

## Beijing Is Used to Learning From Russian Failures

**The invasion of Ukraine is offering useful lessons for the PLA.**

By ***Oriana Skylar Mastro**, a center fellow at Stanford University's Freeman Spogli Institute for International Studies, and **Derek Scissors**, a senior fellow at the American Enterprise Institute.*

Russia's invasion of Ukraine has been a double disaster for President Vladimir Putin, as he faces a poorly performing military combined with an inability to shield his country from economic punishment. Both of these possibilities historically have also been sources of apprehension for the Chinese Communist Party (CCP). But China's leadership turned its anxiety into action about 10 years ago, deliberately working to fix many of the problems and minimize the risks currently plaguing Russia in Ukraine.

One result is that the Chinese military is more likely to perform well even though it has not fought a war since 1979, when it lost thousands of troops in a punitive but brief invasion of Vietnam. Adding to that, China's economy is both far larger and deliberately more diversified than Russia's. A sanctions effort like the one presently aimed at Russia would be much harder to sustain against China. These two observations do not mean deterrence won't hold, only that the unfolding events in Ukraine will likely do little to make Beijing more cautious.

Nearly everyone overestimated Russia's military capabilities—including probably Putin himself. During its invasion of Ukraine, Russia's air-ground coordination has been ineffective, and Russian forces have shown risk-averse tendencies in the air. Russia has also struggled with logistics and keeping its military supplied. Notably, it appears that Russia acted on bad intelligence and therefore did not believe initial strikes that maxed out its firepower were necessary. Furthermore, many Russian weapons platforms are outdated (for example, its Cold War-era tanks), and modern Su-57 fighter jets and T-14 Armata tanks only exist in comparatively small numbers.

The Chinese military used to clearly exhibit the same deficiencies. But over the past decade, it has embraced significant reforms, creating a much more capable fighting force that should give even the United States pause.

First, while Russia allowed its conventional capabilities to atrophy, Chinese military spending has exploded over the past three decades, increasing by 740 percent (in comparison to Russia's 69 percent) from 1992 to 2017. According to data from the Stockholm International Peace Research Institute, China spent almost four times on its military in 2020 than Russia (\$244.9 billion to \$66.8 billion). In 1999, less than 2 percent of its fighter jets were fourth-generation, 4 percent of its attack submarines were modern, and none of its surface ships were. Twenty years later, not only did China have much more of everything, but the majority was the most advanced, modern versions available—with China exhibiting advantages over Russia, even in combat aircraft, a traditional area of weakness for China.

Indeed, People's Liberation Army (PLA) commentators often refer to China's economic might as one of the reasons their military would outperform Russia's—Russia has been “stingy” with its military modernization and production of precision-guided munitions primarily because of a lack of resources. By contrast, China has more than 2,200 conventionally armed ballistic and

cruise missiles, making the PLA Rocket Force the world's largest ground-based missile force. Estimates place the number of missiles positioned against Taiwan alone at around 1,000.

Russia's poor performance does remind us that it takes more than just a lot of fancy systems to win a war (though having more advanced systems and more of them surely would have helped). The human element of Russia's failures is front and center. Putin probably did not have an open and honest communication channel with the military, which was fearful of providing unfavorable information to the erratic leader. Russian troops were largely considered incompetent, but Putin thought superior technology could overcome human deficiencies.

Chinese President Xi Jinping identified similar training and competency issues in the PLA 10 years ago. But under his command, the PLA has been proactively implementing significant reforms to avoid similar pitfalls. And unlike Putin, who apparently believed technology could overcome deficiencies in personnel, Xi came to the opposite conclusion. When he came to power, he took one look at the military and recognized that with all its fancy equipment, the PLA probably could not fight and win wars and perform the missions it had been assigned. Of particular importance, according to China's national military strategy, was to fight local wars under informationalized conditions. This meant that the network between platforms and people—the ease of connectivity—was the main feature of modern warfare. China needed the best equipment; an advanced command, control, computers, communication, intelligence, surveillance, and reconnaissance (C4ISR) network; and tons of precision-guided munitions. But perhaps most importantly, it needed troops that could leverage these systems to conduct seamless operations across services and top-down through the chain of command.

What followed was a series of slogans—the two incompatibles, two inabilities, two big gaps, the five incapables—all designed to point out the organizational and personnel issues of the military and focus leadership attention and resources on fixing the issue. A massive military reorganization followed with moves such as reorganizing effective combat units to be smaller so that they can mobilize more quickly and can remain self-sufficient for long periods of time. This means, in contrast with the Russian military, the PLA will likely have less reliance on generals at the front lines. China also established theater commands to facilitate joint operations and prioritized realism in its military exercises to help it prepare for real combat. Part of all of this was Xi's demand that the military communicate its failures and weaknesses so that they could be addressed. Moreover, to improve command and control, China has moved toward engaging in multidomain joint operations all while standing up a new joint operations center that will ensure that, unlike with the Russian military, orders will be communicated and understood at the lowest levels. Indeed, the main reason that Xi has not yet made a play for Taiwan is likely his desire to hone this command and control structure and practice joint operations in realistic conditions for a few more years—a cautious and pragmatic approach that the situation in Ukraine only encourages further.

The PLA itself acknowledges that it still has some distance to go with training, particularly with regards to joint operations, but it looks as if the hard work is paying off. The complexity and scale of China's national military exercises are eye-opening. It takes a great deal of planning, synchronization, and coordination to take service-level operations to the joint level. China appears to have made great strides in this area. The United States has observed, for example, China executing deep-attack air operations in its exercises that have combined intelligence, surveillance, and reconnaissance (ISR) with multi-domain strike; lift for rapid mobility and

advanced fighter maneuvers. Russia has relied heavily on artillery and tanks, now and historically, while the PLA is showing a more balanced approach to combined arms operations.

For all these reasons, we should not expect the Chinese military to perform as poorly in its first real military operation since 1979. The PLA is structurally superior to the Russian military. And the Chinese know it. Granted, it's hard to know whether some of the outlandish claims in the Chinese media are true—that the PLA Air Force would actually “be able to take out the Ukrainian air force in one hour.” But one thing is for certain—the Chinese military is learning lessons from Ukraine, whether it is to stockpile more precision-guided munitions, ensure solid command and control, or cut off internet access to prevent the leaking of information to the West, which will only serve to improve its warfighting capability in the future.

That does not mean it's perfect. China is still in the process of building its corps of noncommissioned officers, recruiting more college graduates and technical experts so as to be less reliant on conscripts and shift away from an officer-heavy structure. Also, there is always the possibility that Xi's anti-corruption campaign, which has impacted even the highest levels of the military, may begin to impinge on these reforms. But to date, it seems that those against necessary reforms have been largely targeted. In other words, Xi has not had to choose yet between his goals of consolidating domestic power and the professionalization of the armed forces.

The economic side is less about what has happened in the past six weeks than what will happen in the next six months or even six years. As tempting as it is in the case of Russia's invasion, the impact of economic sanctions cannot be properly evaluated over a short time period. The need for a longer time horizon also applies to Russia-China economic comparisons, as it will generally require more extensive and more durable sanctions to deter or compel China than it would Russia.

Russia is thought, at least, to be highly vulnerable to sanctions applied to date. And it is certainly the case that China can be harmed by sanctions. Beijing is more integrated in global trade and finance than Moscow and thus has more to lose. But integration cuts both ways—compared with Russia, more countries would be harmed to a greater extent by equivalent actions taken against China. Further, China has demonstrated greater capacity to weather extended economic blows. This combination of features reduces the willingness of the United States and others to enforce durable sanctions, a fact that Beijing well appreciates.

The CCP survived three decades of worse poverty than experienced by the Soviet Union at the time, a self-inflicted depression in 1989-90 paralleling in some respects the events that ended the Soviet Union, the global financial crisis, and another partly self-inflicted economic wound via China's determination to maintain its zero-COVID policy in 2021-22.

During more recent events, Beijing has been able to mobilize first greater capital resources than Moscow and then far greater. In 2020, the World Bank put China's gross fixed capital formation at 20 times Russia's. Xi attacked some of China's richest citizens, as well as other elements of the private sector, in part because he believed them too intertwined with foreign capital. These were voluntary steps by China that mirror how the world currently seeks to punish Russia. Whatever their wisdom, Xi knows China can afford them, while Russia's capability is in doubt.

Some Russian foreign reserves have been effectively frozen and some financials excluded from the Society for Worldwide Interbank Financial Telecommunication (SWIFT), limiting international transactions. In the short term, these steps could have a similar impact on China, but they would be much harder to sustain.

Beijing has conducted currency swaps with dozens of countries that will want their renminbi to be useful. China also holds foreign government bonds in amounts that countries cannot ignore. U.S. Treasuries see the largest holdings, but there are also sizable quantities of Japanese government bonds, for instance. With official Chinese reserves upwards of \$3 trillion, perhaps five times Russia's, a partial freeze would quickly wear on governments and firms looking for bond buyers.

For any SWIFT restrictions that interfere with outbound U.S. portfolio investment, that volume stood at \$85 billion in Russia and \$1.15 trillion in China in 2020. The stock of U.S. direct investment was 10 times higher in China than Russia—companies willing to exit Russia would face leaving a lot more behind in a China contingency. Most broadly, the yuan can erode the role of the dollar; the ruble certainly cannot. Beijing lacks the will to allow free movement of the yuan and make it a true reserve currency, but heavy, durable sanctions might change that.

On the goods side, existing pressure to spare Russian vital exports would be more intense in China's case. The loss of Russian oil and gas exports of \$230 billion in 2021 threatens energy markets. Chinese exports are at least as important within chemicals, textiles, household appliances, industrial machinery, and consumer electronics. Would they all be exempted?

Certain Russian exports, such as palladium, play supply chain roles beyond their direct financial value. As expected from its manufacturing and export volumes, China's supply chain participation is far larger than Russia's, extending from inputs crucial to global pharmaceuticals to processed rare earths crucial to clean-energy applications. Russian ships have been banned from some ports. By tonnage, Russia accounts for a bit over 1 percent of the world's commercial fleet, while China accounts for more than 11 percent. Banning Chinese ships would cause seaborne trade to noticeably contract, hitting supply chains that would already be strained by the diversion of Chinese goods.

Even an area of clear Russian advantage—lower import dependence—is double-edged. Inhibiting Chinese imports of iron ore or integrated circuits, for example, would hit the country hard. But China is such a huge purchaser that many producers would refuse to join a sustained embargo against it. As elsewhere, the barriers to Russian imports adopted thus far could hurt China only in the unlikely event that they are maintained for many months.

From how to remain in power to how to advance on the international stage, militarily and economically, the CCP has been learning what not to do from the Russian or Soviet experience for decades. Chinese strategists are unquestionably evaluating whether the nature of warfare has changed or if they failed to consider some critical factors necessary for success. Chinese economists are certainly looking to identify missed vulnerabilities based on how the economic dimension of the war in Ukraine plays out—and will work to address them to prevent exploitation by the United States and others.

Not that it will all be easy for Beijing. But China is already better prepared than Russia, economically and militarily. The steps to support Ukraine and punish Russia are immediately less potent in a China contingency. And an unfortunate side effect of the tragedy in Ukraine is

that China has a relatively low-cost opportunity to learn—it may become a more formidable challenger than it would've been otherwise. The United States and its allies should realize that their effectiveness with regard to Russia is highly unlikely to translate. In a Taiwan contingency, the United States must be able to immediately implement both a stronger package of actions aimed at China and also a second package aimed at minimizing the long-term cost of the first.

**Oriana Skylar Mastro** is a center fellow at Stanford University's Freeman Spogli Institute for International Studies. She is also a non-resident senior fellow at the American Enterprise Institute. Twitter: [@osmastro](#)

**Derek Scissors** is a senior fellow at the American Enterprise Institute.