

LGIMA's Multi-asset Market Update

November 2019



Equity market

Markets are on track for another exceptional year with global equities up another 4% since our October report and 22% year-to-date. Clients remain focused on protecting those gains through the calendar year and, for many, fiscal year-end. We frequently noted the dourness of those early stage client conversations in reports from earlier this year. However, in our meetings, and our writing, we have tried to remain patiently focused on identifying the appropriate level of risk, and helping plans implement that risk in ways that may better shape outcomes rather than attempting to make heroic short-term market calls.

Our current short equities tactical view does not reflect a belief that a large, sharp equity drawdown is imminent. It reflects declining conviction in fundamental support for continued gains, a view that we are late cycle and the realization that many other positions—both strategic and tactical—are demonstrating a higher equity beta than historical data would suggest. That equity beta in our portfolios is also most closely linked to positive developments on trade and, given the notoriously capricious political risks, we believe it is prudent to reduce overall risk exposure for the time being.

We are also encouraged by the shifting tone of our equity hedging and structuring clients. The experience of 4Q18 invigorated their interest in hedging; however, ongoing conversations are leading to more strategic, thoughtful approaches by many of them. As we near the maturity of equity protection structures put on over the last few months to protect gains through year-end, we see clients becoming more deliberate about rolling those forward to balance asset protection with upside potential to help them meet their objectives in 2020 and possibly beyond. We have also developed important new tools to help clients evaluate risk exposures in both asset-only and liability-relative frameworks that we think are critical to better decision making, and we look forward to introducing those in more detail early next year.

In the meantime, with equity protection, and an even more robust framework of risk management already in place, we can more confidently turn our attention to the critical duties of brining and smoking turkey legs, baking pies, and enjoying that bounty with loved ones. We wish our readers a happy and safe Thanksgiving!

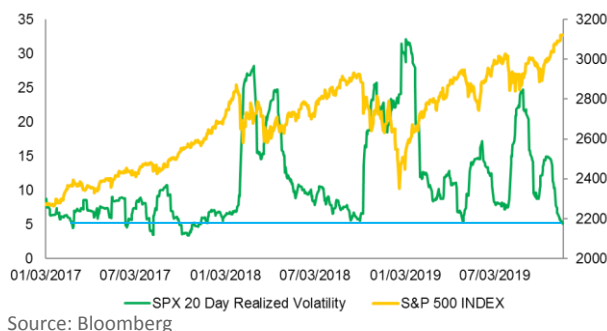
Equity volatility

Observable short-term volatility of US equities recently reached multi-year lows. Realized volatility over the last 20 trading days on the S&P 500 has collapsed to 5% annualized, which implies an average daily movement of about $\pm 0.3\%$. That compares to an average of 14.5% annualized or $\pm 0.9\%$ per day over the past year.

As is typical of rising underlying equity markets that exhibit low volatility, the option market exhibits low implied volatility in near dated and near-the-money tenors, but much more elevated implied volatility in the tails.

December 2019 at-the-money call implied volatility is about 10%, while the December 2020 version is a more normal 16%.

Dealer commentary earlier this month was dominated by highlights of call buying and trade ideas for a year-end catch up. Recently, however, that activity gave way to longer dated put purchases, and this activity has supported steep skew (i.e., the higher implied volatility in the downside tail). For example, one year 90% / 110% Put / Call skew has steepened to nearly eight volatility points this year, similar to conditions in late 2017 and Q3 2018.



Rates market

The bearish momentum from mid-October continued through the first two weeks of November as long-end US Treasury rates moved above 2.40 for the first time since early August. The 30-year Treasury rate reached 2.23 on October 15 on the back of positive updates from both sides of the US-China trade war. From there, rates traded sideways until October 28, when it was announced that the UK had been granted another Brexit extension, moving the deadline back to January 31, 2020, and the 30-year rate sold off to 2.33. Going into the FOMC meeting on October 31, rates had rallied overnight from buying in Japan. The Fed delivered another hawkish cut, lowering the target rate by 25 basis points and changing the phrasing in their statement, moving from their forward plan of “act as appropriate,” to a more laissez-faire, “assessing the appropriate path.” Some interpreted this as the Fed hoping the accommodation up to this point would be enough to keep the economy growing at a modest pace. But the day after the Fed meeting, more disappointing data came in as personal spending and PCE came in below consensus and there was a sharp decline in Chicago PMI. By the end of the week, the long-end rate had dropped from 2.33 down to 2.19.

US Rate Environment

Index	11/19/2019	One-month ago	Three-months ago	One-year ago
Fed Funds Rate	1.75	2.00	2.25	2.25
2y	1.60	1.57	1.55	2.80
5y	1.62	1.57	1.48	2.88
10y	1.78	1.75	1.61	3.06
30y	2.25	2.25	2.09	3.32

Source: Bloomberg

30yr Treasury Rate



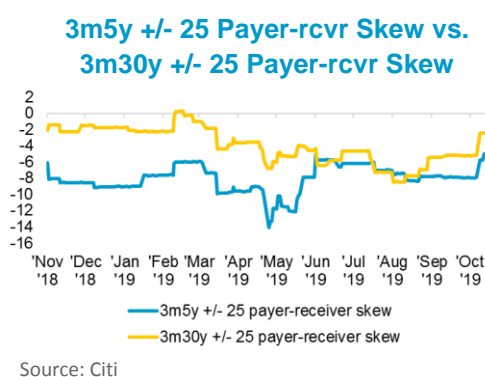
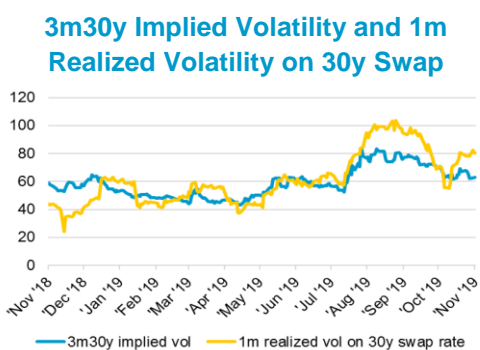
The post-meeting rally was short-lived, however, as rates shot higher the following week. Once again, the ongoing development of the US-China trade negotiations proved to be the catalyst of the notable market movements. A global rates selloff began during London trading hours on November 4, as Chinese officials announced a desire for a “mutually beneficial” outcome of the phase one talks. Later in the day, in an interview with Bloomberg, Commerce Secretary Ross said the proposed European auto tariffs (which had already been pushed back by six months) may not be needed. The long-end rate ended the day at 2.26. After the close, the Financial Times published an article citing sources saying the US was considering rolling back the tariffs implemented on September 1 in order to continue to move trade talks forward.

Rates received an additional bump higher as ISM non-manufacturing surprised to the upside and the 30-year rate reached 2.33. Yields took a one day pause on news there may be a delay in a phase one agreement signing and from the US elections. The results proved to be a bit of a reality check for the GOP ahead of next year’s Presidential

election as Democrats picked up some key wins, most notably taking the Governorship and majority control of the State House and Senate in Kentucky for the first time in 20 years. Separate speeches from the Fed’s Evans and Williams tempered any rally from these events as they both emphasized the Fed’s goal of a symmetric inflation target. Evans went as far as saying he would be comfortable with inflation “running as high as 2.5%.” On November 7, the China’s Ministry of Commerce announced that the US agreed to lift tariffs once a phase one agreement was reached. The next day, the president denied that a tariff rollback agreement was in place, but the markets continued to sell off, with the 30-year Treasury rate reaching 2.42, its first time closing above 2.40 since early August. In the subsequent week, the long-end rallied back to 2.25, despite PPI and housing starts surprising to the upside. Rhetoric from both the US and China have indicated that phase one progress has stalled. Meanwhile, recent Fed speeches indicate they think they are close to reaching their goals and it would take some pretty substantial data shifts in order for them to cut or hike. The market seems to be pricing in a Fed “on hold” for now, but does have a greater than 50% chance of a further cut by June of 2020.

Rates volatility

Swaption volatility is down significantly on short-dated options, particularly on the left-hand side of the volatility surface (see table). Short-dated options on 2-year tails are down 3-24abpv while 30-year tail volatility is down 1-12abpv. On the shorter tails on the left-hand side, the market believes the Fed is on hold for the foreseeable future (or at least the next several months), anchoring the short-end of the curve and limiting how much it can move. Volatility on the right-hand side had been trading in lock-step with delivered volatility, but that trend has recently broken down. As 1m realized volatility rose off its recent local lows, 3m30y implied volatility initially rose, but in the past week program gamma sellers have persisted in the market, pushing the implied volatility to 63abpv. This is the first time 3m30y volatility has dipped below four basis points/day since the onset of the rally in August. Longer-dated volatility has remained roughly unchanged in the past month. The expiry curve remains deeply inverted, leading to active buying of forward volatility structures or calendar spreads. This buying has absorbed the volatility hitting the market from long-dated callable supply, keeping long-dated volatility relatively well bid. In skew, receivers remain more expensive than payers. However, dealers are seeing a strong interest from clients initiating bear steepeners in swaption space, causing payer skew to richen, particularly in longer tails.



Current Implied Volatility Levels and Change Over 1 Month

P/TAIL	1Y	CHANGE	2Y	CHANGE	5Y	CHANGE	10Y	CHANGE	30Y	CHANGE
1M	48.7	-24.7	59.4	-23.6	68.8	-16.4	68	-14.2	64.7	-12.3
3M	49.9	-21	58.5	-17.6	65.6	-11.9	65.7	-9.2	63.4	-7.1
6M	54.7	-15.4	62.3	-10.1	66.4	-7	65.9	-5.9	63.3	-3.9
1Y	62.4	-5.6	65.6	-2.9	66.9	-3.4	66.7	-1.9	63.4	-1
2Y	64.7	-3.4	65.2	-3	66.3	-1.6	65.8	-1.3	61.8	-0.6
3Y	66.4	-0.3	66.5	-0.5	65.8	-0.9	65.1	-1.3	60	-0.5
4Y	66.1	-0.1	66.2	-0.3	65.5	-0.5	64.6	-1	58.9	-0.4
5Y	66.6	0	66	-0.1	65.3	-0.3	64.1	-0.8	58.2	-0.4
7Y	65.1	-0.4	64.5	-0.6	64.6	-0.4	63	-0.5	57	-0.1
10Y	63.7	-0.4	63.2	-0.4	63	-0.3	61.2	-0.3	55.2	0.1

Source: Citi as of 11/19/19.

Credit market

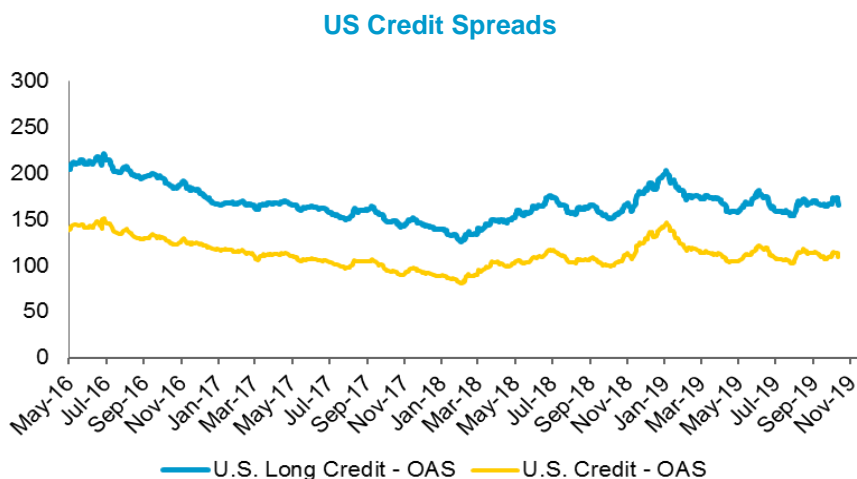
The IG Fixed Income market in October began at local wides on the back of heightening geopolitical instability, declining interest rates and mixed economic sentiment. However, the direction of credit spreads reversed midway throughout the month in tandem with positive trade news and stronger economic data. The shift in sentiment resulted in the US Long Credit index closing six basis points tighter at the end of the October.

In November, an abundance of US IG supply is expected, as \$84 billion of paper has already come to market. Primary issuance is expected to keep pace as we approach the Thanksgiving holiday, with syndicate desks estimating between \$90 and \$110 billion for the month. At this point in time, November's issuance brings the US IG market to \$1,022 billion, ~4% behind last year's pace. Foreign demand continues to support the market, as net-dealer-to-affiliate shows overseas buying to have increased ~30% from the beginning of October. Furthermore, retail inflows continue to be robust with US bond funds and ETFs showing \$30 billion in net flows throughout November. Historically, November tends to be the last heavy supply month of the year, and 2019 has been no different. Corporate bond market technicals remain strong as demand has outpaced supply, as illustrated in the \$30 billion AbbVie deal where the orderbook amassed \$77 billion from IG investors.

With respect to monetary policy, market consensus is that the Fed will remain on hold after the three 25 basis point rate cuts this year, barring the impact of any unexpected economic data. However, as the 2020 Presidential Election is less than a year away, progressive democratic candidates are increasingly gaining in the polls. US Credit market sectors have been reluctant to price the risk of lower corporate growth in this environment, contrary to that of US equity markets.

Regarding the United Kingdom, the Brexit decision has been postponed; however, elections are set for mid-December and conservatives are currently polling favorably. Internationally, political protests and uprisings have been manifesting throughout the world, but the market impact has remained minimal thus far. Shedding a more positive light on geopolitical relations, tensions between the United States and China have subdued, as both countries appear to be working towards a positive outcome with a trade deal.

Going forward, LGIMA is optimistic the direction of spreads will tighten into year-end. Although recession risks have declined and several extreme downside risks have been mitigated, our long-term outlook remains cautious.



Source: Citi

Scenario Based Asset Allocation

SCENARIO SUMMARIES

Name	Description	Risk Assets	Inflation	Rates	USD	Probability (last month)
Global Recession	<ul style="list-style-type: none"> • Dominated by fears of imminent recession, US growth below 1%, China faltering and below 5%, Europe in recession • US & UK rates near 0 • Commodities drop, political uncertainty contributes to recession 	▼	▼	▼	—	25% (25%)
Slugflation	<ul style="list-style-type: none"> • Sluggish global growth persists... • Forcing continued Fed rate cuts (totalling 100-150 basis points) • Inflation remains below target • Simmering trade war tensions 	▼	▼ / —	▼	—	15% (20%)
Economic Stabilisation (Roadmap)	<ul style="list-style-type: none"> • US gradually slows but is above trend • Steady Europe growth and inflation • China stimulus helps stabilize growth given trade war uncertainty • Fed cuts 1-2 and inflation back to target 	▲ / —	▲ / —	—	—	25% (15%)
Global Growth	<ul style="list-style-type: none"> • US growth remains strong, buoyed by 2-3 early cuts, strong consumer consumption and no material trade war escalation • China stimulus leads to an overshoot of 6.5%+ • Europe rebounds with EM growth • Other economic data does not point to material overheating 	▲	▲	▲	▼ / —	10% (10%)
Rates Rebound Risk Off	<ul style="list-style-type: none"> • US inflation picks up rapidly, forcing the Fed to hike within the coming 12 months • Global government bond yields rise fuelled by rising rate and future expectations • Equity markets sell off on the back of higher yields 	▼	▲	▲	▲	10% (10%)
Trumpilocks	<ul style="list-style-type: none"> • 2-3 rate cuts, in part for insurance against trade and slowing global growth • Trade tensions have less impact than expected and stimulus efforts reaccelerate growth 	▲	▼ / —	▲	▼ / —	15% (20%)

Contributors



DISCLOSURES

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