



Dr. Richard O. Michaud
President and CIO,
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 4 U.S. patents and author of *Efficient Asset Management* and many professional and academic articles.

Euro Fears

A flight to quality benefited most domestic indices for the quarter and the year. While international equities were positive for the quarter they were down substantially for the year. The S&P 500 was up 11% for the quarter and was flat for the year. Bonds were mixed with Barclays Capital Aggregate Bond Index up 1% for the quarter and 8% for the year while long-term treasuries were up 2% quarterly and 34% for the year. International equities were good performers for the quarter with MSCI EAFE up 3% but down 15% for the year. The VIX declined over much of the period to a relatively normal level of volatility of 23%. The dollar rose against the euro and stayed flat against the yen while oil rose 25% this quarter.

Perspectives

The euro crisis has dominated financial headlines and threatened global economic growth for the last two years. The European Union (EU) has repeatedly failed to articulate an effective plan to address Europe's debt problems and deteriorating finances. German demands for austerity and economic rectitude by eurozone members, while politically popular in Germany, ignore basic principles of orthodox Keynes-Samuelson macroeconomics for dealing with a financial slump. There is no historical example of austerity leading to growth.

The essential problem is that many eurozone countries have large current account deficits and poor productivity rates with looming sovereign debt refinancings. Currency devaluation, the method of choice for addressing these issues, is infeasible for member countries in the single currency eurozone. Internal devaluations associated with rigid austerity policies and wage cuts at levels required in this economic environment are unlikely to promote growth any time soon, while possibly engendering unproductive civil unrest.

The European Central Bank (ECB) and International Monetary Fund (IMF) in concert with the four most important central banks may be able to buy time while some accommodation is achieved. The December ECB auction, announced by its new president Mario Draghi, pumped \$640B into the European Union's (EU) banking system and rallied capital markets worldwide. Such policies long advocated by many American and global macroeconomists, while not a cure, may have averted a serious near-term credit crunch in the European banking system. Nevertheless, EU political and structural rigidities remain, and the euro's long-term viability is at best uncertain. A disorderly breakup would likely have substantial global economic consequences.

While the euro crisis is the most serious macroeconomic risk facing global investors, it is not the only one. Political gridlock in Washington

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 www.newfrontieradvisors.com.

resulted in an economically unnecessary downgrade of American debt that concurrently resulted in a four week 14% stock free fall in midsummer. An end-of-year skirmish over a simple two month extension of economic issues indicated a persistently dysfunctional political environment. However, unlike Europe, structural advantages of the American federal system including common taxation policy, mutual guarantees, an independent Federal Reserve, and various limited stimulus programs have contributed to slow steady economic growth up until now.

If U.S. equities disappointed investors in 2011, non-domestic equities were far worse. Equity indices in Europe and Asia were double digit underperformers relative to the U.S. The current decoupling of American with international capital markets is historically anomalous. However, it is consistent with a necessary slowdown in export oriented economies when consumer demand is down in the U.S. and the European economy is in crisis. A return to a more normal functioning of the global economy is uncertain any time soon.

The duration and instability of the appetite for low return securities reflects global risk aversion, tighter capital rules for banks, weak consumer demand, and ongoing deleveraging. Investors simply have no tolerance for the stomach churning swings in equity markets relative to unknowable macroeconomic risks. Many hedge funds and alternative strategies that use momentum factors were badly whipsawed and performed poorly. The opportunity cost when flows reverse, as occurred in October, can be severe.

Look Ahead

Global investing is likely to be very challenging in the year ahead. While the euro has so far been surprisingly resilient, many eurozone countries face substantive debt refinancing this quarter and in the coming year. Given the current political, structural, and economic reality there is no simple cure to the euro crisis. The ECB's evolving pursuit of liquidity policies and potential interest rate cuts may be helpful, but major political changes may be necessary. Beyond Europe, the remainder of the global economy may be very dependent on a continuing expansion of the American economy and improving consumer demand.

How realistic is continuing American expansion as a significant factor driving global economic growth? U.S. equities appear cheap by historical standards. The Fed continues to find creative ways to support economic growth. Strong risk aversion makes for good valuations. The flows into bonds may begin to reverse. However, the U.S. recovery is very fragile. A presidential election cycle and the possibility of substantial shifts in economic policy are significant risk overhangs for the future of the American economy. The politics of class and conflicting macroeconomic principles are likely to drive the debate across the political spectrum. Income disparity and inequality,

continued on page 3

New Frontier Portfolios

New Frontier develops and manages a broad range of ETF-based asset allocation portfolios for advisors and their clients, and currently oversees over \$1 billion in global ETF asset allocation portfolios.

special interest politics, and the cultural battle that sees wealth ducking responsibility for financial chaos and buys political privilege creates a bimodal perceptual electorate not easily bridged with possible far reaching consequences for the long-term functioning of the world's dominant economy.

Given current performance of international markets and obvious global risk factors a thoughtful investor may legitimately question the value of core globally diversified strategies. But professional investors recognize that a too short-term view of capital markets can easily be counter-productive. U.S. equities lagged international as recently as 2007 and were far from stellar performers in 2008. Over the last ten years ending in 2010, U.S. equities averaged 3.6% while international reached 7.3%, and U.S. compound return was 1.4% versus 3.8% for international stocks.

The importance of global diversification remains a fundamental precept of sound investment practice for long-term investors. Almost all well referenced studies of long-term investing have found that global diversification reduces risk.¹ In addition, the expected geometric mean or compound return is a negative function of volatility. Consequently, effective diversification not only reduces risk, it also increases long-term return. More, not less, diversification is the most appropriate route for core investing. Our strategies use the patented Michaud optimization process to significantly enhance the level of diversification in our optimized portfolios.²

A unique characteristic of the Michaud optimizer is the ability to assess the statistical significance of each asset's contribution to diversification in an optimized portfolio. Using this capability we have carefully analyzed all our ETF investments and considered non-standard alternatives that have resulted in a new set of allocations that limit dependence on eurozone risk while enabling more effective diversification of our global funds.

Recently, analysts have noted that stocks tend to have higher correlations compared to historical norms. This is not the "correlations go to one" phenomenon that occurs in the presence of large macroeconomic risk factors. This contemporary phenomenon is the consequence of increasingly large scale investing in index-tracking ETFs. A buy or sell of a single ETF representing a broad based stock index changes the price of all the stocks in the index in similar ways all other things the same. The benefit of ETF investing comes at the price of a fundamental change in equity market structure. Security valuations may be increasingly dominated by market risk factors while stock picking strategies may be increasingly challenging.

Research News

We have significantly enhanced our algorithms for computing optimized portfolios and deciding when to rebalance. Our optimization examines thousands of scenarios and builds portfolios designed to perform as well as possible in all of them. We've improved our process to model these scenarios

continued on page 4

using the t-distribution which is a more realistic distribution with fatter tails. This new procedure is a theoretical, empirical, and provable performance enhancement. We now use a more sophisticated efficient frontier averaging technique for computing Michaud optimized portfolios. We are now using the critical line algorithm originally proposed by Markowitz. A significantly enhanced (patent pending) Michaud portfolio rebalancing rule has been used for well over a year in practice and found to be a highly reliable measure for deciding when trading may be desirable and for managing our investment management process.³

The interview I conducted of Dr. Harry Markowitz at the Spring 2011 *Journal Of Investment Management* conference in San Diego is now available as a free download on the front page at our website: www.newfrontieradvisors.com. We encourage all investors to take the opportunity to appreciate Dr. Markowitz' many fundamental contributions and innovations to modern asset management.

January 5, 2012

¹ Michaud, R., G. Bergstrom, R. Frashure, B. Wolahan, 1996. "International Investing: Still a Route to Higher Return and Lower Risks?" *Journal of Portfolio Management*.

² Michaud, R.1998. *Efficient Asset Management*, Harvard Business School Press, Boston and Michaud, R. and R. Michaud 2008. *Efficient Asset Management*, 2nd Ed., Oxford University Press. U.S. Patents 6,008,018.

³ Michaud, Esch, Michaud, 2012. "Portfolio Monitoring in Theory and Practice." *Journal Of Investment Management*, forthcoming.