LGIMA's Multi-asset Market Update

August 2020

Equity market

July 1, 2020: The Journal of the American Academy of Pediatrics releases "COVID-19 Transmission and Children: The Child is Not to Blame."[1]

July 18, 2020: A Korean study finds that children under 10 transmit the virus much less than adults, although the risk is not zero, and children ages 10-19 transmit just like adults.[2]

July 30, 2020: Chicago's own Lurie Children's Hospital releases a report that young children (under 5) transmit the virus as much as any other age group.[3]

A sequence of studies on children transmitting and contracting the virus has changed greatly in the months preceding the debates and decisions to reopen schools across the US. Regardless of your views or mine on reopening schools, masks, social distancing or any other aspect of living through this pandemic, evidence can be easily found that will either support or refute that view. Yet that evidence is scant. Studies of the virus have only a few months of data collected, and in order to control for as many independent factors as possible virtually all research is left with inadequate sample sizes.

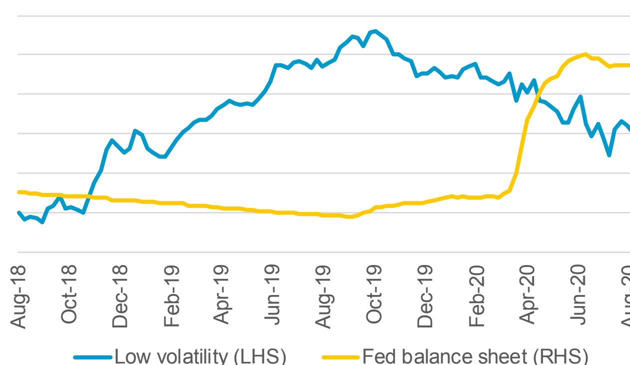
If you were presented with an investment strategy that had a backtest period of six months and was based on a small number of similar securities, would you invest anything in that strategy? The answer, most likely, is a resounding "no." Professional investors cannot prudently put their institution's capital and their own careers on the line with such little support.

Nevertheless, this is exactly the situation nearly everyone in the US finds themselves in at present. Even if you don't have school-aged children, you likely work with parents, have friends who are teachers or caregivers, or at least are not completely socially isolated—it is all of us. And we are being asked to manage risk with limited data and conflicting signals in an environment (at roughly six new cases per 100,000 people per day) that is particularly volatile. It seems impossible to do that with any measure of confidence.

Remarkably, though, in another live risk management exercise, our collective confidence in markets seems to be unflappable. Another asset manager, using data back to 1881, highlighted that annual global GDP growth (projected for full-year 2020) is at the 4th percentile while at the same time the Shiller P/E is at the 95th percentile. It is one of the starkest representations of the disconnect between markets and the economy we've seen. The bridge between these, of course, is fiscal and monetary stimulus. Consider also the chart of the Fed balance sheet versus the relative performance of a low volatility equity factor.[4]

The low volatility factor performed well during what we believed was a late cycle environment in late-2018 and much of 2019, and this positive relative performance correlated with increasing uncertainty about future levels of growth. Then the Fed balance sheet hit a local minimum and low volatility peaked within weeks. The underperformance accelerated with the addition of virus-related stimulus.[4]

Fed balance sheet vs. Low volatility equity factor



Source: Bloomberg, data as of August 18, 2020.

Further, the low volatility factor is associated with a behavioral economics phenomenon known as the "preference for lotteries." The recent sharp rise in retail call option buying is exactly that—a lottery—and it is exemplified by Dave Portnoy, or "Davey Daytrader", and his adage, "stocks only go up." The preference for lotteries exists most strongly where there is perceived to be high volatility and positive skewness. We have witnessed high realized volatility, and my conjecture is that the stimulus has enforced a belief that the lottery odds have shifted in favor of the individual investor.

Yet, we know lotteries have a negative expected value for the individual. This would be the case if, unsurprisingly, vast amounts of wasted option premiums aren't publicized the same way quick gains are celebrated. It also seems likely that the purchase of lottery tickets or call options isn't what is (directly) increasing the size of the jackpot, but rather, as stated above, the stimulus bridging where economies are today to where markets expect we will be in the future. If the numbered balls controlled by the Fed and the Treasury stop spinning before a full economic recovery is reasonably certain, the market damage could be severe, leaving all investors with losses.

Fat-tailed distributions are difficult to understand, let alone manage. We and everyone around us are facing situations that not only have fat tails but are also jointly distributed. Because this is a markets piece, we veil the humanity of health and livelihoods in statistics. Current data continues to suggest that the coming months are likely to be extremely challenging for us as individuals and for our portfolios. We encourage all of you to manage health risks as you would a new investment strategy—with extreme care, open-minded observations, and dedication to all those who depend on the quality of your judgement. Meanwhile, we remain focused on our clients' outcomes and available to help structure exposures around the fat tails of markets as needed.

Equity volatility

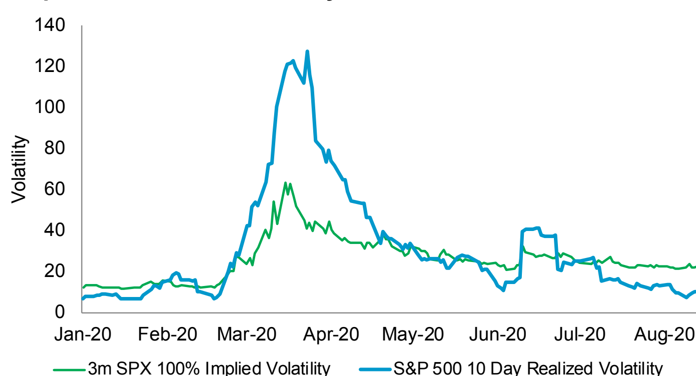
Despite US equities making all-time highs and recent short-term historical volatility more 'normalized,' implied volatility and associated risk parameters remain elevated, though generally outside of the crisis-zone. The crisis-zone could heuristically be described as a regime of implied volatility levels north of 25-30%.[4]

As common during times of extended stress, the term structure of implied volatility had been relatively flat in prior months. The currently more normalized option market pricing appears to more closely reflect event-specific risks corresponding to the US presidential election rather than elevated systemic risks. For example, short-dated at-the-money implied volatility is solidly below 20%, while three months and further is flat at around 22%.[4]

Another expression of normalization over the past several weeks is the return of a short volatility carry premium of significantly lower realized volatility than preceding implied volatility. This means that a window to favorable carry gains has finally been open for a wider range of short volatility programs. But while this favorable environment must be tantalizing to any surviving volatility overwriters, its seeming resistance to compression indicates their hesitation in attempting to harvest it.

While we continue to field client inquiries on the potential prescience of diverse risk premia strategies through the second half of the year, the option market still offers attractive protection for pensions' risk-seeking portfolios simply via put spread collars. Despite recent volatility market moves, a one-year 80/95 put spread can still be favorably acquired versus an approximate 110% call at zero cost.[4]

Implied vs. realized volatility



Source: Bloomberg, data as of August 18, 2020.

Rates market

Compared to one month ago, rates have moved higher and the back-end of the curve has steepened slightly following record refunding announcements. In mid-July, rates traded in a tight range. Before the move upward, the front-end and belly of the Treasury curve closed at record low levels in early August.[4] Positive headlines around vaccine progress as well as CPI and retail sales data surprising to the upside was tempered by jobless claims remaining elevated and US-China tensions continuing to escalate.

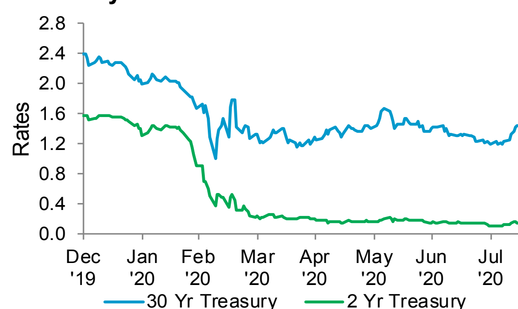
In an interview on Bloomberg TV, the Fed's Dudley stated that the Fed "could extend duration of bond purchases" which led to a two-day bull flattening a week before the July FOMC meeting. Comments from Evans and Brainard pushed research that showed the best course of action was to keep rates low until inflation is solidly above the 2% target to make up for prior underperformance. The day before the meeting, the Fed announced they were extending all their lending facilities until at least the end of the year (compared to the previous date at the end of September) in order to provide more certainty in their efforts to support the economy during the COVID-19 pandemic. This set the tone for the dovish FOMC meeting which went pretty much exactly as expected – benchmark rate left unchanged, no change in asset purchases, and very little change to the accompanying statement. As the press conference Chair Powell emphasized the need for continued fiscal relief for workers displaced by COVID (and to defer focus on debt until a later date) and said the markets "should not expect signals for some time on removing Fed help."[4]

US Rate environment

Index (%)	8/18/2020	1-month ago	3-months ago	1-year ago
Fed Funds Rate	0.25	0.25	0.25	2.25
2-year	0.14	0.15	0.18	1.50
5-year	0.28	0.28	0.37	1.42
10-year	0.67	0.63	0.73	1.53
30-year	1.40	1.33	1.44	1.97

Source: Bloomberg, data as of August 18, 2020.

Treasury rates



Source: Bloomberg, data as of August 18, 2020.

In the following trading days, front-end and belly rates rallied to record closing lows, with the 2-year Treasury rate closing at 0.105% at the end of July and the 10-year Treasury rate reaching 0.505% on August 4. Some of this rally may have been fueled by 2nd quarter GDP printing at -32.9%, which even though was better than the -34.5% consensus, is still a staggering number to see.[4]

Fueled by strong data and Treasury funding announcements, rates bounced off these lows as the 10-year and 30-year rates rebounded over 20 basis points in a week and the curve steepened. ISM surprised to the upside to start the month and the July payroll numbers once again surpassed expectations, as 1.76 million new jobs were created (consensus estimate was 1.48 million) and the unemployment rate dropped to 10.2%, although some of this drop was due to a lower labor force participation rate. At the quarterly refunding announcement, the Treasury announced they would be auctioning off $112 billion in securities.[4]

As the second round of stimulus negotiations stalled in Congress, President Trump signed executive orders to implement some parts of the next package. Even with the selloff concessions leading into last week's auctions, the new 30-year offering tailed 2.4 basis points, which sent rates even higher, pushing to long-end rate to a one month high of 1.45. The selloff seems to have subsided for now and rates are starting to drag lower, with the 30-year Treasury rate now trading at 1.40.[4] With the DNC convening this week and the RNC scheduled for next week, election season is kicking into high gear. Schools are also starting to open, but many in-person schools have been hit with a surge of COVID infections in the first week, most notably the University of North Carolina which moved back to online only classes after less than a week as cases on campus soared.

Rates volatility

Rate volatility continues its grind lower as gamma selling – both systematic and fast money – and lack of delivered volatility persist in the market. The notable exception to this is 3m expiries, which picked up in early August given the Presidential election in November. Even dates a few weeks past the election have remained rich, possibly as protection against disputed or delayed results, similar to what happened in the 2000 Bush vs. Gore election.

Current implied volatility levels and change over one-month

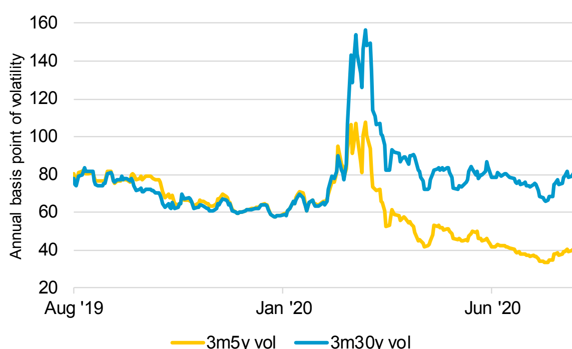
P/TAIL	1Y	CHANGE	2Y	CHANGE	5Y	CHANGE	10Y	CHANGE	30Y	CHANGE
1M	16.5	*-2.6*	19.1	*-1.2*	34.1	*-0.7*	56.1	*-0.3*	74.2	*0.8*
3M	20.1	*1.7*	22.8	*3.2*	40.3	*3.1*	62.6	*3.6*	80.7	*5.8*
6M	20.3	*0.2*	23.4	*-0.5*	40.5	*-1.0*	60.3	*-2.6*	74.3	*-2.1*
1Y	24.0	*-2.9*	28.6	*-3.0*	44.6	*-2.8*	60.4	*-4.1*	70.2	*-5.0*
2Y	34.7	*-3.3*	40.0	*-2.7*	51.2	*-2.9*	61.7	*-3.4*	68.5	*-4.1*
3Y	45.2	*-2.3*	48.1	*-2.5*	55.6	*-2.1*	62.6	*-2.6*	66.5	*-3.2*
4Y	51.7	*-1.8*	53.5	*-1.7*	58.2	*-2.1*	62.8	*-2.4*	64.9	*-1.7*
5Y	55.9	*-1.7*	57.4	*-1.2*	60.1	*-2.1*	62.5	*-2.1*	62.7	*-1.7*
7Y	60.4	*-1.3*	60.9	*-1.2*	62.0	*-1.7*	62.0	*-1.6*	59.7	*-1.5*
10Y	62.3	*-0.8*	62.4	*-1.0*	61.9	*-1.4*	60.8	*-1.6*	56.9	*-1.5*

Source: Citibank, data as of August 18, 2020.

Short-dated options did see some small moves higher on days when rates rallied and the stock market sold off, but any brief bids in short-dated volatility were quickly met by a slew of selling. Any short-dated options on 10y or shorter tails reached all-time lows in implied volatility at the end of July or beginning of August. This is not surprising given the realized volatility of 10y and shorter tails was under 2.0 basis

points per day in July (and only 0.7 basis points per day on 2y swaps). Realized volatility in August has been a bit more robust with the bear steepening curve move, which has pulled volatility off the lows.[5]

Longer-dated options remain depressed as Formosa issuance continued at a steady pace and the callable dvega/drate dynamics saw dealers getting longer long-dated volatility in the selloff. There is still a demand for wing options in both higher and lower rates, so skew remains elevated, particularly in 30-year tails. With the front-end firmly anchored for the foreseeable future, but Treasury refundings coming in at record high levels, bear steepener trades have become popular, richening high strike payers on 30-year tails relative to low strike receivers. Since many see rates as continuing to trade range bound, curve options and distribution trades (receiver or payer spreads/flys) have also been gaining in popularity.[5]



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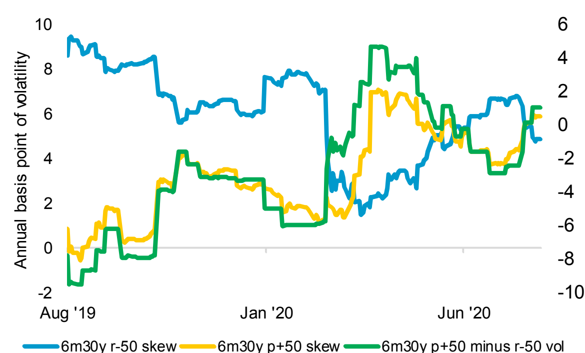

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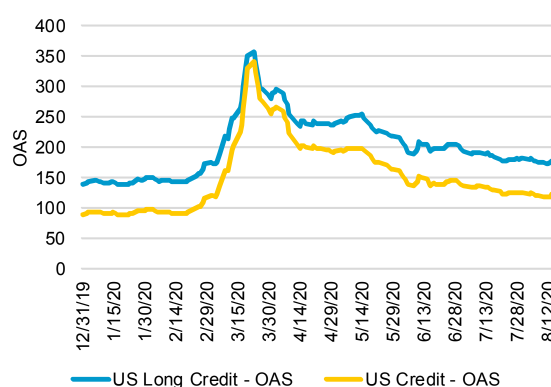
Credit market

As the US virus dynamics showed signs of improving in late-July and into the beginning of August, credit spreads were able to recover from mid-June's pullback. However, surging issuance, stalling stimulus negotiations and typical August illiquidity have halted the credit rally in its tracks. As of August 18th, the US Long Credit index stood at 182 basis points, just 1 basis point tighter on the month and 9 basis points wider from August 12th.[4]

A disproportionate part of the blame for the pullback would seem to be related to the upside surprise in August issuance. Indeed, the narrative around supply being lower throughout the remainder of the year has been called into question during the last two weeks as August has proved to be far busier than expected. After July came in below expectations the thinking was that August would do the same, particularly as it tends to be one of the slowest months of the year. The expectations at the beginning of the month were for only $50-60 billion of IG issuance. But those supply forecasts have proved very wrong; month-to-date there has been $115 billion of IG issuance, and syndicate teams are anticipating another $20-30 billion next week. A big driver of the uptick in supply seems to be related to aggressive trades to refinance debt. A growing number of



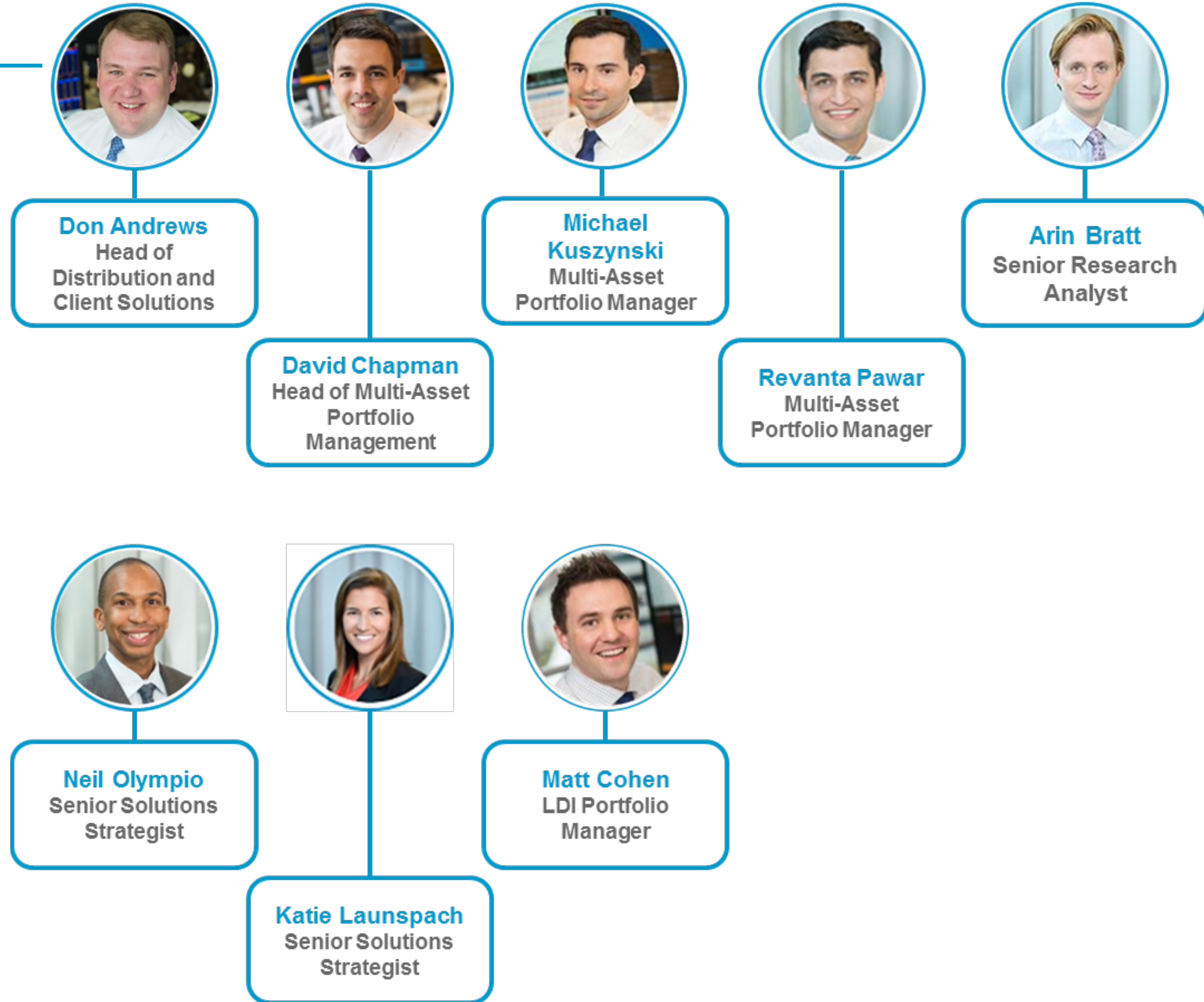
Source: Bloomberg, data as of August 18, 2020.

companies are looking to tender for front-end debt (<5y) and issue out the curve (+7y) with interest rates so low and credit spreads back to year-ago levels for 80% of the market. Although new issuance has acted as a headwind, it has been mitigated by extremely robust inflows. The inflows into US Investment Grade bond funds and ETFs during the month of July amounted to the second highest monthly total on record. The $66 billion in net inflows is second only to the June 2020 figure, which was $8.2 billion higher.[4]

Finally, SMCCF purchases continue to show signs of slowing, as the Fed purchased only $60 million in corporate bonds the week before last. This was the slowest pace since the program began in May and underscores the "backstop" nature of the SMCCF. If spreads resume tightening, it would not be surprising for the Fed to stop purchases all together. Of course, if the mid-August selloff continues, the Fed should ramp up purchases once again.[4]

In the meantime, the economic data continues to beat to the upside: the latest major surprise was July CPI increasing 0.6% month-over-month, while jobless claims fell below 1 million for the first time since March. Retail sales have also retraced their losses through the first half of the year. While the initial recovery has been better than expected, the road ahead is unlikely to remain so smooth, particularly given the delays in extending the emergency unemployment assistance. The question for credit markets is whether any economic choppiness to come will cause a disruption. One could argue that the high-frequency data is already suggesting that economic activity is leveling off and this issue is well flagged by economist crowd who expect the rebound in growth will slow if not stall until a vaccine becomes available. As such, there's a case for staying relatively constructive on the market near-term—or at least neutral—in light of the August pullback in valuations. Credit spreads could recover much of their underperformance in the coming months on the back of positive interim phase 3 vaccine news, a US fiscal deal, and a return to a more normal issuance/liquidity environment in September.[4]

Contributors



DISCLOSURES

1. AAP News & Journals: https://pediatrics.aappublications.org/content/146/2/e2020004879
2. New York Times: https://www.nytimes.com/2020/07/18/health/coronavirus-children-schools.html
3. ScienceDaily: https://www.sciencedaily.com/releases/2020/07/200730141324.htm
4. Bloomberg
5. Citibank

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