2021 ANNUAL REVIEW AND 2022 OUTLOOK

SUMMARY

The year started on a strong note, following the approval of new vaccines to help fight the global pandemic at the end of 2020. However, two variants of the original virus, Delta and Omicron, emerged during the year, leading to uneven economic re-opening across the world as various countries implemented restrictive measures.

Although the year started strong, by mid-year supply chain disruptions linked to the pandemic, a strong rebound in consumer demand and tight commodity supplies combined to create a wave of inflation unseen since the early 1980's. Faced with persistent inflation measures, the Federal Reserve abandoned its "transitory inflation" narrative, heralding the end of loose monetary policy and looming interest rate increases heading into 2022.

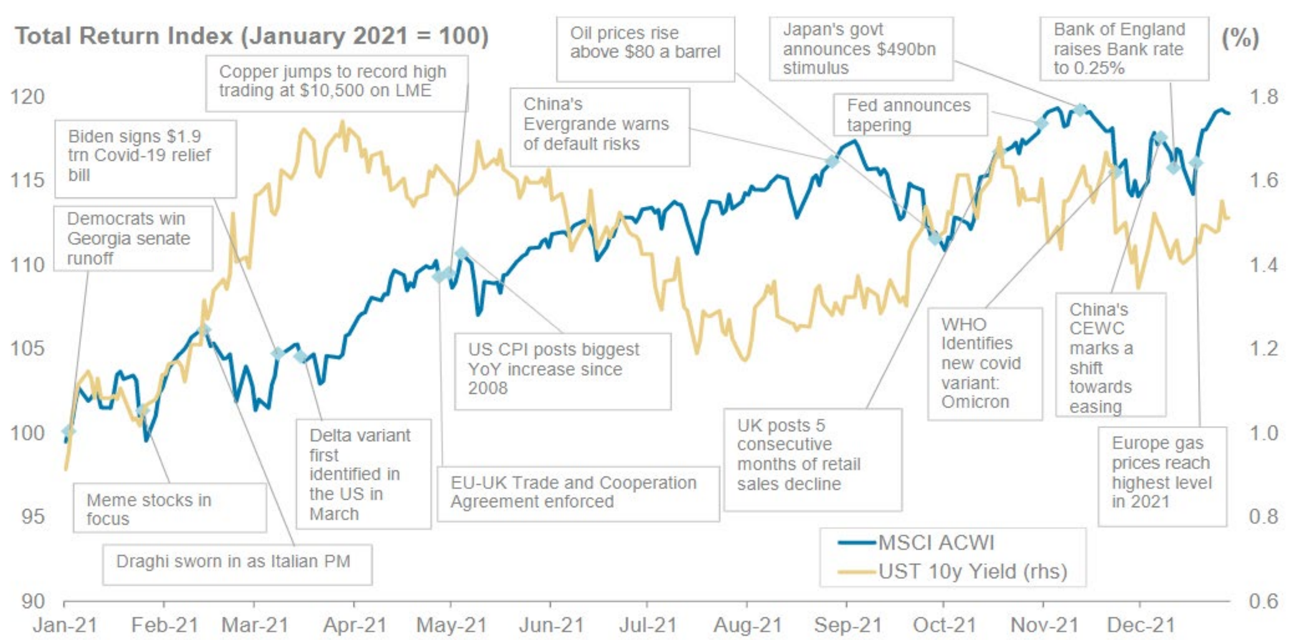
Weathering inflation and rising rates, global equities managed to gain 18.5% for the year while U.S. fixed income fell by 1.5%. Broad commodities surged 27.1%, amid declining market volatility and a stronger U.S. Dollar (figure 1).

A 2021 ODYSSEY

The year unfolded in three stages. Initially, the world made progress toward containing the pandemic in early 2021 thanks to the rapid deployment of vaccines and leading to hopes for a rapid recovery. In reaction, value stocks staged a rally and interest rates rose sharply in the first quarter. The yield on the 10-year bond spiked by 0.83% in the first quarter to a peak of 1.74%.

However, the apparition of the Delta variant in March, later followed by Omicron in November, produced new waves of infection, and a pause in the recovery scenario. By the end of the second quarter, inflation readings became impossible to ignore, leading the Fed to signal a possible end to monetary stimulus at their June meeting. Counter-intuitively, the yield on the 10-year bond declined by 0.57% in the first quarter to a trough of 1.17% on August 3rd as market participants anticipated long-term inflation to remain under control. Growth stocks, now seen as defensive investments at times of weakness, recovered all the ground lost relative to value stocks during the third stage.

2021 by the Numbers – What Happened in 2021? (Figure 1)



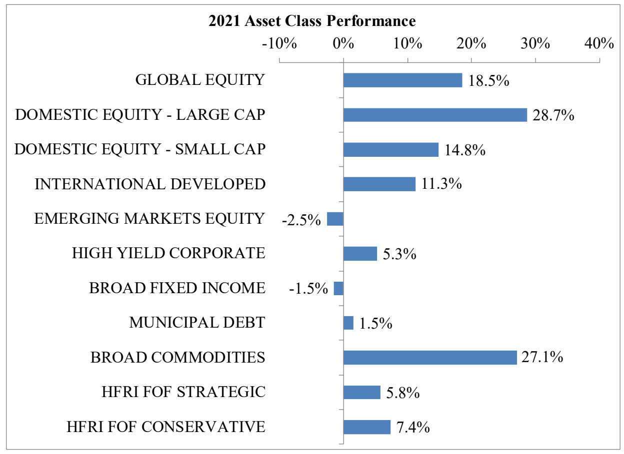
Source: Morgan Stanley

Inflation was anticipated coming out of the pandemic but its breadth proved surprising: consumers flush with stimulus money drove demand for goods, straining supply chains; housing prices continued to increase; workforce participation declined leading to staffing shortages; tight supplies of nearly all commodities caused price spikes. Year over year headline inflation reached 7.0% by December, a level not seen since June of 1982, nearly 40 years ago! The Fed seemed slow to react as the mandate of price stability suddenly conflicted with a goal of full employment. Bond investors reacted by taking the 10-year yield back up to 1.51% by year-end, reflecting increasing unease. Equity markets, however, continued to favor mega cap growth stocks, diverging from the bond market signal (figure 2).

The year closed on this third act, setting the stage for the sharp rise in rates and dramatic resurgence in value investing we are now experiencing.

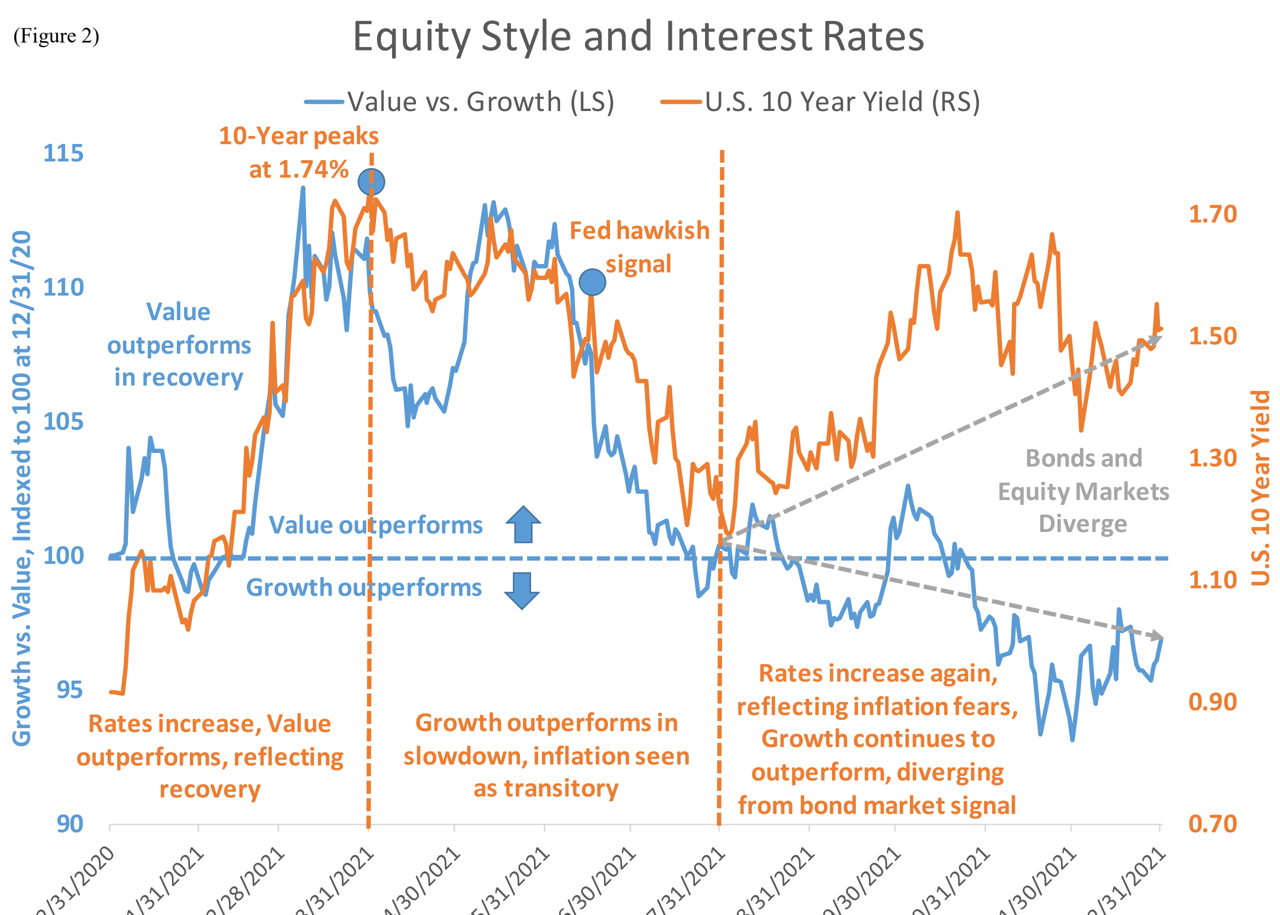
For the year, U.S. equity markets outperformed foreign equity markets. While taxable investment grade fixed income was down for the year, credit risk paid off as high yield delivered positive returns and municipal debt benefited from concerns around rising taxes. Commodities were up broadly except for precious metals (figure 3).

(Figure 3)



Source: Bloomberg

(Figure 2)

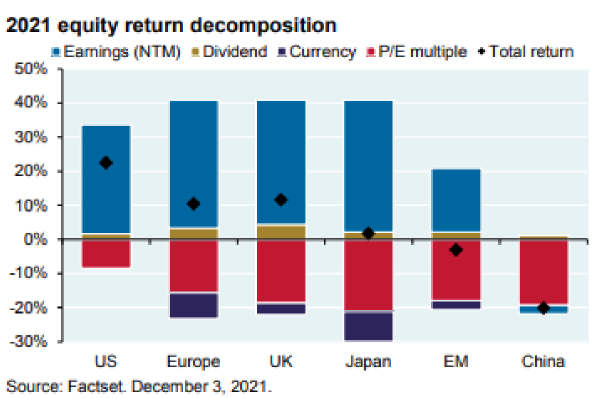


Source: Bloomberg, Windrose Advisors

Reflecting the market index's steady march upward, equity volatility (VIX index) declined from 22.8 at the beginning of the year to 17.2 by year-end. Expectations for higher rates supported the U.S. currency after the Fed's June pivot (DXY U.S. Dollar index, up 5.6% for the year). Currency declines against the U.S. Dollar contributed to underperformance of foreign equity markets (Japanese Yen -10.3%, Euro -6.9%).

As shown below, earnings growth accounted for all of equity market gains in 2021 while P/E multiples fell markedly (figure 4). Earnings and dividends were actually higher in Europe and Japan than in the U.S. but offset by a larger drop in valuations. With cheaper valuations and cheaper currencies, foreign developed markets continue to look attractive. Weakness in emerging markets was largely tied to China, which implemented new regulatory controls over technology and education companies, crimping earnings.

(Figure 4)



Source: JP Morgan

As in the Odyssey, markets have embarked on a long journey of normalization, fraught with perils. The zig-zags between value and growth investing during the year made it difficult to extract consistent alpha from equity investing in 2021. However, within our equity-oriented programs, we made timely decisions to harvest gains across value managers in the second quarter and rebalance portfolios. By far, our most compelling advice coming into 2021 was our recommendation to emphasize real assets as a hedge against inflation risk. Our customized portfolio of natural resources equities, commodities and public real estate returned more than twice the performance of global equity markets as energy was a leading sector worldwide (figure 5).

(Figure 5)

USD

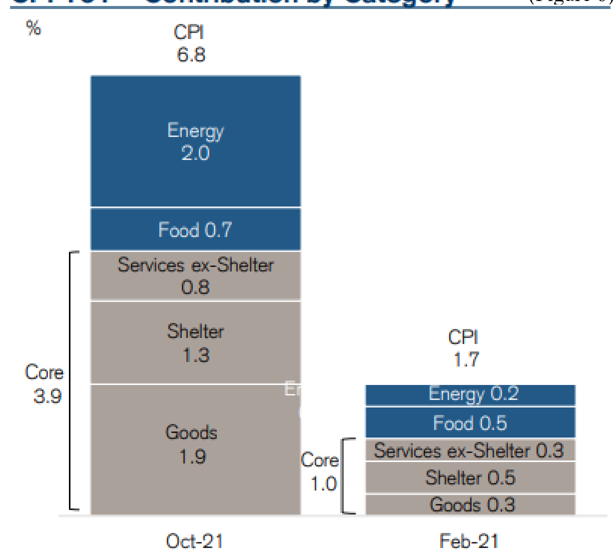
2021 (%)	ACWI	US	Europe	Japan	EM
Energy	37.5	53.2	26.8	27.5	21.7
Information Technology	27.7	31.6	27.2	18.5	10.4
Financials	25.1	35.8	20.6	13.6	8.6
Real Estate	23.6	43.3	1.0	1.5	-21.7
Health Care	18.0	25.4	17.3	-13.5	-19.8
Industrials	16.6	19.9	20.4	4.2	8.6
Materials	15.3	27.1	16.4	-2.1	9.8
Consumer Staples	11.7	18.1	12.4	-10.1	-4.6
Utilities	11.0	17.4	1.4	-16.5	13.3
Communication Services	10.8	18.9	7.1	-16.0	-9.0
Consumer Discretionary	9.2	21.5	14.5	7.3	-29.0

Source: Morgan Stanley

THE INFLATION HYDRA

Like the mythological Hydra, inflation appears to be multi-headed and may prove hard to slay. As shown below (figure 6), inflation in Goods, Shelter and Energy are the main culprits although all categories rose significantly during the year.

(Figure 6)



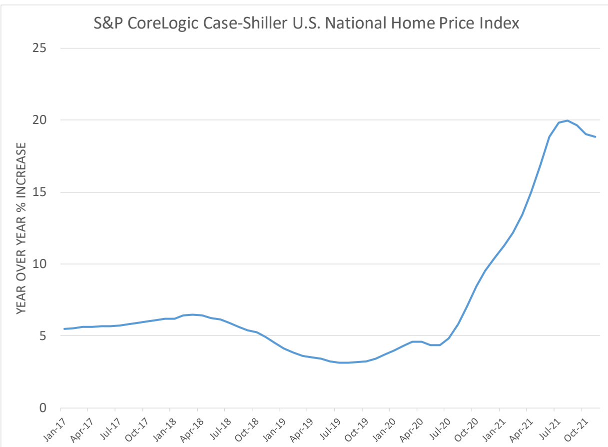
Source: Credit Suisse

On a short-term horizon, some inflation pressures should abate substantially, even if monetary policy remains accommodative. Price increases for some durable goods, including vehicles, building supplies, furniture and IT equipment are well above trendlines. As demand shifts back from Goods to Services in an economic re-opening, and supply bottlenecks are resolved, Goods inflation should revert back to trend and bring CPI lower.

Service inflation may accelerate instead in the new year as demand shifts. However, wage pressures have been concentrated at the lower end of the wage distribution and service workers are likely to re-enter the workforce as the pandemic fades, which should help contain inflation pressures.

However, home price appreciation has surged since the pandemic started. The S&P CoreLogic Case-Shiller U.S. National Home Price index hit an annual increase of 20% in August 2021 (figure 7).

(Figure 7)

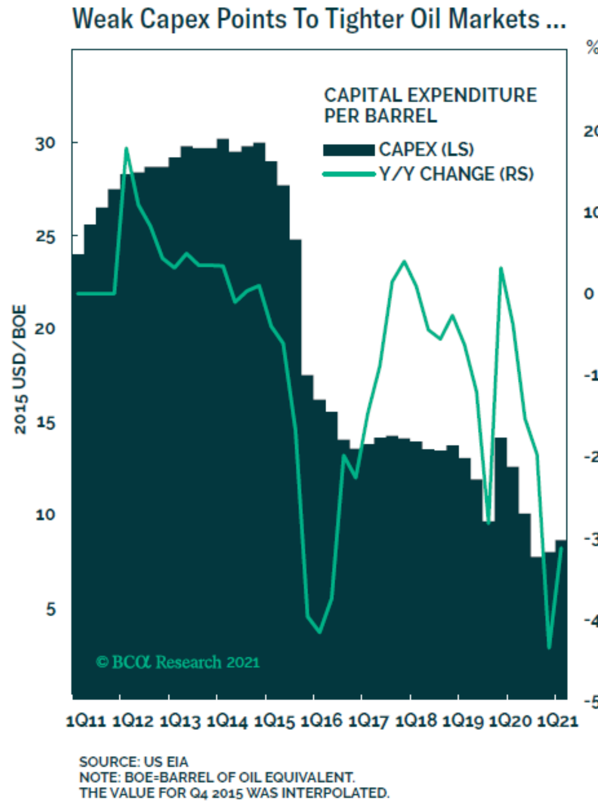


Source: Bloomberg

The official inflation measures don't reflect home price appreciation, preferring "owner's equivalent rent." We discussed declining home affordability in our earlier semi-annual report and how this would contribute to higher demand for renting over home ownership. Certainly, this came to roost in 2021 and our real estate managers are reporting historic increases in apartment rental income, explaining the rise in Shelter inflation. As the Fed embarks on a new tightening cycle, mortgage rates are set to increase, further contributing to home ownership costs. This trend will continue to support rents, thus Shelter costs in the CPI basket are unlikely to decline meaningfully in our opinion.

This leaves the issue of energy prices. We have long argued that declining investment (figure 8) would eventually result in an undersupplied market. We have now reached that point as energy demand rebounds to pre-pandemic levels, only to meet with a muted supply response. The reasons for the slow reaction to higher oil prices are multi-pronged: demands for capital discipline (i.e. favoring free cash flow over production growth), environmental concerns (reduced capital investing in fossil fuels) and inexorable resource depletion all conspired to limit supply.

(Figure 8)



Source: BCA Research

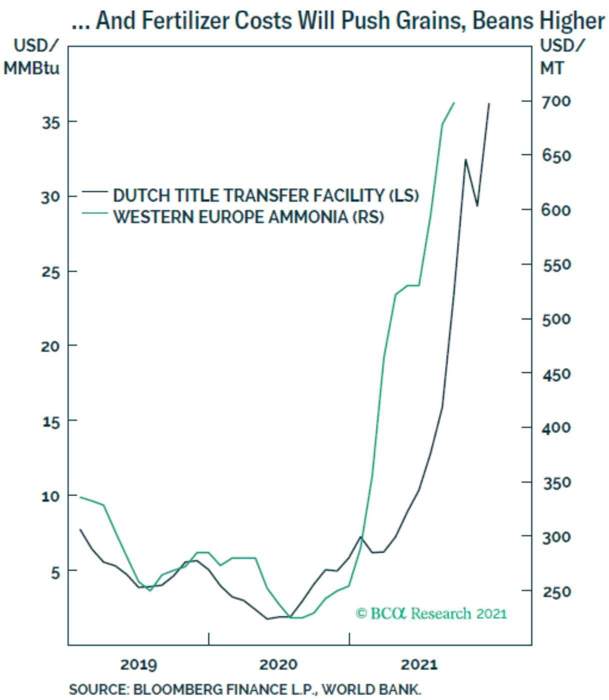
Most supply increases are coming from three countries: Saudi Arabia, Iraq and the United Arab Emirates, while other producers strain to increase production. In the U.S., shale basins which powered production growth, appear to have peaked, except for the Permian basin in Texas.

Tight energy markets extend beyond oil to natural gas. The disappearance of associated gas from U.S. shale basin as oil extraction fell, as well as the permanent closure of European gas wells in the North Sea severely limited the supply of natural gas in global market.

The situation in Europe was made worse by the decision to phase out nuclear power in Germany and the issue of intermittency in renewable energy as a lack of wind led to a deficit of electricity production. Europe is now dependent on imports of liquefied natural gas from overseas, or gas imported from Russia (with geopolitical implications). Low gas inventories heading into winter caused a price spike starting in October.

The sharp rise in natural gas prices produced unexpected consequences. The production of ammonia, used in fertilizers, is based on extracting hydrogen from natural gas and combining it with nitrogen[1]. As natural gas prices increased, European fertilizer plants closed as production became uneconomic, and the price of ammonia rose (figure 9).

(Figure 9)

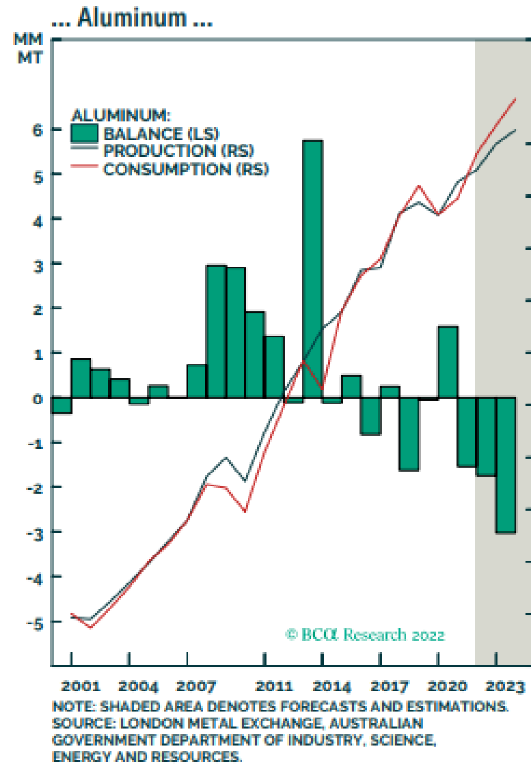


Source: BCA Research – Dutch Title Transfer Facility (TTF) is a virtual trading point for natural gas in the Netherlands.

Similarly, the process of producing aluminum is highly energy intensive and smelters are typically located in places where electric power is both plentiful and inexpensive. High power prices in Europe and China have curtailed production, resulting in an undersupplied market (figure 10).

The fact is that energy inputs are critical to many sectors of the economy and Fed action will have no bearing on the near-term supply of commodities. Energy prices may pause in case of favorable weather conditions or renewed mobility restrictions should another variant emerge. But the risk of pricing spikes will persist in energy, metals and agricultural commodities which will contribute to higher than anticipated headline inflation.

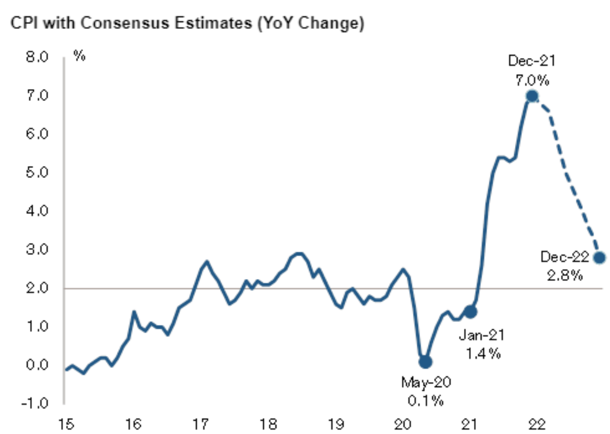
(Figure 10)



Source: BCA Research

Thus, while economists expect inflation to cool to 2.8% over the coming year (figure 11), we believe this is an optimistic scenario due to momentum in housing costs and tight commodity markets.

(Figure 11)



Source: Credit Suisse

[1] a process which generates carbon dioxide in the process and is a major contributor to global warming.

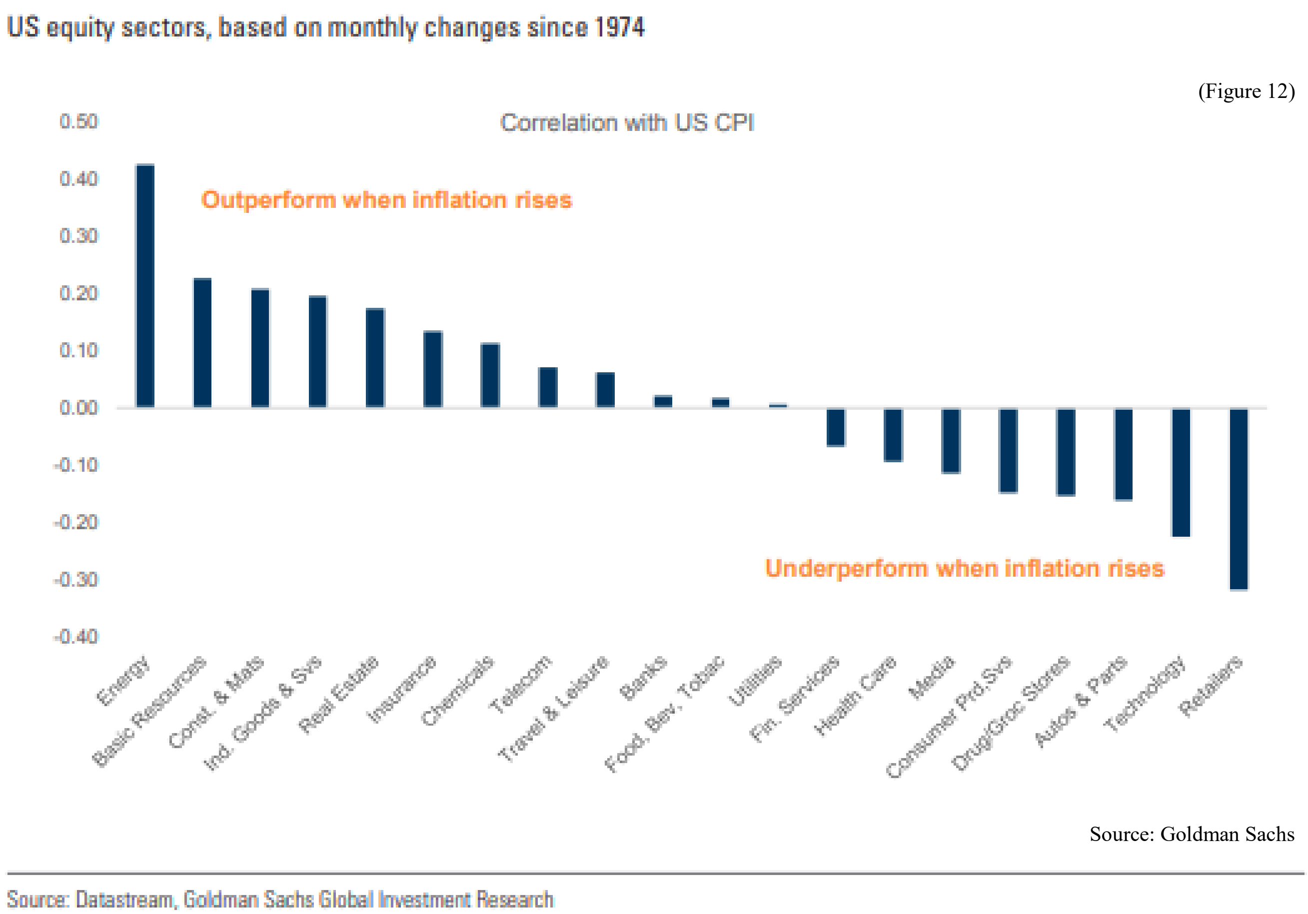
BETWEEN A ROCK AND A HARD PLACE

Scylla and Charybdis were mythical sea monsters sited on opposite sides of the Strait of Messina in Homer's Odyssey. Travelers faced a difficult choice with no easy option.

Similarly, the Fed is aiming to navigate between inflation and recession, trying to tame one without triggering the other. The Fed's hawkish turn toward controlling inflation caused a violent market repricing in January. While investors appear most concerned with the risk of rising rates smothering the economic recovery, we think that the Fed will be loath to tilt markets into a recession. The risk may well be that inflation runs hotter than expectation and we have worked to position portfolios accordingly.

As shown in figure 12, the performance of equity sectors tend to be vastly different in inflationary environments than what we experienced over the past decade when inflation was in check. Energy, Materials and Real Estate (which we label as Real Assets along with Commodities) tend to outperform when inflation rises as costs are passed to consumers. On the other hand, Technology and Retail tend to struggle as costs are more difficult to pass on, or long-dated cash flows are more heavily discounted with higher rates. It just so happens that after an extended period of sub-par economic growth and massive monetary and fiscal stimulus, the best sector hedges against inflation are also among the cheapest today.

This is the opposite of what most investors have experienced in their careers. Since 1981, the world's economic environment has been



(Figure 12)

Source: Goldman Sachs

characterized by deflationary forces: globalization, the opening of China, the end of the Cold War and abundant natural resources, all contributing to receding inflation. Consider how yields on the 10-year Treasury declined steadily from a high of 15.8% in September 1981 to a low of 0.6% in June 2020, providing a powerful tailwind to long duration assets for 40 years. A 15% drop in interest rates over 40 years assuming equity duration of 20 years implies a positive boost to performance of 7.5% annually[2]. However, the assumptions of the past decades may not hold any more: globalization is in retreat, geopolitical tensions are rising and natural resources may not be as readily available as previously thought. In essence, inflationary pressures will become more persistent.

Positioning portfolios for a more inflationary environment may require portfolio tilts that look quite different from what tended to work in the past ten years, as outlined in figure 13. For example, we expect equity markets to be more range-bound, with value outperforming growth, and greater dispersion rewarding active management. Diversification will be rewarded as lagging sectors like natural resources revert to trend. Most government bonds will offer investors a choice between losing money quickly if rates rise or slowly as inflation erodes buying power.

This should all sound suspiciously familiar to our clients as we have long anticipated such a turn of events, favoring value and international stocks in our equity portfolios, moving to shorter duration debt in fixed income, and expanding our portfolio of commodity strategies in real assets.

(Figure 13)

	INFLATIONARY	DEFLATIONARY
Equities	Tilt toward Real Assets, Financials	Tilt toward Technology
	Diversify internationally	Favor U.S. exposure
	Favor Value stocks	Favor Growth stocks
Fixed Income	Shorten duration	Lengthen duration
	Reduce credit exposure	Favor credit exposure
	Favor floating rate debt	Favor fixed rate debt
Alternatives	Favor Real Estate	Favor Private Equity
	Favor Commodities	Favor Equity Strategies
	Favor Trend Following strategies	Favor Relative Value Strategies

Source: Windrose Advisors

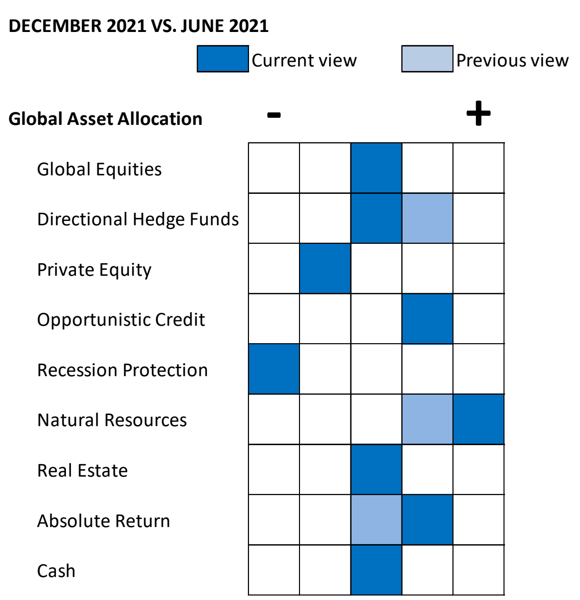
[2] 15% decline in rates / 40 years x 20-year equity duration = 7.5% equity gain per year attributable to rates

2022 OUTLOOK

As we write this letter, global equity markets are experiencing a sharp repricing of risks. However, we don't anticipate a bear market in equities: bond yields are still low and hardly restrictive, and the yield curve remains upward sloping. Rather, we believe we just witnessed a change in market leadership that may herald a new economic regime.

Near term, we anticipate that economic growth will slow but remain positive, while inflation will decline from peak levels but continue to surprise on the upside. Markets don't move in a straight line and maintaining broad diversification while taking advantage of rebalancing opportunities will help enhance portfolio returns.

Longer term, our assessment of inflationary risks has increased, which warrants a maximum overweight to Real Assets while they remain cheap. More volatile markets argue for lower beta exposure and we now favor Absolute Return over Market Directional strategies. We expect that our emphasis on active management within equity strategies will deliver solid performance but a longer time horizon may be required than what was experienced over the past two years. We remain bearish on recession protection assets given yields below inflation and view Private Credit as a good alternative, trading liquidity for income.



INDEX KEY

Indexes are unmanaged, statistical composites and their returns do not reflect payment of any brokerage commissions or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. The indexes include a different number of securities and have different risk characteristics than the model. Past performance of the indexes and benchmark is no indication of future returns.

Global Equity (MSCI All Country World-USD), Domestic Equity Large Cap (S&P500), Domestic Equity Small Cap (Russell 2000), International Developed Equity (MSCI EAFE), Emerging Market Equity (MSCI EM), Energy Equity (MSCI ACWI Energy) Broad Fixed Income (Barclays Aggregate), U.S. Government Debt (Barclays U.S. Treasury), U.S. Inflation-linked (Barclays U.S. Treasury Inflation Notes), U.S. Corporate Debt (Barclays U.S. Corporate), U.S. Securitized Debt (Barclays U.S. Securitized), Emerging Debt U.S. Dollar (JP Morgan Emerging Market Bond Index Global), Emerging Debt local currency (JP Morgan Global Bond Index Emerging Markets), High Yield Debt (Barclays U.S. High Yield), Municipal High Yield (Barclays U.S. Municipal High Yield), Municipal Debt (Barclays U.S. Municipal), Commodities (Bloomberg Commodity Index), Public Real Estate (MSCI U.S. REIT), Global Hedge Funds (HFRI Fund Weighted Composite), Directional Hedge Funds (HFRI Fund of Funds Strategic), Absolute Return Hedge Funds (HFRI Fund of Funds Conservative), Venture Capital (Cambridge Associates Venture Capital Index), Private Equity (Cambridge Associates Private Equity Index), Private Real Estate (Cambridge Associates Private Real Estate).

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