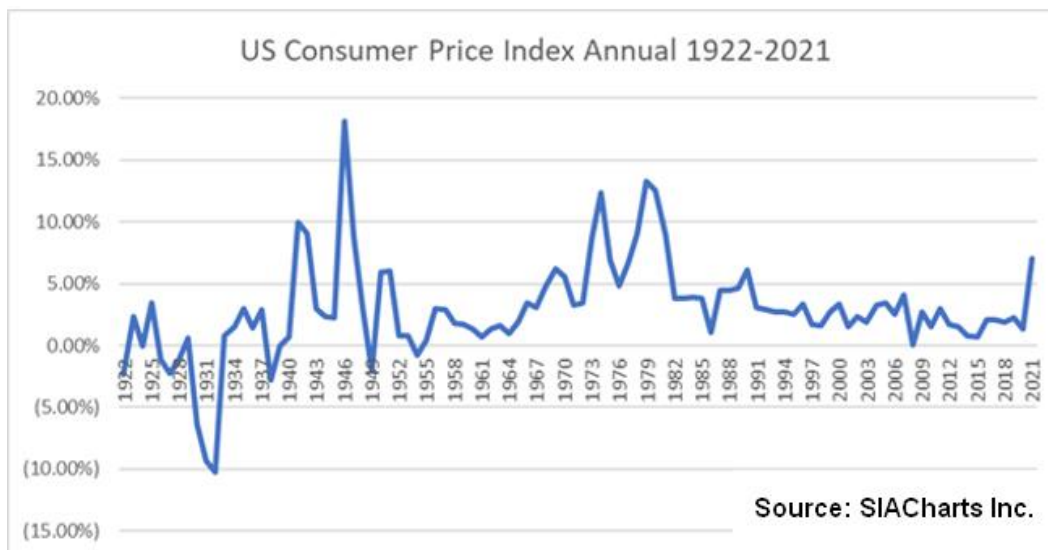


SIACHarts Quarterly Outlook & Chartbook – Spring 2022

What Could the End of the 40-Year Downtrend in Interest Rates Mean for Different Asset Classes?

There were a lot of new developments in the first quarter of 2022 that had an impact in varying ways on investor sentiment, including the start of a war in Ukraine, accompanied by new rounds of sanctions, commodity prices spikes and selloffs, new rounds of COVID lockdowns in China, political and financial unrest around the world, and much more. So let's dive into it.



The biggest potential development for investors, however, could be the realization by central banks around the world that high inflation is here to stay unless they do something serious about

it and fast. Not only did the Bank of Canada and the Federal Reserve Board start raising interest rates in the winter, the tone of their talk shifted dramatically from supporting the economy to fighting inflation. Both banks hinted they may become more aggressively hawkish and soon, not only potentially raising interest rates faster but also shrinking their balance sheets (Quantitative Tightening).

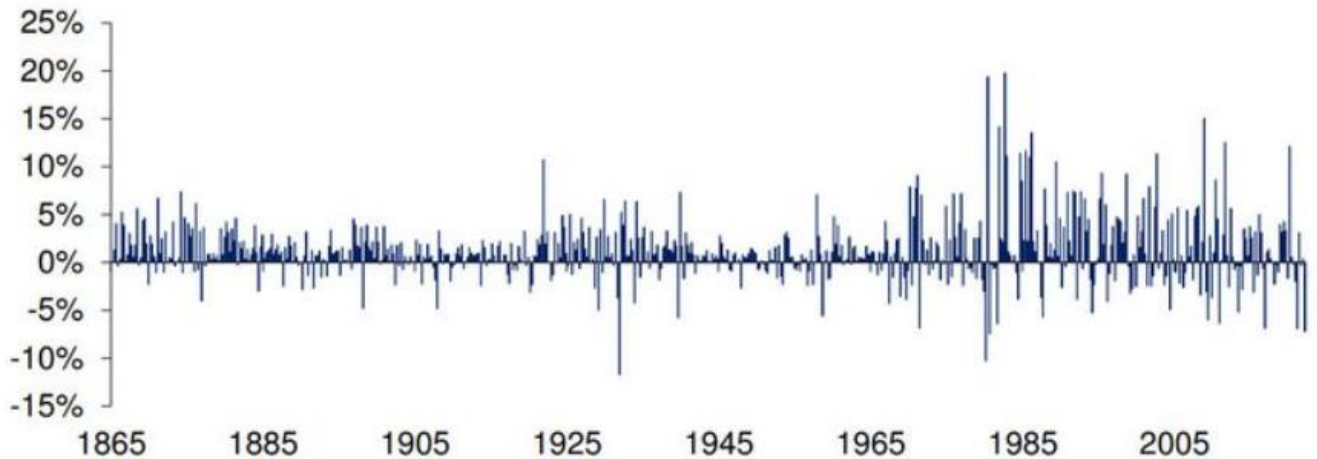
The key turning point for investors came in March, when Fed Governor and Vice-Chair Nomine Lael Brainard, who had been one of the most dovish Fed members during her tenure at the US central bank, changed her tune to a much more hawkish stance indicating central bankers have figured out they have fallen far behind inflation and need to catch up fast.

This quarter, we are going to change up the format a bit and focus on what this dramatic change in trend for interest rates along with some of the other recent developments could mean for different asset classes including Bonds, Stocks, Commodities, and Currencies over the short and long terms.

The Worst Quarter in Four Decades for Bonds (and the Pain may be just Beginning)

Toward the end of March arrived, we started to see a lot of headlines in the business press screaming that Q1 was the worst quarter in forty years for bonds.

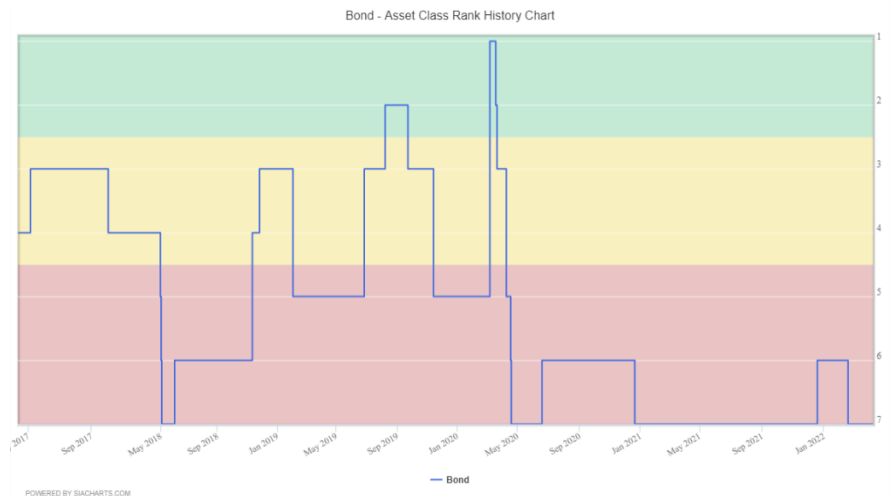
Quarterly US 10yr Treasury total return series - Q1 '22 one of the worst quarters on record.

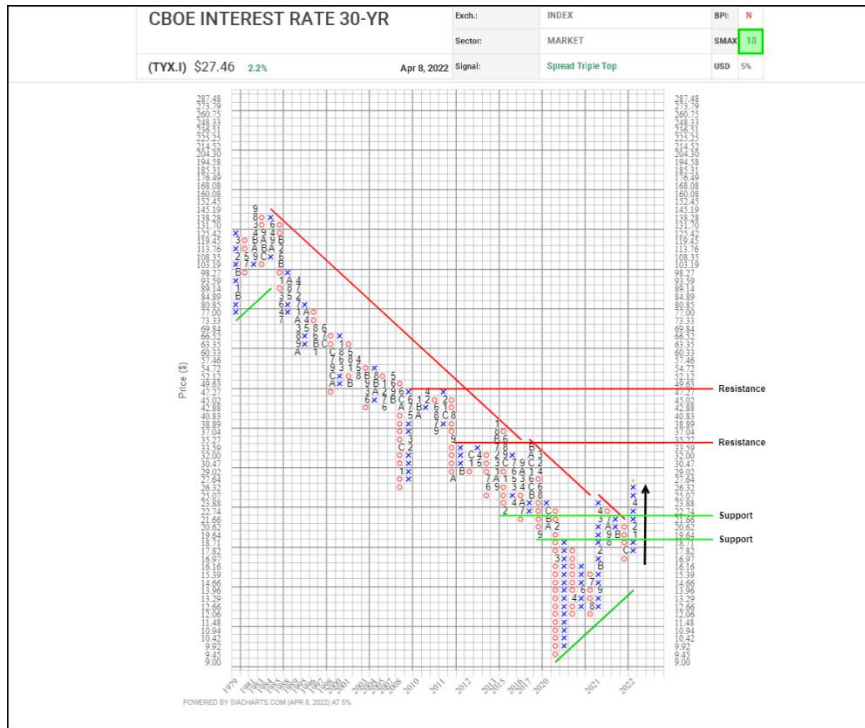


Source : Bloomberg Finance LP, Deutsche Bank

SOURCES: BLOOMBERG, DEUTSCHE BANK

This may not have been as big a shock to SIACHarts subscribers, as Bonds have been ranked last or in the bottom two positions since April of 2020 in the SIA Asset Class Rankings and have been an area to underweight or stay away from as much as possible according to client's risk profiles. Bonds currently have a bearish SMAX score of 0 out of 10 indicating weakness relative to all asset classes.





The CBOE 30-year interest rate chart has broken out of a four-decade downtrend.

This breakout represents a major change in sentiment toward bonds. Through the ups and downs of various cycles over forty years, bonds have essentially had the wind at their back from falling inflation, falling interest rates and dovish central banks.

This breakout and the emergence of a new upward trend for interest rates indicates that bonds may now have the wind in their face.

This change in sentiment can clearly be seen in the iShares US 20+year Treasury Bond ETF (TLT). An uptrend of over fifteen years peaked and saw initial cracks appear in 2020.

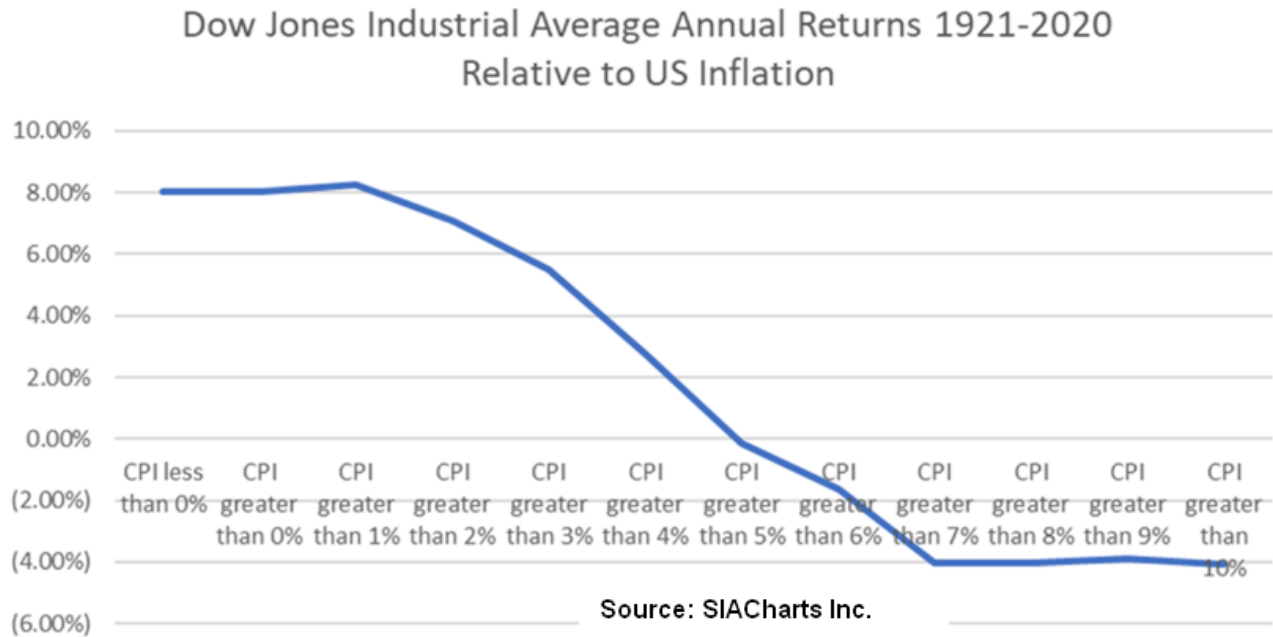
This year, it has become clearer that accumulation has changed to distribution. This winter, at a time when increased political turmoil overseas would have historically sparked a stampede into US bonds and pushed up the price was overwhelmed by interest rate related selling. TLT snapped a multi-year uptrend and completed a bearish Spread Quadruple Bottom breakdown.

In other words, investors still thinking they can hide from turmoil in bonds may be in for some very unpleasant surprises in the coming months and years.



Warning Signs for US Equity, International Equity Struggles, Resource Markets Outperform

1) High Inflation has Historically been Trouble for Stock Markets



In times of high inflation, it is important to remember this chart showing over the last 100 years the Dow Jones Industrial Average has historically done poorly when inflation rises and has averaged negative returns in years when the US Consumer Price Index has increased by more than about 6.0%. Many stocks/sectors may find the wind in their face along with bonds in a high inflation / rising interest rate environment.

2) Homebuilder Downturn looks Similar to 2007-2008 and could be an Indicator of Trouble Ahead

The homebuilding sector has historically been particularly sensitive to swings in interest rates. Back in 2007, the homebuilders peaked six months ahead of the broad market and the sector continued to trend downward through 2008, leading equities into a bear market.

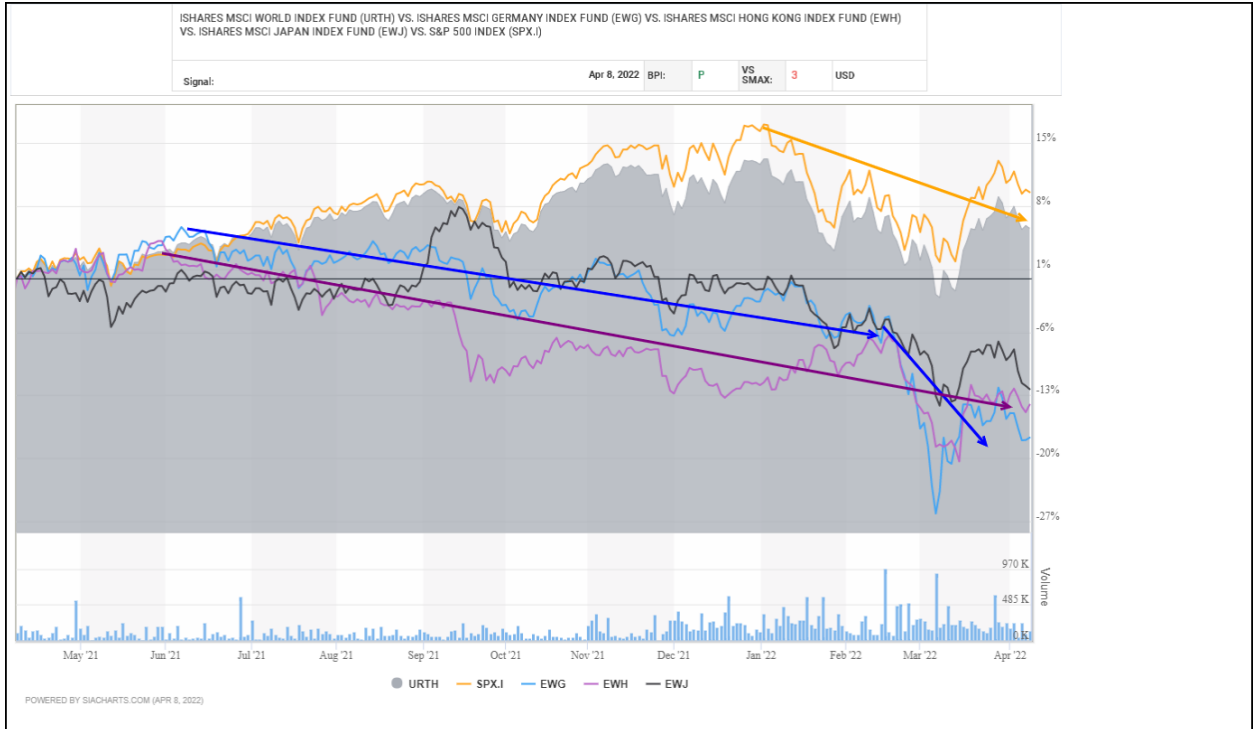


More recently, Homebuilders peaked at the end of 2021 and this year, they have been leading the S&P 500 down once again, while US traded interest rates have been spiking.



3) International Equity Markets have Underperformed the US Significantly in the Last Year

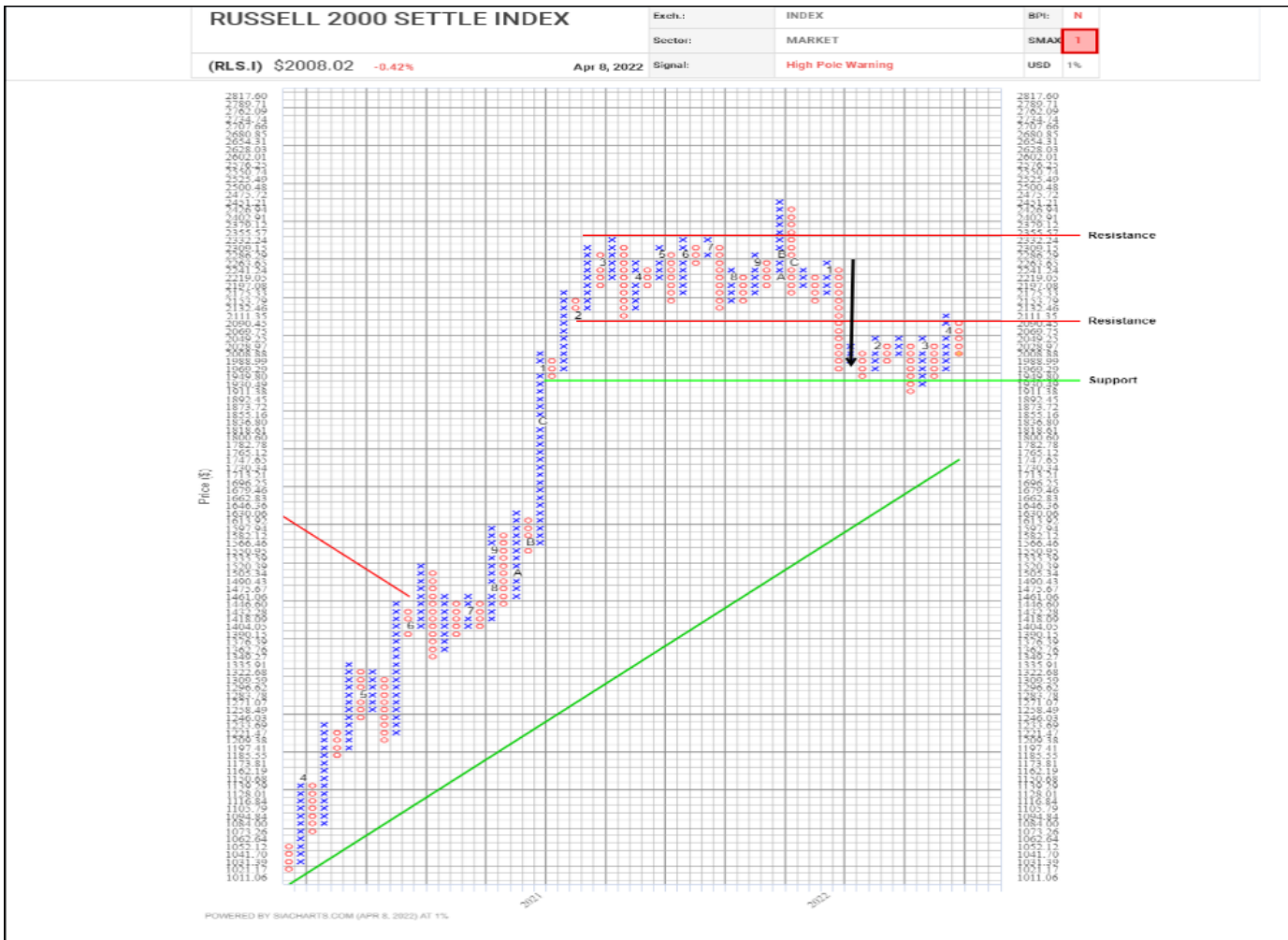
After the early 2022 downswing and rebound, the S&P 500 is still up about 8% from this time last year. In contrast, equities in Germany, Japan, and Hong Kong are down 15%-20% over the last year.



Historically large divergences in performance between US and International asset classes have been closed in one of two ways. Either the US acting like an engine and pulling International indices higher, or International indices acting like an anchor and eventually dragging the US down.

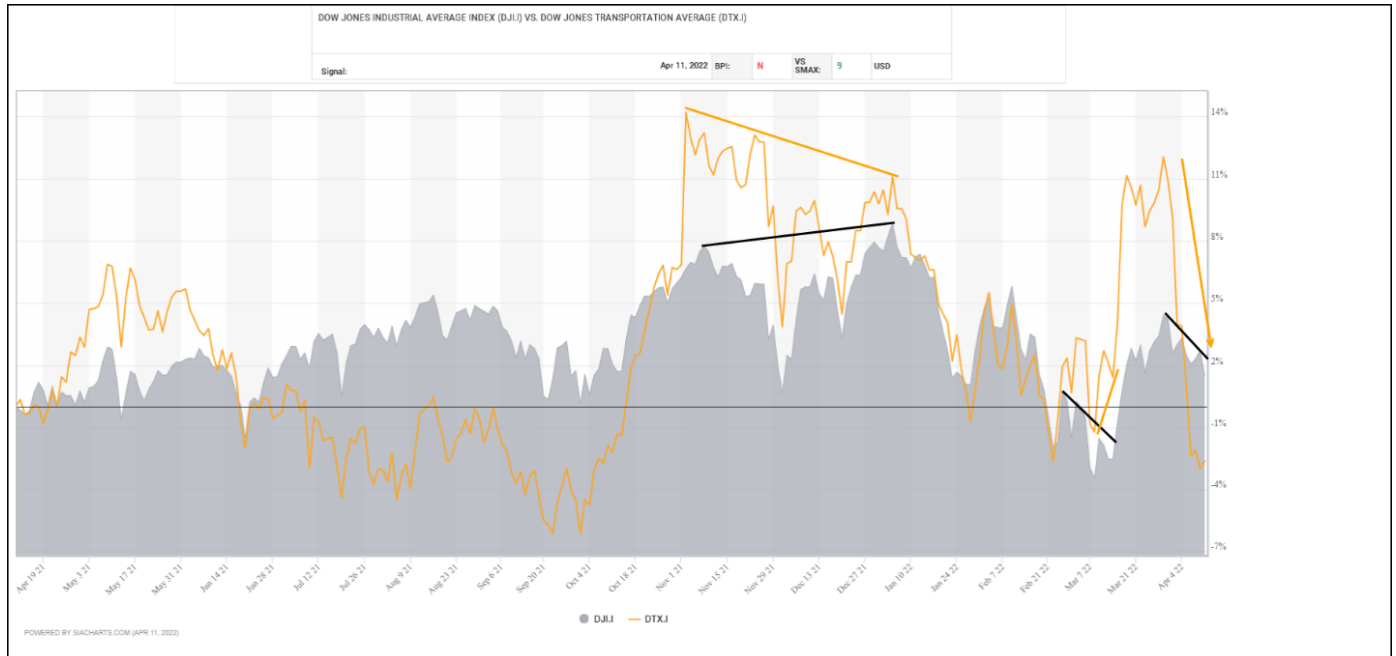
4) Decreasing Bullish Breadth: The Rebound in US Small Caps appears to be Ending

For a while in March, the rebound in US equities was picking up steam and breadth was strong. That has changed recently with the Russell 2000 Index turning back downward. This suggests the rally could be fading and investor confidence could be eroding with investors losing enthusiasm for small cap stocks or circling the wagons in large caps.



5) Dow Theory: Transports have Turned Sharply Downward

Dating back over a century to the writings of Charles Dow, investors have long looked at the relationship between the Dow Transports (orange) and Dow Industrials (gray) as an indicator of trend strength and potential trend changes.



In the last few months, the Dow Transports have been leading the Dow Industrials. The Transports turned downward first in late 2021, before the early 2022 selloff. In February, the Transports turned back upward before the March market bounce.

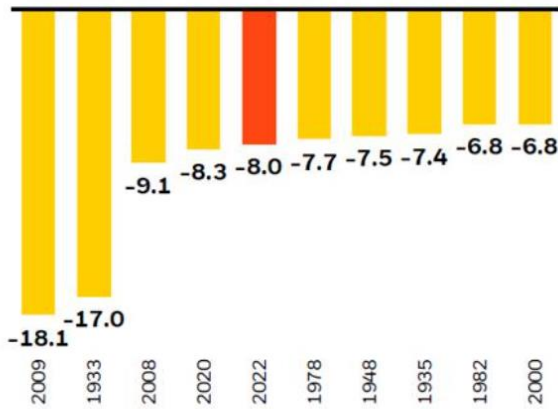
In recent days, the Transports have turned downward once again.

6) 2022 Had a Rough Start, Could It Bounce Back?

The chart and table below from Morningstar suggest that the combined January-February plunge was one of the worst two-month starts to the year in the last hundred years. The potentially good news is that in many of these cases, bears were washed out and US equities stormed back the rest of the year.

The potentially bad news is that in 2008, markets continued to decline throughout the year and into 2009 and we have noted above that the recent performance of homebuilding stocks has been eerily reminiscent of 2007-2008.

10 worst starts of the year for stocks
(1/1/26 – 2/28/22, total return for first two months of calendar year)



Returns after each "worst start"
(1/1/1926 – 2/28/22)

Year	First 2 months	Next 10 months
2009	-18.1	54.6
1933	-17.0	85.6
2008	-9.1	-30.7
2020	-8.3	29.1
2022	-8.0	?
1978	-7.7	15.4
1948	-7.5	14.1
1935	-7.4	59.4
1982	-6.8	30.5
2000	-6.8	-2.5
Avg.	-9.7	28.4

Source: Morningstar as of 2/28/22. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 2/28/22 and the IASBBI U.S. Lig Stock Tr USD Index from 1/1/26 to 3/4/57, unmanaged indexes that are generally considered representative of the U.S. stock market during each given time period. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You can not invest directly in the index.

Regardless of what happens, SIACHarts continues to track capital flows between asset classes which can provide insights into how investor sentiment and market trends are extending or changing.

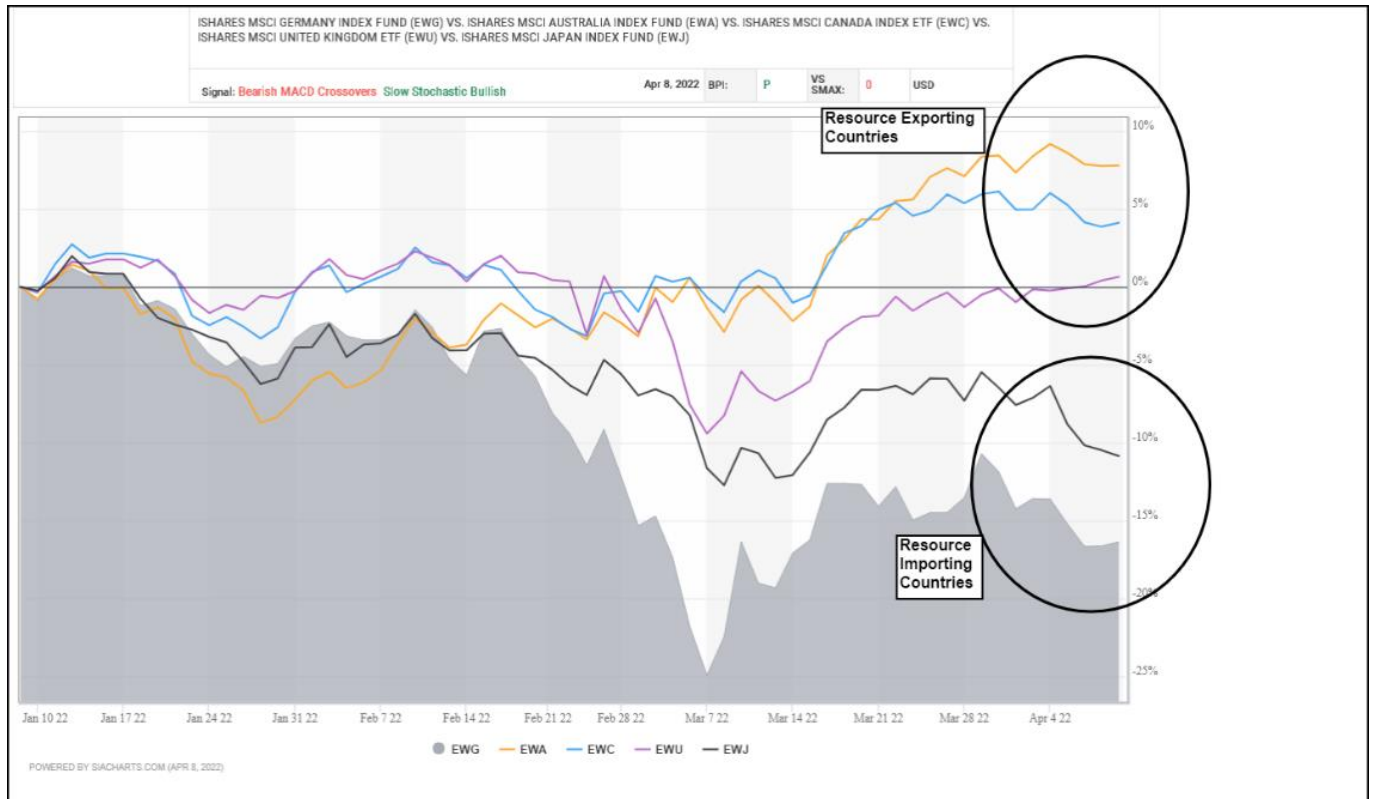
7) Energy Sensitive Indices Outperform their Peers

OIL, NOT BONDS
TOTAL RETURNS AFTER INFLATION, 1971-1981



Total returns in 'real' purchasing power terms.
SOURCES: NYU STERN, NATIONAL ASSOCIATION OF REITS, KENNETH FRENCH (TUCK SCHOOL OF BUSINESS, DARTMOUTH COLLEGE).

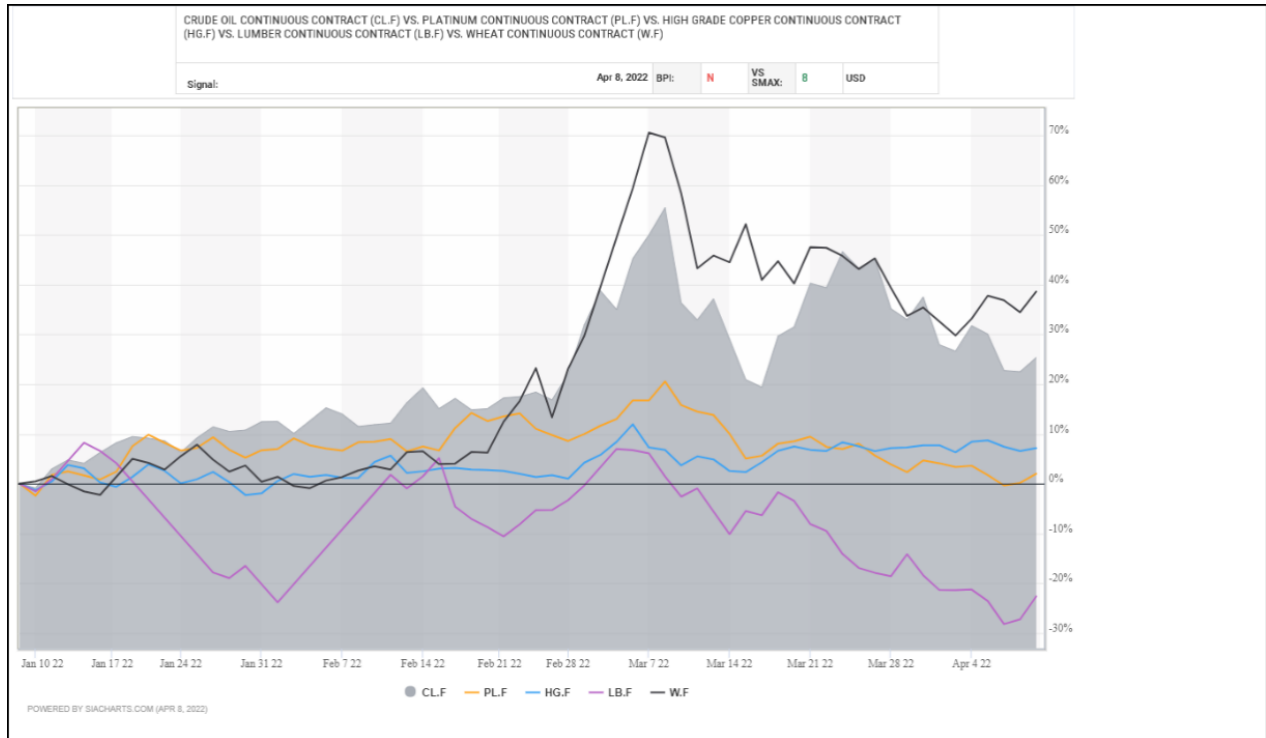
If we consider that interest rates have been trending downward since the early 1980s, it would make sense to look back to the 1970s for an indication of how different asset classes performed in a rising interest rate, high inflation environment. The chart below indicates that the 1970s were a tough time for bonds (which has started to repair itself already as noted above) and broad market indices. On the other hand, it was also a time when energy (and other resource related sectors and markets) outperformed.



This comparison chart shows commodity prices on the rise. The Country ETFs for markets with a higher sensitivity to Energy (Canada, Australia, & the UK) have outperformed relative to the Country indices for resource importing nations (Germany & Japan). This divergence has started to grow into early April.

Commodities Caught Between Shortfalls of Supply and Demand

Supply and demand have historically been key drivers of commodity markets but big shifts and fears of imbalances have had a particularly large impact in the latest quarter.

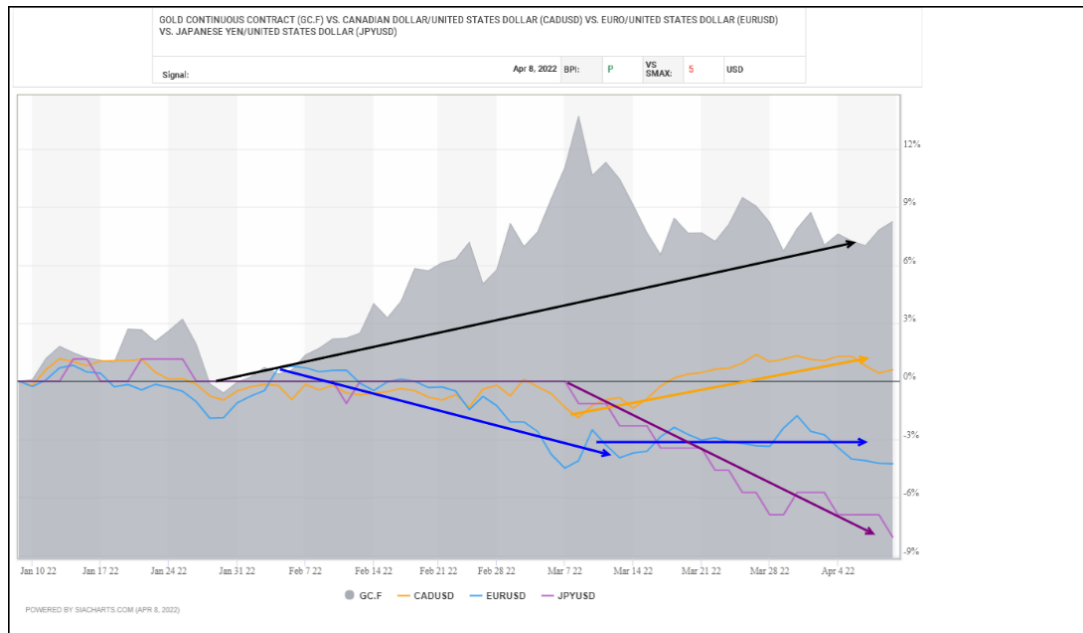


In late February and early March, fears that the Ukraine war and related sanctions could lead to supply shortfalls sparked a big rally not only in crude oil (where Russia is a big producer and Ukraine is a key pipeline transit country), but also in grains such as wheat (where Ukraine is a big exporter). Some of these fears eased through March, particularly for energy as countries like the US announced plans to add supply from stockpiles, and COVID lockdowns in China shifted the balance of fear back to potential decreases in demand. Metals like platinum and copper were generally steady over the quarter. Lumber, on the other hand, with much of its demand coming from the North American housing market, had a rough quarter alongside homebuilding stocks.

Currencies Reflect Changing Interest Rate Expectations and Resource Prices

Changing stances on interest rates and other factors have had a significant impact on currency trading as well.

The most interesting divergence in the latest quarter has been between strength in gold and weakness in the Japanese Yen. As defensive havens both have historically performed



well in times of turmoil, and this apparently did provide some support for gold in the quarter, along with its historic role as a store of value and an inflation hedge.

Toward the end of the quarter, the Japanese Yen was crushed, apparently due to the Bank of Japan keeping its stimulus programs going full speed, leaving it very lonely and marginalized in the dovish camp at a time when other central bankers have become more hawkish as the quarter progressed.

On the other hand, the outbreak of war in Ukraine dragged on the Euro for a few weeks, but it then stabilized once the European Central Bank started to talk more hawkishly.

Summary: The first quarter of 2022 appears to have been a key turning point for several asset classes, particularly bonds as the forty-year decline in interest rates appears to have come to an end and the first inflation driven rising rate market since the 1970s commencing. Changing perceptions about interest rate trends may continue to spark divergences and reversals of performance both within and across asset classes and sectors.

Asset Class and Sector Ranking Analysis

SIA Charts Asset Class Ranking	
As of Mar 31, 2022	
Asset Class	Change*
Commodity	+1
CAD Equity	+1
US Equity	-2
Cash	+1
Intl Equity	-1
Currency	+1
Bond	-1
*Change in Ranking Since Dec 31, 2021	
Source: SIA Charts	

The SIACHarts Asset Class Rankings changed significantly during Q1, reflecting changing capital flows, risk parameters and investor expectations. With energy and metal prices climbing, it comes as no surprise that Commodities climbed back up to the highest position and pulled the resource weighted CAD equity along for the ride. Meanwhile, rising interest rates put pressure on bonds which tumbled back down into last spot.

Increased risks from war, lockdowns, inflation, and reduced central bank support negatively impacted US and International Equities.

As a reflection of heightened equity market risk and a moderate improvement in the neutral Cash and Currency asset classes, the SIA Charts Equity Action Call™ downshifted during the quarter from Favored to Neutral.

There were a lot of changes in the top-level industry groups this quarter. With commodity prices rising, the two Resource sectors, Energy and Materials leapt to the top of the list.

Interestingly the defensive sectors remained at the bottom of the rankings while the middle was dominated by the generally weakening Cyclical and Interest Sensitive groups. But running this comparison on a shorter outlook shows the Interest Sensitive sectors, especially Utilities ranked much higher in or near the Favored zone.

SIA Charts Sectors Ranking		
As of Mar 31, 2022		
Sector	Group	Change*
Energy	Resource	+1
Materials	Resource	+3
Consumer Discretionary	Cyclical	-2
Industrials	Cyclical	-1
Financials	Interest Sensitive	-1
Communications Services	Cyclical	none
Information Technology	Cyclical	+1
Utilities	Interest Sensitive	+2
Real Estate	Interest Sensitive	-2
Consumer Staples	Defensive	-1
Health Care	Defensive	none
*Change in Ranking Since Dec 31, 2021		
Source: SIA Charts		

SIACHARTS Quarterly Chartbook: Spring 2022

S&P 500 Index (SPX.I)

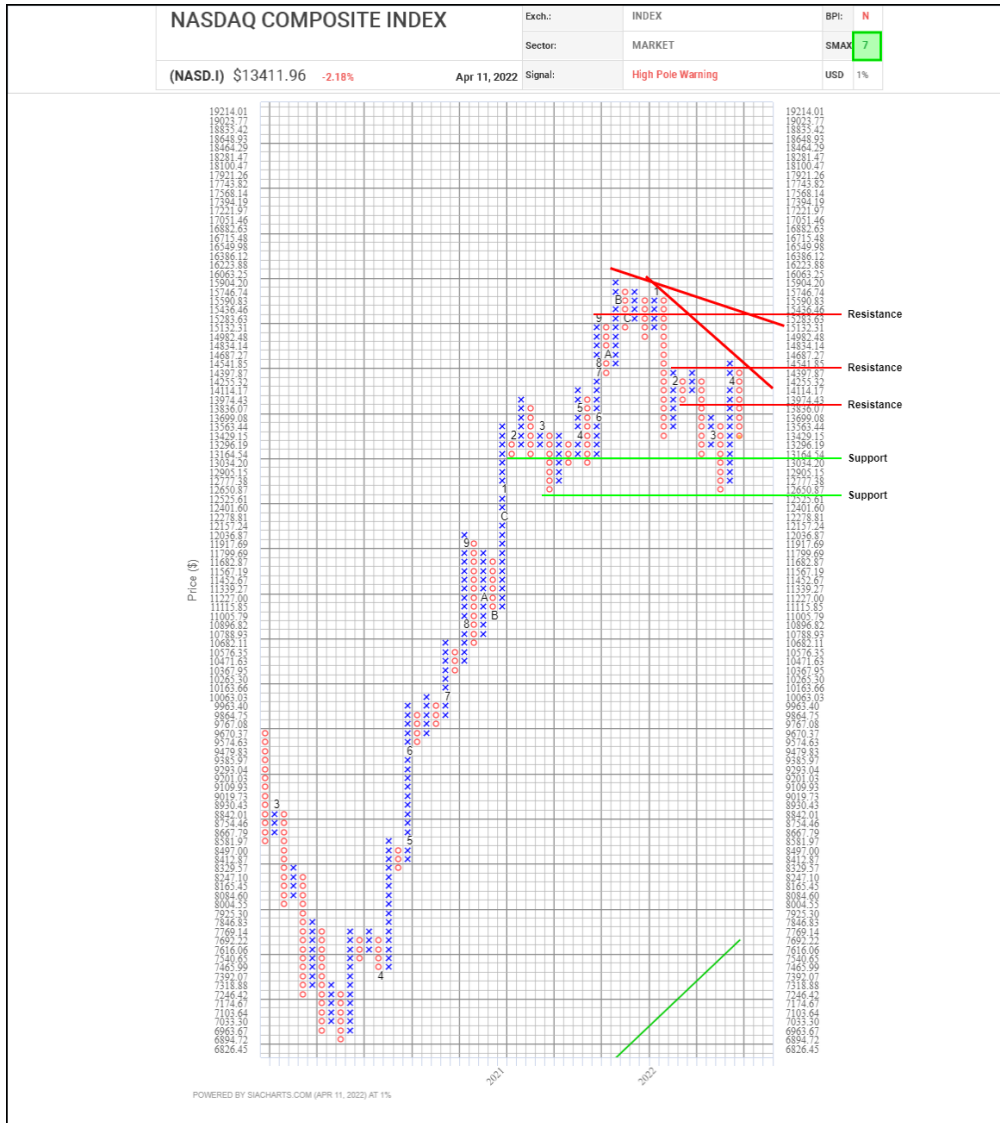


The long-term uptrend in the S&P 500 Index (SPX.I) which started at the March 2020 market bottom appears to have peaked at the start of this year, when a Double Top breakout failed in a classic Bull Trap reversal.

Over the course of Q1, SPX.I steadily retreated completing a series of bearish patterns but bounced back a bit in late March.

A recent rebound was contained at a lower high and at this point the index appears to be shifting into a sideways range. Initial upside resistance appears near 4,665 then 4,805, while initial support appears near 4,305 and then 4,140, all based on recent column highs and lows. Whichever way SPX.I breaks from this emerging range could indicate the start of a significant new trend.

NASDAQ Composite Index (NASD.I)



The shift from accumulation to distribution over the last quarter has been even more pronounced in the NASDAQ Composite Index (NASD.I).

NASD.I had peaked back in November and struggled into January when the bottom fell out and it dove into a downtrend that was finally contained near 12,525, close to the March 2021 low.

NASDAQ tried to rebound recently, and

even managed to stage a spread triple top breakout, but this quickly filtered and became a bearish Bull Trap. This downturn also set a lower high that established a more steeply sloped downtrend line.

Current support appears in place near 13,035 and 12,525. The Index faces a number of upside resistance hurdles at the moment including a previous column low near 13,975, the 14,000 round number, a downtrend line near 14,255, the 15,000 round number, and a second downtrend line near 15,285.

S&P/TSX Composite Index (TSX.I)



In contrast to its US counterparts, Canada's S&P/TSX Composite Index (TSX.I) has continued to attract support through 2021 and recently broke out to a new all-time high.

TSX.I has benefitted from its higher exposure to resource producing sectors like Energy and

Materials, and because of this, the broad market index has been supported by Energy, Mining, and Fertilizer sectors.

Between November and February, TSX.I paused in a range between 20,000 and 21,750 but through that time, higher lows indicated that underlying support remained intact. In March, TSX.I completed a bullish Triple Top breakout and in April, the Index completed a bullish Spread Double Top breakout, completed a bullish Ascending Triangle pattern, and broke out to a new all-time high, all indicating increased accumulation.

Vertical and horizontal counts suggest potential resistance near 22,840, 23,765 and 24,730 on trend with initial support possible near 21,090 based on a 3-box reversal.

Crude Oil Continuous Contract (CL.F)



Crude Oil (CL.F) has been caught in a tug of war between fears about a shortfall of supply (war, sanctions) and fears about a shortfall of demand (lockdowns, economic disruptions, recession), for the last several months.

The year started out with the bulls in charge driving the price briefly up above its 2011 peak near \$117.00 and up into the high \$120s before accumulation faltered. More recently the seesaw has tipped the other way with the bears gaining the upper hand. A bearish descending triangle of lower highs above \$92.50 support has been forming for several weeks.

Recently, CL.F has been trading on either side of \$100.00/bbl. A move above \$112.50 would signal a breakout from a short-term downtrend and signal an upswing with next potential resistance near \$126.50. A breakdown below \$92.50, however, would signal the start of a deeper downtrend with next potential support near \$82.25, then \$76.00.

Gold Continuous Contract (GC.F)



Gold, historically seen as a store of value, a hedge against inflation and as a relatively safe port in times of turmoil, has attracted renewed interest in recent months.

After soaring above \$2,000/oz back in the summer of 2020, gold

fell back toward \$1,675/oz by March of 2021. It then spent nearly a year trending sideways. Over that time a symmetrical triangle of higher lows and lower highs formed, indicating a period of consolidation. In February, Gold's long-term uptrend resumed in earnest with the metal price breaking out of the triangle to the upside and taking a run at its 2020 peak.

Recently, gold has slipped back in a common correction and has found support above \$1,900/oz, a previous breakout point, with more possible near \$1,860 or \$1,825. Initial resistance appears near the \$2,000/oz round number, then near \$2,080.

Greyscale Bitcoin ETF (GBTC)



Trading trends in Cryptocurrencies such as Bitcoin can provide insight into investors appetite for risk over time.

In the summer of 2021, the Grayscale Bitcoin Trust (GBTC) soared up from near \$23.65 toward \$55.00 before peaking just short of previous highs.

As confidence started to falter in November, GBTC plunged and completed a round trip back toward \$23.65

where support finally contained the damage for now.

In March and early April, GBTC started to rebound and even completed a bullish spread double top breakout. The ETF has faltered in recent days and has rolled back down into a bearish High Pole Warning.

Currently, GBTC appears to be settling into a lower range between \$23.65 and \$33.75. A breakout would signal the start of a new upswing with next potential resistance near \$41.50. A breakdown would signal the start of a new down-leg with next potential support near \$18.68.