfortunately, CN8 products can only be analysed for the EU, as this is a national product nomenclature that is not comparable across countries. To allow cross-country analysis, we aggregate to 6-digit products and use the HS2017 nomenclature.[23] We define an HS6 product as 'sanctioned', if all corresponding CN8 products are sanctioned; an HS6 product with less than 100% of all CN8 products sanctioned is classified as 'other'; and all remaining goods are non-sanctioned.

Our analysis shows three headline results.

First, the CBR data indicate that imports have recovered fully after a seven-month slump following the beginning of the war with Ukraine, and since May 2023 have been at the same level as the 2021 average (USD 25.3 billion). One might worry about the quality of the data reported by the Russian authorities. However, as Borin et al. (2023) show, any concerns about falsified trade data can be largely discounted.[24] Therefore, the 20 percentage point fall in the share of imports from the 58 countries in our sample since March 2022 suggests that countries that are not included in our sample – such as Belarus, Tajikistan, Turkmenistan (which do not report data to UN Comtrade) and the United Arab Emirates – may be playing a bigger role now. Differences in statistical recording might also matter: Russia imports a significant part through the so-called 'parallel importing' scheme, which refers to the practice of setting up a shell company in a third country (e.g. a CIS country) that is used to buy relevant products from the EU legally and then sell them on to Russia.[25] Since the third country is only used for transit, the export flow of that third country (due to the parallel importing scheme) might not be counted by the respective national statistics, and hence not be included in our mirror data from UN Comtrade and national sources, while the Russian statistics record this trade flow as imports. However, further analysis is necessary to make a definitive statement on this.

Second, sanctions are effectively preventing exports from the EU and the other G7+ countries[26] to Russia and, as of January 2023, full substitution using goods from other source countries was not possible – roughly a third of sanctioned goods are missing, compared to pre-war levels. China is far and away the most important alternative source country for sanctioned goods: the Chinese share in the total imports of sanctioned products increased from an average of 21% in 2021 to 57% (average of July-December 2022); 17% come from Turkey and the CIS countries combined (average of March 2022 to January 2023). For China, at least part of this development can be explained by domestic production having been ramped up; however, for the other countries, sanction evasion springs naturally to mind, as the sudden and large increase in trade volumes seems very suspicious (e.g. Turkey is exporting more than three times the average for 2021, and Armenia ten times). Does this mean that sanctions are not having any effect at all, since EU products are still reaching Russia? Not necessarily, as circumventing the sanctions entails higher trade costs, which drives up the prices for Russian consumers, who then often choose cheaper (and probably also lower quality) alternatives in place of expensive EU products. With monthly exports of sanctioned goods ranging from USD 12 million to USD 63 million in 2022, India plays a negligible role. However, in March 2023, Indian exports to Russia roughly doubled, compared to 2021. In contrast to many CIS countries, where sudden spikes in exports to Russia were driven by very few products (e.g. footwear in Kyrgyzstan in November 2022), this development took place in more than half of the products that India exports to Russia and should be observed further in the future.

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[22] We consider sanctions to be in force for a respective month whenever they are in place for at least 16 days.

[23] The international product classification changes from HS2017 in 2021 to HS2022 in 2022. Again, to keep things comparable across time, we need to use one product definition and therefore settle (as is standard in the literature) on the first available one, i.e. HS2017.

[24] Borin et al. (2023).

[25] https://www.reuters.com/markets/europe/russias-2022-parallel-imports-reach-4-2021-overall-imports-2022-08-15/

[26] Australia, Canada, Switzerland, the United Kingdom, Iceland, Japan, North Macedonia, Norway, New Zealand and the United States.

Third, exports of non-sanctioned products from the EU are at a lower level than before the war. In absolute terms, Russian imports of non-sanctioned goods decreased on average by roughly USD 0.7 billion, which corresponds to one third of the absolute reduction in the imports of sanctioned products. Given that total Russian imports are close to their pre-war levels, this reduction can be explained by the shift in the structure of Russian demand from EU towards non-EU goods. Since European firms now export less to Russia direct (due to higher reputational risks, higher expectations of being hit by sanctions later, or other factors, such as solidarity), many European goods enter Russia via third countries within the framework of ‘parallel’ imports (as with sanctioned goods), which makes them generally more expensive and forces consumers to look for alternatives. For medical goods, however, the EU is still the most important supplier for Russia.[27]

RESISTING DEPRECIATION PRESSURES

The Russian rouble has lost around 30% of its value with respect to most main currencies (except the Turkish lira) since the beginning of this year (Figure 4), briefly crossing the psychological threshold of 100 RUB/USD on 15 August and 3 October. The unfavourable trends in foreign trade (described in the previous chapter) have been one important reason for this, since they have resulted in a sharp decline in the supply of foreign exchange from current account transactions. In addition, Russia’s efforts at ‘de-dollarisation’ of its foreign trade, primarily in the form of a switch from the US dollar to other currencies as a means of payment for its exports, have (ironically) backfired: as a result of such a switch in trade with India, for example, by early May 2023 Russian exporters had accumulated claims worth some USD 10 billion in Indian rupees – which are notoriously difficult to get hold of and convert into ‘hard’ currencies.[28]

Because of the rouble depreciation (and also because imported goods have generally become more expensive, even in foreign-currency terms), consumer price inflation has recently been rising steadily. After the low of 2.3% (on an annual basis) in April 2023, it reached 4.3% in July and 5.2% in August (Figure 5) – thus above the 4% inflation target; annualised inflation (based on the most recent trends) has been even higher, reaching 9-11% at the time of writing. Exchange rate depreciation aside, the steep rise in the price of petrol and diesel following the recent cuts to the subsidies has also played a role (leading the government to impose a ban on exports of these products as of 21 September).

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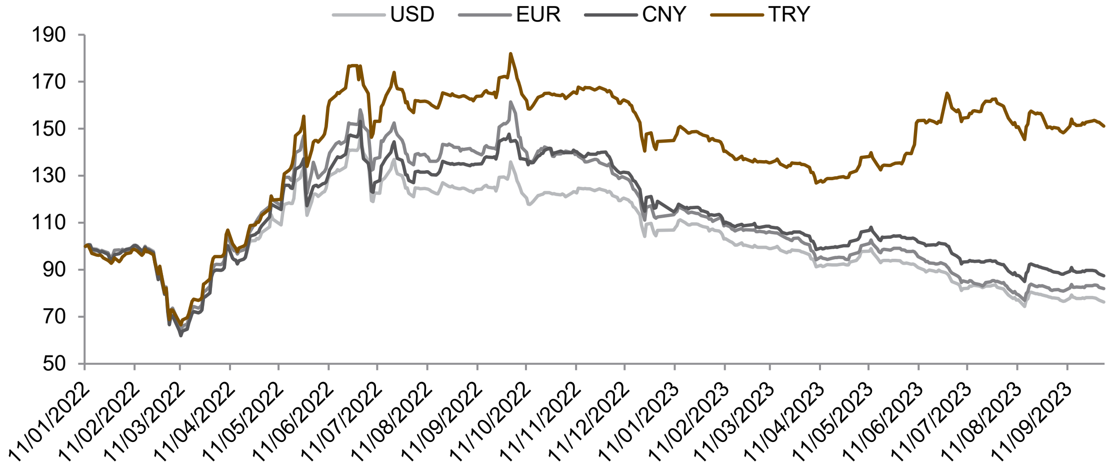
[27] We use the World Bank’s definition of medical goods, which can be found here: https://wits.worldbank.org/trade/covid-19-medical-products.aspx

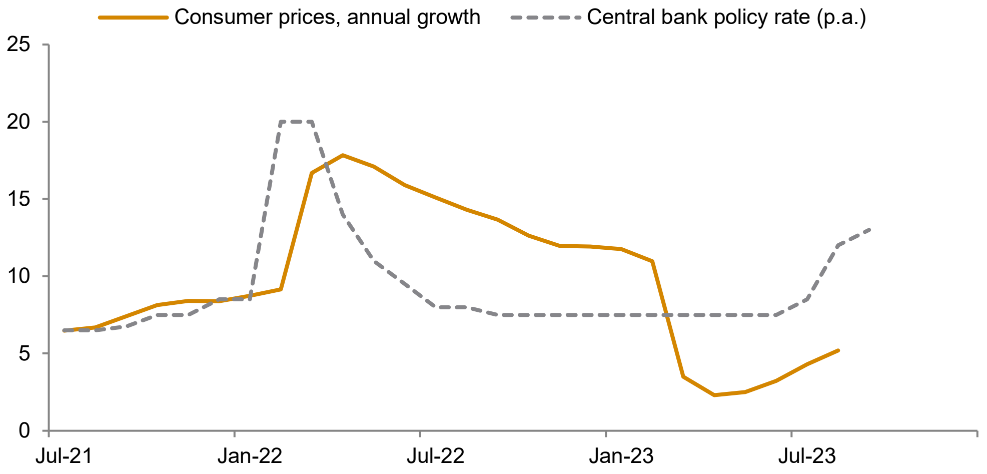
[28] https://www.vedomosti.ru/economics/articles/2023/05/05/974042-rossiya-reshit-problemu-zavisshih-rupii

Figure 4 / Nominal exchange rate of the rouble against main currencies, 11.1.2022 = 100



Note: falling (rising) line corresponds to depreciation (appreciation) of the rouble.
Source: Central Bank of Russia.

Figure 5 / Inflation and policy rate, in %



Source: wiiw Monthly Database, incorporating national statistics.

Under these circumstances, since July the CBR has hiked the key rate in three steps, by a combined 5.5 percentage points (to 13%), and has stepped up its foreign exchange interventions (Figure 5).[29] These measures, coupled with the increased 'voluntary' conversion by exporters of their foreign currency earnings,[30] have been successful in stabilising the exchange rate for now. Such fundamental factors as recovering oil prices should provide support for the rouble in the coming months as well. However, as the pass-through from the previous depreciation into consumer prices is not yet over, inflationary pressures may not subside very rapidly. Besides, the CBR is concerned about the economy ‘overheating’, whereby strong domestic demand increasingly faces capacity bottlenecks, with potentially adverse inflationary consequences.

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[29] Another move in this vein has been the tightening, as of September 2023, of regulations on subsidised mortgages, which had been an important driver of credit growth. The minimum downpayment required has been raised from 15% to 20%, and the interest rate subsidy on mortgages has been cut by 0.5 percentage points.

[30] Exporters have been strongly 'advised' to exchange their export proceeds into roubles; otherwise, the government has threatened to tighten capital controls.

FISCAL SITUATION BETTER THAN EXPECTED, BUT DEFICITS WILL NOT BE AVOIDED

Low energy exports this year have affected the government’s energy revenues, which historically used to account for around 40% of the federal budget. Although the recent upturn in oil prices and the depreciation of the rouble have brought some relief, on average in January-August 2023 these revenues were still down by 38%. However, non-energy tax revenues picked up by 24%, thanks to the economic recovery under way. Moreover, the growth in budget expenditure – which was very high at the beginning of the year – has moderated, averaging a mere 12% in the period January-August. While the budget deficit reached RUB 2.4 trillion in the first eight months, the whole-year target of RUB 2.9 trillion (1.7% of the GDP now projected) appears broadly realistic.

Thanks to the better-than-expected performance of the economy and of tax revenues, the medium-term fiscal outlook has generally brightened as well. According to the government draft for 2024-2026 (yet to be adopted by parliament),[31] federal budget deficits for the next three years will stand at 0.9%, 0.4% and 0.8% of GDP, respectively. These are very low figures by international standards, which implies that public debt will rise very slowly and will stay below 20% of GDP up until 2026. However, they represent a novelty for Russia, which over the past two decades has had a solid track record of (mostly) fiscal surpluses. The deterioration in Russian fiscal balances over the forecast horizon is a direct consequence of the war and the high war-related government spending. For 2022-2023 alone, the size of the fiscal stimulus enacted (including off-budget support) is put at around 10% of GDP, according to estimates by the Finance Ministry.[32]

The sharp rise in planned government expenditure in 2024 (26% in nominal terms) is mostly due to the 68% rise in ‘defence’ spending, which will reach 6% of projected GDP.[33] By contrast, spending on the ‘national economy’ (which includes public-sector investment and subsidies) will be cut by 5.7% next year, which will likely further impede government efforts at import substitution. It is noteworthy that USD 1.85 billion will be allocated next year in fiscal transfers to the four Ukrainian territories annexed by Russia last year (Donetsk, Luhansk, Zaporizhzhia and Kherson), in addition to USD 390 million envisaged for their reconstruction and development.[34]

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[31] Ministry of Finance (2023).

[32] ibid.

[33] However, in 2025 and 2026 defence spending is planned to be cut again, by 21% and a further 13%, respectively, probably reflecting the government’s belief that the war will be over by that time (or at least its intensity will have declined substantially).

[34] Own calculations, based on the current exchange rate of 96 USD/RUB, https://www.vedomosti.ru/economics/articles/2023/09/27/997295-v-proekt-byudzheta-vklyuchili-gosprogrammu-vosstanovleniya-novih-regionov

The planned growth in government spending next year should be matched by a 34% growth in revenue (again, in nominal terms), facilitated by the higher nominal GDP,[35] rouble depreciation,[36] and the higher average price for Russian oil: USD 71.3 per barrel, according to government projections (up from USD 63.4 this year). By and large, these assumptions look realistic. Besides, revenues should be helped by a higher taxation burden (e.g. the introduction from 1 October 2023 of export duties on selected Russian commodities).[37] The measure has been justified by the government on the grounds that the weak rouble is providing exporters with bonanza profits, which should be taxed. Starting from 2025, the budget draft envisages a return to the 'fiscal rule', which was abandoned at the start of the war. The new version of the fiscal rule foresees a threshold oil price of USD 60 per barrel (instead of USD 45 prior to the war): this means that only revenues from the oil price that exceed that threshold will be channelled into the National Welfare Fund, while the remainder will go to the federal budget. This should provide some RUB 1.5 trillion in additional government revenues, according to Bloomberg Economics.[38]

CAN RUSSIAN STATISTICS BE TRUSTED?

As statistical reporting by the Russian authorities becomes less transparent and more sporadic (with some statistics discontinued altogether), there is greater demand for alternative data sources that can serve to validate the official data. This section describes the results of modelling carried out at wiiw, which has sought to verify how realistic the Russian official statistics are, using Google Trends data.[39] This approach is not new: it has been tested for multiple countries in both stable and unstable settings – sometimes alone, and sometimes together with other data sources, both conventional and unconventional.

In short, we approximate the Russian economic time series during the war by creating a set of models using a dataset composed of Google Trends queries, and financial and monetary data that are not reported by the Russian Statistical Office. We reduce the dimensionality of the dataset by constructing its principal components and training a set of models based on these principal components. As a final step we apply model averaging by aggregating predictions across the models, using different weighting approaches. For the sake of brevity, we concentrate only on the main results below. Any reader interested can find the details of the modelling process and methodology in the corresponding working paper.[40]

Figure 6 shows the predictions of our model for four macroeconomic indicators – the Consumer Price Index (CPI), GDP, retail sales and the unemployment rate – as well as the actual data reported by the Russian Statistical Office. Each chart shows the officially reported data (the pink line), together with a set of models. The grey lines represent individual models, where the regressors are principal component analysis (PCA) components. Each model type denoted as 'Model PCA type: *x*' refers to the model where the PCA components account for *x*% of total variation within the dataset. The larger the value, the greater the total variation of the dataset they cover, but also the number of PCA components. The grey lines represent individual model predictions; the violet line shows the mean value of predictions across all models; the yellow line shows the 'best' model, as measured by root mean square error (RMSE) for the period 1 January 2021 to 1 March 2022; the pink line shows the actual value; and the red line shows the model where the explanatory variables are forecasts of the individual models.

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[35] For 2024, the government reckons on real GDP growth of 2.3% and end-year inflation of 4.5%.

[36] Average exchange rate in 2024 is projected at 90.1 USD/RUB, versus 85.2 USD/RUB this year.

[37] The duty will be applied to all exports, except oil, natural gas, grain and timber, if the rouble is below 80 USD/RUB. It will range between 4% and 7% depending on the exchange rate. For fertilisers, exports of which are already subject to 7% export duty, a uniform rate of 10% will be applied, https://www.interfax.ru/business/922398

[38] https://t.me/c0ldness/1902?comment=14561

[39] The model estimations were done in mid-2023 and are based on data up until April. More recent trends, such as the pick-up in inflation and the acceleration of GDP growth, are therefore not reflected in the estimations and the accompanying analysis.

[40] Kochnev and Sabouniha (2023).

Consumer Price Index

Our model results generally support the officially reported CPI variation in Russia during the war. Deviations from the best model are largely negligible for the period 2022-2023, with the exception of the latest month, when official inflation was reported to be below 3%. Although models at the upper bound of the distribution indicate a downward trend for inflation, none of them supports the speed of deceleration suggested by the official statistics. That said, the uncertainty across the models is fairly large at both ends of the distribution.

Retail sales

The best model shows retail trade dynamics close to the official figures, with the difference being negligible. Retail sales remain below the zero line, showing barely any sign of recovery after the war-time shock. Note that the distribution of the predictions is heavily skewed downwards, suggesting that, if anything, the official statistics are at the upper end of the spectrum.

GDP

Our GDP predictions follow a similar pattern as retail sales: a dip in Q2 2022, with no clear sign of recovery.[41]

Unemployment

Comparison of the unemployment statistics with the modelled results shows the greatest divergence between the official and the predicted data. What stands out in this example is the shape of the trend line. Whereas during the period of test data (1 January 2021 to 1 March 2022) the slope of the trend lines generated by model averages and the 'best' model is in line with the official statistics, recent trends of model results and official statistics (based on LFS) diverge: it appears that the behaviour of Google users is no longer in line with the official figures. There are several possible explanations for that. The first is that the official statistics do not reflect partial employment, which provides little or insufficient income: people employed in such jobs are likely to stay in the active job search process, looking for an opportunity to improve their financial situation. The second explanation is that the official statistics might not capture the dynamics in the informal/shadow economy to the same extent as the Google search trends do. And finally, the Google search results could potentially be elevated by Russian emigrants who are still sending search queries in Russian, while looking for a job abroad or in Russia as remote workers.

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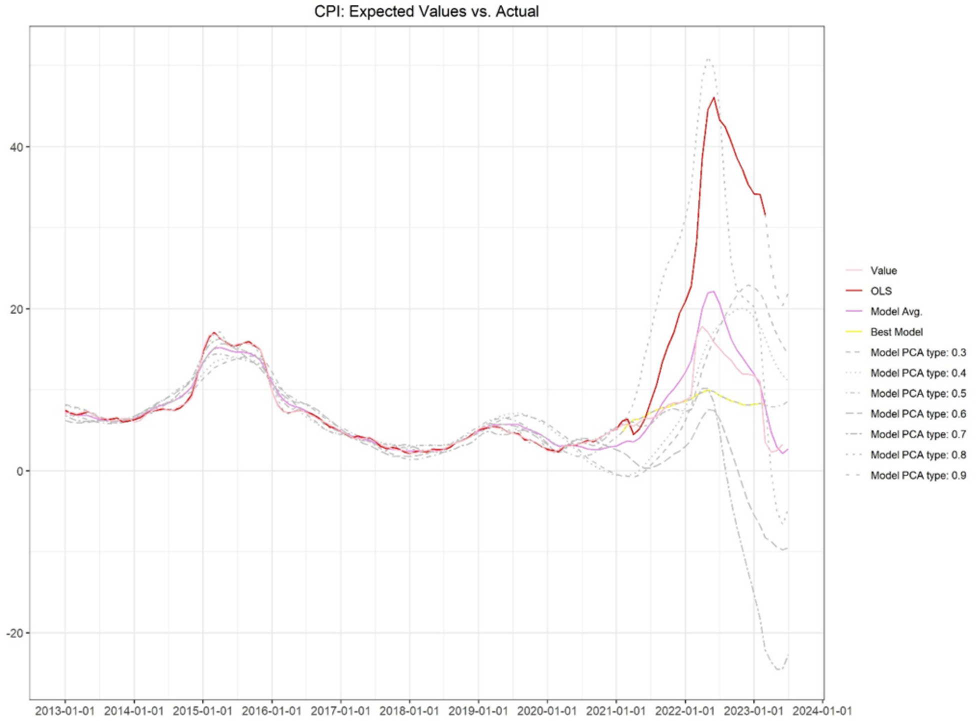
[41] It is worth noting, however, that this is an instance where model averages perform better at approximating GDP than the model with the lowest RMSE over the test period, and suggest a larger and continuing contraction. This result stems from the fact that the probability distribution is heavily skewed downwards.

Figure 6 / Predicted and actual values for key macroeconomic indicators



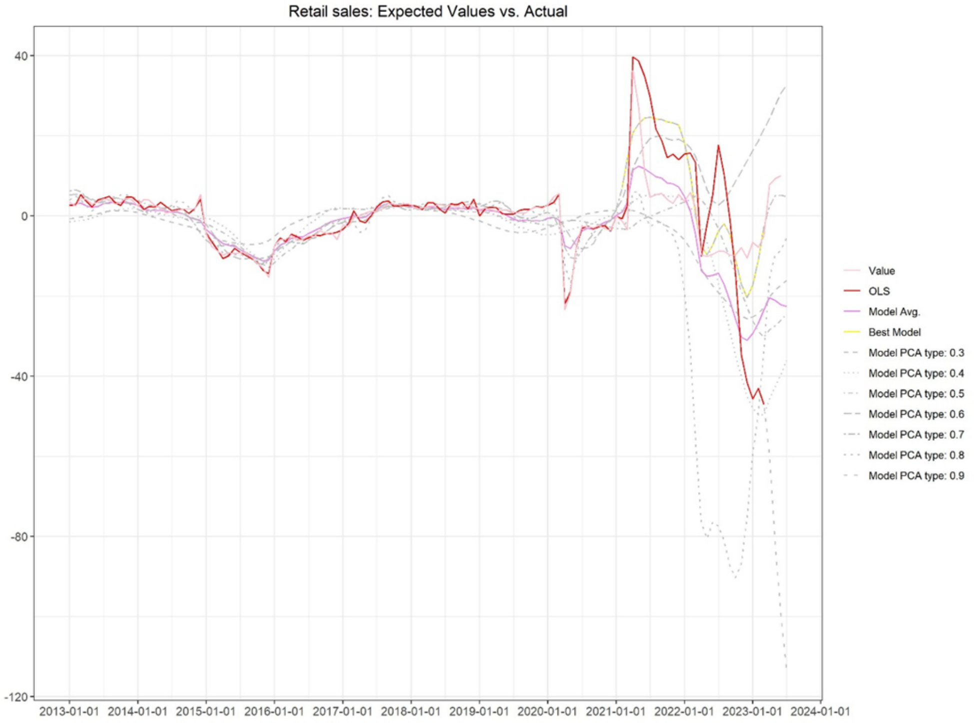


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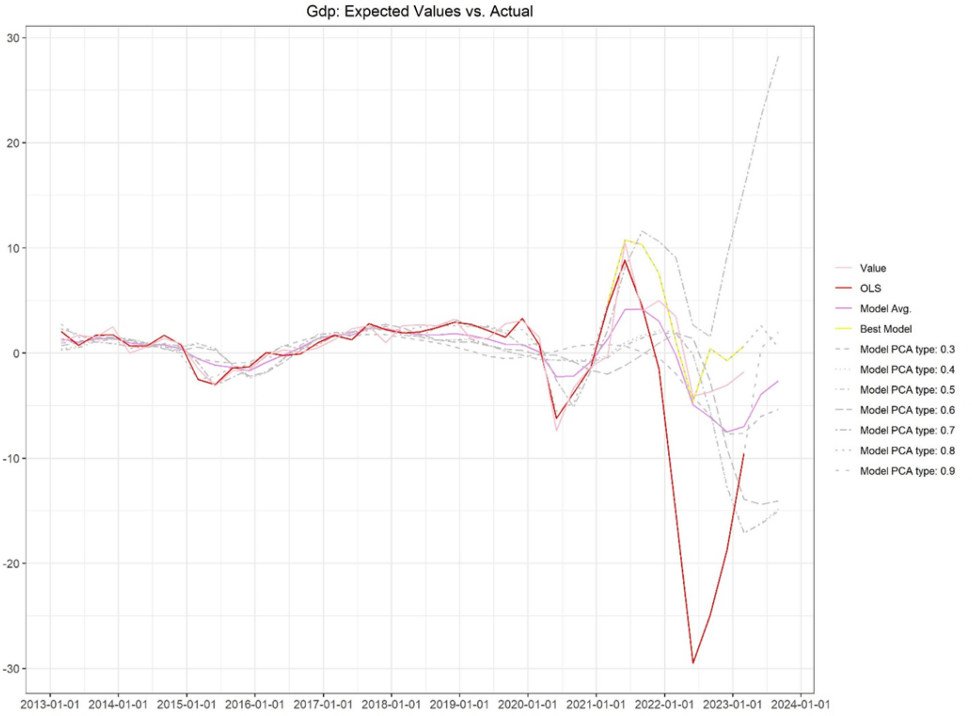
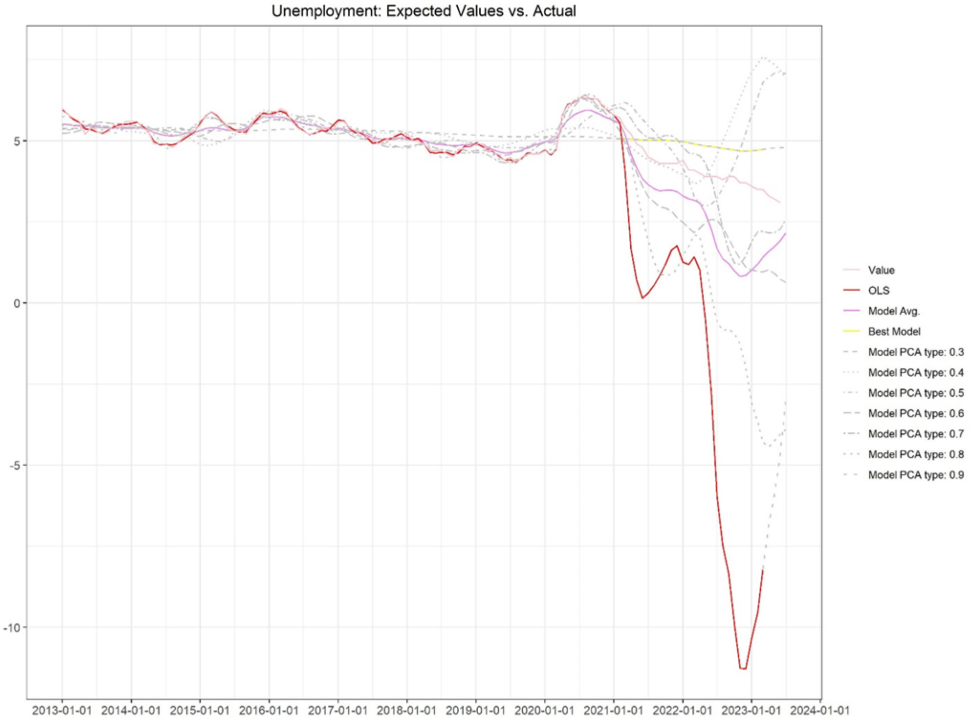
Figure 6 / Continued





Note: Grey lines correspond to individual models, where the regressors are PCA components.
Model PCA type: *x* refers to the model where PCA components in total account for *x*% of total variation within the dataset. The larger the value, the greater the total variation of the dataset the PCA components cover, but also their number. Grey lines represent individual model predictions; the violet line shows the mean value of predictions across all models; the yellow line shows the 'best' model, as measured by RMSE for the period 1 January 2021 to 1 March 2022; the pink line shows the actual value; and the red line shows the model where the explanatory variables are forecasts of the individual models.
Source: wiiw calculations.

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