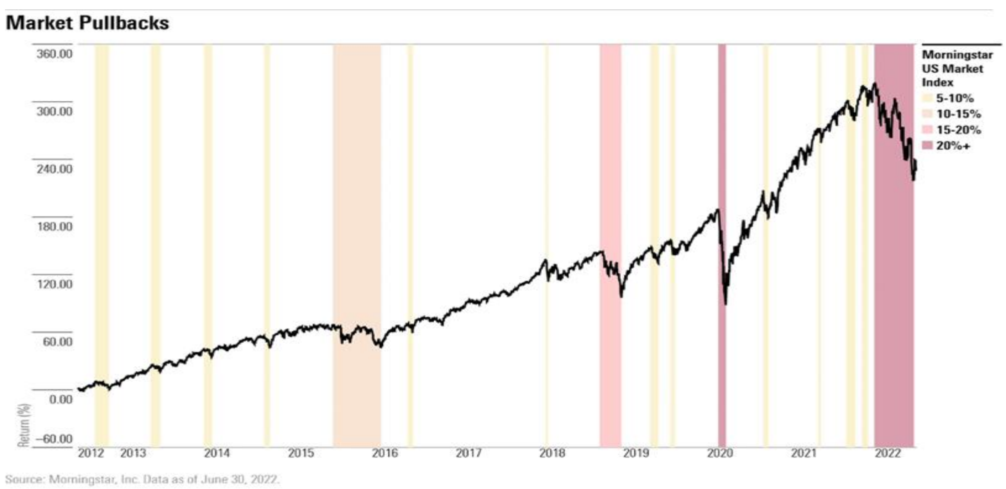
FROM: PATRICE HORNER, CFP, MBA
SUBJECT: INVESTMENT COMMENTARY
DATE: JULY 25, 2022

Review

Global equities are in a bear market and recession warnings are growing louder. Broad-based asset class volatility remains elevated. The S&P 500 Index has posted a daily gain or loss of greater than +/-1% on more than 60 days in 2022. Outside of 2020, we haven't seen so many of these kinds of outsized moves since 1956 – SPDR

Bear markets signal a leadership change within the overall equity market, notes RBA. Volatility spikes when the economy surrenders to a new leadership better matched to a new backdrop. The first indication that de-globalization was underway were the changes to US tariffs and trade regulations. Financial globalization risks were underestimated, in light of the risks of sprawling, inter-linked production networks, and intricate trade agreements. Market pullbacks are inevitable as is a return to the long-term trend line. There are opportunities in declines such as the one experienced in the first half of the year.



After the pull-back in the 1st six months of 2022, markets climbed in July. This rise was despite global crises, including the resignation of the UK Prime Minister and concerns about a key EU gas pipeline, as noted by State Street Global Advisors(SSGA). However, the resumption of Ukrainian grain exports via the Black Sea amid the ongoing war is "a beacon of hope" in a world that desperately needs it, stated UN Secretary-General António Guterres said at the signing ceremony in Istanbul, Türkiye, on 22 July.

June was in fact the first time since March 2019 that inventories of finished goods stabilized. Bloomberg estimates that the goods inventory is approaching overstocked conditions, particularly in the Consumer Discretionary and Technology Sectors, The growth in new orders deteriorated, with declines registered in the EU, US and UK. China only saw a modest revival of demand, while near-stagnation was seen in Japan and across the rest of Asia. Asia-U.S. shipping indexes are down approximately 20% to 30% from their peaks due to lockdowns in China and port congestion. There's a ton of pent-up demand for dry bulk and maritime shipping.

Chart 2: Manufacturing output by major economy

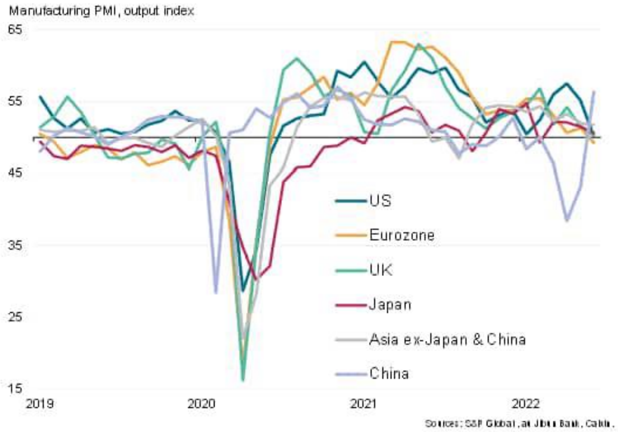


Chart 3: Manufacturing new orders by major economy

The economy is showing more signs of deterioration. Jobless claims are ticking up, consumer confidence is ticking down and the housing market is cooling off. The Senate voted 80-19 to confirm Jerome Powell to a second four-year term as chair of the Federal Reserve as the central bank implements the biggest interest-rate increases since the 1980s. Chris Waller, a member of the FOMC board, said the strength of the labor market and the Gross Domestic Income suggests the economy is not in a recession nor heading towards one. Treasury Secretary Yellen says that there is not a broad-based contraction across many sectors which would signal a recession. Energy and food were the major driver of CPI. Core CPI decelerated, a lagging indicator.

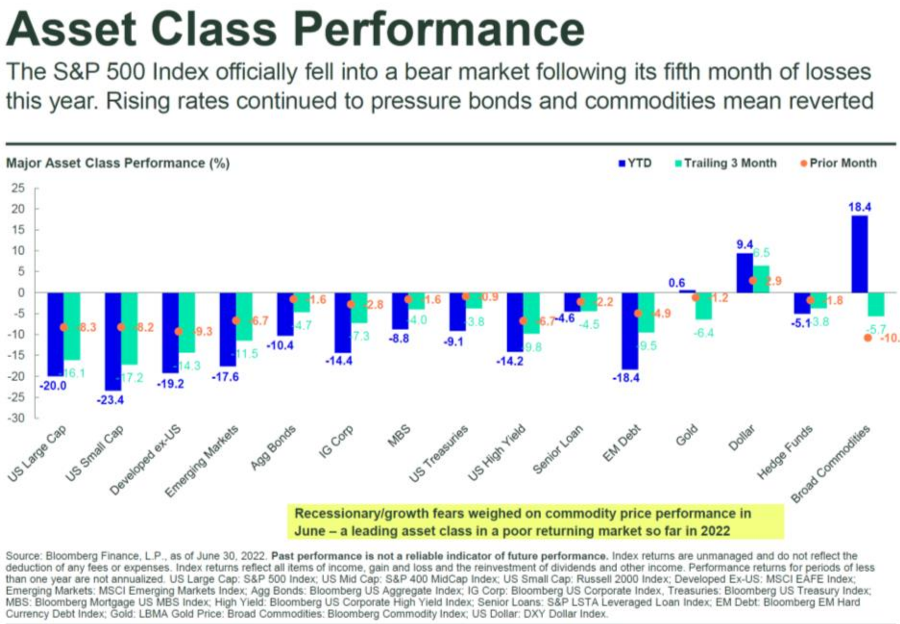
Higher prices are driving consumers to spend differently, with about a third switching to private labels, according to McKinsey. Since then, consumer confidence has plunged, with July numbers showing a key index at its lowest levels since early 2021. Oil and gas companies are raking in windfall gains while ordinary citizens struggle to make ends meet. An "inflation rebate," financed by a windfall-profits tax on fossil-fuel corporations, could address these inequities.

.

As a share of global GDP, private and public debt levels have risen from 200% in 1999 to 350% today (with a particularly sharp increase since the start of the pandemic). Under these conditions, rapid normalization of monetary policy and rising interest rates will drive leveraged households, companies, financial institutions, and governments into bankruptcy and default. Driving market declines on Jun 30th was the last day to realize a loss for tax purposes by selling then offsetting any realized gains for this financial year. Traders have become the most bearish since 2017, 2/3rds with the highest cash allocation since 2020 due to risk of a further fall.

Bonds spent the second quarter continuing one of the worst selloffs in the market's history, reports Morningstar. This is the second time in more than four decades that stocks and bonds *both* posted losses for two consecutive quarters. The last time investors saw back-to-back down quarters for stocks and bonds was in 2008.

Investors who thought they were diversifying by loading up on cryptocurrencies were disappointed as Bitcoin and Ethereum both plunged over the last three months. Bitcoin posted its largest quarterly drop in its history, losing 56.6%. Crypto-lender Celsius Network is filing for bankruptcy.



Market Overview

The International Monetary Fund (IMF) downgraded its forecasts for global growth this year to 4.1 percent and then lowered it further to 3.6 percent this is in contrast to the estimated expansion of 6.1 percent in 2021.

The 2Q22 US GDP growth estimates just released this week were negative, as they were last quarter, raising the issue of whether it is in a recession. Federal Open Market Committee (FOMC) members now project growth at only 1.7% this year and next, reflecting the loss of economic momentum. Support from a strong labor market, the recent narrowing of the trade gap, and strong services spending mighty offset the declines in manufacturing, according to State Street Global Advisors (SSGA). Nuveen reports that earnings from the second quarter have been notably less favorable. There are fewer companies reporting positive earnings surprises and the magnitude of surprises are below the five-year averages.

Nuveen views the July 10% market bounce-back with some skepticism. At 17x forward earnings on the S&P 500 Index, investors aren't being adequately compensated for risk. Earnings expectations for US firms for the second quarter declined from 5.9% to 4.3% over the past three months. Small-cap growth estimates for 2Q22 have been reduced by 11 percentage points, and full-year estimates by 8 percentage points. On a 12-month horizon, DWS Investment GmbH sees mid-single digit upside potential for global equities, on receding volatility. For Europe the gains could potentially be double-digit if the war in Ukraine is resolved.

Economic sentiment has slowed as data missed estimates while recessionary fears emerged. Earnings sentiment continues to weaken globally with the US as the only region with posting a positive ratio YTD. Leading economic indicators are edging lower from the 2021 highs yet indicate a market slowdown is not a recession reports notes SSGA. Growth forecasts continue to be revised lower in Emerging Markets. 2022 Earnings Per Share (EPS) growth was revised slightly higher for US Large Caps. During 2Q22 and YTD, the factors of Minimum Volatility, Dividend Yield, and Value all have had positive excess returns in the US, as well as EAFE regions.

Based on a composite of the intrinsic valuation of all the stocks that trade on U.S. exchanges, the broad U.S. stock market is trading at a price/fair value of 0.83 times. Small-cap stocks are trading at the greatest discount to fair value at 0.68 as of July 1st. Considering the core category is closest to fair value, the best positioning for investors is a barbell portfolio between growth and value. The U.S. equity market is undervalued. It is not the time to be reducing equity exposures but add cautiously in companies with dominate market positions.

Quarterly Market Performance Barometer

Equities	Q2 2022	Q1 2022	2022 YTD
			Performance %
U.S. Market	-16.85	-5.33	-21.28
Value	-9.44	2.35	-7.31
Growth	-25.33	-11.97	-34.26
Developed Markets ex-US	-14.90	-5.17	-19.30
Emerging Markets	-11.59	-5.90	-16.81

Fixed Income			
U.S. Core Bond	-4.50	-6.00	-10.23
U.S. Treasury Bond	-3.65	-5.50	-8.95
U.S. High Yield Bond	-9.90	-4.53	-13.98
TIPS	-6.25	-2.44	-8.53
10+ Year Treasury Bond	-11.58	-10.49	-20.86

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

Equity Markets

Stocks took a hit as the market reassessed the potential of the Federal Reserve Open Market Committee's (FOMC) more aggressive interest rate hikes. This was compounded by Russia an unprecedented attack on the Ukraine.

The Morningstar US Market Index lost 16.9% in the second quarter, heading into mid-year with a 21.3% loss YTD. The Morningstar US Growth Index lost 25.3% in the quarter, its worst performance since the financial crisis in 2008. Meanwhile, Morningstar's US Value Index fell 9.4% for the quarter, bolstered by Large Cap Healthcare companies such as Pfizer (PFE), which rose 2.1%, and Bristol-Myers Squibb (BMY) up 6.2%.

U.S. Equity Style Box Performance

Q2 2022

	Value	Blend	Growth
Large	-8.16	-15.55	-29.81
Mid	-12.65	-15.40	-21.33
Small	-12.78	-14.89	-22.41

2022 YTD

	Value	Blend	Growth
Large	-6.66	-20.61	-39.32
Mid	-8.41	-19.74	-33.93
Small	-11.21	-20.20	-32.79

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

U.S. Barometer

	Val	Core	Gwth
Lg	0.37	0.95	0.99
Mid	0.49	0.55	0.56
Sm	0.52	0.75	1.29

Aug 3 10:53 AM ADT

American multinational oil and gas company ExxonMobil (XOM) gained 9.2%. Tech giants Amazon and Tesla each lost about 35%. Nvidia (NVDA), which makes up 3.0% of the Morningstar US Large Growth Index, fell 44.4% for the quarter. Morningstar US Technology Index has dropped 29.8% and the Morningstar Consumer Cyclical Index is down 33.2%.

There is consolidation in some of the Consumer Discretionary Sector. Consumers are spending money on small luxury items. They trend downward in Bear markets. Volatility has compressed, suggesting a possible turning point. Despite the losses, stocks are still up an average of 9.7% per year over the last three years.

JPMorgan Chase chief global markets strategist Marko Kolanovic is upbeat on equity market prospects for the remainder of the year, writing that investor hawkishness has peaked and many S&P-listed stocks are now fairly valued. But the market may decline on earnings downgrades. Following the most recent quarter results, more than 70% of S&P 500 firms have issued negative guidance. This is above the 60% historic average. As a result, earnings expectations for the 2Q22 have declined from 5.9% to 4.3%. Most valuation metrics have come down and are now trading close to historical averages and in line with the long-term interest rate metrics.

DWS has an 18x target PE for the next twelve months, leading to a 4,200 June 2023. The S&P 500 target based on EPS estimates. It has 4000 as a reasonable immediate long-term attractive fair value and a S&P 500 EPS growth of about 7.5% with a 20x P/E ratio. The selloff in the stock market also had high levels of volatility. The quarter had 10 days when the market moved 2% or more from its two-day historic average between the years of 2019 and 2021. The coming months will be characterized sideways trading on markets.

In July, the U.S. equity market rebounded from its decline in the first half of the year. The S&P 500, which had fallen by -20.0% between January and June, rose by 9.2%. The S&P 500 Index is more than 8% above its mid-June lows and bond rates have retreated as market prices rose. This may be a pivot, or it might be a bear market bounce. The economic slowdown, high input costs, and falling real wages will all weigh on profitability. The US preliminary S&P Global US Composite Purchasing Managers Index registered an unexpected contraction in July.

Morningstar Sector Indexes

			Performance %
Cyclical	Q2 2022	Q1 2022	2022 YTD
Basic Materials	-17.53	-1.29	-18.59
Consumer Cyclical	-25.19	-10.66	-33.17
Financial Services	-17.13	-3.01	-19.62
Real Estate	-15.01	-6.22	-20.30
Sensitive			
Communication Services	-21.89	-12.20	-31.41
Energy	-5.96	38.47	30.21
Industrials	-15.24	-3.82	-18.48
Technology	-22.33	-9.66	-29.83
Defensive			
Consumer Defensive	-5.70	-1.31	-6.93
Healthcare	-7.07	-4.03	-10.82
Utilities	-5.07	4.48	-0.82

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

Morningstar Global Entertainment Sector containing companies in the movie, television, media, and movie theater businesses had losses, led by Walt Disney (DIS) and Netflix (NFLX). Basic Consumer Staples stocks like Dollar General (DG) and Monster Beverage (MNST) rallied from mid-March. Pharmaceutical giants posted gains with Eli Lilly (LLY) up 13.6%, and Merck (MRK) up 12%. Investors shifted to the larger, established winners of the vaccine race, led by Moderna as well as Pfizer and Johnson & Johnson (Russell 1000 biotech and pharmaceutical firms). US Healthcare is attractively valued with promising drug pipelines.

The Energy, Materials, Industrial, RE, and Consumer Discretionary (led by retailers) Sectors had the largest downside revisions for Q2 and the full year. Energy firms added substantial earnings and profitability. Energy ranks highly across the Valuation, Momentum, and Sentiment factors. Consumer Discretionary looks challenged across those quantitative metrics. The Housing Sector pressures may be easing as demand for homes overcome the higher interest rates. The four Cyclical sectors had upgrade to their 2Q22 EPS estimates over the last quarter.

Insurance firms are a defensive rate-sensitive option to navigate elevated volatility and higher rates. Three industry groupings fell 15% on average this year, the financial capital markets, and banks stocks subsectors. Insurance firms are only down an average 5%. It is a more defensive rate-sensitive subsector strategy It has positive correlation to interest rates and is a good rate hedge. Full-year 2022 EPS forecasts increased this year by +0.37%.

Real estate ranks high on earnings sentiment, with the largest and most numerous earnings upgrades for the full-year 2022. It had the highest profit margin of any sector (+36.4%) with 70% of the firms posting a year-over-year increase as of 1Q22. Some 75% of real estate firms either beat or met expectations on both earnings and revenue in the first quarter.

The Tech Sector is trading at a slight premium to the 20-year average intrinsic value. The Semiconductors Sector is backed by secular long-term tailwinds and is a bargain after recent declines. Based on the P/E ratio, the Semiconductor industry is trading at discounts of 13% and 9% respectively relative to its 20-year average. Twelve-month growth forecasts for semiconductor stocks were revised higher by 11% this year, compared to 3.6% and 4.0% for the S&P 500 Index and tech sector, respectively. Analysts expect 21% growth over the next three to five years in semiconductors, compared to just 13% and 15% for the market and broader tech sector, respectively. The SPDR Semiconductor ETF is XSD.

International Equities

There is still a reasonable degree of momentum in the European economy. The Services Sector accounts for the bulk of employment and economic output in the Eurozone and includes finance, retail and tourism. France's government has cut its 2022 economic growth forecast from 4% to 2.5%. Consumer spending in the country is falling in response to higher food and energy costs. Gross domestic product (GDP) growth in the EU is expected to settle in the range of 2.5% to 3% this year. That is expansary vis-à-vis the EU's average GDP growth rate over the past decade of roughly 1%.

The Euro is approaching a 20-year low against the US dollar. Japan's yen and the Swiss franc are also falling against the dollar, while the dollar-denominated price of gold has declined. As Japan's digital infrastructure improves it can play a bigger and more important role in the future. However, the strength of the U.S. dollar will increase inflation overseas impacting the Yen as well.

The Italian government had another crisis. Prime Minister Draghi has resigned. Yet, Italy remains one of Europe's manufacturing hubs. It's Banking Sector has cleared non-performing loans. Italy has suffered the fate of many emerging economies that peg their currency to a "hard" currency while accumulating rising current account deficits. The Euro is less an integrated currency than a regime of fixed exchange rates controls between countries with a common currency, but individual economic and fiscal policies and fragmented labor or banking markets.

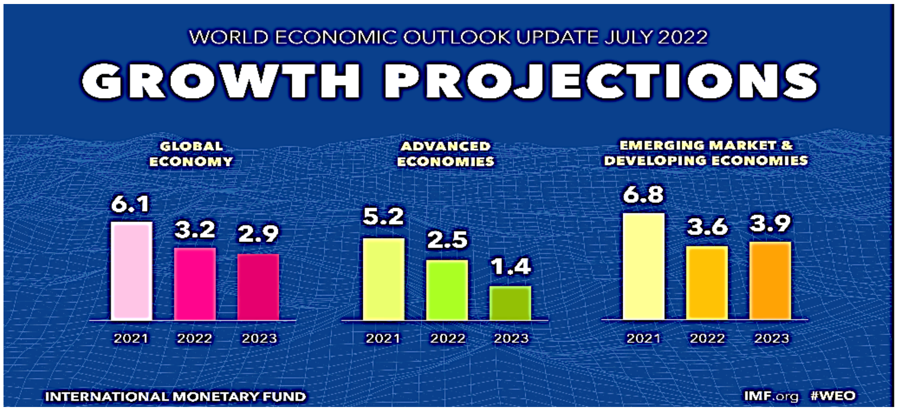
The market for Italian Credit Default Swaps (CDS) are priced for the risk that this political turmoil will spark Italy's exit from the EU. CDSs written after the 2014 EU crisis are trading at their highest market price to-date. Germany's Dax index has been hit particularly hard in recent months but may have bottomed. The spread between German and Italian 10-year bonds is higher than 200 basis points, which is 2% points.

The European Central Bank increased eurozone interest rates by 50 basis points, its first increase in 11 years to dampen rising prices across the single-currency bloc. The European Central Bank shut down asset purchases in June and started raising interest rates. A further hike is expected in September. However, so called forward-guidance statements are no longer adhered to. Decisions are made on current data.

The Yen is approaching levels of weakness last seen in the summer of 1998. The latest sell-off came after the Bank of Japan (BoJ) reiterated its commitment to keep 10-year Japanese bond yields below of 0.25 percentage points. The Bank of England and even the Swiss National Bank raised interest rates in June. The European Central Bank followed suit in July.

A weaker Euro could undermine the ECB's goal of price stability. The major Central Banks could use coordinated action and FX intervention to stop the US dollar from strengthening further, speculates Seeking Alpha. Over the last year, the Euro has depreciated by more than 13% vis-à-vis the US dollar and around 6% in trade-weighted terms. This adds to inflation in the region.

The British Pound is under pressure as the Bank of England starts rates aimed at slowing the pace of inflation. The GBP will be tested if UK unilaterally pulls out of the Brexit trade deal on Northern Ireland and triggers a trade war. The Bank of England's Monetary Policy Committee voted 8-1 to raise its key interest rate by 50 basis points to 1.75%, to stave off inflation that could otherwise climb to 13% by the end of the year.



Emerging Markets

Emerging Market Equities are now trading at a 40% P/E-ratio discount to the S&P 500. The MSCI Emerging Markets index retreated by over 30%, with the US and Euro down by 20%. It may be a good entry point. EM is expected to have 8% returns per annum over the next decade, according to McKinsey. The IMF predicts economic growth for the Emerging Markets in 2022 of 3.6%, nearly half of the 2021 amount of 6.8%. The GDP growth remains constrained at 3.9% in 2023. This exceeds the 2.5% and 1.4% forecast for the advanced economies in 2022 and 2023 respectively.

China is the only region up at the end of 2Q22. Chinese authorities issued measures to jumpstart the economy including easing some Covid restrictions. The Morningstar China Index ended the quarter up 8.5%, which followed a decline of 13% in the first quarter. GDP is expected to slow from 8% in 2021 to only 3.3% this year and 4.6% in 2023. Adding to the challenges, Chinese homebuyers are boycotting mortgage payments, deepening the RE crisis that started last year. The Taiwan threat has also escalated lately.

India is projected to lead GDP growth in 2021, 2022, and 2023, with 8.7%, 7.4%, and 6.1%. The Reserve Bank of India is looking to slow the decline of the Rupee by rolling over some of its foreign-exchange derivative contracts. The Rupee price drop is reportedly due to the pending expiry of $5.5 billion worth of Dollar-Rupee futures. Such currency declines is exasperating the inflation of food and fuel.

Russia's Ruble reached an exchange rate of 53.75 per US dollar on the Moscow Exchange Tuesday, its highest level since May 2015. This strengthening and oil prices have buoyed the Russian economy. Whereas the 2021 GDP was 4.7%, the economy shrank by -6% and again in 2023 with a 3.5%. Most investment managers have been removing Russia from their investments.

Fixed Income Market

Fixed Income markets posted the weakest start to a year for U.S. Treasuries in over 200 years, erasing $8 Trillion dollars since its peak according to DWS.

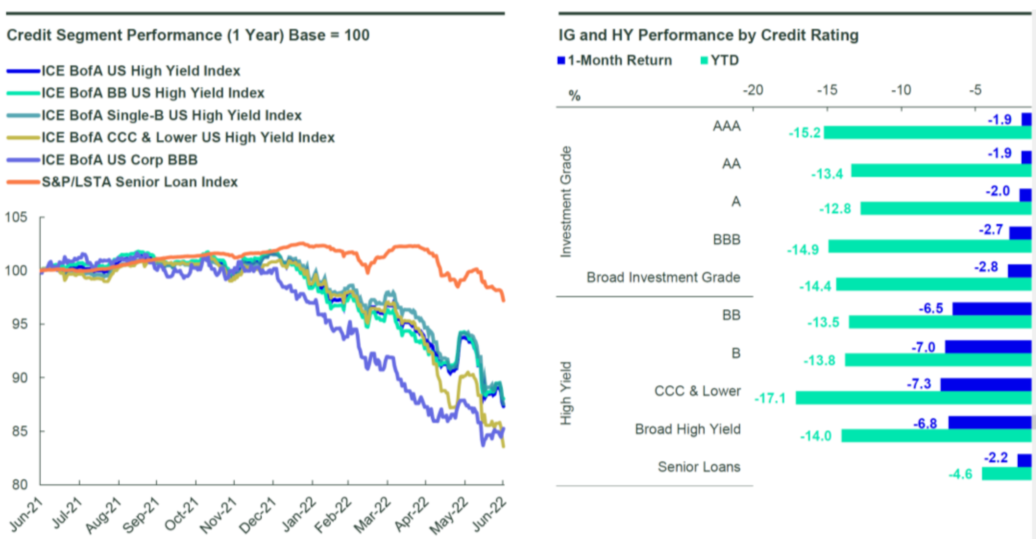
The return on bonds for the first six months of 2022 is the third worst since 1975. All 16 fixed bond sectors are down on the year. Morningstar Core Bond Index lost 4.5% in the second quarter. The broad bond market declined -10.4% YTD. It creates an attractive entry point for new money.

The US FOMC raised rates twice during the quarter. There was a 25 bps hike in March, then a 50 bps boost in May, and a 75 bps increase in June. The recent 75 bps (0.75 % points) rate hike pushes the Fed Funds rate target to the range of 2.25% - 2.50%. That is near the Fed's estimate of neutral rates, reflecting risk-free rate without inflation. Investors are pricing in another 100 bps of hikes over the last three meetings of 2022. Nuveen expects the 10-year Treasury yields to rise further, but do not expect sharp moves beyond 3.0% to 3.5%. The housing market weakened and business fixed investment fell after the initial hikes this year.

Chairman Powell and his Board of Governors see the healthy labor market as a sign the U.S. economy is sound. Since the June meeting there have been declines in commodity prices and broad-based softening in economic data. If the US economy slows significantly, the yield on the 10-year Treasury bond could drop back to 2% within six to 12 months, according to Bank of America.

As anticipated, the European Central Bank (ECB) raised interest rates on July 21st for the first time in more than a decade to combat surging prices. The ECB raised policy rate by 50 bps when markets had expected only 25 bps. The UK hiked 50 bps, the first tie since 1995. The market expects higher rates from Central Banks within the Eurozone, the United Kingdom, Australia and Canada in 2022, says SSGA.

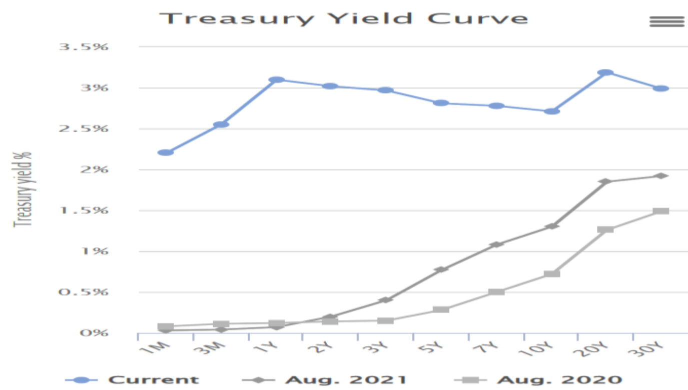
Fixed income was negative across the board as rates rose, long duration and ex-US exposures were hit the hardest. The entire yield curve moved higher in June but flattened as the short end rose more than the long end. The yield curve briefly inverted in June for the second time since 2019, prompted by expected inflation along with downside revisions to growth. Credit spreads are the additional yield expected for riskier bond. The spread continued to widen in June, beyond the long-term averages. Among all credit segments, Floating Rate Senior Loans had the strongest performance over the past year.



Source: Bloomberg Finance, L.P., BofA Merrill Lynch, as of June 30, 2022. **Past performance is not a reliable indicator of future performance. Performance of an index is not illustrative of any particular investment. It is not possible to invest directly in an index.**

Headwinds for bonds are likely to intensify, not slow, this Summer, putting further pressure on Fixed Income markets. US Investment-Grade (IG) bonds and High Yield Corporates are yielding 4.74% and 8.65%. Interest income typically drives more than 95% of bond market returns rather than price appreciation. High-Income Floating-rate Senior Loans currently yield 7.3% and without the duration risk. Senior loans have only about 0.25 years of duration. Increased default expectations coincided with a decline in credit rating upgrades for High Yield bonds. There were nearly 1.5 upgrades per downgrade at the beginning of the year. Now, it is reversed with more downgrades.

Short-term yields reflect monetary policy. Longer-term bonds reflect future growth and inflation expectations. Traditional US 10-year minus US 2-year rate has inverted three times in the past 90 days. The first two were a result of spikes in the US 2-year yields. Higher rates benefit floating-rate assets like Senior Loans, as well as benefiting shorter-duration markets, like High Yield and select Emerging Markets Bonds.



Yields rose across the bond market. The U.S. Treasury 10-year note climbed to nearly 3.5% in mid-June to finish the quarter at 3.2%. That was up from 2.3% at the end of March and from 1.5% at the beginning of the year. Meanwhile, the yield on the U.S. Treasury 2-year note finished within 0.1% of the 10-year at 3.1%, up from 2.28% at the end of March and 0.73% at the end of December.

Morningstar Bond Indexes

			Performance %
Core Bond	**Q2 2022**	**Q1 2022**	**2022 YTD**
Core Bond	-4.50	-6.00	-10.23
Sector			
U.S. Treasuries	-3.65	-5.50	-8.95
Corporate	-6.94	-7.88	-14.27
High Yield	-9.90	-4.53	-13.98
Mortgage	-3.96	-5.03	-8.79
Maturity			
Short-Term Core	-1.16	-3.62	-4.74
Intermediate Core	-4.24	-5.98	-9.97
Long-Term Core	-12.12	-11.26	-22.02
Inflation-Protected			
TIPS	-6.25	-2.44	-8.53
Global Sovereign			
Global Treasuries	-9.86	-6.98	-16.16
Global ex-US Treasuries	-12.90	-7.54	-19.47
Emerging Market			
Composite	-8.79	-9.36	-17.33
Sovereign	-11.36	-8.27	-18.69
Corporate	-6.93	-10.13	-16.36

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

The Morningstar US 10+ Year Core Bond Index fell 12.1% and the Morningstar US 10+ Year Treasury Bond index lost 11.6%. Losses were posted across the globe, with the Morningstar Emerging Markets Sovereign Bond Index down 11.4% and the Morningstar Global ex-US Treasuries Index 12.9% lower.

Short-duration Senior Loans and Asset-Backed Securities fared best. U.S. TIPS benefited from increasing rates. Emerging Markets Debt (EMD) were hardest hit because of its longer duration profile and those regions hardest hit by the war. EMD denominated in local dollars is down 14%, with nearly 60% of the negative returns driven by currency effects.

Other Assets

Commodities were the leaders through the first half of 2022. They have given up some of the gains in July as economic sentiment and manufacturing levels declined. Copper seen as a bellwether for economic activity declined 20.5% and aluminum fell 30.4% on technical issues stemming from Russia.

The S&P Goldman Sachs Commodity Index (GSCI) held onto a 36% gain YTD despite sentiment becoming bearish. Reports of a deal between Russia and Ukraine to ship grain stock through the Black Sea eased concerns of critical food shortages. None-the-less, the S&P GSCI-Grains ended the month down 3.4%.

Energy was mixed, with most petro-based commodities off their highs while retaning nearly 60% YTD. Petro then declined 3% in July, while Natural Gas rose 59% in July. Crude Oil prices may drop to $80 per barrel if a deal with Iran is inked as expected. Oil futures out four or five years have prices in a range of $65-$75 as compared to $110 today. The Industry Classification Benchmarks(ICB) for Oil and Gas was renamed to Energy, with subsectors of Oil, Gas and Coal or Alternative Energy.

The S&P GSCI Industrial Metals subsector was flat last month, while Precious Metals lost 2.2%. Gold bullion maintained its value and the lowest correlation to the S&P 500 Index. Gold held the second-lowest realized volatility. US Quantitative Tightening started on June 1 with the US no longer spending $47.5 billion per month buying US fixed income securities. This will reduce market liquidity which supports gold prices. The drop in industrial activity pushed silver prices lower in the month. Silver supplies dropped in 2021 and Metals Focus analysts predict another sizeable deficit of 72 million ounces in 2022. The S&P GSCI Copper subsector was down 3.9% in July, signs are the price is stabilizating.

Rare Earth metals are in high demand. Electronic Vehicles (EV) demand pushed lithium prices up nearly 550% by the beginning of March 2022. The price for lithium carbonate price passed $75,000 per metric ton and lithium hydroxide exceeded $65,000 per metric ton, stellar as compared with a five-year average of around $14,500 per metric ton.

Real Estate Investment Trusts (REITs) delivered the highest Sharpe Ratio of all asset classes outside of Fixed Income according to Real Estate Information Service Ltd (RESI). Senior-level real estate investors expect a rise in distressed assets, up 15% year over year as a result of higher borrowing costs, according to Auxadi. Investors expect more capital commitments into the commercial sectors that have safer cashflows ie medical facilities, self-storage and industrial buildings. Some 79% of those surveyed noted the rising cost of debt was up 22% from 2021, a huge year-on-year hike. Two-thirds (69%) of RE investors expect the residential sector to post the strongest gains over the next two years. Exceeding that of central business district-located offices (56%), and 'food-anchored' retail parks (49%).

The Residential Sector had the biggest post-pandemic bounce in sentiment over the past 12 months. In 2021 the Logistics Sector registered the biggest drop in performance expectations, according to JLL research. It represents a quarter of all commercial real estate investments globally. 'Food-anchored' retail parks had a substantial gain in investor sentiment, as consumer resume instore shopping. The high street retail sector was one of the biggest casualties of Covid-19. It is likely to re-attract more capital over the next few years. The Logistics Sector will continue to benefit from the rise in e-commerce and tighter supply chain management. However valuations have risen.

The price of Bitcoin fell 56.5%. It started the quarter at $46,282, then prices dipped below $20,000 to $19,785 in June, back to the level from December 2020. The second-largest cryptocurrency by market cap, Ethereum, lost 67.5% in 2Q22. Losses of this size have not been seen since the first Bitcoin began trading in 2014. One large crypto lenders halted withdrawals. Crypto-focused businesses laid off employees and even Stablecoins failed. Stablecoins are pegged to a currency like the USD to avoid the volatility common to cryptocurrencies. The parent company Luna of popular Stablecoin Terra had a meltdown in value from its $116 high on April 6 to a low of $0.008 on May 12. In September 2021, China banned cryptocurrency mining after discovering that Bitcoin miners were siphoning electricity from state-owned public institutions.

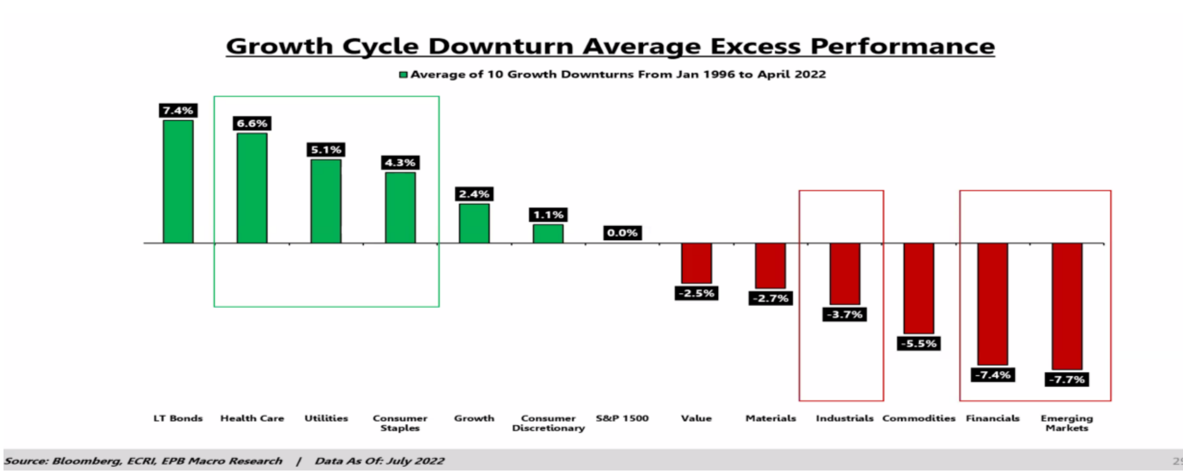
Asset Allocation

The first quarter presented a major structural turning point in the investment landscape in 40 years. -State Street

Changes in asset types as weights need to change with this turning point. However, the turn was anticipated and reflected recommeded changes earlier this year. Here are some keys for 2022.

The focus on lower duration strategies may be one way to mitigate the potential impact of more volatility and rate hikes. Trim duration while retaining some yield upside. Duration is a measure of the sensitivity of the price of a security to a change in interest rates. This impacts bond as well as stock prices. An increase in inflation and nominal interest rates to where real positive real rates would threaten the risk/reward advantage currently attributable to equities. The allocation to bonds remains low at this point.

Term duration while retaining better yield. Investment-grade floating rate notes are an option to manage duration. Bond yields have become much more attractive after a substantial increase in interest rates, meaning the price is lower and could be added back. A switch from Treasury Inflation Protected Securities (TIPs) to select long-term bonds maybe in order.



As far as Sector weights, DWS have an overweight in Healthcare and is positive on the Energy sector due to the structural shortage. Other Defense Sectors are fully to over-priced like Telecoms, Staples, and Utilities. Commodities are losing their luster with signs the global economy is slowing. The tilt will shift from Metals to Agriculture, with Energy continuing as beneficiary in the interim.

Shipping stocks stand to see superior growth potential in the future compared to average stocks. So an allocation to Transport remains. A wave of imports is creating more backlogs in ports around Europe and the United States, inter shipping and delivery logistics are valuable for faster routes to offload containers and store inventory. Shipping stocks stand to see superior growth potential in the future compared to average stocks. So an allocation to Transport remains.

For Real Estate, strong industrial and apartment return performance is anticipated, but at a lower margin than 2021 given rate pressures according to USB. Expect deteriorating performance for office and a gradual strengthening in retail performance through 2022. The emphasis is on residential. European rental housing sector and logistics assets located in strategic distribution hubs continuing to benefit from structural trends.

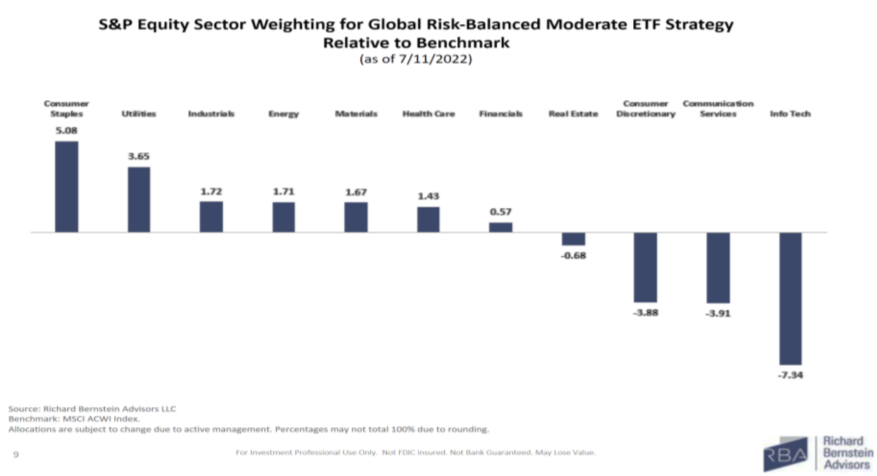
During 2Q22 and so far in 2022, Minimum Volatility, Dividend Yield, and Value all have had positive excess returns in the US as well as EAFE regions. Those investment Factors tend to lead during periods of economic contraction.

STYLE FACTOR EXCESS RETURNS ACROSS BUSINESS CYCLES

	ENTIRE PERIOD	CONTRACTION	RECOVERY	EXPANSION	SLOWDOWN
Small Size	1.3%	-1.9%	14.5%	5.6%	-2.3%
High Value	2.7%	3.9%	6.6%	3.2%	1.0%
High Momentum	1.9%	-1.2%	-4.0%	2.9%	4.6%
Low Volatility	0.5%	7.0%	-4.8%	-7.5%	2.6%
High Div. Yield	1.0%	3.3%	1.4%	-1.6%	1.4%
High Quality	3.1%	5.5%	4.8%	1.1%	2.5%
Number of Observations	*506*	*93*	*52*	*160*	*201*

Source: Northern Trust Asset Management, Conference Board for business cycle indicator data, Bloomberg. Entire period = December 1978 – Feb 2021. Data for Russell 3000 Index. For illustrative purposes only. Factor returns are excess returns of the top factor quintile of the Russell 3000. Geometric averages used for entire period. For regime analysis, annual averages are displayed. Past performance is no guarantee of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index.

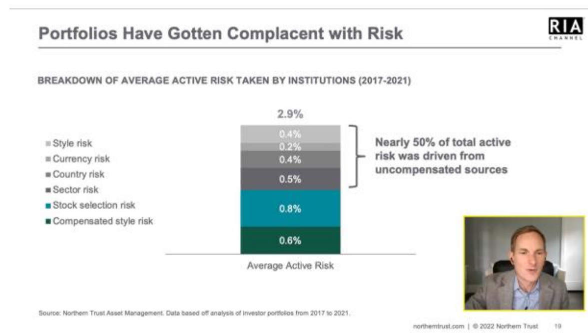
The recommended asset allocation strategy according to Richard Bernstein Advisors LLC (RBA) emphasizes the defensive sectors of Consumer Staples, whilst minimizing the Cyclicals including Communication Services and Information Technology. The following chart is an overweight/underweight from the market weight. The tilt is more Large Cap vs Small Cap.



SSL uses a 'Smart Beta' strategy with factor 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 attached SSL 3Q2022 Model Portfolio.

Conclusion - *MEASURE AND MANAGE THE RISK*

Focus on compensated risks of Quality, Value, Dividend, Size, ESG or Momentum to generate excess returns. Avoid more uncompensated risk categories including those in the grey boxes below.



Some of the risks to keep in the cross-hairs in the environmental risks. The major issues are Greenhouse Gases or Carbon Emissions as well as water. Both are ubiquidious to the plant and frequently overlooked. One way to manage Carbon Emmissions is through trading carbon credits.

Carbon futures contracts will be traded on the European Energy Exchange as early as this year. Contracts will comply with the carbon offset scheme set up by the International Civil Aviation Organization. The Ireland Central Bank Governor Gabriel Makhlouf said Climate Risk Unit will educate market participants in voluntary carbon markets to better understand the potential role of the official sector. The Barclay's iPath Series B Carbon Exchanged Traded Note GRN invests in the most liquid carbon-related crediting plans.

Risk of water shortages could close companies involved in the manufacturing of chemicals, paper, and steel; those extracting oil and gas, coal and metals, and those generating power. There are investment approaches for water, such as Fidelity® Water Sustainability FLOWXInvestments in strategies to sustain the planet will pay-off economically and strategically for the future of the planet.

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.*

3Q22 SSL Model Portfolio

as of 5-Aug-22

Green - Add Red - Remove ETFs

15.00%	**FIXED INCOME**
0.00%	Cash
5.00%	VNLA Ultrashort (Intl) Bd A-Credit 42%US 78%Corp 0.68Dur -1.48%Ret 1.72%Yld 5s Neu
3.00%	SPIP (3-5YRS) TIPS 100%Gov 100%AAA 7.39Dur -5.81%Ret 6.58%yld 3s BRN
5.00%	SRLN - GSO Senior Loan ETF B+Crd 89%Corp 61%B 0.9Dur-5.9%Ret 4.79%Yld 4sNeu
2.00%	VGIT Vanguard 3-10 Intmdt-Term Trs AAA 5.3Dur -8.95%Ret 1.25%Yld 4sSlv
0.00%	CEMB iShares JPM em BBB- 91%Corp 4.75Dur -15.39%Ret 4.11%Yld,5sSlv
0.00%	CWB SPDR Barclays Convert Sec 32%Tech 17%CC 14%Comm NotRated 1.98Dur -24%Ret
15.00%	Subtotal
80.00%	**EQUITY**
0.00%	OMFL Invesco Rus1000 Dyno Mltfct B- 20%Tech 19%HC 15%CD-10.862%Ret 1.24%Yld 5s
10.00%	QUAL iShares MSCI USA Quality Factor ETF B+ 23%Tech 15FS 14%HC -15%Ret 1.34%Yld 3s
0.00%	MTUM iShares MSCI USA Mometum B+ 30%HC 19% CD -24.7%Ret 1.07%Yld 2BRZ LG
5.00%	DEUS Xtrackers Russell(1000) US Multifactor b 18%Tech 16%Ind 13%FS -8.4%Ret 1.55%Yl
0.00%	VSS Vanguard FTSE All-Wld ex-US SmCp B- 40Asia/22Eur 19%Ind 14%Tech 12%CC -22%Re
5.00%	SMLF iShares MSCI USA Small-Cap Mltfctr B- 19%Tech 18%HC 16%FS -13.5%Ret 1.25%Yld
2.00%	*XHB SPDR Homebuilders B- 50%CC 50%Ind -25%Ret 0.81%Yld 3sGLD MB Q*
2.00%	*XTN SP S&P Transportation ETF C+ 95%Ind 5%Tech -20%Ret 0.80%Yld 2sSlv SMC*
2.00%	*XLF Financial Select Sector SPDR® C+ 13%Ret 1.96%Yld 4sBrn LV*
5.00%	*XLV SPDR Health Care Sel A- 19%Ret 1.46%Yld 5sSlv LVB*
3.00%	*XLY SDPR Consumer Discretionary Sel C+ -13%Ret 0.71%Yld 4Brz LGrw LV*
8.00%	*XLP SDPR Consumer Staples Select Sector A- 99%ConD* ***5.8%%Re****t 2.42%Yld 3sBrz LVB*
5.00%	SCZ iShares MSCI EAFE Small-Cap C- 22%Ind 13%ConC 30%Jap 15%UK -23%Ret 4.4%Yld 4Brz MB
0.00%	FKU First Trust UK AlphaDEX®C 24%FS 20%ConC% -25%Ret 4.74%Yld NR MV
0.00%	EFAV iShares MSCI Min Vol EAFE B 19%HC 17%CD 12%FS 27%Jap 15%Swz -14%Ret 2.65%
7.00%	IQLT iShares MSCI Intl Quality Factor B 20%FS 13% Ind 12%HC 14%UK 14%UK 13%Swz-20
7.00%	EMGF iShare Multi-Factor EEM C 20%Tech 16%FS 15%CC 34%China 20%18%India -18%Re
5.00%	FFR - First Trust DM RE B 36%xUS -15%Ret 3.77%Yld 3Slv MB LQ
4.00%	DBE Invesco DB Energy ETF B 27%Lte 30%Crd 20%Petro 13%Gas LPG 68%Ret 0%Yld NoRa
3.00%	DBB Invesco Base Metals Fut B 0%xUS 107%Zinc 50%Alum 44%Cop -4%Ret 0%Yld 0s No
0.00%	COMT iShares ComDynoRoll Strategy A 65%Enr 17%Agr 9%Ind %%Meat 4%Prec 21%Ret 14%Yld 3Glo
4.00%	FTGC First Trust Global Tact Cmdty Strat 36%Agr 25%Enr 15%Ind 10% Prec 21%Ret 6.2%Y
3.00%	FLOWX Fidelity Water Sustainbility 58%Ind 23%Util 11%Tech -14%Ret 0%yld 0sBrx
5.00%	GRN iPath® SeriesB Carbon ETN 56%Ret 0%Yld Nr
85.00%	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.