

In February 2022, Russia initiated a full-scale invasion into Ukraine. The war developed into a relative stalemate, with both sides suffering. This current situation leads to some relevant questions such as: Will the West continue its support for Ukraine to maintain the stalemate? Is this support likely not enough to win? Can Ukraine sustain its losses? Is Russia able to regain the initiative despite its military losses and economic sanctions? Many defense and economic analysts postulated that Russia's economy would crater under the weight of sanctions and the loss of foreign trade imposed by the West. If this were to happen, it would provide an advantage to Ukraine.

According to The Guardian, Russia's Defense Industrial Base (DIB) rarely turned a profit before the war. However, Russia's war economy now exceeds estimates. This was achieved with the use of abundant energy revenues and currency reserves to pay for the war, nationalizing specific aspects of the economy to mobilize industry, and increasing efficiency and output. Russia also relies on other authoritarian regimes for assistance and has taken extensive sanctions avoidance measures to acquire the critical technology that it cannot produce domestically.

Economic forecasters project the Russian industrial production boom to continue in the near term (1-2 years). This year, the massive Russian investment in the military is projected to be the largest as a share of GDP since the Soviet Union era.

Energy exports remain the center of gravity for the Russian war effort. As such, damage inflicted on the export energy sector disrupts Russia's ability to make this work to its favor. China, North Korea, and Iran are collaborating on combat equipment and lethal aid for Russia's use in Ukraine. China is now integral to Russia's defense industry, so large-scale Chinese military aid would make that calculation questionable.

Bottom Line:

- The Institute for the Study of War (ISW) and other Russia analysts assess the Russian DIB is capable
 of sustaining Russia's current tempo of operations, although not likely able to fully support a potential
 operational or strategic-level offensive operation using a strategic reserve of manpower in 2024.
- Economic forecasters project the Russian industrial production boom to continue for the next 1-2 years. ISW also assessed "Russia's increased DIB production is unlikely to be sustainable in the medium- and long-term (2-5 years)." Economic conditions for long-term well-being are grim.
- There are significant headwinds, however, such as inflation, rapidly depleting sovereign wealth, lost foreign direct investment, a substantial lack of skilled labor, loss of foreign technologies and expertise, and sanctions. Some analysts believe, with cause, that the Russian economy is not as productive as it advertises, and that Putin is cannibalizing other sectors to sustain the war. Restated, perhaps Putin "is burning the furniture to heat the house."



Discussion:

Following Russia's attack on Ukraine, many defense and economic analysts postulated that Russia's economy would crater under the weight of sanctions and the loss of foreign direct investment and trade (for broader context with sanctions, please see <u>Bancroft GEOIntelligence White Paper on Sanctions</u>). Indeed, cratering the Russian economy was the intent of the sanctions and other measures taken by the United States and Europe. However, Russia's defense industry has nearly 6,000 companies, many of which rarely turned a profit before the war, according to The Guardian. But what it lacked in efficiency, it made up for in spare capacity and flexibility when the Russian government suddenly ramped up defense production in 2022. After an initial downturn, its economy recovered and has surpassed its pre-war levels of production in many critical areas.

Economic forecasters project the industrial production boom to continue in the near term (1-2 years). This year, massive investment in the military is projected to be the largest as a share of GDP since the Soviet Union era. Recently, NATO realized it underestimated Russia's ability to sustain a long-term war. The Guardian quoted an Estonian defense official who stated, "we still haven't seen where Russia's breaking point is. Basically one-third of their national budget is going on military production and on the war in Ukraine. So, it's a little bit challenging to say when this will stop."

However, defense manufacturing is very popular with the people as it employs 3.5 million Russians, which is about 2.5% of its citizens—the populace is unlikely to complain or cause problems as long as the money flows. Looking beyond the near-term, however, the ISW assessed that "Russia's increased defense industrial base (DIB) production is unlikely to be sustainable in the medium- and long-term (2-5 years)." This is due to labor shortages and an inability to fully compensate for military and dual-use items it can no longer acquire due to sanctions.

Another significant problem in the Russian defense industry is inflation and the lack of qualified personnel to man the manufacturing machines. Significant portions of the increases in Russia's military procurement budget are being eaten up by inflation: The country's overall inflation rate was 7.4% in 2023. Inflation was more than 30% in certain weapon categories. As a result, the Bank of Russia's key interest rate is 16% to control inflationary factors in the economy, but this also created the additive problems of inhibiting growth plus raising the costs for the government to finance weaponry.

Expanding the DIB has required serious upgrades to production facilities, as well as investment in skills and training. Many of the current skilled workers are nearing retirement age, and young graduates are hesitant to enter industrial work due to historically low wages, remote locations, and insufficient career opportunities. However, recent initiatives have boosted wages, stoking inflation.

Further, the Wall Street Journal reported that the Bank of Finland concluded "Russia may not be able to sustain its expanded DIB production as it takes personnel and material resources away from other sectors of the Russian economy." The report also stated that "the Russian DIB is suffering from a personnel shortage of about 20 percent and some DIB enterprise employees have recently complained about the lack of training and tools." This seems to also reflect the conditions after more than one million of its best and brightest workers left the country after the first mobilization.

It is also important to note that the Russian DIB is not as productive as Russian authorities portray it to be, but it is still capable of mostly sustaining Russia's war effort. To this point, Yale management experts have described Russia as cannibalizing the other parts of its economy to focus exclusively on wartime production. In their terms, Russia is "burning the furniture to heat the house." It will continue to fall short in some critical areas and provide equipment of lesser quality than pre-war manufactured items. However, in some areas such as long-range precision strike weapons, they have substituted parts with what they can acquire and are now exceeding pre-war production levels.



In the near-term, Russia will have more than sufficient means to continue its unrestricted warfare against Ukraine. The Russian economy has been militarized and is now geared up for years of fighting in Ukraine. It also has extensive support from Iran, China, and North Korea to make up for near-term shortages.

In the mid- to long-term it is easy to foresee a time when Russia will have a second instance of what happened after November 1989 when the Soviet Union fell apart. The West had collectively outspent the Soviets and bankrupted them to the point where their autocratic system of control and patronage fell apart. Similarly, modern Russia is rapidly spending its current funds and available reserves thus ensuring it has a bankrupt future. Further, history informs us that Tsar Nicholas bankrupted the nation during World War I and was overthrown in 1917 because of the hardships inflicted on the people via a broken economy. Given two similar instances in Russian history, the mid- to long-term conditions look rather ominous for Putin and the nation.

Funding the War:

The Economist assesses "The budget assumes that oil and gas revenues will increase by more than a quarter in 2024 to 11.5trn rubles, on the expectation that Brent crude will average \$85 per barrel and Urals crude \$70. If oil prices drop, revenues will come in below target. The budget also assumes that the ruble will average roughly 90 to the dollar in 2024. If the currency appreciates, however, earnings on oil and gas exports will fall in ruble terms, squeezing government revenues. GDP growth may also fall short of expectations."

Further, The Economist cited Russia's 2024 budget has boosted "...defense spending in 2024 by nearly 70% to 10.8trn rubles (\$115bn)—nearly a third of total expenditure and almost three times what had been forecast in 2021. Military outlays—on equipment, salaries, and payments to the families of soldiers killed in battle—will be three times higher than spending on education, health care and the environment combined, and will account for more than 8% of GDP." Its ability to sustain this expenditure rate from sovereign accounts and energy proceeds is limited, but the timeline is uncertain.

Energy Sector:

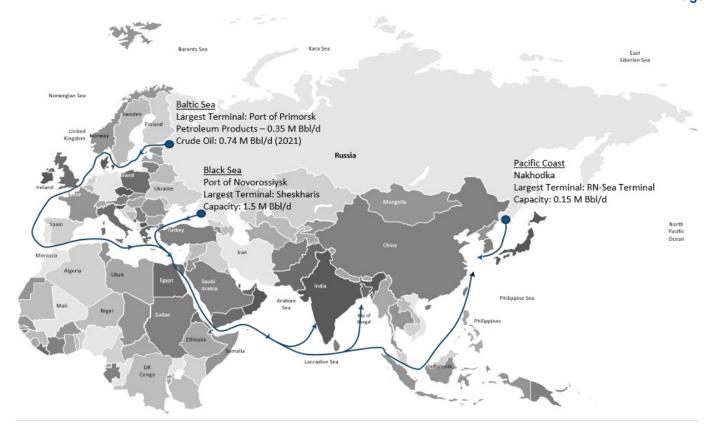
Energy receipts are the center of gravity for the Russian war effort. Without income from its energy, Russia could not fund the expansion of the economy, increase war material production, and pay the troops. Any damage inflicted on the export energy sector disrupts Russia's ability to make the whole thing work to its favor. It is for this very reason that Ukraine has developed long-range strike weapons that are targeting the oil and gas infrastructure. To date, these strikes managed to decrease Russian energy refining by 14%. However, damage has been done to refined petroleum capabilities, thus reducing energy for domestic consumption. These products are not major revenue producers. In contrast, the export capacity has been spared and has not affected the global supply of oil.

A Russia analyst recently commented "...there are six billion people and nations across the globe desperate to improve their daily struggle for bare basic survival and that of their children. Affordable energy is the common means to survival and advancement, and oil and gas remain the greatest accessible form of energy. The undecided peoples outside of Russia and the West are watching." They will make a choice on whom they will support based on the ultimate kitchen table discussion—energy to support their economic well-being and families.

Price caps on Russian oil are easily evaded; oil is fungible and global. Further weaking sanctions regimes is the fact there is no physical enforcement on the seas. Entire ghost fleets of oil tankers, which travel off normal navigation routes and are not using international maritime signals, have emerged to transport Russian oil to global destinations.

The internationally agreed protocol requires all oil tankers to have insurance. Western insurance financial institutions are these insurers. Alternatively, the oil price cap protocol in which we try unsuccessfully to "enforce" caps by prohibiting reputable insurance issuance to tankers carrying Russian oil. The dark tankers that transport Russian oil do not comply, and the rogue nations of the world have created their own maritime insurance regime to support the ghost fleets.





Industrial Nationalization:

The Ukrainian Armed Forces (UAF) has destroyed large quantities of Russian equipment, including tanks, armored personnel carriers, artillery and rocket systems, helicopters, and naval vessels. Russia has responded to those losses by mobilizing its economy to support the war effort. Among other actions, it has directed civilian enterprises to produce products with military applications, transitioned the defense industry to round-the-clock production, and directed about 30% of the federal budget to the military in 2024. The Congressional Research Service assesses "With its wartime production posture, Russia's defense industry appears capable of building, upgrading, and repairing most equipment and weapon systems to sustain combat operations."

A study conducted by Novaya Gazeta Evropa and Transparency International Russia reveals that, since the onset of Russia's War on Ukraine, Russian courts have received an unprecedented 40 demands for the nationalization of more than 180 private companies. The most nationalized enterprises are those in the military-industrial complex, mechanical engineering, food, and fishing industries, as well as ports and real estate. Moreover, a substantial portion of the companies seized have a direct role in defense manufacturing. (Russian Life: Nationalize it, 1.bb).

Early in 2023, the Russian government transferred more than a dozen plants, including several gunpowder factories, to the state conglomerate Rostec to modernize and streamline production of artillery shells and other key elements in the war effort, such as military vehicles. Al-Arabiya reported the head of the (Russian) Investigative Committee, told a conference "We are essentially talking about economic security in a war," and "Let's go along the path of nationalizing the main sectors of our economy."

Chatham House noted that in 2022 Putin initially denied that he would nationalize foreign assets, but then ordered the re-nationalization of assets beginning in 2023. Additionally, he is engaged in a campaign to redistribute the wealth from the old cohort of oligarchs who are aging out of their roles. Assets are being transferred to new and younger groups of state oligarchs, and used to shore up personal allegiance and support for Putin himself. Putin views the elders as holders of assets that were transferred into their hands by the state and, thus, could always be transferred back.



This amounts to a significant restructuring of the politico-economic system in Russia. De-privatization is a basic declaration that private property rights in the country are null and void and that all property is contingent on an individual's relationship with Putin. This fits with evidence of how authoritarian political systems generally function: the leader uses the distribution of resources to establish ties of patronage and loyalty.

To reinforce Russia's drive to efficient wartime production, Putin made a significant change in his cabinet. According to The Economist, President Putin dismissed Sergei Shoigu as Russia's defense minister after 12 years in post on May 12, 2024. He named Andrei Belousov, a technocrat with few ties to his country's security bloc, as his replacement. His father was an economist, and he studied economics and started his career in academia.

More recently and significantly, The Economist reported "Belousov joined the government in 2006 as a deputy economics minister. He began working closely with Mr. Putin two years later when he became director of the government's economics department. He was later a minister for economic development, a presidential aide and, from 2020, a first deputy prime minister. He has a reputation for being one of Mr. Putin's acolytes." Above all, he appears to be loyal to Putin.

He is known for his statist economic views, and his ideas may appeal to Mr. Putin given funding for the armed forces could reach \$120 billion this year, a third of all government spending. He seems to fit perfectly into the current military-economic situation in Russia. "Mr. Belousov was previously responsible for increasing Russia's production of drones. He also has strong links with officials in China, which has become a crucial supplier of parts and even finished armaments to Russia's arms industry."

The appointment has a clear purpose: Vladimir Putin is betting on a long war of attrition in Ukraine. He gave Belousov two tasks as he entered office: First, fully integrate the Russian military economy into the general Russian economy and complete the defense industry mobilization; Then, make the Russian Ministry of Defense as open as possible to innovation.

Labor:

ISW has previously assessed that Russia's labor shortage, which is simultaneously a result of its war in Ukraine and a symptom of Russia's ongoing demographic crisis, will likely continue. Additional complications are created by Kremlin efforts to balance increasing Russian economic capacity and force generation while catering to the Russian ultranationalist community by disincentivizing migrant workers from working in Russia.

The Kazan gunpowder plant, one of the country's largest, took on more than 500 workers in a December hiring spree that increased average monthly salaries at the plant more than threefold, from 25,000 rubles to 90,000 rubles (£782), according to the plant's director. Job announcements offer night shifts from midnight to 8:00 a.m. and protection from military service for those trying to avoid the frontlines.

According to The Guardian, the Kurganmashzavod plant produces the BMP-2 and BMP-3 infantry fighting vehicles and has brought in student and convict labor to help the factory meet its deadlines. Workers told local media they had been shifted to six-day weeks and 12-hour shifts. "It is actually forbidden to refuse additional shifts. You either agree [or] you're fired, and there's no third option."

External Suppliers:

The Economist reported that "Despite western sanctions, Russia's arms industry is booming. Its production of crucial weapons for its war effort in Ukraine has dramatically increased since the start of the fighting. By the start of this year the monthly capacity for long-range missiles is thought to have more than doubled. The growth is made possible by new international suppliers, who provide parts, electronics, and tools." For example, a recent report indicated 90% of the microchips for weaponry are sourced from China.



The Wall Street Journal reported that Western analysts have assessed that Russia's current domestic ammunition production is not sufficient for its war in Ukraine, so Russia will likely continue relying on supplies from key partners—Iran and North Korea – for high-use munitions such as suicide drones, artillery rounds, and small arms ammunition. CNN reported NATO intelligence estimates that Russia is producing about 250,000 artillery munitions of unspecified caliber per month totaling about three million shells per year. They use about 3.6 million rounds annually, with the remainder coming from stores or external suppliers such as North Korea, Iran, and China. It is important to note that Russian bloggers often reflect soldier complaints about the low quality and unsafe nature of the foreign ammunition.

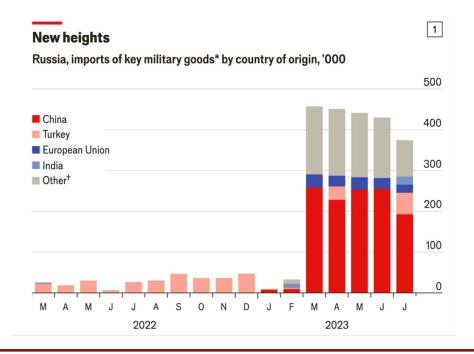
The China Factor:

As indicated in the following graph, China is the largest supplier of dual use and military-specific goods for Russia's arms industry. "The chart suggests that Russia's imports of such goods began to rise after President Vladimir Putin announced a partial mobilization in September 2022. But the surge in deliveries from China came in March 2023, when Xi Jinping, the country's leader, met Mr. Putin in Moscow." China has maintained that it is neutral in the war and does not provide weapons, but recent evidence is to the contrary.

The Economist reported after a recent London Defense Conference at King's College, Britain's defense secretary stated there is evidence "that Russia and China are collaborating on combat equipment for use in Ukraine," to include "lethal aid." China is now integral to Russia's defense industry and apparently the Chinese leadership is either no longer as worried about Western sanctions or it believed the aid would remain secret. "This matters because Russia's defense industry is supposed to plateau next year. Chinese intervention on any large scale would make that calculation questionable."

However, secondary sanctions are biting into the China-Russia relationship at a time when China is struggling with the massive fallout from its real estate bust and other structural problems. The effect to note is Chinese companies are becoming less willing to provide Russia with equipment and spare parts.

China has become critically important to Russia, with Russia now viewed as the junior partner in that relationship. As noted, Putin's new defense minister, Mr. Belousov, is reported to have important and strong links with officials in China, which will have a significant role to play in sustaining Russia's wartime industrial capacity. This point was undoubtedly stressed during the recent Putin-Xi meeting in Beijing. Xi subsequently made a point of stating the relationship has grown stronger in the areas of defense cooperation.





Assessment:

The ISW and other Russian analysts assess the Russian DIB is capable of sustaining Russia's current tempo of operations, although not likely able to fully support a potential operational or strategic-level offensive operation using a strategic reserve of manpower in 2024.

Economic forecasters project the Russian industrial production boom to continue in the near term (1-2 years). However, ISW assessed that "Russia's increased DIB production is unlikely to be sustainable in the medium- and long-term (2-5 years)" due to labor shortages and an inability to fully compensate for military and dual-use items it can no longer acquire due to sanctions. In the mid- to long-term it is easy to foresee a time when Russia will repeat what happened in 1917 and again in 1989 – Russia's economy tanked and there was regime change from within.

Energy receipts are the center of gravity for the Russian war effort. Without income from its exported energy, Russia could not fund the expansion of the economy, increased war materiel production, and pay the troops. Any damage inflicted on the export energy sector disrupts Russia's ability to make the whole thing work to its favor. China is now integral to Russia's defense industry, potentially serving as its lifeline. China might also perceive a Russian collapse in the mid- to long-term as a strategic setback and is taking measures to ensure it retains a capable partner in its campaign against the West.

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