

MANAGERS VIEW U.S. TAX REFORM AS POSITIVE FOR EQUITY MARKET, EXPECT STEADY U.S. ECONOMIC GROWTH THROUGH 2018



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Most investment managers, 68%, believe that the recently enacted tax reform legislation will be positive for U.S. stocks. Approximately 49% of managers believe the tax reform legislation could hinder the bond market. Managers were split as to whether they will be making any changes to their portfolios due to the new tax legislation with about half reporting they would not and half expecting they will make some changes. Seventy-three percent of investment managers expect U.S. economic growth to continue at a similar rate or to accelerate in 2018. The vast majority of managers, 89%, expect the 10-year U.S. Treasury bond yield will be higher by the end of 2018. Although most, 72%, believe the increase will be less than one-half of a percentage point. A large portion of managers (52%) continue to view U.S. equities as overvalued, European equities and emerging market equities are viewed as undervalued or fairly valued by 87% of managers. Investment managers rank the top risks to the global equity markets as geopolitical risk, U.S. monetary policy and risk of a market sell-off due to high valuations.

Key Findings: Fourth Quarter 2017 Survey

Tax Reform

- 68% of managers believe tax reform changes will be positive for equities
- 52%, expect to make some changes to portfolios due to the tax changes
- 76% expect U.S. corporate earnings to rise in first quarter 2018; of these, 21% believe it will be primarily due to tax reform

2018 Outlook

- 57% of managers expect U.S. economic growth to be around 3.0% in 2018
- 62% expect corporate profit growth to increase in 2019
- 70% expect inflation to increase in 2018

Interest Rates and Equity Valuations

- 40% of managers expect the 10-year Treasury bond's yield to increase between 25 to 50 basis points by the end of 2018
- 58% expect modest widening of high yield spreads and 8% expect substantial widening in 2018
- 48% believe U.S. equities are undervalued or fairly valued
- 87% believe emerging market equities and European equities are undervalued or appropriately valued

TAX REFORM

The U.S. tax reform bill was winding its way through Congress and multiple issues were still being debated while the survey was open in mid-December. We asked investment managers if they believed a tax reform bill would be enacted by the beginning of 2018; 85% predicted correctly that it would. Just under half the investment managers, 49%, believe that the tax reform bill would be positive for equity markets and negative for bond markets. Approximately one quarter expect the bill will not significantly affect either market, and about 19% believe it will be positive for both equity and fixed income markets.

We also asked managers whether they would make any changes to their portfolios if the tax reform bill passed. Approximately 48% thought they would not make any changes, while 47% thought they would make modest changes if the bill passed. The remaining 5% of managers expected to make a moderate amount of changes to their portfolios.

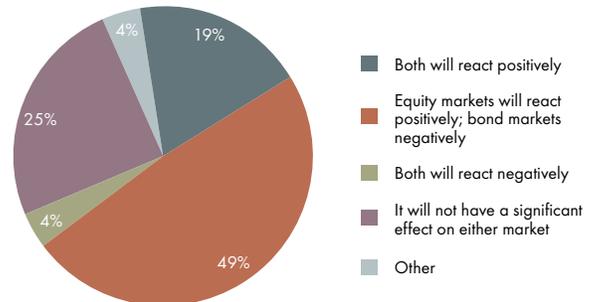
Corporate earnings have been on an upswing over the past few quarters, we asked managers about the tax reform bill's potential impact on U.S. corporate earnings. Fifty-five percent expect U.S. corporate earnings to increase over the next three months with or without the tax reform bill. Approximately 24% believe earnings will remain the same and 21% expect earnings to increase, primarily due to the tax reform legislation. None of the managers expect earnings to decline over the next three months.

2018 U.S. ECONOMIC AND FINANCIAL MARKET OUTLOOK

Looking ahead to 2018, more than half the managers, 57%, expect U.S. economic growth at the end 2018 to be similar to the current rate of growth. Approximately 21% of managers expect U.S. gross domestic product (GDP) growth to be between 2% and 3%, while about 16% expect growth to accelerate to greater than 3.5%. Five percent of managers expect economic growth to slow to less than 2%.

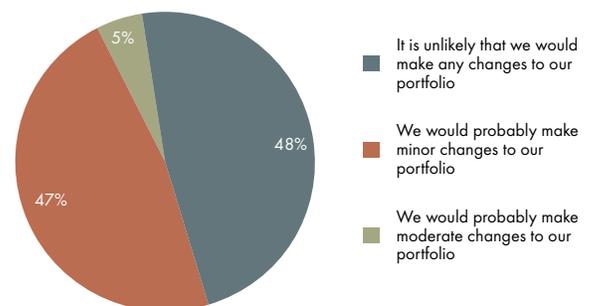
In reference to corporate profits, under the assumption that any corporate tax benefits from tax reform would take effect in the first quarter of 2018, we asked managers what they expect U.S. earnings growth will look like in the first quarter of 2019 versus 2018. A majority, 62%, expects earnings growth to increase in the first quarter of 2019, and approximately 28% believe corporate earnings will remain the same. A smaller portion, 10%, expects a decrease in U.S. corporate earnings.

EXPECTED EQUITY AND BOND MARKET REACTIONS TO U.S. TAX REFORM ENACTMENT



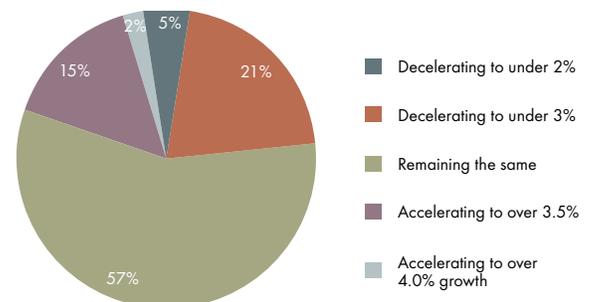
Source: Northern Trust Investment Manager Survey, 4th quarter 2017

DO YOU EXPECT TO MAKE ANY CHANGES TO YOUR PORTFOLIO DUE TO TAX REFORM CHANGES?



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

EXPECTED U.S. GDP GROWTH END OF 2018



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

U.S. inflation, as measured by either the consumer price index (up about 2.2% over the past year), or the core inflation index (up 1.7% over the past year), has been historically low. Most managers, 70%, believe U.S. inflation rate will increase by the end of 2018, while 28% believe it will remain steady.

Approximately 89% of managers expect the 10-year U.S. Treasury's yield will be higher by the end of 2018. Thirty-two percent of managers expect the 10-year yield to increase by up to 25 basis points (0.25%), 40% expect the yield to increase by more than 25 basis points and up to 50 basis points, while 16% believe rates will increase more than 50 basis points. One in 10 managers expects the yield on the 10-year U.S. Treasury to be unchanged in one year.

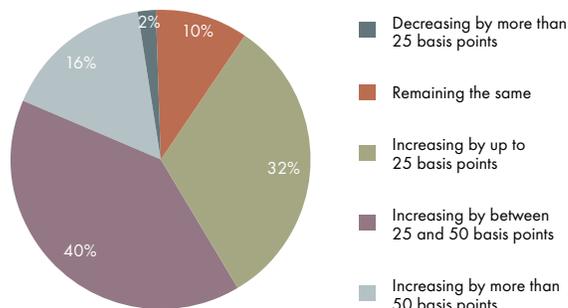
We also asked managers about their expectations for investment grade and high yield spreads. Fifty-four percent expect investment grade spreads to widen modestly over the next year. Nearly four out of 10, 39%, of managers expect investment grade bond spreads to remain largely unchanged, and 6% expect spreads to narrow further. For high yield bonds, 58% of managers expect modest widening, while 8% expect a substantial widening of spreads in 2018. Approximately 31% of managers expect spreads to remain the same over the next year.

U.S. ECONOMIC OUTLOOK

Nearly 48% of managers expect U.S. GDP to accelerate over the next six months, up from 30% last quarter. Forty-four percent expect economic growth to remain steady while 8% expect slower growth. Looking at job growth, 61% expect it to remain stable over the next six months, in line with last quarter. Approximately 10% of managers expect job growth to accelerate, up from last quarter's 3%, but lower than the survey's long-term average of 21%. Given the historically low rate of U.S. unemployment (4.1%), it is not surprising that 30% of managers expect job growth to decelerate but remain positive. That is down slightly from 35% last quarter.

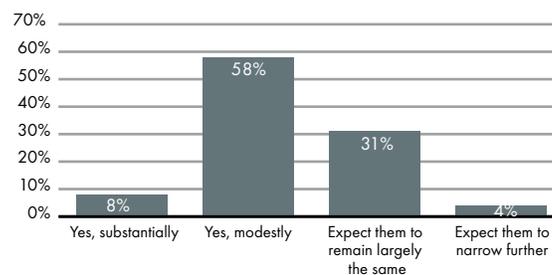
As discussed earlier, 76% of managers expect corporate earnings to increase over the next three months, partially due to the tax reform legislation, 24% expect earnings to remain flat, and none of the managers surveyed expect a decline in earnings. Nearly two-thirds of managers, 65%, expect U.S. corporate revenue growth to increase over the next quarter, up from 41% last quarter. The remaining 35% expect revenue growth to remain stable.

EXPECTED YIELD ON U.S. 10-YEAR TREASURY BONDS BY END OF 2018



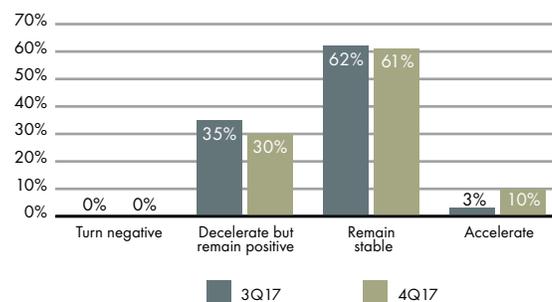
Source: Northern Trust Investment Manager Survey, 4th quarter 2017

DO YOU EXPECT HIGH YIELD CREDIT SPREADS TO WIDEN IN 2018?



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

U.S. JOB GROWTH EXPECTATIONS NEXT 6 MONTHS



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

INFLATION AND INTEREST RATES

A larger portion of managers, 63% expect inflation to increase, up from 39% last quarter. Thirty-seven percent expect inflation to remain the same over the next six months, down from 61% last quarter. The vast majority of managers, 84%, expect interest rates to increase over the next three months – the highest percentage since the survey began in the third quarter of 2008. Thirteen percent expect interest rates to remain the same.

PORTFOLIO POSITIONING

Nearly 83% of investment managers report that their portfolio’s cash levels are in line with historic norms, up from 74% last quarter. The number of managers that have cash levels above their normal levels has decreased to 13% from 21% last quarter.

Most managers, 76%, did not change the level of concentration in their portfolios. There was an increase in the percent of managers that are more risk averse in their portfolios – 34% versus 20% last quarter. Most managers, 61%, made no changes to their level of risk aversion. Approximately 18% of managers increased their portfolios’ commodities exposure, up from 12% last quarter, but most (76%) left their commodities exposure unchanged.

Given the large outperformance of growth stocks over value stocks recently, we asked managers whether they are finding more opportunities in value-oriented securities or sectors. A large portion, 63%, reported that they are finding more opportunities in value-oriented names, while 37% are not.

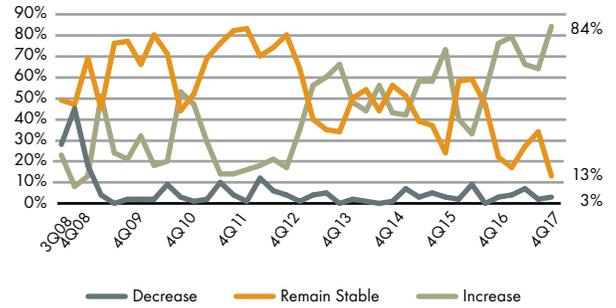
VOLATILITY

More than three quarters of investment managers (77%) expect market volatility, as represented by the Chicago Board Options Exchange Volatility Index (VIX), to increase over the next six months. Only 23% expect the VIX to remain the same. The VIX has been at historically low levels recently.

GLOBAL EQUITY MARKET RISKS

Geopolitical risks and a change in U.S. monetary policy remained the top two ranked risks for global equity markets. A new risk, a market sell-off due to high valuations, ranked third overall. A rise in interest rates continued to rank fourth, followed by emerging market economic growth and a U.S. economic slowdown. Trade policy, which ranked third last quarter, dropped to eighth.

INTEREST RATE EXPECTATIONS NEXT 3 MONTHS



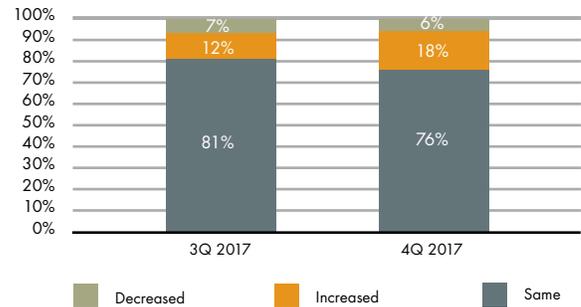
Source: Northern Trust Investment Manager Survey, 4th quarter 2017

RISK AVERSION CURRENT VS. 3 MONTHS AGO



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

CHANGE IN COMMODITIES EXPOSURE VERSUS 3 MONTHS AGO



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

GLOBAL EQUITY MARKET VALUATIONS

A large portion of managers (52%) continue to view U.S. equities as overvalued. Although a similar percent believe U.S. equities are undervalued or fairly valued this quarter (48% versus 47% last quarter), more managers believe they are undervalued (22% versus 14%) than last quarter. The percent of managers that believe they are fairly valued is down 7 percentage points from last quarter (25% versus 33%). From a historical perspective, a smaller than normal portion of managers view U.S. equities as attractively valued: Over the 38 quarters we have surveyed our managers, 73% of managers have viewed U.S. equities as undervalued or fairly valued on average. This quarter only 48% of managers do.

Managers view Japanese equity valuations less favorably this quarter versus last. Approximately 28% view Japanese equities as undervalued, down from 42% last quarter. A higher percent of managers, 22% versus 10% last quarter, view the Japanese market as overvalued. Half of the investment managers believe equity valuations in Japan are appropriately valued, in line with last quarter. Overall, 78% of managers view equities in Japan as undervalued or appropriately valued, down from 90% last quarter but higher than the 48% that hold similar views on U.S. equity valuations.

Managers see emerging market equities as attractively valued, with 87% viewing them as undervalued or appropriately valued. Of this,

approximately 48% of managers view emerging market equities as undervalued, with 13% believing they are undervalue by more than 10% and 35% believing are undervalue by 10% or less. The same percentage of managers as last quarter, 38%, believes they are appropriately valued. Only 13% emerging market equities as overvalued.

The region managers feel has the most favorable equity valuations is Europe. Fifty-seven percent view European equities as undervalued, up from 53% last quarter. Only 13% believe European equities are overvalued, and 30% view them as fairly valued.

Most managers, 53%, expect equities from the Asia-Pacific region (as represented by the MSCI AC Asia Pacific Index) to perform in line with global equities, a slight increase from 46% last quarter. Forty percent of

GLOBAL EQUITY MARKET VALUATIONS



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

INVESTMENT MANAGERS' RANKINGS OF TOP RISKS TO EQUITIES

RISKS	FOURTH QUARTER 2017 RANK	THIRD QUARTER 2017 RANK	CHANGE FROM LAST QUARTER
GEOPOLITICAL RISK	1	1	=
CHANGE IN U.S. MONETARY POLICY	2	2	=
MARKETS SELL-OFF DUE TO HIGH VALUATIONS	3	-	NA
RISE IN INTEREST RATES	4	4	=
EMERGING MARKET ECONOMIC GROWTH	5	7	+2
U.S. ECONOMIC SLOWDOWN	6	6	=
U.S. CORPORATE EARNINGS	7	5	-2
TRADE POLICY	8	3	-5
NON-U.S. DEVELOPED MARKET MONETARY POLICY MISSTEPS	9	-	NA
OIL/COMMODITY PRICES	10	8	-2

Source: Northern Trust Investment Manager Survey, 4th quarter 2017

investment managers expect Asia-Pacific equities to outperform global equities, and approximately 8% believe they will underperform global equities over the next six months.

FIXED-INCOME SECTORS

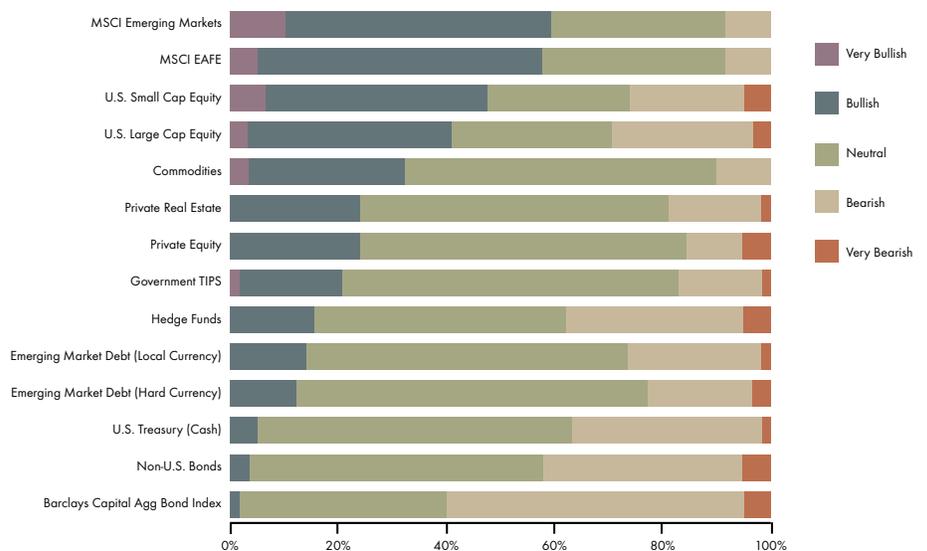
Within fixed-income markets, managers view investment grade, emerging market and U.S. high yield as most attractive. Least attractive is euro high yield, followed by global sovereign debt.

WHICH ASSET CLASSES AND SECTORS ARE MANAGERS BULLISH ON?

Managers are most bullish on emerging market equities, followed by non-U.S. developed equities. These two asset classes have ranked first and second for the past four quarters. U.S. small cap stocks ranked third and U.S. large cap ranked fourth. Commodities moved up to fifth from ninth last quarter. Managers were the most bearish on U.S. fixed income (as represented by the Barclays Capital Aggregate Bond index) and non-U.S. bonds, followed by hedge funds.

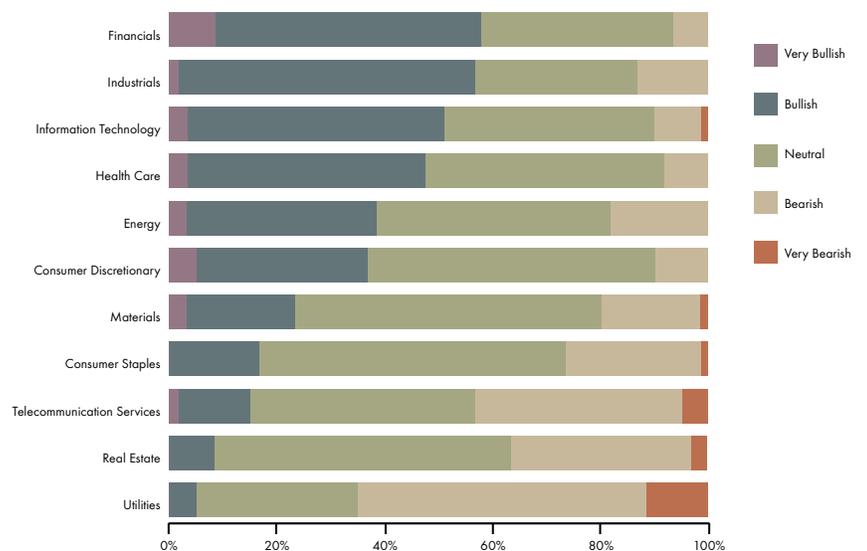
Looking at sectors, managers were most bullish on financials, which ranked second last quarter. The industrials sector ranked second this quarter, moving up from fifth last quarter. Information technology was ranked third, dropping from first last quarter. Healthcare and energy ranked fourth and fifth this quarter. The sectors managers are most bearish about are utilities, telecommunication services and real estate, followed by consumer staples.

BULL/BEAR INDICATOR (ASSET CLASS)



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

BULL/BEAR INDICATOR (SECTORS)



Source: Northern Trust Investment Manager Survey, 4th quarter 2017

COMMENTARY FROM OUR MANAGERS

We asked managers this quarter to share their views on the following questions:

Many financial markets continue to experience very low levels of volatility. What do you believe this reflects and what does it suggest going forward? Have you positioned your portfolios differently given this environment?

“The expanded influence of value agnostic investors in a rising market environment has contributed to low volatility. Likewise, in a sell-off, these investors may exacerbate volatility as they liquidate. We have increased cash to redeploy in a more volatile environment.”

– **Brian Beitner, portfolio manager, Chautauqua Capital – a Division of Baird**

“We believe low volatility across asset classes represents the low risk premium being placed on future returns by the market. Since risk premium is typically correlated to uncertainty about future economic conditions (higher risk premium equal higher uncertainty), and since central bank policy plays a big role in shaping expectations of those economic conditions through tightening or loosening credit conditions, the lack of uncertainty results from the tremendous amount of forward guidance given by central banks before taking action. We continue to manage our portfolios under the construct that as long as central banks remain heavy users of forward guidance in telescoping future policy action (6+ months in advance), volatility will continue to remain subdued.”

– **Komson Silapachai, Vice President – Research and Portfolio Strategy, Sage Advisory Services Ltd. Co.**

We also asked managers what other significant risks concern their investment teams and how these are affecting their portfolios. The following comments represent a selection of their responses:

“We remain concerned about stretched valuation multiples in combination with the current low-volatility environment. Negative shocks to the financial markets (especially arising from geopolitical events) are likely to be paired with market losses and realized risk in excess of forecasts. Our portfolios continue to have expected tracking-error targets in the lower-end of our dynamic allocation bands.”

– **Geoffrey Gerber, president & chief investment officer, TWIN Capital Management, Inc.**

“Liquidity is the lifeblood of the markets. With the Fed unwinding its balance sheet, liquidity will decline. This is a new concept for the market to digest. It might be difficult for the Fed to get this exactly right, which has the potential to increase volatility.”

– **Mike Morrill, chief operating officer, DF Dent and Company, Inc.**

ABOUT THE SURVEY

For our survey, Northern Trust polled a select group of respondents, including fixed income and equity managers across value and growth styles, with a bias toward fundamental, bottom-up stock-picking strategies. Invitations to complete the survey were only sent to investment managers that currently manage assets for Northern Trust and our clients. As a result, the survey responses should reflect the beliefs of only the managers in which Northern Trust's multi-manager investments group maintains a high conviction. The survey is conducted quarterly so that Northern Trust and participating managers can examine trends in attitudes and allocations.

Percentages in report and graphs may not add to 100% due to rounding. All data analyzed in this report are derived from the Northern Trust Investment Manager Survey.

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Northern Trust is a leading provider of multi-manager investment solutions, with \$58.7 billion under management and \$59.9 billion under advisement for institutional and personal clients. Having investments with more than 200 external managers worldwide, Northern Trust's multi-manager solutions range from retail mutual funds and alternative asset classes to emerging manager programs and total investment program management for institutions and affluent individuals and families.

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