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Global Markets Daily: How Much Risk is Priced into Global Assets Now? (Wilson/Chang)

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- At the start of last week, before the start of military action, we looked at how much geopolitical risk premium we thought was priced into a range of global assets. Following Russia's invasion and escalating sanctions, the market has begun to shift from pricing a generalized risk premium to dealing with a concrete reality, where risks across assets are starting to be differentiated on the basis of the market's view of the actual macro risks.
- The situation is fluid, but our initial assessments involve large impacts on the local economies, and a more nuanced impact outside the areas directly affected by the conflict, with commodity price risks a key part of the likely transmission mechanism. We currently expect the risks to growth to be highest in neighboring economies, and see more near-term downside to Euro area growth than to the US. Our current expectation is that the impact of growth and inflation shifts is roughly neutral for the Fed but raises some risk of a delayed ECB exit.
- We compare what has happened to global assets relative to our previous "intensification" and "de-escalation" scenarios. In the period of peak stress last week, many global assets approached full pricing of the downside case we had laid out, while some regional and EM assets traded through those levels. Since then, there has been more differentiation. RUB is trading well through our original downside scenario, as are CEE-3 currencies to a lesser degree. EM equities and European assets have reversed some weakness but are still pricing a high level of downside risk, as are oil prices. Other global assets—including US equities, credit and rates —are now incorporating a lower level of risk.
- Bond yields moved relatively less in the stress period last week than the other asset classes. With inflation already high, the market has been less convinced that central banks will be easily deterred from hikes. But while equities have bounced meaningfully from their lows, US yields are still close to last week's troughs. In that sense, the news over the weekend appears to have weakened the market's initial confidence that central banks will "stay the course", at least at the margin.
- Looking at current pricing, two core areas of our structural views are again starting to stand out. We think the market may be underestimating the risks of tighter supply on oil pricing, which remains a key risk from the ongoing conflict– so we think the "risk premium" here should probably be larger. And we think the market is starting to overestimate the impact that the conflict will have on the Fed trajectory and so think that front-end rates are ultimately likely to reverse

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this recent rally. Despite the obvious uncertainties that the invasion brings, those two areas are likely to remain important themes in our market forecasts.

How Much Risk is Priced into Global Assets Now? (Wilson/Chang)

The invasion of Ukraine and the escalating sanctions on Russia continue to be the dominant driver of markets. At the start of last week, before the start of military action, we looked at how much geopolitical risk premium we thought was priced into a range of global assets and estimated how those assets might move in the case of either a full de-escalation or a version of a scenario where risks flared into outright conflict. We based our estimates on the combination of a) asset reactions to two major episodes (on February 11th and February 15th) where the market shifted its views on the risk of military action, and b) a simple measure of the risk premium embedded in the RUB exchange rate. Exhibit 1 reproduces a version of that table (updated slightly for more detailed tick-level data around those episodes) and adding the levels of assets implied at the time by the "de-escalation" and "intensification" case.[1]

Exhibit 1: In a recent exercise, we used historical episodes and USD/RUB to benchmark possible market moves in various scenarios

Asset	Average change per +1pct RUB across episodes	Potential downside in 2/18 "intensification" scenario	Potential upside in 2/18 "de-escalation" scenario	Implied "intensification" level	Implied "de-escalation" level
	(1)	(2)	(3)	(4)	(5)
S&P 500	-0.7%	-7.1%	6.4%	4033	4623
Nasdaq	-0.9%	-9.3%	8.3%	12700	15162
Russell 2000	-0.9%	-8.5%	7.7%	1836	2160
CDX IG	1.0bp	9.5bp	-8.6bp	78.4	60.3
Eurostoxx 50	-0.9%	-8.6%	7.7%	3720	4381
Nikkei 225	-0.7%	-6.8%	6.2%	25009	28498
MSCI EM	-0.6%	-6.2%	5.6%	1148	1291
EUR/$	-0.1%	-1.4%	1.3%	1.12	1.15
$/JPY	-0.2%	-1.8%	1.6%	112.98	116.84
EUR/CHF	-0.2%	-1.7%	1.5%	1.03	1.06
EUR/CZK	0.2%	1.9%	-1.7%	24.79	23.90
EUR/PLN	0.3%	3.3%	-3.0%	4.68	4.40
EUR/HUF	0.3%	2.7%	-2.4%	366.4	348.0
Gold	0.6%	5.6%	-5.1%	2006	1802
Oil (WTI)	1.1%	11.2%	-10.0%	101.2	81.9
UST 2Y	-2.3bp	-23.2bp	20.9bp	1.23	1.67
UST 5Y	-2.7bp	-26.9bp	24.2bp	1.55	2.06
UST 10Y	-3.0bp	-29.9bp	26.9bp	1.63	2.20
German 10Y	-2.7bp	-26.5bp	23.9bp	-0.07	0.43
$/RUB	1%	10%	-9%	85.1	70.4

Source: Goldman Sachs Global Investment Research

That approach relied on the assumption that the market was pricing fairly broad-based risk and that those risks were fairly well-captured by shifts in the RUB exchange rate. Following the invasion of Ukraine last week, and a series of escalating sanctions against

[1] This is simply our estimate of the implied moves combined with February 18 close prices (on which the exercise was based).

Russian institutions, the situation has obviously intensified significantly. As a result, the market has also moved from pricing a generalized risk premium to dealing with a concrete reality, where risks across assets are likely to be differentiated increasingly on the basis of the market's view of the actual risks of the underlying situation. The situation is fluid, but our initial assessments of that emerging reality involve large impacts on the local economies and assets, particularly in the wake of the tightening of sanctions over the weekend, and a more nuanced impact outside the areas directly affected by the conflict. The risks from tighter commodity supplies —in European gas, particularly, but also in oil, metals and grains—are a key part of the likely transmission mechanism to the broader global economy. We currently expect the risks to growth to be highest in adjacent countries, and see more near-term downside to Euro area growth than to the US, where we view the impacts on the growth and inflation outlook as likely to be modest. For central banks—who are generally dealing with some increase in growth risk but also higher inflation risk, the impact is theoretically ambiguous. But our current expectation is that the combined impact is roughly neutral for the Fed, modestly increases the chances of a slower exit for the ECB and is probably hawkish for the CEE-3. As the market has shifted from generic risk to this specific outlook, it has not been appropriate in recent days to assume that movements in the RUB exchange rate are reliable proxies for the risks being priced into other assets. But there is still value in being able to estimate how those risks are in fact being priced using a consistent method, even if those estimates are bound to be imprecise. To do that, we adopt another simple approach here, extending our earlier exercise.

We assume that the "de-escalation" and "intensification" levels of assets consistent with our estimates last week (in Exhibit 1) were broadly appropriate at the time. We then hold those levels fixed and interpret movements in assets over the last week as movements along the path between de-escalation and intensification—in effect, we assume that the only major shifts in assets since our original exercise last week have been a result of shifting perceptions on market risks related to the Ukraine crisis. As a basic measure of the risks that the market is pricing, we can calculate how far a given asset is between the de-escalation and intensification points and express that in percentage terms. A value of 0% means that the asset is at the level we estimated was consistent with full "de-escalation", while a value of 100% means that the asset is trading at our estimate of the downside scenario. Of course, it is perfectly possible (as we will see) that assets trade north of 100% on this measure if market views of actual downside risks exceed those laid out in our original downside case.

Exhibit 2 shows that measure at two points in time. First, it shows the maximum levels reached on that measure for each asset on February 24th (column 4), which is still the most stressed that pricing has been for many global assets. Second, it shows levels for that measure as of the close on February 28th (column 6). Given high volatility, we appreciate that these measures quickly become stale, but they can be easily updated with the information in the table.

Exhibit 2: Taking our previous estimates as upper and lower bounds, we benchmark where assets are trading in that range

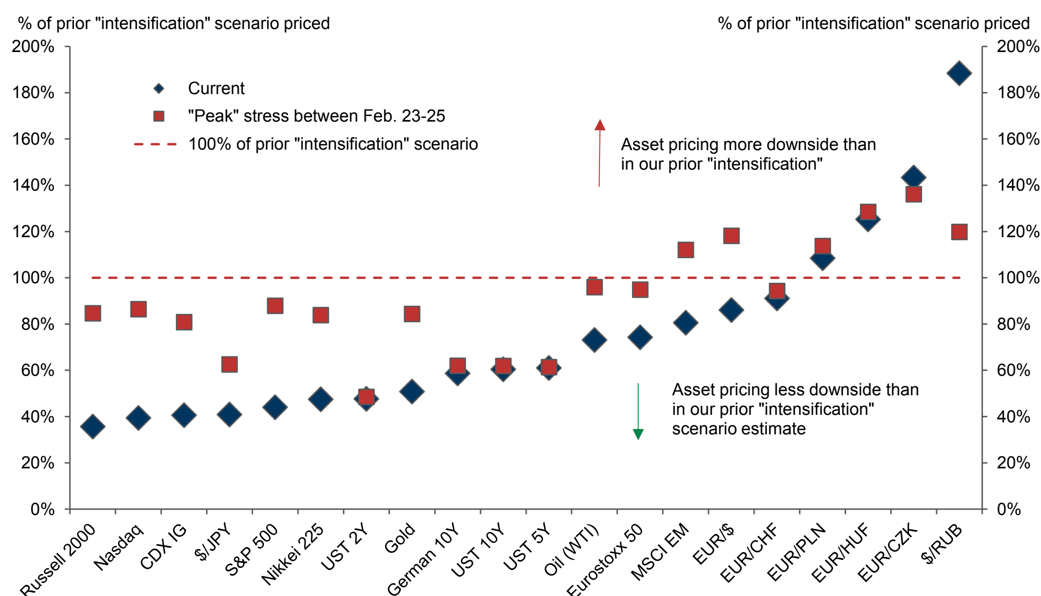
Asset	2/18 implied "intensification" level	2/18 implied "de-escalation" level	Peak stress level between 2/23-2/25	% of "intensification" scenario priced	Current	% of "intensification" scenario currently priced
	(1)	(2)	(3)	(4)	(5)	(6)
S&P 500	4033	4623	4104	88%	4363	44%
Nasdaq	12700	15162	13033	87%	14191	39%
Russell 2000	1836	2160	1885	85%	2045	36%
CDX IG	78.4	60.3	75.0	81%	67.7	41%
Eurostoxx 50	3720	4381	3754	95%	3890	74%
Nikkei 225	25009	28498	25570	84%	26840	48%
MSCI EM	1148	1291	1130	112%	1176	81%
EUR/$	1.12	1.15	1.11	118%	1.12	86%
$/JPY	112.98	116.84	114.42	63%	115.26	41%
EUR/CHF	1.03	1.06	1.03	94%	1.03	91%
EUR/CZK	24.79	23.90	25.11	136%	25.17	143%
EUR/PLN	4.68	4.40	4.72	114%	4.70	108%
EUR/HUF	366.4	348.0	371.6	129%	371.1	125%
Gold	2006	1802	1974	84%	1905	51%
Oil (WTI)	101.2	81.9	100.5	96%	96.0	73%
UST 2Y	1.23	1.67	1.46	49%	1.46	48%
UST 5Y	1.55	2.06	1.75	61%	1.75	61%
UST 10Y	1.63	2.20	1.85	62%	1.85	60%
German 10Y	-0.07	0.43	0.12	62%	0.14	59%
$/RUB	85.1	70.4	87.99	120%	98.06	188%

Source: Bloomberg, Goldman Sachs Global Investment Research

We draw three broad conclusions from this exercise:

First, on February 24th, a number of global assets approached full pricing of the downside scenario we had originally mapped out, as can be seen in Exhibit 3. The major DM equity markets; EUR/$ and EUR/CHF; oil and gold all traded at least 80% of the way to that scenario, while RUB, CEE-3 currencies and EM equities traded through it. While we reiterate that this downside scenario was not intended as a "worst case"—and so can be exceeded as we have seen in some areas—it does suggest that at that point the market had priced meaningful risk premium into a wide range of global assets.

Exhibit 3: While a number of assets approached full pricing of the previous downside scenario we had mapped out when at their peak stress levels last week, assets are now differentiating to a greater degree
Red squares show column 4 from exhibit 2, while blue diamonds show column 6



Source: Bloomberg, Goldman Sachs Global Investment Research

Second, since that generalized risk-off move on February 24th, markets appear to have been differentiating to a higher degree than before. While the situation is very fluid and markets are highly volatile, the situation as of the evening of February 28 (the blue diamonds in Exhibit 3 are from 8pm EST on February 28) highlights that. RUB is trading well through our original downside scenario, as the US and Europe have delivered a more severe set of sanctions than our original scenario anticipated. CEE-3 currencies are also still trading through those downside levels, though by a smaller margin. EM equities and European assets (European equities, EUR/$, EUR/CHF) are still pricing a relatively high percentage of downside risk (75% of more), as are oil prices, though they have reversed to some degree from the peak stress last week. Other global assets—US equities and credit, Japanese equities and FX, gold and bond yields—are now generally incorporating a lower risk of the downside case, generally around 50% of those downside levels as of the 2/28 evening. At least directionally, the differentiation that we have started to see is in line with the economic impacts of our initial assessment of the situation as we described above.

Third, government bond yields moved relatively less in a risk-off direction in the stress period last week than the other asset classes, particularly at short maturities. With inflation already high in many economies, the market has been less convinced that central banks will shift easily away from planned tightening, particularly given that the new shock is likely to be an inflationary one. While US (and to a lesser extent, Euro area) bonds are still incorporating relatively less downside risk than most European and EM assets, they now look less distinctive relative to equities than they did last week. Equities have bounced meaningfully from their lows, but US yields are still close to last week's troughs. In that sense, the news over the weekend both of intensifying military action and increased sanctions have weakened the market's initial confidence that

central banks will "stay the course", at least at the margin.

The implicit assumption in the exercise laid out here—that a resolution would now mean a full return to past levels—is not one that we should take too literally. Even if we do see an eventual reduction in tensions, long-lasting shifts in policy and economic outcomes are now likely, and not just in local assets. Commodity supply risks are likely to be persistently higher; growth and inflation outcomes could change in many places, even if some of those changes are modest and temporary; European defense spending commitments are set to increase; and Russian assets are likely to be subject to an extended period of sanctions. As time goes on, and these impacts become clearer, the differentiation process we are highlighting will ultimately need to incorporate these kinds of shift more fully, as it may already be starting to do. Both because of where we think those shifts in the outlook are most likely to come and because of how we see risks currently priced, two core areas of our structural views once again stand out. We think the market may be underestimating the risks of tighter supply on oil pricing, which remains a key risk from the ongoing conflict–so we think the "risk premium" here should probably be larger. And we think the market is starting to overestimate the impact that the conflict will have on the Fed trajectory (our US economists in fact raised their Fed funds forecast path over the weekend for 2023) and so think that front-end rates are ultimately likely to reverse this recent rally. Those two areas are long-standing themes in our market forecasts and—despite the obvious uncertainties and fluidity that the invasion brings—still stand out in our market views.

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