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MARKET COMMENTARY

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- With the necessary caveat that what has occurred often gets treated as inevitable in hindsight, we evaluate two major forecasts that either surprised many people or the majority got wrong in 2014 — specifically, that oil prices would enjoy continued low volatility and that interest rates were likely to increase as the U.S. economic recovery plowed ahead.
- What is critical to understand is that 2014 was NOT unusual in that two big forecasts got missed. Quite simply, knowing the future is impossible. That requires investors to value multiple different futures, specifically by assigning different probabilities to various cash flow scenarios and to spend an immense amount of time on allocation.
- In providing context for 2015 returns we ask two critical questions: What do current equity valuations suggest for future expected returns and how likely is an economic contraction that would typically tip us into a negative return year?

4Q 2014

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MARKET REVIEW
AND OBSERVATIONS

Time plays a starring role in investing. As we gaze forward into a new year, time presents us with an infinite number of possible outcomes, which gives rise to one of the best descriptions of risk as conveyed by Professor Elroy Dimson: "Risk means more things can happen than will happen." At the same time, we can look back at the previous year as infinite possibilities collapsed into a single outcome, and we can mercilessly grade our prior forecasts with the often cruel and distorting lens of hindsight. Even though we are long-term investors, this letter will engage in a little bit of past and future calendar-year reflection.

With the necessary caveat that what has occurred often gets treated as inevitable in hindsight, we will begin by evaluating two major forecasts that either surprised many people or the majority got wrong in 2014. Specifically, that oil prices would enjoy continued low volatility and that interest rates were likely to increase as the U.S. economic recovery plowed ahead. As the following table shows, courtesy of Birinyi Associates, at the beginning of 2014 Wall Street forecasters expected West-Texas Intermediate (WTI) crude oil prices to average roughly $95 with a low forecast of $70, and 10-Year Treasury yields to average roughly 3.3% with a low forecast of 2.1%. In a classic case of forecasting folly, WTI ended 2014 at $53 or almost 25% below the bottom end of the forecasted range, while Treasury yields ended 2014 at 2.2% after troughing at a forecast-busting low of roughly 1.9% in mid-October.

Starting with oil prices, we believe that the majority of the down move was caused by increased U.S. supply from the disruptive innovation of shale oil and gas. At its most basic level, rig productivity has enjoyed exponential improvement, with oil produced per drilling rig doubling every three years or so in the most productive shale regions.

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>
> Sam Peters

Wall Street 12-Month Forecasts as of December 2013

	High	Low	Median	Mean
WTI[1]	114	70	95.1	95.59
Brent	122	86	102	108.32
10-Year	3.94	2.1	3.39	3.33

Source: Birinyi Associates, Inc.

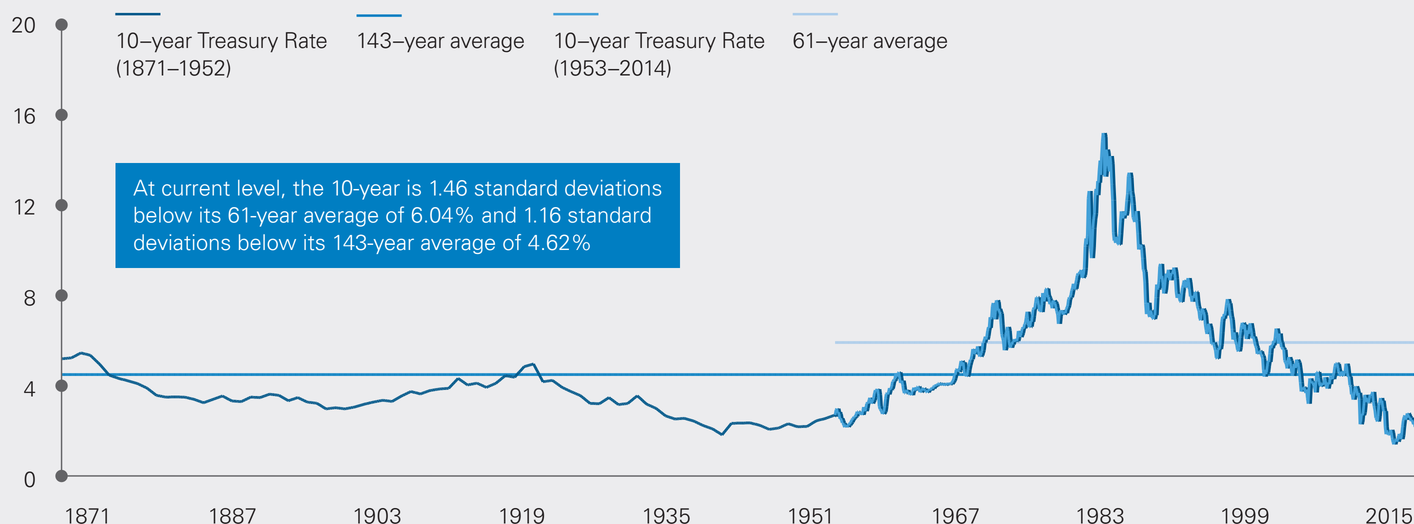
The issue that this supply disruption has created is that many entities debt-financed their drilling programs and modelled their expected cash flows off what is now clearly an immensely optimistic average expected price. With the dramatically lower oil price, free cash flow has collapsed and we are tasked with trying to figure out how much toxic leverage now haunts global markets. This toxic leverage will likely kill some companies, as high-yield markets must grimly decide which companies survive and which don't. We also think it is very likely that some highly-indebted energy exporting countries will face some level of crisis sooner in 2015 than later.

As with all toxic leverage cycles, the forced liquidation will create a feedback loop that drives oil prices below a long-term sustainable level. Ultimately, this could create a valuation opportunity as embedded expectations in selective energy stocks are already over-discounting bad fundamentals, in our opinion. However, at this point we are focused solely on well-financed companies that can weather the current crisis, and on companies at the core of the disruption that should ultimately succeed in the new supply paradigm of U.S. shale.

In many ways, the continued decline in sovereign debt yields is the most vexing challenge for investors. We were dead wrong, along with consensus, in expecting higher yields in 2014, but we still think the long-term risk for interest rates is to the upside. As shown in the chart of long-term Treasury rates below, whether you look at the post-WWII era or the very long sweep of U.S. history, we are at historically low levels for interest rates. There is also the simple reality of the zero bound, which ultimately defines the left tail of this long journey.

[1] **West Texas Intermediate (WTI)**, also known as Texas light sweet, is a grade of crude oil used as a benchmark in oil pricing. This grade is described as light because of its relatively low density, and sweet because of its low sulfur content. It is the underlying commodity of Chicago Mercantile Exchange's oil futures contracts. Brent Crude Oil is a major trading classification of sweet light crude oil that serves as a major benchmark price for purchases of oil worldwide. This grade is described as light because of its relatively low density, and sweet because of its low sulfur content. Brent Crude is extracted from the North Sea and comprises Brent Blend, Forties Blend, Oseberg and Ekofisk crudes.

Historical 10-Year Treasury Yield (1871 to 2014)



Source: Federal Reserve (1953–2014), Robert Shiller (1871–2014), ClearBridge analysis through January 2, 2015. **Past performance is no guarantee of future results.** This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

Thus, calling any major shift in interest rates is impossible, but the asymmetry of the current range is self-evident. The challenge is that the 10-Year Treasury yield is the risk-free-rate (RFR) that plays a major role in how most assets are valued. From such low levels, any move higher in the RFR will present a major headwind for most asset price levels, and we believe the dislocation and liquidity risks from a major interest rate shift would make the current violence of the ongoing energy dislocation pale in comparison. Accordingly, we remain committed to well-capitalized U.S. financial stocks that have been challenged by low interest rates, and that could actually enjoy some relief if and when the prevailing winds of low rates shift. We also continue to find very little value in “bond-proxy” equities, such as utilities, that are flattered by low rates. However, some housing-related opportunities reached compelling valuations during October’s market sell-off, and these could directly benefit from the current low-rate environment and lower energy prices. As always, it’s important to diversify and hedge out risk as much as possible, but not sacrifice valuation discipline to do it.

What is critical to understand is that 2014 was NOT unusual in that two big forecasts got missed, as forecasting folly is the rule and not the exception. Quite simply, knowing the future is impossible.

So what does this require to make long-term bets on the future, while accepting that you cannot predict it? The first requirement is to try and value multiple different futures, specifically by assigning different probabilities to various cash flow scenarios. This provides a robust measure of what investor expectations are embedded in the current price.

These expectations can then be compared against what one thinks can actually happen. Almost always an asymmetric return profile is favored; one where there is much more upside if expectations are beat versus the downside if expectations are missed. Josh Wolfe, our friend and co-founder of Lux Capital, calls this asymmetric return profile finding cheap long-term options on future randomness.

Once different futures are priced, it’s imperative to become a keen observer of the present and systematically update probabilities as new information becomes available. The goal here is to simply follow the most probable course as a thousand future possibilities collapse to a single, actualized present. As the pioneering work of Ole Peters on time averages has shown, what matters is not a simple average of all the possible good and bad things that can happen in parallel (an ensemble average), but what actually does happen as time collapses to a single outcome. We are confident investors care about realized return and not the probability-weighted average of all the good and bad returns that could have happened.

Finally, it’s important to spend an immense amount of time on portfolio construction. The primary goal of portfolio construction is to absorb inevitable mistakes by finding a diverse set of valuation opportunities. Said more simply, the idealized goal is a portfolio of stocks with equally attractive gaps between price and value, but with zero correlation to each other. The perfect diversification implied by zero correlation is obviously not realistic, but may be best approached by leveraging diverse inventory of mispriced stock ideas to create an allocation that is not optimized for one outcome. This may allow one to be somewhat agnostic on the timing of price and value convergence, and to not be overwhelmed by one or two mistaken valuation bets.

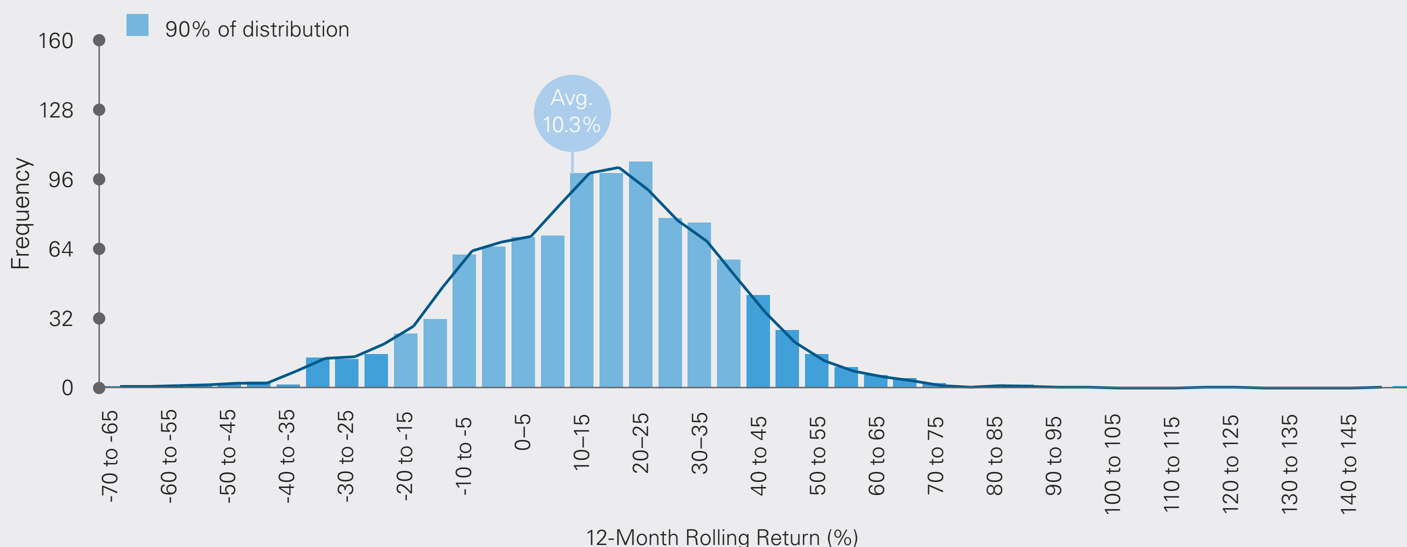
OUTLOOK

Despite the caveat that we cannot know the future, we will to provide some commentary on potential U.S. equity returns in 2015. As always with outlook comments, we are really trying to dimension our approximate location on the fear and greed continuum as investor expectations cyclically expand and contract.

We will begin the exercise by looking at historic U.S. equity returns from 1901 to 2014. By looking at rolling 12-month returns since 1901 we can create a sample of over 1,300 annual observations, which provides a pretty good base rate of historic returns. A key part of probability discipline is to "eyeball" the entire distribution of data, which we have included below.

What most investors focus on is the long-term average equity return of a little over 10% on an annualized basis. Ironically, in classic flaw-of-averages fashion, investors would only have realized within 1% of the average return (9% to 11%) in less than 3% of calendar years: 1918, 1993 and 2004. Despite the illusive nature of average, most investors will anchor on this number and ignore all the good and bad things that cancel out to create this average.

Distribution of Rolling 12-Month Market Returns (1901–2014)[2]



	Calendar years	Rolling 12-Months
# Observations	114	1357
Average return	10.4%	10.3%
Maximum return	81.7%	146.3%
Minimum return	-47.1%	-70.1%
% Positive years	68	–
Avg. return during positive years	22.1%	–
% Negative Years	32	–
Avg. return during negative years	-15.0%	–

Source: Bloomberg Finance L.P., ClearBridge Investments. **Past performance is no guarantee of future results.** Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges. This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

[2] Market is represented by the Dow Jones Industrial Average from 1900 to 1928 and S&P 500 from 1929 to 2014. The **Dow Jones Industrial Average (DJIA)** is an unmanaged index composed of 30 blue-chip stocks, each with annual sales exceeding $7 billion. The DJIA is price-weighted, reflects large-cap companies representative of U.S. industry, and historically has moved in tandem with other major market indexes such as the S&P 500. The S&P 500 Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S.

Echoing Ole Peters' work on time averages again, what really matters to us are the fluctuations or tails of the returns and the different economic and market contexts that coincided with different realized returns. What is clearly visible is the "fat tail"[3] nature of equity returns with an awful 12-month return of negative 70% during the Great Depression and a positive 146% return over the subsequent 12 months.[4] We can also observe that markets have enjoyed positive returns in 68% of calendar years with an average return of 22%, while the average decline during down years is roughly 15%.

In providing context for 2015 returns we need to ask two critical questions:

- What do current equity valuations suggest for future expected returns?
- How likely is an economic contraction that would typically tip us into a negative return year?

Our preferred method on equity valuations is to measure the Equity Risk Premium (ERP)[5] as calculated by Professor Aswath Damodaran, a valuation expert at New York University. As of January, the ERP was a historically elevated 5.8%, suggesting a potential U.S. equity return of just under 8%, calculated by adding the ERP to the 10-Year Treasury yield or risk-free-rate (RFR) of 2%. This suggests a return modestly below the illusive long-term average return, which seems reasonable given U.S. equity valuation levels are OK but not great, in our opinion. Our biggest concern is that the RFR could reverse and start climbing. This increase in the RFR could easily overwhelm any compression in the ERP to more normal levels, but as we write this letter yields are actually falling as global deflation fears continue to spread.

Gauging the probability of a recession is more difficult but we still think this is an elongated economic cycle and the probability of a U.S. recession in 2015 is less than 20%. In aggregate, lower energy prices and lower interest rates could actually support a continued U.S. economic expansion, especially coupled with the ongoing recovery in labor markets.

The reality, however, is that as equity valuations have moved up, finding good values has gotten harder as stock prices reflect cash flows and returns on capital well beyond 2015. Thus, we continue to think the path of least resistance is modestly up for the overall U.S. equity market, but the key is trying to find attractive long-term investments at the individual stock level regardless of any market outlook.

Fortunately, we continue to find attractive valuation opportunities at the sector and stock level. In particular, we are finding long-term return asymmetries in financials, legacy tech and increasingly in energy. On the other hand, healthcare valuations have improved notably from extremely depressed levels four years ago.

One of the biggest challenges is timing, and valuation investors sometimes tend to buy laggards and sell winners too early. This could clearly be the case in energy and healthcare, respectively.

Outside of the recent pain in energy, not much is as out of favor as active management and we are actually encouraged by the rush to passive. As more money goes passive it should create long-term valuation opportunities for liquidity providers, as passive is always a liquidity taker. We continue to think that there could be big dislocations in liquidity, especially if rates reverse course, and we will carefully value opportunities to provide liquidity to major dislocations between price and value. As Heraclitus realized over 2,500 years ago: "All things change." Fortunately, change provides opportunities for disciplined valuation managers.

[3] **Fat tails** are a statistical distribution phenomena seen whenever there are a lot of events or values that stray widely from the average giving more frequent high and low values; graphically fat tails are seen as a bell curve with a fatter opening.

[4] The **S&P 500 Index** declined 70% for the 12 months ending June 30, 1932 and rose 146% for the 12 months ending June 30, 1933.

[5] **Equity risk premium** is the excess return that an individual stock or the overall stock market provides over a risk-free rate, usually the U.S. 10-year Treasury note. This excess return compensates investors for taking on the relatively higher risk of the equity market

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