MAM Insight No. 22

September 6, 2022

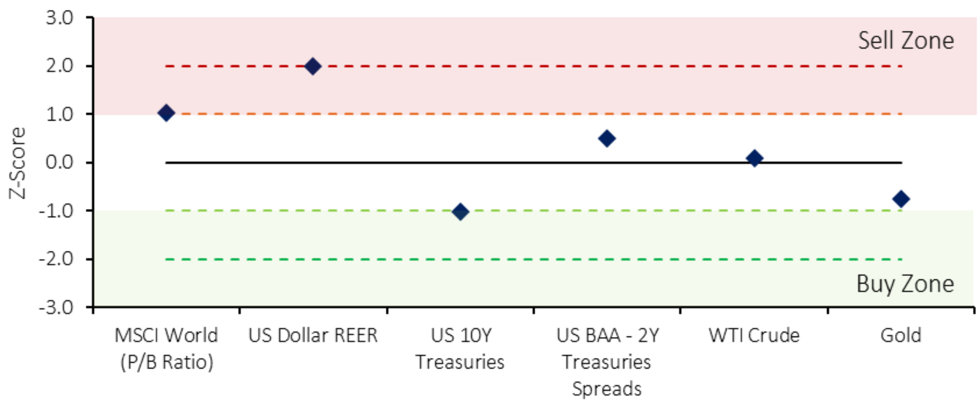
Where Are Valuations?

2022 has so far been the worst year for markets in at least five decades based on an analysis of stock and bond-market returns heading into September. One of the reasons why 2022 has been such a difficult year for investor is that both bonds and stocks sold off in unison, leaving traditional 60-40 portfolios with nowhere to hide. A 60-40 portfolio is c. -18.25 YTD. At least when stocks plunged in 2008 and in 2020, investors had the option of seeking safety in the bond market. There have only been three other years where both U.S. stocks and U.S. bonds were both in the red to this extent heading into September. Those other years were 1973, 1974 and 1981. Challenging market conditions bring to the fore all sort of biases and creative narrative. At MAM, we like to pause and review quantitatively the valuation landscape across all asset classes. This helps us assess where actual value lies. We measure asset valuation differently across asset classes and provide some context across this publication. In order to standardise valuations, we report them as standard deviations of their historical range. As shown in the chart below **(Chart 1)**, despite the sell-off in markets in 2022, very few assets screen "cheap". In fact, we argue that global equities still screen expensive relative to their history (+1 standard deviation). In the current macro-economic context, this pushes us to remain cautious equities. Another asset screening expensive is the USD at +2 standard deviation above long-term average valuations. While the trend of the USD remains very strong, valuations are now looking stretched. What is gradually starting to look attractive from a valuation standpoint is US treasuries and gold; two assets that we have been focusing on in portfolios. It is important to remember valuations only are an indicator of "what" to buy but do not provide information on "when". Please find below a review of valuations by asset class for your perusal.

Investment Implications

This review of cross-asset valuations comforts us in our analysis that very few assets screen "cheap" even despite the challenging year 2022 has been so far. This pushes us to remain cautious with regards to our exposure to equity and credit markets. The only areas that are showing "value" are US treasuries and gold. This is part of the reason we have been active in these two specific assets over the past few weeks.

Chart 1. Where Are Valuations?

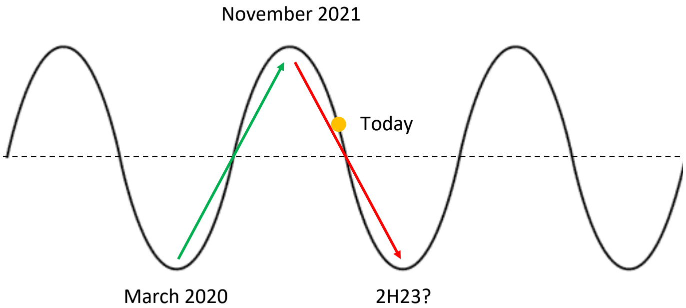


Source. Bloomberg, MAM Research

Equities

Almost all of the weakness in equities in the first half can be attributed to inflation, global central banks, and tighter global financial conditions. The outcome for the second act remains largely unknown. The first major drawdown of a bear market is much easier to call than what comes after. Today, arguing for lower prices is not as easy. Where are we in the cycle? Where are we heading? The first thing we must highlight before answering the above: valuation is not a catalyst but a mere representation of where we are relative to history and in the cycle on the sine curve **(Figure 1)**.

Figure 1. Picturing The Cycle (Sine Curve)



Source. MAM Research

Equities tend to perform poorly in a late cycle environment. The S&P 500 down 16.8% YTD, Nasdaq down 24.8%, Stoxx 600 down 16% YTD, and EMs down -20.8% YTD are evidence of that. Yet, we continue to argue the road ahead remains bumpy and the path of least resistance is down. The second part of the bear market starts now. Valuations are down from their peak, expectations remain anchored at elevated levels. While most regions are back to their mean, the US and MSCI World (US are 60% of the index) remain over +1 standard deviation ("SD") expensive. Earnings results and expectations will determine the outcome heading into next year. Leading indicators and comps set-ups both point to weakness ahead. 2021 marked peak margins and high double digit growth on earnings. Easy financial conditions and large stimulus fuelled a consumption frenzy. Businesses have been overearning after the pandemic and 2H22-1H23 should bring a reckoning with comps not easing up until at least 2H23 **(Table 1)**.

Conclusion

Despite the most recent market declines, valuations remain relatively elevated. The US remain the most expensive region. In Europe and the rest of the world, while not cheap, valuations have been resetting closer to the long-term mean. While we would argue an overshoot to the downside is a rising and strong probability outcome - the fact of the matter is - their rising cheapness warrants our attention.

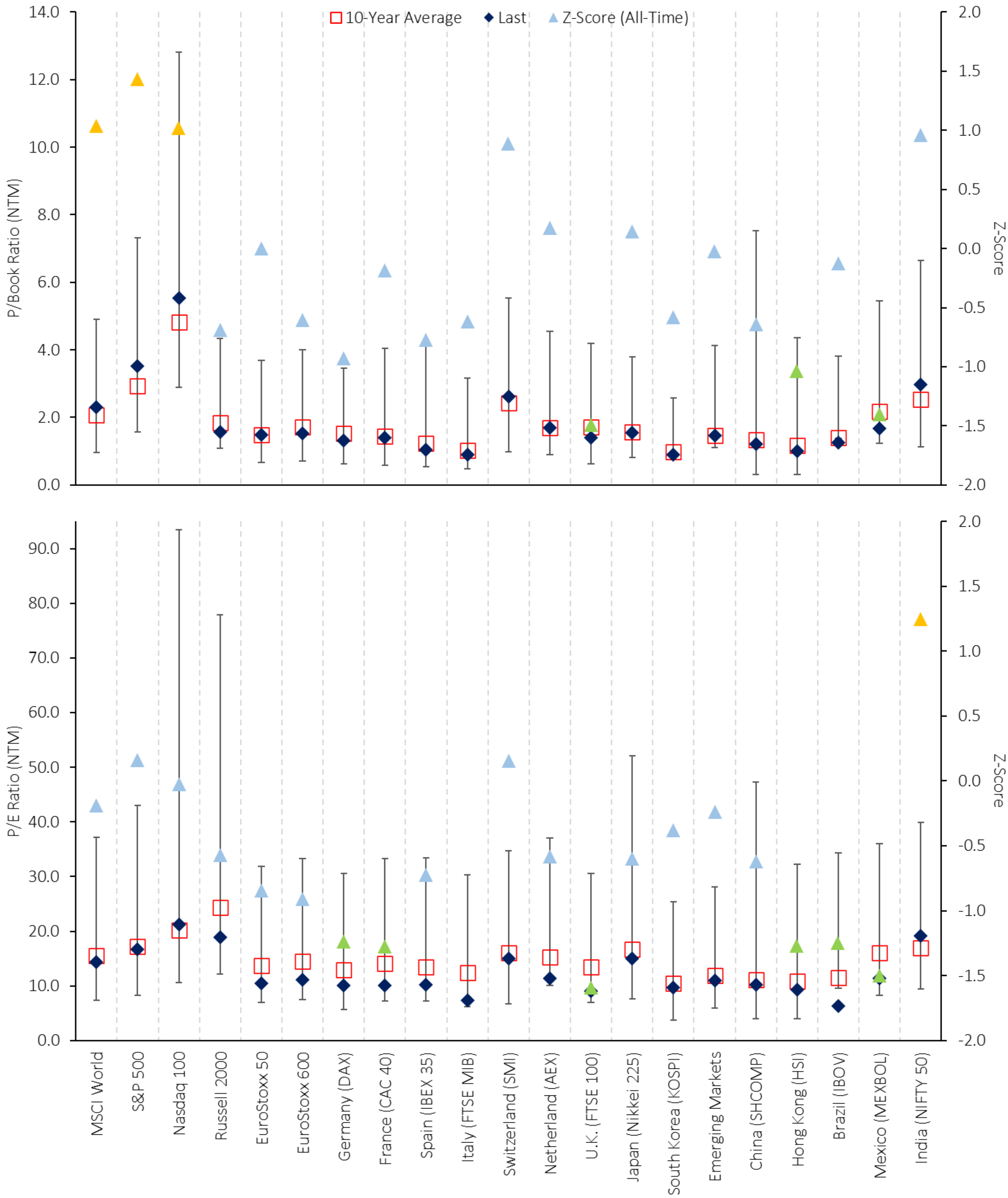
Highlights

- US Equities. Gravity is a powerful force. After reaching sky high valuations, multiples have mean reverted in the first half of 2022. However, they remain over +1SD expensive on a price-to-book and to-sales basis. They are back to mean on a price-to-earnings basis, but a lot can be said on whether the trajectory of the next twelve months denominator (Earnings or "E" in P/E) is fair. Consensus still models double digit earnings growth. Bring it close to zero (to be conservative) and the P/E multiple is back to being over +1SD expensive. We recommend an underweight in the current juncture.

- European Equities. European valuations did not stretch as far as in other regions (i.e., US). The market has been pricing in a lot of bad news given the several crises hitting the region: war, energy, economic. As such, valuations are looking a bit more attractive on a relative basis with P/B and P/S in the mean to -1SD range. On a P/E basis, some markets are now trading over -1SD cheap. Standouts in the region are the UK, Germany, and France with all screen at the cheaper end of the valuation spectrum.

- Emerging Markets ("EM"). The picture seems a bit more disparate in the EMs. Some regions such as China, Brazil, and Mexico are all trading on relatively lower valuations on all metrics. India remains the outlier in EM, being one of the world's most expensive regions. We continue to favour EMs.

Chart 2. Global Equities P/Book, P/Sales, P/E Valuations



Source. Bloomberg, MAM Research

Table 1. Global Equities Corporate Sales and Earnings Growth (YoY)

	2020				2021				2022			
Sales Growth (YoY)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22E	4Q22E
MSCI World	-6.7%	-17.3%	-9.4%	-2.9%	6.3%	21.8%	11.9%	10.1%	9.5%	9.0%	6.2%	36.9%
S&P 500	-1.2%	-10.6%	-2.9%	0.8%	8.3%	22.1%	15.0%	11.2%	15.2%	13.6%	9.8%	6.8%
Nasdaq 100	10.4%	1.5%	7.1%	10.8%	18.2%	27.9%	21.0%	14.9%	12.1%	8.3%	2.5%	5.2%
Russell 2000	-2.3%	-17.1%	-2.5%	2.1%	12.3%	22.3%	10.9%	14.1%	12.2%	8.9%	7.4%	3.0%
EuroStoxx 50	-6.6%	-16.9%	-15.0%	-13.9%	-5.6%	11.5%	14.5%	17.6%	24.4%	26.6%	24.9%	-7.2%
EuroStoxx 600	-4.3%	-20.7%	-14.3%	-14.4%	-4.5%	17.0%	9.0%	20.6%	26.7%	28.3%	28.1%	19.0%
Germany (DAX)	4.1%	-15.6%	-2.6%	1.3%	6.2%	23.2%	0.2%	0.6%	6.3%	9.7%	21.3%	12.5%
Japan (Nikkei 225)	-11.3%	-20.0%	-2.8%	0.3%	9.1%	23.5%	9.6%	8.8%	9.6%	12.9%	9.4%	6.8%
South Korea (KOSPI)	-0.9%	-11.2%	-3.5%	-2.8%	4.9%	17.7%	9.2%	14.2%	7.5%	10.2%	8.5%	727.6%
Emerging Markets	-13.5%	-20.6%	-10.2%	-5.0%	7.3%	19.5%	10.4%	12.3%	5.0%	7.7%	3.3%	212.3%
China (SHCOMP)	-11.9%	-3.6%	-0.7%	-0.4%	20.0%	15.7%	8.9%	1.7%	5.7%	0.1%	3.1%	n/m
Hong Kong (HSI)	-9.5%	-9.2%	1.0%	4.3%	11.9%	29.8%	21.1%	42.0%	28.0%	18.4%	18.3%	n/m
Brazil (IBOV)	10.6%	-8.8%	8.3%	6.5%	24.6%	49.1%	31.5%	37.3%	27.2%	34.6%	25.7%	9.4%
Mexico (MEXBOL)	3.4%	-4.9%	-2.6%	15.8%	0.4%	14.0%	13.4%	-10.0%	16.2%	11.9%	8.2%	7.4%
India (NIFTY 50)	-1.6%	-26.5%	-10.2%	-6.3%	12.6%	32.5%	22.6%	22.7%	11.7%	20.8%	8.3%	3.1%

	2020				2021				2022			
Earnings Growth (YoY)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22E	4Q22E
MSCI World	-43.4%	-53.1%	-10.3%	11.2%	120.4%	177.7%	44.2%	27.9%	0.7%	1.3%	5.3%	12.5%
S&P 500	-23.8%	-39.1%	-7.6%	-9.2%	58.9%	100.7%	41.1%	33.6%	12.5%	13.3%	7.3%	15.7%
Nasdaq 100	-0.4%	-14.7%	8.0%	16.6%	50.8%	72.4%	38.4%	23.7%	12.9%	-1.8%	-9.6%	14.1%
Russell 2000	-171.8%	-216.8%	-62.4%	12.2%	-	-	618.7%	-31.9%	-41.2%	7.3%	-25.1%	210.8%
EuroStoxx 50	-31.5%	-164.9%	-51.2%	7.5%	136.6%	-	145.9%	66.3%	41.1%	8.8%	15.6%	39.7%
EuroStoxx 600	-71.3%	-134.0%	-32.3%	11.4%	334.1%	-	87.3%	107.1%	-16.0%	5.2%	37.8%	34.7%
Germany (DAX)	-39.1%	-174.7%	-79.1%	116.2%	188.8%	-	508.3%	-37.6%	22.7%	-20.2%	3.1%	74.5%
Japan (Nikkei 225)	-128.8%	-58.7%	35.0%	58.4%	-	182.9%	15.9%	0.8%	-75.7%	-85.9%	-80.7%	18.3%
South Korea (KOSPI)	-43.7%	-10.4%	42.3%	-	166.7%	121.9%	61.0%	94.9%	4.1%	-1.5%	-13.6%	13.5%
Emerging Markets	-50.5%	-35.6%	-3.1%	36.5%	131.7%	102.4%	39.7%	25.1%	7.1%	-4.7%	-3.4%	-11.2%
China (SHCOMP)	-28.8%	-22.3%	14.7%	17.8%	49.4%	39.9%	-4.8%	-0.7%	-0.2%	-1.1%	8.8%	59.1%
Hong Kong (HSI)	-27.3%	-40.9%	-0.8%	232.8%	28.2%	71.1%	1.5%	46.6%	14.6%	-1.0%	25.7%	-58.7%
Brazil (IBOV)	-330.5%	-76.0%	32.9%	263.6%	-	988.7%	130.6%	-7.8%	113.0%	-19.9%	20.9%	-4.4%
Mexico (MEXBOL)	-86.0%	-56.1%	-83.6%	29.6%	848.0%	256.4%	571.9%	-0.2%	4.7%	-10.6%	28.5%	6.1%
India (NIFTY 50)	-58.0%	-44.5%	1.2%	52.0%	203.4%	144.9%	51.9%	37.5%	20.0%	15.1%	-4.8%	6.8%

Source. Bloomberg, MAM Research

Fixed Income

In order to value sovereign bonds, we use a regression analysis. Regressions can help identify and quantify the factors that determine an asset valuation. Because regressions minimise the distance from the data points to the regression line, they generally split the universe of observations into two parts, that being above or beneath the line. In this case, because yields are inversely related to bond prices, a yield above its fair value results in a 'cheap' bond, and vice versa. The challenge is identifying independent variables that robustly explain the fair value of a sovereign bond. Our model is based on a 5-years rolling multiple linear regression of 10-year yields against CPI inflation, short-term rates, and the non-accelerating inflation rate of unemployment ("NAIRU"). We use a 5-year moving average on all three inputs to smooth out the volatility and a rolling regression to capture the underlying trends.

The rationale for each of the components is:

1. Short-term rates anchor the front end of the curve and play an important role in driving longer term yields.
2. Inflation expectations are a key component of bond yields and are formed adaptively by realized inflation. That is, economic agents slowly adjust their expectations based on past inflation trends.
3. NAIRU is used to capture the structural trend in bond yields. A falling NAIRU makes it increasingly difficult to generate aggregate demand that outstrips aggregate supply. Excess supply suppresses inflation and bond yields. The opposite holds when NAIRU rises, as in the 1960s and 1970s.

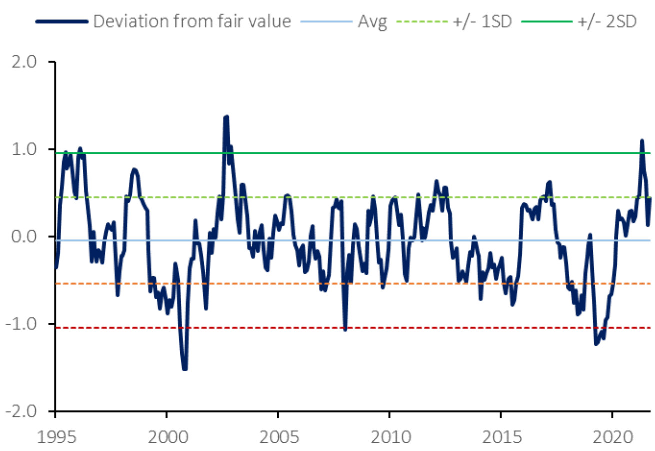
Conclusion

From our model, US Treasuries and Italian BTPs appear the most undervalued sovereign bonds, with current yields sitting at or above one sigma deviation from fair value. We only retain the opportunity set offered by US Treasuries at this stage. Indeed, Italy's economy is set to enter a period of intense challenges with a general election in a few weeks. This can continue to exert downward pressure on Italian BTPs. To a smaller extent, German Bunds also appear undervalued, although not yet at the highest historical levels.

Highlights

- US. Based on our model, the US 10Y Treasury bonds are slightly less than one-sigma undervalued, a key reversion level historically. Although yields appear over-extended at close to 3.25%, they will only begin to drop precipitously when the Fed softens its policy stance. In the near term, the Fed could still get more hawkish than market expectations, if inflation remains sticky, meaning short rates, which positively drive long-term yields, will likely rise.
- Germany. German 10Y Bunds are 0.5 sigma undervalued. The current record-high inflation, coupled with an escalating energy crisis, will most likely force the ECB to tighten its stance and further hike rates. As such, short-term rates will continue to escalate, which could further deviate the 10y yield from its fair value.
- France. French 10Y Government bonds are 0.25 sigma undervalued. We use the same rationale than with German Bunds – although valuations show that French 10Y bonds are starting to become cheap, only a slowing down inflation and a decelerating energy crisis will see capital flow into European government bonds.
- Italy. Italian 10Y BTPs are 1.15 sigma undervalued. On top of European woes, Italy is facing its own issues with the fall of its government led by Mario Draghi. With the ECB's Transmission Protection Instrument now firmly in place, Italian Government bonds could become an appealing opportunity for investors in the future.
- Japan. Japanese 10Y Government bonds are 0.2 sigma overvalued, they're the only market with expensive valuations in our model. In fact, since 2018, Japanese yields have rarely surged above fair valuations.

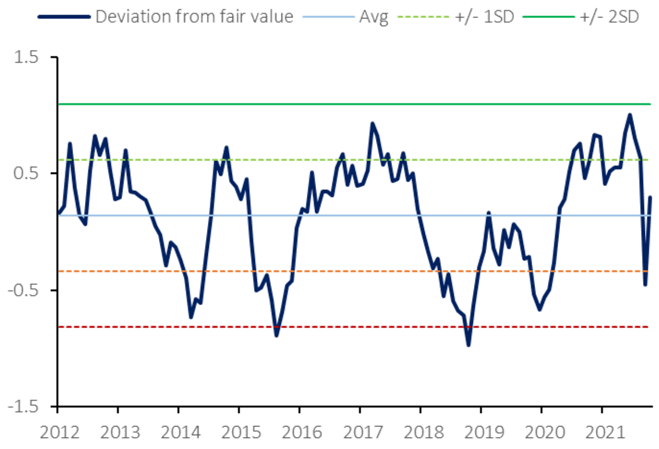
Chart 3. US 10-Year Yield Deviation from Fair Value



Source. Bloomberg, MAM Research

Note: On yields, +1SD = cheap meanwhile -1SD = expensive

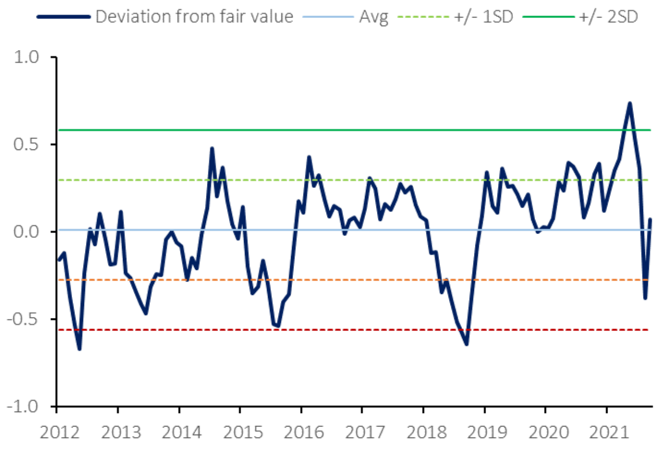
Chart 4. German 10-Year Yield Deviation from Fair Value



Source. Bloomberg, MAM Research

Note: On yields, +1SD = cheap meanwhile -1SD = expensive

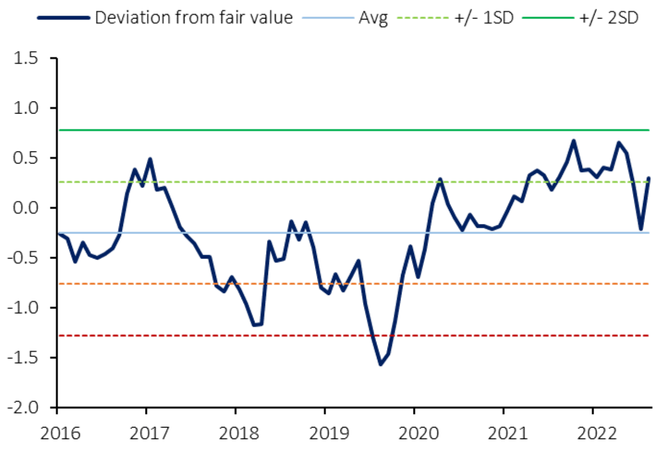
Chart 5. France 10-Year Yield Deviation from Fair Value



Source. Bloomberg, MAM Research

Note: On yields, +1SD = cheap meanwhile -1SD = expensive

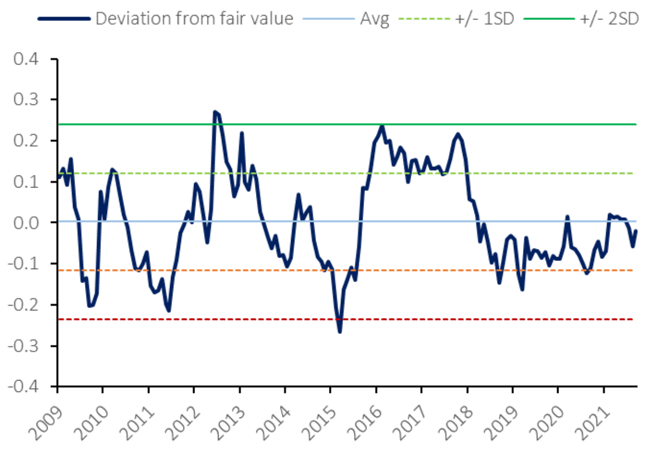
Chart 6. Italy 10-Year Yield Deviation from Fair Value



Source. Bloomberg, MAM Research

Note: On yields, +1SD = cheap meanwhile -1SD = expensive

Chart 7. Japan 10-Year Yield Deviation from Fair Value



Source. Bloomberg, MAM Research

Note: On yields, +1SD = cheap meanwhile -1SD = expensive

Currencies

Determining whether a currency is cheap or expensive is no easy tasks. One of the items in the tool box used by most to value a currency is the Real Effective Exchange Rate (REER). It is the weighted average of a country's currency in relation to an index or basket of other major currencies. The weights are determined by comparing the relative trade balance of one country's currency against that of each country in the index. An increase in the REER is an indication exports are becoming more expensive and imports are becoming cheaper.

Looking at the definition, it makes sense to see currencies like the Euro, Japanese Yen, and British Pound weaker on both a REER and actual basis. The series of crises hitting the world meant global trade dynamics meaningfully shifted. Europe is importing its energy from various regions to compensate for the lack of Russia gas supply, including the US thus creating a more meaningful trade deficit (sell more euros). The same can be said for the UK. In the non-US regions mentioned, the central banks are also hiking rates at a slower pace than the Fed creating headwinds on a rates-differential basis. It gets accentuated when factoring in the economic growth spread.

Conclusion

On a REER valuation basis, the dollar is expensive near +2SD. This last happened in 2000-2001 before an eight-year USD bear market **(Chart 8)**. The EUR and GBP are on the cheap side of the spectrum at -1SD. JPY looks quite cheap at -2SD. We continue to expect a weaker dollar in the medium-term.

Highlights

- US Dollar. The dollar remains strong and very expensive at almost +2SD. A rollover in rates and economic slowdown could be the catalysts sending the currency lower.
- Euro. The Euro has suffered massively on a spot and REER basis. After reverting back to the mean in mid-2020, it is back to being -1SD cheap with a widening trade deficits and interest differentials as primary headwinds here.
- Japanese Yen. The BoJ remains highly accommodative in an effort to cap the yield on its sovereign bond yields. The implication has been a strong devaluation of its currency with the Yen now trading over -2SD cheap.
- British Pound. The British Pound has remained relatively strong on a REER basis amid the latest rounds of market turmoil, even though the currency is suffering on the spot market. The BoE has been vocal and actively raising rates to fight off inflation as the country faces, like Europe, an energy crisis. GBP is moderately cheap at -1SD.

Chart 8. US Dollar REER

Source. Bloomberg, MAM Research

Chart 9. Euro REER

Source. Bloomberg, MAM Research

Chart 10. Japanese Yen REER

Source. Bloomberg, MAM Research

Chart 11. British Pound REER

Source. Bloomberg, MAM Research

Credit

In credit markets, valuation is reflected in the yield on the debt instrument, which is the ratio of the annual coupon payment to the market price of the bond. Should the price of a debt instrument trade lower owing to the view that it has become riskier, the yield on the debt instrument rises. To cancel the impact of interest rates on the yield of the debt instrument, valuations are analyzed as “spreads”. Typically, it is calculated as the difference between the yield on a corporate bond and the benchmark rate. The yield on a government bond generally is a benchmark rate. The credit spread thus gives an indication of the additional risk that lenders take when they buy corporate debt versus government debt of the same maturity. Changes in the spread indicate that perceptions of the risk of a specific issuer have changed or that perceptions of general market conditions have changed. For example, if the market becomes more sceptical about the creditworthiness of an issuing company, the spread of that company’s bonds widens (its yield relative to the benchmark widens). If markets become more negative and risk-averse, spreads in general also tend to widen. It is no surprise that credit spreads have widened in 2022 as investors fear a global recession.

Conclusion

Global credit markets have corrected, and spreads widened, but are not yet cheap enough to warrant a purchase. Regionally, EU credit has corrected the most for obvious geo-political reasons, but valuations have yet to reach past crisis levels (2008, 2012). As a result, we do not currently recommend investors to foray into global credit markets.

Highlights

- US Credit. US high yield and investment grade credit spreads have widened 80bps and 230bps respectively in 2022 which is a significant move. Yet, since credit spreads were unusually low (or expensive) in 2021, credit valuations remain unattractive. US Investment grade credit spreads are trading at -0.5x standard deviation cheap. US high yield credit spreads are trading at long-term averages. This is very far from the over -1 standard deviation cheap levels seen during prior crisis. Based on MAM’s expectation that the upcoming recession will be quite severe, US credit markets remain unattractive from a valuation perspective.

- Europe Credit. EU investment grade credit valuations have corrected more than other regions. EU investment grade credit spreads have widened by 102bps YTD. They are now trading at -1.7x standard deviation cheap. While this is starting to look compelling, we are still some distance away from the -2 and below standard deviation cheap levels experienced during previous crisis. Cognisant of the risks to Europe’s economy over the coming months, we would prefer to see EU investment grade spreads widening more before investing. EU high yield spreads are still trading at long-term averages which is expensive despite the 230bps widening YTD. More valuation de-rating is expected in EU high yield markets.

- EM Credit. EM credit spreads are trading at long-term averages and -0.4 standard deviation cheap for investment grade and high yield, respectively. Like in other regions, EM credit offers very little value yet. Prospects of a globalized recession can send EM credit valuations lower over the coming months.

Chart 12. US High Yield with z-score bands

Source. Bloomberg, MAM Research

Chart 13. US Investment Grade

Source. Bloomberg, MAM Research

Chart 14. European High Yield with z-score bands

Source. Bloomberg, MAM Research

Chart 15. European Investment Grade with z-score bands

Source. Bloomberg, MAM Research

Chart 16. EM High Yield with z-score bands

Source. Bloomberg, MAM Research

Chart 17. EM Investment Grade with z-score bands

Source. Bloomberg, MAM Research

Commodities

Commodities typically performed well late in the business cycle (and during times of global turmoil) offering a potential hedge against inflation and disruption. Testimony to this is the performance of the iPath Bloomberg Commodity Index ETF at +23.4% YTD. After this spectacular performance, are commodities expensive or do they offer good value? Valuing commodities is a complex endeavour. There is no discounted cash flow method for commodities. They don't pay dividends nor bear interest rate. They don't generate cash. Long-term investing in commodities is all about finding opportunities where supply and demand are out of balance and the price is low relative to where it "should" be on an inflation adjusted basis. One method is by analysing the “roll yield” between various futures contracts. Another (our favourite), is to look at the evolution of commodity prices adjusted for inflation in the context of longer-term supply and demand cycles. Quantitatively, we use 7-year rolling returns inflation adjusted to compare current commodity prices to history on the basis that typical supply/demand cycles last around 7 years.

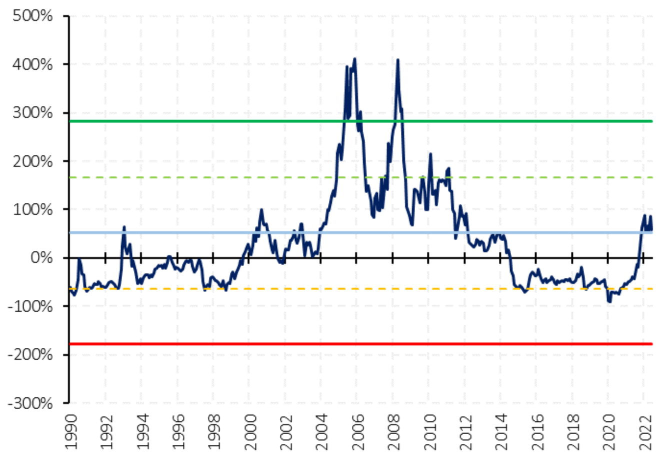
Conclusion

The structural bull market in commodities can continue as valuations are still attractive. Putting aside Natural Gas, which is screening expensive, all other commodities (i.e. agriculture, energy, industrial metals) have valuations at or around their long-term averages. Precious metals look the most attractive with valuations still well below long-term averages.

Highlights

- WTI Crude Oil. Despite a strong performance in oil prices (+54% in 2021, +17% YTD), valuations are merely back to long-term averages, still far from the elevated valuations experienced in the 2008 rally. Amid tight global supply, oil prices have room to see their valuation expand further.
- Natural Gas. It displayed tremendous performance over the past two years (+53% in 2021, +146% YTD) for obvious geo-political reasons. On a valuation-basis, it is over +2 SD expensive. A overshoot akin to 2005 cannot be ruled out, but the valuation starting point is unappealing. We would not recommend investing in Natural Gas at this juncture.
- Copper. We often say Dr. Copper has a PhD in Economics because of its ability to predict economic turning points. After a strong performance in 2021 (+24%), copper prices are down -24% YTD given China’s growth slowdown and broader fears of a global recession are developing. From a valuation perspective, copper is over -0.5 SD cheap. While prices tended to trend at -1 SD cheap in previous crisis, copper prices are cheap and warrant investors’ attention in the coming months.
- Wheat and Corn. These performed well over the past two years (+24% in 2021, flat YTD), but less than anticipated despite clear geo-political drivers. Valuations are simply back to long-term averages. Like oil, in the context of tight global supply, wheat and corn prices have room to see their valuation expand further
- Gold and Silver. Precious metals failed to exhibit historical characteristic as hedges against inflation and geo-political risk. Gold prices fell 3% in 2021 and are down -6.4% YTD. Higher interest rates and a stubbornly strong USD are the main reasons behind this underperformance. As a result, valuations look cheap. Both precious are -0.5 SD cheap. Further downside towards historical lows of -1.5 SD cheap is possible. However, the risk-reward ratio remains quite appealing. In the current macro-economic environment, it makes precious metals interesting for investors.

Chart 18. WTI Crude Oil - 7-Year Rolling Returns

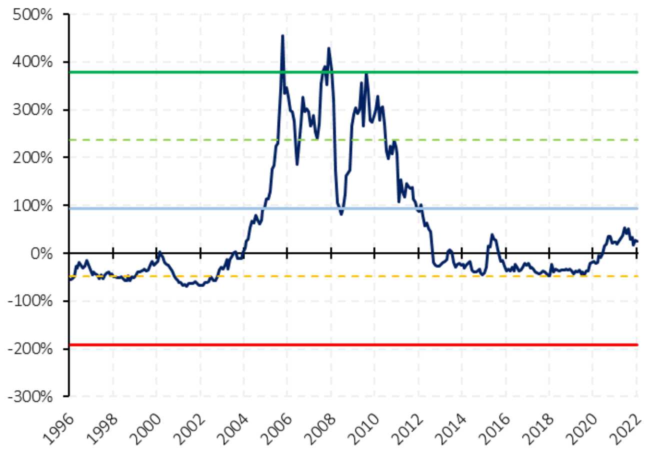


Source. Bloomberg, MAM Research

Chart 19. Natural Gas - 7-Year Rolling Returns

Source. Bloomberg, MAM Research

Chart 20. Copper - 7-Year Rolling Returns

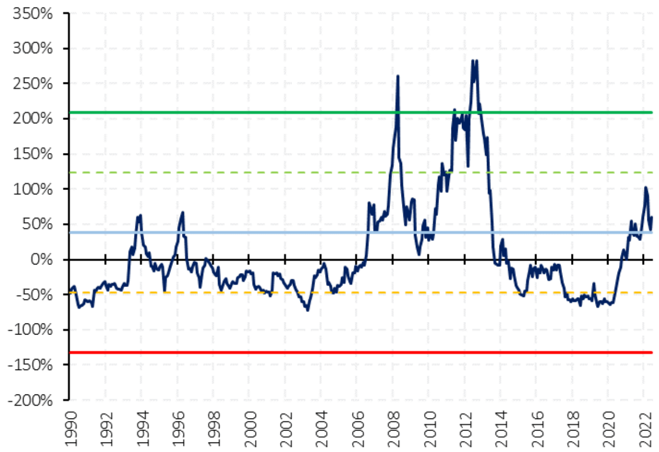


Source. Bloomberg, MAM Research

Chart 21. Wheat - 7-Year Rolling Returns

Source. Bloomberg, MAM Research

Chart 22. Corn - 7-Year Rolling Returns



Source. Bloomberg, MAM Research

Chart 23. Gold - 7-Year Rolling Returns

Source. Bloomberg, MAM Research

Chart 24. Silver - 7-Year Rolling Returns

Source. Bloomberg, MAM Research

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