INVESTMENT NEWSLETTER January 2017



Investment Newsletter

January 2017

THE FED, YIELDS, AND EXPECTED RETURNS

Source: Dimensional Fund Advisors

December 2016

In liquid and competitive markets, current interest rates represent the expected probability of all foreseeable actions by the Fed and other market forces.

On December 14, 2016, the Federal Open Market Committee (Fed) concluded its final meeting for the year and announced its decision to raise the federal funds target rate from its range of 0.25%-0.50% to 0.50%-0.75%.

As we have mentioned before, Fed watching is a favorite pastime for many market participants who often presume that Fed actions will lead to specific market outcomes. On December 16, 2015, the Fed raised the federal funds target rate for the first time since 2006. As a result, some market commentators believed this was a signal that multiple rate increases would occur in 2016.

As we now know, the Fed failed to prove the market prognosticators right; the Fed did not change the target rate until its last meeting of the year. Despite this, interest rates in the US have varied throughout the year. In fact, as shown in Exhibit 1, immediately following the Fed's rate increase in 2015, yields on many US treasury bonds decreased until the second half of 2016.

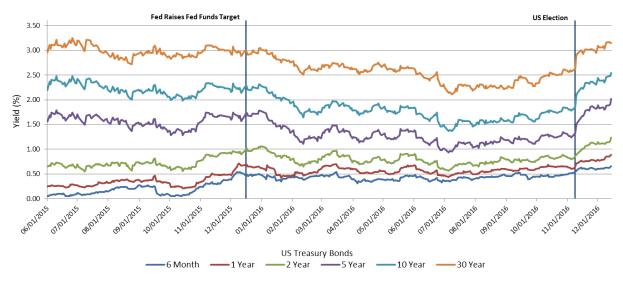
Because interest rates in the US began to increase at the beginning of the fourth quarter, it prompts a question: Did the market lead the Fed to raise its key interest rate, or did the Fed lead interest rates higher by setting expectations?

Trying to answer the question may be futile, however. In liquid and competitive markets such as the US Treasury market, current interest rates represent the expected probability of all foreseeable actions by the Fed and other market forces. Market participants, using publicly available information, estimate the probabilities of different outcomes. Those expectations are collectively reflected in current interest rates. As publicly available information changes, market participants adjust their expectations, which are immediately reflected in new interest rates.

While market participants use publicly available information to set expectations, unanticipated future events or surprises relative to those expectations may trigger interest rate changes in the future. The nature of those surprises cannot be known by investors today. As a result, we believe there has been no reliable way found to systematically benefit from trying to outguess market prices when forecasting changes in interest rates. We can say, however, that there is known and observable information in current interest rates, or bond prices, that we can use to set expectations about future returns.



Exhibit 1. US Treasury Yields (%) as of December 14, 2016



Securities data provided by Bloomberg Barclays LIVE. Bloomberg Barclays data provided by Bloomberg.

The expected return of a bond can be decomposed into three components: (1) the yield of a bond over its holding period; (2) capital appreciation (or depreciation) of the bond due to the shape of the yield curve; (3) and changes in bond prices due to future changes in yields. As we mentioned earlier, there is no reliable way to predict future changes in yields due to unanticipated future events that are not yet known.

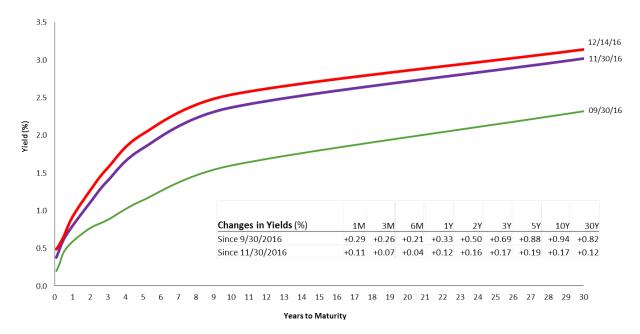
Our research and experience in the fixed income markets informs us that there is reliable information in the first two components of expected return that enables us to use current bond prices to identify securities with higher

expected returns.

As we can observe in **Exhibit 2**, yields on US Treasury bonds have increased since the end of September. While the increase in yields has had a negative impact on fixed income returns over the short term, the expected returns of fixed income securities, as observed through the first two components of expected return, have increased.

The first component (yield) has increased as bond prices have decreased. Additionally, as yields on longer-term bonds have increased more, relative to shorter-term bonds, the shape of the yield curve has become steeper. A steeper yield curve increases the second component of expected

Exhibit 2. US Treasury Yields (%) as of December 14, 2016



Source: US Department of the Treasury.

return (capital gain). As time passes, a bond's maturity and yield decrease as the bond becomes a shorter-term bond. On an upward sloping yield curve, this results in capital appreciation. As a result, the expected capital gain is greater for bonds on steeper yield curves if those bonds are sold before maturity.

We believe using information about expected returns in current prices combined with a long-term focus can serve investors well when pursuing investment goals. So while yields have increased over the fourth quarter, prices today indicate that forward looking expected returns have also increased.¹

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Fixed income securities are subject to increased loss of principal during periods of rising interest rates and may be subject to various other risks, including changes in credit quality, liquidity, prepayments, and other factors. Sector-specific investments can increase these risks.

¹Excerpt from presentation at the Anderson School of Management, University of California, Los Angeles, April 15, 2003.

A VOTE FOR SMALL CAP STOCKS?

Source: Weston Wellington - Dimensional Fund Advisors

December 2016

In the days immediately following the recent US presidential election, US small company stocks experienced higher returns than US large company stocks. This example helps illustrate how the dimensions of expected returns can appear quickly, unpredictably, and with large magnitude.

Average returns for US small company stocks historically have been higher than the average returns for US large company stocks. But those returns include long periods of both strong and weak relative performance. Investors may attempt to enhance returns by increasing their exposure to small company stocks at what appear to be the most opportune times. Yet this effort to

time the size premium can be frustrating because the most rewarding results often occur in an unpredictable manner.

A recent paper¹ by Wei Dai, PhD, explores the challenges of attempting to time the size, value, and profitability premiums.² Here we will keep the discussion to a simpler example. As of October 31, 2016, small company stocks had outpaced large company stocks for the year-to-date by 0.34 percentage points.

Total Return through October 31, 2016			
	Year-to-Date	1 Year	
Russell 1000 Index	5.82%	4.26%	
Russell 2000 Index	6.16%	4.11%	
Size Premium	0.34%	-0.15%	

The size premium is determined by calculating the difference between the Russell 2000 Index, which represents small company stocks, and the Russell 1000 Index, which represents large company stocks. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.

To the surprise of many market observers, the broad stock market rose following the US presidential election on November 8, with small company stocks outperforming the market as a whole. In the eight trading days following the US presidential election, the small cap premium, as measured by the return difference between the Russell 2000 and Russell 1000, was 7.8 percentage points. This helped small company stocks pull ahead of large company stocks year-to-date, as of November 30, by approximately 8 percentage points and for a full one-year period by approximately 4 percentage points.

This recent example highlights the importance of staying disciplined. The premiums associated with the size, value, and profitability dimensions of expected returns may show up quickly and with large magnitude. There is no guarantee that the size premium will be positive over any period, but investors put the odds of achieving augmented returns in their favor by maintaining constant exposure to the dimensions of higher expected returns.

	Year-to-Date	1 Year
Russell 1000 Index	9.99%	8.01%
Russell 2000 Index	18.00%	12.08%
Size Premium	8.01%	4.07%

The size premium is determined by calculating the difference between the Russell 2000 Index, which represents small company stocks, and the Russell 1000 Index, which represents large company stocks. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio.

^{1.} Wei Dai, "Premium Timing with Valuation Ratios" (white paper, Dimensional Fund Advisors, September 2016).

^{2.} Size premium: the return difference between small capitalization stocks and large capitalization stocks. Value premium: the return difference between stocks with low relative prices (value) and stocks with high relative prices (growth). Profitability premium: The return difference between stocks of companies with high profitability over those with low profitability.

WHAT IMPACT ARE HIGHER RATES HAVING ON HOUSING?

Source: Robert Johnson, CFA - Morningstar Advisors

This week, there really wasn't much to write about in terms of economic news. Through Thursday, most markets were little changed, with the U.S. doing the worst, Europe about flat, and some healthy gains in emerging markets. Bond rates were down a little, driving bond prices up.

Most of this week's news was on housing, with some price data and pending home sales. Since we haven't had a housing review for a while, and because we didn't talk about all of last week's housing news, our focus this week will be on the slowing we are seeing in housing. Data is certainly not in a free-fall, but it's enough to limit 2017 GDP growth. We suspect higher interest rates are the primary cause of the housing industry's troubles.

Outside of housing the only real news was another widening trade gap for the month of November. With the dollar still strong and farm products no longer providing much help, exports declined and imports increased. Unfortunately, if the trade numbers continue on their current path, net exports

could be a significant headwind to the fourth-quarter GDP calculation. Although most economists were anticipating this, the magnitude of the problem appears larger than expected, with the potential to take 1% or more off of fourth-quarter GDP. Expectations were for a more modest 0.25% negative net export contribution for the whole quarter. That could put fourth-quarter GDP growth under 2% unless we have a huge trade rebound in December.

We have been tracking the housing industry statistic very closely to try to gauge the psychological impact of Donald Trump's election and sharply higher interest rates. The November data has been trickling in slowly. With our four key housing metrics now in for the month, there appears to be some modest deterioration in the data, especially on a year-over-year basis. On a rolling 12-month basis, growth rates are down from year-ago levels in all four cases: new homes, existing homes, the more forward-looking permits, and new home sales data.

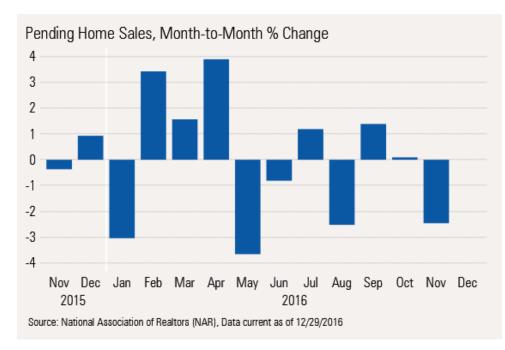
Major Housing Indicators, Rolling 12-Months, Year-over-Year % Change				
Indicator	% Change Nov 2015	% Change Nov 2016		
New Home Sales	14.5	12.4		
Single Family Permits	9.3	7.7		
Existing Home Sales	6.7	4.1		
Pending Home Sales	8.2	1.5		

Source: Census Bureau, National Association of Realtors Morningstar Calculations

The falloff is certainly no disaster, but it likely means that housing will have a hard time matching its longer-term contribution rate to GDP in 2017. With the consumer already under pressure, this is not great news.

The shorter-term month-to-month data hasn't looked so hot, either, with both single-family housing permits down along with pending home sales. Existing-home sales eked out a small monthly gain while new home sales showed some nice growth in November.

One troubling sign this week was softness in the pending homes data, as shown below.



This great leading indicator has had a rough time the past two months and hasn't had any great months since spring. These numbers are seasonally adjusted, already accounting for the fact that spring is normally a strong time for home sales.

Still the year-over-year, rolling 12month data looks even worse. That data, shown by the red line below, suggest the market for existing homes continues to weaken under the burdens of low inventories, high prices, and now higher interest rates.

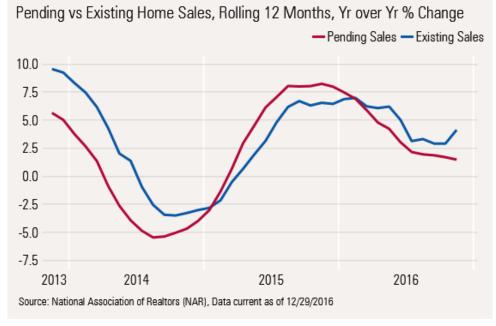
It's interesting to note that the blue line above, representing existing-home sales, has fared better. It appears that buyers are rushing to close sales quickly on already-signed deals to avoid higher

interest rates. We believe that is the primary reason the two lines have diverged recently.

Unfortunately, there will likely be payback in the months ahead, and existing-home sales growth may fall below the 1.5% pending home sales rate. Pending home sales are a very good future indicator of existing-home sales. A signed contract normally precedes a closing by 30-60 days.

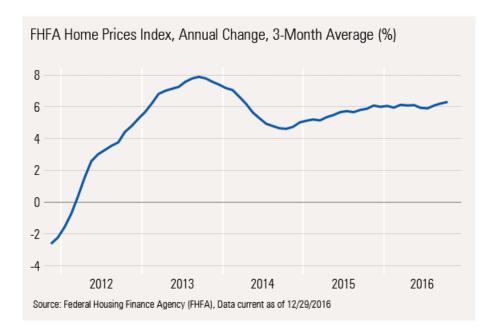
Much higher mortgage rates are not helping, and could prove to be an even bigger headwind for December and beyond. The current 4.32% mortgage rate compares with just 3.42% at the end of September. On a 250,000 loan, the monthly payment would be \$1,240 per month now versus \$1,111 a year ago. That is a hard-to-stomach 11.2% increase in just three months' time. We would like to believe that long-term rates could top out, or least pause here as longer-term rates have jumped far higher than short-term rates, suggesting that even if short-term rates move higher, the long-term rates, such as mortgages, may not follow.

Unfortunately, accelerating home prices will not help matters. According



to the FHFA, home prices increased 0.4% (4.8% annualized) in October, compared with September. That was mercifully lower than the 6.2% year-over-year increase, but still high enough to cause problems.

Also, the year-over-year rate keeps creeping up. We hope that the current 6.2% rate represents a top, but that can't be guaranteed. With inventories still low and demographics favoring the housing industry, seeing a top in this data might be a bit of wishful thinking. On the other hand, higher interest rates might put a stop to the increases. Only time will tell.



The year-over-year regional data has begun to converge. It's no longer the situation that it was at the beginning of the recovery, when almost all of the big increases were on the West Coast (though it still leads the way). Growth rates are now between 8.3% (Mountain) and 3.3% (Mid-Atlantic). Besides these two regions, five regions are at about 5% growth. The South Atlantic Region, at 7.6%, has now joined the Mountain and Pacific regions on the leader board (8.3% and 8.0%).

Disclosure

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