Benchmark Performance by Asset Class	Week-to-Date	Month-to-Date	Year-to-Date
U.S. Large Cap Equities	-2.38%	-2.31%	7.88%
U.S. Small Cap Equities	-2.70%	-1.69%	-7.13%
International Developed Equities	-2.07%	-2.04%	-6.56%
Emerging Markets Equities	-1.95%	-0.17%	0.28%
Global Equities	-2.25%	-2.00%	2.66%
U.S. Bonds	0.15%	-0.08%	6.76%
Intermediate Municipal Bonds	-0.03%	-0.04%	3.08%
High Yield Bonds	-0.04%	-0.10%	1.57%
Oil	-6.87%	-5.79%	-41.21%
Gold	-2.05%	-2.24%	23.85%
Key Rates	9/4/2020	12/31/2019	9/4/2019
U.S. 2 Year Treasury Note	0.14	1.58	1.43
U.S. 10 Year Treasury Note	0.72	1.92	1.47

Week in Review:

- Big technology companies like Tesla and Apple led equities lower last week despite positive economic data. The US unemployment rate dropped to 8.4% in August, down from 10.2% in July and well below the 9.8% that was expected. Weekly jobless claims also came in better than expected, supporting the theory of a labor market that is recovering well from the corona virus pandemic. The ISM Manufacturing Index also expanded at the fastest rate in nearly two years.

One of the biggest stories in markets this year has been the surge in individual retail investor trading, and the effect that those investors have had on equity markets in the US. The narrative has been that unsophisticated individual investors, fueled by free trading apps and little to do at home during the pandemic, have pushed large technology stocks to potentially unsustainable record highs. Taken at face value, the data seems to support this idea - in the first six months of 2020, retail investors accounted for the highest proportion of shares traded in the US (19.5%) than at any time in the past decade. That is up from 14.9% last year and double the percentage from 2010 (It should be noted that in many parts of Asia, individual traders account for up to 80% of shares traded). The uptick in retail trading became noticeable last year after most large US brokerages slashed trading fees to zero, drawing parallels to the dot com boom when web-based brokerages made it easier to trade as a bull market was underway. However, a recent study that looked at the correlation between individual stocks' popularity on free trading app Robinhood and their subsequent returns, found no evidence of retail investors driving up prices of large technology stocks. The study did find a so-called "Robinhood Effect" where retail traders pushed up the value of smaller stocks such as Eastman Kodak, electric-truck startup Nikola, and biotech firm Novavax. Others point to day traders – who might not necessarily be trading via Robinhood – making risky bets on high flying tech names also contributing. To be fair, it is difficult to tell who is behind a given trade based on order flow.

So far, the biggest winners of the free-trading boom have been electronic high-frequency trading firms such as Citadel Securities, Virtu Financial Inc., and Susquehanna International Group LLP. Brokerages have supplanted the lost trading income by directing investor trades to these high frequency traders for a fee (Robinhood is currently being investigated by the SEC and FINRA for failing to fully disclose its practice of selling client order flow to third-party firms). The high frequency trading firms then make a profit by collecting the small difference between the purchase and sale price of a stock (some have also been known to front-run trades for profit). These small differences can add up – Virtu, the only public company of the three listed above, more than tripled its net trading income in the second quarter and its stock is up over 60% year-to-date.

Recently there has been some unusual trading activity in derivatives markets with large bets being made by institutional investors. Over the past two weeks, nominal option trading value on US stocks has averaged $335 billion per day, triple that of the rolling average from 2017 to 2019. The sheer size of bets being made indicate that retail traders cannot be responsible. On Friday it was reported that Japanese conglomerate SoftBank has been the "Nasdaq whale" purchasing massive amounts of derivatives on US technology stocks. The company, which is known for making risky bets on privately held startup companies through its $100 billion Vision Fund, has been purchasing enormous amounts of call options - derivatives that give the owner the right to purchase 100 shares of stock per option contract at a pre-agreed price - on individual tech names. This has contributed to the largest trading volume in options contracts linked to individual stocks in the past 10 years and intensified wild "melt-ups" in names such as Tesla – which gained 26% in the week up to September 1. Of course, institutional investors like SoftBank cannot be the only ones making these trades. Options contracts spiked in March, April, and May as smaller investors opened free trading accounts, indicating that they do have some sway in the market as well.

So, it seems this summer's bull run has been fueled by high stakes options bets made by both individual and institutional investors. Counter-parties to these option positions, usually large banks, are exposed to downside moves in the underlying stocks. Therefore, they must fully hedge their position by purchasing shares of the underlying companies. Since one option contract gives the owner the right to purchase 100 shares of the underlying stock, the counter-parties must purchase numerous shares – the exact number is determined by a "delta hedge" calculation – for each contract purchased. Consequently, more call option purchasing begets more stock purchasing, and so on. All of this activity exacerbates volatility and leaves the market vulnerable to sharp pullbacks, such as that experienced on Thursday. It remains to be seen whether the pullback will shake out some weak hands, or if the massive amounts of cash on the sideline will "buy the dip."

Economic Calendar:

- Weekly Jobless Claims - Thursday, September 10th
- Consumer Price Index - Friday, September 11th

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Indices Used: U.S. Large Cap equities: Russell 1000 Index, U.S. Small Cap Equities: Russell 2000 Index, International Developed Equities: MSCI EAFE Index, Emerging Market Equities: MSCI Emerging Markets Index, U.S. Bonds: Barclays Aggregate Bond Index, U.S. 10 Year Treasury Note: Bloomberg 10 Yr. Treasury Note, Municipal Bonds: Barclays Intermediate Municipal Bond Total Return Index, High Yield Bonds: Barclays U.S. High Yield Total Return Index, Oil: Bloomberg WTI Crude Sub-Index Total Return Index, Gold: Bloomberg Gold Sub-Index Total Return Index