NEW FRONTIER

Market Perspectives: 1st Quarter 2016

Enhanced Return ▪ Effective Diversification ▪ Managed Risk

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A White Knuckle Ride

Markets

Domestic equities were mostly flat for the quarter. The S&P 500 gained 0.8%, the Dow Jones gained 1.5%, and the NASDAQ lost 2.8%. The U.S. small cap Russell 2000 index lost 1.9%. Domestic bond markets were stable for the quarter; Barclay's Aggregate Bond Index gained 3.0%. The dollar was down 4.2% to the euro and 6.6% to the Japanese yen. Commodity prices picked up from historically low levels; NYMEX-traded oil is trading at $38 per barrel gaining 3.5% for the quarter. Gold posted an impressive gain of 16.5% for the quarter.

Global markets were mixed. Europe and Japan posted negative results, while emerging markets (excluding China) were positive for the quarter. The EURO STOXX 50 lost 8.6%, the Japanese Nikkei 225 lost 12.0%, and the MSCI Emerging Markets Investable Market Index gained 5.1%. The Chinese SSE Composite Index lost 15.1% while the offshore Hang Seng index declined a more modest 5.1%. Two major drivers for the emerging markets partial recovery from previous lows are Latin America and Eastern Europe. MSCI Latin America IMI is up 18.7%, and the MSCI Eastern Europe IMI is up 14.7%. It is worth noting the increasing prevalence of negative interest rates in some economies including Switzerland, Sweden, and Japan. Such rates are aimed at boosting inflation and consumer spending. However, they have not generally had the desired effect of weakening the currency. All our ETF-based portfolios benefited from global and asset class diversification; performance is consistent with standard global benchmarks.

Perspectives

The quarter was a white knuckle ride for many global investors. Plunging global capital markets, steep declines in oil prices, and anxiety about contradictory central bank policies fed market volatility. The damage could have been worse. The China Shanghai index dropped nearly 26% at the end of January and remained close to the same low level at the end of February before modestly recovering by quarter end. Similarly, oil prices declined 32% by mid-January before recovering and posting a gain by quarter end. Domestic equities were only marginally better off with 10% declines in mid-January before recovering by the end of the quarter. Many major global markets ended with double digit declines or more.

Central bank policies were front and center concerns for global asset managers. The Federal Reserve did not raise rates in March as many had predicted at the beginning of the year. Forecasts of as many as four rate hikes in 2016 were cut back to two or less. While the American economy has shown stable economic growth and is arguably near full employment, the Fed's minutes noted concerns about global risks

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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.

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as considerations for deferring a rise in short-term interest rates. These risks included a steep downturn in many major international capital markets during the quarter as well as lingering concerns about the effectiveness of stimulus policies by the European Central Bank (ECB), Peoples Bank of China (PBoC), and Bank of Japan (BoJ). The quarter ended with a rebound in many indices from quarterly lows and mostly good domestic news of positive job growth with a drop in underemployment rates and gains in wage growth.

The Federal Reserve is far from unique in being concerned with global risks to the American recovery. The European Central Bank (ECB) announced a dramatic program of aggressive growth stimulus policies including interest rate reductions, an increase of 20 billion to the 60 billion euro per month bond purchase program including a limited number of corporate bonds, and a new targeted longer-term refinancing operation (TLTRO) to pay eurozone banks to increase lending. But ECB policies are limited by the lack of a unified banking system, many countries in the eurozone requiring structural reform with little political will for implementation, as well as an immigration and terrorism crisis. China is in the midst of transforming its huge economy from manufacturing- to information-based as well as managing a large population with wide economic disparity. While Japan has imposed aggressive fiscal and monetary growth policies, it appears to have limited impact due to an aging demographic and cultural rigidities. Prospects for robust global economic growth seem limited near term.

Negative interest rates and currency management are monetary policy tools for spurring consumer activity and bank lending. Low interest rate policies weaken the value of the currency and encourage economic growth by reducing the cost of exports. However, currency management does not work if all economies weaken their currencies at the same time. In particular, the PBoC has spent a significant portion of their dollar reserves to manage the yuan and protect policy objectives from speculators. The concern is that stimulus policies by non-U.S. central banks may result in a too strong dollar that could slow down or even stifle the U.S. recovery. This was an important factor in the Fed's decision not to raise rates in mid-March. Contradictory central bank policies leave the global economy in a state of economic disequilibrium that feeds uncertainty and encourages market volatility.

The price of a barrel of crude oil continued its dramatic fall from more than $100 over little more than a year to a low of less than $27 in the quarter before recovering to near $40. The impact of the U.S. and Iran as major new crude oil producers plus a global slowdown in economic activity disrupted a consensus equilibrium that had lasted for many years. The consequence is an ongoing major geopolitical economic and political upheaval. Many major oil producing countries are experiencing substantial economic difficulties and political ferment with unknown consequences for the global economy.

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New Frontier Portfolios

New Frontier develops and manages a broad range of ETF asset allocation portfolios for advisors and their clients, and currently oversees nearly $2 billion in global ETF asset allocation portfolios.

It is a presidential election year. One reason given for a strange political season is that much of the American electorate is angry with all establishment politicians. Certainly many victims of the economic downturn of the Great Recession see fraudulent Wall Street business practices and a cozy political establishment to blame. But eight years later, the U.S. has largely recovered. Are there other important factors causing voter malaise and discontent? In this regard it is worth noting that average GDP growth was nearly 4% thirty years ago but is now less than 2% with continuing low growth forecasts.

Free trade policies, an important issue in political discourse in this election cycle, are typically supported by both Republican and Democratic political establishments. But a chorus of credible economists is questioning the consensus that free trade is necessarily a good thing.[1] Almost any economic model will indicate free trade as an economic benefit for the majority of participants in trading partner economies, all other things the same. Consumers pay less for more goods than they would in a closed economy and have access to a better quality of life. Those displaced in cost inefficient industries should migrate to more efficient ones by developing new skills and starting new businesses. But this simple scenario is not a reality for many. Older and less well educated workers are unlikely to be able to make the transition. Trading partners with wide disparities in demographics and economic development may be unequally benefited. Policy makers may need to better understand and be more careful managing the costs borne by various sectors of an economy. Many Americans may have been left behind with a lower standard of living with little recourse.

Look Ahead

The long bull market in equities has restored much capital value in many global markets. But the consequences of disparate central bank policies remains an open issue. In particular, credit markets are largely in a global state of disequilibrium with negative interest rates and currency management policies. Robust global economic growth is far from assured any time soon.

China, the second largest global economy, has been a driver of global economic growth for some years. But China's current economic and political challenges are in a class of its own. China has seen weakened trade, lowered industrial production, factory closings, declining property investment, and a rising wave of worker strife. Credit availability in China is very tight for small and private companies in spite of looser bank reserve requirements and margin requirements. The disparity between onshore and offshore investing in Chinese capital markets reflects a continuing lack of regulatory, economic, and financial integration and maturity. The need to ban stock sales by large shareholders and state-owned financial institutions with a

[1] Porter, E. "On Trade, Angry Voters Have A Point: It Hasn't Been Much Good For Them." *New York Times*, March 16, 2016, p. B8.

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crackdown on insider trading, market manipulation, and malicious short selling provide strong cautionary signals for would be investors in an economy of great potential.

Structural reform is the essential prescription for long term efficient functioning of global capital markets. The need of a politically informed understanding of the economic tools necessary for properly managing global economies while avoiding political stalemate are in short supply. Much of the global economy remains negatively affected by the back wash of the Great Recession and the global slowdown in economic growth. Central bank policies are symptomatic of a general disequilibrium in the global economy. The continuing threat of global terrorism, Middle East conflicts, and a dramatic decline in the price of oil are components in a geopolitical reset. But there are still reasons for some optimism. The VIX is currently less than 14%, a useful objective measure of uncertainty for domestic investors. An upbeat earnings season in U.S. equities would be helpful for a return to normalcy. There is no evidence of a loss of momentum in innovation in technology, medicine, and finance. An old financial aphorism –bull markets climb a wall of worry – may provide some perspective.

Comment: Recent Research on Private Equity Investing

Many large financial intermediaries and high net worth investors invest in Private Equity funds. The consulting firm Cambridge Associates reports that the 25-year return on private equity of 13.5% can be compared to the Russell 2000 9.75% return over the same period. Similarly, in the survey article by Kaplan and Sensoy, they find that private equity outperformed capital markets by 3-4%.[2] But private equity funds include drawbacks such as high fees, high complexity, poor liquidity, and poor transparency. Not all investors have been advantaged.

Recent research has begun to throw new light on some of the basic investing assumptions associated with private equity investing. The framework for the new research is on replicating private equity performance with public small cap securities. Chingono and Rasmussen show that leverage is a key factor in enhancing the average returns of a small-value investment strategy.[3] Their results provide a better understanding of the leveraged buyout industry as well as encouraging public market value investors to consider leveraged strategies. In another recent study, Stafford reports that a passive portfolio of small, low EBITDA multiple stocks with modest amounts of leverage and hold-to-maturity accounting of net asset value produces an unconditional return distribution that is highly consistent with that of the pre-fee

[2] Kaplan and Sensoy, 2015. "Private Equity Performance: A Survey." Fisher College of Business Working Paper No. 2015-03-10 http://ssrn.com/abstract=2627312.

[3] Chingono and Rasmussen (2015), "Leveraged Small Value Equities." http://ssrn.com/abstract=2639647.

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aggregate private equity index.[4] Note that the passive replicating strategy used by Stafford represents an economically large improvement in risk- and liquidity-adjusted returns over direct allocations to private equity funds, which charge average fees of 6% per year. In a different perspective, Weisman provides a cautionary study of the impact of appraisal (hold-to-maturity accounting) reported data in leveraged strategies and the cost of fire sales when liquidity disappears.[5] As Weisman notes, the impact of appraisal estimated returns during the private period can be a major factor in the misperception of enhanced returns over public equity investing.

New Frontier Research

Dr. Michaud has a number of invitations to present New Frontier's new research paper: "The Fundamental Law of Mismanagement," co-authored with Robert Michaud and David Esch. The schedule includes: Fi360 Insights conference, San Diego, April 5-6; QWAFAFEW New York, April 12; CFA UK Society in London, April 28; Boston Security Analyst Society May 15; CFA Society in Toronto, June 15. An abbreviated abstract follows: "Active managers often claim superior risk-adjusted performance because they invest in many securities, use many factors to forecast return, trade frequently and optimize without constraints. We show with simple examples why the four principles fail followed by a rigorous simulation proof to confirm that all four fundamental law principals are invalid and self-defeating." The latest version of the paper is available at www.newfrontieradvisors.com.

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[4] Stafford (2016). "Replicating Private Equity with Value Investing, Homemade Leverage, and Hold-to-Maturity Accounting." Harvard Business School Working Paper, No. 16-081, January.

[5] Weisman. "Forced Liquidations, Fire Sales and the Cost of Illiquidity." *Journal Of Portfolio Management*, 2016.