

PRUDENT MAN ADVISORS MARKET OUTLOOK



Summary Outlook

Prudent Man Advisors outlook is for increased market volatility and limited returns in the U.S. fixed income and equity market. While economic indicators and earnings growth are trending higher, we remain skeptical of the sustainability of the U.S. economic expansion and market valuations are not particularly attractive. Thus far in 2018, market returns have evolved largely in line with our expectations. Coming into the year, our outlook called for improved returns for short term investments, limited returns across the broader fixed income market and higher expected returns for U.S. equities. (Table 1) US Stocks have led the way thus far in 2018, although the path to those positive returns has been highly volatile. Cash has outperformed the broader fixed income market as credit spreads have widened across most non-Treasury sectors and yields increased with tighter Fed policy and signs of higher inflation. With interest rates significantly higher, expected risk adjusted returns on the front end of the yield curve have become relatively attractive. While we remain concerned about the increasing supply of US Treasuries and the general lack of supply of high quality issuers, higher yield levels do provide investors with the opportunity to earn more income without as much risk.

Volatility once again resurfaced in the first half of the year following a relatively placid 2017. We expect that trend should continue in the year ahead as a divergent mix of global monetary policies, protectionist trade policies and inflation fears could weigh on market confidence. Liquidity has been declining along with tighter monetary policy and a shrinking Fed balance sheet which provides an additional risk element we are monitoring closely. We remain vigiliant to the fact that the market unfolds in a consistently surprising manner. Market corrections come a lot slower than anyone expects, but once they arrive, they escalate much faster than one might imagine. As a result, we recommend building liquidity in many sectors of the market where investors are not being fairly compensated for the underlying credit and market risks. As prudent investors, we strongly believe that timing the market is dangerous and we are not suggesting large changes to your asset strategy. Rather, given our decades of experience, with history as a guide, we know that managing risk is critical at this point in the market cycle. Incremental portfolio improvements can insulate returns today, enhance return opportunities in the future and protect principal during a period that is becoming increasingly uncertain.

2010	2011	2012	2013	2014	2015	2016	2017	YTD 2018*
S&P 500 Stocks	Taxable Municipal	International	S&P 500 Stocks	Taxable Municipal	S&P 500 Stocks	High Yield Bonds	International	S&P 500 Stocks
15.06%	Bonds 20.91%	Stocks 17.60%	32.39%	Bonds 16.29%	1.38%	BB 13.22%	Stocks 27.41%	2.65%
High Yield Bonds	US Treasury Bonds	S&P 500 Stocks	International	S&P 500 Stocks	Taxable Municipal	S&P 500 Stocks	S&P 500 Stocks	Portfolio Mix
BB 14.93%	9.79%	16.00%	Stocks 15.59%	13.69%	Bonds 0.93%	11.96%	21.83%	(0.40%)
International	Inv Grade Corp	High Yield Bonds	Portfolio Mix	Portfolio Mix	US Treasury Bonds	Portfolio Mix	Portfolio Mix	US Treasury Bonds
Stocks 12.98%	Bonds 7.51%	BB 14.36%	13.53%	9.51%	0.83%	8.02%	14.53%	(1.10%)
Portfolio Mix	High Yield Bonds	Portfolio Mix	High Yield Bonds	Inv Grade Corp	Portfolio Mix	Inv Grade Corp	Taxable Municipal	Taxable Municipal
11.77%	BB 6.12%	12.80%	BB 5.19%	Bonds 7.51%	0.09%	Bonds 5.96%	Bonds 8.36%	Bonds (1.14%)
Inv Grade Corp	Portfolio Mix	Taxable Municipal	Inv Grade Corp	US Treasury Bonds	Inv Grade Corp	Taxable Municipal	High Yield Bonds	High Yield Bonds
Bonds 9.52%	4.67%	Bonds 11.08%	Bonds (1.46%)	6.02%	Bonds (0.63%)	Bonds 4.97%	BB 7.15%	BB (1.76%)
Taxable Municipal	S&P 500 Stocks	Inv Grade Corp	US Treasury Bonds	High Yield Bonds	High Yield Bonds	International	Inv Grade Corp	Inv Grade Corp
Bonds 7.31%	2.11%	Bonds 10.37%	(3.35%)	BB 5.34%	BB (1.04%)	Stocks 4.72%	Bonds 6.48%	Bonds (3.12%)
US Treasury Bonds	International	US Treasury Bonds	Taxable Municipal	International	International	US Treasury Bonds	US Treasury Bonds	International
5.88%	Stocks (14.25%)	2.16%	Bonds (5.42%)	Stocks (3.39%)	Stocks (4.29%)	1.14%	2.43%	Stocks (3.69%)

Table 1. *As of 6/30/18. Portfolio Mix; 40% S&P 500 Index, 25% ICE BofAML US Corporate Index, 10% FTSE Global ex US All Cap Index, 10% ICE BofAML US Treasuries Index, 10% ICE BofAML Broad US Taxable Municipal Securities Index, 5% ICE BofAML BB US High Yield Index.

Economic Outlook

PROJECTED GROWTH OF REAL GDP AND IT'S COMPONENTS

	Actual, 2017	2018	2019	2020	2020-2022	2023-2028
Real GDP	2.6%	3.3%	2.4%	1.8%	1.5%	1.7%
COMPONENTS OF REAL GDP						
Consumer spending	2.8%	2.5%	2.7%	2%	2%	2%
Business investment	3.9%	8.5%	2.5%	0.8%	0.8%	2.6%
Business fixed investment	6.3%	5.9%	3.1%	1.6%	0.9%	2.5%
Residential investment	2.6%	5%	4.9%	4.8%	3%	-0.2%
Purchases by federal, state, & local governments	0.7%	3.6%	1.1%	0.4%	0%	0.5%
Federal	1%	6.9%	0.9%	-0.5%	-1.4%	0.3%
State and local	0.5%	1.6%	1.3%	1%	0.8%	0.6%
Exports	5%	2.9%	2.9%	2.6%	2.5%	2.7%
Imports	4.7%	4.4%	3.6%	2.1%	2.4%	2.4%
MEMORANDUM						
Net Exports (change in billions of 2009 dollars)	-22.8%	-63.1%	-41.5%	-3.6%	-13.7%	-10%

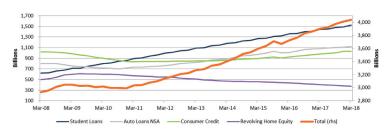
Table 2. Source: CBO

The economic expansion continues to slowly roll along and now represents the second longest span of uninterrupted growth since World War II. First guarter gross domestic product (GDP) grew at a weak 2.0 percent annualized pace following a 2.9 percent gain during the fourth quarter. While most of the economic expansion thus far has been driven by higher consumption levels, we did see improved contributions from business investment during the first quarter, a critical component for the expansion to continue. As broad economic indicators have been trending higher the past several months, we would expect stronger growth in upcoming quarterly reports. However, intermediate and long term growth prospects for the U.S. economy remain challenged despite the positive effects of the 2017 tax act. The non-partisan Congressional Budget Office's (CBO) most recent projections show growth improving to 3.3 percent in 2018, only to trend quickly back below 2.0 percent by 2020. (Table 2) Business investment must move materially higher for the economy to avoid such a fate. The real economy is currently operating beyond projected real potential growth. Potential GDP averaged 3.1% between 1981 and 2007. Estimates of potential GDP growth averages 1.9% over the next 10 years due primarily to slower labor force growth. Demographic issues and, to a lesser extent, immigration policy play an important role in this issue. The U.S. birth rate recently dipped to 30 year lows sinking below necessary replacement levels. We forecast GDP

growth of 2.6 percent in the year ahead, slightly below CBO and market consensus estimates, but in line with 2017 growth levels.

Healthy employment levels, strong consumer confidence, extended periods of low interest rates along with looser credit standards have certainly helped fuel personal consumption. With increased levels, household debt has increased over 30 percent since credit crisis, driven primarily by growth in student loans, credit card debt and auto loans. While overall household finances remain healthy at present, the cost of servicing the debt will continue to move higher along with interest rates. Growth in spending has exceeded the growth in income over the past several years. Further, the era of low mortgage rates is over. 30 year conventional mortgage rates hover near 4.5 percent. If inflation is a bigger risk than we estimate and interest rates continue to move higher, real estate values will be impacted and residential investment will drop, providing a negative feedback loop into consumption.

HOUSEHOLD DEBT



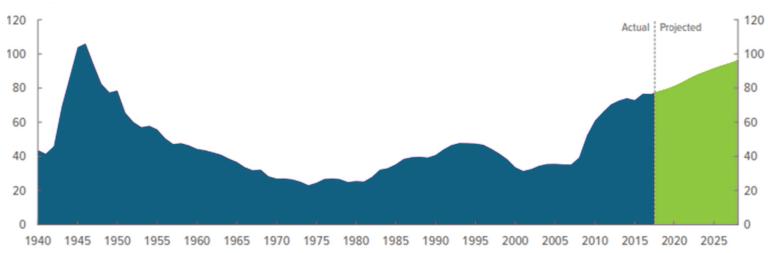
Graph 1. Source: Bloomberg, Prudent Man Advisors, Inc.

In addition, finding growth from higher government spending will likely prove difficult going forward. Federal spending on interest payments will increase due to both larger debt balances and higher interest rates. US Federal debt held by the public as percent of GDP is currently 78 percent and is projected to rise toward 100% in the next 10 years according to CBO estimates. Studies have shown that countries with higher debt to GDP ratios experience

lower future growth prospects. Higher debt levels may also result in less in less flexibility to use other fiscal tools, such as tax and spending policies, to respond to unexpected economic challenges. As a result, the probability of a fiscal crisis in the U.S. has increased over the past year with higher deficits, increasing debt levels and an aging population left to service the debt. Fun times for sure.

FEDERAL DEBT HELD BY THE PUBLIC

Percentage of Gross Domestic Product



Graph 2. Source: Congressional Budget Office

With the Federal Reserve appropriately tightening policy thus far during the expansion, the likelihood of the Fed overshooting economic fundamentals have increased, given our growth outlook. While we are skeptical of need to target long term monetary policy above 3 percent when long term growth estimates remain anchored below 2 percent, as prudent investors we consider the risk of inflation very seriously. So what is making the Federal Reserve continue to tighten policy after already raising the Fed Fund's rate 7 times in the past 30 months when growth remains well below pre-crisis levels? One explanation could be that the Federal Open Market Committee believes that future inflation is a much bigger risk than what the market currently expects. Several Fed voting members have recently expressed the need to raise interest rates further to avoid a buildup of unsustainable pressures that lead to excessive inflation. So let's take a closer look at the inflation argument.

Certainly fundamental inflation measures have been increasing this year after declining during 2017. The Fed's preferred measure of inflation, the U.S. Personal Consumption Expenditure Price Index (PCE), has been trending higher over the past year as the index increased in May to 2.3 percent and 2.0 percent at the headline and core measures respectively. Looking at other inflation measures, we have also seen an uptick in the Consumer Price Index (CPI) year to date. Headline CPI increased to 2.8 percent in May while core measures of CPI rose to 2.2 percent. These are the highest rates we've seen since 2012. Low unemployment hasn't yet pressured wages significantly higher, but is something we have discussed at length in previous outlooks and it is a measure the Fed is monitoring very closely. We would expect wage pressures to continue to increase. Given the evolving priorities of the Trump administration, the potential inflationary impact from changes in U.S. trade policies is difficult to assess. Regardless, our inflation

estimate assumes the additional tariffs should provide increased fundamental pressures on inflation as well negatively impacting consumption. Offsetting these inflationary risks somewhat is the fact that tighter monetary policy should strengthen the dollar versus other currencies as other central banks remain largely accommodative. A stronger dollar is deflationary.

If we analyze market expectations for inflation, we get a somewhat different story. Breakeven rates (measured as the yield difference between US Treasuries and similar maturity Treasury Inflation Protected securities) across the maturity curve are very flat. While we typically see a positive slope to breakeven rates, the flatter breakeven curve indicates Fed policy has already been quite effective at tamping down market fears of higher inflation in the future as breakeven rates hover near the Federal Reserve's 2% target. The Fed typically references 5 year 5 year forward breakeven rates in their minutes as a key consideration when gauging inflation risk in the market. While this rate has moved higher over the past several months, the rate has not moved materially higher even though fundamental inflation measures increase.

Term	Current	FYE 17	FYE 16
3YR Breakeven	1.94	1.71	1.71
5YR Breakeven	2.08	1.88	1.76
10YR Breakeven	2.12	1.98	1.97
30YR Breakeven	2.12	2.02	2.10
5 year 5 year Forward Breakeven	2.15	1.97	1.95
Core PCE Index	2.30	1.52	1.87
Core CPI Index	2.20	1.80	2.20

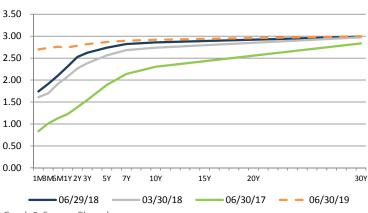
Table 3. Source: Bloomberg, Prudent Man Advisors, Inc.

While we expect inflation to remain contained and average 2.5 percent in the year ahead, the risk of materially higher inflation is something we need to watch closely as trade negotiations evolve. It's important to note that we think market inflation expectations may be telling us something more than merely as an indicator of future inflation. The flat breakeven curve might indicate the Fed will indeed follow through on their projected rate increases, contain inflation and tighten credit beyond what is fundamentally needed for a low growth environment. We don't need to look too long in the rear view mirror to know the Fed has done this before.

Market Outlook

While interest Rates have moved materially higher over the past several years, most of the changes occurred on the short end of the yield curve, leaving longer maturities relatively untouched. While short term interest rates moved higher once again during the first half of the year, volatility increased in longer dated tenors as well. A firmer tone to the Fed's resolve to tighten policy, as well as higher inflation fears, pushed 10 year Treasury yields up 45 basis points and 30 year Treasury yields up 25 basis points. At one point in mid-May, the long bond touched 3.25%, around 50bps higher than where it started the year. The forward curve is already pricing in higher short term rates with intermediate to long rates

TREASURY CURVE



Graph 3. Source: Bloomberg

virtually unchanged. Interest rate volatility on the long end of the yield curve is significant because it impacts long term borrowing costs for everyone. Long bond yields are virtually unchanged since the Fed started tightening interest rates in December 2015. As we discussed earlier, the Fed's tighter policy has been very effective in containing the markets forward inflation expectations. It's important to remember that short term rates are based on Fed policy and adjoining economic activity. Long rates are impacted more by changes in inflation expectations and required real rates of return. Total debt has been increasing for consumers, corporations, and the federal government over the past several years. While we are not predicting significantly higher long term rates in the year ahead, should financing costs move materially

higher than our estimates, the negative feedback loop into the real economy could prove significant. One thing keeping rates relatively capped is the fact that US rates are attractive versus other large developed economies.

From our perspective, US rates continue to offer relative value versus global sovereign alternatives. Despite the numerous economic and fiscal challenges ahead, the United States remains the safe haven for global investors in need of principal preservation and liquidity. The US Treasury market is the largest bond market in the world and it boasts the highest overall yields versus alternatives. If volatility continues in the year ahead as we predict, risk off investment behavior will benefit U.S. Treasuries versus other sovereign debt or asset classes. It's important to remember that US Treasuries increase in value when nothing else can.

Short rates are increasingly attractive on a risk adjusted basis. Real yields, while modest, have turned positive for the first time since the end of the credit crisis. This is great news for savers and investors as the past decade made it extremely difficult to keep pace with inflation. Ultra short strategies are particularly attractive right now as yields represent nearly 90% percent of

2-YR UST VS. PCE CORE PRICE INDEX



Graph 4. Source: Bloomberg, Prudent Man Advisors, Inc.

long Treasury yields with a fraction of the interest rate risk.

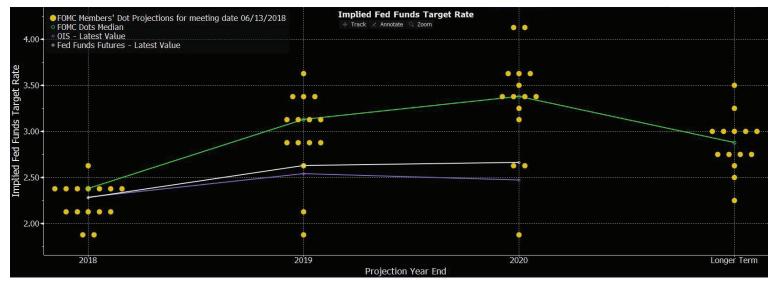
Importantly, this is not to suggest that longer maturity Treasuries aren't appropriately valued given the economic forecast and the premium placed on safety given market uncertainty. We wouldn't be surprised to see the front end of the yield curve

Term	Spot	Projected
Fed Funds	1.91	2.54
3m LIBOR	2.33	2.84
1 Year	2.32	2.77
2 Year	2.54	2.92
5 Year	2.74	3.12
10 Year	2.86	3.26

Table 4. Source: Bloomberg, Prudent Man Advisors, Inc.

invert, especially if the Fed follows through with their policy estimates and the market begins to price in a higher probability of a recession. Ten-year Treasury yields were range bound during the last Fed tightening cycle from 2004-2006. Flatter curves have been the norm when the Fed increases policy rates.

In the past several cycles, 10 year yields peaked around the same level as the federal funds rate. Long bond yields ended this quarter right around 3 percent, roughly in line with the longer term policy estimate provided by the FOMC. Assuming the long term US real growth estimates of 1.75 percent with inflation maintained around 2 percent, a reasonable upper boundary for long bond yields of 3.75 percent seems appropriate. Therefore, while longer maturity Treasuries are not attractive on a risk adjusted basis versus shorter paper, we would be very surprised to see long bond yields move above this upper boundary without signs of significantly higher growth and/or inflation. Our base case estimate calls for higher rates and modestly positive returns across most maturities. As fiduciaries, we believe effective asset liability management is critical to long term financial health. If you have long term liabilities, rest assured they will be valued lower along with your long term assets should long rates move materially higher. Stay invested, and stick to your plan.



Graph 5. Source: Bloomberg

With the backdrop of a flatter curve, as well as the potential that the curve might actually invert in the next few years, where do you find value in today's market? Higher volatility will bring opportunity to the patient investor who has prudently built liquidity into their portfolio. As a result, cash and enhanced cash strategies are the most attractive we've seen in the past decade due to their liquidity characteristics and higher expected risk adjusted returns.

In terms of relative value within the non-Treasury sectors of the fixed income universe, the market is extremely challenging and increasingly bifurcated by maturity, sector and quality. On the front end of the yield curve, the market is struggling with a general lack of supply of high quality issuers outside of US Treasury Bills. Risk premiums (credit spreads) are very tight in the market despite animal spirits returning to most corporate board rooms at this point in the credit cycle. Floating rate paper has outperformed fixed rate alternatives on the front end of the yield curve, given the Fed tightening more than the market forecast. That trend should continue if the Fed's forecast is fulfilled. The market estimate for Fed Funds is closely aligned with the Fed's forecast this year; however, the estimates diverge in 2019 by approximately 50 basis points. We continue to find value in select deposit programs and certificates of deposit on the front end of the curve.

Further out the risk spectrum, investment grade corporate spreads are wider YTD by 18 basis points with the communication sector widening the most, followed closely by the basic materials and financial sectors of the market. Credit spreads are too narrow and corporate credit curves remain too flat to be aggressive at this point in the cycle. At the same time, risk premiums for lower quality investment grade (<BBB/Baa) and high yield issuers are too tight given the underlying credit risk profile of many of these issuers. Short term high quality credit is fairly priced and will continue to be emphasized within our strategies, given our outlook. The agency commercial mortgage backed, asset backed and, to a lesser degree, agency pass through sectors represent relative value versus other non-Treasury investment grade sectors. Again, supply is the biggest constraint within that sector of the market. The taxable municipal market is rich and doesn't offer much relative value. Having been heavily involved in that market for the past several decades, we've never seen that sector quite this bifurcated. New issues are priced at extremely tight levels and structured often times with unattractive dollar prices and call features. Bid side markets are materially wider

should an investor need to sell securities if a bid exists at all. The risk return trade-off does not fairly compensative investors right now in the taxable municipal market. In addition, credit quality is an ongoing concern for many municipal entities throughout the United States, so we keep it highest quality and short term when we choose to selectively participate in that sector.

Improving corporate earnings have provided a stabilizing force for the economic expansion. Corporate profits have increased

S&P 500	Sales Growth	Earnings Growth
All Companies	5.71%	10.48%
Energy	20.49%	247.69%
Materials	8.81%	7.24%
Industrials	4.47%	3.80%
Consumer Discretionary	4.85%	3.90%
Consumer Staples	2.74%	4.17%
Health Care	5.20%	7.34%
Financials	4.47%	5.17%
Information Technology	6.30%	19.11%
Telecommunication Services	-0.98%	1.24%
Utilities	2.57%	0.51%
Real Estate	5.36%	8.17%

Table 5. CY Ending 2/19 Annual Earnings S&P 500. Source: Bloomberg, Prudent Man Advisors, Inc.

significantly over the past several quarters and earnings should remain strong in the near term. Strong corporate earnings drive higher corporate valuations and overall stock indices. We view corporate earnings and valuations to be approaching peak levels at the mature bull point in the credit cycle. As prudent investors, we know that earnings can't continually grow at a higher rate than nominal economic growth without commensurate increases in corporate leverage. When future earnings growth estimates begin to subside, so will stock prices, which is healthy for the market. That said, equities have historically performed well during previous mature bull phases of the credit cycle when the yield curve has been flattening, specifically during the late 1990's and 2005-2007, before the credit crisis. In addition, equity valuations aren't externely overvalued based on future earnings

expectations and the lack of compelling investment alternatives. Forward P/E multiples, while rich to historical averages, aren't close to levels we have seen at previous market tops. While volatility should continue to impact the equity markets, PMA's base case expectation for domestic equity returns in the next year is 6.0%, albeit with a wide range of potential returns.

FORWARD S&P PRICE TO EARNINGS RATIO



Graph 6. Source: Bloomberg, Prudent Man Advisors, Inc.

We wouldn't be surprised to see the equity markets experience a healthy correction in the year ahead, should interest rates move higher than our forecast. Conversely, we also wouldn't be surprised to see another strong year of returns for risk assets despite full valuations.



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