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COMMODITIES REPORT

24 February 2022



	Spot	Week on Week Change	MTD change	YTD change	
Gold (\$/oz)	1,942	2.3%	8.1%	6.2%	
Silver (\$/oz)	25.0	4.7%	11.5%	7.5%	
Platinum (\$/oz)	1,113	3.8%	8.9%	14.9%	
Palladium (\$/oz)	2,564	9.1%	8.9%	34.6%	
Aluminium (\$/t)	3,321	0.7%	8.9%	18.4%	
Copper (\$/t)	9,907	-1.0%	3.4%	1.7%	
Zinc (\$/t)	3,579	-0.6%	-0.8%	-0.3%	
Nickel (\$/t)	24,887	1.1%	9.0%	19.2%	
Iron ore (\$/t)	143.0	1.8%	-7.8%	7.1%	
Brent (\$/bbl)	102.6	9.7%	12.5%	31.9%	
WTI (\$/bbI)	97.4	6.9%	10.4%	29.5%	
Henry Hub (\$/MMBtu)	4.83	9.1%	-0.8%	29.6%	
TTF (\$/MMBtu)	29.52	20.3%	-1.8%	25.8%	
JKM (\$/MMBtu)	28.97	21.7%	17.2%	-5.0%	

	Average annual price					
	Spot price	YTD	F2022	F2023		
Gold (\$/oz)	1,942	1,835	1,785	1,425		
Silver (\$/oz)	25.05	23.3	23.3	17.5		
Aluminium (\$/t)	3,321	3,096	2,879	2,525		
Copper (\$/t)	9,907	9,855	9,175	8,600		
Nickel (\$/t)	24,950	23,025	21,650	19,300		
Iron ore (\$/t)	122.2	123.9	88.5	72.5		
Brent (\$/bbl)	102.6	89.0	82.8	77.8		
WTI (\$/bbl)	97.4	86.7	80.3	75.3		
Henry Hub (\$/MMBtu)	4.83	4.34	3.99	3.45		
TTF (\$/MMBtu)	29.52	27.21 24.64		16.43		
JKM (\$/MMBtu)	28.97	27.01	27.14	18.43		



WEAPONIZATION?

RUSSIAN METAL: SANCTIONS VS.

While most news outlets have focused on the impact of the Russia Ukraine crisis on the energy sector, Russia is also a major producer of metals. Metal prices can be heavily impacted by western imposed sanctions or Russian "weaponization" of metal exports.

In this report we look at the historical impact of sanctions and weaponization and explain which metals are the most likely to be impacted.

Our view is that even if sanctions or weaponization don't take place, the possibility of either or both happening is enough to drive base and precious metal prices higher in the near term and into a volatile period. As such we have revised upwards our forecasts of the metals complex and expect that gold prices will break through \$2000/oz over the coming days if the conflict further escalates.

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While most news outlets have focused on the impact of the Russia Ukraine crisis on the energy sector, Russia is also a major producer of metals (table 1). Metal prices can be heavily impacted by western imposed sanctions or Russian "weaponization" of metal exports.

Table 1: Russian mined output

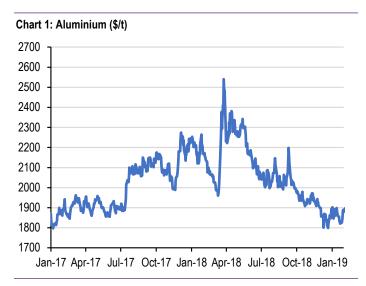
	Production	Share of world production				
Palladium (t)	82	42.8%				
Platinum (t)	21.8	14.2%				
Nickel (kt)	220	8.4%				
Aluminium (kt)	3924	6.0%				
Copper (kt)	871	4.1%				
Crude steel (Mt)	71.6	3.8%				
Zinc (kt)	272	2.2%				

Sources: WoodMac, JM

Historical impact of sanctions vs. "weaponization"?

Reviewing **sanctions**, the latest example we have is that of the US sanctions against Rusal which were enacted in 2018. At the time aluminum prices rose by as much as 30% in a matter of weeks (chart 1). The issue with sanctions on commodity related industries is that it almost inevitably causes collateral damage, especially for the West which is a net importer. As highlighted by the Rusal sanctions, alumina prices doubled and massive supply chain disruption ensued. The impact should also not be separated from the broader market context - this time the industrial metals complex is extremity tight (highlighted by the large percentage of metals trading in backwardation) and as such the implication on prices could be even higher. For instance, even though Russia produces only 4.1% of the world's copper (table 1), export sanctions could lead to substantially higher copper prices given the supply tension.

The big question this time also is, with China and the US becoming more confrontational whilst Russia and China are getting closer, if sanctions against Russia are put in place will the latter serve as a market of last resort for Russian commodities? Last year China passed "The Rules on Counteracting Unjustified Extraterritorial Application of Foreign Legislation and Sanctions" which in a nutshell makes it illegal for Chinese firms to comply with US extraterritorial sanctions.



Source: Bloomberg

As for "weaponization" of metals, the 2010 Chinese rare earth metals export ban (unofficial) to Japan serves as one example. Back then China reduced its rare earth export quotas by 40% under the pretext of protecting the environment, but it was more likely that it was the result of a dispute with Japan over the Senkaku/Diaoyu islands.

This caused a considerable headache (including some financial losses) to the Japanese high tech industry particularly the automobile industry. Nevertheless, China was also a long term loser as in the following ten years Japan reduced its reliance on Chinese rare earth metals from 90% to 58%, the country aims to reach 50% by 2025. Europe and the US are also actively looking at way to reduce their reliance on China.

As such the issue with weaponization is that for the country imposing it (who has the market advantage) they could burn that card for future use as those who were sanctioned diversify away their supply chain or seek substitution.

So which metals are likely to be impacted?

From a Russian metal "weaponization" perspective, **palladium** is possibly one of the best contenders, as the country accounts for 42.8% of global output. Should Russia head for an export ban or simply slowdown the export process then the loss as a percentage of Russian GDP will be minor, whereas this would prove to be a major headache for automobile makers (so mainly Western and Western allies as they are the main automobile producers) and could end up costing more than the equivalent loss in Russian sales given that palladium is an input to high value products. In 2020 Russia is estimated to have produced the equivalent of \$6.3bn worth of palladium which was mainly exported, this equates to roughly 0.43% of Russian GDP.

In 2000, delays in Russian export licenses of palladium drove prices of the metal up by around 220% in a matter of a few of months (chart 2). Between mid- 2001 and the end of that year, when Russia was exporting palladium at normal quantities,



prices fell by over 60% incurring heavy losses to some automakers. At the time the mismanagement of palladium stocks led a \$1bn loss by Ford Motors.

Chart 2: Palladium prices (\$/oz) 1200 1100 1000 900 800 700 600 500 400 300 200 100 Jan-03 Jan-04 Jan-99 Jan-00 Jan-01 Jan-02 Jan-05

Source: Bloomberg

Another contender is titanium which could damage the Western weapon and aerospace industries. The world's largest producer of titanium is VSMPO-AVISMA. located in Siberia and controlled by a close ally of President Putin. Boeing is one such example of how a western company could be damaged and are "hooked" to low prices. VSMPO-AVISMA was flagged back in November 2019 by the US Bureau of Industry and Security (BIS) as selling titanium at artificially low prices to Boeing: "Russia's VSMPO-Avisma do not pass on the full cost of titanium sponge to consumers and offer artificially low-priced finished titanium goods. This is most notable with VSMPO-Avisma's joint venture with Boeing to produce titanium-based aircraft parts in Russia for use in U.S.-assembled commercial aircraft." Despite this warning, in November of last year both companies agreed on maintaining "titanium supplies and technology collaboration for years to come", signing a memorandum of understanding which makes the Russian company the largest titanium supplier for Boeing's commercial airplanes.

This is a somewhat similar to the dumping strategy that the Chinese used in rare earth metals in order to capture market share in strategic sectors. Boeing is not the only company impacted, airbus has around half of its supply of titanium coming from Russia and the UK's aerospace industry is also heavily dependent. Similar to palladium, titanium sales contributed marginally to Russia's GDP but are of extreme importance to western companies including the armament industry.

Conclusion

For Russia mining is of a strong importance to the country's economy as it accounts for about 12% of GDP. Sanctions on that sector could be painful but seem unlikely given how much Europe relies on Russian base metals (table 2) and not just on palladium and titanium. Sanctions on those sectors are likely to harm European industries which could find it complicated to quickly get new suppliers and could also hit the continent's GDP as metals are at the basis of some of their higher value chain products.

Table 2: EU 27+UK metal imports from Russia (2020)

	EU27 + UK estimated Total consumption	Imports from Russia	Russian share of imports
Nickel (kt)	253	160.02	63.2%
Aluminium (kt)	7450	1042	14.0%
Copper (kt)	4411	194.78	4.4%

Source: Woodmac, European Commission

Be it weaponization or sanctions on metals, all sides inevitably end up losing. In the long term weaponization drives away those who were hit, meanwhile western sanctions against commodity related entities end up backfiring given the nature of global markets and that the western world is heavily reliant on commodity imports.

Our view is that even if sanctions or weaponization don't take place, the possibility of one or both happening is enough to drive base and precious metal prices higher in the near term. In a nutshell we are heading into a volatile period, the main three factors that will contribute to this are:

- The weight of Russia in the commodities market.
- Europe's exposure to Russian metal imports and its involvement in the conflict.
- A very tight base metals market that is already in backwardation.

As such we have revised upwards our forecasts (table 3) of the metals complex and expect that gold prices break through \$2000/oz in the coming days if the conflict further escalates. A quick correction will ensue once the conflict's intensity winds down and that is if no major commodity related sanctions or weaponization take place.



Table 3: Natixis forecasts

	2022				2023				Annual	
	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	F2022	F2023
Gold (\$/oz)	1,890	1,950	1,700	1,600	1,550	1,400	1,375	1,375	1,785	1,425
Silver (\$/oz)	24.0	26.0	23.0	20.0	19.0	17.5	17.0	16.5	23	18
Aluminium (\$/t)	3,267	3,400	2,400	2,450	2,450	2,500	2,550	2,600	2,879	2,525
Copper (\$/t)	10,000	10,000	8,300	8,400	8,500	8,600	8,600	8,700	9,175	8,600
Nickel (\$/t)	24,000	25,000	18,800	18,800	19,000	19,200	19,400	19,600	21,650	19,300
Iron ore (\$/t)	110	80	82	82	75	75	70	70	89	73
Brent (\$/bbl)	86	83	81	81	81	78	76	76	82.8	77.8
WTI (\$/bbl)	83.5	80.5	78.5	78.5	78.5	75.5	73.5	73.5	80.3	75.3
Henry Hub (\$/MMBtu)	5.1	3.5	3.5	3.9	3.6	3.3	3.3	3.6	4.0	3.5
TTF (\$/MMBtu)	32.9	20.8	20.8	24.2	24.2	12.1	12.1	17.3	24.6	16.4
JKM (\$/MMBtu)	36.9	21.8	21.8	28.2	27.2	13.1	13.1	20.3	27.1	18.4



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