1492 CAPITAL MANAGEMENT

DISCOVERING OPPORTUNITY

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INDENTIFY THEMES | FUNDAMENTAL ANALYSIS | TARGET VALUATION | GROWTH STRATEGY | VALUE STRATEGY | CORE ALPHA STRATEGY

1492 Vantage Point Quarterly Newsletter

Welcome to 1492 Capital Management's newsletter for the fourth quarter of 2022. In each quarterly newsletter, we provide our perspective on the most recent quarter, preview what lies ahead, and offer a bit of market trivia.

Our corporate slogan is "Discovering Opportunity" which is our daily focus for our clients with our small cap strategies and our wealth management portfolios. Our investment professionals possess a tremendous amount of experience navigating through multiple market cycles. 1492's time-tested strategies are based on a three-step process of identifying investment themes from hundreds of meetings annually with company executives, extensive tire-kicking of the financial statements, and a rigorous valuation methodology.

Russia, Recession, Resurgence, and a Runaway Fed - 2022 in Short

Late in 2021, the Fed signaled the start of the current interest rate tightening cycle, and that shot across the bow plus lingering COVID concerns was enough to start the year in a bad place. The stock market actually peaked on the first trading day of 2022. To make matters worse, Russia invaded Ukraine and touched off geopolitical concerns not seen in decades. This setting led to two consecutive quarters of negative GDP growth which, prior to this year, was the definition of a recession. However, many economists stated that this result wasn't a true recession due to the very low unemployment rate. Nevertheless, we saw a resurgence in growth as we moved through the back half of the year as the economy woke from its two-year, COVID-induced slumber. This growth focus appeared despite a runaway Federal Reserve who continues to hike interest rates with reckless abandon. For the record, we have been very critical of the Fed throughout this year. Our criticism was not for raising rates but for the pace and messaging that has gone with their hikes. They continue to drive the economy through the rearview mirror as anyone that has the ability to look ahead a number of months can see that inflation will continue to cool rapidly. *Recall last year at this time that the Fed forecasted that the current Fed funds rate would be at 1%.* Forgive us if we're a tad bit skeptical about the Fed's forecasting prowess.

The Fed's removal of the proverbial "punchbowl" left investors with nowhere to hide in 2022. It was a year to forget as it was the worst year in history in terms of returns for the 60/40 portfolio (equity/fixed income weights) when the S&P 500 has fallen less than 20%. Both the equity and fixed income markets really took it on the chin. The Fed's actions and stubborn inflation pushed interest rates to levels not seen since 2007. The bond market fell -15% in 2022 and recorded its first ever back-to-back annual losses. The downturn in the stock market has wiped out all of the pandemic-era gains for small caps as the Russell 2000 Index declined -20.4% in 2022 and is now below the February 2020 pre-pandemic levels. The S&P 500 Index performed slightly better over this timeframe, but it too, retreated -19.4% in 2022.

In the balance of this newsletter, we'll discuss many of the issues plaguing the markets and why we believe that the current flawed Fed policy is nearing its end which should lead to the start of a new resurgence in small caps. Please read on to see our unique views of what's on tap for 2023, themes that we're investing in here at 1492, what we believe the key stock market drivers will be and indulge in some stock market trivia. We will be providing our strategy webinars and detailed performance information on 1492's strategies in a separate email in the coming week. If you would like to discuss any of our strategies with us, please contact Tim Stracka at 414-238-3398.

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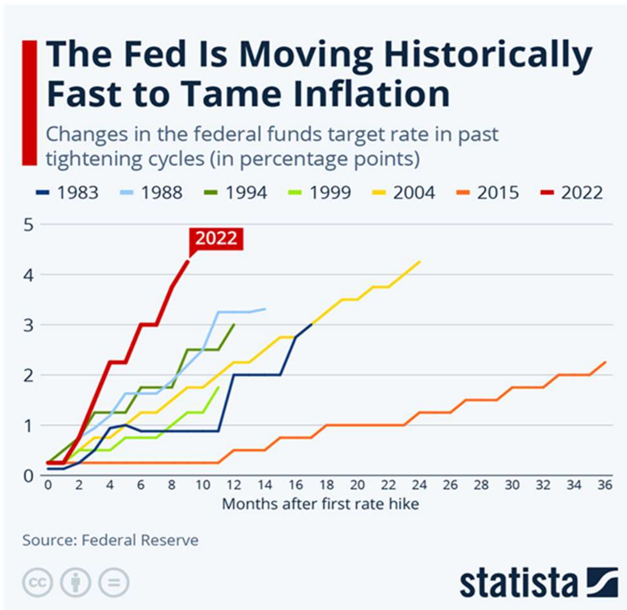
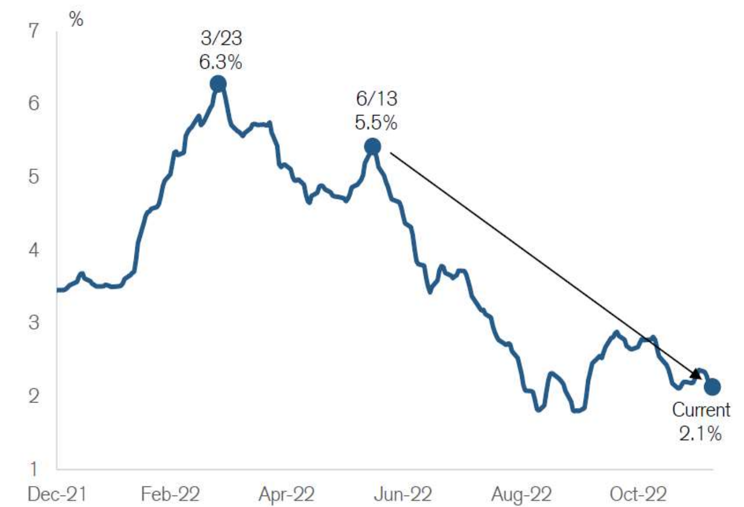
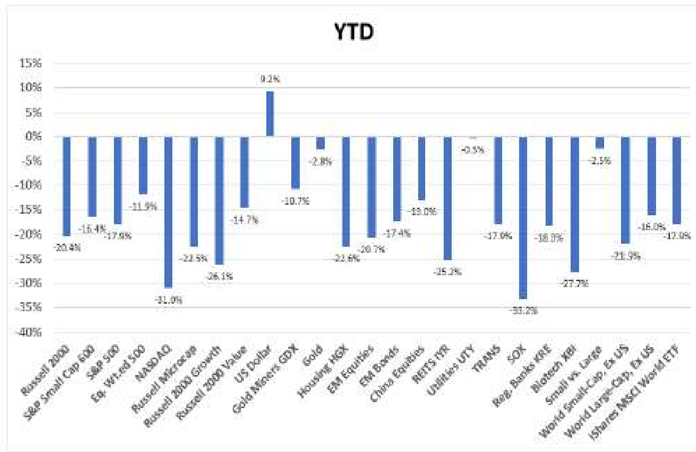
A Review of 2022: Russia, Recession, Resurgence, and a Runaway Fed - 2022 in Short

Late in 2021 the Fed signaled the start of the current interest rate tightening cycle and that shot across the bow plus lingering COVID concerns was enough to start the year in a bad place. The stock market actually peaked on the first trading day of 2022. To make matters worse, Russia invaded Ukraine and touched off geopolitical concerns not seen in decades. This setting led to two consecutive quarters of negative GDP growth which, prior to this year, was the definition of a recession. However, many economists stated that this result wasn't a true recession due to the very low unemployment rate. Nevertheless, we saw a resurgence in growth as we moved through the back half of the year as the economy woke from its two-year, COVID-induced slumber. This growth focus appeared despite a runaway Federal Reserve that continues to hike interest rates with reckless abandon. For the record, we have been very critical of the Fed throughout this year. This criticism is not for raising rates but for the pace and messaging that has gone with their hikes. The chart below left shows that the current Fed rate hiking cycle is the fastest since the 1980's. They continue to drive the economy through the rearview mirror as anyone that has the ability to look ahead a number of months can see that inflation will continue to cool rapidly. Rate hikes generally take 12 to 18 months to work through the economy and the Fed hasn't given the economy enough time to show the impact of these hikes. The market already believes that inflation will cool rapidly as shown on the chart on the right which shows the one-year breakeven inflation rate at 2.1%. In other words, the market is predicting that a year from now, inflation will be at a 2.1% run rate. *Recall last year at this time that the Fed forecasted that the current Fed funds rate would be at 1%. We're currently at 4.5%.* Forgive us if we're a tad bit skeptical about the Fed's forecasting prowess.

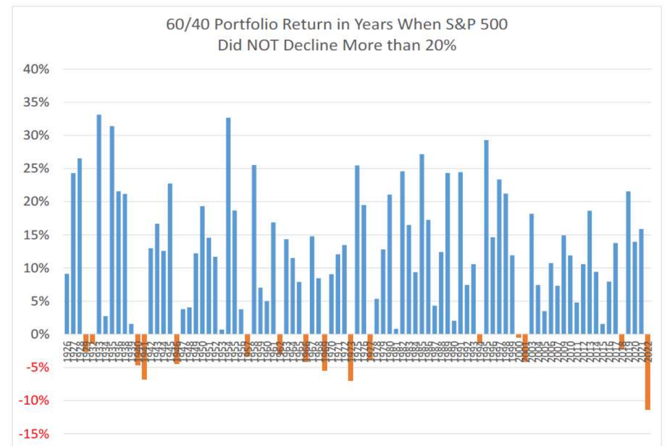




The Fed's removal of the proverbial "punchbowl" left investors nowhere to hide in 2022. The chart below left shows that the only major index that was higher during 2022 was the U.S. Dollar. It was a year to forget as it was the worst year in history in terms of returns for the 60/40 portfolio (equity/fixed income weights) when the S&P 500 has fallen less than 20%. Both the equity and fixed income markets really took it on the chin (see chart below left). The Fed's actions and stubborn inflation pushed interest rates to levels not seen since 2007. The bond market fell -15% in 2022 and recorded its first ever back-to-back annual losses. The downturn in the stock market has wiped out all of the pandemic-era gains for small caps as the Russell 2000 Index declined -20.4% in 2022 and now sits below the February 2020 pre-pandemic levels. The large cap S&P 500 Index has done only slightly better over this timeframe, but it too retreated -19.4% in 2022.

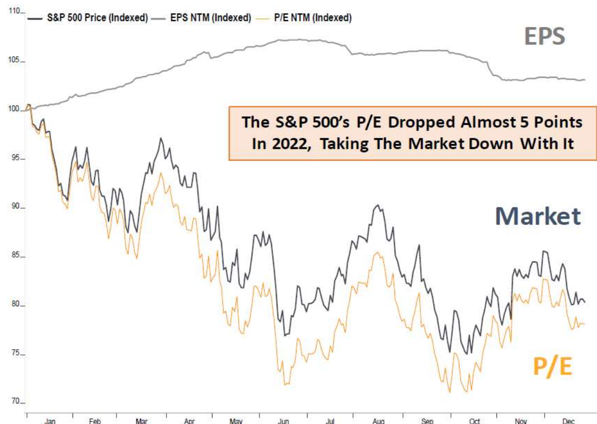


Source: Furey Research Partners, FactSet. As of: 12/16/2022

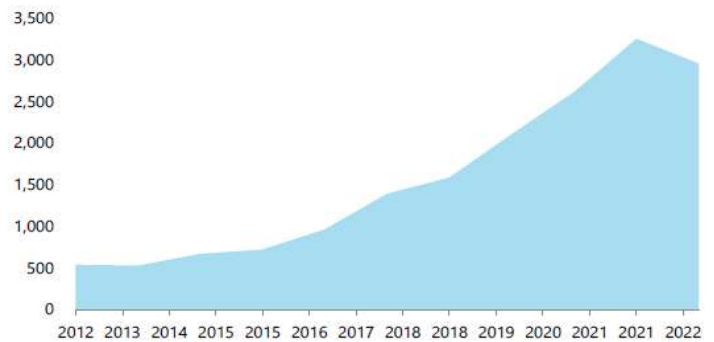


*Source: Furey Research, FactSet; 2022 is YTD as of 11/30/22; *Assumes a 60/40 Stock/Bond portfolio rebalanced at the start of each year*

Despite the two quarters of negative GDP growth early in 2022, the earnings per share of the S&P 500 at the year's end was higher than what was expected at the start of the year as can be seen in the gray line at the top of the chart below left. All of the stock market's drop is attributable to the decline in the P/E ratio (price/earnings) or the multiple at which the market is capitalizing earnings. This drop can be blamed on the significant increase in interest rates which has a very profound effect on discounting future earnings back to today. Despite higher interest rates, 2022 inflows into fixed income instruments declined year-over-year. This change is interesting as fixed income investors have been clamoring for higher yields for over a decade, and now that they have them, they're running the other way.



Source: Raymond James



Source: Morningstar as of 11/30, Jefferies

As shown in the table below, the stock market finished the year with a positive fourth quarter but the year was ugly by any measure. Small caps ended 2022 on a stronger note, which helped to close the relative gap with large caps for the full year. Interestingly, the Dow Jones Industrial Average was the strongest performer for the full year as old line industrial and defense companies had relatively strong years. Conversely, the NASDAQ Composite was the weakest performer as many of the market leaders like the Mega-cap stocks like Google, Amazon, Microsoft and Tesla succumbed to the Fed's interest rate hikes.

Index Returns		
Index	Fourth Qtr. 2022 Return	2022 YTD Return
Russell 2000	+6.23%	-20.44%
Russell 2000 Growth	+4.13%	-26.36%
Russell 2000 Value	+8.42%	-14.48%
S&P 500	+7.56%	-19.44%
Dow Jones Industrials	+15.39%	-8.78%
NASDAQ Composite	-0.79%	-32.54%

Source: 1492 Capital Management, LLC and FactSet

From a style perspective, the Russell 2000 Growth Index (-26.4%) trailed the Russell 2000 Value Index (-14.5%) for the year. This marks the second year in a row in which the value index outperformed the growth index. However, since the market bottom in June, the growth index has outperformed the value index by over 600 basis points. As we mentioned above, the bottom line is that there were few places to hide during 2022. The only sector that was positive for the year within the Russell 2000 Index was Energy (+53%) as oil and natural gas prices were pushed higher due to the Ukraine war. Interestingly, crude oil is now on par with where it was exactly one year ago prior to the Ukraine war. The worst performing sectors for the full year were Technology (-33%) and Commercial Services (-41%). Technology generally underperformed as the market unwound the premium valuations afforded to software and ecommerce stocks during the pandemic. Commercial Services stocks have melted down on concerns over slowing spending due to higher inflation and interest rates impacting buying patterns. During the fourth quarter the only sector that was negative was healthcare (-4%), all other sectors posted positive returns. The table immediately below highlights the performance of the Russell 2000 style indices by sector for the fourth quarter of 2022 and year-to-date 2022.

Table 1 - Index Performance by Sector

	Russell 2000			Russell 2000 Growth			Russell 2000 Value		
GICS Sector	**December**	**4Q22**	**2022**	**December**	**4Q22**	**2022**	**December**	**4Q22**	**2022**
Com Serv	-8.8	0.7	-40.5	-9.0	-0.8	-39.0	-8.6	2.0	-41.7
Discretionary	-8.2	8.8	-30.3	-8.7	5.1	-31.7	-7.6	13.0	-27.6
Staples	-6.6	9.7	-9.1	-5.5	11.2	-8.7	-8.5	7.1	-10.3
Energy	-7.0	17.5	52.5	-8.3	17.4	37.2	-5.4	17.6	60.5
Financials	-7.6	6.1	-15.4	-9.3	0.1	-30.3	-7.3	7.4	-12.0
Health Care	-4.6	-3.7	-28.7	-3.3	-3.2	-28.2	-7.5	-4.8	-29.6
Industrials	-5.9	10.7	-15.8	-7.1	7.3	-19.1	-4.2	15.3	-12.8
Info Tech	-6.1	5.0	-32.9	-5.4	4.9	-34.4	-8.4	4.8	-27.1
Materials	-7.1	12.8	-13.1	-9.0	7.9	-11.4	-4.9	18.7	-14.0
Real Estate	-6.8	7.6	-28.2	-7.9	8.7	-41.2	-6.6	7.4	-24.6
Utilities	-4.4	7.9	-1.4	-8.5	0.9	-19.8	-2.9	10.5	0.4

Source: Jeffries

Returns in the international markets were varied across markets and many deviated widely from those seen in the U.S. markets. In general, returns in Europe, Middle East and Africa markets were slightly better than the U.S. Despite worsening fundamentals due to the Ukraine war, valuations in those markets were much lower than those in the U.S. entering 2022. The Asia Pacific region was slightly worse than the U.S. markets, particularly those exposed more directly to technology like Korea and Taiwan. The Chinese market had been as bad as the rest of the world until the COVID lockdown was canceled. Their government postured that stimulus programs would be enacted to compensate for the COVID-induced slowdown. This news led to a significant rally in Chinese equities that helped that market recoup losses from earlier in the year. Interestingly, Brazil and India's markets were among the best performers globally. The ongoing war in Ukraine continues to hamper the European economy as high gas and oil prices crimp demand. Similar to the U.S. Fed, the ECB and BOE are hiking interest rates to fend off inflation. However, European stock markets have generally fared better than the U.S. despite all of these concerns. The recent decline in longer dated interest rates pushed bond prices higher during the fourth quarter and broke a streak of negative returns for the bond market. Volatility increased dramatically as one would expect with the market selloff during the year. Interestingly, lumber and oil were both modestly lower in the quarter but substantially lower on the year, which is indicative of broader trends across the commodity spectrum.

Index	Fourth Qtr 2022 Return	2022 YTD Return
France	**12.60%**	**-9.50%**
Germany	**16.20%**	**-12.30%**
Brazil	**-0.30%**	**4.70%**
India	**6.10%**	**5.30%**
China- A Shares	**2.20%**	**-15.10%**
China-Shenzhen A Shares	**3.30%**	**-21.90%**
Japan	**0.80%**	**-9.40%**
Long-Term Treasuries (SPTL)	**-1.00%**	**-29.40%**
Investment Grade Corp Bonds	**3.20%**	**-15.00%**
Gold	**9.40%**	**0.00%**
Volatility- VIX index	**-31.30%**	**26.60%**
Oil	**1.10%**	**7.00%**
Natural Gas	**-39.90%**	**14.90%**
Lumber	**-11.80%**	**-67.50%**

Source: 1492 Capital Management, LLC

A Look Back: Predictions and Prognostications for 2022 – How Did We Do?

While we aren't in the business of making formal forecasts on the economy or on the stock market, we thought it would be interesting to review our 2022 outlook from a year ago and see where our prognostications hit or missed the mark. Our predictions/prognostications from our fourth quarter 2021 newsletter are in italics below.

> *"Any stock with a remote tie-in to EV's was on fire at some point in 2021. It started with the derivative of the SPAC (special purpose acquisition company) boom, where nearly every SPAC that came public early on targeted private companies with ties to the EV market for acquisition. There were plays on building, charging, and supplying componentry to EV's. They were all red hot for a time this year. However, we hate to be the one to pour cold water on the group, but from where we sit, EV stands for "Extreme Valuation". It's not that we aren't believers in the EV revolution. We are. However, we think the stock market is in the midst of a mania that shows no regard for sane valuations and believes that the entire auto and truck market will accrue to the new generation of auto/truck manufacturers like Tesla and Rivian."*

Tesla's and Rivian's stock prices were down -65% and -82%, respectively in 2022. Enough said.

> *"To be clear, in 2022 we should prepare ourselves for more volatility as a starting point, period, end of story. Since the start of the pandemic, stimulus programs have been the buffer and accelerant for the stock market. As we know, those stimulus programs are behind us with personal income peaking in the first quarter of 2021. The Fed's actions will suck liquidity out of the market as we move forward. Even if the Biden Administration gets their "Build Back Better" plan passed early in 2022, the fiscal drag between 2021 and 2022 is going to be an enormous $1.5 trillion drag….. the Fed appears to be hell bent on raising interest rates, possibly as early as March. ……This combo platter of lower fiscal spending and tighter monetary conditions would pose problems for any stock market, let alone one that is entering the year at record highs."*

On the surface, our predictions for more volatility and problems for the stock market were accurate but as you'll see below, we thought inflation would peak earlier than it did, which would get the Fed out of the way sooner.

> *"Within the stock market, there is a current set of stocks (namely high growth software, ecommerce, and biotech stocks) that currently maintain extraordinarily high valuation levels. The chart below left shows this phenomenon. Currently 18% of the Russell 3000 stocks (largest 3,000 stocks in the U.S. market) have valuations higher than 10 times sales, which is a higher percentage than the level during the tech bubble of 2000. Low interest rates and high secular growth support these valuations, but it is hard to argue that this segment of the market will see their valuation level expand, particularly if inflation doesn't cool as we suspect. ..……..The latest reading on CPI was 6.8%. If this were to be sustained, it would argue for much lower P/E ratios due to higher interest rates. We again believe we'll see inflation cool to the 2-4% range in 2022 which should be supportive of maintaining the current valuation parameters."*

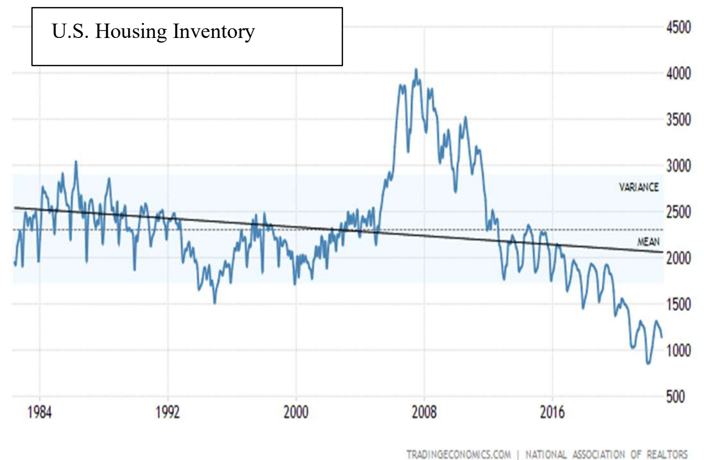
While we called out high growth software and ecommerce stocks out as susceptible to a price correction due to higher interest rates and inflation, our expectation for inflation cooling more rapidly and falling back into the 2-4% range in 2022 was way off the mark. This miss was primarily due to the unforeseen invasion of Ukraine by Russia which pushed many commodities significantly higher. However, inflation peaked in June at 9.3% and the most recent month (November 2022) decelerated to 7.1% with a month over month reading of just +0.1%, which if held constant from here would equate to an annualized inflation rate of less than 2%.

> *"With small caps having better projected earnings growth coupled with lower relative valuations, we think that small caps could outperform large caps, although valuation levels will be capped due to higher interest rates. We predict large caps could advance mid-to-high single digits with small caps approaching double digit returns for the year."*

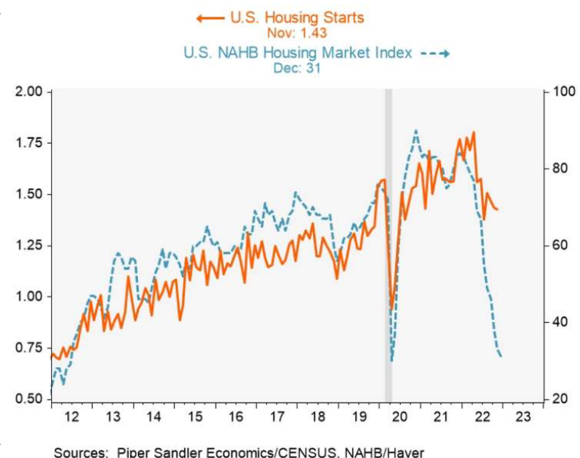
Swing and a miss. The Fed's aggressive rate hiking posture overrode any valuation disparities between large caps and small caps. Despite earnings for the year holding in at forecasted levels, the increase in interest rates pulled valuations down across the board and left the S&P 500 and Russell 2000 down -19.4% and -20.4%, respectively, in 2022.

2023 Outlook: Housing Market (err.. the Fed) Holds the Key to the Economy in 2023

The housing market is one of the largest industries in the U.S. economy at nearly $2 trillion annually, and it is also very sensitive to changes in interest rates. In terms of size, according to the NAHB the housing market's share of GDP is 16.4%, construction of homes accounts for 4.6% of GDP, and there are more than 7.5 million jobs associated with homebuilding. Therefore, the housing market almost immediately feels what the Fed does with interest rates as 87% of homes purchased in 2021 were financed using a mortgage. The reason that housing holds the key to the economy is due to several factors that include its size and importance in the U.S. economy, its sensitivity to interest rates, and the structural shortage in the U.S. market of nearly 5.2 million homes according to Realtor.com. The two charts below depict very different stories. The chart on the left shows the months supply of new houses in the U.S, which would indicate that there is a glut of homes. However, that statement is the furthest from the truth. The months supply number is currently elevated because the number of sales is substantially lower. At a low point in demand, the months' supply is obviously going to jump. You can see this concept by looking at each recessionary period in grey. Demand falls off in a recession, and the months of supply shoots higher. Conversely, the graph on the right tells the real story. The U.S. housing inventory is around 1.1 million units which is about half of the average for the last 40 years and is trending down. Even though the housing market has the supply/demand characteristics to provide a robust economic engine, it's really in the Fed's hands as the current interest rate policy is stifling demand.



Housing affordability is a function of two inputs -- price and interest rates. The pandemic set off a wave of home buying as the work from home phenomenon took hold. This demand in a fairly tight supply environment with extremely low interest rates helped push housing prices up rapidly. The chart below left shows the housing affordability index. Note that affordability has plunged as interest rates have surged and now sits below that seen in the Great Financial Crisis era. The chart below right shows housing starts (orange line) overlaid on the NAHB housing market index (blue line), which is a sentiment survey. As you can see, without a change in tone from the Fed on interest rates, the housing market could be in for an ugly downturn as these two measures follow each other pretty closely over time. This view is why we say that the housing market is the driver to the economy in 2023. This industry can turn very rapidly, but for now, the Fed holds the keys to unlock the economy.



2023 Outlook: Our Fearless Forecast - The Most Anticipated Recession Could Unleash Small Caps

Let's start with the punch line and then fill in the details. In our second quarter newsletter, we penned a section of our newsletter called "Quite Possibly the Best Opportunity in Small Cap Stocks in Decades". https://1492capitalmanagement.com/wp-content/uploads/2022/07/1492CM-2Q2022-Newsletter.pdf The gist of this call was predicated on valuation levels that we haven't seen in decades, on the underperformance relative to large caps for over a decade, on inflation peaking and beginning to fall, and on a big move to reshoring of the U.S. supply chain which should benefit small caps with their higher domestic exposure. Since that bold statement in June, small caps have outperformed large caps by over 200 basis points, not coincidentally as inflation peaked and began to recede (June CPI reading was the highest this cycle at 9.1%). As promised here is our forecast.

1. The economy enters a recession as the Fed's aggressive rate hikes take their toll. Likely a mild recession due to where unemployment stands today.
2. The Fed will be cutting interest rates by the end of 2023 as it becomes evident that they went way too far as usual.
3. The first part of the year will be the weakest as the Fed will still be in hiking mode and as earnings estimates retreat rapidly for 2023 as companies set a low bar to start the year.
4. Small caps start what could be a multi-year outperformance cycle as big-cap tech takes a breather. Remember small cap stocks have been in a bear market since March 2021, which is much earlier than the rest of the market.
5. Inflation drops rapidly and could be less than 4% by summer 2023.

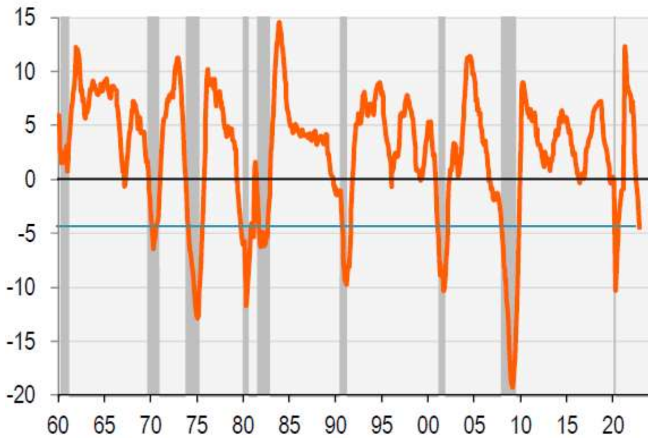
Potential Headwinds to our Forecast

1. Fed continues with their aggressive tightening and rhetoric.
2. Inflation doesn't cool as expected due to an unforeseen event (similar to Ukraine war). Geopolitical tensions rise.
3. Supply chain disruptions continue to hinder productivity. This disruption should be a much smaller issue in 2023 than it was in 2022.
4. Corporate earnings decline more than expected as nominal growth slows with inflation.
5. Energy costs rise due to poor policy decisions.

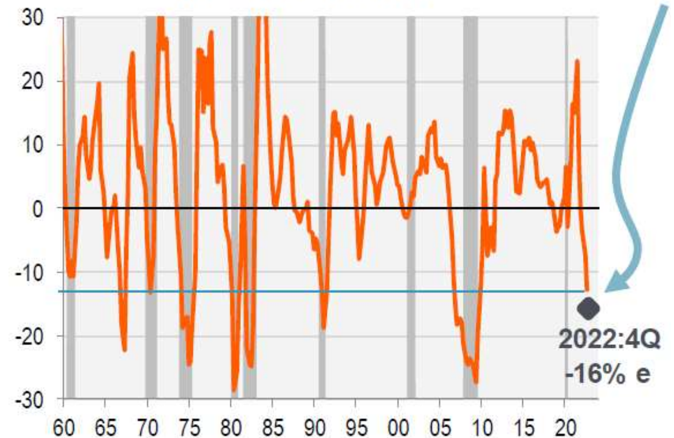
Potential Tailwinds to our Forecast

1. Valuation disparity between large caps and small caps is at a generational discount that favors small caps.
2. Inflation continues its downward trajectory from high levels which has historically favored small caps.
3. FAANG stocks or mega caps underperforming shifts equity dollars elsewhere.
4. Private equity funds loaded with cash go shopping in the public markets which have been marked down compared to private markets.
5. China awakens from COVID slumber and poor policy (tech crackdowns) to provide a global growth catalyst.
6. Supply chains around the world normalize which brings costs down and productivity up.
7. Funds from prior legislation like the Infrastructure Investment and Jobs Act and Inflation Reduction Act make their way into the economy.

Now for the evidence to support our forecast. Barring a significant change in tone from the Fed, the economy is already slowing dramatically and is on pace to go into recession. However, we believe that recession is what much of the downturn in the equity markets was discounting in 2022. The chart below left shows the U.S. Leading Economic Indicator (LEI) which currently resides at -4.5%. As you can see by the blue line, recession ensues any time the LEI has dropped below the current level. The chart below right shows Real Residential Investment. Similarly, when the indicator drops as far as it has, it's a high probability that a recession isn't far behind.

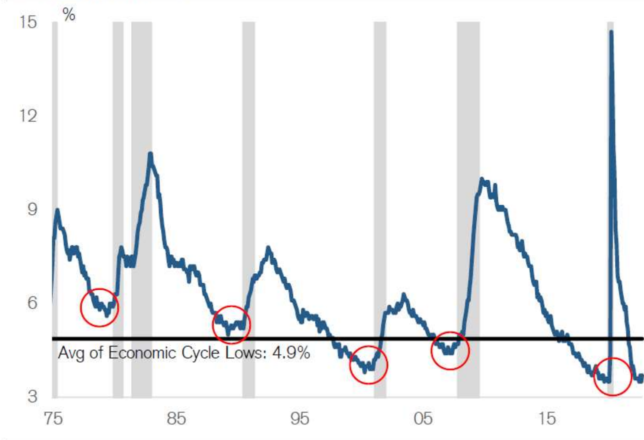


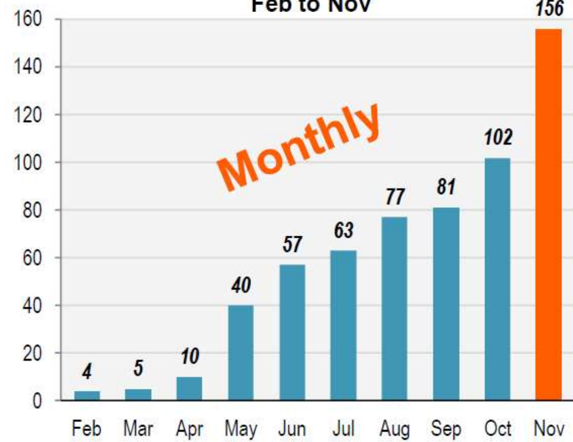
Source: PSC



Source: PSC

One of the strengths of the current economy is the labor market. Some would argue, like the Fed, that it's too strong and is causing some of our inflation issues. As the chart below left shows, the unemployment rate is currently at historic lows and this low level is what is frustrating the Fed because the inability to hire the right employee or enough employees has caused a bidding war to some degree for workers. However, that situation is quickly coming to an end as the Fed stated that they are willing to sacrifice job growth in order to squash inflation. This flies completely in the face of one of the Fed's dual mandates -- maximum employment. Think about how silly they sound. We're trying to crush employment and job growth in order to tame inflation. Their two mandates are in complete conflict with each other. The chart below right shows that the Fed is starting to see the early signs of companies laying off employees. It's only going to get worse in the months ahead as corporations will be forced to tighten their belts in order to try and maintain profit margins as the economy slows into a recession. I suggest that the Fed needs to change their mandate and work on the supply side of the economy as that's what really has caused inflation to spike over the past 18 months.



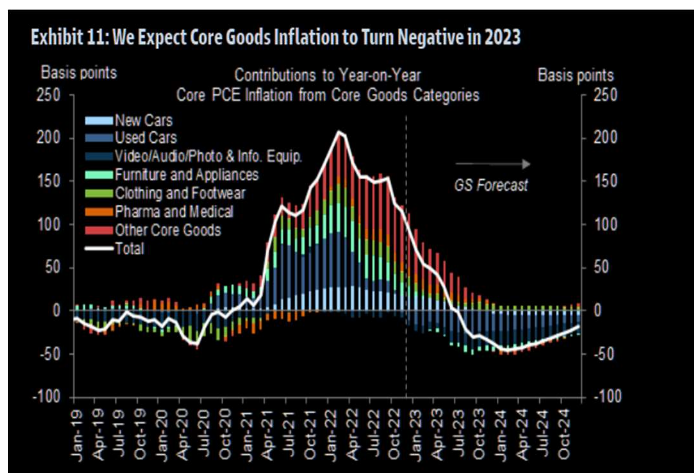


Source: PSC

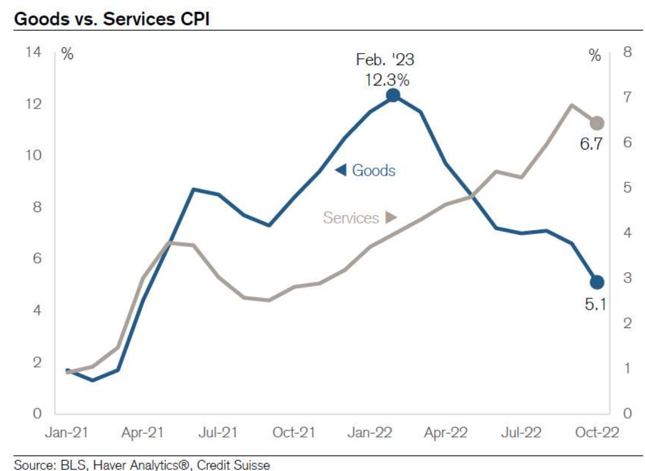
As we know, the Fed is hellbent on crushing inflation but they continue to ignore the root cause of how we got here. The pandemic and flooding the system with money created the perfect storm. We would argue that it's not because of a secular shift in how our economy is operating. To the contrary, inflation occurred because our economy wasn't operating like normal. Supply chains were severely impacted due to a lack of workers at all levels which caused shortages of commodities and products which those workers produced. To make matters worse, Russia invaded Ukraine which caused shortages in food commodities and by policy, a shortage of energy like oil and natural gas. The Fed hiking rates doesn't resolve bad policy decisions. These "transitory" conditions (yes, we said transitory) have caused price spikes in everything from used cars to appliances. We highlighted the used car situation a few quarters ago to point out how absurd the Fed's view of inflation was and that in time those prices would retreat. A shortage of semiconductor chips used to produce new cars precipitated the price spike in used cars. New car demand soared during COVID because many Americans moved out of cities and refused to use public transportation during COVID. Because new cars weren't generally available, these consumers had to shift their

purchases to used cars. This shift caused the largest spike in used car prices in history which peaked last January. When we get to the January 2023 CPI report, we will be comparing a plummeting used car price market (Manheim used car survey is already down 14% from its peak) with the all-time high. To show what an anomaly the used car market is, here are some facts. The Manheim used car index started in 1995 with a value of 100. Over the next 25 years the index rose to 143 (+43%) by February 2020 (month before the pandemic began). *That increase implies an annual inflation rate of about 1.5% over those 25 years*. During the pandemic, the index spiked to 236.3 by January 2022, which is a 65% increase in just two years. This jump is the definition of an anomaly, but the Fed is treating this increase as engrained and persistent inflation. The chart below left shows the impact that a number of core goods have had on the inflation spike and on the current retreat. This forecast is consistent with our views on how quickly inflation will subside. Note how large of an impact used car prices have had on the spike of the overall core goods inflation number. It's currently unwinding as we mentioned above, and it will be deflationary in 2023.

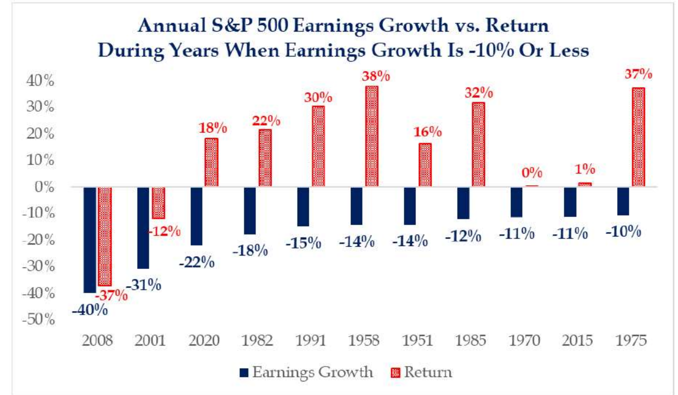
The chart below right shows goods inflation versus services inflation. It's no surprise that goods inflation surged during COVID and earlier than services as people were locked down in their homes with extra cash and buying things like computers, cellphones, and furniture. Once COVID ended, there wasn't the same pent up demand for goods, and the supply chains that were hampered during COVID started to function correctly. Hence, goods inflation began to wane. Then as Americans came out of their lockdown mode, they made up for lost time with spending on trips and restaurants (services), and services inflation started advancing with a lag when compared to goods. This, too, will begin to subside as most Americans have taken their missed trips and given the softer economy, demands on services will begin to wane as well. We believe that by year end 2023, the Fed will be cutting interest rates as they overshot on their rate hikes. The only thing that we believe can prevent this action is if China emerges strongly from their COVID lockdowns and takes the demand baton from other countries like the U.S.



Source: Goldman Sachs

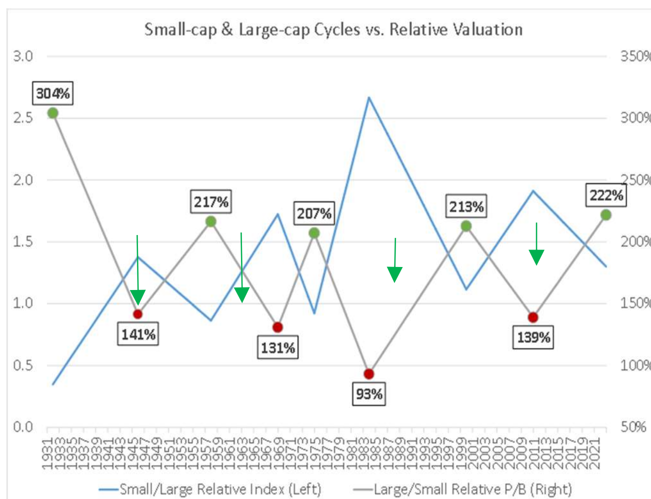


Now we present the case for small caps. As we stated at the outset, this environment is one of the best setups for small caps that we've seen in decades. There are a number of things that are coming together to create a perfect setup. Let's start with inflation since that is the topic of the year. As the chart below left shows, small cap stocks outperform large and midcap stocks when inflation is above 3% and falling (see green box). Interestingly, the June CPI report was the peak inflation report, and since the June market lows, small caps have already outperformed large caps by 200 basis points through year end. We expect inflation to continue to drop as we mentioned above into 2023. Many market prognosticators are calling for a further dip in the market in 2023 due to an expected decline in earnings that will come as a byproduct of the Fed-induced slowing economy. However, we contend that the decline in the markets during 2022 was all about the coming drop in earnings many are projecting for 2023. The market is a discounting mechanism. The chart below right shows that in many instances where earnings fall more than 10% from the prior year, the stock market is actually nicely higher and, in several cases, up more than 20%. The two exceptions to these instances were the 2008 Great Financial Crisis and 2001 when the tech bubble burst. What we're currently experiencing is nowhere near those two situations.

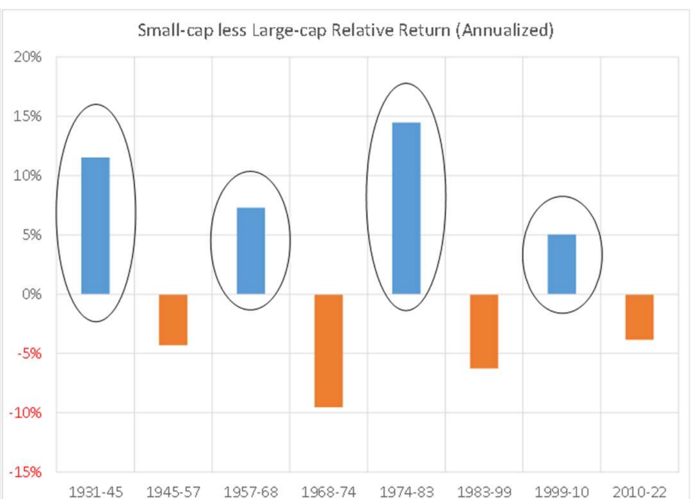


Source: Strategas

Small cap stocks historically have gone through cycles where they are out of favor on a relative basis to large caps. This occurrence is what we've seen for much of the last decade-plus going back to the Great Financial Crisis of 2008. The environment has generally been favorable for large caps due to the low interest rate environment and the emergence of the mega-cap tech stocks. Low interest rates provided large caps cheap growth and acquisition capital and allowed them to grow both organically and inorganically and to pay dividends that were generally above treasury rates. However, after more than a decade of outperformance by large caps over small caps, the valuation disparity between large and small caps has widened to a level that has historically led to a changing of the guard. The chart below left shows these performance cycles going back to the 1930's with the blue line. When the blue line is falling, large caps are outperforming small caps and vice versa. The grey line shows the relative price-to-book value between large and small caps. Note that every time large cap relative valuations reached the current level (roughly more than 2X book value), the pendulum shifted, and it started a new outperformance cycle for small caps. These cycles can last for more than a decade. The chart below right shows the annualized outperformance or underperformance for small caps relative to large caps. Note that these figures are the annualized numbers. These cycles can be very impactful, and we think we're on the cusp of a new cycle that favors small caps.

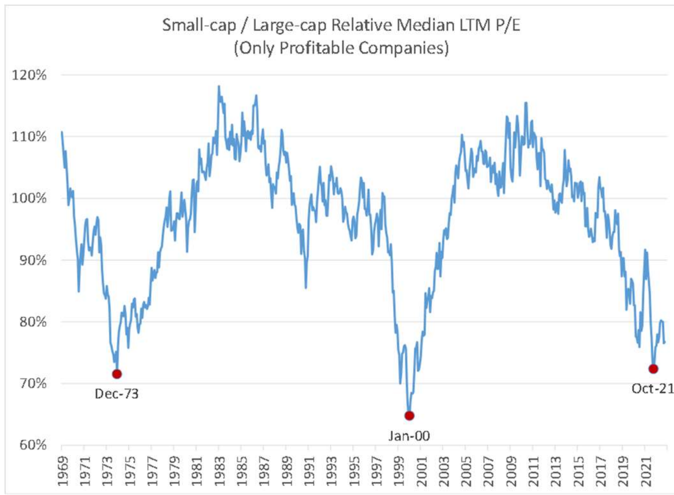


Source: Furey Research



Source: Furey Research

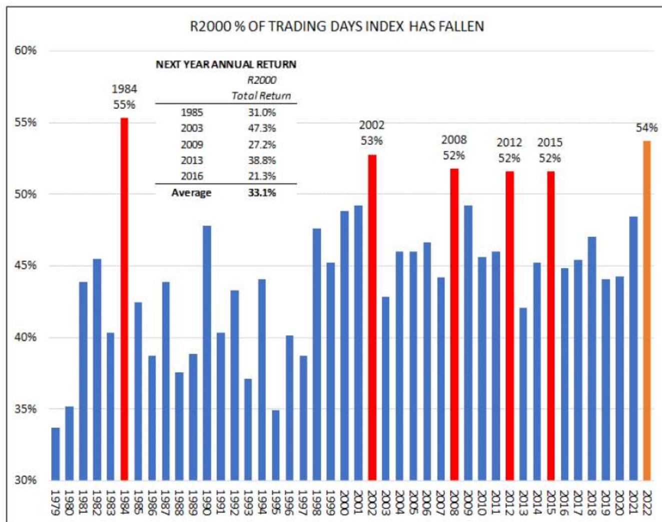
Looking at valuations on a P/E (price to earnings ratio) basis, small caps appear exceptionally attractive from a historical basis. The chart below left shows that the relative P/E ratio between large and small caps has rarely been this low. These troughs in relative valuation synch up with the change in trend chart above as well. Anecdotally, when we made our small cap call in our June newsletter, we were noticing stocks in our portfolio or prospective investment candidates that were trading at P/E ratios that we hadn't seen since 2008. Many of these equities were trading at single digit P/E's which is quite attractive for most stocks. The chart below right shows that mega-cap stocks have finally succumbed to the Fed rate hiking cycle. As the chart shows, this group of stocks has lost a cumulative $4.7 trillion in market cap as their shares have been pressured all year due to slowing fundamentals or outright shrinkage in the case of Meta. It is noteworthy that as these mega-caps are no longer the easy investment choice they once were, and where does all of that capital go?? The total market value of the top five stocks in the S&P 500 is enough to buy the entire Russell 2000 three times over. Therefore, even small shifts out of these mega-caps can be a big boost for small caps.



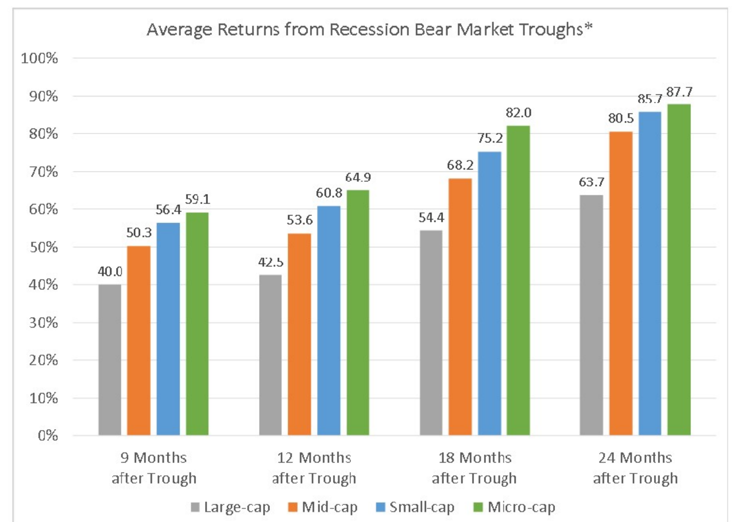
Source: Furey Research

Source: Deutsche Bank

Lastly, we have a few more nuanced arguments in favor of small caps. The chart on the left shows the percent of trading days in which the Russell 2000 has fallen in any given year. However, in those years in which we've seen the Russell 2000 decline on more than 50% of trading days in a given year, the following year has seen exceptional returns averaging +33% as highlighted in the table on the chart. The chart below right depicts the returns for microcaps through large caps following a recession bear market trough. Undoubtedly, small and microcaps easily outpace large caps for the two year period that follows the trough. The real question is did we have the trough already or is it yet to come? We believe the largest drawdown has already occurred.



Source: Raymond James



Source: Furey Research

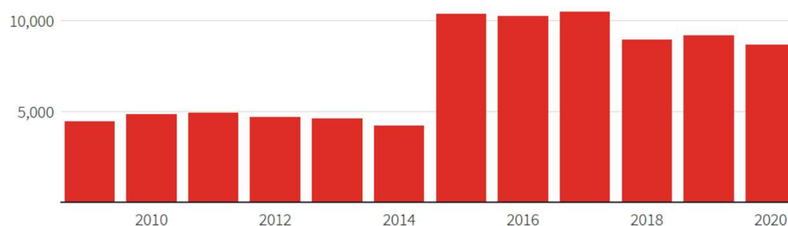
Thematic Investing: New Economy Requires Massive Upgrade in the Electric Grid

At 1492 Capital Management, we utilize thematic investing as the key strategy for our investments. As a refresher, thematic investing in its simplest form is investing in a number of companies who all benefit from the same trends or economic forces. Our differentiated approach to thematic investing is that we do it with a bottom-up fundamental perspective, and we are not making top-down macro calls on interest rates or oil, for example. Our research process begins with kicking the tires on hundreds of companies each year as we search for signs of a new secular or cyclical trend that is about to take off. Then we locate as many ways as possible to participate in a given theme once we have a high degree of confidence in the fundamentals of the theme and the companies that will benefit as a result. Below we describe one of the themes currently being deployed in our portfolios at 1492.

Did you ever stop and wonder how we're going to power all the electric vehicles that are projected to be sold over the next decade, let alone everyone's laptops, cellphones, and other electronic gadgetry? How will the current electric grid handle power from the new generation of renewable energy sources like solar and wind? Well, the answer is that in its current form, it won't handle it. The U.S. electric grid as we know it started in the 1880's. According to the U.S. Department of Energy, 70% of transmission lines are over 25 years old, and the average age of large power transformers, which handle 90% of U.S. electricity flow, is more than 40 years old. How many times over past several years have we heard of blackouts in major cities as the grid failed during a storm or just due to high demand? Quite a few blackouts have happened, and it's not just in one part of the country. The chart below shows the number of outages seen over the past decade.

U.S. power outages surge

The nation's aging transmission network has failed far more often in recent years, in part due to increasingly severe weather from climate change.



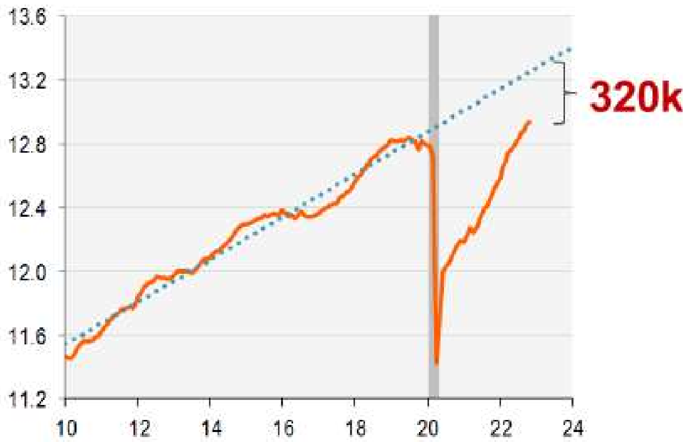
Note: Shows momentary and sustained transmission outages
Source: North American Electric Reliability Corporation

The U.S. clean energy movement and the Biden administration's promised clean-energy revolution is afoot, but it will be stopped dead in its tracks if we don't upgrade the electrical grid that holds the promise of a cleaner environment. According to Reuters, more than $2 trillion will need to be spent on upgrading the current antiquated infrastructure. $29 billion was earmarked for grid security, reliability, and resilience in the recently passed Infrastructure Investment and Jobs Act. Power outages over the last six years have more than doubled in number compared to the previous six years according to federal data. Additionally, to support the move to clean energy, the grid needs to be able to handle the more sporadic electricity being generated from solar and wind farms as those modalities can be less predictable due to weather. According to Eaton Corp., in 2022 greater than 60% of new U.S. utility-scale power generation is from renewables. Additionally, these solar and wind farms are being constructed in rural areas or deserts and are thus away from the population centers where demand is highest. Therefore, upgraded transmission networks need to be built to move this power onto the grid and to the points of usage. These grid upgrades require massive investment by utilities across the country, but many of them are hesitant to push rate increases to their customers for fear of backlash from politicians. However, this offset is being more readily accepted as the cost of a cleaner and more effective grid. A study by Marsh McLennan showed that a $1 billion investment in the grid yields at least $50 billion in incremental earnings over time to the entity who steps up and makes these expenditures.

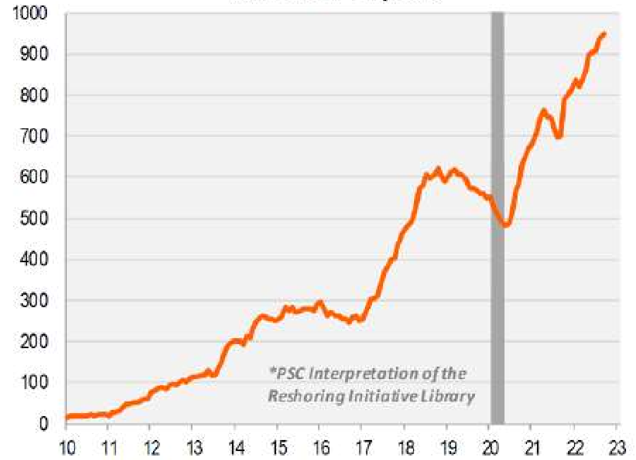
Our research process has uncovered several different ways to participate in the grid upgrade theme. These include investments in companies that provide the actual construction services for the grid, manufacturers of electrical components for key parts of the transmission system, smart metering solutions, energy storage solutions, lithium producers, engineering, and design solutions, etc. We'll continue to hunt for new ways to participate but the current pond of ideas is providing great fishing.

Thematic Investing: Onshoring to Drive U.S. Robotics Demand

As we have discussed in previous newsletters, there is a secular trend underway of onshoring (or reshoring) manufacturing bases back to the U.S. from overseas particularly from China. This onshoring has created both a robust capital spending cycle and strong growth in manufacturing jobs as seen in the chart below left which also depicts additional potential hiring of roughly 320,000 manufacturing workers just to return to the trendline indicated by the blue dots.



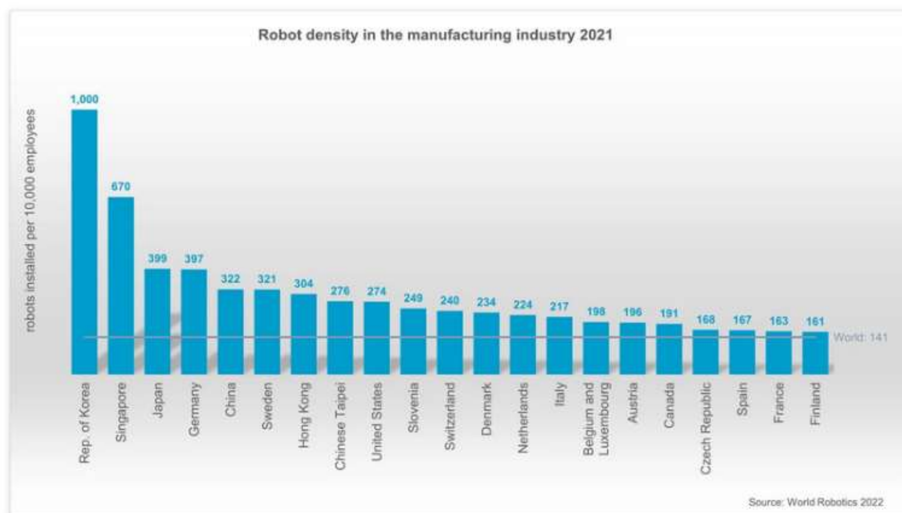
Source: PSC



Source: PSC

The subsequent growth in manufacturing jobs is likely to continue based on the number of companies that have announced onshoring or existing capacity expansions here in the U.S. as seen in the chart above right. With a very tight labor market for skilled workers, one of the key drivers to cost effectively grow this new and expanded U.S. production capacity is the use of robotics to complement and, in some cases, to reduce hard to find labor. As an example, we recently attended a plant facility tour here in Milwaukee at a company that produces snowplows and accessories. The company commented multiple times that they are planning on adding more robotic welding equipment to help expand output amid a particularly tight market for qualified welders.

As seen in the chart below, U.S. manufacturers currently reside in ninth place in terms of robots per 10,000 manufacturing employees. According the the World Robotics 2022 report, this robot density measure has more than doubled from 69 in 2015 to the current 141. Of the 15 largest markets for industrial robots, the U.S. ranked third in growth in 2021 with a 14% increase compared to advances of 22% and 51% in Japan and China, respectively. The automotive and electronics industries currently account for the largest shares of the robotics industry, but there is increasing adoption across a variety of sectors that are looking for efficient and consistent process execution. In the U.S., the metals and machinery and plastic and chemical products areas posted healthy increases in robot installations in 2021.



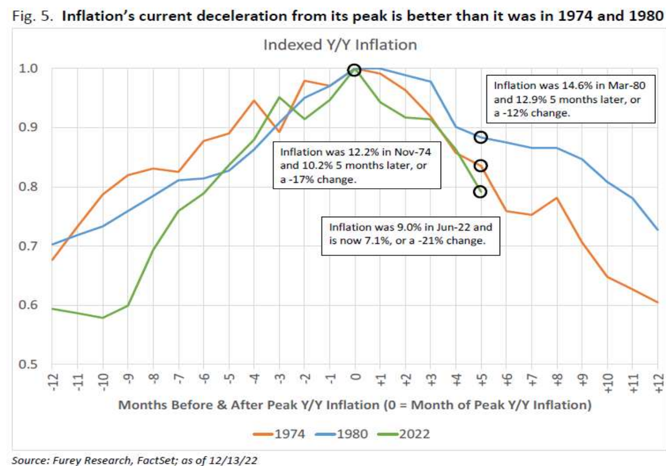
With respect to the use of robotcs in warehouse automation, research from D.A. Davidson shows that roughly 80% of global warehouses remain manually-operated with only 5% having significant high-end automation. We believe that this warehouse automation trend will see significant growth in the U.S. as onshoring brings additional fulfillment/distribution centers that can deploy robotics to reduce less skilled labor as well as the injuries that are often associated with warehouse jobs. According to the International Federation of Robotics, the top application for professional service robots in 2021 was in the transportation

and logistics area. Being able to robotically convert items on pallets into smaller cases and move these cases to shipping is the proverbial Holy Grail in warehouse automation. We recently deployed one robotics theme holding that is focused on doing just that with a significant presence in helping leading grocers and mass merchants automate. In fact, the country's largest mass merchant has contracted this robotics company to automate its entire U.S. distribution center system. As you examine the supply chain for robotics, the sensor and motion control components' companies should also benefit from healthly demand for their products in the buildout of this automation tailwind in the U.S., and we recently initiated a position in a motion control company in a 1492 Capital Management strategy. With onshoring accelerating, we would expect that the U.S. will be increasing its robot density in the year ahead. We see growth in a variety of areas for this investment theme as robotics expand in industrial production, the service industries, healthcare, agriculture, and warehouse automation.

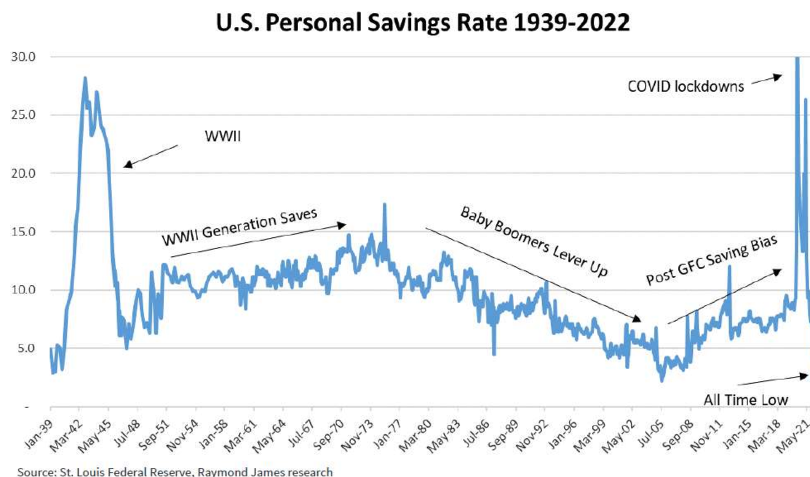
2023 Outlook: A Picture is Worth a Thousand Words

We articulated our 2023 outlook above and the key issues and drivers for the stock market. Yet, we believe that there are other topics that we haven't spent a great deal of time on that deserve some mention. In order to provide you with a shorter read, as everyone's time is valuable, we decided to express it in pictures. As they say, a picture is worth a thousand words, and we'll let you interpret what we view as some compelling charts. We'll provide a bullet point or two of explanation as to why we think the chart or graphic is important.

This chart shows the pace at which inflation is decelerating compared to 1974 and 1980. So far, the current inflation rate is falling more rapidly than those prior cycles. Let's hope that continues so the Fed can get out of the way.



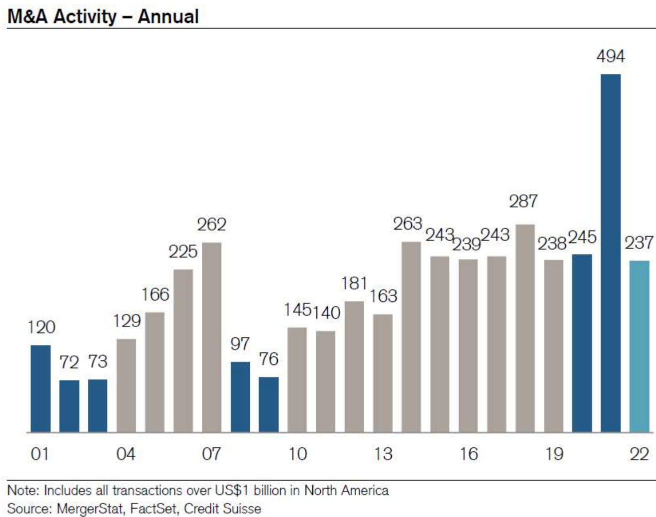
This chart shows the personal savings rate over the past 80 years. Note that the current savings rate is at an all-time low but could be deceiving as we are comparing against COVID lockdown periods.

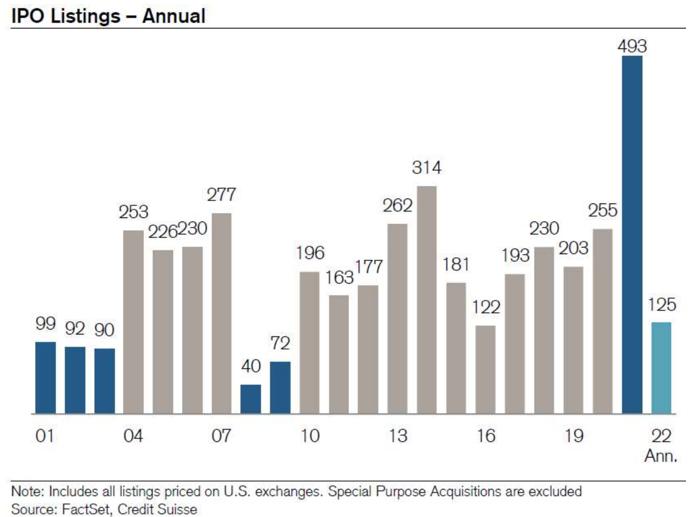


Many market prognosticators use the inverted 2 yr-10 yr. yield curve comparison to indicate when a recession is likely. The 3 month- 10 yr. treasury inversion is more predictive as banks borrow short (three months through deposits) and lend long for mortgages, for example. They don't need to make loans when the economy slows if they can park deposits in 3-month treasuries and earn 4% risk free.

Source: Strategas Research

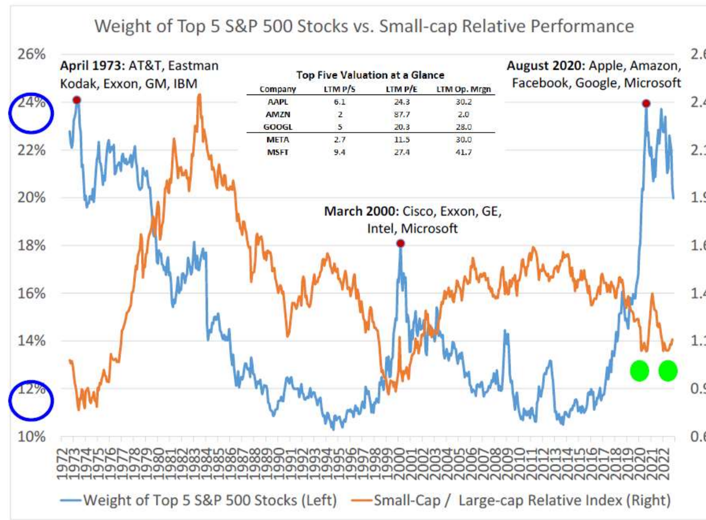
The following charts are an investment banker's nightmare. The chart on the left shows merger and acquisition activity has fallen off from the pace of 2021 but is on par with prior years. However, IPO activity dropped off a cliff in 2022 as new SPAC issuance came to a standstill after flooding the market in 2021. Wall Street bonuses will be lower in 2022.





Stock Market Trivia

Each quarter we offer a piece of market trivia that we believe is interesting or timely, or both. This quarter we focus on the mega cap phenomenon. The chart below shows the weight of the top five S&P 500 stocks (blue line) in the S&P 500 Index over time. Whenever this weight peaks, it signals a changing of the guard. The orange line shows the performance of small caps relative to large caps. When the orange line is rising, small caps are outperforming large caps. The implication is that as money no longer finds value in the big five stocks, it starts to look elsewhere down market cap for a home. In 1973 when the top five stocks peaked at over 24% of the S&P 500, it initiated a new bull market run in small caps. Similar occurrences were realized in 2000 at the end of the tech bubble and in 2020. We'll see if the trend holds in the current cycle as small caps had a bit of a head fake but formed a double bottom (green dots) and are bouncing higher.



Top Five Valuation at a Glance

Company	LTM P/S	LTM P/E	LTM Op. Mrgn
AAPL	6.1	24.3	30.2
AMZN	2	87.7	2.0
GOOGL	5	20.3	28.0
META	2.7	11.5	30.0
MSFT	9.4	27.4	41.7

Source: Furey Research Partners and FactSet. Data as of 11/1/22

We hope that you found our fourth quarter 2022 review and 2023 outlook newsletter to be insightful and interesting. Should you have any questions about anything discussed herein or would like more information about 1492 Capital Management, please call us at 414-276-1492.

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