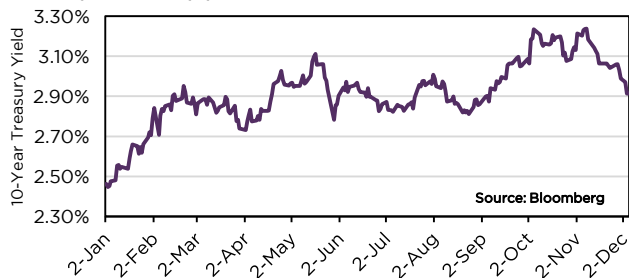


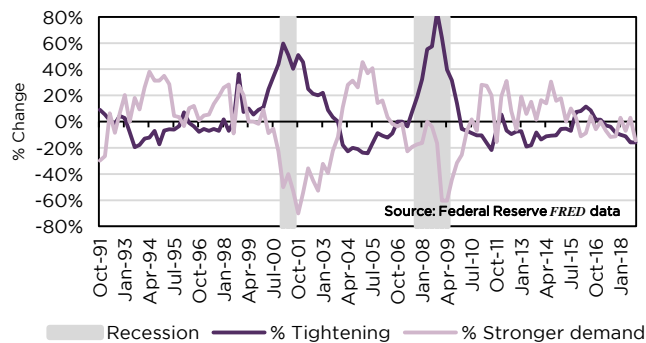
NOVEMBER 2018

October's volatility bled into November as policy uncertainty, rather than economic activity, remained the dominant catalyst for asset price movements. December likely will bring more of the same. During the month, markets were whipsawed by trade comments, the mid-term elections, Brexit negotiations, Italian budget discussions, and Federal Reserve (Fed) policies. Equities trafficked in a high-to-low range of almost 7%, oil prices plunged more than 20%, and credit spreads moved to their widest levels in more than two years. These moves came despite the fact that global growth, though slowing, remains in solid expansionary mode. Surveys of purchasing managers implied continued growth in manufacturing, with operating conditions improving across most developed countries. Improvements in manufacturing were led by the U.S., where new orders jumped to the highest level in three months. Measures of economic activity in the services sector were also strong. In addition to healthy economic activity, inflation remained subdued. The Fed's preferred measure of inflation, Core PCE, fell to just 1.8% year-over-year, below the 2% target. The economic data, combined with constructive comments from Fed Chairman Jerome Powell appeared to have helped equities finish the month with positive performance. Although policy uncertainty may have been the impetus for recent market moves, the amplitude of the moves may have been impacted by the rise in popularity of quantitative strategies. While these strategies differ in many respects, many investors tend to sell as market volatility increases and buy as volatility decreases, exacerbating directional shifts. Analysts at Morgan Stanley estimate assets in these strategies have more than doubled in the last six years, expanding to more than \$1.5 trillion and, while the exact impact of these strategies is unknown, their proliferation likely has magnified market moves. We continue to believe that, ultimately, fundamentals will drive performance over longer periods.

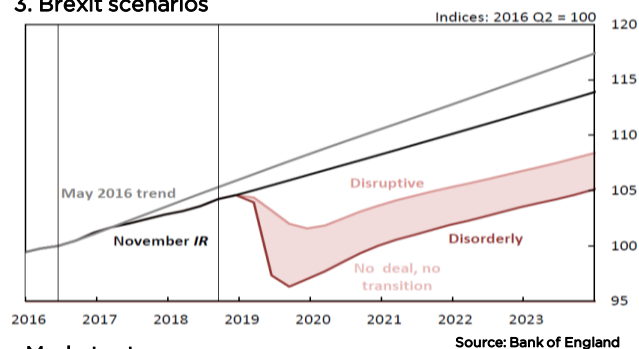
1. 10-yr Treasury yields retreat



2. Lenders not being squeezed



3. Brexit scenarios



A yield in yields: In the Federal Reserve's September FOMC announcement, language was removed that had been in place for several quarters (if not years). The phrase "The stance of monetary policy remains accommodative..." was removed. This change was significant, as it suggested Fed officials were nearing the end of policy tightening. For that reason, market participants were surprised when only a few days later, on October 3, Chairman Powell stated that Fed policy was "a long way from neutral." This appeared to be a shift in guidance, causing 10-year Treasury yields to spike to five-year highs and touching off the recent bout of market volatility. On November 28, the Chairman appeared to reverse course when he declared in prepared remarks that Fed policy was "just below" neutral. These comments buoyed markets, providing equities with a material relief rally. Where does that leave us now? We think the Fed will raise rates in December by 25 basis points and maintain its current pace of increases of 25 basis points each quarter until it reaches the 3% target in June. Though likely, these increases are not preordained. Policy moves will remain data dependent. The recent slowdown in inflation allows policy makers to maintain their gradual pace while monitoring economic conditions for material change (up or down). Due to this gradual process, any policy misstep likely would be modest and easily reversed.

Still accommodating: Despite two years of gradual policy changes and the change in language in the September FOMC announcement, by most measures conditions in financial markets remain accommodative. Entities in need of financing can still obtain it, at relatively low cost. Debt service costs among households and businesses remain near historic lows relative to income/earnings and, with interest rates on mortgages and corporate debt still below pre-crisis levels, these circumstances won't change quickly. Additionally, banks continue to relax loan standards to commercial borrowers. Historically, rising policy rates have resulted in tightening financial conditions which, in turn, reduces the viability of household and business investment. This reduced investment demand slows the economy, often tipping it into recession. Rate increases this cycle do not appear to have breached this threshold with expected future increases only marginally restricting conditions. Figure 2 depicts the percentage of banks reporting a tightening of loan standards as well as changes in commercial loan demand. Typically as lending standards tighten, loan demand decreases and vice-versa. Currently, banks report a continued lowering of standards reflecting accommodative conditions. Commercial loan demand, however, has not picked up. Loan officers report that tax cuts plus underlying economic growth have made companies cash rich, limiting financing demand. These are not circumstances associated with a near-term end in the cycle. Due to their significance, financial conditions warrant careful monitoring as policy rates continue to increase.

Brexit knot: Brexit continues to generate significant uncertainty across markets, not just in Europe and the United Kingdom. The core problem to reaching a deal is striking an agreement that will both avoid a hard border between Northern Ireland and Ireland while still allowing the U.K. to regain control of its borders. No one has provided a workable solution, and none appears forthcoming, with current conditions threatening Theresa May's tenure as Prime Minister. The prospects for the U.K.'s disorderly exit, a so-called "hard Brexit," have increased. Figure 3 provides the Bank of England's analysis of the impact various withdrawal scenarios likely would have on U.K. economic growth. The good news for non-EU members is that economic carnage is anticipated to be constrained to the U.K. and EU members, with non-members potentially receiving very modest benefits due to trade realignment. Given the challenges, these negotiations are likely to remain uncertain for a while.

Market returns

	November	QTD	YTD
S&P 500	2.0%	-4.9%	5.1%
Russell 1000 Value	3.0%	-2.3%	1.5%
Russell 1000 Growth	1.1%	-8.0%	7.8%
Russell 2000	1.6%	-9.4%	1.0%
MSCI EAFE	-0.1%	-8.1%	-9.4%
MSCI Emerging Markets	4.1%	-4.9%	-12.2%
Bloomberg Barclays Agg	0.6%	-0.2%	-1.8%
3-Month T-Bills	0.2%	0.4%	1.7%

Source: Factset

Market Review

November 2018

Overview

In November, markets waged a partial recovery from October's swoon, led by emerging market equities. Declines in tail risks helped buoy many markets, but regional risks remain. More recently, the market was boosted by the U.S. striking a conciliatory tone regarding trade relations with a 90-day truce tendered during the G20 meeting at month-end. This truce proved to be weak tea however. Internationally, risks appeared only to evolve, rather than dissipate, as the U.K. and E.U. established a draft proposal for Brexit, but passage by the U.K. parliament is uncertain. After peaking on November 8th, the 10-year rate fell throughout the month with Fed Chairman Powell's comments curtailing interest rate uncertainty and driving yields back to September levels. Year-to-date, uncertainty has risen with financial markets demanding increased risk premia, pushing equity valuations down and widening credit spreads. Higher risk premia should boost returns, but volatility will persist with unresolved risks.

Index Total Returns (%)

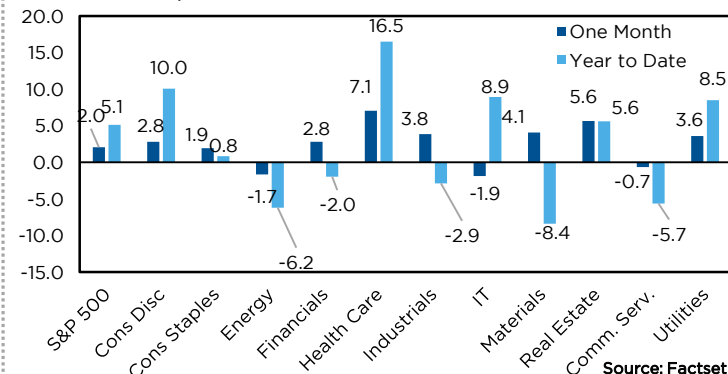
As of November 30, 2018

Domestic Equity Indices	Month	Quarter to Date	One Year
Dow Jones Wilshire 5000	1.9	-5.5	5.6
S&P 500 Index	2.0	-4.9	6.3
Russell 1000 Index	2.0	-5.2	5.9
Russell 1000 Growth Index	1.1	-8.0	8.6
Russell 1000 Value Index	3.0	-2.4	3.0
Russell Midcap Index	2.5	-6.1	1.9
Russell Midcap Growth Index	2.5	-7.6	5.3
Russell Midcap Value Index	2.4	-5.0	-0.8
Russell 2000 Index	1.6	-9.4	0.6
Russell 2000 Growth Index	1.6	-11.3	2.8
Russell 2000 Value Index	1.6	-7.5	-1.8
International Equity Indices			
MSCI EAFE Index	-0.1	-8.1	-7.9
MSCI EAFE Growth Index	0.3	-8.9	-6.9
MSCI EAFE Value Index	-0.6	-7.2	-9.0
MSCI EAFE Small Cap Index	-0.7	-10.3	-9.9
MSCI AC World Index	1.5	-6.1	-1.0
MSCI AC World Index ex U.S.	1.0	-7.3	-8.1
MSCI Emerging Markets Index	4.1	-5.0	-9.1
Fixed Income Indices			
Bloomberg Barclays Aggregate	0.6	-0.2	-1.3
Bloomberg Barclays U.S. Int. Gov/Credit	0.5	0.3	-0.3
Bloomberg Barclays U.S. Long Gov/Credit	0.6	-2.8	-6.4
Bloomberg Barclays U.S. Corp. High Yield	-0.9	-2.5	0.4
Bloomberg Barclays U.S. Treasury: U.S. TIPS	0.5	-1.0	-0.9
Citigroup Non-U.S. World Government	0.3	-1.2	-4.2
JPM EMBI Global Div (external currency)	-0.4	-2.6	-4.8
JPM GBI-EM Global Div (local currency)	2.8	0.8	-5.6
Real Asset Indices			
Bloomberg Commodity Index	-0.6	-2.7	-1.8
Dow Jones Wilshire REIT	4.7	1.6	3.7

- The slight reprieve from trade tensions aided emerging market and U.S. equities, but international markets remain saddled with political uncertainty.
- Widening spreads held back performance for credit in fixed income, as treasuries rallied during the month.
- While trade prospects supported soybean prices, oil supply concerns drove prices to year-to-date lows.

S&P 500 Sector Total Returns (%)

November 30, 2018



- The U.S. remains the standout among equities with positive year-to-date performance.
- Industrials and materials saw prices rebound amid declining risks. Interest rate sensitive sectors also climbed, bolstered by lower treasury rates.

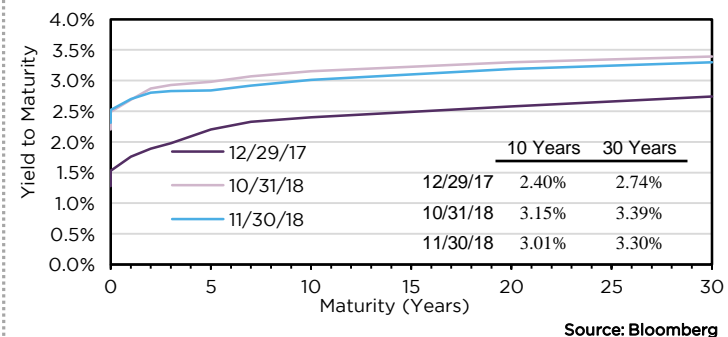
Duration-Matched Excess Returns to Treasuries

	Month to Date (bps)	Year to Date (bps)
Barclays Aggregate	-32	-66
Agency	-36	-61
MBS	0	-43
ABS	-2	20
CMBS	-26	-1
Corporate	-120	-209
High Yield	-155	9
Emerging	-110	-272

Source: Bloomberg

- Rising credit spreads weighed on performance relative to treasuries, as investors assessed the extent of the slowdown anticipated over the next year.
- Unlike securitized product, corporate sectors suffered rising yields, magnifying the underperformance relative to treasuries.

Treasury Rates



- While yields continued to rise at the start of the month, policymaker comments and risk aversion flattened the curve by month-end, with rates falling beyond maturities of 1-year.
- Fed guidance maintains its data dependence, and with subdued inflation, the interest rate path is expected to remain gradual with one more increase expected by year-end.