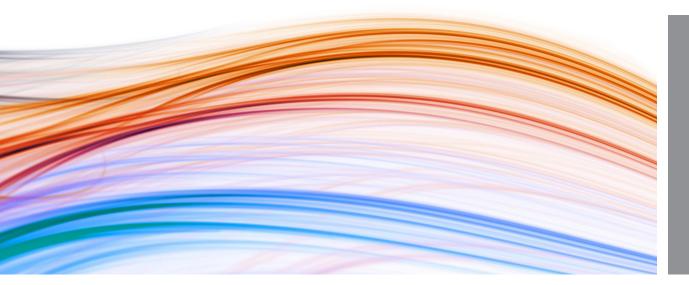
FEG INSIGHT FEG 2019 INVESTMENT FORUM



Signs: Separating Signal from Noise in Markets, Politics, and Investments



ANANYA HANDA / Research Analyst / Global Fixed Income and Credit EMILY HOGYA / Senior Portfolio Analyst KATHRYN MAWER, CFA, CAIA / Vice President / OCIO Advisor FEG welcomed more than 500 attendees to their ninth Investment Forum, *SIGNS: Separating Signal from Noise in Markets, Politics, and Investments.* Hosted in downtown Cincinnati, the Forum featured 39 speakers, multiple breakout sessions, and various networking opportunities—all designed to help clients and guests learn how to separate signals from noise to better pursue their investment targets and respective missions.



FEG President and CEO Becky Wood shared some of the firm's recent milestones with attendees, including the firm's conversion to an employee stock ownership plan (ESOP) and FEG's 30th anniversary.

Becky reiterated FEG's commitment to remaining independent, enhancing the client experience, and helping support intergenerational growth for perpetuity through portfolio performance.

Over the subsequent two days, Forum speakers addressed topics ranging from technology to market cycles and from politics to philanthropy. The following summaries highlight the most powerful takeaways and meaningful insights shared by the presenters.

INVESTMENT OUTLOOK

Presented by Gregory M. Dowling, CFA, CAIA, Chief Investment Officer and Head of Research at FEG and J. Alan Lenahan, CFA, CAIA, Chief Investment Officer and Head of OCIO at FEG

SIGNS, SIGNS, EVERYWHERE

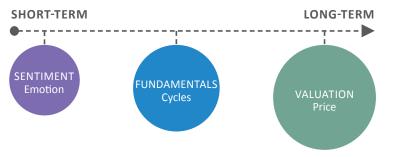
While we live in a world surrounded by signs, there are no signs that explicitly warn of an impending recession. Greg Dowling reminded the audience that institutional investors should be able to interpret signs and data as they encounter them. Not only is there more data today than there were in years past, the data is also changing more rapidly.

Before the digital age, investors waited for information sent via traditional mail to update statistics and make trades. Today, investors have near-instant access to data—more, in fact, than they can process.

FEG'S DATA ORGANIZATION FRAMEWORK

To help separate signal from noise, FEG organizes data into three meaningful indicators: valuation, fundamentals, and sentiment. While valuation—the price one pays for an investment—matters most over the long-term, sentiment—the fear and greed levels of market participants—impacts the short-term.

Ultimately, FEG's focus is to identify the progression of different cycles and incorporate all three factors—valuation, fundamentals, and sentiment—into its framework.



To highlight FEG's framework, Greg focused on two time periods: March 2009 and Fourth Quarter 2018.

In 2009, when FEG hosted its first Investment Forum, all three measures were flashing green (positive):

- Valuations were low and asset prices were cheap
- Fundamentals were improving as a result of central bank involvement
- Sentiment was so bad that there was nowhere to go but up

Since then, the markets have increased nearly 400% in value, though geopolitical risks have been introduced along the way. This growth was fostered by the Fed's increase to the balance sheet and three rounds of quantitative easing.

In contrast, the measures were different in 2018. The end of 2018 saw all risk assets decline, marking the worst broad market decline since the 1930s. While valuation and sentiment flashed yellow (caution), fundamentals flashed red (negative) as hawkish monetary policy expectations weighed on the market.

Performance in 2019 rebounded following the "Powell Pivot." Investors watched as the Fed cut interest rates twice, easing market sentiment.

ON PAPER, 2019 LOOKS LIKE A GOOD YEAR; HOWEVER, COMPARED TO THE THIRD QUARTER 2018, INVESTORS HAVE SIMPLY ENDED UP BACK WHERE THEY STARTED



Data source: S&P 500; data as of September 13, 2019

NARRATIVES ARE DRIVING MARKETS

Next, Alan Lenahan explained market volatility and how sentiment with can shift under the influence of narrative. Volatility in the markets can be attributed to a number of factors, but is primarily driven by sentiment resulting from narratives.

Humans are hardwired for storytelling, and often react quickly and emotionally to the stories they hear. Alan contended that some narratives are devious, as they are crafted to influence behavior. Today, central bank missionaries, evangelist executives, and world leaders are weaving their own narratives, which are, in turn, driving rapid swings in the markets.

There have been times when valuation, fundamentals, and sentiment followed a predictable path. However, when narratives dominate sentiment, the predictability of the path begins to fade, and predictive models become less useful.

Alan argued narratives are currently a dominant force in the markets, pointing out that nearly four billion people connect to the internet on a daily basis—a place where they constantly consume content created by storytellers.

He explained that FEG continues to monitor sentiment along with valuation and fundamentals; however, currently, there is not a lot of opportunity across asset classes.



OPPORTUNITIES TO ENHANCE INVESTMENT PERFORMANCE

Alan concluded with ways investors could potentially add value to their portfolios when little is flashing green among valuation, fundamentals, and sentiment.

1. **Strategic starting point:** Investment professionals, committees, and boards should take the time to understand themselves and their organization. To achieve your targets, you need to understand where you are today.

2. Active management: Despite the negative headlines, active management is not dead. FEG continues to strive to identify those active managers who we think have the potential to outperform their passive peers.

3. **Illiquidity premium:** Many institutions in the philanthropic world are managing pools of capital with a long-term horizon. FEG believes they likely are well-positioned to integrate private capital solutions into their portfolios.

4. **Risk management:** While it is always good to understand and manage the risk embedded in a portfolio, the volatility of today's markets makes risk management even more important for investors. FEG uses the proprietary tool Vigilance to monitor and manage risk in client portfolios.

5. **Fee alignment:** FEG continues to believe in the merits of active management, actively negotiating lower fees and terms with managers for the benefit of our clients.

CONCLUSION

Greg and Alan adeptly set the stage for the sessions to come, touching on the impact of technology, politics, and policy, all of which—through the narratives market players weave—influence sentiment and were addressed by the sessions which followed.

THE NEXUS OF FINANCIAL AND TECHNOLOGICAL INNOVATION

Presented by Campbell R. Harvey, Ph.D., Duke University, NBER, and Research Affiliates

As Dr. Cam Harvey took to the stage, he began with a history lesson on late Victorian England to illustrate the power of disruptive technology.

The "Great Horse Manure Crisis of 1894" was due to the high number of working horses on the streets of London. However, by 1915 the horses were disrupted by the motorized carriage. The main "losers" in this situation, were the working horses, whose numbers dropped greatly. Laborers were not significantly impacted by the shift; those who drove a horse and buggy switched over to driving the new motorized buggies, and stable hands transitioned to pumping gas at service stations.

This lighthearted example illustrated the disruptive nature of technology, and how we cannot really predict what will happen in the future. Following this, Cam dived into the different views of technology, the rise of machines, how technology is impacting finance, and how perhaps "This time is different."

TWO VIEWS OF TECHNOLOGY

Cam described two possible ways to view the interaction of technology and labor.

1. **The Dark View:** In his book, *Das Kapital*, Karl Marx describes technology as "an instrument of the capitalist to increase profit at the expense of labor." Essentially, Marx believed advances in technology lead to large-scale unemployment.

2. **The Bright View:** Technological change can lead to short-term disruption of employment, but in the long-term, the detrimental macro effects are limited. This view is based on three main ideas: that benefits of technology should be considered, that labor is mobile, and that different technologies will impact different demographics.

GLOBALIZATION AND TECHNOLOGY

According to Cam, nearly all economists agree globalization has led to higher average growth and trade is generally positive. However, the growth benefits of globalization can be unequally distributed and affect different demographics and populations inconsistently.

Cam contended the unequal benefits of globalization are a driving force for decisionmaking by those impacted. For example, he believes the Brexit vote was a result of such a disparity. He also suggested the U.S. may not be the land of opportunity it is widely purported to be, as the upward mobility of those born to low-income households remains limited in comparison to other nations.

Further, although attention remains focused on the headlines about immigration and outsourcing, Cam argued the main issue society needs to confront today is technology. Politicians have the capacity to erect barriers to immigration and punish companies for outsourcing, but it is very difficult for them to regulate the use of technology.

RISE OF THE MACHINES

Continuing his history lesson, Cam noted we have come very far, very quickly. In the mid-1980s, the Cray 2 was the fastest supercomputer in the world, priced at \$32 million in current dollar terms. Today, the iPhone 11 Pro is priced at just \$1,000, yet is more than 3,600 times faster than the Cray 2.

How did we get here?

Revolution #1. **Computing Power**

Unlike many variables, computing power can be predicted. Raw computing power today is dramatically superior to what it was in the past.

Revolution #2. **Data Generation and Storage** It is cheaper to store data than ever before.

Revolution #3. Methods

We have made advances in the methods we use in every industry as a result of the available computing technology.

Revolution #4. **Open Source Code**

Coding has become a shared activity and programmers no longer need to reinvent the wheel every time they develop software.

HOW TECHNOLOGY IMPACTS FINANCE AND GROWTH

Because of these revolutions, the financial world is rapidly changing. Cam touched on four key initiatives or ways technology is impacting finance.

1. **P2P financing:** This allows entrepreneurs to obtain financing, which was difficult to access in the past. It also enables anyone to make micro-investments in firms, which had previously been reserved for "qualified" investors. This places great risk on the traditional banking industry.

2. **Robo-advising and asset management:** As more firms begin using trading algorithms, Cam believes there likely will be a shakeout in the asset management industry. Small firms will fail to compete with the larger firms that are heavily investing in data and machine learning.

3. **Blockchain and smart contracting:** Blockchain technology presents an opportunity to lower or even eliminate transaction costs. Broader application of this technology could result in quick verification of ownership and efficient exchange of ownership of securities.

4. **Machine learning:** There are four main forces that fall under machine learning: computing power and the rise of GPU, growth of big data, artificial intelligence and machine learning advances, and open source software.



"THIS TIME IS DIFFERENT"

Technological disruption is nothing new, but this time we know the direction things are moving.

As Uber gained popularity in New York City, the price of taxi medallions plummeted, causing taxi drivers to shift over to driving for Uber. Like in the case of horses and cars in the late 1800s, there was no disruption of labor, simply an adaptation to the advancement of technology. The next step in automotive technology will likely be self-driving cars, as major firms are investing in machine learning and technological advancement. This should have profound effects on both the consumer and driver-reliant industries. However, drivers will once again adapt, taking on new roles made possible by technology.

Cam believes the "losers" of the shift to a more technologically-savvy world likely will be unskilled and medium-skilled workers in developed markets—a demographic that can be difficult to retrain. Ultimately, he expressed optimism regarding the vast amount of underutilized human capital in the world, including many people with little or no access to education. As technology becomes more widespread, people in remote areas will increasingly gain developmental opportunities.

CONCLUSION

Technology will continue to play a major role in globalization. While it is relatively easy to forecast the growth of technology, investors often ignore the implications. Technological growth will continue to increase, but likely will not affect everyone positively. It is crucial that policymakers, corporate leaders, and educators begin having conversations around this issue and develop methods to deal with the rapid growth in technology and its potential impacts.

FEG'S INSIGHT

FEG supports Dr. Harvey's subscription to the Bright View of technology based on significant empirical evidence that while technology can lead to short-term disruptions, it does not significantly impact labor or employment over the long term, as labor is mobile.

A FIRESIDE CHAT WITH HOWARD MARKS

Presented by Howard S. Marks, Co-Chairman of Oaktree Capital Management and moderated by Michael A. Condon, CFA, Head of Portfolio Management at FEG

Howard Marks sat down with his long-time friend and FEG's Head of Portfolio Management, Michael Condon, to discuss multiple topics, including investors' fears, the current bull market, and attempting to time the market.

TWO FEARS OF INVESTORS

Howard stated, "The truth is, every day investors have to worry about two risks: one—the obvious one—is the risk of losing money. The other is the risk of losing opportunity. You can reduce one of these risks at a given time, but not both."

With this in mind, he suggested that each investor should have an idea of "normal" risk posture to determine how much to worry about losing money versus worrying about missing opportunities. Investors should then decide whether they'll try to alter their posture based on market events, and, if so, whether their risk should be above normal or below normal today.

To determine whether a given point of time is ripe for aggressiveness versus defensiveness, Howard suggested investors consider where the market is in its cycle: when psychology is depressed, news is bad, and people are despondent, is when he believes the odds are truly in an investor's favor—and vice versa.

He described an activity he likes to engage in called, "taking the temperature of the market," to determine whether the market is hot or cold. To do this, he observes both quantitative and qualitative (or behavioral) factors. While the quantitative data is equally accessible by all, investors can gain an advantage by understanding behavior; when people are terrified, market prices collapse to reflect their fear. Every investor operates in the same market others create, thus an understanding of the behavior of others enables investors to react accordingly.



THE UNLOVED MARKETS

Howard revealed that in his 50-plus years of experience, the current bull market is the most unloved one he has ever witnessed. Using a saying from his early days, he described the markets as "climbing a wall of worry."

While it can be dangerous if a market goes up parabolically and people have too much confidence, he shared that, in his opinion, attitudes today are relatively modest. Investors feel they have to engage in aggressive behavior by investing in equities and other risk markets—which can also be described as a TINA (there is no alternative) environment—in order to meet desired return targets in today's low-return world. He noted that investors' moderate expectations are a good thing, but investors' aggressive behavior despite their moderate expectations introduces risk.

He also commented that people tend to raise their expectations regarding the future as market returns surprise to the upside. What investors fail to realize in good times is those above-average returns are borrowing from the future, meaning they'll likely be followed by lower returns in later years.

According to Howard, the fundamental error investors make is ignoring the tendency of the markets to regress to the mean. When abnormal returns are experienced, rather than maintaining restrained expectations, people tend to extrapolate the gains.

As investors turn more optimistic when markets are doing well, valuations and prices increase, making for a poor entry point. Conversely, investors tend to avoid markets when extrapolating negative sentiment, thus they miss out on opportunities when risks and valuations are low. In Howard's opinion, the best investors are contrarians.

"We need to be abnormally unemotional or contra-emotional. It's great in investing, but not so great in marriage." – Howard Marks

CATCHING THE FALLING KNIFE

When asked whether he found it easier to pick the top or the bottom of the market cycle, Howard shared that he generally avoids using the terms "top" and "bottom." However, as a distressed debt investor, the so-called "bottom" of a cycle becomes important.

Most people step back in times of market stress and wait until the dust has settled and the uncertainty has been resolved. Howard believes this is synonymous with admitting to being too terrified to take action. He argues that by the time things have settled, the great buying opportunity is gone. Thus, it is the job of distressed investors to put money to work while the knife is falling, albeit carefully.

When discussing the right time to buy, Howard concluded that it makes sense to buy when prices are low, rather than wait until they appear to have bottomed. If investors buy when things are cheap and have staying power, they may go down further before they go up, but they'll eventually be right.

He recalled an experience in 2008 following the disappearance of Bear Stearns and other large banks. Without a strong precedent to guide forecasters, some people speculated that it was the end of the modern financial world. Howard acknowledged that the outcome defied analysis and was difficult to predict. However, what he recognized was that if Oaktree bought in to the markets and the world ended, it wouldn't matter; whereas, if they failed to invest and the world kept on spinning, they would not have done their jobs.

"The idea that you will do your buying at the bottom is silly, like the notion of being able to sell at the top." – Howard Marks

HAVING THE MONEY TO SPEND AND THE NERVE TO SPEND IT

All one needed to make a lot of money in late 2008 was money to spend and the nerve to spend it, according to Howard. In particular, you didn't need caution, conservatism, selectivity, or discipline. That doesn't mean "money and nerve" constitutes a surefire formula for investment success; having them in early 2007 cost investors a lot of money in the Global Financial Crisis. Ultimately, it is the progression of the market cycle that determines investors' odds of success and whether money or nerve should be applied at a given time, or if investors should instead favor caution, conservatism, selectivity, or discipline?

In Howard's opinion, the economic environments in 1999 and 2007 felt very normal, but there were strange things happening in the technology and mortgage markets. Today, that sense of normality is missing. Interest rates are low at a time when economic growth is decent, and inflation is muted even though unemployment is at a historic low. Despite all these unusual factors, asset prices continue to move upwards, making this a challenging environment for investors.

Howard remains cautious regarding both the idea of being invested in the market and the potential opportunity cost of not being invested.

FEG'S INSIGHT

During this session, Howard stressed the importance of understanding one's risk posture as well as the position of the market within its usual cycle. This can help investors maintain a long-term focus and avoid the exuberance of peaks and the despair of troughs, allowing for contrarian actions that are sometimes difficult but have proven to be effective over time.

FEG's ongoing evaluation of markets through our valuation, fundamental, and sentiment framework provides a structure through which the firm not only assesses long-term return potential, but also the sentiment and emotion that foster contrarian opportunities.

WASHINGTON AND THE INVESTMENT LANDSCAPE

Presented by Dan Clifton, Partner and Head of Policy Research at Strategas Research Partners

Dan Clifton has staked out the intersection of public policy, the global economy, and investing as his area of expertise. Eliciting a laugh from the audience about the often-frustrating world of politics, Dan remarked his presentation "goes so much better with alcohol," before launching into his discussion on the global economic backdrop, key political issues, and the highly contentious 2020 U.S. presidential election.

With the confidence of someone who routinely converses with and briefs members of political and financial communities, Dan highlighted the importance of discerning and extracting actionable investment insights from the jumble of data, policies, interviews, and tweets.

THE INTERCONNECTED WORLDS OF GOVERNMENT AND INVESTMENTS

Dan immediately established the interdependent relationship between government and markets by citing a shocking statistic: in a survey of S&P 500 company executives, 52% flagged government and governmental issues as the top risk to their businesses. Even more notable, that figure was just 26% a decade ago.

Conversely, he pointed out that economic volatility can also impact the political landscape. For example, actual growth in real gross domestic product (GDP) has lagged its forecasted trajectory since 2008, and politicians have struggled to narrow the gap between public expectation and reality, resulting in political volatility as voters seek leadership that will succeed in boosting growth.

In fact, according to Dan, U.S. voters have removed the party in power in six of the last seven elections as part of this search for a leader capable of overcoming this gap, a statistic which poses a threat to President Donald Trump as the run-up to the 2020 election plays out against the backdrop of a questionable economy.

Monetary policy has been the tool of choice in stimulating economic growth since 2008. However, Dan suggested that in order to surmount the threat of a populist candidate like Elizabeth Warren or Bernie Sanders overtaking him in 2020, President Trump must shift his focus from monetary policy to fiscal policy.



SUCCESSES AND SHORTCOMINGS OF TRUMP'S POLICIES

This is not to suggest President Trump has not already had successes in fiscal policy, cautioned Dan. Trump's economic policies—including the tax reform of 2018—have helped the bottom 10% of earners achieve the fastest-growing income rate of all earning groups.

However, investors must prepare for the impacts of tariffs and trade disputes with China to overshadow the benefits of fiscal policy, especially in light of a Federal Reserve that, Dan argued, has overcorrected for the current trade war. Despite low unemployment broadly, these issues are beginning to manifest via manufacturing job weakness in key electoral states, which could pose a significant problem for President Trump should a trade resolution not be reached.

Data indicates China is also feeling the effects of the trade war, as evidenced by supply chains beginning to leave the country. China may continue to struggle even in the event of a change in U.S. leadership, as animosity against China for theft of intellectual property and imbalanced trading conditions appears to be a bipartisan rallying point for Americans.

Dan believes Elizabeth Warren is more threatening to the Chinese government than President Trump because, in addition to the trade concerns already being addressed, Ms. Warren boasts an intense commitment to the social issues embedded in the dispute, particularly regarding human rights violations in manufacturing facilities.

Nevertheless, Dan believes it would benefit President Trump to secure a trade war resolution as soon as possible to ensure the economy does not decline further from ongoing tension. The equity markets are pricing in a trade agreement by the end of the year, and past data suggests that presidents not facing a recession two years ahead of reelection are likely to win again. If President Trump can negotiate a beneficial solution with China soon, Dan stated, he stands to keep the economy shielded from protracted effects of high tariffs between the two nations and improve his chances of winning a second term.

In pursuit of his next term, President Trump faces opposition from the new Democratic favorite, Elizabeth Warren, who could be setting up a pivot from the far-left to the center based on her support of union issues and ambiguity surrounding policy proposals like gun control. Though President Trump has an established base, he needs to secure more female voters over 50 if he hopes to best Warren.

According to survey data, the most important issue for this demographic is drug pricing, and both Republicans and Democrats have aligned incentives to combat this issue. If the president can lead the legislative charge on this matter and secure bipartisan cooperation between Senate Majority Leader Mitch McConnell and Speaker of the House Nancy Pelosi, Dan believes President Trump could secure another four years in office. Of course, the bipartisan adoption of drug pricing legislation is contingent upon the Democrats' decision to launch an impeachment inquiry. If they do commit to impeachment, he believes the decision could backfire and further unify the President's supporters.

Dan concluded his appearance by reiterating a fact he cited at the beginning of his presentation: the approval rating of a president tends to be the approximate percentage of the vote he will earn in the upcoming election. A referendum on his presidency, Trump's approval rating has hovered around 43% for the majority of his first term. Should he accomplish a few key victories—namely in trade negotiations and drug pricing reform—he stands to increase his chances of re-election.

FEG'S INSIGHT

In an age where "fake news" is the phrase of the day, Dan Clifton demonstrated the importance of identifying, monitoring, and acting upon the data that matters most. While the world of politics is rife with noise, FEG believes understanding the underlying economic factors that indicate and influence policy provides the best information about where the enmeshed arenas of government and markets may advance.

CIO CORNER: A DISCUSSION WITH NONPROFIT CIOs

McCall Cravens, Jonathan Hook, and Robert Durden, CFA; discussion moderated by Alice Handy

Kicking off a fireside chat with some of the brightest minds of the institutional investment space, Alice Handy framed the session around topics that significantly pervade the investment decision-making process, including asset allocation, manager selection, risk budgeting, liquidity management, benchmarking, and committee dynamics.

SEEKING UPSIDE WHILE MANAGING RISK

Though each of the panelists offered a unique perspective on the various functions inherent to investment management, they all focused on a few key challenges they routinely face.

In his opening remarks, Robert Durden touched on a challenge he finds paramount in managing a nonprofit's long-term investment pool: understanding the trade-off between the long-term risks with potential to diminish his organization's spending ability and the short-term volatility his organization might experience as a result of those risks. He noted that understanding how to allocate assets in the context of the organization's acceptable risk, required spending rate, and liquidity needs is a necessity.

To navigate this difficult responsibility, Robert looked to a quote from another keynote speaker of the 2019 Forum. Howard Marks, Co-Chairman of Oaktree Capital Management, urged investors to "dare to be great," which Robert interpreted as a call to be bolder where possible, though he cautioned that doing so requires taking and understanding appropriate risk.

McCall Cravens agreed, framing her method of seeking greatness in terms of manager concentration in her family office's portfolio. The types of families that have family offices often created their wealth through a concentrated—not diversified—set of activities. Her approach to investing those assets, then, is to concentrate them among high-conviction managers that feel diversified to the family, but still provide opportunity for outperformance.



Jonathan Hook shared that he also prefers a portfolio comprised of fewer, moreconcentrated managers, the number of which is dependent upon his ability to understand what each manager is doing at all times.

Given this support for concentration, the panelists also expressed a mutual concern for capturing potential upside without over-exposure to potential downside. Part of this delicate balance is accepting a degree of illiquidity to act as a key driver of portfolio return.

Jon explained that approximately half of his portfolio is implemented via private investments—mostly in real estate due to the unique profile of his foundation. His was the highest percentage of illiquid investments among the panel.

McCall observed illiquidity tolerance depends upon each organization's unique spending rate. For her family office, she implements a third of the portfolio through private vehicles, though lately illiquidity has been permeating other parts of the portfolio, such as hedge funds and long-only equity. She noted that it will be imperative to watch this phenomenon closely going forward to manage liquidity and ensure private investments are actually delivering outperformance.

As part of implementing a private capital program, Robert emphasized one must strive to minimize the volatility of capital commitments to smooth out the risk profile of the portfolio.

SOURCING STRONG MANAGERS TO DRIVE ALPHA

As each panelist described the importance of selecting good managers in enabling a portfolio to achieve its spending goal, Alice guided the conversation towards manager sourcing and selection.

Jon said he seeks to support younger managers when they possess sound investment philosophies and processes. He warned older firms with strong track records may not be the same firms that produced those historical numbers, so investors must be wary of any changes in teams, processes, and philosophies that could impact how the firm manages its strategies.

Robert indicated he especially focuses on evaluating a manager's team and process, prioritizing these features even over performance because they can be indicative of a manager's ability to generate performance.

When asked about sourcing managers, McCall listed several methods, including leveraging industry connections, working outward from a specific strategy, and considering managers who fit a desired theme—such as innovation.

Jon mentioned he scrutinizes areas where broad investor capital is not being deployed in order to identify opportunities where greater inefficiencies may be present. Robert articulated the efforts of the panel and audience to keep up with the latest-andgreatest in investment strategies with a perfectly apt metaphor: "The treadmill of new ideas moves faster and faster, and we just try to keep up."

WORKING WITH COMMITTEES TO UNIFY VISION

To conclude the chat, Alice focused on committee dynamics, a topic especially pertinent to the audience. Garnering nods from several guests, McCall expressed the need for an organization's CIO and committee to share the same vision, understand the same time horizon, and engage in the same standards for communication, sharing that full transparency and overcommunication govern her approach to interacting with her committee members.

Similarly, Robert said he spends time individually with board members to cultivate a team mentality and communicate about things such as strategic asset allocation, tactical asset allocation, manager selection, and broad portfolio construction.

FEG'S INSIGHT

Managing a portfolio is a tricky business, complicated by the interaction between data and judgment, philosophy and implementation, and risk and return. FEG echoes the panel's belief that by balancing these features under a vision, strategy, and process shared and communicated by both CIO and committee members, organizations are better able to navigate the challenges inherent to investment management and generate the best ideas for investment success.

A FIRESIDE CHAT WITH ROBERT F. SMITH

Presented by Robert F. Smith, Founder, Chairman & CEO of Vista Equity Partners, with Susan M. Fasig, CFA, Director of Private Capital for FEG

BACKGROUND AND LESSONS LEARNED

Robert Smith began the discussion by sharing how he was first introduced to technology in a high school computer class. An eager and curious teenager, he decided to apply for an internship with Bell Labs. As the internships were offered exclusively to college students, he was at first denied. Demonstrating extreme determination, he called Bell's HR director every day for two weeks, and then every Monday for five months. When an MIT intern failed to show up, Robert received the position, an opportunity which helped define his professional journey.

Jokingly noting that "Cornell engineers are more reliable than MIT engineers," Robert shared how this experience, and his subsequent work at Bell Labs, helped shape some of his fundamental beliefs in the power of persistence, education, the joy of "figuring things out," and the value of internship programs, encouraging the audience to hire as many interns as they can.

Mr. Smith then added the power of standardization to this list—a lesson he learned while studying at Cornell. In the technology sector, standardization is especially important for providing a common language system that allows the user to go anywhere in the world and access and operate similar technology—for example, Microsoft Excel—in the same fashion. This interoperability can help foster innovation and increased productivity.

FOUNDING VISTA EQUITY PARTNERS

After joining Goldman Sachs and becoming the first at the company to focus solely on tech M&A, one thing became abundantly clear to Robert: technology is one of the key value drivers in business. Yet, at the same time, technology firms were narrowly profitable, given they were part of a nascent industry and not well-run. Robert shared that it was this realization that led to Vista's creation and its value proposition: identifying the best-run companies in the world, recording and perfecting their processes and protocols, teaching these "best practices" to relevant employees, and effectively implementing these protocols across the companies that Vista purchases.

When evaluating acquisitions, Vista looks for product superiority and executional excellence. Robert first asks, "What is this company's product superiority and positioning relative to every other product in the market?" Then Vista takes a closer look at the company's features, functions, and capabilities. Vista thinks holistically and asks, "Do we need to buy or build compatible companies to package this product superiority in a suite format?" Vista ensures companies are built to last; sustainability is one of the most important factors in success and can be driven by heavy R&D investment. Lastly, Vista considers how the company takes a product to market. Winners need to maintain product superiority while managing global market strategies.

"There's a war on talent right now—you can pay more and still not get the best, or you can develop [talent] and be the best of anyone that's out there." – Robert F. Smith

RISK MITIGATION

Capital Inflows into Private Equity: When asked about the risk resulting from the surge of inflows into private equity, Robert noted, "Every private equity firm that's awake has realized that earnings are directly linked to investment in technology. There has been a massive explosion in the number of investors, but the good news is there are a lot of tourists. They don't have a system for creating value." Since Vista only underwrites companies who would benefit from the firm's areas of expertise and in which the firm can enact change, the question becomes one of acquisition costs. While Vista has had to be strategic in its bidding strategies, the firm's size and reputation grants it access to opportunities competitors never see.



Dynamic with China: Shifting to the global marketplace and the changing dynamic with China, Robert focused on interoperability. He warned that if countries are unable to adapt to this interoperability, they may have to create their own and then try to influence others. This potential for countries to create new systems of interoperability has a material impact on how Robert thinks about growth arguing that less potential for interoperability might mean paying less for portfolio companies because there is less upside. It also raises the question: "What if a superior product developed elsewhere subsumes the current market?" That, he noted, is a whole different paradigm.

Cybersecurity: According to Robert, cybersecurity represents the biggest threat to software companies, regardless of the industry they serve. A security breach in the public market can result in a market cap being lowered by billions of dollars instantly. To counter these threats, he stressed the importance of building and maintaining cybersecurity infrastructure to support and complement secure practices.

FEG'S INSIGHT

While intuition and forecasting have their place in the investing world, Vista's impressive track record proves that nothing can trump experience and thoughtful management over the long term. Vista illustrates an understanding of their own expertise and their proven success in applying that expertise. This ability translates to a competitive advantage in a constantly changing industry. We believe that firms with differentiated access, expert knowledge, and an understanding of their competitive advantage have the ability to weather the sometimes volatile nature of the market and benefit from developing opportunities where access and expertise are essential.

A FIRESIDE CHAT WITH EMMANUEL ROMAN

Presented by Emmanuel Roman, CEO of PIMCO, with Keith M. Berlin, Head of Fixed Income at FEG

AN ECONOMIC OUTLOOK

Stepping out from behind the podium to make his initial remarks, Manny said he believes the U.S. economy is going to slow during the first half of 2020. While consumers—who represent 70% of the economy—are doing quite well, manufacturing is basically in a recession. He cautioned that "in no way, shape, or form are we in an environment that looks like '07 and '08." However, he did say that he expects the Federal Reserve to cut rates another 25 bps and the dollar to weaken. Manny subsequently shared the outlook of Ben Bernanke, who serves on PIMCO's board, that the biggest surprise in the U.S. at present is the lack of inflation.

The current trade war with China is generally bad for global GDP. It creates uncertainty and is not likely to be resolved in the near future. Manny believes China is playing a political game of chicken, and both the U.S. and China have a lot to lose based on the outcome. While the fallout from this event is difficult to predict, Manny suggested that this conflict will remain a constant feature of the global political economy for the next 10 years.

Elaborating on China, he stated, "China has basically changed from an outsourcer to a global competitor for dominance." With no privacy laws and incredible technology and data, he indicated that he expects to see real innovation in China.

Shifting his focus to Europe, he emphasized the value of political union, pointing out that the European Union (EU) was created to balance American and Asian power and is stronger when it includes Britain. According to Manny, the decision to support Brexit came about because 52% of people did not want to deal with the bureaucracy from Brussels. He commented that Brexit is a divisive issue that will likely be bad for both the EU and the UK, and that financial companies, which are prevalent in the UK, will be especially hard-hit.

In his opinion, the solution to fixing Europe's struggling economy is not monetary policy, but rather structural reform. In France, for example, the politicians and population need to understand jobs have moved away forever. Retirement will need to be pushed back. Changing a country that is used to going on strike and taking long lunch breaks can be difficult—annual vacation time in the public sector is six weeks yet the average employee takes 18 sick days.





INVESTMENT OPPORTUNITIES IN FIXED INCOME

After his initial remarks, Manny sat down with Keith Berlin, Director of Fixed Income at FEG, to discuss the current economic environment, and investors' desire for yield. Manny shared that PIMCO believes now is a time for less risk rather than more, advocating a risk-off position. He further emphasized that it is a good time to have a lot of dry powder on hand for when things inevitably break.

Given the rather bleak landscape, PIMCO is positioned to have cash ready to deploy in areas like mortgage origination, and distressed and illiquid strategies.

Credit/Mortgages: The inflow of capital from Europe and Asia is causing tight credit spreads. Mr. Roman expressed that it would be difficult for rates to climb significantly from where they are; therefore, he is not enamored with credit, particularly investment-grade. For this reason, PIMCO is shifting away from credit and incorporating more mortgages in their funds.

High Yield/Distressed: The high yield/distressed market is the single best asset class in the U.S. Bankruptcy is so low that if there were a recession, the asymmetric risks profile of this strategy would become quite attractive.

Private Credit: There has been a 1.5%-2% premium on private debt for investors who can lock up their money for five years.

For those investors willing to invest in emerging markets debt, Manny recommended China. He explained that Chinese consumers and industrial companies are good bets. He also indicated that things are good in the Middle East, particularly Saudi Arabia, which has a lot of new issuers and could be an alpha opportunity.

INVESTMENT CULTURE

When asked, "What are the pros and cons of a rock star versus a team approach?" in reference to PIMCO's founder Bill Gross, Manny responded lightly, "I'm certainly not a rock star. I'm the product of luck and survivorship bias." He went on to explain that everyone is important to a firm's culture and that while PIMCO may have had a rock star in the past, the firm has since had to evolve.

Manny went on to share that he has never understood the rock star mentality or those who crown themselves king. He added that the days of George Soros waking up and deciding the pound is overvalued are gone. PIMCO outperforms because 250 of its 2,600 staff members are actively contributing to performance.

In his view, the key to long-term success is knowing what you're good at and what you're not good at, which is not always easy to do. PIMCO is good at two things: fixed income and active management.

PIMCO is not trying to be all things to all people and remains true to its core fixedincome strength, Manny observed. Building on these strengths, he shared that PIMCO needs to invest in technology and build up the private credit business to ensure future success.

FEG'S INSIGHT

Expectations for lower global policy rates should help keep near-term business cycle risks at bay. Prospects for softer economic conditions, along with swift accommodative responses by policymakers, have aided in supporting returns across the riskiest corners of the market as well as the highest quality segments—a phenomenon which is unlikely to persist into perpetuity. FEG agrees with PIMCO that private credit may be a source of future return for those investors who can afford to lock up fixed income assets for the next five years.

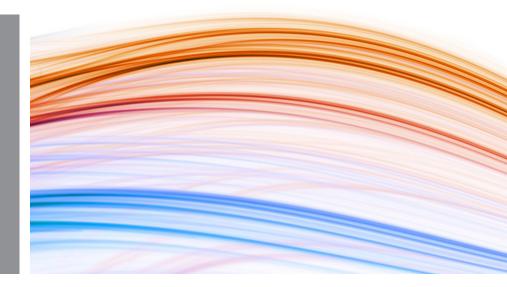
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