AYSENIOR SOLUTIONS UPDATE

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SUBJECT: INVESTMENT COMMENTARY
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Quarter in Review

Last year had the worst financial market performance for most of the developed markets last 75 years.

It will be recorded as one of the toughest periods, not just for investors but for society. Tough elections in Italy and Brazil, as well as the U.S. midterms kept investors on edge. The UK saw three prime ministers within three months as a result of serious political and financial market troubles. Tension between China and Taiwan also developed, an unwelcome new dynamic in 2022.

Many countries, especially in emerging markets saw large scale demonstrations and civil unrest in the wake of the global cost of living crises. Though there are low rates of unemployment in much of the developed world. Chair Jerome Powell continued to emphasize the labor market's supply/ demand imbalance and its ability to fuel wage growth. The cost of wages and benefits for US employers rose by 5.1% in the fourth quarter of 2022 from the previous year and by 1% over the previous quarter, according to the US Labor Department.

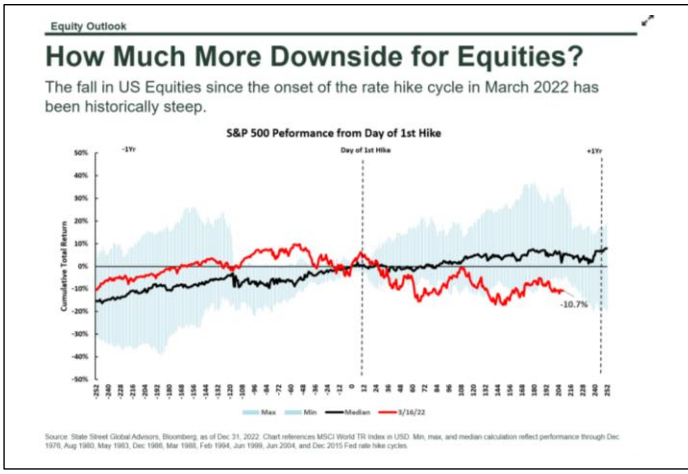
Equity markets insist on pricing in a best case scenario for a soft landing and policy pivot in 2023, despite the lingering and potentially risky downside. The economy activity will stagnant or be recessionary in 1H23. Inflation will continue to moderate. Compounding the impact of hiking interest rates, the Fed had also begun a quantitative tightening program that allows $95 billion of Treasuries and mortgage-backed securities roll off its balance sheet each month.

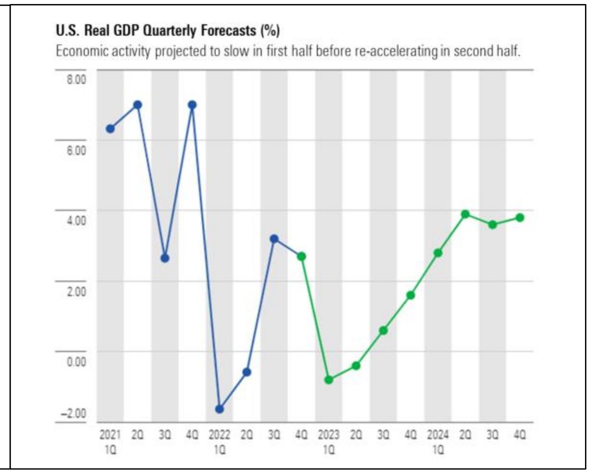
Elevated capital costs and material inputs will be a drag, with metal, energy and labour costs being cost pressures. Valuations impacted by ability to adjust rates and renegotiate contracts, ie utilities. Repricing has yet to occur, so values may be hit. Governments may look to limit prices, especially energy prices, or subsidies.

Europe is where recession fears loom largest for 2023. The jump in key interest rates and in yields during 2022 rose to the highest in decades. Russia triggered a major war for the first time since the Second World War. It created the worst inflation spikes and crisis in energy supplies since the 1970s. Germany's economy fell 0.2% in the fourth quarter as high gas prices weighed heavily on demand. The unexpected contraction raises concerns that the country will enter a technical recession. The EU has created the "Transmission Protection Instrument" primarily aimed at keeping the interest load for Italy low.

The Bank of England has raised its benchmark interest rate by 50 basis points and reached the highest level since 2008. The European Central Bank has followed suit, raising its benchmark rate to 2%. Both the European Central Bank (ECB) and the Bank of England (BoE) are expected to raise interest rates by another 50 bps this week, after the Fed hiked 25 bps last week.

The Bank of Japan's easing policy to pin long-term government bond yields near zero has left the world with virtually no negative-yielding debt. Sudden changes to Japan's ultraloose monetary policy could significantly affect global financial markets, according to the International Monetary Fund. The IMF First Deputy Managing Director Gita Gopinath urges flexibility in how the Bank of Japan controls government bond yields.





The Fed hadn't raised its flagship policy rate by 75 points in any single meeting since 1994. It issued four 0.75 percentage point hikes in 2022, with an additional Dec rate hike of 0.50 percentage points. The Fed hiked rates by a smaller 25 basis points to 4.50% - 4.75% last month. The effective federal-funds was up from 0% at the start of 2022. Still, the US Personal Consumption Expenditures (PCE) Price Index rose 5% year-over-year in December.

The updated projections from the policymaking Federal Open Market Committee (FOMC or Fed) show a median expected federal-funds rate of 5.1% in December 2023. This implies two more rate hikes of 0.25% in 2023, with no cuts through the end of the year. "Powell can push up short-term rates, but it's getting increasingly difficult for him to push up long-term rates." The Yield Curve is strongly inverted, with the 2yr yield much higher than longer dated bonds. This typically signals economic contraction. According to SIFMA, “A recession is avoidable and "not inevitable," Treasury Secretary Janet Yellen says.

The job report data on Feb. 3 showed that the US economy added 517,000 jobs in January, far exceeding the estimated 188,000. Additionally, the unemployment rate fell to a low 3.4%, while the labor participation rate increased to 62.4% meaning more people are returning to work.

Institute for Supply Management (ISM) services report rebounded to 55.2 from 49.6 in December, while new orders increased by 60.4%. In 3Q22 corporate earnings stayed relatively healthy across much of the market, providing some support for stock prices. A key variable that investors are watching in 2023 is the degree earnings are able to remain buoyant. Job security will be important to leverage personal savings to keep the economy moving.

Treasury is to announce whether it will issue fewer short-term bills in the second quarter after having reached its borrowing limit. "Bill issuance is going to come down quite a bit in Q2. They have to incorporate the debt ceiling into their financing estimates at this point," said Wells Fargo macro strategist Angelo Manolatos. Analysts will also be watching for indications of Treasury buybacks.

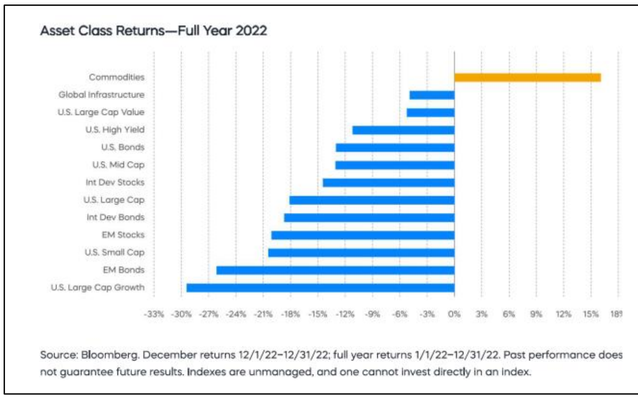
The U.S. debt ceiling has already been reached, and the Treasury only has enough room to push off the emergency until the late Spring. There are no proposed “unconventional” solutions that seem feasible such as minting a $1 trillion coin or prioritizing debt repayments over other expenses. Nuveen, state the ceiling must be raised or suspended or the U.S. will be in default.

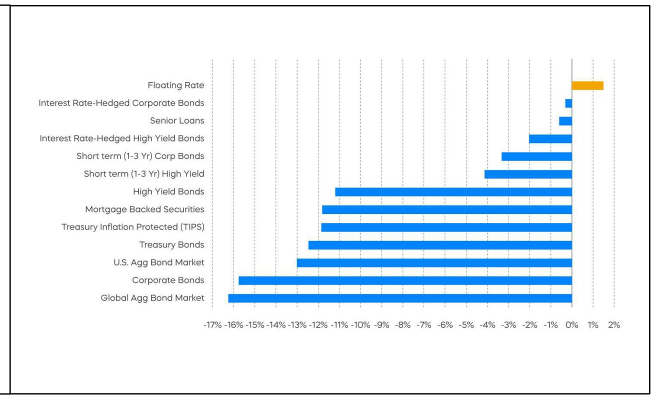
Market Overview

Global stocks and bonds both moved into a bear market at the same time, for the first time ever.

Signs are that high inflation may be easing which prompted the International Monetary Fund (IMF) to upgrade its 2022 global growth projection to 2.9%, compared with the 2.7% forecast in October. The IMF also cited the reopening of China's economy from coronavirus restrictions as a positive factor for growth.

US GDP rose at a 2.9% annualized pace in the last quarter of 2022. While it beat the 2.6% GDP estimate, it's still slowing from the 3.2% in Q3 2022. US equities have fallen by 16%, trading at 17.9 times next year's earnings. Non-US equities now trade at 12.17 times next year's earnings, 20% below their historical median average of 14.94.





About 40% of 4Q22 S&P companies have reported. Earnings per Share (EPS) results are on track for about $54 of quarterly EPS. This is the first quarter of no year over year EPS growth since 2020. This will be the second quarter of sequential S&P EPS declines. S&P EPS growth could be flat the next couple of years. High inflation and soft aggregated demand will keep downward pressure on corporate profitability. Yet according to DWS "there is record profitability everywhere" whether referring to margins, returns on capital, economic profits and observed real growth rates of profits.

More"unthinkable" things could happen in 2023. Global Risk Management Tony Dowding said insured losses from natural disasters amounted to $132bn in 2022, the fifth costliest year on record for insurers, according to Aon's 2023 Weather, Climate and Catastrophe Insight report. Natural disasters caused $313bn global economic loss for the year with the protection gap lowest on record. Insured natural catastrophic losses hit $140bn in 2022, with $125bn falling on private insurers and the rest on public insurance entities, reports Gallagher Re. Greg Case, CEO of Aon, and Aon president Eric Andersen are quoted from remarks at the Disaster Response Emergency Fund (DREF) pledging conference: "Big problems need to be solved by collaboration".

Strong labor markets, comparatively solid household and corporate balance sheets, should prevent further price declines at a similar scale of 2022. The ISM US Manufacturing Index continued to decline in Q4, slipping into contractionary level (below 50) in December, as have other key leading economic indicators. Economists now forecast a sharp slowdown for the US economy in 2023 and a recovery the following year. The U.S. Federal Reserve (Fed) and European Central Bank (ECB) are expected to have reached the peak interest rate hike cycle. The Central Banks' reaction in the coming year is difficult to predict. The expectation is that consumer price inflation will fall from 8.2% to 4.1% in the U.S. and from 8.4% to 6.0% in the E urozone.

The International Monetary Fund (IMF) predicted 2023 global growth will fall to 2.7% from 3.2% in 2022. Global economic activity is experiencing a broad-based and sharper-than-expected slowdown. Fitch Solutions forecasts 2022 for Developed Market (DM) growth is revised from 2.3% to 2.4%. For 2023, DM growth slid from 1.5% to a weak 0.8%. In 2023 for the United States, the tightening of monetary and financial conditions will slow growth to a meager 0.9%. The probability of the US entering recession over the next 12-to-18 months is 40-50%.

The global slowdown is most pronounced in the Euro area, with growth only 0.5 % in 2022. A Eurozone recession is expected in 2023 with a contraction of 0.3%. Growth will be weakest in Germany and Italy, due to the emphasis on the industrial sector and with natural gas as the major source for energy production.

A recovery for Mainland China is forecast in 2023 with GDP at 5.3%. External demand from the US and the Eurozone will add to the Chinese recovery in 2023, as those regions account for about 32% of Chinese exports (and 5.5% of GDP). Fitch Solutions made several upward earnings revisions to two other Emerging Markets economies: Latin America due to their relative resilience in the first half of 2022, as well as to oil producers such as Saudi Arabia in MENA.

Equity Markets

A worsening macro backdrop for the markets is prompting higher risk premiums resulting in lower equity returns.

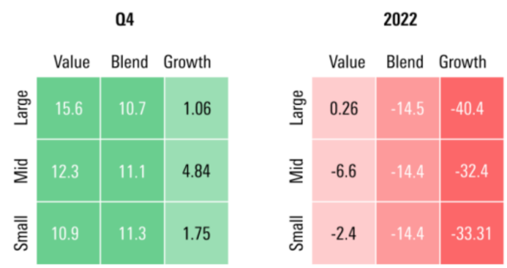
Economic uncertainty has been a headwind for growth stocks. Large-cap Growth Stocks are having their worst year since 2008. US Small Caps have shown stronger earnings sentiment than Large Caps. At the end of 3Q22, losses on Value Stocks exceeded those on Growth Stocks but reversed by year end. The Growth type equities were 4 times as expensive as Value style equities. Over the past 60 years, Value had better relative prices, according to the Financial Times Stock Exchange (FTSE).

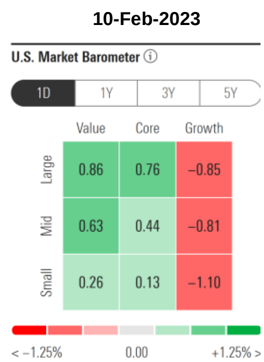
State Street Global Advisors (SSGA) reports that all factors except Quality have outperformed the broad market last month, led by Momentum. Momentum’s overweight to Energy contributed to nearly half of its outperformance. During 4Q22, the market discriminated amongst various Quality stocks. Quality tilts toward Growth, hence suffered last year. Long-term outperformance between 2002-22 for high Quality stocks have been less volatile. That Factor has high and stable Return on Capital, low leverage, with high barriers to entry with market leadership. It tends to buffer downside capture. Valuations are improved after the 2020-2022 price pullback. Also yields rise when prices fall.

S&P companies overall had positive e*arning*s in 2022. The expected 3-5-year EPS growth has increased from 17.7% at the beginning of 2022 to 18.8%. Stock prices declined on lower price-to-earnings ratios (P/E) driven by the rise in interest rates. Nasdaq 100 now has an earnings yield of about 3.75% versus a 10-year 'real' yield of 1.27% so the spread is 2.48%. The Nasdaq 100 is more expensive since 2008 than the 10-year TIP according to Seeking Alpha. The 2023 S&P consensus estimate for the earnings growth rate is 4.9% and is not more than inflation. Add the dividend to the earnings yield for a high single digit return.

US small caps and emerging markets (EM), offer better value after last year's decline. EM experienced an 11% decline in 2022 earnings growth. US large caps are the most expensive, including large-cap value stocks. Large-caps had outpaced small-caps in most industries in the 4Q22 rally, led by Health Care, Telecom & Financials. Full year, Large-cap industries fared better than small-cap peers except in Discretionary and Telecom.

U.S. Equity Style Box Performance





Source: Morningstar Direct, Morningstar Indexes. Data as of December 30, 2022.

Both large and small-cap Value indexes broadly outpaced Growth in the 4Q22 rally and lost less in the full-year market collapse. The surge in Energy stocks was a major driver of Value outperformance. Value fared better than Growth in most industries, particularly among large-caps. Profit surges were in Energy, Materials, Auto, Semiconductors, some Retailers. Diminishing earnings prospects for Energy, Basic Materials, Financials and Real Estate companies reflected the second-half easing in commodity prices. Stocks in these industries make up a bigger share of the small-cap index than its larger-cap counterpart.

Earning revisions for the larger cap Russell 1000 Index turned negative in recent months. Their number of downgrades to 12-month forward EPS forecasts continued to outnumber upgrades in 4Q22. The recent reversal in this ratio has been more pronounced for the large-cap indexes than for the small-cap counterpart. The 4Q22 revisions turned negative for both indexes. While forward EPS estimates for small-cap Growth remains near five-year highs, Value small-cap have returned to early pandemic levels.

Energy stocks were the leaders in 2022 as OPEC production cuts and ripple from Russia's attack sparked oil and natural gas prices, soaring almost 64% higher over the course of last year. The sector is now the most overvalued and trading at a 12% premium over our fair value estimate. Energy continues to rank favorably as it exhibits attractive valuations, positive earnings sentiment, and especially strong momentum across all observed time periods.

For the first time in a decade, low inflation, low interest rates, and low energy price the tailwinds are supporting utilities' earnings growth and premium valuations are reversing. Expect pressure on profitability relative to oil prices as maintenance operating expenditure (opex) and capital expenditure (capex) rebound. DWS expects Energy profits to decline at least 10% in 2023, followed by about 5% thereafter.

Utilities' growth prospects are a big concern going into 2023. Utilities like Xcel Energy, Alliant Energy, and DTE Energy recently increased their long-term growth plans, in large part to support clean energy investments.

In 2022 the Materials Sector outperformed the market. Despite the relative outperformance, there are opportunities across the sector. The lithium market is currently undersupplied, leading to prices at all-time high levels above $70,000 per metric ton, up over 10 times from below $7,000 per metric ton in early 2021. Rising freshwater costs will boost demand for water management systems in manufacturing and industries, such as data centers, which use water for cooling.

The Consumer Cyclical sector trades at a 21% discount to our fair value estimates after the 3Q22 earnings season reporting. The consumer cyclical sector now is the second-most undervalued sector, trading at a 30% discount to fair value. Apparel and travel and leisure top the list of the most undervalued sectors. An anticipated relief has yet to be fully recognized. Whereas online retailers had their day. There is pent up demand to return to the Malls. However, growth in online retail will continue. Pent-up demand catalyzed a surge in the travel industry during the second half of calendar 2022.

Real estate stocks saw their fortunes wither this year, declining on sharply higher interest rates and fears of recession. This came after a particularly strong year in 2021 when real estate investment trusts had their best year in history.

Morningstar Sector Indexes

	Performance %	
	Q4	2022
Cyclical		
Basic Materials	15.97	-11.41
Consumer Cyclical	-6.52	-35.52
Financial Services	12.71	-12.34
Real Estate	4.62	-25.55
Sensitive		
Communication Services	-1.35	-40.94
Energy	21.00	62.50
Industrials	16.84	-8.08
Technology	3.91	-31.55
Defensive		
Consumer Defensive	11.79	-2.61
Healthcare	11.85	-5.18
Utilities	8.88	1.65

Source Morningstar Direct-Morningstar Indexes December 31, 2022

Stocks from the Consumer Defensive sector, such as healthcare and utilities companies protected against some of last year's steep declines. While Consumer Staples is relatively inelastic, meaning regardless of economic conditions, they tend to be less volatile, and demand remains the same regardless of price.

Tesla, Nvidia, Bank of America, and Broadcom are now undervalued mega-cap stocks. Communication Services is the most undervalued by far, trading at a 43% discount to fair value estimate. The decline was led by Alphabet, which dropped 40% and Meta Platforms, which plunged 65%. Communication Services ranks poorly as negative earnings surprises from Meta and Disney weigh on the sector. Overall, Industrials' positioning appears especially bearish as short interest hits a one-year high.

The Healthcare Sector is defensive as it remained buoyant despite the market sinking. Pharmaceuticals may provide investors greater exposure to Quality and Value than the broad Health Care sector. The sector beat the broad market by 16%, a trend consistent with its performance history during economic slowdowns. So, valuations have become more expensive.

Pharmaceuticals ranks the second-best in terms of both profitability and margin stability over the past twenty years, as measured by return on equity and operating margin, followed by biotech and health care providers & services. From a regulatory risk perspective, the prescription drug provisions in the 2022 Inflation Reduction Act and a split Congress may reduce the risk of new major drug pricing legislation in the near term .The S&P Health Care companies will lead the next decade of profit growth with medical innovation.

The regional Bank Industry saw the largest year-over-year expansion in net interest margin on record in 3Q22 as a result of the Fed's aggressive rate hikes. Banks are generating some of the best profits, net interest margins and ROEs since the financial crisis on higher interest rates. Financials' net profit margin of 15.5% is more than 35% higher than the S&P 500 Index net profit margin. The total loan balance grew 9.9% on a trailing 12-month basis which us the fastest rate since 2Q06. Banks have set aside more reserves to prepare for potential losses, resulting in the highest reserve coverage ratio on record.

The industry's recent earnings outlook has been more stable than the broad market and other cyclical sectors. It is trading at a 41% and 64% discount to the broad market based on forward price-to-earnings and price-to-book multiples respectively. It trades at a more than 20% discount compared to the S&P 500 Index using forward 12-months price-to-earnings (P/E) ratios of 13.6x for financials versus 17.4 for the S&P.

Last year, US aerospace & defense stocks had the best year in more than 20 years on a relative basis. Aerospace & defense industry growth will be supported by the FY 2023 National Defense Appropriation Act, authorizing a record $858 billion in defense spending. NDAA likely marks the start of a new cycle of increased defense spending. Consensus growth estimate for 2023 is significantly higher than the broad market (46% vs 4%). Aerospace & defense industry appears expensive based on price-to-forward-earnings following its strong performance last year, its price-to-book ratio is around its 20-year average.

Semiconductor Industry has the largest percentage of firms (70%) with positive earnings-per-share figures over the past 12 months. further supported by the recently passed CHIPS and Science Act, which provides $39 billion for construction of semiconductor plants and $11 billion for semiconductor research and development to be disbursed through 2026. Planned reshoring semiconductor capacity has surpassed $138 billion. However 80% of demand is from outside the US. Semiconductor stocks are trading at potentially attractive valuations. The technology sector was the worst for 2022. Technology, real estate, and consumer cyclicals had degrees of overvaluation at the beginning of the year.

2022 Market Performance Barometer

U.S. Equities	Q4	2022
	Performance %	
U.S. Market	7.26	-19.43
Value	14.68	-0.72
Growth	0.15	-36.70
Dividend Composite	13.69	-3.88
Wide Moat Composite	8.26	-21.63

Global Equities		
Developed Markets ex-US	16.24	-14.79
Emerging Markets	9.39	-17.93
Fixed Income		
U.S. Core Bond	1.88	-12.96
U.S. Treasury Bond	0.73	-12.44
U.S. High Yield Bond	4.07	-11.09
TIPS	2.03	-11.86
10+ Year Treasury Bond	-0.63	-29.45

Source: Morningstar Direct, Morningstar Indexes. Data as of December 30, 2022.

European Equities

Europe has lagged in the creation of innovative and disruptive new technologies.

EU is a monetary union without a fiscal union with massive debt and lousy demographics. The STOXX Europe Total Market Index now trades at a nearly record 30% discount compared to the S&P 500 on a forward 12 month basis but with comparable EPS growth expectations over the next three to five years. Despite recession fears, revenues, earnings, and profit margins have remained resilient. As China re-opens and Europe avoids an energy crisis, the US dollar has softened, boosting non-US returns for investors.

European stocks have outperformed global ones with improved data on inflation and declining energy prices. Major indexes in France, Germany and the UK have comfortably outperformed the S&P 500 during the past three months Oct-Dec. In 2022 the Euro Stoxx 50 was down only around 10%, half of the S&P 500's loss. The FTSE 100 was down 10% in dollar terms. The FTSE 100 companies benefits from rising energy prices and the weak pound. It is on pace to outperform the FTSE 250 by the biggest margin since 1986. The FTSE 250 a more domestic index of midcap stocks is down 20%.

Since the beginning of the year, the Stoxx 600 has gained almost twice as much as the S&P 500. This outperformance started at the end of September 2022. Since then, European stocks have gained around 15% in Euros as compared to 7% for the S&P 500 in USD. In 2022 amongst 20 companies of the Stoxx 600 that had total returns of more than 50%, the highest number of companies came from defense companies with one that gained 127%. Defense was followed by energy and then banks. Europe's financial sector is benefiting with the turn in interest rates after its profits were dashed last year. The low interest or even negative rate era is over. This supports the more value-heavy European equity markets.

Infrastructure - In Europe macroeconomics, politics, regulation and sector trends make transformational infrastructure a strategic necessity. The REPowerEU Plan with EU3 billion in an Innovation Fund and the US Inflation Reduction Act including tax credits or refunds directly from government will be a boost. Broad technologies are receiving support similar to solar and wind decades ago. This includes a European Hydrogen Strategy. Europe transform the energy sector as well as the wider economy which has lacked innovation and requires foundational infrastructure. There should be a growing pipeline of capital into systematic themes of decarbonization, digitalization, and sustainability. Affordability is key for regulators. Attention is being given to opportunities for small and medium sized entities (SMEs). In 2022 there were 3345 infrastructure deals worth USD 41.07 trillion up from 2021 with 3400 and $1.14 trillion. General Partner type structues are expected to accelerate in 2023 and faster than developer and institutional investors. Europe remains the dominant region. Electronic Vehicles (EV) and Liquid Natural Gas (LNG) sectors are active, with demand for fibre and data centre capacity emerging. Key is energy efficiency and smart electric grids to incorporate alternative fuels, EV charging, as well as small & localized microhubs and battery storage. A diverse investment strategy within infrastructure opportunities is important. Funding for non-core and secondary level companies expand with a degree of liquidity. Full energy ecosystems are needed. The defensive nature of infrastructure will become more important as the economy approaches a recession. *Nuveen Investments.*

Global Airlines - US Global Capital has issued an indepth analysis of the sector. Since the middle of October, the NYSE Arca Global Airline Index soared over 22% as compared to the S&P 500 that gained 11%. Shares of global airline stocks advanced more than 12% during the week ended January 13, as travelers suffered the service outage that temporarily grounded planes in the US. The United Airlines was the best performer for the week, up 22%, followed by American Airlines 20% and Frontier Airlines 17%. Regional air travel in China was expanding even before its reopening. US carriers are investing a record amount in aircraft, equipment, airport construction and information technology. The estimate for 2023 is $27 bil. Airbus delivered 661 jets and won a net 820 new orders last year, against Boeing's 480 jets delivered and 774 net new orders. United Airlines placed one of the largest widebody order in history by a US carrier. It ordered 100 Boeing 787 Dreamliners in December with an option to purchase 100 more. Airlines Reporting Corporation (ARC), a ticket transactions settlement firm, reports leisure travel has returned to 2019 levels, while business travel continues to trail. Travel budgets are expected to be 98% of 2019 levels according to a recent survey of 100 global corporate travel managers by Morgan Stanley. Smaller companies are leading demand.

Emerging Markets

As a result of China ending Covid restrictions, an economic uptick is likely to appear in the 2Q23. Europe will benefit more than the U.S. from exports to China. China is expected to be an outperformer in this Year of the Rabbit. The reopening is going to boost domestic GDP growth, along with liquidity support for the property sector. Consumption coupons are going to be distributed in certain areas from now until May 2023. China will accelerate. Better economic data can be expected in 2Q23 to achieve a GDP growth of 5%, with corporate earnings growth of about 15%.

Stock prices include a lower risk premium with a 11.4x forward price-to-equity ratio. Urbanization remains a key driver as China targets an urbanization of 80% up from the current 63%. The China Securities Regulatory Commission plans to bar companies in certain industries from listing on stock exchanges in a bid to steer more capital toward strategic sectors.

Emerging market (EM) currencies have rebounded 9.5% since the October bottom due to a weakening USD. The slowdown in US rate hikes is eroding the dollar's yield advantage. EM central banks are one step ahead of US monetary tightening. That provides a foundation for a recovery across EM asset classes. However, 2023 earning expectations are negative for EM companies. This is the first negative forecast since 2009. If geopolitical issues improve it may prove that the current consensus forecasts may be too conservative. The potential for higher EM equities might reward for investors with higher risk. EME valuations are well below their long-term averages and inexpensive relative to the U.S.

We currently favor EM corporate issuances over sovereign debt. High quality well-established EM-domiciled issuers are offering elevated yields with a majority of issuers rated investment grade. The segment had its worst calendar year return ever at -16%. This pushed the yield on EM local debt to 6.7%, its highest level since the Global Financial Crisis. EM local debt returns are 94% correlated to the movements in EM currencies. As the USD dollar loses dominance, EMD local currency will be enhanced for USD investors.

Fixed Income Market

All 32,000 bond holdings within the Bloomberg Global Multiverse Bond Index all suffered losses.

Globally, negative yielding debt has fallen from $15 trillion to $0 in 2022. Last year's declines have led to a huge rise in bond yields. The 1-3 year US investment-grade corporate bonds now yield over 5.3%, the highest since the Global Financial Crisis.

Rates have moved so swiftly that the bond yields are 250 bps above their 20-year average. Economic uncertainty means investors need to be cautious with corporate bond or credit investments. Active duration management, sector allocations, and security selection may be able to better defend against rate and credit risks than core strategies.

Ultrashort bonds were kept afloat by their very short maturities, which meant the market prices moves less with changes in interest rates while their yield rose as rates were hiked. Leveraged loans have historically performed well in rising rate environments as their floating-rate nature provides protection from inflation.

According to Morningstar, the US 10-year Treasury will average 3.50% in 2023 and decline to 2.50% in 2024, then bottom at an average of 2.25% in 2025 as market prices normalize. For the first half of 2023 intermediate bonds with three- to five-year maturities are expected to provide the greatest amount of yield for the lowest amount of duration risk, according to Morningstar's chief markets strategist David Sekera.

The 4Q22 period posted a relief rally as all areas of the bond market posting positive three-month returns. It wasn't enough to reverse the terrible performance in the rest of the year. Before 2022, the US Core Bond Index had only experienced two calendar years in the red. In those two years, the losses did not exceed 2% as compared to the double-digits losses in 2022.

MORNINGSTAR BOND INDEXES

	4Q22	2022
Sector		
U.S. Treasuries	0.73	-12.44
Corporate	3.72	-15.71
High Yield	4.07	-11.09
Mortgage	1.87	-12.09
Maturity		
Short-Term Core	1.19	-5.74
Intermediate Core	2.08	-12.90
Long-Term Core	2.66	-27.57

	4Q22	2022
U.S. Government		
Short-Term Treasury	0.95	-5.43
Intermediate Treasury	1.19	-12.56
Long-Term Treasury	-0.63	-29.45
Inflation-Protected		
TIPS	2.03	-11.86
Floating Rate		
Leveraged Loans	2.71	-0.63

Source: Morningstar Direct, Morningstar Indexes. Data as of December 30, 2022.

Italy's 30-year Treasury Bonds (BTPs) generated a total loss of 40% in 2022. There was also loss of 47% for the Germany 30-year Bunds. The 10-year Bund yields has reached 2.56% which is an 11year high after a decade of negative interest rates. European credit defaults are expected to rise in 2023, according to S&P Global estimates. With the default rate by September reaching 3.25% for speculative-grade firms. Fitch Ratings and Moody's Investors Service expect similar increases in defaults, as high-leverage borrowers have limited refinancing.

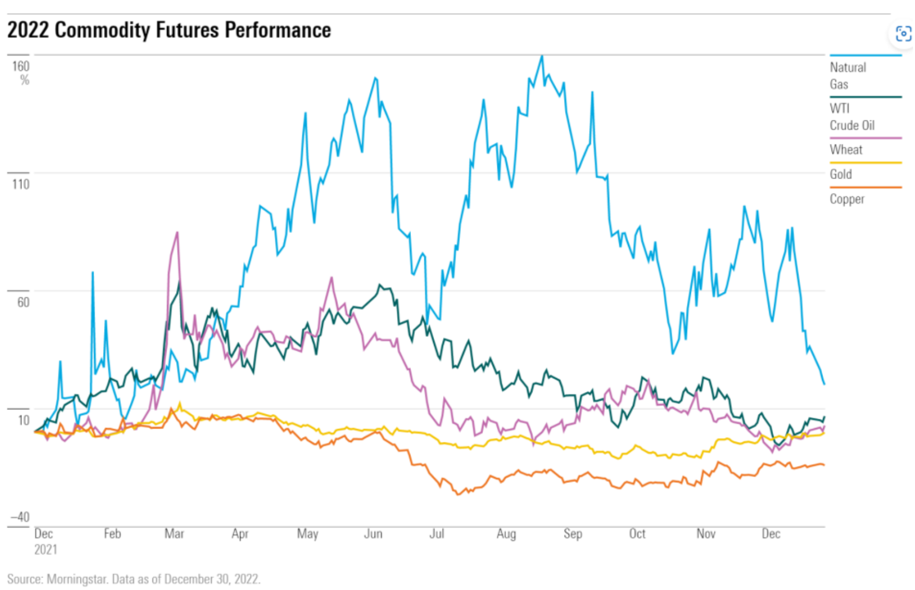
Defaults in the $1.4 trillion Leveraged Loans market are set to rise during the next two years notes SIFMA. Analysts expects the current default rate of 1.6% to at least double. Deutsche Bank strategists say defaults could soar to near an all-time high of 11.3% in 2024. While, collateralized loan obligations (CLOs) are expected to become low-rated corporate debt if credit downgrades increase. Many CLOs limit CCC rated loans to 7.5% of the portfolio. As firms are downgraded they might not receive lending from CLOs.

Preferred (Prefs) securities experienced sizable $4.7 billion outflows in 2022. Prefs had steep declines of -16% that pushed the yield over 6% for the first time since 2013, except for the brief interval during the COVID-19 crash. The average price on Prefs dipped below 85 from 100 par. It is an investment grade hybrid security that has bond and equity characteristics. With an average price of around $80 at year-end and a yield of 6.24%, it is a deeply discounted segment that will recover swiftly when the Fed stops rate hikes.

Other Assets

Peak inflation combined with growing global recession fears have dampened investor enthusiasm for real assets.

'Real Assets' are commodities, real estate, and infrastructure investments. The last commodity super cycle was downward earlier this century. It reversed last year and may have started an upward stage. These cycles often last years. S&P GSCI Industrial metals are considered the most crucial inputs to our future economy. Demand is picking up rapidly yet supply is constrained perhaps for the next decade. This will push valuations higher. Michael W Arone, SPDRChief Investment Strategist, predicts that a diversified portfolio of real assets will outpace the traditional 60/40 investment portfolio in 2023.



Reopening of the Chinese economy is providing support for oil prices. The oil markets are largely mirroring macroeconomic events. A sluggish long-term economic forecast might be overdone. There are also supply issues. US is still refining below 15 million barrels a day (bpd) with a massive maintenance cycle not considered in the refining estimates. Russia has now announced a 500,000 bpd voluntary production cut due to growing pressure from sanctioned price caps and embargoes from the incursion into the Ukraine.

The Qatari state oil company QatarEnergy is negotiating with French TotalEnergies to reportedly buy a 30% stake of the $27 billion commitments in Iraq solar, gas and water projects. UK oil major BP and Danish wind producer Orsted are developing two separate projects. BP is pioneering a carbon capture site. Orsted is installing an offshore windfarm. They are both in the North Sea with an overlapping zone of 110 km2. Both sides are expecting the other to cede territory. These will delay implementation. According to a new study, imports of green hydrogen into the EU might be more cost-efficient than domestic production. The cost of producing it in Germany is €4-5/kg whilst Morocco and Spain can generate clean hydrogen at a €3.1-3.2/kg. The costs of distribution or transport were not mentioned. However, pipelines can be utilized from Spain.

Gold was testing its all-time-high price in US dollars after reaching US$2070/oz in early March. Gold may benefit from investors trying to pivot towards counter-cyclical and defensive portfolio positioning. Continued high inflation rates and positive real interest rates will weigh on the gold price. The strong dollar is phasing out, especially against the Euro.

Gold prices had declined under the strong dollar environment over the last year. Despite rising US rates and a strong US dollar, global investment demand for gold still rose to protect against depreciating currencies and loss of spending power due to inflationary pressures. Central bank net buying was a source of significant demand, with an estimated 3Q22 record of 400 tons of gold added to central bank holdings.

Strategists at major banks are increasingly ditching their bearish forecasts for the Euro this year. JPMorgan strategists have abandoned their prediction that the euro would linger below parity with the dollar. Morgan Stanley strategists raised their year-end forecast for the Euro from $1.08 to $1.15. However, the dollar jumped 90 bps on the day the FOMC raised rates in January.

The major cryptocurrencies Bitcoin and Ether plummeted in 2022, each losing over half the value from the start of the year. Bitcoin was the first cryptocurrency and is the largest by market size. On Nov. 6, investor fears over the collapse of major cryptocurrency exchange FTX due to fraudulent mismanagement led to the single-day drops of 24% in the price of Bitcoin and 30% in the price of Ether. Terra lost nearly all of its value earlier in the year. Terra's losses spooked investors throughout the cryptocurrency markets, as stablecoins are pegged to traditional currencies. It was in May 2022, that Terra blockchain was temporarily halted after the collapse of its stablecoin TerraUSD and their algorithmic stablecoin Luna wiped out almost $45 billion in market capitalisation. There is still viable progress in the cyberspace with MIT working on software for Central Bank Digital Currencies (CBDC) and established financial institutions experimenting with crypto. Secondary business in crypto services such as Coinbase and Blok offers a modicum of stability.

Asset Allocation

Blackrock recommends remaining in the markets, but watch the risk balance between Equities and Bonds.

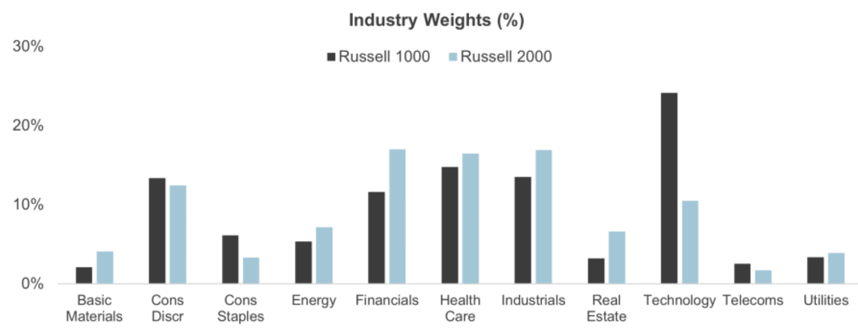
The three surprises for 2023 could be 1-Financials outperform the market, 2-European stocks beat US stocks, 3-Real assets outpace the 60/40 portfolio. When long-term interest rates are lower than short-term interest rates, the yield curve is inverted. Typically, the curve slopes upward with longer rates higher. The inverted yield curve signals a recession and deflates the profitmaking model for banks and other lending institutions.

The shift from inflation to recessionary concerns necessitates a change in portfolio strategy, according to Nuveen. Be less cyclical. Strengthen core bond holdings. Be cautious with EMD ad CLOs. Extending duration with Treasuries and IG Bonds over High Yield and Senior Loans. Bonds and preferred securities offer attractive dividends. Shorter term US treasuries and Floating Rate corporate bonds are favored. Extend the duration of the bond portfolio with 3-5 year interim term US Treasuries and quality corporate credits.

Diversify with infrastructure, REITs, mid-stream energy refining, and waste management investments. Those sectors are supported by the Inflation Reduction Act. Tech and Communications are likely to continue to struggle. The goods vs services balance will be restored as consumer spending on goods returns. Remain underweight non-US Equities, especially the UK and Europe.

In the Real Estate sector favor Debt over Equity. Segments in RE include Specialized Medical Offices, European residential subdivision, Asian senior homes, and Australian student housing. Farm land is attractive as an inflation hedge. Utilities with clean energy and renewable fuels are well positioned. Focus on the growing 'global cities. Energy and Utilities rank favorably due to strong surprises and widespread upgrades, respectively.

The focus is more toward SMEs and the Russell 2000 index. As noted below, it favors the industry sectors that are likely to benefit in the current market dynamic.



SSL uses a 'Smart Beta' strategy with factor, sector and regional screens to pinpoint the attractive securities within an index or to make an investable index. Academic and practitioner research have shown that Smart Beta portfolios outperform the overall benchmarks in the long run. High Quality Factor have the superior risk-adjusted returns. The strategies are implemented in the following SSL 1Q2023 Model Portfolio.

Conclusion - *STAY NIMBLE AND BE TACTICAL IN YOUR PORTFOLIO*

There have been a few changes to the 1Q23 portfolio. In Fixed Income, the allocation to Senior Loans (SRLN) has been trimmed due to credit concerns and exchanged with variable rate Prefs (VRP). A Defense/Aerospace (XAR) has replaced the Homebuilders ETF. An Infrastructure (IFRA) iShares was added to replace the Invesco Energy and Base Metals ETFs. This was due to the punative tax treatment of those Invesco options, but also to the dimishing propsects for those sectors as compared to 2022. The IFRA has 39% to tilities and 18% materials as well as 7% energy. The First Trust Global Tactical Commodities Strategy (FTGC) has 47% materials and 38% energy exposure as well. Please reference the following page for the updated model. An Morningstar Xray is attached with the email of this report. Please contact us to arrange an explanatory meeting.

Previous performance is not a guarantee of future returns. All investments contain risk. Your particular portfolio should be designed to your level of risk and to target your financial goals. Review regularly. *Senior Solutions Ltd (SSL) provides financial planning guidance for a fee. The client receives guidance to implement at their own discretion. SSL does not guarantee any returns from such guidance. SSL is not an investment manager, does not sell investment or insurance products, nor receives any commission or third-party compensation. SSL does not directly manage or custody assets on behalf of clients. SSL is a financial planning firm for select clients.*

Senior Solutions Ltd

1Q23 Portfolio Design Structure

as of 10-Feb-23

lio	*Green - Add Red - Remove ETFs*
20.00%	**FIXED INCOME**
0.00%	Cash
7.00%	VNLA Ultrashort (Intl) Bd A-Credit 5.3%Gov 58%Corp 9%Cash Corp 0.34Dur -1%I
0.00%	SPIP (3-5YRS) TIPS 100%Gov 99%AAA 7.8Dur -7.7%Ret 6.9%yld 3s NEU
3.00%	SRLN GSO Senior Loan ETF BB- Crd 92%Corp 7%Cash 0.3Dur-2.4%Ret 5.6%Yld 3I
6.00%	IUSB iShares Core TTL USD Bonds AA- 42%G 32%Crp 20%Sec 6.32%dur -8%ret 2.45%yld
2.00%	VGIT Vanguard 3-10 Intmdt-Term Trs AAA 99%Gov 5.3Dur -7%Ret 1.7%Yld 4Slv
2.00%	VRP Invesco Var Rate Pref BBB- 100%Corp 3Dur 5.2%Yld 5.3%Ret 4Brz
0.00%	CEMB iShares JPM em BBB 8%Gov 90%Corp 4.41Dur -12.59%Ret 4.17%Yld 5Slv
0.00%	CWB SPDR Barclays Convert Sec 98%Util 3%HC 1%Comm 2.32Dur -8.6%Ret 2.08
20.00%	Subtotal
80.00%	**EQUITY** 12 mos Rolling
10.00%	QUAL iShares MSCI USA Quality Factor ETF B+ 21%Tech 17%FS 13%HC 10%CC -5
5.00%	DEUS Xtrackers Russell(1000) US Multifacton B 18%Ind 15%Tech 13%FS 12%HC (
6.00%	SMLF iShares MSCI USA Small-Cap Mltfctr 18%HC 17%Tech 16%FS 5%Ret 1.4%Yl
5.00%	XAR Defense/Aircraft B 93%Ind 7%Tech 0.5%Yld 8.5%Ret 4Slv MB
0.00%	*XHB SPDR Homebuilders 51%CC 49%Ind -1.2%Ret 0.92%Yld 3sLV MB Q*
5.00%	*XLF Financial Select Sector SPDR® C+ 33%Bank 27%Cap 21%Insur -6.9%Ret 1.91*
6.00%	*XLV SPDR Health Care Sel 31%Pharma 23%Srvcs 18%Equip 1.3%Ret 1.49%Yld 5S*
3.00%	*XLY SDPR Consumer Discretionary Sel B- 94%CC 5%CD -17.3%Ret 0.87%Yld 4Slv*
7.00%	*XLP SDPR Consumer Staples Select Sector 99%CD -0.7%Ret 2.5%Yld 3Brz LB M*
3.00%	SCZ iShares MSCI EAFE Small-Cap 23%Ind 13%CC 36%Eur 30%Jap 14%UK -10.5%Ret 1.8%Y
5.00%	IQLT iShares MSCI Intl Quality Factor B 20%FS 13% Ind 12%HC 53%Eur 14%UK 1:
5.00%	EMGF iShare Multi-Factor EEM C 18%Tech 17%FS 16%CC 36%China 16%India -1:
5.00%	PSR Invesco Active US Real Estate B **20.2%Infra 10.7%Apt 13.4%Ind 11.2%Data**
5.00%	IFRA iShares InfraStructure B 339%Util 5%Ind 18%Mat 7%Eng 7.3%%Ret 1.85%Y
	DBE Invesco DB Energy ETF B 2**7%Lte 30%Crd 20%Petro 31%Gas** 8%Ret 0.8%Ylc
	DBB Invesco Base Metals Fut B 0**%xUS 107%Zinc 50%Alum 44%Cop** -9.5%Ret 0
5.00%	FTGC First Trust Global Tact Cmdty Strat **47%Mat 38%Enr 11%CD** 4.7%Ret 10.3%
0.00%	FLOWX Fidelity Water Sustainbility B+ 60%Ind 24%Util 11%Tech -0.4%Ret 0%yld
5.00%	GRN iPath® SeriesB Carbon ET**N** **-6**.6%Ret 0%Yld NR
80.00%	*Subtotal*
100.00%	Total

Index: The ETF Trading Symbol is followed by the name, credit rating, sector data when applicable, 1yr Returns, 12 month Yield, Morningstar stars and level Neutral, Silver, Bronze and Gold. This is followed by Market Cap and Style, and HQ if HighQuality.