NEW FRONTIER

Market Perspectives: 4th Quarter 2019

Enhanced Return ▪ Effective Diversification ▪ Managed Risk

Dr. Richard O. Michaud

President and CEO

New Frontier

Dr. Michaud earned a Ph.D. in Mathematics from Boston University and has taught investment management at Columbia University. He is the co-holder of four U.S. patents and is the author of Efficient Asset Management and many professional and academic articles.

For use with financial advisors.
Not for use with clients.

New Highs

Introduction

It has been a great year for equity investors. The S&P 500 index posted a 31% annual return, the Dow 25%, and the NASDAQ a spectacular 39%. More than $6T of equity paper wealth was created for domestic investors this year alone. Unlike some recent years, global equity investors were not left out of the rally; the MSCI ACWI IMI rose a highly respectable 26% this year.

For a number of reasons, many Americans did not participate in this historic rally. For one thing, roughly half of Americans do not own stocks. For those who do, a volatile third quarter, an inverted yield curve, global fears of a possible recession, uncertainty in Fed policy, political dysfunction in Washington, and various technical indicators encouraged many to limit their participation in the market while motivating others to use various defensive low return investment strategies. For the unsophisticated, it was as simple as being spooked by a too-good-to-be true market and what-goes-up-must-come-down sentiment.

Investing is often confused with trading. Good long-term investing is not for the faint of heart. Longer-term political, economic, and capital market trends, rather than short-term portfolio positioning requiring the need for an accurate forecast, is often the most reliable route for investors. Important secular trends include the continuing democratization of stock market investing, with zero online trading fees and fractional shares. The combination of a robust U.S. economy, a thoughtful Federal Reserve, strong consumer sentiment, and a possible first phase trade agreement with China were fundamental factors driving historic gains in U.S. and global indices.

New Frontier Performance

New Frontier's standard portfolios are global multi-asset ETF investment strategies for six stock/bond ratios ranging from 20/80 to 100% equity. Portfolios are optimized, rebalanced, and traded based on New Frontier's multi patented and proprietary investment technologies. Portfolio optimality is monitored on a daily basis by computing a unique "need-to-trade" estimate for all portfolios managed by the firm. Our process is focused not on changes in short-term sentiment but on long-term optimality at each point in time.

S&P Dow Jones computes portfolio performance of our optimized investment strategies in index form. Current performance and a more than fifteen-year track record is available on Bloomberg, Morningstar, Yahoo, on our website, smartphones, and in real-time on wearable devices such as the Apple Watch. Reported performance is that of our global strategic mandates in index form, which are net of ETF expense ratio costs but gross of management and advisory fees and trading costs. Consequently,

continued on page 2

About New Frontier

New Frontier is a Boston-based institutional research and investment advisory firm specializing in the development and application of state-of-the-art investment technology. Founded in 1998 by the inventors of the world's first broad spectrum, patented, provably effective portfolio optimization process, the firm continues to pioneer new developments in asset allocation and portfolio selection. Based on practical investment theory, New Frontier's services help institutional investors across the globe to select and maintain more effective portfolios.

More information is available at newfrontieradvisors.com

For use with financial advisors.
Not for use with clients.

New Frontier strategies can be compared directly to the performance of many standard passive indices.

As an example, New Frontier's Global Equity index (NFGEI), consisting of twenty non-fixed income global ETFs, closely replicates the MSCI ACWI IMI index. Another example is New Frontier's Global Balanced index (NFGBI) representing a 60/40 stock/bond ratio portfolio consisting of roughly twenty-seven global ETFs. Such an index may serve as an appropriate long-term performance benchmark for many institutions and individual investors in well-defined investment programs. For the year, the NFGBI index was up 20.9%. In contrast, a 60/40 benchmark of the MSCI ACWI IMI index and FTSE 3-month T-bill or Barclays Agg was up 16.7% and 19.3% respectively.

Look Ahead

The major issues for investors in 2020 include political risk, the trade war, Federal Reserve policies, the deficit, international markets, and ECB policies under the new president.

Domestic Politics

2020 is a presidential election year. It is also an impeachment year. It is only the third time in U.S. history that a sitting president has been impeached. It is widely assumed that the Republican dominated senate will acquit President Trump of all impeachment articles passed by the House of Representatives. However, how the impeachment trial is conducted in the Senate is likely to have a major impact on the 2020 election and the history of the American experiment in a democratic political system. Who wins is likely to have many long-term economic, social, judicial, and political consequences. This is because President Trump has nearly total control of the Republican Party with policies at odds with many long-standing prior administrations including deficit spending, environmental regulation, immigration, government social programs, support for technology, and foreign policy.

The American electorate is deeply divided with more than 50% favoring removing the President from office and 36% supporting him, according to a recent Wall Street Journal/NBC News poll. While economic satisfaction and optimism stands at the highest reading in the past three decades, recent job-approval stands at just 44%. A remarkable 48% surveyed say they are certain to vote against Mr. Trump regardless of who the Democrats nominate.

The internet era of Facebook, Twitter, Instagram, and other social networks has fundamentally changed the framework for social interactions, political discourse, and information in America. No prior president has ever before used social media as President Trump has to dominate domestic politics. Mr. Trump won the presidency tapping and stoking anxiety, anger, and grievance toward the financial and political

continued on page 3

New Frontier Portfolios

New Frontier develops and manages a broad range of ETF asset allocation portfolios for advisors and their clients, and currently oversees over $3 billion in global ETF asset allocation portfolios.

ruling class. Add to this evidence of foreign interference using social networks to foster dissension among the American people. No one should underestimate the anger and fear that currently exists in the electorate. Almost anything is possible during this election season including political violence and the National Guard in the streets. Given irreconcilable differences and iron-lock control of the Republican led Senate, voters will likely have the last word.

The Federal Reserve

Particularly in an election year, the Fed wants to be perceived as nonpartisan on domestic politics. While there were three rate cuts during 2019, the Fed decided to stand pat at the most recent meeting. With a healthy economy, robust consumer activity, GDP growth in line with forecasts, and inflation not yet a serious concern, the Fed had little reason to cut or raise rates. The Fed seems likely to maintain a no-cut, no-increase policy for the near future. The most significant economic risks to the U.S. are more international than domestic.

Repo and the Deficit

The good news is that Congress and the President have passed measures for funding the U.S. government through September 2020. The bill was a rare example of bipartisan agreement. The bad news in the good news is that fiscal deficits are climbing at a fast pace. Government spending climbed 7% to $4.1T, outpacing federal tax receipts which grew 3% to $3.1T. Federal budget deficits are projected to average $1.2T per year for the next decade. In previous times of major balance sheet expansions, when deficits were growing at the same rate, the U.S. was attempting to climb out of a deep recession. Despite the opportunity presented by low interest rates and an expanding economy, no serious policy exists for reducing the deficit.

Growing deficits coincide with reduced supply of cash in money markets. The Fed relies on the repo market to help manage the benchmark fed funds rate to maintain a desirable range. There was a short-lived spike in the Fed repo rate during the last quarter. While repo rate spikes are familiar at quarter's end, the surge in the third quarter came two weeks before the end. The Fed is well aware of the issue, feeding dollars into the economy to enhance liquidity. Unfortunately, the need to manage the repo rate is scrapping hopes of normalizing monetary policies by restarting bond-buying programs. An implication is that ultra-low interest rates may remain in place for a long time. The cure may almost be worse than the disease on a longer-term basis.

The Trump Trade Wars

President Trump's trade policies are arguably the most significant initiatives of his presidency. Recently, the administration struck a deal with Canada and Mexico rewriting the 25-year old North American Free Trade Agreement (NAFTA). The new

continued on page 4

agreement is a template for the administration's effort of new bilateral agreements with China, Japan, the EU, and the U.K. The measure has passed the House with the Senate and President likely to approve in early 2020.

However, most of the world's focus has been on U.S. trade relations with China. Initially, the Chinese and Trump administrations were engaged in a bitter tariff game of Chicken. More recently, both sides have defused the rhetoric of trade tensions. A deal has been announced for a trade truce. While full details have not been published, it is likely to be signed shortly after the turn of the year. The new agreements largely roll back tariff increases and suspend new ones that were expected to take place. Of particular interest to the administration, China has agreed to remove some tariffs on U.S. farm goods, helping to placate farm belt voters important to the President's reelection campaign. The Chinese promise to respect intellectual property rights but compliance remains suspect.

The world's second largest economy has been significantly negatively affected by the Trump trade war. China needs to grow rapidly in order to maintain fiscal and political stability, manage its debt, and advance its strategic and military ambitions. China uses cheap credit, privileged domestic market access, state subsidies, and stolen intellectual property, while shielding Chinese firms from foreign competition. The U.S. has the consumer market necessary for export of Chinese goods and a far more adaptive and diverse economy. This is why President Trump can threaten to walk away from any agreement. But neither side can claim a victory that has added new costs for businesses, forced expensive changes in supply chains, and put off investments and hiring.

Interestingly, there has been a sharp rise in the value of China's A shares with the SSE Shanghai index rising 23.8% this year. In contrast, the performance of the off-shore Hang Seng index rose only 13.6%. An important factor impacting performance differences has to do with changes in the composition of MSCI's Emerging Markets index. The index has increased its allocation to China A Shares in a three-step process to a weight of 4.1%.

Fixed Income

The three-decade run of gains in fixed income assets continued in 2019 with the Barclays U.S. Treasurys index up 6.9% and the AGG up 8.7% at year-end. But sentiment of persistence was less upbeat at the end of the year with a 0.8% negative quarterly Treasurys return and the AGG barely positive at 0.2%. The year- and quarter-end pattern persisted with the Dow Jones US Select REIT index, also part of New Frontier core strategies, posting a spectacular 23.1% return annually but a -1.2% quarterly return. However, buyers continued their love affair of junk bonds in search of yield with the Barclays High-Yield index up 2.6% end of quarter and 14.3% annually.

continued on page 5

The European Central Bank (ECB)

The ECB has had a changing of the guard with the Presidency of the bank passing from Dr. Mario Draghi to Mme Christine Lagarde. Unlike Dr. Draghi, Mme Lagarde is not a Ph.D. economist but a French politician and lawyer who served as Chair and Managing Director of the International Monetary Fund.

In her first official announcement, she confirmed that the Draghi policies would remain unchanged for now but ordered a comprehensive review for future meetings. The bank remains under bitter criticism for its negative rate and stimulus policies, particularly in Germany. A number of economists have criticized the policy as being ineffective. Critics charge that the ECB policies steal "German savers money" and result in asset bubbles. A major political problem is that the Draghi policies conflict with elected government policies. Cheap loans hardly seem the answer for much of Europe when the problem is more where to put the money to work. Draghi leaves the new ECB president with a slowing growth rate economy vulnerable to trade disputes, low inflation, and limited room for policy changes.

The negative rate question remains controversial. Sweden recently scrapped its negative-rate policy for stabilizing the value of the krona. Sweden was the earliest proponent of negative rate monetary policy. It was the first to charge commercial banks to hold deposits rather than pay interest. In 2015, it lowered its key policy rate below zero as a short-term fix for stimulating the economy. While successful in its original objective, it has driven household debt higher, weakened the krona, threatened the stability of the banking sector, forced pension funds to hold negative-yielding securities, and raised the prospect of better-than-free money encouraging asset bubbles. A rate hike was a tacit admission that the unintended side effects of changes in investor behavior may outweigh the benefits when rates stay too low for a long time.

Brexit

It is a positive from both sides that the uncertainty of Brexit is resolved. However, there is much skepticism that the cure is economically desirable. Only days after the election the Boris bounce in the pound and bonds collapsed, though it has risen since. For the much larger European Union (EU), the downsides of Brexit are more political than economic. Britain's difficulties with leaving the EU will not encourage others with similar sentiments, particularly when associated with a euro denominated economy. However, the 2020 transition year may have a significant negative impact on the British economy.

Thoughts on Global Investing

While 2019 was an exception, global investing has been uncompetitive relative to a pure

continued on page 6

domestic strategy for some recent years. With some exceptions, the EU lags behind in many cutting-edge fields where the US, South Korea, and China dominate. EU companies file fewer patents and invest less in research. The EU economy is held back by the euro and lack of an EU wide financial and political governance structure. ECB monetary policy is no substitute for a coordinated Eurozone wide fiscal stimulus policy.

However, the US also has a disturbing competitiveness problem that could see its lead in technology diminish. Research and infrastructure issues have largely been ignored in the political dysfunction that has afflicted Washington politics for more than eleven years. The hopelessly partisan political process that favors ideological rather than practical solutions has limited progress with the skills gap, education, immigration, medical care, and business investment uncertainty. At the same time, China must deal with political restiveness, a slowing economy, and a far from resolved trade agreement with the U.S.

On January 3rd, Maj. Gen. Qassem Soleimani, the leader of the foreign wing of Iran's Islamic Revolutionary Guard Corps, was assassinated on orders of President Trump. The administration defended the action saying that serious attacks on Americans and U.S. interests were thwarted, while Tehran called it an "act of international terrorism" and threatened dire consequences. It immediately affected capital markets globally with prices of oil, gold, and haven assets increasing and equity indices falling. For investors, it is another example of a completely unforecastable event affecting global capital values. It serves to reinforce once again the essential importance of global diversification for reliable long-term investing and risk management.

Research Announcements

We are very happy to report the forthcoming publications of our research:

- Michaud, R., Esch, D., Michaud, R. (2019). "Estimation Error and the 'Fundamental Law of Active Management' forthcoming in *Journal of Investing*. https://newfrontieradvisors.com/media/1750/fundamental-law-september-2019.pdf.
- Michaud, R., Esch, D., Michaud, R. (2019). "Comment on: Allen, D., C. Lizieri, S. Satchell 2019. 'In Defense of Portfolio Optimization: What If We Can Forecast?'" forthcoming in *Financial Analysts Journal*. https://newfrontieradvisors.com/media/1760/lte-comment-on-allen-lizieri-and-satchell-nov-2019.pdf.
- Michaud, R., (2019). "Comment on: Kritzman, M. 2006, 'Are Optimizers Error Maximizers?'" forthcoming in *Journal of Portfolio Management*. https://newfrontieradvisors.com/media/1759/lte-kritzman-comment-nov-2019.pdf.

All three articles are available on SSRN.com, ResearchGate.com and our website.

January 3, 2020

DISCLOSURES

Past performance does not guarantee future results. As market conditions fluctuate, the investment return and principal value of any investment will change. Diversification may not protect against market risk. There are risks involved with investing, including possible loss of principal.

The indices are not investable securities. Any investable security would have performance reduced by fees.

The methodology described in this document are protected by U.S. patents 6003018, 6928418, 7412414, and 7624060. Worldwide patents are pending. Inventors of Michaud Optimization and the New Frontier logo are trademarks of New Frontier. Registered in the U.S. and other countries and may only be used with permission.