LGIMA's Multi-Asset Market Update

November 2017

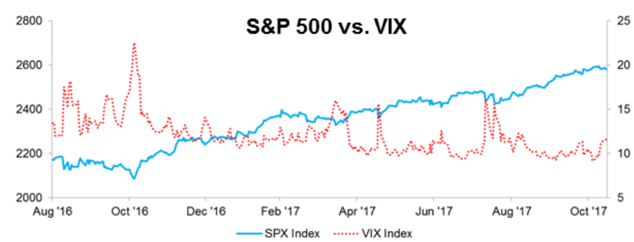
Equity Market

Equity markets have been mixed over the past 30 days, with a particular shift in sentiment to measured caution. US large caps grinded higher 1.2%, while world-ex US fell a meaningful 2.0%, leaving the ACWI essentially flat (+0.2%). Regionally, international stocks were led by Asia, with both developed markets such as Japan (2.9%) and Korea (3.2%), and emerging markets such as China (2.3%) posting strong gains, while European stocks broadly sold off (-2.4%), and the pain in Latin American EMs persisted. Small caps underperformed, growth continued to outperform value, and min-vol strategies faired reasonably well, particularly in the US. On a sector basis, both domestically and internationally, technology stocks and utilities outperformed, while telecom, materials and health care sold off, revealing no clear bias toward defensives or cyclicals. Together, these equity market developments seem to reflect a slight move away from the yearlong risk on environment.

Index	One month	Three months	One year
S&P 500	1.2%	5.1%	21.6%
Russell 2000	-2.0%	5.9%	14.8%
Euro Stoxx 50 (LC)	-1.2%	3.3%	20.0%
Nikkei 225 (LC)	5.8%	15.4%	29.0%
HK Hang Seng (LC)	2.4%	8.1%	36.3%

As of November 14, 2017

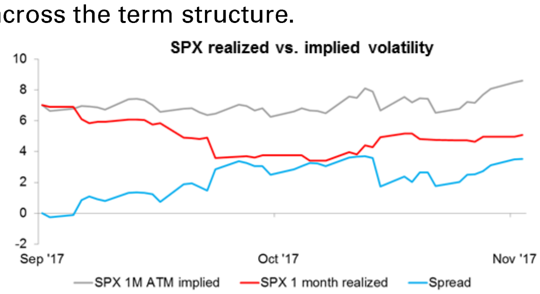
Source: Bloomberg



Source: Bloomberg

Equity Volatility

Although the theme for equity volatility in 2017 has been characterized by historically low implied and realized, option market dynamics have evolved meaningfully within the last week. Given the low vol regime and a Goldilocks economic state of stable but sub-target inflation, low unemployment, and globally synchronized growth, risk markets have 'bought the dip' with intraday declines purchased directly or implicitly by volatility sellers opening new positions. However, the VIX Index is nearly 13% as of writing today, and on the whole, we have finally seen implieds firm up. The coincidence of ongoing low realized volatility is at odds with the relatively higher stress observed in option markets. Recent stress in high yield markets, global tensions in Asia and the Middle East, and concerns about the likelihood and effectiveness of US tax reform may all be contributing to option market restlessness. Put-call skew is highly elevated in longer dated options, call skew in very short dated options, and put skew across the term structure.



Source: Bloomberg

Source: Bloomberg

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Rates Market

The past month in rates has seen a persistent flattening of the yield curve. The 5s30s Treasury curve went from 92 basis points steep at the end of September to 86 basis points steep at the end of October, and is currently trading at 76 basis points. Rates sold off somewhat in late October, with the 30-year rate reaching 2.98% on the hopes that Republicans could come to an agreement on a large tax reform plan. Those hopes have abated, as it looks like any sort of tax reform has been pushed back, and the Senate's proposal for corporate tax rate cuts has been pushed back to 2019. This—accompanied with some mixed inflation data, weaker than expected wage growth in the below consensus October payrolls print, higher than expected PPI, and CPI coming in as expected—has helped fuel a rally in rates this month, with the 5-year rate currently trading at 2.05%, and the 30-year rate at 2.81%. On November 2, Jerome Powell was officially nominated to replace Janet Yellen as the next Fed Chairman. Many analysts view Powell as likely to continue down the path set by Yellen and the current Fed, but will be more lax on financial regulations. The fed fund futures are currently pricing in a 97% of a hike at the Fed's final meeting on December 13.

Index	11/14/2017	One month ago	Three months ago	One year ago
Fed Funds Rate	1.25	1.25	1.25	0.50
2y	1.69	1.49	1.32	1.00
5y	2.06	1.90	1.77	1.68
10y	2.37	2.27	2.22	2.26
30y	2.83	2.81	2.81	3.01

Source: Bloomberg

Source: Bloomberg

Rates Volatility

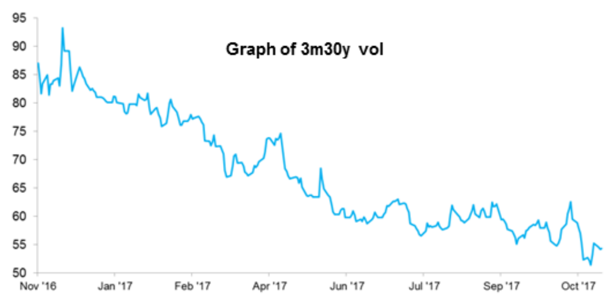
After hitting all-time lows in mid-October, short dated interest rate vol saw a decent move higher with the late October sell-off. 3m30y implied vol went from 55abpv to 63abpv. Some of this gain in vol was from speculators betting on the outside chance that Stanford economist John Taylor would get the Fed chair nomination. Once Powell received the nomination, rates rallied in a risk off move in November, and program gamma sellers came into the market at month end, short dated gamma once again hit all-time lows, with 3m30y hitting 51apbv on November 8. Since then, vols have rebounded somewhat, with the 3m30y currently trading around 54.5abpv. Long dated vol has been following a similar pattern, as the Deutsche Bank Vega Index also hit all-time lows of 68.8 last week.

Current volatility level 1-year percentile

Trailing 1y percentile
0-10%
10-20%
20-30%
30-70%
70-80%
80-90%
90-100%

11/14/2017	2y	5y	7y	10y	30y
1m	14.7%	7.5%	8.3%	5.1%	7.5%
3m	7.5%	1.5%	2.3%	2.3%	2.7%
6m	16.7%	1.1%	1.1%	1.9%	3.5%
1y	3.5%	1.1%	1.1%	1.1%	2.3%
3y	1.1%	0.3%	0.3%	0.3%	0.3%
5y	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Bloomberg



Source: Barclays Live

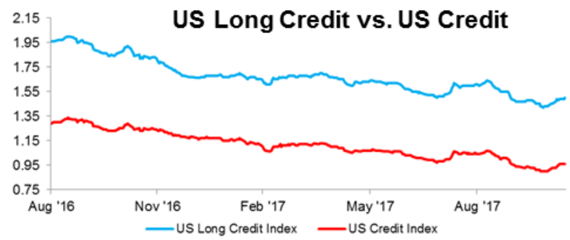
Credit Market

The credit market in November is eerily similar to the beginning of August, where credit spreads widened 8 basis points in nine days on the combination of a supply shock and geopolitical risks. In addition to the abundance of unexpected supply, lower UST yields, tax reform risks, strong Democratic showing in the recent elections, and single company issues, all played a part in the softness. On the other hand, with over 90% of the S&P 500 having reported third quarter earnings, fundamentals were, on average, very steady during the quarter on the back of consistent EBITDA growth and moderate increases in outstanding debt levels. At the sector level, it appears there are more deviating trends, with a modest weakening in TMT, energy and healthcare improving, and retail stabilizing in the third quarter. All eyes are on tax reform heading into year end.

Index (OAS)	OAS at 11/14/17	One month	Three months	One year
US Long Credit	1.85	1.4%	-6.3%	-18.9%
US Long Gov Credit	1.12	0.0%	-6.3%	-20.5%
US Long Credit A+	1.41	1.8%	-7.4%	-19.9%
US Credit	1.25	2.1%	-8.6%	-23.2%
EM	3.33	3.7%	-4.9%	-24.3%
HY	4.98	5.7%	-3.4%	-26.1%

As of November 14, 2017

Source: Bloomberg

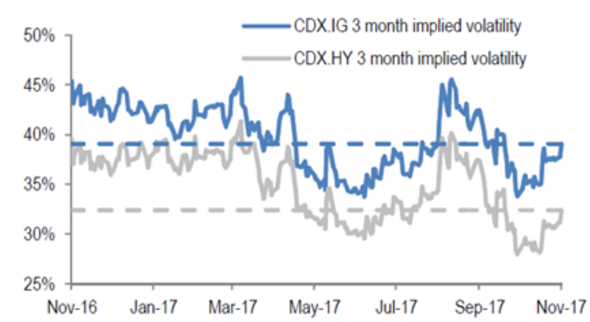


Source: Bloomberg

Credit Volatility

CDX indices have traded in a narrow range recently and right around their multi-year tights. While CDX.IG is unchanged over the month, implied volatility has increased significantly from its multi-year lows reached on October 6. Over the month, CDX.IG 3-month implied volatility is up 5% to 39% for IG, which has not been this high since late September.

Implied volatility has increased sharply over the past month



Source: JP Morgan

Scenario Based Asset Allocation

SCENARIO SUMMARIES

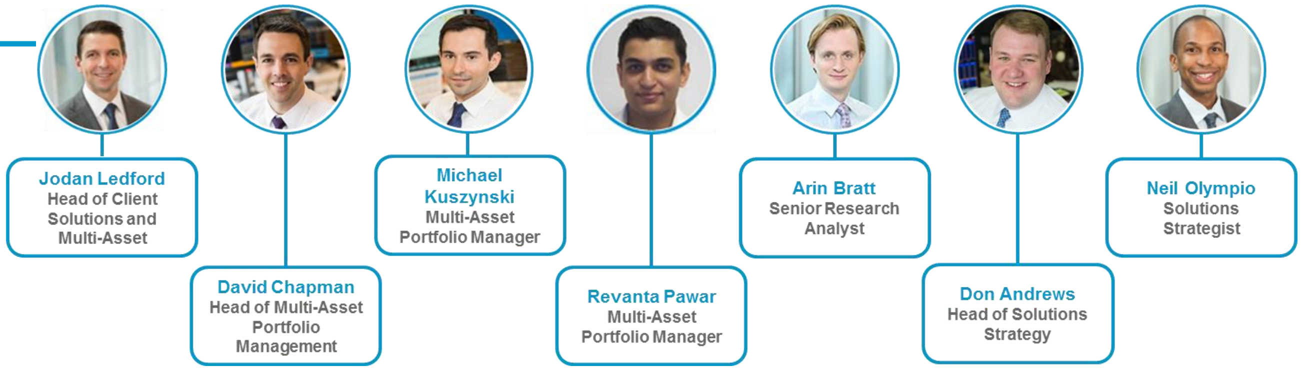
Name	Description	Risk Assets	Inflation	Rates	USD	Probability
Global Slowdown	• Dominated by fears of imminent recession, GDP growth trackers start to fall • US only manages 0-1 rate hikes in 12 months, UK cuts rates back to 0.25% • Commodities drop, political uncertainty contributes to slowdown • US corporates under pressure, EM falters	▼	▼	▼	▼	10%
Longer Liquidity	• Inflation prints continue to disappoint • Despite falling unemployment and stable (if unimpressive) growth, the Fed raises rates slower than expectations • ECB QE does not end after currently announced period	▲	—	▼	▼ / —	20%
Roadmap Central Scenario	• Cyclical global recovery, but structural problems mean rates unlikely to fully normalize • US overheating in 2019 prompted by tax cuts • EM prospects brightening in absence of trade war • ECB tapering progresses as currently announced	▲	▲	▲	▲	30%
Global Growth	• Stronger growth environment driven by EM and EU, ahead of US • Still some pick up in US inflation leading to some rate hikes • Other economic data does not point to any overheating	▲	▲	▲	▼ / —	15%
Rates Rebound Risk Off	• Central banks need to counter looser monetary conditions by hiking more, which slows growth expectations • Global government bond yields rise fuelled by rising rate and future expectations • Equity markets sell off on the back of higher yields (similar market reaction expected for protectionism)	▼	▲ / —	▲	—	15%
Fed Found Out	• Inflation stays below trend, but the Fed presses on with planned rate hikes • Longer dated rates don't rise as investors bet on a Fed error • No significant slowdown of growth • New concern on the ineffectiveness of monetary policy	▼	—	—	▲	10%

MAIN TAIL RISKS

- China Hard Landing / Currency Devaluation
- Eurozone Malaise
- Escape Velocity

Source: LGIMA

Contributors



Contact the [LGIMA Multi-Asset team]

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