

OCTAVIA'S OUTLOOK VOLUME 2: SUMMER 2015

Before discussing views on markets and investments, Octavia has an important announcement to make. Brian Wu recently joined Octavia as an investment partner. You can read about Brian's investment strategy and background at the Octavia website (www.octaviainvestments.com). The two key factors for Octavia clients to understand are (1) Brian brings a new investment strategy, long-short equity, to complement Octavia's historical unconstrained growth and income investment strategy and (2) Brian adds to Octavia's overall investment research capabilities. Please contact us to learn more about this important new development.

And, with that, lets jump into Octavia's outlook on markets.

We had a conversation with an investor recently that illustrates our investment perspective. We were discussing whether now was a good time to put money to work in the S&P 500 index. This investor's argument went into great detail on valuation metrics, earnings prospects and the like. At the end, he asked if we agree, to which we replied, "Near-term security prices are pretty simple; are there more buyers or sellers and how motivated are the buyers to buy and sellers to sell; that's it." Will the S&P500 index go up? In the near-term it depends on the number and conviction of buyers and the number and conviction of sellers. And, numerous factors influence their desire to buy or sell. It could be valuation metrics, as this investor proposed. But, it could just as easily be a geographic rotation out of the S&P 500 and into European equities, for example. Or, it could be margin calls that result in forced selling. Or, it could be large inflows of new cash that has to be put to work and forces buying. Don't get us wrong, valuations and news matter, especially for individual companies. But, the raw volume of buying and selling can distort fundamental security valuations for longer periods of time than you would expect. If you want an example, you have no further to look than the 2008-2009 time period, during which selling was indiscriminate; it was one giant margin call.

With that perspective, let's look at specific asset classes.

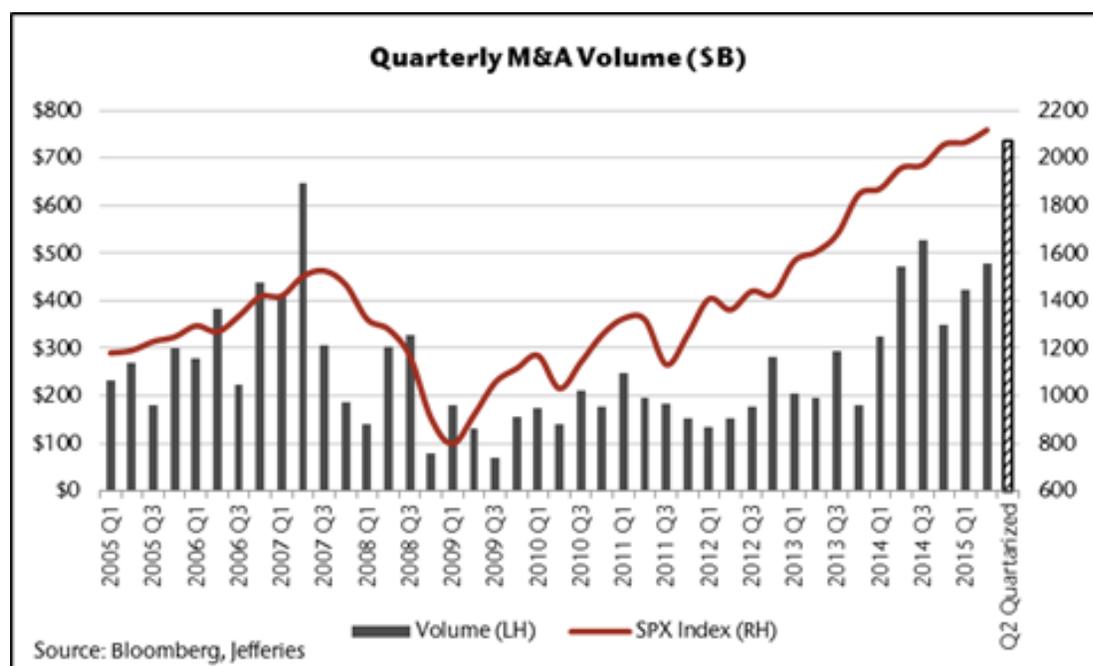
Fixed Income

Even if you only invest in equities, you need to pay close attention to the fixed income market for several reasons.

1. **Liquidity Domino Effect.** If there is a sell off in fixed income (i.e., investors demand higher yields on a given fixed income security), this could spill over to equity markets. The investment banks are not as active in making markets for fixed income securities. As a result, the fixed income markets are quite illiquid, even the US treasuries market. So, it will only take a modest number of sellers to push fixed income security prices down, and for levered investors, these price declines could lead to margin calls. To satisfy these margin calls, the levered investors could try to sell their illiquid fixed income securities. Or, in the case of multi-asset investors, they could sell their more liquid equities to get their leverage ratios in line. The point being, a

sell-off in the fixed income market can have ripple effects across other asset classes and across all geographies. All markets are interrelated.

2. **DCF Impact.** At their core, all securities are worth the net present value of their future projected stream of cash flows. If interest rates rise, the future cash flows are discounted at higher rates and thus are worth less today. Assuming there is no change in the future projected cash flows as a result of the change in interest rates, the securities would be worth less.
3. **Earnings Impact.** Rising borrowing costs will negatively impact corporate earnings growth in two ways. First, many companies have used borrowed money to fund share buybacks and dividends (described in greater detail later). By using inexpensive debt to buy back shares, companies can increase earnings per share. If interest rates increase, companies will have to pay more to borrow money to buy back stock, diminishing the magnitude of the earnings growth from reducing the share count. Second, and similarly, for existing debt, when it comes due and is refinanced, higher interest rates will mean higher interest costs, which reduce net income and thus earnings per share. At the end of 2014, the S&P 500 (excluding financials) had \$3.63 trillion in debt. If the cost of that debt increased 1%, interest expense would rise by \$36.3 billion, which is about 10% of operating earnings. Needless to say, rising interest rates would be a material drag on S&P 500 earnings growth.
4. **M&A Impact.** M&A activity is currently running at record levels (see the chart below). One of the reasons is the availability of very inexpensive debt to fund the purchases. A company that borrows at 3% can pay up to 33 times earnings without impacting EPS, and that ignores any synergies from the purchase. And, a company that uses cash on the balance sheet, which earns nothing, can pay any price without impacting EPS. Basically, at today's borrowing costs, it's almost impossible for an acquisition not to be accretive to earnings if the acquisition is done with cash. We recognize that this is a simplistic analysis and a bit hyperbolic. Markets are more discerning about acquisition prices, but in general, cash acquisitions can drive EPS growth. Thus, increases in interest rates will reduce the EPS accretion, limiting the premiums that buyers can pay. These current acquisition premiums have contributed to overall rising stock prices.



With that, where are rates heading then? The first question you have to ask is: which rates are you considering? Short-term rates are influenced by central banks, but long-term rates are set based on a multitude of factors. For example, just because the Fed orchestrates an increase in the fed funds rate (the rate at which banks lend to each other) or the discount rate (the rate that banks earn on deposits with the Fed) does not necessarily mean that long-term rates (typically associated with 10 year treasury notes) will increase also (note: for simplicity we will refer to fed funds as the rate that dictates other short term rates). We find it very useful to understand how you can derive the yield on a 10 year treasury. The 10 year treasury is nothing more than 120 one-month treasury bills. We buy a one-month treasury bill, which has a certain yield that follows the fed funds. At the end of the month, we reinvest the proceeds in a new one-month treasury bill, which yields something in line with the fed funds rate at that point in time. We can continue this process for 118 more months. In theory, the yield on a 10 year treasury note is the expected weighted yield on 120 one-month treasury notes. Thus, the key assumption is what will one-month treasury yields be in the future? To know that, you have to know what the fed funds rate will be.

Today, the fed funds rate is basically zero percent. As a result, a one-month treasury bill yields about zero percent. If you believed that the fed would keep the fed funds rate at zero percent for the next 10 years, then the 10 year treasury note should yield zero percent. If the Fed pushes fed funds up to 0.25% later this year and then does nothing for the next 10 years to push the fed funds rate higher, the 10 year treasury note should yield a bit below 0.25%. Today, the 10 year treasury note yields about 2.38%. This means that over the next 10 years, the market is assuming the fed funds rate will be increasing to over 2.38% (by mathematical definition). In fact, we ran a model. If you assume the Fed pushes up fed funds by 0.25% starting in September 2015 and continues to do so every 3 months until March 2018, fed funds at that point would be 2.75% and that series of 11 fed funds rate increases equates to a 2.34% yield on a 10 year treasury note.

We believe that the Fed will not push up fed funds to 2.75% over the next three years. Therefore, yields on long-dated treasury notes and bonds should fall, and accordingly prices should rise from current levels. Several factors inform our thesis.

1. ***The Fed's Greatest Fear is Financial Asset Price Dis-inflation/Deflation.*** We want to start with an excerpt from our fall 2014 Octavia Outlook to explain our view on the over-riding macro trend influencing asset prices and driving Fed behavior.

The global economy, and especially the US, has been growing for the past 30-plus years through debt-fueled consumption. As an individual, if you want to buy more, you have three choices. One, you use your savings. Assuming you have no available savings, then you can work more or smarter in order to generate more income and thus be able to consume more. Or, finally, you can borrow the money to consume more. The US, in the aggregate, has chosen option three (we will focus on the US but our conclusions are relevant for most economies throughout the developed and developing world).

Instead of people being more productive to generate more income to fund growing consumption, they have borrowed more in order to grow their consumption. And, this growth in consumption is what has propelled

growth in nominal GDP. To us, real GDP growth is increased productivity of the citizenry, leading to growing income and then resulting in growing consumption (and from an economic standpoint a real increase in standard of living). Instead, the US has (1) relaxed lending standards (via financial institutions in conjunction with Congress and regulators) in order to offer increasing levels of debt and (2) cut interest rates (via the Federal Reserve) to make it easier to service this growing debt balance. And, this increased debt is what has increased consumption and thus increased GDP. The increase in debt and thus spending has occurred both at the individual level and at the governmental level.

Free economies trend to find equilibrium in the volume of goods offered and the price for such goods; it's all about supply and demand. And, back in 2008 (as well as today) the economy was way out of equilibrium. In a world without debt, consumption would equal income plus or minus savings (i.e., contributing to savings or using savings). You could only buy something if you have the cash; there is no credit. In the world of the past 30 years culminating in the financial crisis of 2008, consumption was a function of income and credit. But, incomes had not been growing. In fact, real median incomes today are not much different than 15 years ago. Increasing amounts of debt at lower interest rates were the only way to keep nominal GDP growing year after year.

The 2008 financial crisis was the bursting of the debt bubble. Increasing levels of less expensive debt had enabled asset prices to become disconnected from underlying economics. Income and savings were not (and still are not) sufficient to support the level of asset prices. If financial institutions withdraw access to credit, as they have done since 2008, then asset prices should fall. The supply of assets has not decreased. And, incomes are not rising. And, credit is being withdrawn. Thus, asset prices should fall. And, yet, the opposite has happened. Stock prices are up 200% from March 2009. Home prices are up substantially across the US. Why? The reason is the Federal Reserve's Quantitative Easing program and zero interest rate policy. While the private sector was withdrawing credit from the economy, the Fed was making it available by, in effect, creating money. The Fed created about \$4 trillion in credit to enter the economy.

The Fed originally stated that when unemployment achieved 6.5% they would start to push up interest rates. We are now below 5.5% and yet still no rise in interest rates. Why? Because despite what they have said publicly, the Fed's greatest fear is financial asset price deflation/dis-inflation. This fear is two-fold. First, given how indebted the US is, be it at the federal, state, local, corporate or individual levels, outside of a large increase in productivity to pay down the debt, inflation is the only real viable means to accommodate so much debt. Also, during deflation/dis-inflation, asset prices and incomes fall but debts stay constant. Deflation would bankrupt the banking system, as loans secured by assets would be upside-down.

A rising dollar is also deflationary/dis-inflationary. For one, global commodities are priced in US dollars, so as the US dollar increases versus other currencies, commodity prices have to fall in local currency terms to keep purchasing power constant. But, in US dollar terms commodity prices fall in real terms, which then works its way through the production of goods via lower costs and ultimately lower prices. At the same time, relative interest rates and central bank QE programs heavily influence the value of the US dollar versus that of other currencies. If the Fed were to push up short-term interest rates, this would lead to a higher value for the US dollar, which feeds into declines in commodity prices. These deflationary/dis-inflationary forces from rising short-term interest rates are a major reason we believe the Fed is very unlikely to go on a major interest rate hike campaign, at least as long as the ECB and BoJ are pursuing QE and zero interest policies that repress the value of their currencies.

- 2. *The Federal Budget Can't Handle It.*** Ignoring unfunded liabilities to social security and healthcare, the US federal debt to external parties (excludes debt held by the Fed and US federal government agencies) is currently \$11 trillion and the average interest rate on this debt is about 2.36%. Further, about one-fourth of this debt matures in a year, one-half in three years and three-fourths in five years. So, if three years from now fed funds are 2.75% instead of zero, as treasury debt is maturing and needs to be refinanced, the new federal debt will be at higher rates. Let's assume that half of the debt costs an extra 2.75%, this means that annual interest on the debt would increase by \$150 billion. And, in reality it is worse because with annual budget deficits of \$500 billion, in three years the debt will be \$12.5 trillion, plus the increasing interest on the debt that occurs as fed funds start creeping up. So, in reality, the debt will be closer to say \$13 trillion, times 2.75%, times half of the debt results in an incremental \$180 billion on top of the current \$260 billion in annual interest expense. The point in all of this is to explain that the US is highly indebted and the only reason it can carry this much debt is because the Fed has been keeping interest rates very low. If the Fed brought up Fed Funds to a more typical 5% level and the US cost of debt increased by 5% over time, that would result in an added \$650 billion (and growing as debt grows) in annual interest expense, pushing the deficit to over \$1 trillion per year. Simply put, this would quickly spiral out of control due to the compounding nature of the interest expense leading to large deficits and debt. Without a large reduction in the annual deficits to reduce the federal debt, we struggle to see how the Fed can raise short-term interest rates without stressing the US federal governments finances, and all the negative ripple affects that would occur.

The Fed, ECB and BoJ have been using low rates and QE policies to substitute for real economic growth. Until the developed world pursues structural reforms, we are unlikely to see broad-based real economic growth. And, without real economic growth countries will not be able to generate enough tax revenue to satisfy their expenses, continuing to run deficits and higher debts which need to be financed via low rates. Central banks are not able to materially increase interest rates in such a situation.

- 3. *Corporate Earnings Can't Handle It.*** About 40% of S&P 500 company sales are international. A strong dollar is a major earnings headwind via translation for financial reporting. If the Fed pushes up short-term interest rates in a meaningful way and as a result the US dollar appreciates materially from current levels, this will be a major risk to S&P 500 company sales and profits and thus their share prices. A major decline in the stock market will lead to a decline in US wealth, which the Fed believes could lead to a decline in consumption, which then leads to a decline in economic activity, making it more difficult to service the heavy

debt load. The Fed is aware of all of this, which puts limits on how far they will push up fed funds rates. Further, rising rates will lead to higher interest expense, which will reduce earnings.

There is great debate on whether the Fed will increase fed funds in 2015. We believe this question is irrelevant. What matters are how many rate increases will occur, not whether the first one happens in June, September or December 2015.

So, what are we expecting as we set our investment strategies? We believe the Fed will raise fed funds one time at some point in 2015. They may even raise fed funds a second time in late 2015 or the first half of 2016. After that, they will be finished since the resulting increase in the US dollar will have too many negative effects on US equity markets and commodity prices. But, if the Fed only raises fed funds by 50 basis points and stops, then long-term US treasuries should rally as a 2.38% yield for a US 10 year treasury is too high relative to future expected fed funds rates. That said, for now, we own no long-term US treasury debt since we don't believe the market understands or concurs with our thesis. We expect yields on long-term US treasuries to increase further over the next six months or so as the market's knee-jerk reaction is that increases in fed funds equals increases in yields on all durations, leading to declines in prices of all fixed income securities. There will be a point, though, when it will be time to buy long-term US treasury debt. It's just not now.

We want to add one final point. In theory, the Fed will push up short-term rates because they want to slow down the economy. But, if that were the case, then there would be less inflation. And, since the only risk that long-term treasuries face is inflation risk (not credit risk), then a reduction in inflation expectations should lead to a reduction in long-term treasury yields (and thus higher prices). Interestingly, the Fed raising short-term rates will actually lead to a fall in long-term rates. Yet, currently, the long-term US treasury market is in decline. This has more to do with somewhat illiquid markets and more sellers than buyers. Long-term US treasuries will trade more on flows than fundamentals for the rest of 2015.

Currencies

Global central banks are in a race to the bottom. They are all using QE and low interest rates to devalue their domestic currencies in order to make their domestic companies more competitive in foreign trade. The Fed's QE and zero interest rate policies were focused on pushing liquidity into the system to bid up financial asset prices. But, the policies had the added result of crushing the value of the US dollar and making US companies more competitive in global trade. All the ECB and BoJ are doing is following the same playbook in order to devalue their currencies, since the world is already awash in more than enough liquidity as evidenced by bank deposits on reserve with central banks.

So, as goes central bank policy on QE and interest rates, so go relative currency valuations. The higher the likelihood that the Fed will push up fed funds, the higher the US dollar will go against the Yen and Euro. Through the rest of 2015, the US dollar looks to rally versus the Euro and Yen as the market expects increases in fed funds rates. Once the market realizes that the Fed will only increase fed funds one or two times and then stop, the US dollar rally will stop and depending on how large the long US dollar positions are there could be a material dollar sell-off. There will come a time when investors should take off their long US dollar, short Euro trade but that is not now. That is, of course, assuming that in the face of a weakening US dollar the ECB does not double down on QE to drive the Euro even lower...

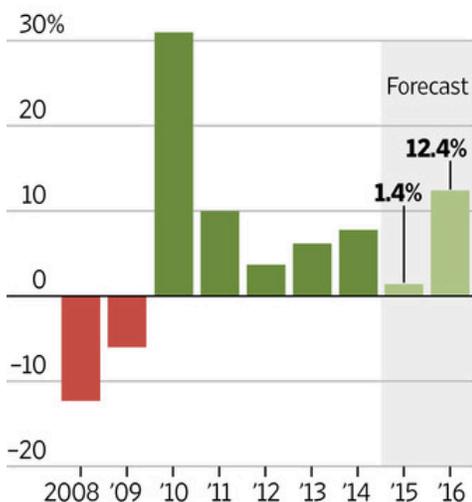
Equities

The US equities market, as exemplified by the S&P 500, continues to march forward achieving all-time highs. From a valuation standpoint, the S&P 500 is stretched. Its trading at about 20x its current year estimated earnings, roughly a 30% premium to its historical average of 15.5x. To the extent companies were experiencing robust earnings growth, you could justify paying a premium. But, earnings growth in 2015 looks dismal at about 1% to 2%. The next chart shows this graphically.

Stretched

Earnings have turned soft at a time when stock prices, as a multiple of earnings, are high.

Annual percentage change in earnings of S&P 500 companies



S&P 500 as a multiple of its companies' net profits



Sources: Thomson Reuters I/B/E/S (earnings); Birinyi Associates (P/E ratio)

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While the chart forecasts 12.4% earnings growth in 2016, the market does not give much credibility to the longer-term estimates. A year ago, Wall Street analysts were estimating 12%-ish growth for 2015 earnings but have cut back to the current 1.4%. The market is expecting 2016 earnings estimates to be cut also.

In addition, labor costs are rising which will be a drag on corporate earnings. And, it appears that consumers are not spending their savings at the gas pump from lower gasoline prices, but instead are putting the money in the bank or paying down debt. Thus, there is no guarantee that rising wages won't also translate to increased savings and debt reduction instead of increased spending. If this happens, company domestic sales will not rise but costs will.

Following the prior discussions on fixed income and currencies, a rising US dollar is bad for S&P 500 companies. For one, almost 40% of S&P 500 sales are overseas, so the translation impact on reported sales and earnings is a large headwind to earnings growth. In addition, with a higher US dollar, S&P 500 companies are less competitive versus global peers, which again acts as a headwind

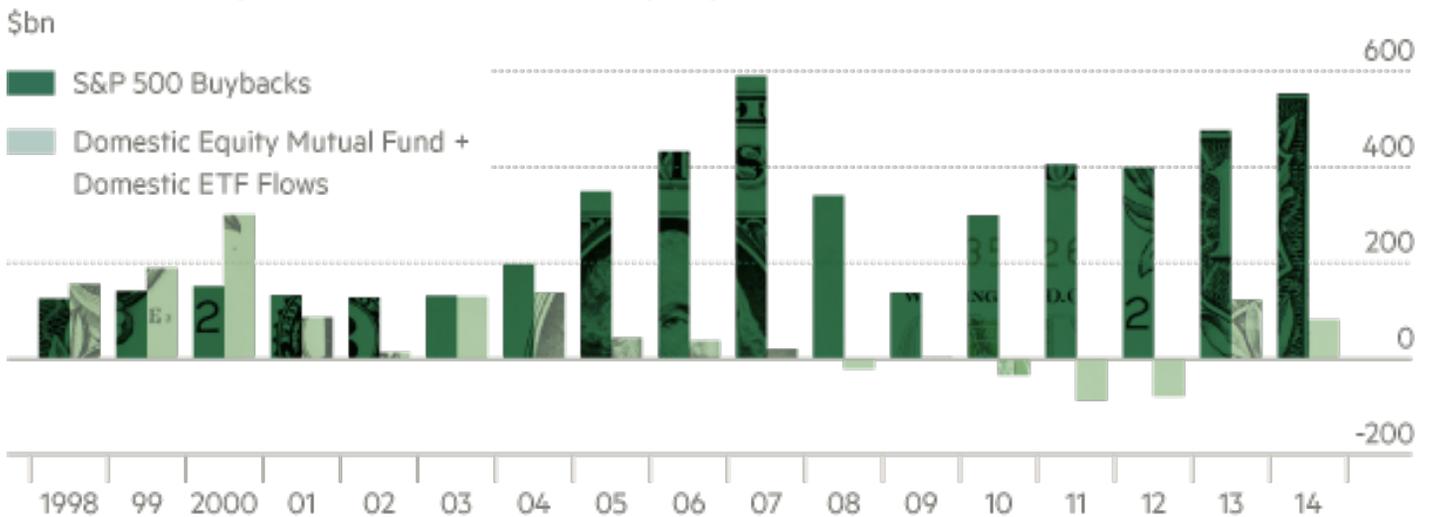
to sales and profits.

Finally, US margin debt is at an all-time record. While there is debate on whether this is a sign of a market top, it would be irresponsible to not consider the following charts and the relationship between margin debt and market sell-offs in 2000 and 2008.



So, the S&P 500 has three major headwinds: valuations are stretched relative to future earnings growth prospects, labor costs are rising and a strong US dollar hurts earnings. And yet, we believe that the S&P 500 can continue to march higher. Why you ask? Because there are more buyers than sellers, and the biggest buyers of all are the S&P 500 companies themselves. As long as S&P 500 companies continue to buy back their shares at the pace they have been over the past few years, they will keep driving up their share prices. And, the share buybacks, funded with cash flow (which earns nothing if parked on the balance sheet) or inexpensive debt (supported by global central bank policies) have the added boost of reducing the share count while barely impacting earnings, leading to EPS growth. The following chart is quite telling.

S&P 500 buybacks vs domestic equity mutual fund & domestic ETF flows



Sources: Haver Analytics; Citi Research US Equity Strategy

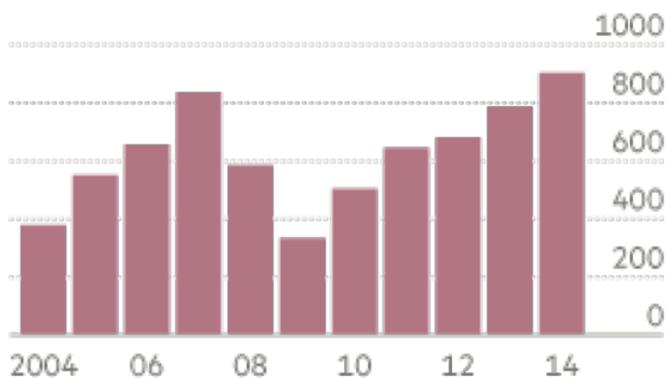
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In the past five years, there have been no net inflows into domestic equity mutual funds and ETFs. But, there has been about \$2 trillion in share buybacks over the same period. These buybacks are a major factor driving up the S&P 500. More buyers than sellers, it's that simple. And, as long as the Fed keeps interest rates low, S&P 500 companies will continue to use cheap debt or low/no yield cash to buy back their stock, with the added kicker of growing EPS by reducing the share count.

And, the buyback trend shows no signs of abating. According to Standard & Poor's, in 2014 S&P 500 companies spent \$903 billion - \$350 billion in dividends and \$553 billion on share repurchases. In 2015, share buybacks and dividends are expected to exceed \$1 trillion. Below is one final chart from the Financial Times, which shows the growth in share buybacks and dividends.

US buybacks and dividend volumes

For S&P 500 companies (\$bn)



Source: S&P Dow Jones Indices

FT

Going into 2015, we were bearish on the S&P 500. We believed the combination of (i) a strong US dollar pulling down revenues and earnings (with nearly 40% of S&P 500 revenues being derived internationally), (ii) a large reduction in GDP from significant cuts in capital spending and employment by the energy sector and related industries, (iii) lower gasoline prices not translating directly to increased consumer spending and (iv) the ECB's QE program drawing global funds flows into European equities, together would be too many negative headwinds for S&P 500 companies to withstand. Add to this that through the end of May, there have been \$111 billion of net outflows for US equity mutual funds and ETFs, as compared to \$76 billion in inflows for all of 2014. And yet, the S&P 500 is up about 2% so far in 2015. We believe that share buybacks and dividends are supporting the S&P 500 equities. As it relates to the Atlas portfolio's specific allocation weightings to US index funds, we continue to rigorously analyze these buyback and dividend trends to form our view on the direction of US equities and thus the relative weighting of the S&P 500 index in the strategy.

Portfolio Composition

One final thought on portfolio composition. Many investment advisors recommend a 60/40 allocation between equities and fixed income for their clients' accounts. The rationale is that when equities go up, fixed income goes down, and vice-versa. Thus, a clients' account is more diversified and less volatile. Historically, this portfolio construction would have made sense as stocks and fixed income tended to move in opposite directions, but in the current environment of central bank intervention, we believe that equities and fixed income are not hedges against each other. And, fixed income is not necessarily lower risk than equities. If our thesis on interest rates is wrong and interest rates move up to historical levels, investors in fixed income could experience 10% to 20% to 30% or greater losses in their fixed income ETFs and mutual funds (depending on the duration of the portfolio). In this scenario, it's also possible that equities would be falling at the same time, as the higher rates have all the negative affects on equity valuations that we described previously. These risks are a major reason why we at Octavia believe in active portfolio management. The historical relationships between security types no longer hold true in the current environment.

Sincerely,
Octavia Investments LLC