S&P Global Ratings

The Macro And Credit Effects Of Russia's Invasion Of Ukraine

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This report does not constitute a ratings action.

Key Takeaways

- We are assessing the effects of Russia's invasion of Ukraine and the related economic sanctions on economies, borrowing conditions, and credit quality in the region and worldwide.
- The potential profound and protracted effects represent a material departure from our previous base case expectations.
- In this note, we outline our approach to covering the situation from a macro and credit standpoint. As the situation continues to evolve, we will issue further reports that consider the credit implications and potentially take rating actions on a case-by-case basis.

With the world's eyes focused on Russia's invasion of Ukraine, S&P Global Ratings remains engaged in assessing the effects on economies in the region and around the world, the ramifications for financial and energy markets, and the impact on borrowing conditions and credit quality. The invasion has, beyond the human cost of the conflict, roiled financial markets and driven oil prices higher—and there could be profound and protracted effects on macroeconomic prospects and credit conditions around the world.

On Wednesday, NATO-allied nations leveled sanctions in response to Russia's recognition of the Ukrainian regions of Donetsk and Lugansk as independent states. On Thursday, the U.S. and EU announced a second round of sanctions, blocking the dollar-clearing capacity of several systemic Russian commercial banks.

Macroeconomic, market, and credit implications could come in the form of:

- Energy supply disruptions or price shocks, particularly in Europe;
- Europe's ability to diversify quickly away from Russian gas;
- Sustained inflationary pressures across economies via higher energy, food, and metals prices;
- A drag on economic expansion, particularly in emerging markets, which are already feeling inflationary pressures and U.S. monetary policy tapering;
- The possibility of a migrant crisis in Eastern Europe, as Ukrainians attempt to leave the theater of war;
- A ratcheting up of cyber and counter cyber attacks between Russia and its perceived adversaries;
- Risk repricing that drives up borrowing costs or limits funding access for weaker borrowers;
- Profit erosion for sectors that are energy intensive or rely on consumer discretionary spending.

The potential effects represent a material departure from the base case explained in our recent report, "Possible Credit Consequences Of Escalating Russia-West Tensions Over Ukraine And Further Sanctions Against Russia," published on Feb. 8. In the coming days and weeks, today's report will be followed by further publications considering relevant credit implications, after we've

For media queries, please contact

Michelle James michelle.james @spglobal.com

Ekaterina Pavlova ekaterina.pavlova @spglobal.com

Additional Contacts:

EMEA Sovereign and IPF SovereignIPF@spglobal.com

Financial Institutions Ratings Europe

FIG_Europe@spglobal.com

Infrastructure Finance Ratings Europe

InfrastructureEurope@spglobal.

Industrial Ratings Europe Corporate_Admin_London@spgl obal.com

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analyzed details of the latest sanctions package and assessed the broader impact on the business outlook. Any related rating actions will be considered on a case-by-case basis.

Globally, equities markets reacted strongly in the lead-up to the attack, with the benchmark S&P 500 Index dropping into correction territory (down 10% from a recent high). Volatility, too, has increased. The CBOE Market Volatility Index (VIX)—considered to be Wall Street's fear gauge—surged by almost one-third, to 37, after reports of the incursion, before retreating a bit. But safehaven buying bolstered prices on key sovereign debt. The yields on 10-year U.S. Treasury notes and German Bunds (both of which are benchmarks for various borrowing costs) moved lower on reports of the attack before settling nearly unchanged on the day. And although secondary-market spreads on corporate debt continue to widen steadily, they remain historically narrow—even for borrowers at the lower end of the credit scale.

Still, investors could soon begin to demand an "uncertainty premium" of higher returns. Rising benchmark rates, combined with a normalization (widening) of spreads, could end a historic run of favorable financing conditions. A rapid and volatile market repricing—affecting debt-servicing costs and funding access—would hurt lower-rated borrowers, in particular. Corporates exposed to operational and structural headwinds and highly indebted small and midsize enterprises may be unable to rebuild revenues and earnings before their financing costs rise to more normal levels, which could weigh on credit quality.

From a macro perspective, the sudden materialization of this downside geopolitical risk tilts our current baseline sharply to the downside. In recent months, the global economy was in the midst of a robust but uneven recovery from the pandemic. Economic damage from the omicron variant was relatively light, and concerns increasingly centered on the rise in inflation and the implications for the normalization of monetary policy. We expect the Russia-Ukraine geopolitical shock to lead to slower growth and, in the short term, higher headline inflation—although the likely reduction in demand-led growth may alleviate some pressure on central banks to aggressively tighten monetary policy. It's important to highlight that this shock is likely to be asymmetric across regions, with Europe, the Middle East, and Africa hit hardest overall—albeit unevenly across countries according to their dependency on Russian energy—and the U.S. less so. Sensitivities for other regions, countries, and sectors depend more on energy usage and trade patterns.

Specific transmission channels we are monitoring include:

- **Trade:** The commodity price spike is redistributive (exporters gain, importers lose) but likely demand and growth impact is negative on balance since exporters save more than importers.
- **Capital flows:** Financing will move to lower-risk assets; this will make financing more difficult for some emerging markets and issuers at the lower end of the ratings spectrum (in the broad 'B' category and below).
- **Confidence:** Consumer and business confidence is likely to decline, slowing spending, and, therefore, GDP growth, despite significant savings accumulated during the pandemic.

Sanctions continue to exclude Russia oil and gas

Leading up to the invasion, the U.S., U.K., and EU in coordination announced sanctions on some Russian banks, state-owned entities and individuals, and Germany suspended certification of the Nord Stream 2 gas pipeline, which is also under U.S. sanctions. A more comprehensive set of sanctions is being weighed given the scale of the assault. We would expect these to remain in place for the foreseeable future. The imposition of strict sanctions on Russia, along with any countermeasures, will curtail business activities of those banks, companies, and individuals that are targeted.

Russia, a net external creditor in recent years, has amassed substantial reserves and other forms of external assets, while operating fiscal surpluses. But Russia's military invasion into Ukraine from several fronts raises enormous questions about its political and economic stability, its integration into the global economy, and the consequences for Europe (the destination of 45% of

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Russian exports), and the rest of the world. China (the destination of 14% of Russian exports) can't, in our view, fully replace Europe as Russia's key market—certainly not overnight. Moreover, China has so far failed to recognize the two regions in eastern Ukraine as independent.

Russia has been subject to a certain level of sanctions since its annexation of Crimea in 2014. It's now evident that the prospect of tougher sanctions hasn't deterred Russia from mounting a hostile invasion. However, over time, we believe the penalties will undermine the country's longer-term growth prospects by making Russia less investable internationally, restricting access to cutting-edge technology required for innovation and development, and creating incentives for Europe to lessen its energy dependence on Russia.

Financial Institutions In The Front Line Of Sanctions

Among financial institutions globally, we see highly differentiated implications in terms of first-round effects—most significant for those in Russia, Belarus, and Ukraine, and limited or very limited for those domiciled elsewhere. Potential second-round effects, from slower economic growth, persistent high commodity prices, and financial market volatility and repricing will likely be slower to emerge, and could lead to some rating actions. That said, at this stage we don't see systemwide changes to financial institutions ratings globally.

Western countries have imposed sanctions on a large number of leading Russian and Belarus banks, some government-owned, some privately held. While Russia's banking system has largely adapted to operating under penalties in place since 2014, in some cases the new sanctions are more restrictive in nature than those already in place.

The precise impact of evolving sanctions is currently difficult to estimate. Sanctions could have a detrimental effect through cross-border payment and foreign trade channels. Restricting access to U.S. and eurozone financial systems could disrupt Russia's foreign trade and undermine its ability to settle cross-border payments—including on debt service. Even though exporters would eventually find a workaround—for example, settling trade in currencies other the U.S. dollar or euro, at the initial stages—the fallout on Russia's export receipts, budget revenues, and the broader economy could be meaningful.

A handful of rated international banks have meaningful Russian or Ukrainian exposure, predominantly through their local subsidiaries. This includes OTP, Raiffeisen Bank International, Société Générale, and UniCredit. We continue to closely monitor any potential ratings effects on these institutions, but we remain mindful of the modest materiality in terms of the groups' total exposures and the ample local deposit funding of the subsidiaries—which historically has held up well in previous times of stress.

Other internationally active banks also have some Russian exposure, typically through servicing of multinational corporate or wealth management clients. They could see some negative effects from loss of business and reductions in asset quality, as well as needing to adhere to the various sanctions lists. Nevertheless, related counterparty exposures tend to be very low as a percentage of these groups' total credit exposures. Volatile financial and commodity markets add significant further risks but also some short-term opportunity if client activity rises. We think it unlikely that these groups will report material setbacks to market-sensitive earnings.

Among other commercial banks, we see very limited direct exposures to Russian counterparts. The most relevant credit factors would derive from two consequential effects: higher energy and commodity prices, which could benefit some economies and, thus, their banks; and heightened risk aversion to some emerging markets, particularly those that have a meaningful share of trade with Russia, which could choke funding market liquidity and drive up yields.

The economic effects of the conflict will ripple through jurisdictional banking systems as months and maybe years pass. Sustained high energy and commodity prices, along with market volatility, could dent confidence and weigh on economic activity. However, it would take a rather more severe macroeconomic downturn to push up personal and corporate delinquencies and weaken collateral values. While a remote scenario at this stage, this would play through to banks'

asset quality and activity, weakening earnings prospects and ultimately, capitalization. **More** profoundly, the Russia-Ukraine conflict could add risk and complexity to already heightened geopolitical tensions outside the immediate region. Should risks escalate and spread, this ultimately could play out poorly for banks.

Insurance

Except for domestic Russian insurers, there is minimal insurance liability or asset exposure for EMEA insurers and reinsurers. The wider insurance sector might not face any direct effects from the situation in terms of insurance premiums, for example. However, spillover impacts on other sectors (such as non-Russian corporates or banks) and asset valuations in equity and bond markets might affect insurers, which are large investors in capital markets. The broader insurance sector has robust capital buffers to offset capital market volatility and maintain capital commensurate with current ratings. In addition, insurance is a highly regulated sector with material capital charges for high-risk assets in many regions. Thus, insurers' investments often focus on highly liquid, highly rated investments. New sanctions might hit reinsurers to a limited extent, such as in crossborder contracts. As of now, we believe ratings for nondomestic reinsurers will remain unaffected.

The key first-round risk for Europe and the rest of the world is another price spike in energy and food, complicating the path for the European Central Bank (ECB) and the U.S. Federal Reserve to normalize monetary policy, as well as representing an immediate hit to consumers, most clearly via higher energy prices (including gasoline).

From a European perspective, a key sensitivity is whether sanctions will stretch to the supply of energy from Russia. Our base case, given the heavy reliance of Europe on Russian oil and gas, is that contractual arrangements between Russia will continue. While halting Nord Stream 2 certification does not impact gas supply in the short term, some disruptions may arise either due to transit routes through Ukraine being cut, or if difficulties arise in financing payments resulting from major Russian banks becoming subject to sanctions. But the situation is fluid, and a worst-case scenario would involve sanctions being extended to key Russian energy suppliers. That would likely lead to an energy-supply shock that would hit Europe especially hard given its heavy reliance on supplies of Russian natural gas and limited alternative suppliers able to replenish European stock levels ahead of the 2022-2023 winter season. We are closely watching spot price and futures movement in the energy markets as the conflict in Eastern Europe escalates. We will continue to evaluate the situation and update our price assumptions accordingly.

Russia has a significant ability to retaliate against additional sanctions that go beyond gas, given its leading market shares in many areas of raw materials and commodities production. For instance:

- It is the world's second-largest supplier of palladium, according to the U.S. Geological Information Survey, accounting for an estimated 37% of global production in 2021.
 Palladium is used in sensors, computer memory components, and automotive catalytic converters.
- Russia is the third-largest producer of **titanium** sponge, after China and Japan, accounting for 13% of global production in 2021. Titanium is an important input to the aerospace industry, as well as for corrosive-resistant applications in oil and gas and paper and packaging processes.
- Russia is also a crucial provider of **fertilizer**, as the world's largest exporter of ammonium nitrate, urea, and NPKs (nitrogen, phosphorus, and potassium).

Ukraine is also an important industrial nation. It ranks fifth in terms of titanium sponge production and is an important supplier of inert gases for semiconductor lithography. Ukraine provides more than 90% of U.S. semiconductor-grade neon, according to the research firm Techcet.

Ukraine is a significant agricultural producer. It is among the world's top 10 exporters for 24 foodstuffs including seed oils, barley, wheat, pigs, poultry, and butter. And it is an important

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provider of food to emerging markets, which are often more sensitive to food prices and supply. For the marketing year 2020-2021, China received 36% of Ukraine's corn exports while Africa and the Middle East took a combined 30% of exports.

Disruption to production and exports—particularly if Black Sea ports are shut down—could exacerbate food price inflation globally, adding to the energy price shock that is already weighing on disposable incomes.

While the U.S. government has made clear it won't become militarily involved directly, the White House is reportedly looking at the option of supporting Ukraine's struggle by mounting cyber attacks against Russian infrastructure to counter possible cyber attacks from Russia. Nor can we rule out a broadening of the conflict beyond Ukraine, given the risk of accidents, centralization of decision making at the Kremlin, and the apparent indifference of Russian leadership to the economic fallout from the conflict.

The economic impact of Russian cyber attacks on Ukraine could run to the tens of billions of dollars, raising more credit risks for issuers with weaker cyber governance and risk management, as we noted in our report, "Cyber Threat Brief: How Worried Should We Be About Cyber Attacks On Ukraine?" published on Feb. 22, 2022.

Energy Security, Defense, and Population Displacement Present Longer-Term Challenges

Energy security remains the Achilles heel of the European economy given heavy reliance on Russian energy imports. The EU is a net importer of energy. Its energy imports consist of 70% oil, 19% natural gas, 6% LNG, and 3% coal. Plus, 47% of natural gas and 25% of oil is imported from Russia. Put differently, the EU imports more than one-quarter of its energy from Russia (26.4%), which makes the country the largest supplier of natural gas and oil to the EU.

A key issue is how quickly Europe can substitute Russian supply, particularly for gas, as well as accelerate the transition to renewable energy. According to our sister company S&P Global Platts Analytics, while there is some flexibility to procure additional LNG supplies from Asia, this will require gas prices to remain high. The LNG, on its own would not be sufficient to fully cover the net reduction in physical gas flows from Russia—averaging 45 million cubic meters per day—that could result from a shutoff of the Ukraine gas transit routes. Other measures would be required to balance including power sector fuel switching (including restoring some coal generation capacity to the grid) as well as some demand destruction. Diversification fully away from Russian gas would take many years and require substantial investment in LNG, renewables, and nuclear.

The invasion has at a stroke reinvigorated NATO's mission to defend the freedom and security of its members through political and military means. A likely consequence of this focus on defense is that all members will be expected to fully meet their financial commitment to spend 2% GDP on national defense. Additional expenditure could amount to 0.5%-1% GDP for some countries such as Spain, Italy, and Germany.

Another likely consequence of the invasion is the risk that a substantial portion of the Ukrainian population could be displaced, with estimates ranging from 1-5 million people depending on how long the military conflict lasts according to the U.S. government. While European countries can be expected to provide substantial support, integrating these numbers will present logistical challenges to the EU, particularly given the sensitivities that have arisen in the recent past.

S&P Global Ratings will continue to provide updates on the macro and ratings implications as the situation evolves. To read the latest research from all of S&P Global's divisions, see our webpage <u>Ukraine Under Attack</u>.

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