

Commodity Views

A REV'ed up start to 2021

1) OPEC and Georgia help neutralize near-term risks. The events of last week substantially reduced the downside risks to our bullish commodity narrative — a fact reflected in the rise in oil and copper alongside the sharp decline in gold. First, Saudi Arabia agreed to a unilateral production cut that neutralized current lockdown risks but more importantly set the stage for a tighter market as the vaccine roll-out accelerates this spring. Second, the Democrats' win in Georgia tipped US politics toward Redistributive and Environmental policies which are central in to our REV (Redistributive, Environmental and Versatility) policy-driven structural rise in commodity demand thesis. Third, EM governments around the world are looking to ensure the Versatility in their commodity supply chains - particularly in agriculture. Their efforts to secure domestic supplies have exacerbated the fundamental tightness in grains, with Argentina banning corn exports, Russia putting an export tax on wheat and China emphasizing the requirement for strategic stockpiles of grains and pork in its latest 5 year plan. Indeed, these three drivers have helped propel commodities up 24% since November. While the recent rally reinforces our October call for a structural bull market, we believe the Democratic sweep and Saudi production cut have left commodity markets with a tighter medium-term outlook, leading us to raise our 3/6/12 month forecast for the S&P GSCI ER to 200/207/208 from 183/189/205, generating commodity returns of 6%/9%/10%, as we pull forward forecasted oil market tightness, raise metals demand forecasts and incorporate lower agriculture yields. Given the magnitude of the recent rally, however, markets are likely to consolidate near-term.

2) Globally synchronized 'green wave' of stimulus. The Georgia win opens a path for all three major economies - the US, China and Europe – to pursue globally synchronized policies that will likely generate a 'green wave' of stimulus, accelerating the reflation loop that has been driving commodity markets higher. Our US economists see the recent win in Georgia leading to an additional \$750bn (3.4% of GDP) of stimulus this year, and an ongoing 0.25% of GDP in new annual spending financed by tax increases, which helps fund infrastructure and green initiatives. As we have emphasized, the broader stimulus effect — including green investment — helps oil demand long before it hurts oil demand. For example, we estimate that \$2 trillion of green stimulus over 2021-22 would boost US demand by c. 200 kb/d. Also, while we believe this surprise cut was mainly due to a deteriorating demand outlook, there was also likely political considerations around the recent Middle East 'détente'

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to consolidate the GCC countries in response to the Biden administration's bid to revisit the Iran deal. However, we still believe that the new administration will likely need to prioritize domestic policy, keeping Iran lower on the US policy agenda.

3) Pulling forward oil market tightness. Given these events we are pulling forward our forecasted oil tightness with Brent prices now expected to reach \$65/bbl this summer as opposed to year-end. With vaccines being rolled out across the world, the likelihood of a fast tightening market from 2Q21 is rising as the rebound in demand stresses the ability of producers to restart production. While higher prices pose the risk of a shale response - as WTI spot prices are now at \$50/bbl allowing for higher activity and positive free cash flows — we see this response remaining muted in the first instance, as higher capital costs and producer discipline curtail the US E&P's reaction function. Moreover, OPEC+ March production level will still be near the recent lows just as global demand starts rebounding sharply driven by warmer weather and rising vaccinations. This points to the group potentially struggling to ramp-up output quickly enough, with our balance currently reflecting a 1.3 mb/d deficit in April-July despite OPEC+ increasing production by 4 mb/d, a historically tall order. We continue to recommend a long Dec-21 Brent trade (currently trading at \$53/bbl vs. our \$65/bbl forecast) and expect sustained backwardation and lower implied volatility. Accordingly, we are raising our 3/6/12 month forecast for the S&P GS Energy Index ER to 76/81/83 from 68/71/82, generating energy returns of 5%/11%/14%.

4) Commodities are historically a safe harbour. With the sharp rise in equity valuations, and bond markets showing limited upside from here, investors have expressed concerns around a consolidation pullback in financial markets. Unlike equities, commodities have a tangible and unavoidable physical supply and demand response to price moves that anchors those prices in the real world. Because of this physical nature, commodities have historically been a safe harbour during financial market sell-offs such as when the dotcom bubble burst in March 2000, commodities went on to rally another 30% that year and didn't sell-off until after September 11th, 2001. While we see much of the recent rally validating our October call for a structural bull market, it has also created pockets of downside risk in the near term, whenever commodity prices rise faster than balances indicate. As we highlighted last week, we see near term downside risk in refining margins and product cracks, given the expected weakness in near-term oil demand with the latest (and possibly final) wave of winter lockdowns spreading across North America and Europe. This connection to physical quantities runs both ways; however, commodity markets that are facing real physical shortage, such as soy, copper and iron ore have further upside potential, despite what appears to be very stretched positioning.

5) Sticky supply response will keep prices supported. Precisely because commodity prices must eventually reflect physical reality, prices must work harder to balance markets if there are other constraints to supply or demand. We are seeing just such constraints across the commodity complex, adding further conviction to our bullish view. First, despite rising oil prices we have seen a muted supply response from US shale producers - influenced in part by ESG factors limiting the supply of capital to producers. Note that this restriction also applies to associated gas production. Second,

we think there is a degree of complacency in the assumption that metals supply will recover with ease from all the covid related losses suffered last year. A reminder of this risk channel has been the apparent halt to production this week at Las Bambas (one of the largest copper mines in the world) due to ongoing protest and road blockades. In a setting of already low inventories and resurgent demand, such supply disruptions can have outsized impact on price. Finally, in years with a low carry-in and a poor harvest - like the one we are in today — agricultural commodities see persistent rises in price, as low inventories have to meet demand for the entire year until next harvest. Further, while acreage does respond to price, there are set limits on additional arable land to cultivate, limiting production upside, while yields remain broadly driven by weather. This limited ability for producers to respond to tight markets is driving grains prices higher. Net, on top of the addition of a sustained demand response from green-based stimulus, commodity supply side capex remains at very low levels, leaving commodity markets tight for the foreseeable future.

6) Reflation feedback loop immune to service-to-goods rotation. Alongside a REV'd up economy, commodities are benefiting from a bullish reflation feedback loop, as oil consolidates above \$50/bbl, the trade weighted dollar has broken the multi-year trend line and EM dollar reserves are rising (even in Saudi Arabia). Higher commodity prices create greater value in global trade and hence larger EM trade surpluses. The excess dollars from EM trade surpluses not only create credit availability that fuels more commodity demand and higher prices, but it also puts further downward pressure on the dollar which reinforces higher commodity prices. This feedback loop is highly sensitive to global trade that generates the global liquidity that drives the loop. After nearly a year of rolling lockdowns and physical restrictions, households the world over have substituted face-to-face services for home-delivered goods. This has helped catalyze a resurgence in Chinese manufacturing and grow the value of global trade, accelerating the reflation feedback loop and creating concerns around the sustainability of such a cycle as the world emerges from lockdowns in a vaccine-driven recovery. In our view, commodities are immune to a goods-to-services rotation, as vaccine roll-outs produce only a minor headwind to the cyclical, not structural drivers of this bull market, while a V-shaped recovery will lead to a substitution of COVID-related goods for non-COVID goods, maintaining a healthy start to the global trade cycle. Further, oil demand is directly linked to leisure and hospitality demand as it begins to recover.

7) Long tail of Chinese stimulus to provide a tailwind for base metals in 2021.

Alongside concerns over a services-to-goods rotation in Western household consumption, there are also concerns that slowing credit growth will taper onshore construction activity over the course of 2021, undermining metals bullish drivers. However, we see three drivers of sustained metals demand that lead us to expect continued yoy growth. First, there remains a lag of c. 6-9 months between shifts in infrastructure funding and the actual metals demand. In our view, the growth in project approval and local bond issuance that many believe will have peaked in 4Q20 will likely create a long tail of projects that will support Chinese construction-related metals demand through until the end of 2021. Moreover, with significant investment targets likely in the 14th Five Year Plan focused on new green electrification investment, this will be a key counterweight to an eventual deceleration in 'old' construction related activity

into 2022 and beyond. Second, Chinese metal demand is not solely dependent on construction. Indeed, there has been a resurgence in demand for manufactured goods — both from domestic consumers and the export channel. This activity — not seen since the start of the Trump-Sino trade war — has driven a strong multiplier of global activity from Western fiscal stimuli, with rising sales into China driving expansion in new orders. Third, coupled with significant backlogs in work orders and very low Western supply chain inventories - particularly in autos - the expansionary trend in global manufacturing appears well-supported in 2021. In this context, we anticipate an unprecedented synchronised surge in global metals demand into Q2 as China's peak activity season coincides with the recovery trends along the Western industrial supply chain. This points to an environment of continued broad price strength across the complex. In this context, we now forecast a stronger path higher for a number of base metals including aluminium, nickel and zinc. Due to these upward revisions, we are raising our 3/6/12 month forecast for the S&P GS Industrial Metals ER index to 209/217/227 from 203/207/216, generating 4%/ 9%/13% of upside respectively.

8) Iron ore market remains tight. In the above context, we think it is important to emphasize that the correction lower in iron ore price from mid-December is not indicative of a negative China metals demand shift. Rather, it reflects in our view progressive attempts by Chinese steel mills to boost margins. There has been recent Chinese industry commentary on lowering steel production and increasing domestic iron ore supply. While there has been some position liquidation and price pressure, we are skeptical of any material impact on the 2021 fundamental outlook. Unless China's steel demand was also cut by the same degree, then the main impact from cutting domestic steel output would be to boost steel imports and simply divert iron ore demand (and steel sales volumes) to ex-China mills. That shift would not materially change what is expected to be a clear deficit in the iron ore market during the first half of this year. After two years of deficit supply chain inventories are low (particularly at China's mills), leaving the market vulnerable to any supply shocks and upside surprise in demand. Given the elevated Q1 weather risks to key supply channels in what is already expected to be a deficit period, we continue to advise upside exposure to iron ore with our 12-month target of \$150/t.

9) Tight LNG reinforce our bullish US summer gas view. JKM prices topped \$21/mmBtu this past week on supply disruptions and strong Asian demand driven partially by maintenance-related reductions in nuclear generation in Japan and colder-than-average weather across Northeast Asia. While we believe the current dislocation will resolve itself, we do see prices supported in 2021 at \$7.56/mmBtu including our revised 1Q21 JKM forecast to \$12.65/mmBtu from \$7.40 previously. We've also raised our 1Q21 TTF forecast to \$6.65/mmBtu from \$5.70 previously on tighter European balances driven by lower LNG imports and colder-than-average weather, which will also help the US market this summer. In the US we maintain our constructive view driven by slow production growth throughout the year. From a positioning perspective, there has been some significant liquidation from the recent highs, reducing sell-off risks from current levels. Further, we would argue that net speculative length remaining above zero is actually consistent with the tight fundamentals we see this coming summer. Specifically, although a warmer-than-average winter thus far has helped

significantly reduce storage stock-out risks, pressuring 2020/21 winter gas prices lower, we note the sell-off in gas prices winter-to-date has spanned the whole forward curve, with the 2021 summer NYMEX gas strip down 10%. This implies meaningful support to coal-to-gas substitution demand for natural gas, helping drive an expected 2.5 Bcf/d (2.9% of the market) deficit in US gas balances this year. Hence, we continue to believe higher US gas prices are required for the next several months to incentivize lower demand and higher supplies to ultimately take end-Oct21 storage to comfortable levels. Accordingly, we maintain our \$3.25/mmBtu summer 2021 NYMEX gas price forecast, well above current forwards at \$2.76, and continue to recommend a long 3Q21 NYMEX gas position.

10) Risk on rotation hurts gold again. While many comparisons between bitcoin and gold are made, we believe that our characterization of bitcoin as a risk-on growth proxy remains more apt. Indeed, last week reinforced this view after gold sold off sharply as Georgia strengthened the Democrats mandate for further fiscal stimulus. In contrast, copper and bitcoin rallied, with copper surpassing \$8000/t and bitcoin \$40,000 as growth expectations improved. The situation resembles, albeit to a lesser extent, the sell-off post positive vaccine news at the end of 2020. Similar to back then we don't expect it to last long and see the current correction as a buying opportunity. Inflation expectations are likely to continue to move higher in 2021 pushing near- to medium-term maturity real rates lower and the dollar weaker. Finally, we see evidence of a recovery in EM demand. Notably Chinese gold and silver jewelry sales yoy growth is now highest since 2013. Also, with oil now back above \$50/bbl we think that it is only a matter of time when some of the EM CB gold demand comes back to the market. We continue to think that substitution of gold for bitcoin for institutional investors is so far marginal. Indeed, large institutional investors have bought 5-7 billion USD worth of bitcoin recently, at least what is visible from public announcements. This compares with \$700bn market cap of Bitcoin and roughly \$1 trillion dollar market cap of all cryptocurrencies. But there is no evidence of meaningful gold selling by any of these firms. In fact some of them remain highly bullish on gold and view bitcoin as an additional way to express this view. Also, the latest bitcoin rally took off after Paypal added crypto to the platform which indicates that retail participation was likely a large force behind the appreciation. Bitcoin remains highly correlated with equities and due to its high volatility acts more like a risky versus defensive asset as much of the demand coming into the space right now is speculative. We think that this inherent riskiness as well as the uncertain regulatory environment mean that a more mass institutional adoption of crypto, if it does happen, is still far away and it shouldn't prevent gold investment from going higher.

Charts

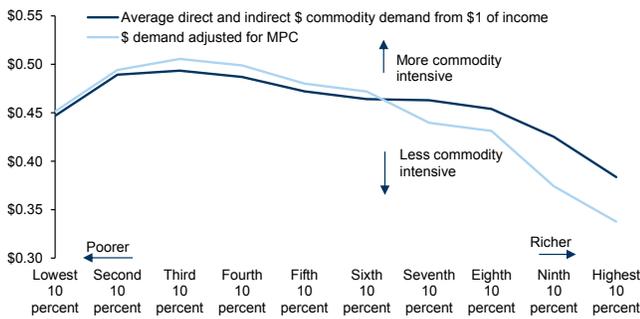
Exhibit 1: S&P GSCI Forecast

GSCI Commodity Index	Dollar Weight	Historical Performance			GS Forecast		
		2018	2019	2020	3m	6m	12m
S&P GSCI	100.0	-12.9	17.4	-18.1	5.8	9.5	10.2
Energy	62.6	-13.9	28.5	-30.1	4.5	10.9	13.7
Industrial Metals	11.2	-18.0	2.8	-2.2	4.1	8.5	13.3
Precious Metals	4.1	-3.6	17.7	27.2	28.8	28.8	28.7
Agriculture	15.4	-7.0	-1.6	2.8	2.9	1.6	-4.4
Livestock	6.7	-2.2	-5.4	-10.6	6.7	5.2	5.4

Source: Goldman Sachs Global Investment Research

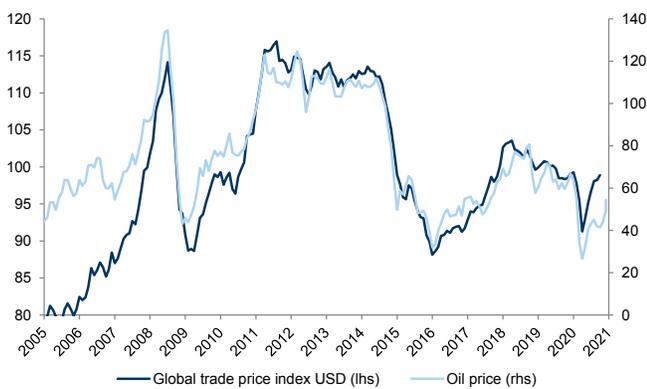
Exhibit 2: Lower income household's consumption bundles are more commodity intensive

Additional dollar of commodity consumption per additional dollar of income, US consumers



Source: BEA, BLS, Goldman Sachs Global Investment Research

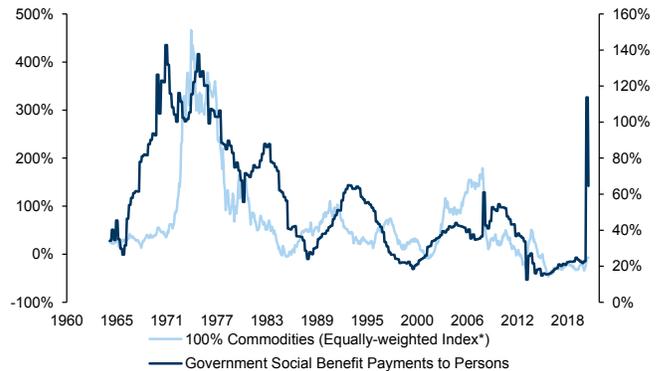
Exhibit 4: Rising commodity prices, oil in particular, drive up the global value of trade



Source: CPB, Bloomberg, Goldman Sachs Global Investment Research

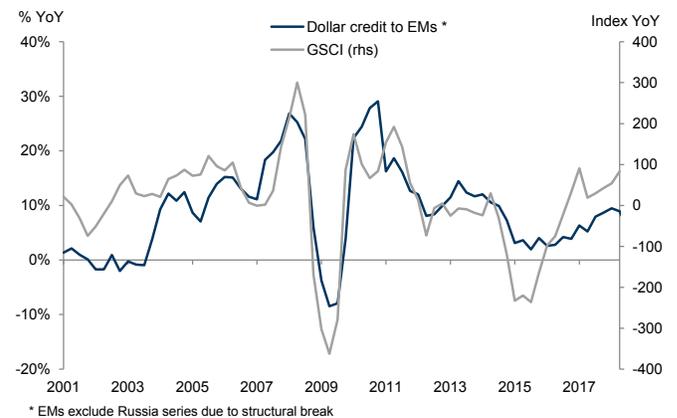
Exhibit 3: Greater transfer to lower income households helps drive up commodity prices

AQR long-run commodities index growth (yoy, an), US Government Social Benefits to persons growth (yoy, an)



Source: AQR, Haver Analytics, Goldman Sachs Global Investment Research

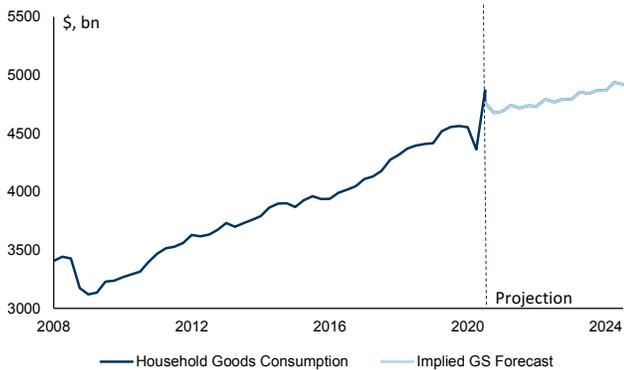
Exhibit 5: ...driving up excess dollar credit to EM's, boosting demand



Source: Haver Analytics, Bloomberg, Goldman Sachs Global Investment Research

Exhibit 6: A strong rising in total demand will support goods consumption, despite a goods to services rotation

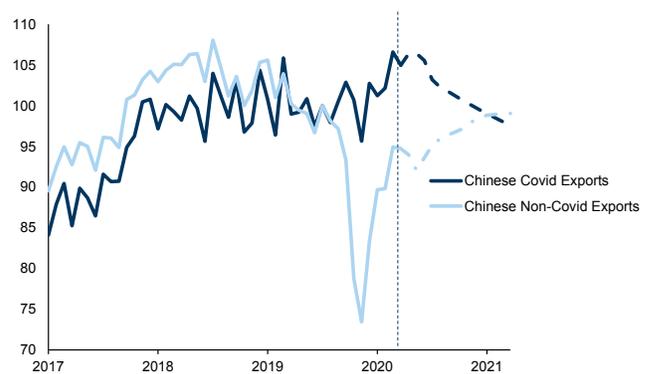
US Goods Consumption, project based off return to trend assumption and GS PCE forecast



Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 7: While a rise in Industrial Production post-vaccine will help substitute for a fall in COVID-related trade

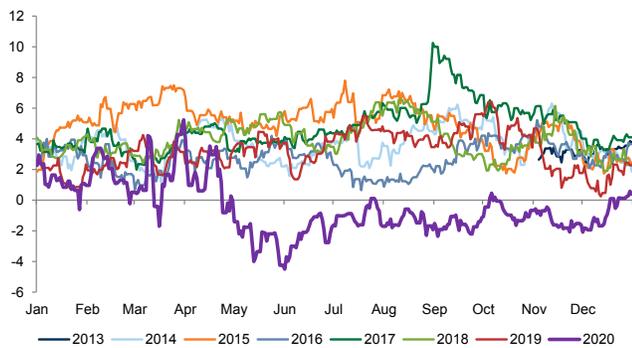
Index, Dec-19 = 100



Source: Haver, CEIC, Goldman Sachs Global Investment Research

Exhibit 8: Refining margins have rebounded despite worsening demand

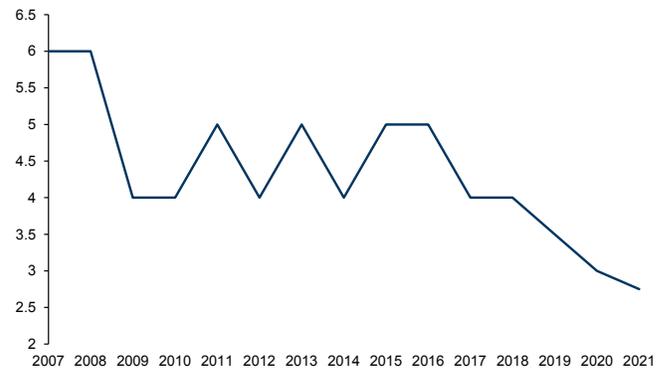
NW European cracking refining margins adjusted for yields, slate, and freight (USD/bbl)



Source: Reuters, ICE, Platts, IEA, Goldman Sachs Global Investment Research

Exhibit 9: Mine supply is fast approaching its peak

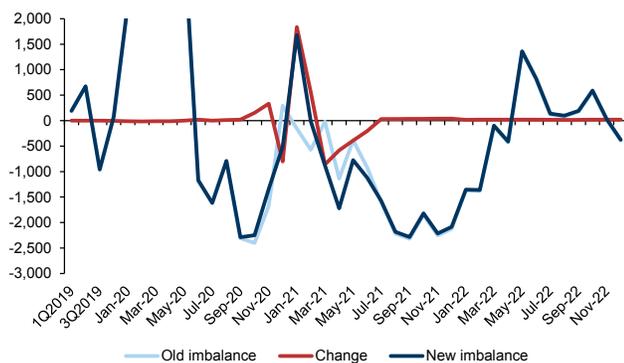
Years until peak mine supply, GS forecasts



Source: Goldman Sachs Global Investment Research

Exhibit 10: Prolonged OPEC cuts will offset the weaker 10Q21 demand

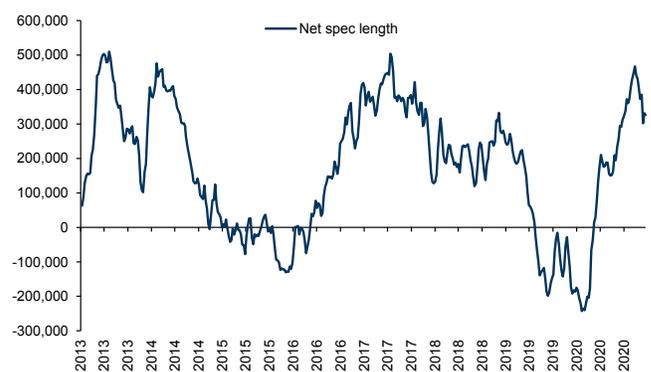
GS global oil imbalance (kb/d)



Source: IEA, Woodmac, Kpler, Google COVID-19 Community Mobility Reports, Apple, National Sources, JODI, Goldman Sachs Global Investment Research

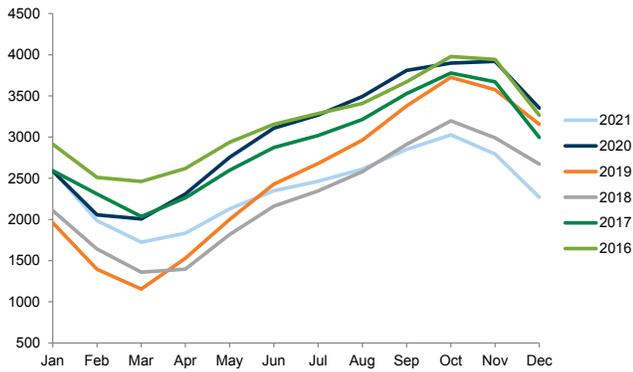
Exhibit 11: Significant liquidation from recent stretched positioning has lowered downside risks

Net speculative length in natural gas contracts



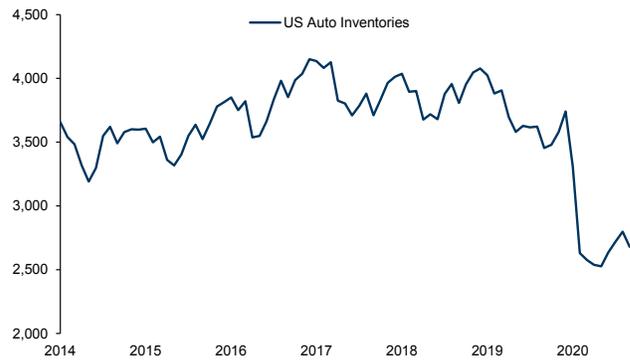
Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 12: We continue to believe higher US gas prices are required to take end-Oct21 storage to comfortable levels
 US Natural gas storage, Bcf



Source: Goldman Sachs Global Investment Research

Exhibit 13: US auto inventories declined in December, creating upside risk to auto production
 (000's of units)



Source: Motorintelligence

Exhibit 14: Gold's correlation to real rates picks back up



Source: Bloomberg, Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

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