PGIM QUANTITATIVE SOLUTIONS

THE FUNDAMENTAL TRUTH IN THE PERMANENT OR TRANSITORY DEBATE

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Much has been written about inflation over the past year, with most of the debate focused on the nature of the increase: Is it permanent or transitory? We can thank the Federal Reserve (Fed) for igniting this debate by commenting after their June 2021 meeting that "inflation has risen, largely reflecting transitory factors." From that point on, the use of the "T-word" (transitory) took off like wildfire. Virtually every market pundit peppered their narrative with transitory, and even corporate America adopted the "T-word" into earnings releases and SEC filings. The Fed made the situation worse by initially sticking to the story about transitory inflation, only to backtrack and change the narrative by scheduling the removal of monetary stimulus and all but telegraphing future interest rate hikes in 2022.

Don't get me wrong – I think the debate about the permanent or transitory nature of inflation was needed and I respect the many hours that Fed officials spend executing their mandates. Inflation is notoriously difficult to forecast and any actions taken by central banks take effect with a material lag. At time of writing, we think that the four-decade trend in falling inflation in the US has ended and inflation will likely rise at a higher rate over the next decade. While an extreme 1970s-style scenario of double-digit inflation is unlikely, we do think that there are risks to the upside in the current forecast of 2.4% embedded in our capital market assumptions and as discussed in our research on inflation. Although the transitory components of inflation should subside, the real test for whether inflation will be higher on a sustained basis will depend on how policymakers respond as the economy returns to full employment.

But for investment managers this question of permanent or transitory phenomena isn't limited to the inflation question, it permeates countless facets of investment decision making. In a more general sense, will a current trend continue or revert to historical norms? This can apply to inflation, economic growth, interest rates, and markets and spreads of all kinds.

To help think through this question of transitory or not, I've taken four very different topical investment issues to summarize how we – as data-driven, systematic managers – navigate the trend or transitory challenge:

- Value vs. Growth
- Meme Stocks
- ESG Investing
- Big Data Revolution

Value: Laggard or Leader?

We saw growth stocks sharply leading their value peers in 2018 and 2019, followed by value's historic underperformance in March 2020 precipitated by the COVID-19 crisis. While value indices have recovered somewhat since the doldrums of March 2020, they have not rocketed past their growth peers, as seen in past cycles. We observed similar underperformance of value during the Tech Bubble of the late 1990s, arguably driven by a different set of circumstances. Is value likely to continue to lag growth or are we at the precipice of a reversal? How do we, as quant investors, manage these scenarios?

As quant investors, we typically focus on value factor returns, which we define as the returns associated with companies' relative value rankings within industries. Our approach eliminates some of the persistent biases that occur in certain industries over time and is supported by our extensive research in the long-term pricing of growth stocks relative to their value counterparts. It's normal for growth stocks to be more expensive than value stocks because, well, their long-term earnings have more growth. However, investors often incorrectly extrapolate past earnings strength (or weakness) to continue, which causes growth stocks to be overpriced, or value stocks to be underpriced. When earnings either disappoint (in the case of growth stocks), or surprise to the upside (in the case of value stocks), investors realize their error and both prices and multiples correct, which causes the value spread to mean revert over long periods of time.

The COVID-19 pandemic further complicated the situation by suddenly shocking the earnings of entire industries such as airlines, restaurants, and leisure, which rendered many standard metrics virtually useless. Prior to 2020, the earnings and multiples of growth and value stocks followed fairly typical patterns. While the forecasted earnings-per-share associated with value stocks slowly declined, their multiples slightly expanded. The opposite was generally observed in growth stocks, which did in fact deliver increasing earnings-per-share growth, but with multiples that generally contracted over time. The aggressive fiscal and monetary stimulus response to COVID-19 drove rapid earnings growth in a limited segment of the market – far beyond any level we have seen in many years – propelling a narrow group of growth stocks to extreme levels. And while growth stocks did deliver strong earnings followed by high returns, their P/E multiples actually declined because earnings growth was so robust! If history is any lesson, then the recent rapid earnings acceleration of growth stocks has "pulled forward" future earnings. This level of growth will therefore be extremely difficult to sustain. Value stocks also benefited (to a lesser extent) from the excessive government stimulus, but were not rewarded with any material multiple change. As interest rates rise, which we think is imminent, fiscal conditions should tighten and any deceleration in earnings will likely have a much larger impact on growth stocks, leading to a narrowing valuation gap and value's return to favor. While value has underperformed for much longer than expected, we think the long-term drivers of the value-growth cycle are still in place. The combination of COVID, inflation, and the Fed's response is likely setting up the perfect environment for solid value factor returns in the coming years.

Meme Stocks: Fad or Forever?

Meme stocks are another great example of the debate around permanent versus transitory phenomena. What actually constitutes a meme stock is unclear and has evolved over time, but what's certain is the market impact generated by investors, both retail and institutional, as they flocked into highly shorted stocks. The firms that have been the most prominent members of the meme group were GameStop and AMC Entertainment. Academic and regulatory scrutiny has generally focused on firms that were temporarily restricted from trading on the Robinhood platform in January 2021. Considering the two most prominent members, the only characteristics they shared were poor fundamentals, high short interest, and retail investors' cult-like following on Reddit. The massive short interest on these stocks helped fuel the large, rapid moves, as investors with short holdings were forced into a short squeeze, particularly if they used leverage. In the case of GameStop, more than 100% of the total shares were shorted at the peak of the meme stock craze, indicating that some of the shares that were borrowed by short sellers were bought by other investors, only to have the positions lent out again.

Vast access to information, coupled with the rise and sway of social media, led to investor herding and drove rapid price increases of meme stocks. And while inflated valuations did breathe some life into these firms, enabling them to issue more equity and raise debt that would have been more difficult before their meteoric rise in 2021, the price run-ups weren't caused by underlying technological change that could drive business fundamentals. Therefore, valuations are likely to revert to long-term averages. In fact, our research shows that despite the earlier hype, investor interest, along with the stock prices for a majority of meme stocks, has evaporated. Despite the steep advance in share prices seen in January 2021, returns have since declined significantly and no new meme stocks are being created, indicating that that this is a fad and not an ongoing investment phenomenon.

ESG: Contempo or Crucial?

The rise of ESG investing has been growing over the past decade and continues to accelerate. Of the three categories, the governance part is the grown-up; there is nothing new in high performing companies' good corporate governance, and that has changed little over time. However, the topics-de-jour – environmental and sustainable goals – are clearly driven by scientific evidence and the understanding that our current business practices will need to be materially modified to slow the pace of climate change. It's important to note that nearly 40% of the world's biggest and most emissions-intensive public companies are demonstrably unprepared for the transition to a low-carbon economy and more than 80% of companies remain off-track for Paris Accord targets (for more information see our research on climate change). Companies and countries that can make this transition successfully may be major beneficiaries.

Although much work has been done in environmental economics regarding negative externalities, it remains difficult to predict when they may be reflected in economic outcomes and market prices since change is dependent on regulatory, governmental, and societal actions. Nevertheless, our belief is that the current realities of climate change will force the market to price these negative externalities as the most efficient way to manage them. The transition to a sustainable economy amid possible climate change scenarios poses both significant risks and opportunities for investors' portfolios as this possible structural change unfolds in the long term.

Big Data Revolution: Enduring or Ephemeral

Technological innovations have given asset managers access to massive amounts of numeric and textual data on a timely basis. Significant advances in artificial intelligence allow for processing vast amounts of data effectively and efficiently for more relevant and timely insights into asset fundamentals and prices. This means managers can now analyze and quantify data previously considered solely qualitative and from sources that just several years ago were unavailable.

A common example of how asset managers quantify previously qualitative data is through Natural Language Processing (NLP). Using NLP to assess analyst conference calls and central bank statements can open a window into sentiment and yield additional insights. Similarly, NLP can be helpful in analyzing news media, which means asset managers no longer have to rely on individual companies to disclose information. The use of big data is undoubtedly here for the long term but how it is being used is much more in transition, and the precision with which it is used even more so.

In many ways, we believe that we are in the early innings of a data revolution which has been unlocked by a combination of the internet, cheap storage, and cloud computing. It's hard to imagine how much additional data will be available as the Internet of Things (IoT) continues to pervade our daily lives. However, more data does not always result in more information. It's also crucial to note that additional data sources are often highly correlated with existing data sources, so it's our responsibility to tease out what is truly innovative and ascertain its value to the investment process.

The Bottom Line:

It helps to be able to disaggregate between a short-term fad and a long-term trend. In my examples, meme stocks and growth's dominance are relatively short term, while ESG and the big data revolution are considerations for the longer-term. It's important, whether you agree with my opinion or not, to stay focused on the one constant: That long-term outcomes will be driven by fundamentals, which are the anchor that will always drive the long-term behavior of markets. Admittedly, timing – when (and how) fundamentals will assert themselves – is always a difficult question to answer.

There will continue to be transient forces and structural changes in the investment landscape as our economies evolve. As quant investment managers, our goal is to filter out information from the noise. Information should be incorporated into our investment process while noise should be handled with smart risk management. The challenge with markets is that it's possible for large groups of investors to create a self-fulfilling result for an unpredictable period of time, as has been much discussed recently concerning ETFs and ARK Invest. This can occur because taking an investment action (buying or selling) produces (on average) some market impact that includes both temporary and permanent moves in an asset's price. It's very difficult to notice this with an individual transaction, but research shows that it has always been present. So, while we may have periods when market participants can drive prices away from long-term fundamentals, it's hard to time when the temporary move will revert to the norm. And while things may differ for a "short" period (whatever short may mean), long-term investment prospects will continue to be determined by fundamentals.

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