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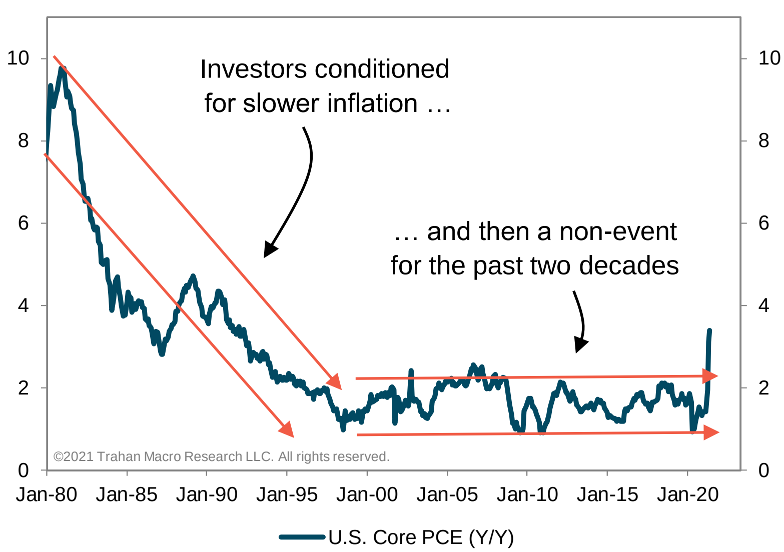
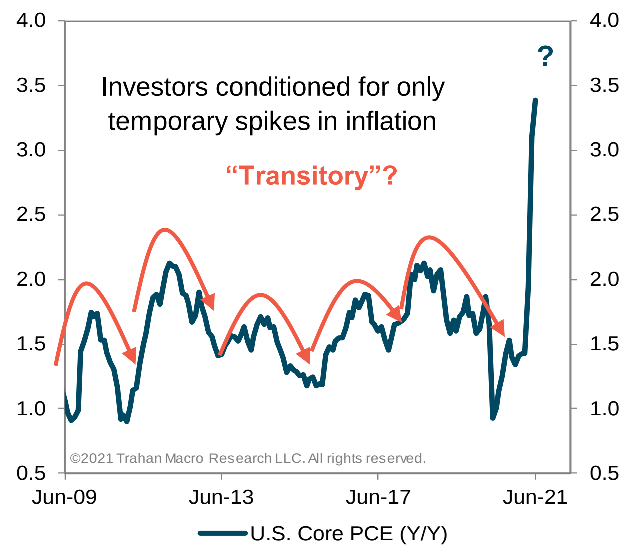
July 1, 2021

Inflation's Mis-Appreciated Role In Today's Financial Markets

This is not meant to sound condescending but unless you were working in this industry in the 1970s you have never faced a true inflationary backdrop. I was in elementary school in the 1970s, so I am not excluded from this club. The point here is that none of us are accustomed to inflation. It is difficult to feel any sense of familiarity with something you have only read about. We are a product of our environments and with the rare exception we have all been used to inflation being a non-issue. Moreover, in the rare instances when inflation has accelerated in the past 25 years, it has ALWAYS proven to be "transitory". After a quarter of a century this starts to feel like a normal outcome. That said, we are living through some unusual times and the word "normal" might not apply to the current backdrop nor the one we will face in the coming years.

Today's Investors Are Only Accustomed To "Transitory" Bouts Of Inflation





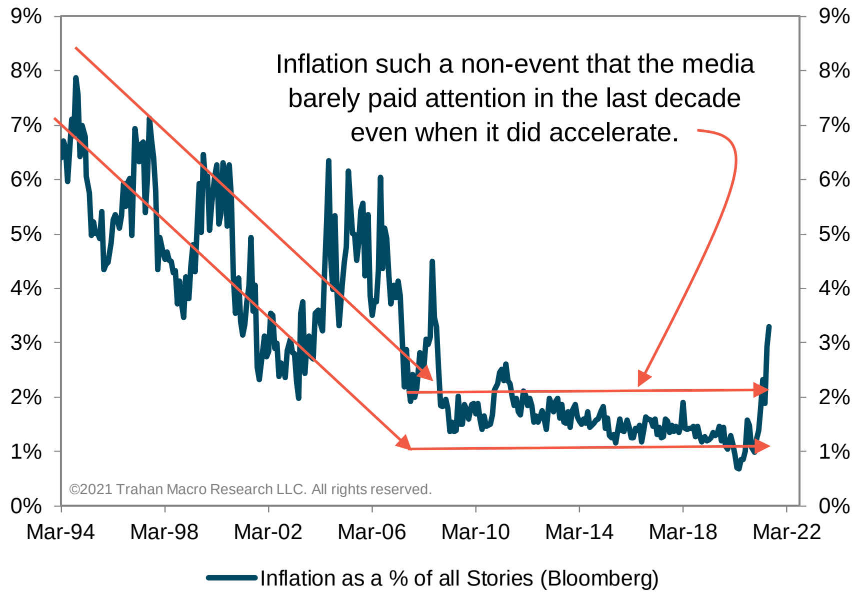
Interestingly, the word "transitory" was also used by the Fed a lot in 2004. In that particular instance, inflation turned out to be a little more than just "transitory". That backdrop also had unique aspects that had not been seen in prior cycles (i.e., the investment boom in China). The point is that inflation surprised the Fed and ended up being more resilient than their forecasts anticipated. The end result was 17 rate hikes over the next two years, a development that eventually ended with the Global Financial Crisis.

Behavioral biases are a tricky topic to cover in this industry because most of us can acknowledge that they occur, but every one of us will claim that we are immune to them somehow. The inability to see changes in front of us because they deviate from the norm is called the "recency bias" and I would encourage all of you to look it up and see how you can adjust your own analysis to try and avoid it and see the inflation story from a neutral perspective. It's not easy but when most gauges of inflation are sitting at multi-decade highs it might be what is necessary. The implications of an incorrect forecast here are significant. Best, Francois.

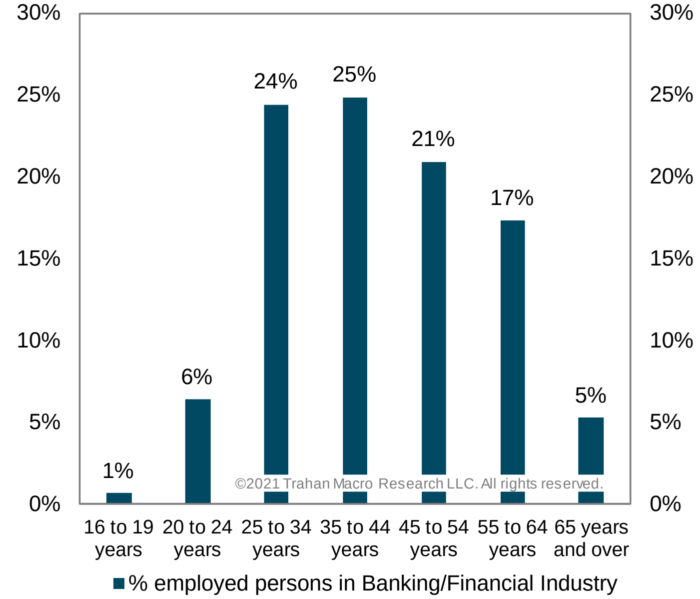
Inflation Became A Non-Event In The Eyes Of Investors Post-GFC

There have been ebbs and flows in inflation since the Global Financial Crisis, but they have occurred within a really low and narrow band. Indeed, Core PCE inflation barely reached the Fed's target during that time frame. It got to be such a non-event that the financial media (and Wall Street research) barely acknowledged inflation during that decade even when it did pick up. This is significant because it influenced all of us to see inflation in a different light, at least differently from what our education and training taught us, as few people today were actively working the last time inflation really mattered in the 1970s.

Inflation Largely Irrelevant Following The GFC

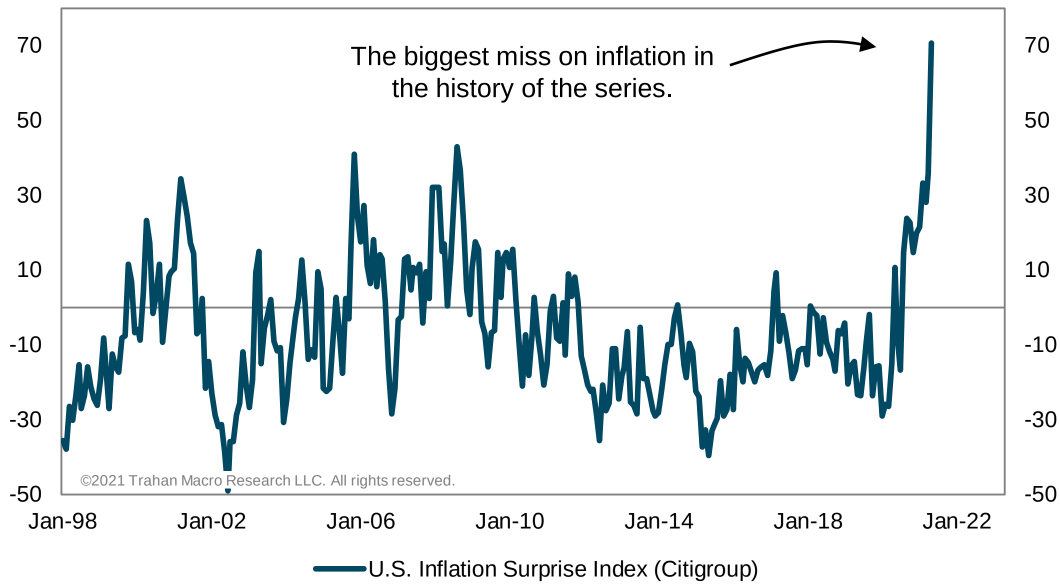


Fewer People With Inflation Experience



The chart above shows the intensity of inflation in the financial news across time. This series essentially trailed lower from 2011 onward and hit all-time lows in the period leading up to the pandemic. Clearly, it lulled this industry into a sense of comfort that it could not be problematic. The Inflation Surprise Index tells us a lot in this regard. We think of it as a gauge of forecast accuracy, and the rise in the series this past year reveals that we have just witnessed the biggest "inflation" miss ever in the history of the index. In fact, it is larger than any rise seen in the history of any of the Economic Surprise Indices (Bloomberg, Citigroup or FactSet). Can we trust the crowd that missed this when they now call it "transitory"?

Economists Did Not Foresee The Sudden Rebound In Inflation

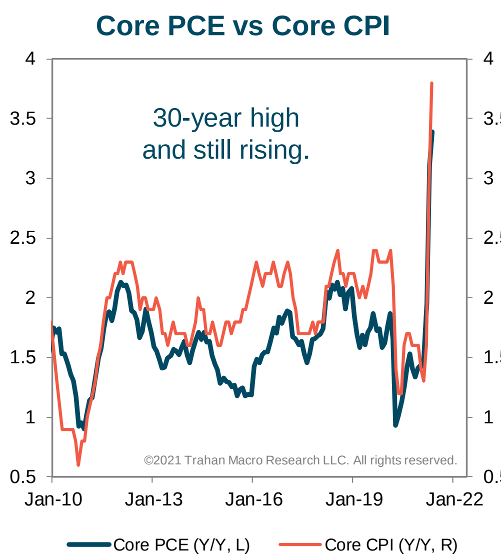


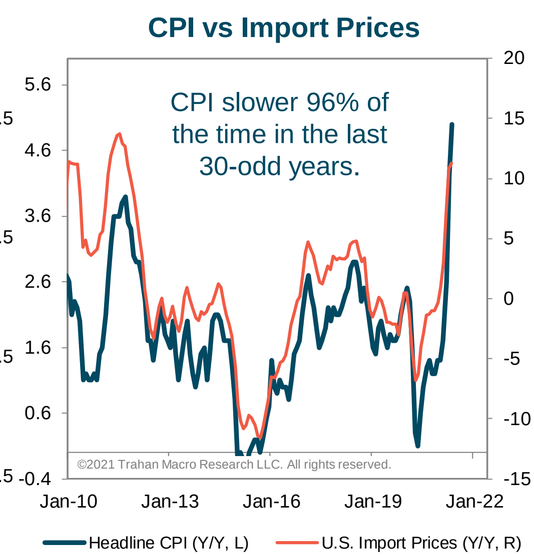
The rise in the Index reflects the breath and magnitude of the "misses" in economists' inflation forecasts.

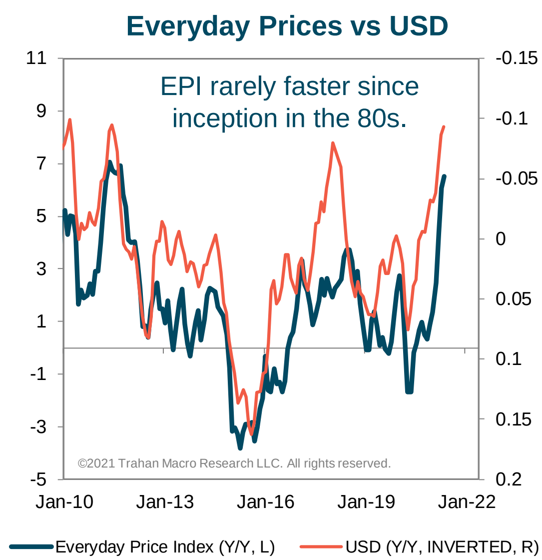
Inflation: A “Small” Topic With Potentially “Large” Consequences

Most everyone in our industry would agree that inflation has become a key topic in recent months. There is an ongoing debate as to what happens from here but the facts in the present are what they are: inflation is at, or close to, multi-decade highs across most measures. Comps from last year’s pandemic effect are surely playing a role BUT forecasters knew this and still managed to miss the boat. I don’t recall a single person that stated in early 2021 that inflation would hit 30-year highs on Core PCE or anything like that. Hence, the Inflation Surprise Index soared and now sits at all-time highs.

Inflation At Multi-Decade Highs In Most Indices And Proxies







We’ve established that inflation as a theme had lost much of its importance in the eyes of modern-day investors. This is largely the result of a long, drawn-out period of low inflation which itself is explained by a multitude of dis-inflationary measures that began in the 1980s. The report herein focuses on some of the key influences of inflation on equities that may have been overlooked given the dis-inflationary backdrop of the last 40 years. This is NOT an exhaustive list. We are just going to cover basics of inflation’s influence on Fed policy, market multiples and stock-picking via its impact on margins.

Three Key Pathways Of Influence Between Inflation And Equities

#1
Matters For Markets

- Inflation is a **critical driver of market P/Es.**
- Growth stocks (long-duration) comprise a large share of the S&P 500 Index.

#2
Matters For Fed Policy

- Inflation is a **key input of the Fed’s mandate.**
- The Fed has been wrong about ‘transitory” inflation in the past.

#3
Matters For Stock-Picking

- Inflation **very influential for gross margins** historically.
- Stocks with high-pricing power do best when inflation is strong/accelerating.

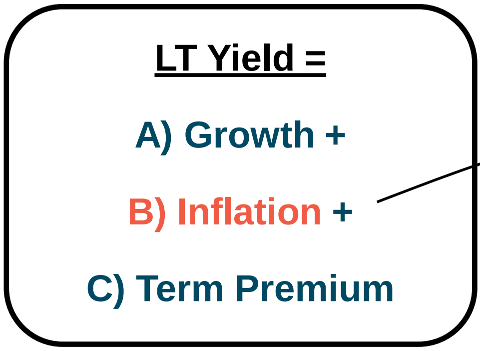
TRAHAN MACRO RESEARCH

#1 Inflation Is A Critical Driver Of P/Es Via Interest Rates

The effect of inflation on market multiples has always been important, albeit the degree of this influence does vary from one cycle to another. The main pathway of this dynamic is via the impact that inflation has on interest rates. We have always liked the Kim-Wright model for this exact reason. It is also a great way to illustrate this phenomenon graphically. The chart below shows the correlation between the Forward P/E of Growth stocks in the S&P 500 and interest rates. It's fairly obvious that even this year rates (and inflation) help explain the ebb and flow of P/Es, and disproportionally so for Growth stocks.

Inflation Influences Bond Yields

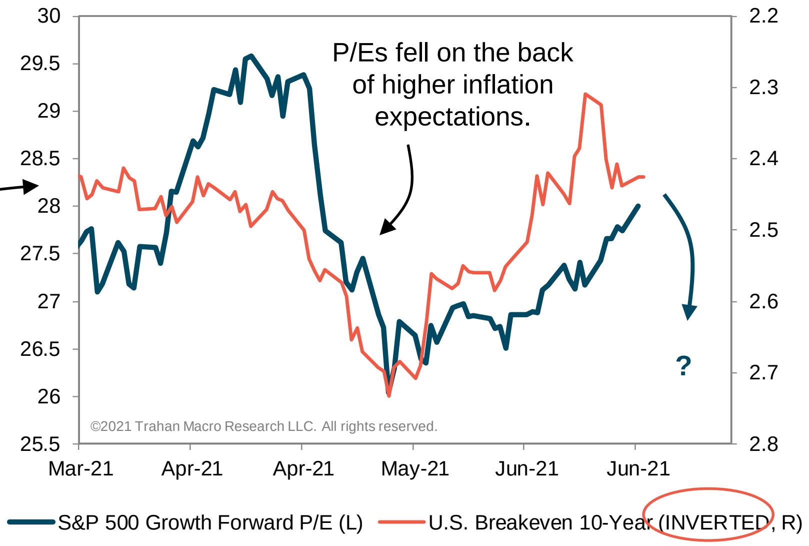
Breaking Down Treasury Yields



Source: Kim-Wright Model, 2005

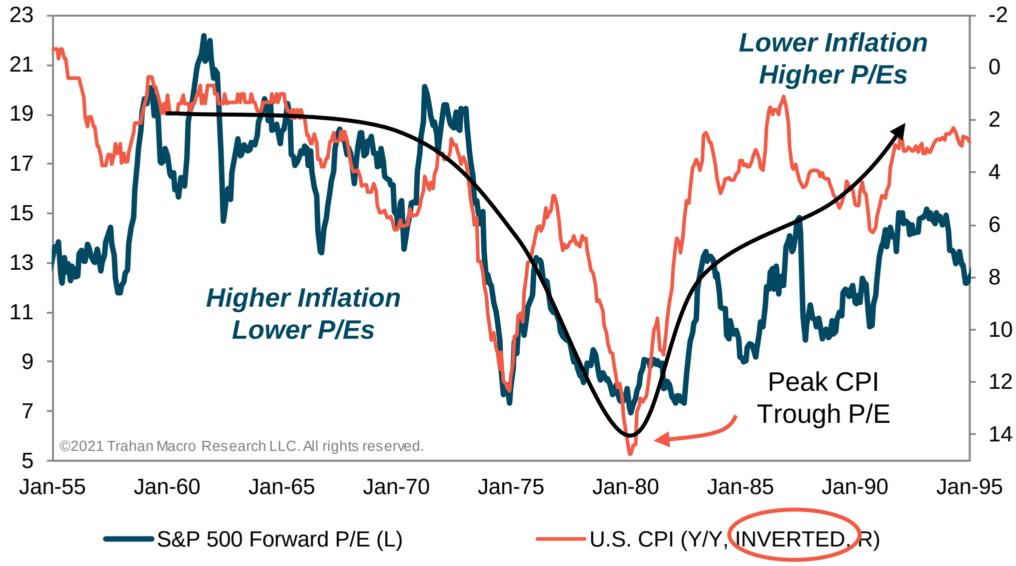
Click here for the full paper.

Growth P/Es Very Sensitive To Inflation Nowadays



There are two external or independent elements that can enhance the impact of inflation on market multiples. The first situation is when inflation acts as the primary driver of interest rates. This is what we like about the Kim-Wright model in that it lets us quantify and determine the primary driver or influence behind a move in bond yields. For the three-plus decades that spanned from the late 1950s through the beginning of the 1990s inflation did exactly that. It played a key role in bond yield trends and as such had a larger-than-typical influence on market multiples. The chart below is a good way to illustrate this as it clearly shows the inverse relationship between CPI and the S&P 500's P/E during that period.

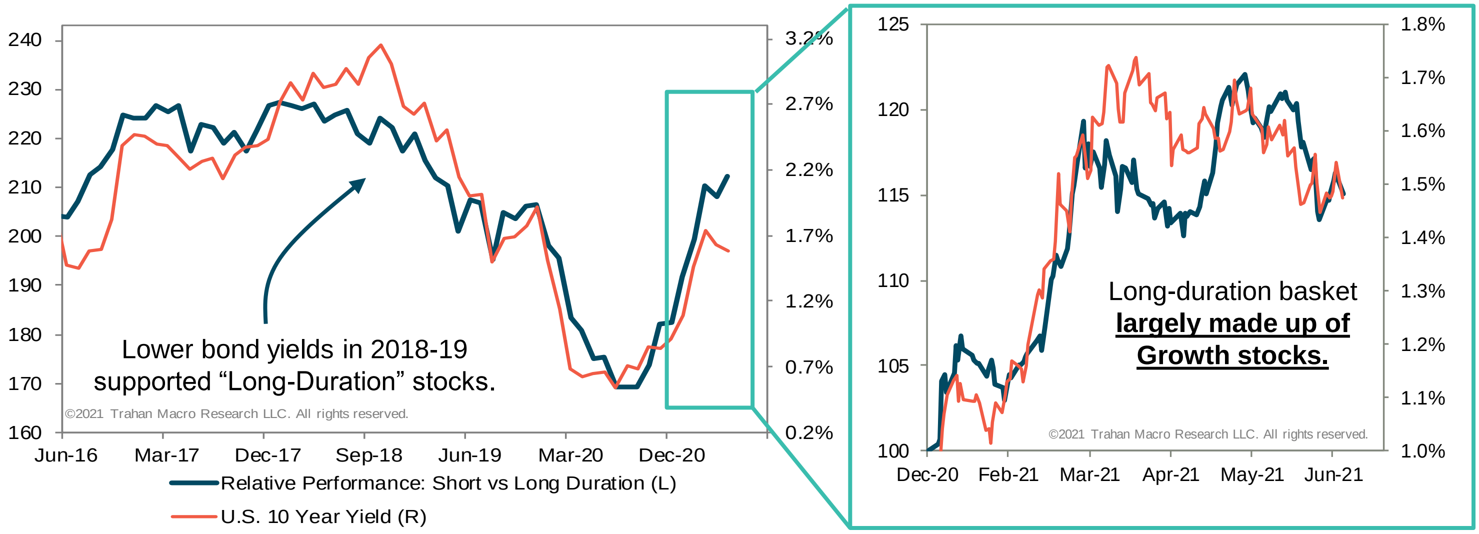
When Inflation Drives Interest Rates It Becomes THE Main Influence On P/Es



#1 The Influence Of Inflation Is Greatest On Growth P/Es

The second pathway between inflation and market multiples is via the composition of the S&P 500 Index, and valuation levels to a lesser degree. The explanation here lies with the fact that higher-duration assets tend to respond most strongly to changes in interest rates. It's easy to see in our work that Growth P/Es (most of which are long-duration assets) tend to correlate better with interest rates than Value P/Es do (these are mostly short-duration stocks). This can have a disproportionate impact on the index in times where Growth valuations (i.e., long-duration) are on the high side of history, as is currently the case. Rule of thumb: the more expensive Growth is the more influential inflation/rates are on P/Es.

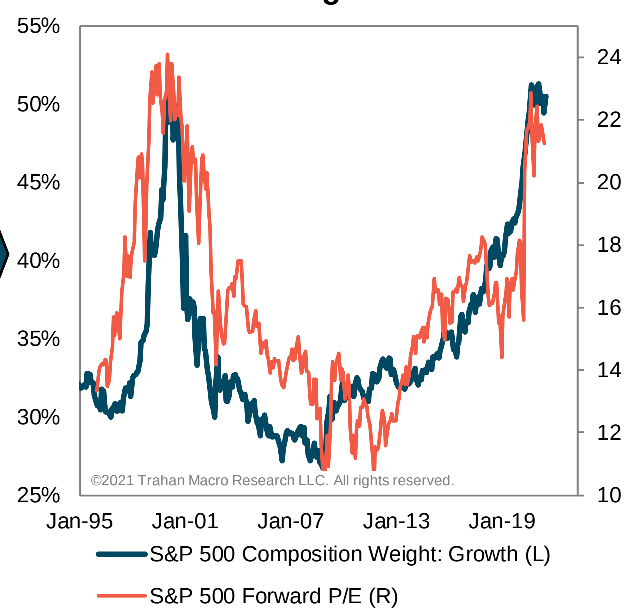
Higher Inflation A Bigger Issue For Long-Duration … … Making It A Key Driver Of Leadership



The other element that can enhance the role of inflation beyond the norm is when the S&P 500 has more Growth stocks than is typical, as is also the case today. In essence, there is more Growth in the S&P 500 than we are used to as the chart below illustrates (% of market-cap in typical Growth sectors vs their Value counterparts). Moreover, these Growth stocks happen to be more expensive than usual enhancing the influence of inflation on P/Es that much more. This is the trifecta of the link between inflation and P/Es → inflation driving bond yields, Growth unusually large in the S&P 500, and expensive to boot.

Composition Of S&P 500 Index Skewed To Growth

Growth Driving S&P 500 P/E



TRAHAN MACRO RESEARCH

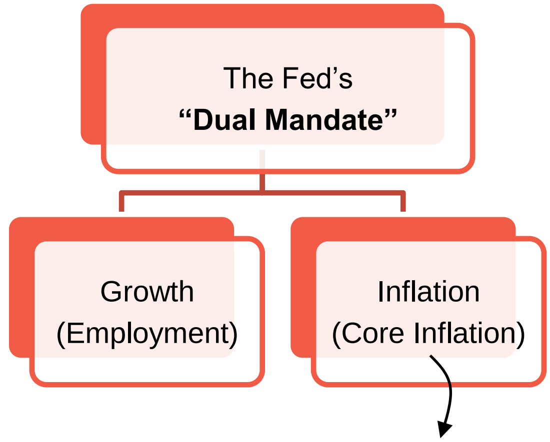
#2 Inflation Is A Key Driver Of Monetary Policy

"Inflation is a key driver of monetary policy" or at least it is supposed to be. I promised the team that I would not get on the pedestal this week so I will avoid statements that might be misinterpreted and stick to facts here. The Fed is supposed to set policy according to just two main variables, and core inflation is one of those. There is officially a third variable in the mandate which is long-term, interest rates but for practical reasons that is rarely discussed. Indeed, in practical terms the Fed spends more time on employment than anything else. In the context of a world where inflation has either drifted lower or gone nowhere in the last 40 years this makes complete sense. The key question is when do you know that the backdrop is may be changing?

The Federal Reserve's "Dual Mandate": The Evolution of an Idea

Since 1977, the Federal Reserve has operated under a mandate from Congress to **"promote effectively the goals of maximum employment, stable prices, and moderate long term interest rates"—what is now commonly referred to as the Fed's "dual mandate."** The idea that the Fed should pursue multiple goals can be traced back to at least the 1940s, however, with shifting emphasis on which objective should be paramount.

By Aaron Steelman, Richmond Fed, December 2011
The Federal Reserve's "Dual Mandate": The Evolution of an Idea



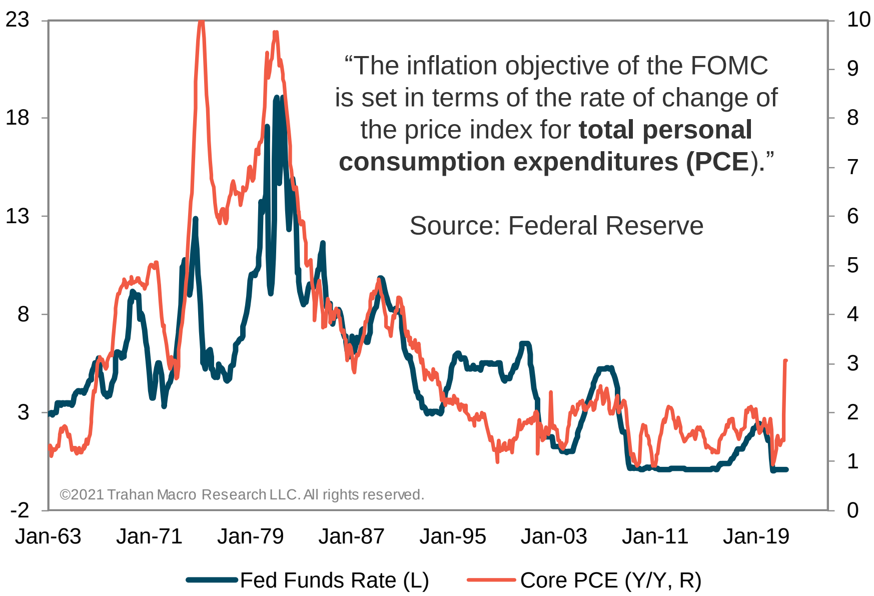
*The three biggest influences for **Core Inflation:***

1) Wage inflation, 2) Import prices 3) Shelter inflation

(See last week's report to read more about these influences)

What we do know is that the fed funds rate and Core PCE (the Fed's favorite gauge of underlying prices) correlate across time, as they should. The latest Core PCE reading came in at 3.4% for May, which is now sitting just above the Fed's long-term target of 2%, but also higher than what their projections were earlier this year. In essence, we know from their own words that they have been wrong about the magnitude of this year's surge in inflation, which they now label "transitory".

Core Inflation Is A KEY Driver Of The Fed's Mandate



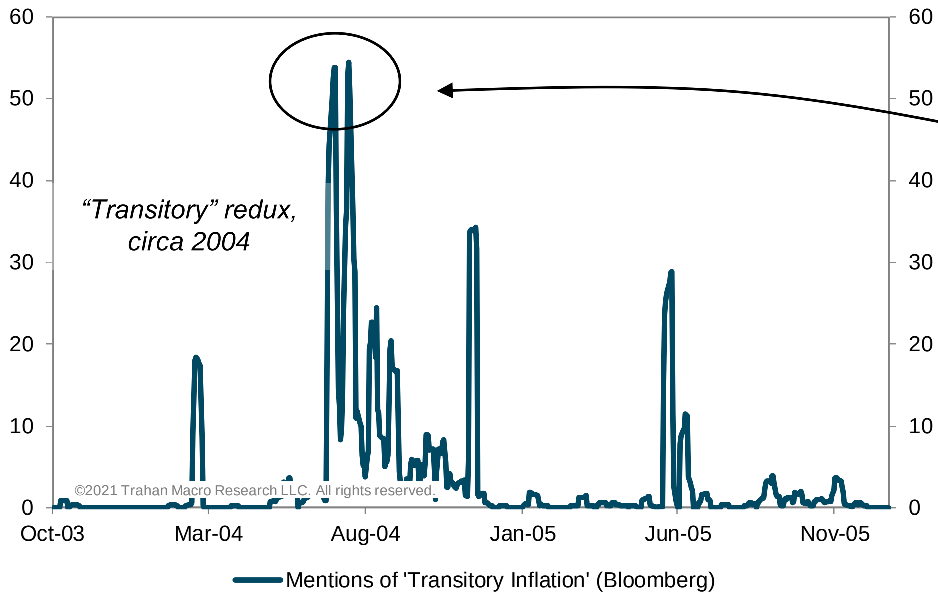
It's not just the Fed that has been wrong about soaring prices this year, it's the entire community of Economists as we have highlighted in the past. The question is whether we can trust their current views that this will be transitory when they did not see this coming in the first place.

We are not trying to complain about the Fed. Their job is hard enough. Still, there are real consequences for equities if they are wrong about inflation being "transitory".

#2 The Last Time Inflation Was "Transitory" … It Wasn't

The Fed wasn't always so transparent with the public about its policy intentions. That said, the institution did make conscious efforts to improve transparency throughout the 1990s. Indeed, the FOMC began to release statements following rate-setting meetings in the mid-1990s. Later in the 1990s, the FOMC adopted a policy to immediately communicate major changes in its views on the likely direction of policy. Interestingly, in July of 2004, the Fed began to provide a forecast for core inflation in its semiannual policy reports to Congress. This was just one month after the Fed's first rate hike of a 17-hike cycle that began in June of 2004. What makes the June 2004 date noteworthy is that the Fed at that time mentioned that it expected the most recent pick up in inflation to be "transitory". It was not.

The Fed Has Been Wrong About "Transitory" Inflation Before



*"Although **incoming inflation** data are somewhat elevated, a portion of the increase … **due to transitory factors**."*

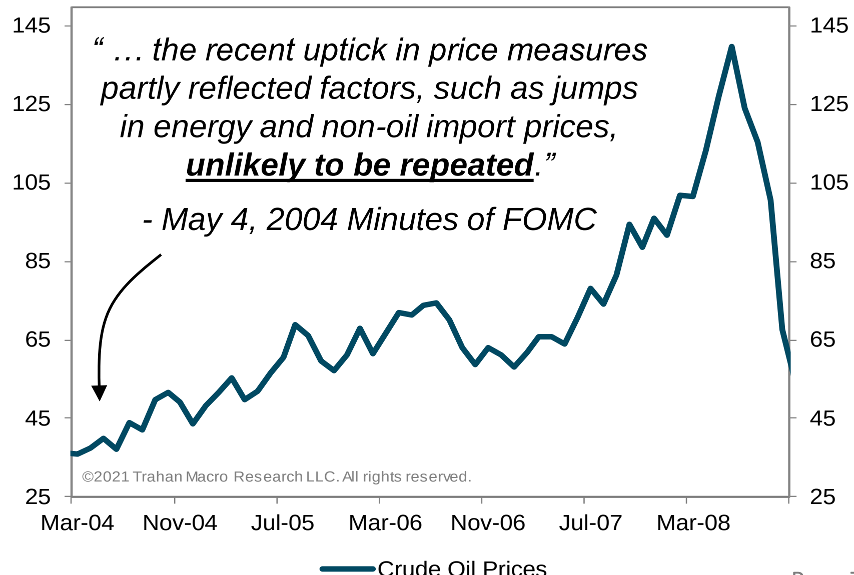
- June 30, 2004 Fed Release

At a National Economists Club luncheon meeting that took place in Washington D.C. on June 4, 2004, Governor Kohn remarked that he believed "that the rise in inflation will be limited" and that he had "been surprised at the extent of the pickup in core inflation this year." Core PCE sat around 2.12%, up from 1.25% at its low point. Note that Core PCE subsequently kept rising until it peaked in August 2006 at 2.55%, just two months after the Fed's last rate hike.

The "transitory" factors that had been pushing inflation higher in 2004 (e.g., energy and oil prices), kept rising throughout the next several years. In other words, **"transitory' inflation turned into:**

1. A sustainable rise in oil prices from $40 to $146 per barrel between 2004 and 2008;
2. Core PCE above the Fed's inflation target 98% of the time;
3. **16 additional Fed rate hikes totaling 400 bps**.

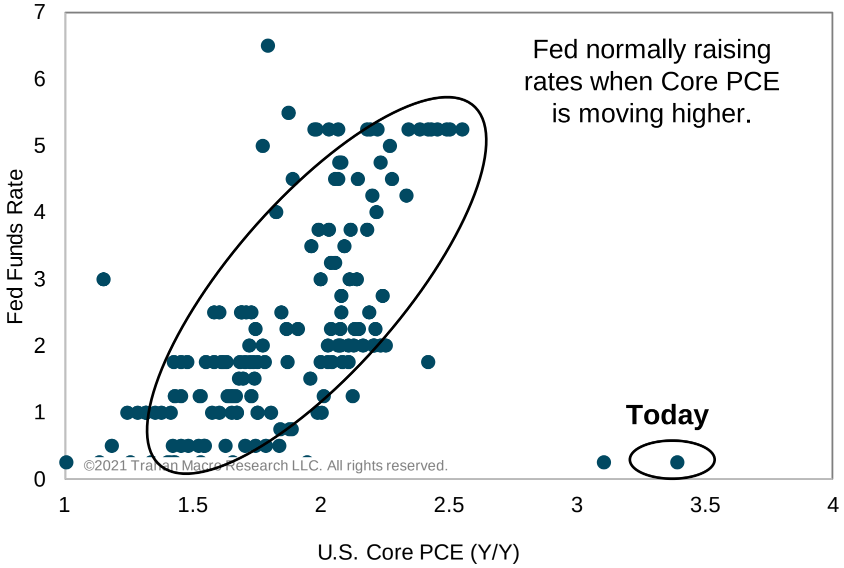
The Fed Did Not Expect Higher Prices To Prevail



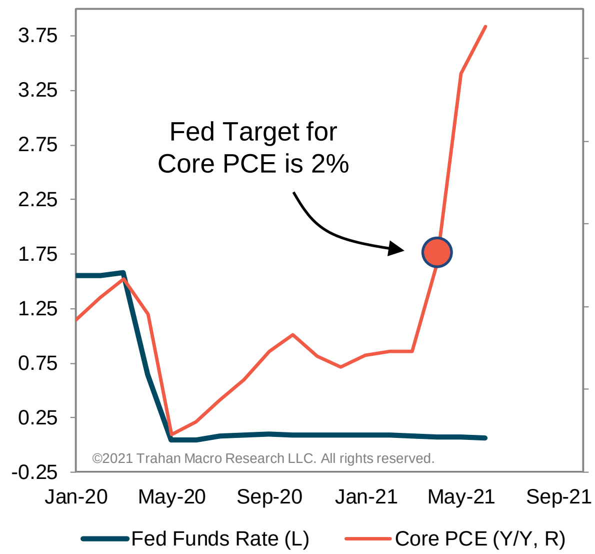
#2 Fed Is Tolerating Higher Inflation Than It Has In The Past

There are a lot of unusual things taking place in this cycle. It's not just the behavior of the Fed. Still, core inflation is higher than we have seen it with a near-zero fed funds rate and a reading much higher than their stated goal of 2%. Even if they won't admit it, we know the Fed did not expect core PCE to accelerate this much based on their own statements earlier this year. So the stakes are high since Core PCE is higher than we have seen it at any point in ZIRP time. The way we see it either the Fed ends up being right and inflation is transitory and dips back toward 2% OR there are other forces at play (we have covered these at length in prior reports) and they are way behind the curve.

Fed Generally Tightening Policy When Inflation Rises

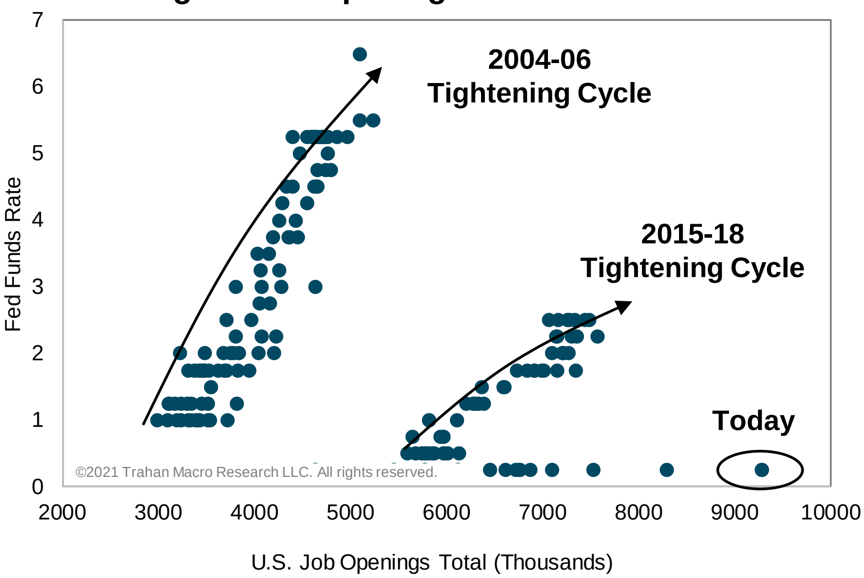


Fed VERY Inflation Tolerant

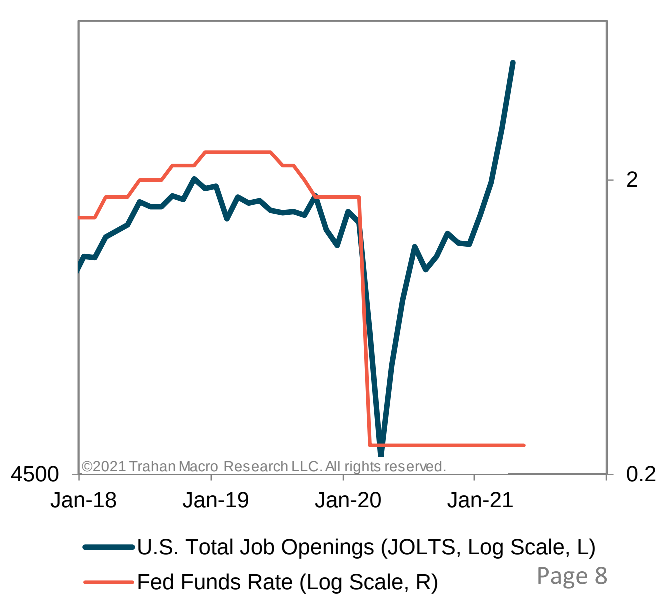


It sometimes seems like the Fed's policy goals are at odds, but they do have a link. Indeed, tighter labor markets generally translate into higher wage inflation which itself influences core inflation trends. The chart below shows the link between the Job Openings data and the fed funds rate. All other things aside, the Fed generally raises rates in the face of higher job openings and there are more of them today than we have seen in a long time. Some will say government benefits are influencing the labor force but even if everyone on benefits filled those positions, we would still have job openings at levels associated with Fed rate hikes in the past.

Higher Job Openings = Fed Rate Hikes?



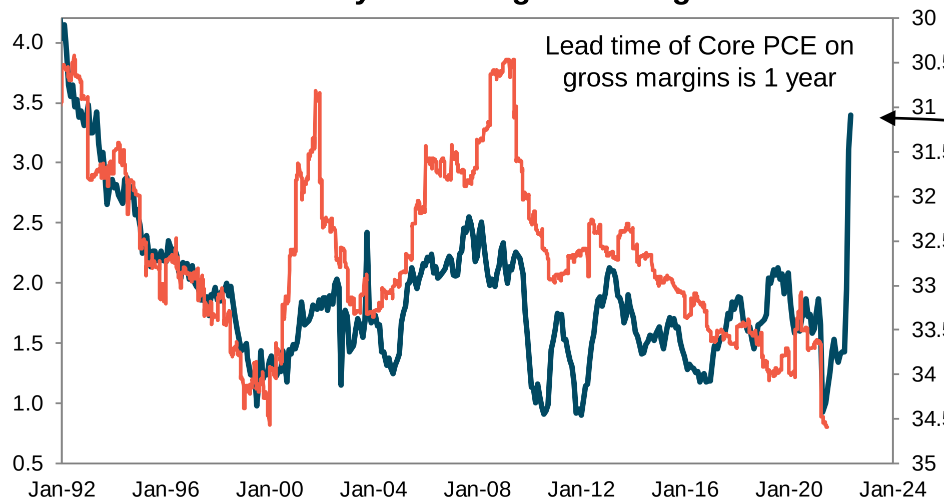
Higher FFR AND Higher Job Openings



#3 Pricing Power Key Factor In The Face Of Higher Inflation

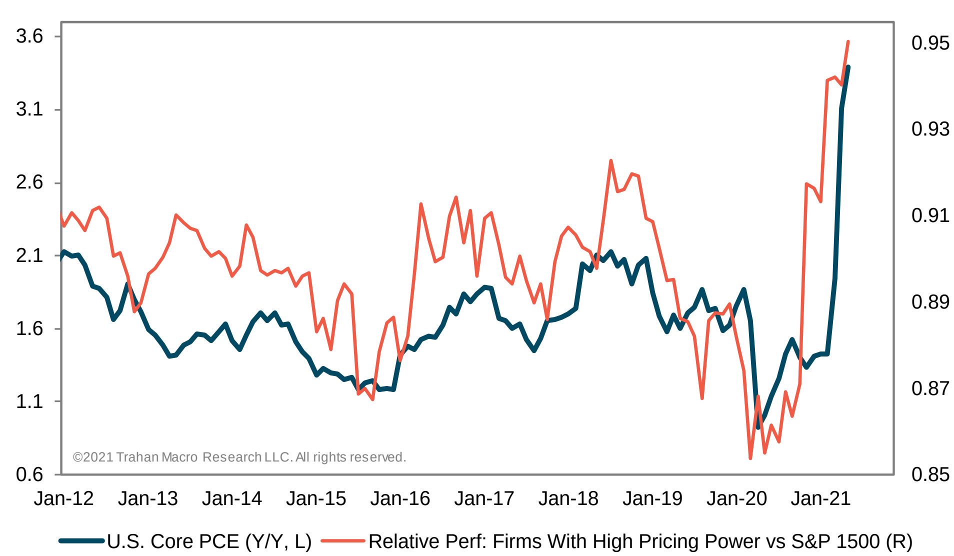
One pathway between inflation and equities is via margins. Margins generally benefit from lower inflation as the cost of goods purchased declines and this is especially true when imported costs are declining. In a backdrop in which inflation and rates are rising, particularly with a Fed tightening cycle on the horizon, the cost of operations and the cost of debt eventually weigh on margins and profitability. Historically, it takes about a year for higher inflation to impact gross margins, as illustrated below. Thus, the last year of higher inflation argues that companies are just about to feel the burden of higher prices.

Inflation Is Generally A Harbinger Of Margin Pressures



This brings us to the most important conclusion for investors – how to position your portfolio for higher inflation. Most of those who have worked in the industry long enough to have seen the cyclical rebounds in inflationary pressures over the last decade are probably familiar with the classic inflation-hedging strategies such as gold (and other commodities), commodity-sensitive sectors and industries, inflation-indexed bonds, real estate, etc. Indeed, many of these asset classes have been a good hedge, and even benefited in some cases, from rising inflation. One of the less accessible inflation-hedging strategies is *pricing power* – it is an economic term in nature and a more elusive topic in the financial industry that hasn't quite translated to having a readily-available pricing power time series.

Firms With High Pricing Power Outperform When Core PCE Rises



There are different ways to proxy pricing power. In the chart we illustrate our version of it (see next page for more detail on how it is constructed). Unsurprisingly, the relative performance of stocks with high-pricing power correlates well with Core PCE. While these stocks have had a respite in the last few quarters, we expect this trend to continue for the foreseeable future as inflationary pressures intensify.

#3 Emphasize Stocks With High-Pricing Power

We define firms with pricing power as those that have been growing gross margins on a year-over-year basis, along with gains in industry market share over the last two years. We look at the revenue for each specific company and compare it to the revenue of all of the U.S.-listed stocks in the respective industry to determine the percentage of market share. At this juncture, with inflation readings at decade-highs by many measures, with likely more to come, we encourage investors to overweight companies with high-pricing power, which are best poised for an inflationary backdrop.

What Is Pricing Power?

Comparing gross margin for each specific company to last year's gross margin.

Strong Pricing Power:

Δ Gross Margins + Δ Market Share

Higher Gross Margins (Y/Y) | **Higher Market Share (Over Past 2 Years)**

Comparing revenue for each specific company relative to all U.S.-listed stocks in that industry.

Pricing Power = Improving Margins AND Growing Market Share

The stock screen below is an abbreviated list of the stocks within the S&P 500 universe that meet our definition of *high-pricing power*. In other words, these are the stocks that are more likely to outperform their non-inflationary beneficiary counterparts if inflation is indeed more than just transitory this cycle. This framework for screening companies with high-pricing power is merely the starting point in separating the winners from the losers in the face of resilient inflation. Please e-mail us at quant@trahanmacroresearch.com if you would like the full screen or another S&P universe.

TRAHAN MACRO RESEARCH

Universe: S&P 500

Pricing Power

Ticker	Name	Pricing Power	Margin Growth	Market Share Growth	Price	Market Cap	Sector	Industry
BLK	BlackRock, Inc.	YES	+	+	$ 878.74	134031.1	Financials	Capital Markets
CHTR	Charter Communications	YES	+	+	$ 721.36	136096.2	Telecom	Media
TSLA	Tesla Inc	YES	+	+	$ 688.72	663464.9	Discretionary	Automobiles
LRCX	Lam Research Corporation	YES	+	+	$ 646.96	92269.0	Technology	Semiconductors
IDXX	IDEXX Laboratories, Inc.	YES	+	+	$ 631.90	53888.8	Health Care	Health Care Equipment
ALGN	Align Technology, Inc.	YES	+	+	$ 621.52	49185.0	Health Care	Health Care Equipment
ADBE	Adobe Inc.	YES	+	+	$ 588.80	281446.4	Technology	Software
SIVB	SVB Financial Group	YES	+	+	$ 556.88	30247.0	Financials	Banks
MSCI	MSCI Inc. Class A	YES	+	+	$ 534.47	44052.4	Financials	Capital Markets
NFLX	Netflix, Inc.	YES	+	+	$ 533.03	236347.0	Telecom	Entertainment

For monthly model updates:

E-mail quant@trahanmacroresearch.com or visit trahanmacroresearch.com/screens