

JVL Associates, LLC

NEWSLETTER

March
2015

Income Taxes and Interest Rates

As another April comes to an end most Americans have either filed or extended their tax returns for another year. And by the time you read this newsletter I can happily report that you are finally working for yourself for the balance of 2015! According to the Tax Foundation's 2015 Report [1] Americans worked to pay taxes until April 23 and on April 24 they celebrate Tax Freedom Day. So for the first 113 days of 2015 Americans will earn enough to pay their federal, state and local taxes this year - (payroll taxes, sales taxes, income taxes, property taxes and miscellaneous taxes).

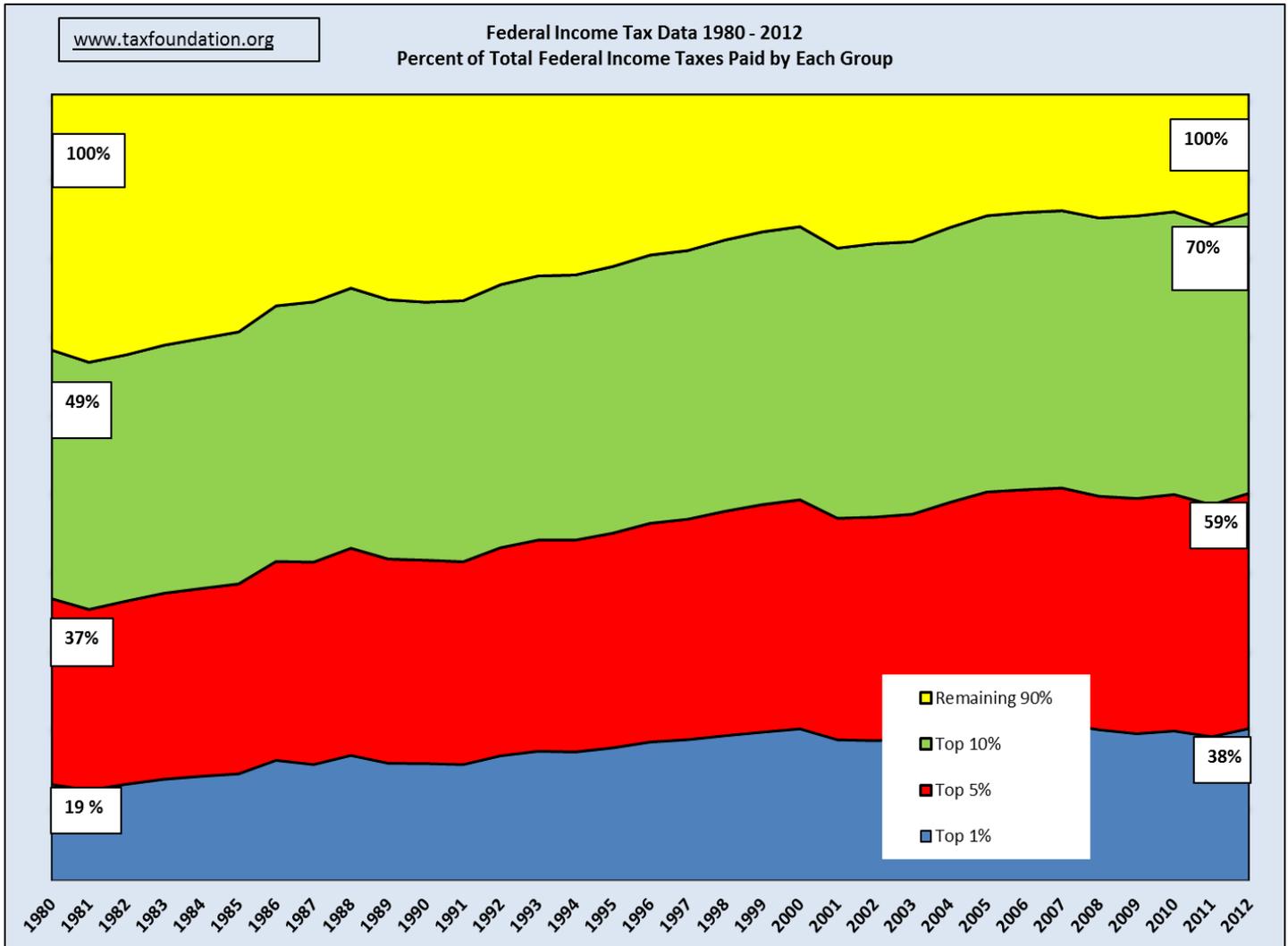
As I have done in prior years, I would like to present data from the Federal Individual Income Tax returns received by the IRS. [2] The data is from 2012 tax returns that were filed in 2013 which is the latest year the data is available. It should be noted that 2012 was the last year before the current tax increases went into effect with the 2013 returns. (see March 31, 2014 newsletter for details)

The chart below shows that the top 1% of taxpayers (AGI above \$434,682) earned 22% of the income (as measured by Federal Adjusted Gross Income) and paid 38% of the total federal income taxes. Add in the next 4% and we see that the top 5% of taxpayers earned 37% of the income and paid 59% of the taxes. Combine that with the next 5% and we see that the top 10% of taxpayers earned 48% of the income and paid 70% of the taxes.

Summary of Federal Individual Income Tax Data, 2012								
Source: Internal Revenue Service								
Category based on Federal AGI	AGI brackets	Number of Tax Returns	(In Millions)	Percent of		(In Millions)	Percent of	
			Total Federal AGI	By Category	Cummulative	Federal Income Taxes Paid	By Category	Cummulative
Top 1%	\$434,682 and up	1,360,804	\$ 1,976,738	22%	22%	\$ 451,328	38%	38%
Top 2 - 5%	\$175,817 to \$434,682	5,443,214	1,354,206	15%	37%	247,215	21%	59%
Top 6 - 10%	\$125,195 to \$175,817	6,804,017	996,955	11%	48%	132,902	11%	70%
Top 11 - 25%	\$ 73,354 to \$125,195	20,412,053	1,933,778	21%	69%	192,601	16%	86%
Top 26 - 50%	\$ 36,055 to \$ 73,354	34,020,089	1,776,123	20%	89%	128,017	11%	97%
Bottom 50%	under \$36,055	68,040,176	1,003,944	11%	100%	32,915	3%	100%
All Taxpayers		136,080,353	\$ 9,041,744	100%		\$ 1,184,978	100%	
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The next chart shows the percentage of the total federal income taxes paid by differing taxpayer income categories back to 1980. The chart helps visualize the shift in income tax payments towards the upper earning taxpayers. In 1980 the top 1% paid 19% of the federal income taxes while in 2012 they paid 38%.

The top 5% paid 37% in 1980 vs. 59% in 2012. And the top 10% earning taxpayers paid 49% of the federal income taxes in 1980 while paying 70% of the 2012 taxes.



And finally, we see from this chart that only the top 10% of taxpayers pay more than 10% of their federal adjusted gross income in taxes—90% of all tax filers pay 10% or less of their income in federal income taxes.

Summary of Federal Individual Income Tax Data, 2012					
Source: Internal Revenue Service					
Category based on Federal AGI	AGI brackets	Number of Tax Returns	(In Millions)	(In Millions)	Federal Income
			Total Federal AGI	Federal Income Taxes Paid	Taxes Paid as a % of Federal AGI
Top 1%	\$434,682 and up	1,360,804	\$ 1,976,738	\$ 451,328	23%
Top 2 - 5%	\$175,817 to \$434,682	5,443,214	1,354,206	247,215	18%
Top 6 - 10%	\$125,195 to \$175,817	6,804,017	996,955	132,902	13%
Top 11 - 25%	\$ 73,354 to \$125,195	20,412,053	1,933,778	192,601	10%
Top 26 - 50%	\$ 36,055 to \$ 73,354	34,020,089	1,776,123	128,017	7%
Bottom 50%	under \$36,055	68,040,176	1,003,944	32,915	3%
All Taxpayers		136,080,353	\$ 9,041,744	\$ 1,184,978	13%

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The subject of interest rates has been getting the majority of the business news' attention over the past few years. In light of the conversation I would like to discuss what the conversation is about and what the various effects may or may not be on investment portfolios.

The short term interest rate is the starting point for the interest rates charged for loans made by banks and other lenders. The Prime interest rate is set at 3% above the Fed Funds Rate. Whenever the Fed Funds Rate changes the Prime rate also changes. This increases the cost of borrowing for both businesses and individuals. Thus, businesses will make less profit if their interest expense increases and consumers will either borrow less or have less spendable income if they are paying higher interest costs.

**ARE YOU
PREPARED
FOR RISING
INTEREST
RATES?**



The long term interest rate affects the value of all issued and outstanding bonds. Bonds, which are a staple in a diversified investment portfolio, decrease in value when long term interest rates rise. If an investor has a \$100,000 ten year bond that pays 2.5% they are earning \$2,500 per year for each of the ten years. If long term interest rates increase to 3% on new bonds an alternate investor will no longer pay \$100,000 for the 2.5% bond. The drop in value is based on the present value of future payments of the existing 2.5% bond versus the present value of the future payments of an alternate 3.0% bond. Because the market drives long term interest rates, the values change rapidly.

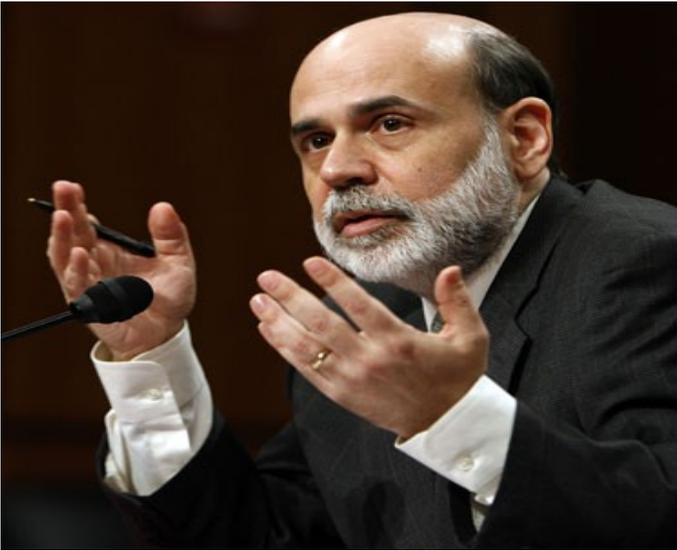
To dig deeper, let's begin with differentiating between the Federal Reserve's established **Fed Funds Rate** (short term rate) and the market driven **10 year Treasury Rate** (long term rate).



The **Fed Funds Rate** is the interest rate charged by one bank for lending funds, maintained at the Federal Reserve, to another bank on an overnight basis. The rate is established by the Federal Open Market Committee, which is made up of members of the twelve regional Federal Reserve Banks and is currently chaired by Janet Yellen. This committee adjusts short term interest rates "so as to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates." [3] In response to deteriorating economic conditions the Committee lowered the rate to 0.25% in December 2008 where it has remained ever since. Now, over six years later, the Committee is debating whether the recovering economy can sustain a rise in this rate.

The two key data points watched closely by the Committee are the unemployment rate and the rate of inflation. Historically, these two data points have been closely correlated. As the unemployment rate dropped, more people were working, they were working more hours, they were earning more money, and therefore they were spending more. This allowed businesses more room to raise prices to keep pace with the increasing demand, which is inflationary. Also, as the unemployment rate dropped employers needed to compete to attract more workers thus increasing wages which is also inflationary. So, in the past, the Committee could watch lower unemployment rates create higher inflation rates, and they would respond by increasing interest rates to stabilize inflation. But something is different this time.

Since the Committee reduced the interest rate to its current level in 2008, the unemployment rate has fallen from a high of 10%, in October 2009, to 5.5% as of March 31, 2015. But, in the meantime inflation has remained muted. With the recent drop in oil prices inflation has actually turned into deflation by many common pricing measurements.

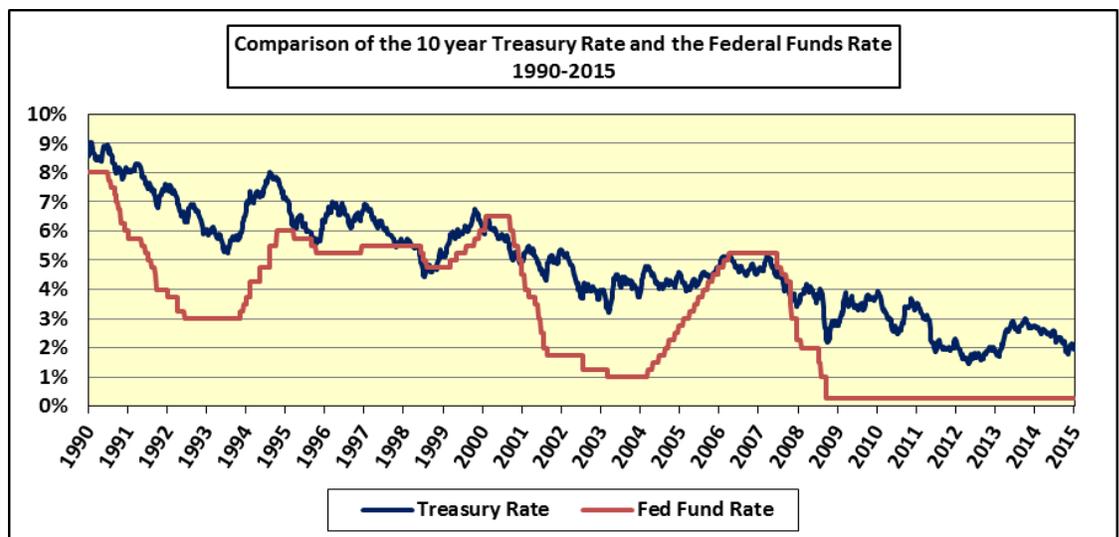


The business news hangs on every word spoken by the Committee members, especially its Chairperson. In January, 2013 then Chairman Ben Bernanke attempted to clarify the Committee's thinking when he said that they planned to keep interest rates at the current levels "as long as the unemployment rate remains above 6.5% and inflation remained anchored to their long-term goal of 2%." [4] At that time the unemployment rate was 7.9% and it seemed like a reasonable position for the Committee to take. But, in March, 2014, the Committee voted unanimously to drop the 6.5% target unemployment rate because it was outdated. Currently, the Federal Reserve website states that "employment...factors may change over time and may not be directly measurable." [5]

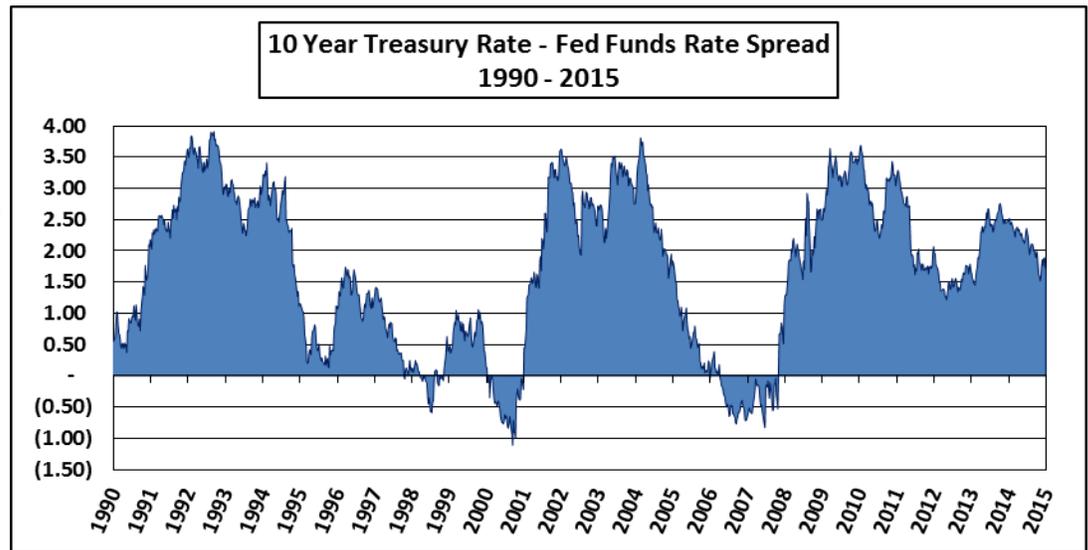
In a recent speech, Chairwoman Janet Yellen said "the Fed would likely end up taking a "gradualist approach" to rate increases in the years ahead, meaning it would move in small steps and with much caution to avoid undermining a grudging expansion." [6] The Wall Street Journal reports that "the median forecast of Fed officials put the Fed Funds rate at 0.625% by year end." [6]

As best they can, the Committee is trying to reassure the world that they are not tied to a numerical data point, but will analyze the data and if the information warrants, they will begin to raise rates in a slow and reasonable manner.

Now let's turn to the **10 year Treasury Rate**. The Federal government issues Treasury bonds on a regular basis, in varying maturities. The 10 year Treasury is the most often quoted long term rate because of the comparability with other sovereign countries. These bonds, once issued, are traded on the public market on a regular basis (not held by initial purchaser) and therefore the rate / yield is determined by supply and demand and is not established by any Committee. Bond purchasers have numerous options for investment so the rate they demand must be competitive with alternate choices. In theory, the rate would be equal to the short term rate plus the expected inflation rate for 10 years plus a premium for creditworthiness of the issuer (will the bond be repaid) plus a premium for tying money up until maturity. In the real world of bonds rates change daily just like the price of a stock. The accompanying chart shows the comparison of the 10 year Treasury Rate and the Fed Funds Rate over the past 25 years.



As we can see, the difference between the two rates changes over time. This is called the spread. The adjoining chart shows the spread between the 10 year Treasury Rate and the Fed Funds Rate. When the spread is negative the Fed Funds Rate (short term) is actually greater than the 10 year Treasury Rate (long-term).



One of the common perceptions is that when the Federal Reserve raises the Fed Funds Rate there will be an automatic increase in the 10 year Treasury Rate. This perception is the driving force behind the fear that raising the Fed Funds Rate is bad for bond holders and thus for an investment portfolio.

We analyzed the past four periods during which the Fed was hiking rates to see what happened to the 10 year Treasury Rates over the same period the Fed Funds Rate was rising.

1) In October of 1986 the Fed Funds Rate was 5.75% and the 10 year Treasury Rate was 7.34% for a spread of 1.59%. Over the next two and a half years the Fed raised the Fed Funds Rate to 9.75% which then exceeded the 10 year Treasury Rate of 8.60% for a negative spread of 1.15%. So the Fed Funds Rate increased 4.00% while the 10 year Treasury Rate only increased 1.26%.

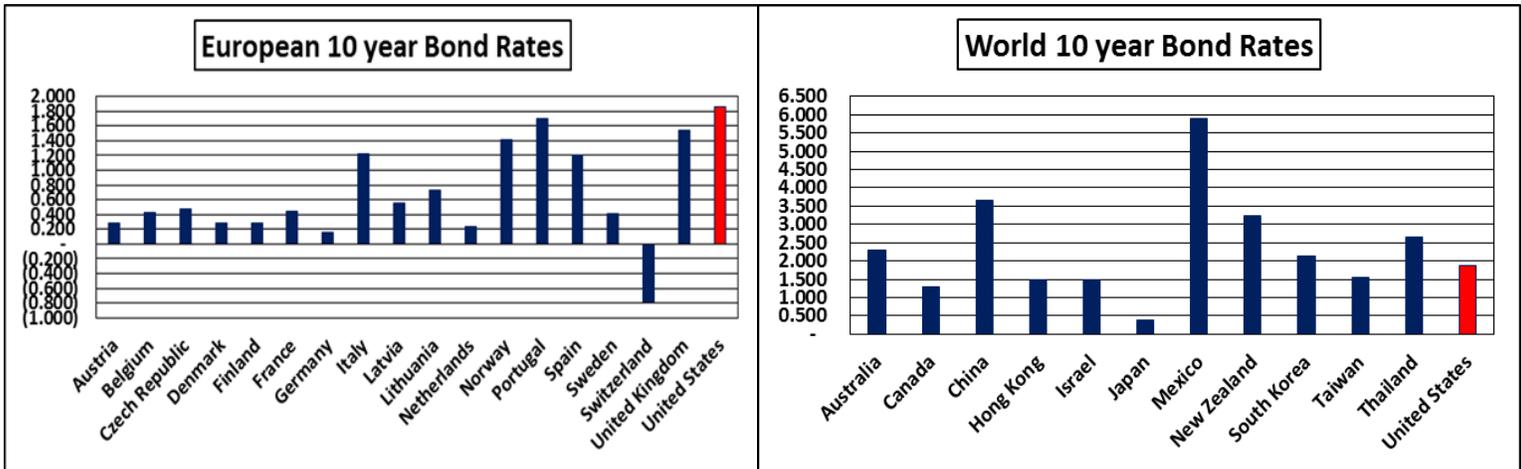
2) In December of 1993 the Fed Funds Rate was 3.00% and the 10 year Treasury Rate was 5.83% for a spread of 2.83%. Over the next year and a half the Fed raised the Fed Funds Rate to 6.00% while the 10 year Treasury Rate rose to 6.21% for a spread of only 0.21%. So the Fed Funds Rate increased 4.00% but the 10 year Treasury Rate only increased 0.38%.

3) In January of 1999 the Fed Funds Rate was 4.75% and the 10 year Treasury Rate was 4.66% for a negative spread of 0.09%. Over the next two years the Fed raised the Fed Funds Rate to 6.50% while the 10 year Treasury Rate rose to 5.48% for a negative spread of 1.02%. So the Fed Funds Rate increased 1.75% but the 10 year Treasury Rate only increased 0.82%.

4) And finally, in June 2004 the Fed Funds Rate was 1.00% and the 10 year Treasury Rate was 4.62% for a spread of 3.62%. Over the next two years the Fed raised the Fed Funds Rate to 5.25% while the 10 year Treasury Rate only rose to 4.74% for a negative spread of 0.51%. So the Fed Funds Rate increased 4.25% but the 10 year Treasury Rate only increased 0.12%.

Behind the numbers we acknowledge that the above data compares the beginning to the end of the rising interest rate cycle while the spreads on a month to month basis are much more volatile during the time period. We also acknowledge that each time period had its own set of circumstances and economic conditions which may be much different from each other and from today. But, in each of the four time periods the increase in the 10 year Treasury Rate was much less than the increase in the Fed Funds Rate. And in all four time periods the spread decreased rather than increased.

Another important factor in evaluating the impact of a rise in the Fed Funds Rate on the 10 year Treasury Rate is: what are the alternatives for bondholders in the current market? The world is in an historical low interest rate environment and money will flow to the best risk adjusted returns. The accompanying charts compare the U.S 10 year Treasury Rate with various Sovereign Government 10 year Bond rates from around the world. [7] Every day the “market” allocates funds to the best risk adjusted returns - no matter the geography.



Given these alternatives it is hard to imagine an investor could demand an increase in the 10 year Treasury Rate just because the Fed raises the Fed Funds Rate. Demand has and should continue to keep 10 year Treasury Rates in check given alternative choices around the world.

Absent another recession it seems clear that the Fed wishes to increase short term rates. That increase may have a detrimental effect on companies with high debt levels. That could negatively impact real estate companies and companies with recent leveraged acquisitions. But, given the high levels of cash and low levels of debt on most large company balance sheets a slow and reasonable approach to higher rates may not be such a major shock to the stock markets.

Investors own bonds for various reasons not the least is their ability to temper the volatility in a portfolio. Bonds have historically been the place money flows when the stock market goes down. Owning bonds in a diversified portfolio can help dampen long term volatility and help minimize the large swings in a portfolio due to stocks. While owning bonds at historical low interest rates can contain more risk than in the past 30 years of decreasing rates, it can still be beneficial in stock market corrections.

At JVL Associates, LLC we monitor the markets and allocate resources to help clients meet their goals. We stay on top of long term trends while watching the news that affects the current markets.

If you know of anyone who could benefit from our services please feel free to pass our name along.

All of our newsletters are archived on our web site at www.jvlassociates.com.

By: Jerry VanderLugt CPA, CFP®, CVA

References:

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- [2] Tax Foundation's Fiscal Fact - "*Summary of Latest Federal Income Tax Data*", by Kyle Pomerleau & Andrew Lundeen - December 2014
- [3] Information obtained from Federal Reserve Bank of Chicago "*The Federal Reserves Dual Mandate*" www.chicagofed.org
- [4] Information obtained from Board of Governors of the Federal Reserve System Press Release, January 30,2013: www.federalreserve.gov
- [5] Information obtained from Board of Governors of the Federal Reserve System, "*What are the Federal Reserve's objectives in conducting monetary policy?*": www.federalreserve.gov
- [6] Wall Street Journal -"*Yellen Maps Cautious Rate Path*", by Jon Hilsenrath and Michael S. Derby March 28, 2015 pg A2
- [7] Information obtained from: www.investing.com - World Government Bond / Government Securities



Financial Planning, Wealth Management and Investment Advisory Services

1535 44th Street SW, Suite 400 Wyoming, Michigan 49509 616-261-2800