NORTHERN TRUST

2018 OUTLOOK:
AN OBJECT IN MOTION STAYS IN MOTION

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Northern Trust Investment Strategy
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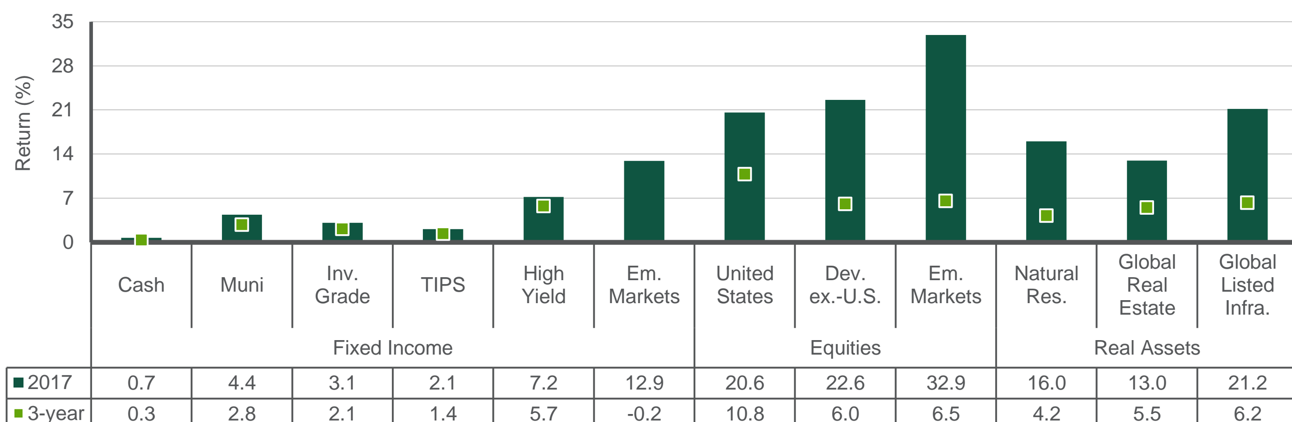
We remain overweight equities as we enter 2018. The global economy is showing broad momentum and inflation is putting little pressure on monetary policy. In response to strong 2017 market returns, we've been reallocating toward asset classes that are less expensive. We believe the two biggest threats to the economy and markets "staying in motion" are a central bank mistake and a China slowdown.

We entered 2017 overweight risk assets, as we believed the global economy was gaining momentum and the U.S. government was set to take some load off of the Federal Reserve. Economic fundamentals have positively surprised in 2017, with the contribution from the U.S. government being more regulatory than legislative in nature. Investors bid up all risk assets in 2017 as fixed income continues to provide middling return potential. To paraphrase Newton's First Law, an object will remain in motion unless it is compelled to change by an external force. We think that describes the general state of the global economy, which should produce another year of solid growth in 2018. Bull markets are always vulnerable to central bankers "taking away the punch bowl" by raising rates, but we think continued subdued global inflation moderates this risk. In addition, the low level of long-term interest rates globally should cap how far the Fed raises short-term rates so as not to invert the yield curve. The rebound in the global economy and financial markets since early 2016 has been supported by accelerating growth in China. This growth may have been engineered ahead of the Party Congress this past October. While a material Chinese growth degradation is a risk, our base case of modest Chinese growth deceleration may help to offset global inflation risks and support risk taking.

EXHIBIT 1: A YEAR TO REMEMBER

Non-U.S. equities outperformed in a strong year for all asset classes.



	Cash	Muni	Inv. Grade	TIPS	High Yield	Em. Markets	United States	Dev. ex.-U.S.	Em. Markets	Natural Res.	Global Real Estate	Global Listed Infra.
	Fixed Income						Equities			Real Assets		
2017	0.7	4.4	3.1	2.1	7.2	12.9	20.6	22.6	32.9	16.0	13.0	21.2
3-year	0.3	2.8	2.1	1.4	5.7	-0.2	10.8	6.0	6.5	4.2	5.5	6.2

Source: NT Investment Strategy, Bloomberg. Returns greater than one year are annualized. 2017 return data through 11/30/2017.
Past performance is no guarantee of future results.

EXHIBIT 2: 2018 OUTLOOK BY ASSET CLASS

		Asset Class	TAA*	SAA*	Key Views
Risk Assets	Equities	U.S. *3% Overweight*	25%	22%	Modest global growth and low inflation continue to support our overweight allocation. Organic growth has provided investors with patience on progress towards the pro-growth agenda. We expect higher earnings from a decrease in the corporate tax rate in 2018 to offset slight valuation contraction due to the higher cost relative to other asset classes.
		Developed ex-U.S. *5% Overweight*	20	15	Our overweight position comes from political pressures that have turned into potential catalysts furthering growth momentum as French President Emmanuel Macron has shown an ability to lead. Meanwhile, the European Central Bank and Bank of Japan maintain easy monetary policy and equity valuations remain attractive versus U.S.
		Emerging Markets *3% Overweight*	10	7	Our overweight position reflects attractive valuations compared to other regions as well as improved global growth prospects and economic stability. The highest performing asset class in 2017 no longer has the same degree of U.S. trade war risks as it did at the beginning of the year. China weakness represents a key risk to emerging market equities.
	Real Assets	Global Real Estate/ Infrastructure *Neutral*	4	4	Our strategic allocation to global real estate and listed infrastructure continues to offer high income and diversified risk exposures. We retain current neutral positioning as we do not expect a large increase in interest rates over the tactical horizon, which would negatively impact the returns of these cash flow assets.
		Natural Resources *Neutral*	5	5	Over the past year, we have moved from a modest overweight back to strategic levels. Equity-based natural resources serve as solid protection for unexpected inflation but inflation is nowhere to be seen over the tactical horizon. A strategic allocation helps to diversify the portfolio as well as alleviate portfolio impacts related to political risk.
	Gold	Gold *Neutral*	0	0	We view gold as an alternative currency and prefer the U.S. dollar. Gold does best in environments of falling real interest rates, either because inflation is accelerating or central banks are responding to systemic risks. We are currently experiencing the opposite, with rising rates primarily due to a Fed looking to normalize policy amidst a stable economy.
	Fixed Income	High Yield/EM Debt *1% Overweight*	6	5	We reduced our high yield overweight over the past year as the asset class has become more fully valued and overly dependent on lower quality issues. Our reduction in high yield has allowed us to improve portfolio liquidity. We remain underweight emerging market debt as we see better risk taking opportunities in emerging market equities.
Risk-Control Assets		Investment Grade *12% Underweight*	24	36	We remain underweight as we believe global economic growth and low inflation argue for a heavier allocation to risk assets. That said, investment-grade fixed income remains a core holding in a diversified strategic portfolio. Interest rates are unlikely to materially rise over the tactical horizon which should allow for continued positive returns in the asset class.
		TIPS *Neutral*	4	4	We continue to recommend a neutral position. Inflation expectations may move higher on a cyclical basis but will continue to be pressured by structural forces on demand (including aging demographics and ongoing deleveraging). We prefer targeted duration strategies to maximize exposure to inflation expectations and minimize exposure to interest rates.
		Cash *Neutral*	2	2	With three rate hikes over the past year, cash is finally providing a measurable — if still very low — return. However, after the anticipated Fed rate hike in December, we only expect one more hike in 2018. In an environment that we believe is conducive for risk-taking, cash remains an asset class used primarily for meeting near-term liquidity needs.
Tactical Risk Position: Overweight					We are overweight risk, primarily to global equities funded heavily by our underweight to investment-grade fixed income. Economic growth greater than market expectations and subdued inflation support our risk taking, which continues to have an increasing focus on non-U.S. equities. We believe that a monetary misstep by central banks looking to normalize policy and China weakness are the greatest current risks.

*TAA = Tactical Asset Allocation; SAA = Strategic Asset Allocation. These recommendations, based on the Global Policy Model, do not include alternatives. We believe strategic holdings in both private investments and hedge funds can assist in increasing portfolio efficiency. However, we do not make tactical recommendations on these assets classes due to the strategic nature of the investments.

MACRO THEME REVIEW: ACCELERATING GROWTH

Part of our 2018 outlook is a review of our long-term capital market assumption themes, as published each summer in our Five-Year Outlook paper. These themes drive the forward-looking portion of our “forward looking, but historically aware” approach to strategic asset allocation and also serve as a useful template for our tactical outlook and asset allocation positioning. Exhibit 3 details our macro themes from the 2017 edition of the Five-Year Outlook and how those themes are progressing.

Entrenched Growth could be more aptly described as accelerating growth of late — and on a global scale. All major global economies are enjoying nice growth momentum as we head into 2018, which is supporting our continued overweight to equities globally. Further supporting our global equity overweight has been the continued **Stuckflation** environment. Central bankers have gone from dismissing recent weak inflation readings as transitory to admitting they were confused by its persistence to now increasingly factoring in the possibility that there are some structural elements to what is keeping inflation so low. We believed this growing realization of Stuckflation would support our **Waiting for Monetary Godot** theme — and to some extent it has, given the continued slow pace of monetary “normalization.” However, the Fed will likely be able to get one more rate hike in this year (at its December 12-13 meeting) than we were expecting earlier in the year. That said, we believe a rate hike in December will only serve to reduce the number of rate hikes the Fed can push through in 2018 (the Fed thinks three, the markets think two, we think only one) — keeping our Waiting for Monetary Godot theme intact. Meanwhile, **Populist Catharsis** has been on grand display the past few months. Whether it be Republicans vs. Democrats, the U.S. vs. China, the U.K. vs. Europe or North Korea vs. the world; thus far, all fights have been contained to rhetoric and none have materially impacted the mood or outlook of financial market participants. While politicians work out their differences, we find **Regulation in the Limelight**. As we expected, the “smarter” regulatory environment has assisted global economy growth, particularly in the U.S. The combination of all these themes has sustained the **Valuation Superstructure** across financial markets.

EXHIBIT 3: SO FAR, SO GOOD

Global growth has outpaced our expectations and other themes remain intact, making for a positive risk-taking environment.

CMA Theme	What was said at the time …	What we have seen so far …
Entrenched Growth	Global economic growth will continue at a modest pace over our horizon. High debt levels, aging developed market populations and transitioning emerging markets economies will control global demand.	Economic growth has accelerated on a global basis and at a faster pace than suggested in our capital market assumptions. We believe this higher pace of growth to be durable for now given the lack of inflationary pressures.
Stuckflation	Automation-enabled supply will easily meet demographic-hobbled demand keeping inflation subdued. Innovation will address pockets of sustained inflationary pressures seen in health care and education.	Central bankers are beginning to entertain the idea that some of the weaker inflation recently is due to structural forces. Japan inflation is flat, Europe is just below 1% and the U.S. is stubbornly below 2% (with slow wage growth).
Waiting for Monetary Godot	We do not expect monetary policy to return to pre-financial crisis levels over our forecast horizon. Central banks facing political scrutiny are expected to keep balance sheets above historic levels.	The Fed accomplished more rate hikes this year than we expected (assuming a hike in December), but we expect only one in 2018. Europe will begin tapering in 2018 while Japan will maintain accommodation for some time.
Populist Catharsis	Markets prefer policy stability but, when change is required, markets will reward policies that move toward new solutions. Leaders capable of navigating populist environments will come out stronger moving forward.	Political systems have allowed for a controlled “airing of grievances” without deleterious impacts on the global economy or financial markets. Actual policy aims have been more sensible than the rhetoric has suggested.
Regulation in the Limelight	A focus on reducing regulations — combined with synchronized global growth — has improved upon legislative failures. Governments and corporations are dictating policy changes to support growth.	The Trump administration’s support for the U.S. economy came primarily through regulatory change (via executive order). Meanwhile, French President Macron has made notable progress towards labor market reform.
Valuation Superstructure	Steady economic growth and benign inflation provide a solid foundation for elevated valuations. Changes to financial markets’ structure, players, and investment vehicles support the case for valuations to endure.	Developed market equity valuations remain elevated, especially in the U.S. (at 21.0x trailing earnings vs. long-term historical average of 16.5x). Emerging market equities stand out as relatively inexpensive today.

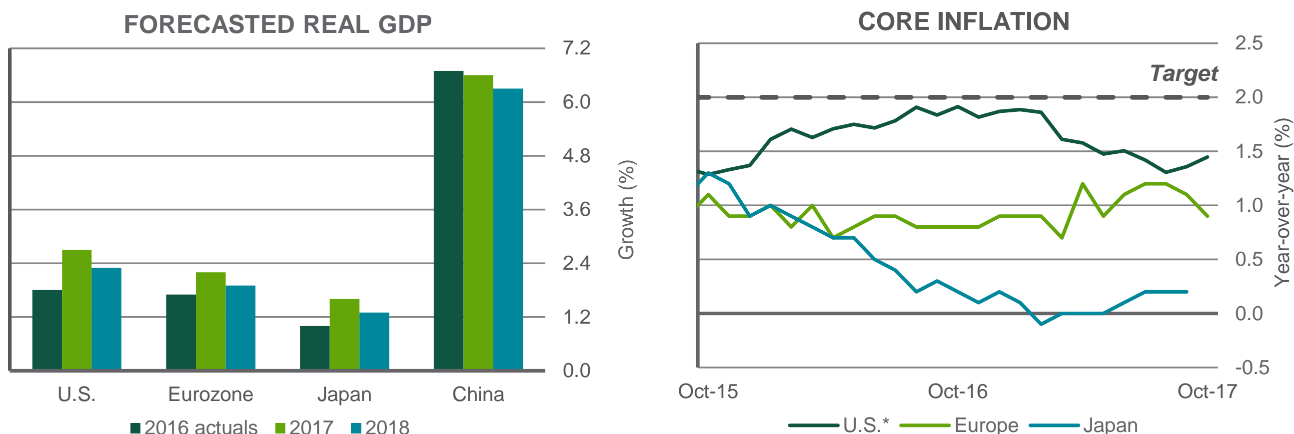
GROWTH AND LOW INFLATION: A STRONG COMBINATION

After a year of solid growth acceleration in 2017, growth is more likely to be relatively steady in 2018. We upped our view of the U.S. growth "channel" last year from a range of 1.5% to 2.0% (with downside risk) to a new range of 2.0% to 2.5% (with near-term upside) due to the potential benefit of deregulation and tax reform. As we go to press, it is looking increasingly likely that stimulative tax reform will pass in the U.S. and that growth will see a boost in 2018. Offsetting this benefit is some likely moderation in China, which has been a key support to the rebound in global growth over the last year. Chinese deficits have jumped in recent years, and the government clearly wanted a strong economy as the backdrop for the every-five-year Party Congress which concluded in October. Helping support strong growth across the emerging markets will be India, with reaccelerating growth after its demonetization program, and Latin America, which is benefiting from higher commodity prices. With purchasing manager index levels at sustained high levels across Europe, the European Union looks set to deliver another year of growth in the 2% range. We expect an increase in business investment to offset a slowdown in government spending in Japan, leaving growth in the country between 1.0% and 1.5%. In sum, our theme of Entrenched Growth looks likely to hold up in 2018, with developed market growth of ~2% being bolstered by emerging market growth of ~5%, leading to overall real growth of just over 3%.

As shown in Exhibit 4, inflation has continued to undershoot policy goals. In line with our Stuckflation theme, we see this global phenomenon continuing in 2018. Central bankers worry about the negative demand indications signaled by weak pricing, while low inflation also increases the real cost of debt service required by high government debt levels. Despite unemployment rates of 4.1% in the U.S. and 2.8% in Japan, wages haven't really budged and inflation has remained in check. Demographics are playing a part in tepid wage gains (higher paid workers retiring and being replaced by cheaper Millennials), while broader inflation is most certainly being impacted by technology. The impact of e-commerce on traditional retailers is well known, but is also spreading into industrial goods and services. Advances in robotics and artificial intelligence are also automating traditional jobs, likely increasing worker anxiety about job security. So far, the low unemployment levels seem to be more of a growth retardant than a cause of inflation as companies struggle to find sufficient qualified workers. If the low level of unemployment finally leads to increasing wages, the key question will be whether the wage gains are offset by corresponding productivity increases. If so, corporate profits will be fine and the economy will thrive. Because we believe corporations still hold the upper hand in wage negotiations, we think that meaningfully higher wages will only occur if productivity is there to support it.

EXHIBIT 4: A POWERFUL DUO

Solid growth and low inflation led to good financial market returns in 2017; we expect this to continue in 2018.



Source: NT Investment Strategy, Blue Chip Economic Indicators, Bloomberg. *U.S. uses core PCE while Europe and Japan use core CPI.

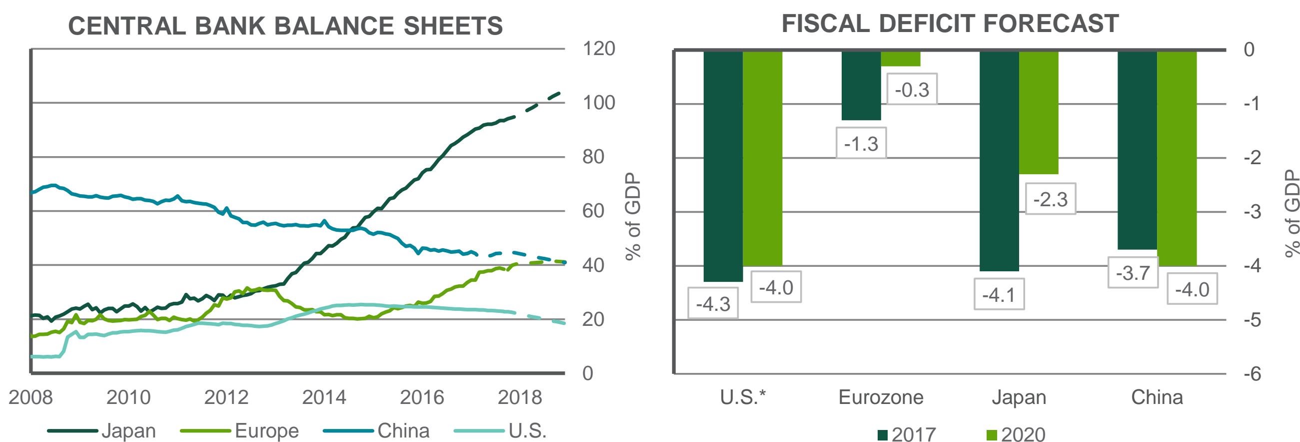
MONETARY AND FISCAL POLICY: LIMITS ON HIGHER RATES

A central banking policy error is one of our formal risk cases for 2018, as major central banks in the developed world strive to reach their inflation targets in a world of "Stuckflation." Of the three most important central banks, the Federal Reserve is the furthest along in its process of removing the extraordinary accommodation provided after the global financial crisis. After a long period of hesitation, the Fed has finally lifted the Fed funds rate to over 1% and begun the process of slowly shrinking its balance sheet. The transition to the new Fed chair is likely to be relatively smooth, and we don't expect much change in the pace of monetary policy normalization. Our primary concern with the mostly new Fed board is how they communicate with the investment community — properly conditioning the markets (and relatedly understanding market expectations) will be critical for a smooth normalization process. Very low interest rates outside the U.S. will continue to pressure the long-end of the U.S. yield curve, limiting how far the Fed can raise interest rates without risking an inversion. We expect one hike of 0.25% in December 2017 and an additional hike in 2018. The European Central Bank has started the process of "tapering" its bond purchases, with a potential end date of September 2018. With core inflation currently stuck below 1.0%, it will take a jump in inflation to force the ECB to move more quickly on balance sheet normalization — which they have indicated will happen before they consider upward moves in policy interest rates. The Bank of Japan has had the most aggressive policy in trying to generate upward pressure on inflation, but consumer price inflation has been below 1% for over two years and the expected rate of inflation over the next ten years is just 0.5%.

Fiscal policy looks to have the greatest potential impact in 2018 in the U.S., providing the tax reform package is finally passed. As shown in Exhibit 5, the U.S. looks to be running the largest deficit in 2017, and the forecasted level in 2020 does not assume the impact of tax reform. Eurozone deficits have been improving in recent years due to the solid economic recovery and relatively stringent budgetary approach taken after the Global Financial Crisis. Estimates of Japan's deficit outlook clearly assume that improving growth will allow some paring back of deficit spending, while China's deficit is expected to modestly expand (after being in surplus in 2007 and at just a 1% deficit in 2011). We are looking at these deficit positions primarily from a growth standpoint, as the bond markets aren't worried about government debt levels and don't appear likely to over the next several years. The Eurozone and Japan may prove to be in better positions to deficit spend in several years should growth turn down, in contrast with the U.S. and China, which may be more fiscally constrained.

EXHIBIT 5: A TIME TO RESTOCK

Strengthening global economic growth allows for a slow reduction in monetary accommodation and fiscal repair.



Source: NT Investment Strategy, Bloomberg, IMF, Oct. 2017. Dotted lines are forecasts.*Deficit forecast does not assume tax plan.

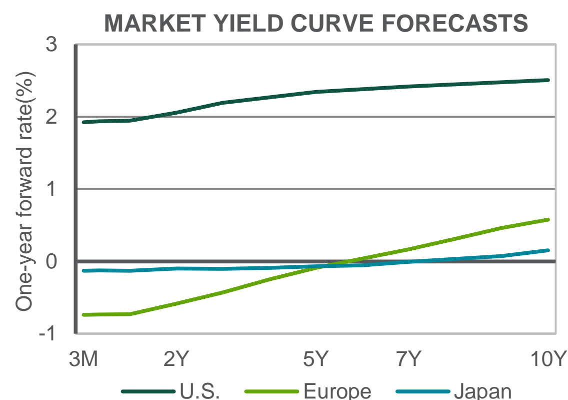
INTEREST RATES

The Treasury yield curve has continued to flatten throughout 2017, driven by Fed rate hikes and long rates anchored by low inflation. The impact of low rates outside of the U.S. has also contributed to the flattening, as international investors have been buying U.S. Treasurys in their continuing search for yield. Appetite for U.S. municipal bonds has moved beyond the typical taxable U.S. investor and the favorable technical backdrop for municipal bonds should continue. Demand from major participants remains high, supply is moderate and the potential for an increase in taxable muni debt reduces the tax free stock. Pension issues will get closer scrutiny by investors as a divergence between the funded statuses of programs increases.

We expect two more Fed rate hikes over the next year (including this December), a slower pace than the Fed has been indicating, as we believe they will be hesitant to risk inverting the yield curve. As shown in the accompanying chart, forward markets are still expecting low long-term rates in one year's time. Central banks in Europe and Japan have continued expanding their balance sheets as inflation readings undershoot targeted levels. Short-dated maturities look least attractive globally, due to the low level of rates in many countries and as they are more vulnerable to changes in central bank policy.

ITS ALL ONLY SLIGHTLY UPHILL FROM HERE

Yield curve flattening will make raising policy rates difficult.



Source: NT Investment Strategy, Bloomberg.
One year forward rates as of 12/8/2017.

- Interest rates are likely to remain low supported by continued quantitative easing in Europe and Japan.
- The Fed may find it difficult to hit its target of three rate hikes in 2018 given the flattening yield curve.
- Meager cash yields should persist; longer-duration fixed income returns should also be low (but positive).

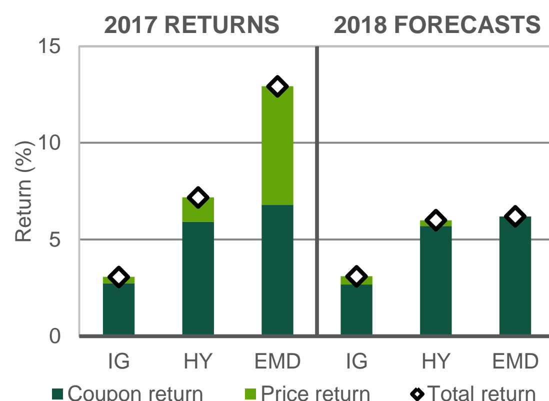
CREDIT MARKETS

In 2017, fixed income investors benefited from taking on both interest rate and credit exposure — gained through allocating to longer duration and lower credit quality securities, respectively. Investment grade total returns of ~3% slightly outpaced beginning of year yield-to-maturities as interest rates moved slightly lower during the year and credit spreads tightened. High yield also benefited from tightening credit spreads, returning ~7% as default rates fell amid strengthening fundamentals. Finally, emerging market debt benefited from the weakening dollar, which both boosts non-U.S. dollar denominated returns and makes it easier to pay U.S. dollar denominated debts; total returns came in at ~13%.

We believe major fixed income indexes will return in-line with their yield-to-maturity starting points in 2018. Interest rates are expected to move only modestly higher (and already priced in). Meanwhile, we expect credit spreads — both investment grade and high yield — to remain range-bound; current spreads sit at post-global financial crisis lows but constructive fundamentals and low interest rates will keep them there. Within the high yield market, technicals are also keeping credit spreads tight — supply (market issuance) is simply not keeping up with demand. We expect lower issuance to continue given the amount of refinancing achieved over the past few years. We remain slightly overweight credit in the overall portfolio, still preferring high yield over emerging market debt.

TAKING CREDIT

Greater credit exposure continues to provide higher returns.



Source: NT Investment Strategy, Bloomberg, Barclays. 2017 total returns through 11/30/2017. Proxies: IG (Investment Grade) - BBG U.S. Aggregate; HY (High Yield) - BBG High Yield 2% Capped; EMD (Emerging Market Debt) - JP Morgan GBI-EM Diversified

- Tighter credit spreads and steady interest rates led to decent fixed income asset class returns in 2017.
- Amid steady economic growth, interest rate and credit exposure should continue to pay off in 2018.
- Our 2018 forecasts are largely in-line with starting point yields as interest rates remain range-bound.

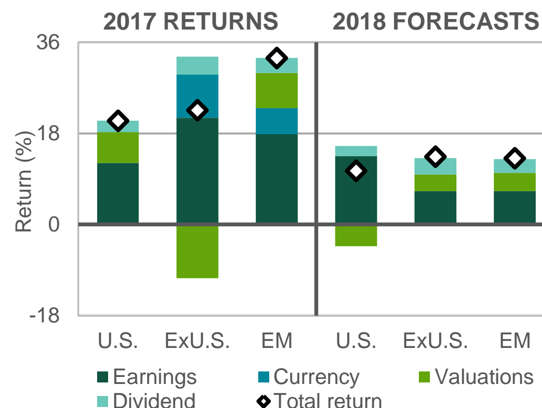
EQUITIES

Global equities are closing out 2017 with strong performance, led by better than expected earnings. Leading the way are developed equities outside the U.S. and emerging markets, where earnings growth of 21% and 18% blew past beginning-of-year expectations. U.S. dollar-based investors have also benefitted from currency appreciation of 9% and 5%, respectively, in these markets. In the U.S., earnings growth of 12% has bested expectations of around 8%, and returns have also been boosted by 6% from valuation expansion. U.S. earnings should get another boost in 2018 from tax reform, with the proposed reduction in the corporate tax rate likely to contribute an 8% boost in S&P 500 earnings per share.

Our return expectations for 2018 are more modest, but still show a healthy return outlook. We expect earnings to remain the primary driver of returns, led by U.S. earnings growth of nearly 14%. With U.S. markets being the most expensive of the major markets, we have penciled in some valuation contraction during 2018. In contrast, we have forecast some valuation expansion in the developed ex-U.S. and emerging markets, as those markets have lagged since the global financial crisis and carry lower valuations than the U.S. We have been reallocating from U.S. equity markets to developed ex-U.S. and emerging markets over the last year, as we feel the multi-year run of U.S. dominance was near its end.

HITTING THE NEW YEAR RUNNING

Recent global equity gains should continue into 2018.



Source: NT Investment Strategy, Bloomberg. 2017 returns through 11/30/2017. Proxies: U.S. - S&P 500; Ex U.S. (Developed ex-U.S.) - MSCI World ex-U.S.; EM (Emerging Markets) - MSCI Emerging Mkts.

- In a great year for global equities, all major regions have recorded well over double-digit gains.
- Gains should continue in 2018 as tax reform boosts U.S. stocks and non-U.S. valuations go higher.
- We expect another year of double-digit gains in all regions with the best returns in Europe and Japan.

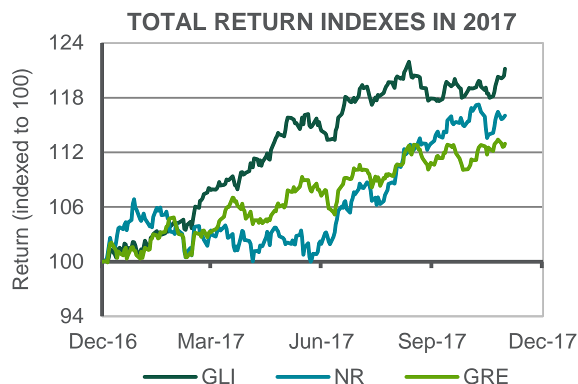
REAL ASSETS

Real assets performed admirably in 2017 but most failed to match the impressive performance of pure global equities. The exception was global listed infrastructure (GLI), which gained over 20% by exploiting 2017's mix of steady interest rates, higher equity markets and somewhat jittery investors (with GLI serving as a lower-risk alternative to listed real estate). Global real estate, (GRE), returning 13%, received some of the same benefits from low rates offset by poor investor sentiment because of concerns over the technology-induced impacts on retail (Amazon/Alibaba), and commercial (shrinking offices) rents. Natural resources (NR) overcame first-half commodity supply worries to return 16%.

Despite our expectations for Stuckflation, we remain strategically allocated across all real assets. This allows us to take advantage of the diversification they provide the portfolio as well as the benefits they provide the investor — including income (primarily global real estate and listed infrastructure) and protection against unanticipated inflation (primarily natural resources). Continued economic momentum and low interest rates create the potential for upside in both GLI and GRE. Natural resources will also benefit from continued global economic demand as well as the ongoing recalibration in commodity supplies. However, Chinese economic weakness — or a greater shift to the consumer — is a risk.

GOOD BUT NOT GREAT

Real asset returns were positive but lagged global equities.



Source: NT Investment Strategy, Bloomberg. Data through 11/30/2017. Proxies: GLI (Global Listed Infrastructure) - S&P Global Infrastructure; NR (Natural Resources) - S&P Global Natural Resources; GRE (Global Real Estate) - FTSE EPRA/NAREIT Global Real Estate.

- Real assets recorded double-digit gains in 2017; global listed infrastructure ran away from the pack.
- The strong global equity outlook paired with low interest rates bode well for GRE and GLI in 2018.
- Better calibrated supply and steady global demand supports natural resources, though China is a risk.

CONCLUSION: GETTING PAID TO TAKE RISKS

Asset markets were boosted in 2017 by a combination of conservative positioning, upside earnings growth and predictable monetary policy. Investors exited 2016 having withdrawn $15 billion from equities, compared with a net investment of $254 billion into fixed income. Investor sentiment improved steadily during 2017, leading to flows into equities of $200 billion in the first nine months of the year — which was still outpaced by $293 billion into fixed income. These investment levels don't compare with the overweighting of equities that occurred at the end of the last two bull markets. In 2007, $212 billion went in to equities as compared with $121 billion into fixed income; in 1999 there were flows of $137 billion into equities and just $2 billion into fixed income. The 2017 investment flow data present a picture of improving optimism, but not one of euphoria.

While the earnings picture in 2018 is highly unlikely to match the robust growth of 2017, the outlook still looks promising. U.S. earnings look to get a one-time boost from pending tax reform, leading to our growth forecast of 14% compared with 7% for developed ex-US and emerging markets. U.S. share prices may face some headwind from valuations, while we expect valuation expansion outside the U.S. Our work on valuation shows that selling out of the market just because it is expensive hasn't added value in the past, and our approach has been to reallocate within equities to those areas with lesser valuations (i.e. markets outside the U.S.).

Monetary policy will be in focus in 2018, as balance sheet management along with policy rate adjustments raise the risk of a monetary misstep. Too much tightening, without the appearance of higher inflation, risks inverting the yield curve and the consequent negative repercussions. We are also monitoring the risk of Chinese weakness, as the strong market environment over the last 18 months has been supported by a strong rebound in China. Politics will remain center stage, but haven't proven to be much of a risk to markets in recent times, and we actually removed this from our risk cases this month. At the end of the day, we expect again to get paid to take risk in 2018 — and should things change during the year we will be positioned to make the appropriate adjustments.

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