

Assessment of the state of the Ukraine War
March 2023

Csaba Barnabás Horváth

March 2023

## Ukraine War Report - March 2023.

In December, analysts expected major offensives on behalf of both combatants to occur during the winter. As the "Rasputitsa" mud season makes significant offensives impossible in Ukraine during most of the spring and autumn, major moves from both sides can be expected either during the summer, when the ground is dry, or during the winter, when it is frozen.

This winter, however, major offensives did not come. One reason for this may have been that the weather this winter was unusually mild, thus time windows when the mud was frozen hard enough for large-scale offensives were short and sporadic. The Russian side, on the other hand, did still conduct offensives, however, their results were limited, and so far haven't changed that major trend in the war, namely, that ever since April, Ukraine has been regaining more territory than the Russians manage to occupy by their new offensives. Initial Russian offensives in February and March 2022 achieved a net gain of 17,86% of the territory of Ukraine. Then the Russian reversal at Kyiv and the subsequent withdrawal from the region resulted in Russia relinquishing and Ukraine regaining a net 5,31% of the country by April 2022. May, June, July, and August 2022 were marked by renewed Russian offensives, which however managed to achieve a combined net gain of only 0,4% of the country. In the fall of 2022 came the Ukrainian counteroffensives near Kharkiv, and the Russian retreat from Kherson, which meant a combined net Ukrainian gain of 2,83% of the country.

January and February 2023 marked new Russian offensives around Bakhmut and Vukhledar. However, these only managed to achieve a combined net gain of 0,11% of Ukraine's territory. On the other hand, as Russian forces get within reach of encircling Bakhmut, Ukraine may have to give up Bakhmut in the upcoming weeks. It is not clear, whether these offensives were just minor, or whether this actually was the big Russian offensive scheduled for winter, but so far has achieved little.

Russian equipment losses suggest the latter. They radically increased in February, and so did the ratio of Russian losses to Ukrainian losses: Oryx reported Russia to have lost 1661 tanks by the 31<sup>st</sup> of January, and 1819 by the 9<sup>th</sup> of March.<sup>2</sup> In our previous assessment,<sup>3</sup> we used a methodology estimating actual Russian losses to be halfway between figures documented by Oryx and those stated by the Ukrainian government (thus multiplying Oryx figures by 1,5). While this meant Russia to have lost 3,5 tanks a day on average in December and January, the same methodology puts the figure to 6,4 per day between the 1<sup>st</sup> of February and the 9<sup>th</sup> of March. As Oryx reported Ukraine to have lost 450 tanks by the 31<sup>st</sup> of January, and 472 tanks by the 9<sup>th</sup> of March,<sup>4</sup> even if we multiply Ukrainian losses

documented by Oryx the same as we do Russian losses, assuming actual losses to be that much higher than the one that Oryx managed to document, this would still only mean 0,9 on average per day.

Significantly from December-January to February the ratio of Russian tank losses to Ukrainian tank losses rose from less than 2:1 to more than 9:1. The main reason for these extreme Russian losses was most likely not the slow but successful advance around Bakhmut, but the unsuccessful attack against Vukhledar, that seems to have been the first major Russian attempt for a tank offensive, and resulted in a major tank battle with high losses. Even in our previous assessment, we came to the conclusion that the long-term Russian trend points in a critical direction ever since the start of the war. This somewhat improved during the autumn and winter, but radically worsened again in February.

Back in our January assessment, we concluded, that Russia's field tactics supported the lower estimates regarding how many tanks Ukraine had at the start of the war. Russia didn't attempt a major tank offensive between April and February, instead, it increasingly used a tactic of infantry charges under artillery cover, but even its artillery activity decreased by 75% in the meantime, 6 suggested shortages either in artillery equipment or ammunition or both. Russia also failed to meet its treaty commitment to help out its CSTO ally, Armenia against Azerbaijan. Even the February tank offensive at Vukhledar was minuscule compared to what Russia could have, and given the military situation, should have conducted, if it really had 12 000 main battle tanks at the start of the war. In that case, it would have meant no problem for Russia to launch a major offensive with thousands of tanks, especially after the mobilization it conducted during the fall. A plausible explanation seems to be that lower estimates are correct regarding the number of main battle tanks Russia has. Lower estimates suggest that Russia may have had only 2700 active battle tanks, and only another 6000 in storage (rather boneyards), out of which 3000 were actual wrecks beyond repair, 8 and that out of its storage tanks, on average 3 to 4 are needed to reassemble a single functioning piece. <sup>9</sup> This means, that the combined number of actual functioning tanks and tanks that can be reassembled using parts of those could have been as low as 4000 at the start of the war. Combined with our estimates regarding the situation as of 31st of January, even including our estimates for possible Russian tank manufacturing in the meantime<sup>10</sup> this would mean Ukraine having 1000 tanks as of the 9<sup>th</sup> of March, and Russia possibly as few about 1600 functional tanks altogether.

Taking into account the quantity of equipment that Ukraine is scheduled to receive, by the summer this could result in a situation where Ukraine achieves

superiority in the number of tanks in the field. To make things worse for Russia, the number of actual functioning tanks it has could drop below the threshold of 1000 by the summer, which would be closer to the level of a middle power than a great power, and raises the question of whether this is sufficient even to maintain control over its territory, with special regards to its problematic regions, such as the North Caucasus, especially given that its losses in other kinds of armored military vehicles and artillery are of a comparable magnitude, not even mentioning how this is about to impact its capabilities to intervene in the "near abroad" countries like Belarus, Georgia, Kazakhstan, or the Armenian-Azerbaijani conflict.

The Economist recently observed that Russia has built just 20 new tanks and refurbished another 25 since 2022, which constitutes one-tenth of what it would need given its losses. In a few months, Russia may be able to increase its capacity to refurbish 90 tanks per month. Combined with the 20 it can build, that gives 110.<sup>11</sup> However, even in this case, Russia will still be losing tanks at a more rapid pace than it can build and refurbish, not to mention that the refurbished ones will be older types than the ones lost. Also, reaching this capacity will still take months, and may not occur before the summer when major offensives of both sides should be launched, at which time the number of functioning tanks that Russia has may fall below 1000.

February 2023 has also revealed an interesting paradox: President Biden's visit to Ukraine sent the strongest message ever since the start of the war about US commitment. On the other hand, while the US and its NATO allies definitely possess the weaponry that would enable Ukraine to make a breakthrough in the field, they are still sending arms only sufficient for the Ukrainians to hold the front. After the announcements of new packages of military supplies, including the introduction of GLSBG missiles of a range of 150km, and western-designed main battle tanks, US enthusiasm appeared to slow in February. Despite much talk, ATACMS missiles, Reaper drones, and jet fighters remained off the table, and it turned out, that as of early March 2023, out of the 380 tanks offered to Ukraine, only 133 will be the top-end Leopard 2, Stridsvagn 122, Challenger 2, Leclerc and Abrams-M1 designs, while the rest will be Cold War era Leopard 1, and Soviet upgrade PT-91 tanks. Even these will be delivered later than suggested in January. The Abrams-M1 tanks to be sent by the US could take over a year to arrive. 12

The main reason for such caution is the fear of escalation, with Russia's possible use of nuclear weapons. This is not so much the fear of the US administration, but those of its European allies (especially France and Germany), and concerns that the US would alienate many of its European allies by disregarding their such fears. <sup>13</sup> This contradiction between the ever-stronger political statements showing

increasing commitment to Ukraine, combined with the clear availability of sufficient weaponry on the one hand, and the lack of actual arms supply of the kind necessary for a breakthrough on the other hand, is unsustainable.

Equipment loss remains the main risk for Russia, while human loss is the main concern for Ukraine. As the population of Russia is close to 4 times higher than that of Ukraine, even if Ukraine manages to hold the front, unless the ratio of Russian and Ukrainian human losses goes permanently above 4 to one, Ukraine would still run out of manpower before Russia does. Therefore, theoretically, this polarity can be decided two ways: The US and NATO either risk a Ukrainian defeat, or it finally decides to provide Ukraine with the weaponry needed for a breakthrough, or if not, at least to permanently maintain Russian losses in manpower 4 times higher than Ukrainian casualties. Political will is the key factor that will decide which way this conflict will be resolved, and recent political statements have been indicating increasing Western commitment. The degree of political commitment to Ukraine has now reached a level, where giving in to Russia would be a hardly manageable loss of face for the US and its NATO allies. Thus facing the choice of risking a Russian victory or sending in the weapons needed for a breakthrough, the more likely choice is the latter. Also, we can see a slow but steady increase in arms deliveries and increasing French and German willingness for it, starting with Javelin missiles and ending up with Leopard 2 tanks. If this trend continues, that also points toward the delivery of weapons sufficient for a breakthrough sooner or later. The time frame for this resolution to be decided is most likely the end of the summer, before the start of the 2023 autumn mud season.

Another issue that emerged in February has been a possible change in the role of China. In February China proposed a peace plan. China's peace plan is difficult to judge, as at first look, it appears to be a list of mere diplomatic commonplaces. <sup>14</sup> At a second glance, however, demanding no use of nuclear weapons can be interpreted as a message to Russia, whilst protesting against a return to a cold war mentality can perhaps be seen as a message to the US. Of these two, the call not to use nuclear weapons is the one with the more practical and immediate significance. The One China Principle, calling for respect for the sovereignty of all countries, can be interpreted as implicitly demanding non-intervention in the Taiwan question, while at the same time offering to back Ukraine's sovereignty and territorial integrity, perhaps in exchange for the former. So altogether, China's peace plan does not seem to be as positive for Russia, as we might have expected given their supposed enduring friendship.

On a more practical level, the issue of the possibility of Chinese arms supplies to Russia has also arisen. Despite supportive words, China has not supplied Russia with weapons. China also implemented certain economic measures that hampered the Russian war effort including a ban on the export of Loongson chips to Russia<sup>15</sup> which the Russian military industry badly needs, warned Russia against the use of nuclear weapons,<sup>16</sup> and even vowed support to Kazakhstan amidst its diplomatic tensions with Russia.<sup>17</sup>

In February however, reports emerged about China supplying Russia with arms, including lethal weapons. US secretary of state Anthony Blinken openly stating knowledge of such Chinese intent and warning China against it.<sup>18</sup> On the 5<sup>th</sup> of March however German chancellor Olaf Scholz stated that Germany received bilateral assurances from China that China had no intention of supplying lethal weapons.<sup>19</sup> This story may not be over yet. In past months, US sanctions against China on semiconductors represented a move that hurts Chinese economic interests, <sup>20</sup> and delivering weapons for Russia may be a feasible way to strike back. On the other hand, as we discussed earlier, a Russian victory may not even be in the interest of China, as a weakened Russia isolated from the West would make a docile junior ally of China, while a triumphant Russia would not.<sup>21</sup> Also, given the US and its NATO allies are delivering hundreds of main battle tanks, and could deliver Reaper drones, ATACMS missiles, and fighter jets, China would need to deliver weapons of roughly equal potency to forestall Russian defeat. It is not clear, whether delivering hundreds of main battle tanks would be a price China is willing to pay given that a Russian victory, wouldn't even necessarily be in its interest.

## Assessment of the course of the Russian invasion of Ukraine Csaba Barnabás Horváth

<sup>&</sup>lt;sup>1</sup> https://twitter.com/War\_Mapper/status/1630737112956825603?cxt=HHwWhsCzvfSwxaEtAAAA

<sup>&</sup>lt;sup>2</sup> https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-equipment.html

<sup>&</sup>lt;sup>3</sup> https://danubeinstitute.hu/hu/kutatas/assessment-of-the-state-of-the-ukraine-war

<sup>&</sup>lt;sup>4</sup> https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-ukrainian.html

<sup>&</sup>lt;sup>5</sup> https://www.businessinsider.com/russia-battle-tactic-failed-bucha-vuhledar-loses-critical-tanks-2023-3

<sup>&</sup>lt;sup>6</sup> https://edition.cnn.com/2023/01/10/politics/russian-artillery-fire-down-75-percent-ukraine/index.html

<sup>&</sup>lt;sup>7</sup> https://www.israeldefense.co.il/en/node/45383

<sup>&</sup>lt;sup>8</sup> https://www.youtube.com/watch?v=eHhgVrKJJoA&ab\_channel=CovertCabal

<sup>&</sup>lt;sup>9</sup> https://nadinbrzezinski.medium.com/logistics-collapse-945984f5d48e

<sup>&</sup>lt;sup>10</sup> https://danubeinstitute.hu/hu/kutatas/assessment-of-the-state-of-the-ukraine-war

<sup>&</sup>lt;sup>11</sup> https://www.economist.com/the-economist-explains/2023/02/27/how-quickly-can-russia-rebuild-its-tank-fleet

<sup>&</sup>lt;sup>12</sup> https://www.intellinews.com/west-fails-to-deliver-tanks-to-ukraine-due-to-resurgent-reluctance-and-logistics-271819/

<sup>&</sup>lt;sup>13</sup> https://www.grid.news/story/global/2023/02/14/why-the-west-wont-just-give-ukraine-all-the-weapons-it-wants/

<sup>&</sup>lt;sup>14</sup> https://www.fmprc.gov.cn/mfa\_eng/zxxx\_662805/202302/t20230224\_11030713.html

<sup>&</sup>lt;sup>15</sup> https://www.pcmag.com/news/china-bans-exports-of-its-homegrown-loongson-chips

<sup>&</sup>lt;sup>16</sup> https://www.politico.eu/article/china-xi-jinping-warns-vladimir-putin-not-to-use-nuclear-arms-in-ukraine-olaf-scholz-germany-peace-talks/

<sup>&</sup>lt;sup>17</sup> https://www.fmprc.gov.cn/eng/zxxx 662805/202209/t20220915 10766191.html

<sup>&</sup>lt;sup>18</sup> https://www.bbc.com/news/world-us-canada-64695042

<sup>&</sup>lt;sup>19</sup> https://www.politico.eu/article/china-ukraine-war-russia-weapon-deliveries-scholz-putin-zelenskyy-xi-jinping/

<sup>&</sup>lt;sup>20</sup> https://zeihan.com/semiconductors-chinas-the-odd-man-out/

<sup>&</sup>lt;sup>21</sup> https://danubeinstitute.hu/hu/kutatas/china-india-and-the-russian-invasion-of-ukraine