When the Market Moves the Market

DRAWDOWN EDITION

JEFFERIES EQUITIES WHITE PAPER | 2020

Jefferies

When the Market Moves the Market: Drawdown Edition

"Everything you know could already be wrong…"

Jimmy Iovine, Founder of Beats Electronics and Interscope Records

Few time periods have more proven Jimmy Iovine right than the first half of 2020.

It's been more than a decade since the global economy has grappled with something of this magnitude – but what we are experiencing is, in many ways absolutely unprecedented, leaving history to be an often insufficient guide.

Our most recent history? We witnessed the **fastest transition from a U.S. bull to bear market in history** at 16 days for the S&P and 19 days for the Dow…before **turning *back* into a bull market on April 8th.**[1]

As of this writing **more than 40 million Americans are unemployed** (the highest unemployment rate since the 1930s), and the Bank of England, anticipating a 30% drop in output, was warning the **UK was set to enter its worst recession *in three centuries.*[2]**

At the same time, many of our basic assumptions about market structure and the requirements around a functioning global execution market have shifted, and the landscape for capital raising and deal transactions has evolved. We have learned new lessons about agility, productivity and endurance.

When the Market *Moves the Market: Drawdown Edition* is the third installment of this series, reflecting on multiple dimensions of market structure and the capital markets landscape. Halfway through 2020, we explore:

1. The change in size and shape of different market structures amid whipsaw moves in multiple directions
2. How this has impacted transparency, liquidity, and market breadth and depth
3. What implications this has on capital formation and broader capital markets' activity, and
4. What may shape the days and months ahead, as the world and markets try to come to terms with what has happened in the wake of Covid-19 and broader macro factors.

Humans love predictions. But while many are trying to guess what the next few quarters will bring, we go back to basics, and lay out data we think is reliable, relevant and robust. We revisit some headline changes from our prior two volumes of *When the Market Moves the Market* – and further excavate what is happening now. **Previous editions of *When the Market Moves the Market* argued that so many of the dimensions of market structure have changed *so materially* over the last decade, players are playing a nearly different game than in the past. The past few months' shifts have been so considerable as to potentially upend the playing field once again.**

We hope that *When the Market Moves the Market: Drawdown Edition* helps identify challenges, opportunities, and a way forward as we emerge on the other side of this pandemic.

Be well.

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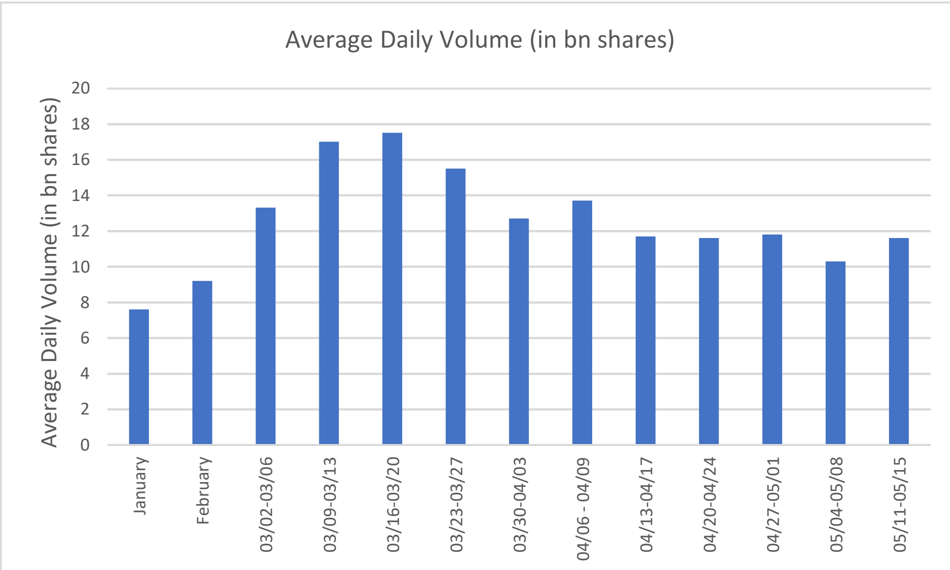
And Just Like That…It Changed *Again*

We charted the below in past *When the Market Moves the Market* pieces and are updating here (where possible) to reflect the markets of the first half of 2020.

	THEN	RECENTLY	TODAY
What	**2007**[3] • Active funds: $2.5 trillion • Passive funds: $700 billion	**2018**[4] • Active funds: $4.5 trillion • Passive funds: $3.9 trillion	**2020**[5] • Active funds: $4.2 trillion • Passive funds: $4.2 trillion (as of March 31, 2020)
When	**2007**[6] • First 30 mins: 11.75% ADV • Last 30 mins: (ex-closing auction): 16% ADV • Closing Auction: 3% ADV	**2018**[7] • First 30 mins: 5.5% ADV • Last 30 mins: (ex-closing auction): 25% ADV • Closing Auction: 8.2% ADV	**2020**[8] • First 30 mins: 12.5%[1] • Last 30 mins (ex-closing auction: 15.2% • Closing Auction: 6.6% (mid-April 2020 avg)
Flows	**2007 – 2017**[9] • $1.9 trillion of inflows to active products • $3 trillion inflows to passive products • $1.3 trillion of inflows to hedge funds		**1Q2020**[10] • $102 billion of **outflows** to actives • $50 billion of **inflows** to passives • $33 billion of **outflows** to hedge funds
Company Landscape (U.S.)	**2007**[11] $19.992 trillion 5,109 companies	**2018**[12] $30.436 trillion 4,336 companies	**2020**[13] $33.818 trillion 4,323 (April 2020 est)
How Many (ADV)	**2009**[14] 9.8 billion shares	**2018**[15] 7.3 billion shares	**Pandemic 2/24-4/30**[16] 13.95 billion shares (on avg) 19.31 bn shares on peak day 2/28

[1] March 23 – end of May



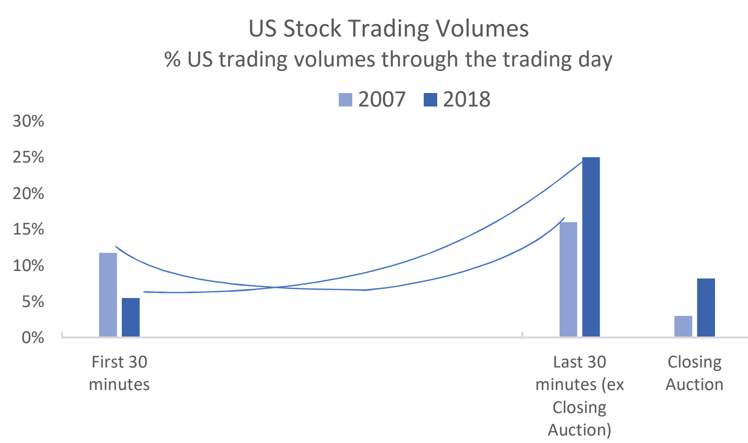
One of the biggest stories and questions of this year – particularly as we transitioned to a remote world virtually overnight – is what would happen to trading volumes.

Would it be materially harder to execute, in ways that would affect volumes? How do we think about the fact that many trading floors and floors on the exchanges nearly evaporated overnight, challenging the notion that "we need physical proximity" to conduct business.

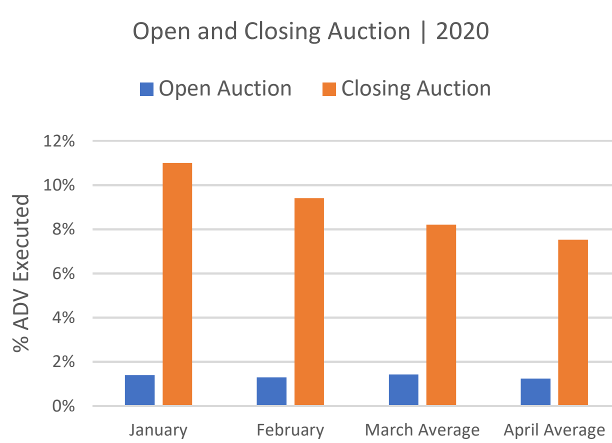
Source: Jefferies, Reuters

But as we moved to a majority-remote/highly decentralized world, with the floor of exchanges in the U.S. closed, and traders across the industry working feverishly in a new landscape of dogs, kids and Bloombergs – **volumes more than doubled**, and the industry largely digested these moves. **While the transition wasn't flawless, few of us would have imagined the velocity of change that occurred simultaneously with growth in traded volumes**.

Where did we see other shifts? In the closing auction. You'll remember in an earlier *When the* Market *Moves the Market* publication, we explored the considerable growth in the importance of the closing auction. But this year, in part due to the closure of the exchange floor, we saw this moderate, and while considerable volumes continued at the beginning and last thirty minutes of the trading day, we also saw declines in the closing auction percentages.



Source: Jefferies, Reuters



Source: Jefferies, Reuters

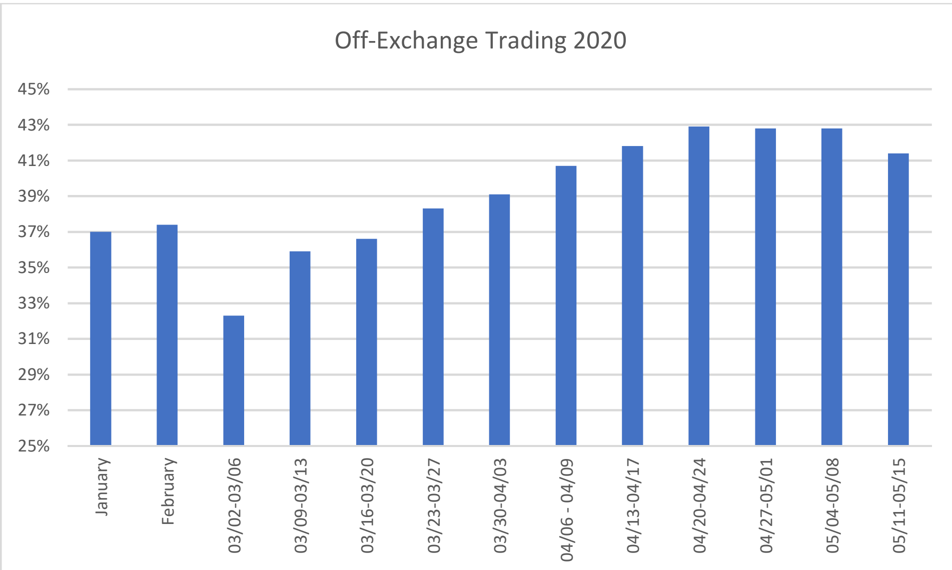
The last 30 minutes of trading and the MOC auction have seen combine decreases by about 3.6% of total traded volume. The largest gainers have been the first 30 minutes and the time period between 12:00 PM EST and 13:30 PM EST.[17]

THE 'WHERE'

Where did all this trading happen?

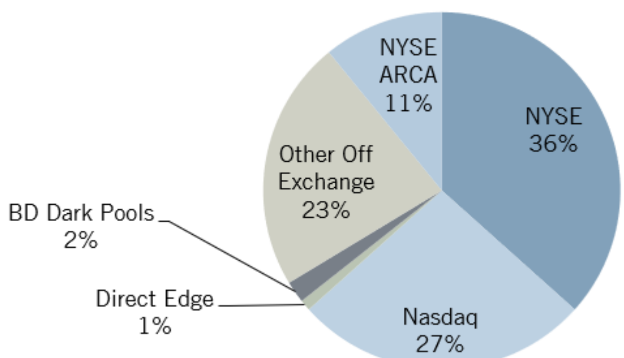
We saw a more than 20% jump in off exchange trading between January and late April peak. It remains to be seen whether this will recede to more long term percentages (about one-third on average), but this was one of the more material moves in the execution landscape we track. Intraday, off-exchange volumes can reach around half of all execution.[18]

Compare this with nearly 15 years ago, when we saw a much more concentrated execution landscape.



Source: Jefferies, Reuters

VS. EXECUTION LANDSCAPE 2006[2]



A WORD ON COSTS

Trading costs for S&P 500 names are still higher by about 50% (relative to Jan-Feb) in spite of the growth in volumes. This is probably on account of the significant reduction in market making interest which is resulting in wider bid-ask spreads and decreased quote stability.[19]

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[2] Several research firms provide estimates of market share breakdown by venue, for example, Rosenblatt Securities. Publicly, this information is available in white papers such as "A Financial System that Creates Economic Opportunities: Capital Markets," October 2017, published by the U.S. Department of the Treasury and available on *Treasury.gov*.

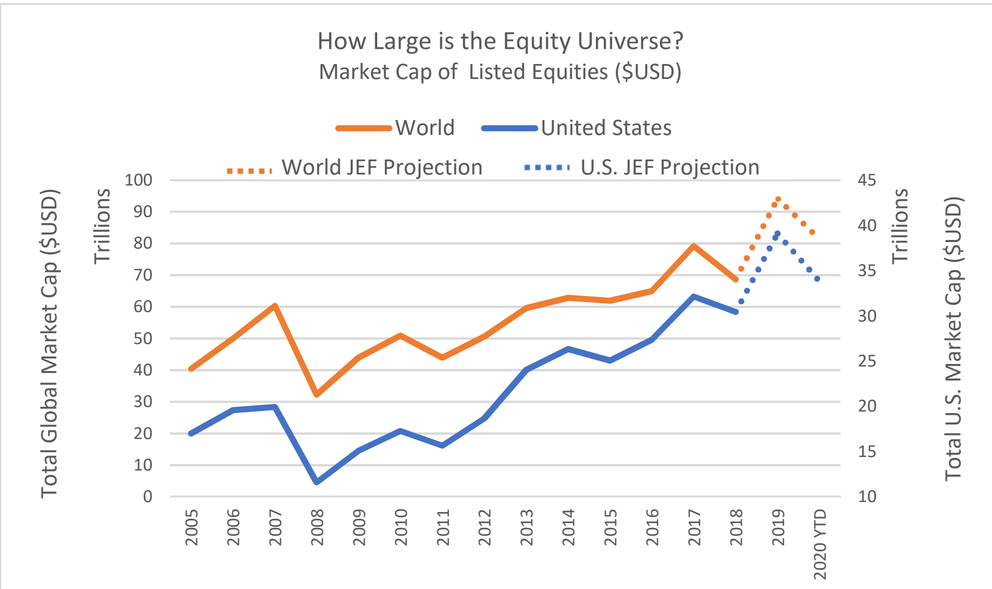
'WHAT' IS THE UNIVERSE WE ARE EXPLORING?

A major trend we explored in prior *When the* Market *Moves the Market* pieces was…what exactly *is* the market universe these days?

The U.S. has witnessed a cratering in the number of publicly traded companies in the last two decades – a trend that doesn't seem poised for a rebound in 2020 with capital markets' activity declining considerably. And while net leverage has crept up from a few years ago, it remains half of what it was in the mid 1990s. Due to the growth of passives, there has also been the knock on effect of higher concentration, with five houses owning, on average and in aggregate, about 20% of many companies in the U.S.

Another way of looking at it: if the equity universe were a neighborhood:

- There would be **fewer houses**
- But these **houses would be bigger, on average** (by market cap)
- And they would be held by **a smaller number of owners**



Source: The World Bank, Jefferies

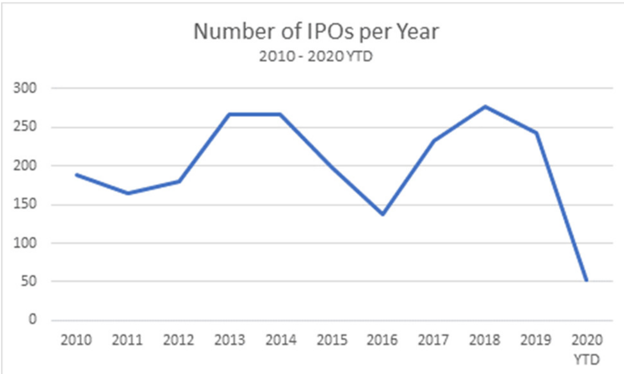
Mean Characteristics (U.S. Companies)

	1975	1995	2015	2020
Number of Listed Firms	4,819	7,002	3,766	4,330
Age (Years)	10.9	12.2	18.4	17.6
Market Cap (Millions USD)	662.8	1,400.1	5,752.9	7,182.8
Net Leverage	17.4%	5.4%	1.3%	2.7%

Source: Kahle and Stulz, Is the US Public Corporation in Trouble?, Journal of Economic Perspectives. FactSet, Jefferies

CAPITAL MARKETS ACTIVITY

The decreased number of publicly traded U.S. companies doesn't look like it's poised for a rebound any time soon – though not everyone agrees this number will remain near twenty year lows.

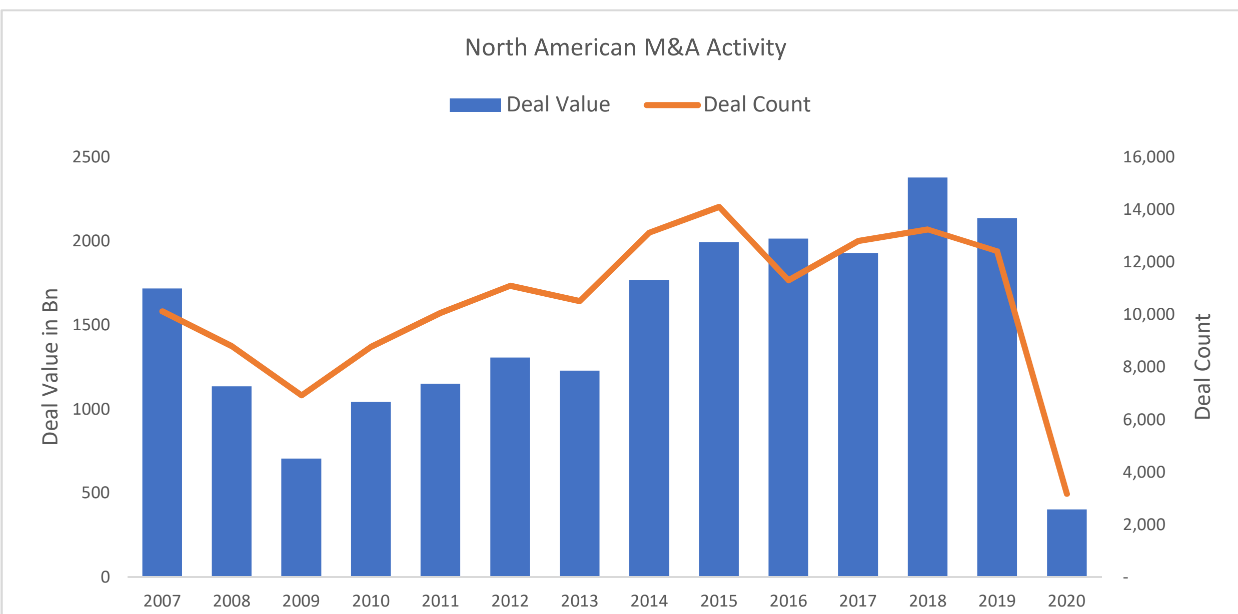


With the IPO market cooling, all eyes are on firms like AirBnB who were slated to come to market in 2020. Despite the considerable drop off in deals in the first half of the year, there *is still* capital market activity, with more than 30 IPOs pricing to date, and some believe that the firms who *do* choose to IPO will comprise some of the strongest IPO classes in the last decade.[20]

Source: FactSet, Jefferies

M&A activity has also been dramatically impacted by the dual challenges of global uncertainty and multiple economies putting themselves in induced comas. While deal value and deal count were obviously depressed in the first half of the year, it is possible that we could see some oxygen breathed into the space in the latter half of the year or early 2021.

What sectors witnessed the biggest declines? Relative to the same three-month period one year ago, the largest M&A activity declines have been in: Technology Services (406 vs. 523), Producer Manufacturing (126 vs. 201), Finance (330 vs. 399), Consumer Services (175 vs. 228), and Health Services (108 vs. 157).[21] Moreover, U.S. private equity activity decreased in April by both number of deals (39 vs. 89 in March) and aggregate transaction value ($9.5 billion vs. March's $17.2 billion).[22]

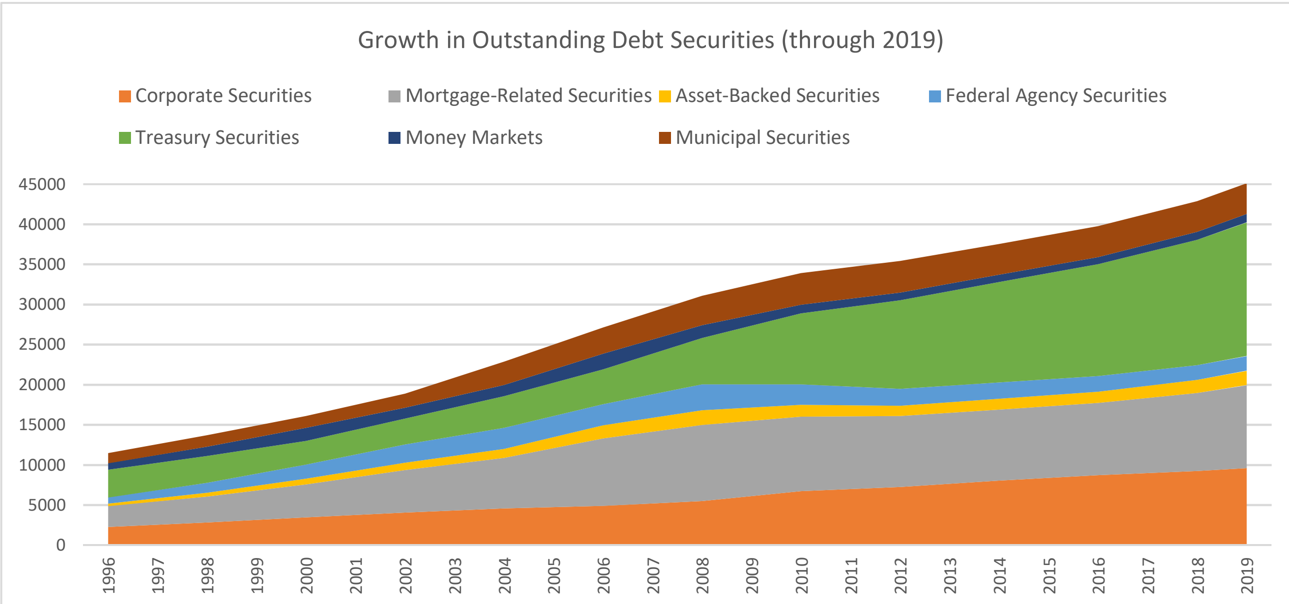


Source: FactSet, thru April 2020

SNAPSHOT OF U.S. FIXED INCOME MARKETS

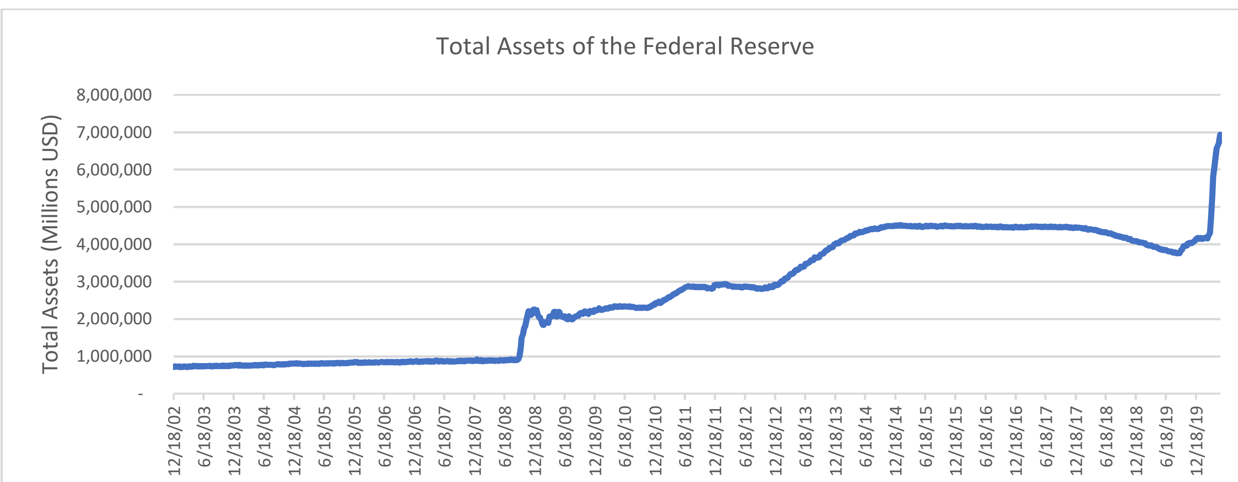
One of the *other* biggest stories of this year (although we're starting to lose count) has been the interventionary actions of the Federal Reserve. Below we reflect on the overall U.S. fixed income markets as of 2019 – and the growth of the Fed's balance sheet in recent months.

OVERALL MARKET | U.S. FIXED INCOME 1996 - 2019[23]

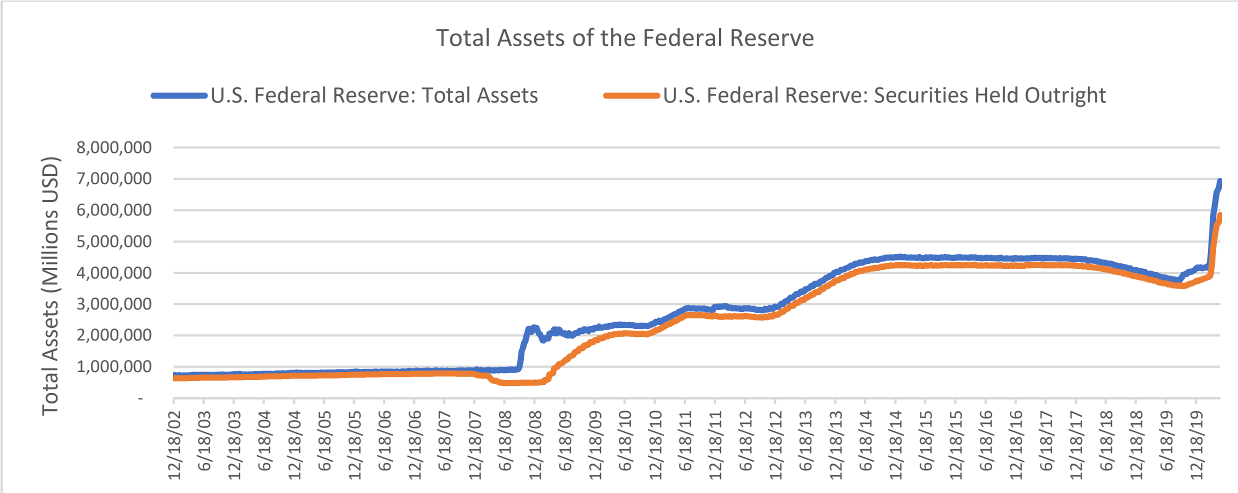


Source: SIFMA

…AND THEN THIS HAPPENED: U.S. FEDERAL RESERVE BALANCE SHEET 2002 – 2020



Source: FRED



Source: FRED

The swift and broad based response of the U.S. Federal Reserve to the uncertainty and temporary freezing of the U.S. economy has created almost as many new questions as answers it may be addressing.

In his May 13th remarks, U.S. Fed Chair Jerome Powell noted: "The scope and speed of this downturn are without modern precedent, significantly worse than any recession since World War II…. This downturn is different from those that came before it. Earlier in the post– World War II period, recessions were sometimes linked to a cycle of high inflation followed by Fed tightening… The Fed takes actions such as these only in extraordinary circumstances, like those we face today. For example, our authority to extend credit directly to private nonfinancial businesses and state and local governments exists only in "unusual and exigent circumstances" and with the consent of the Secretary of the Treasury. When this crisis is behind us, we will put these emergency tools away."[24]

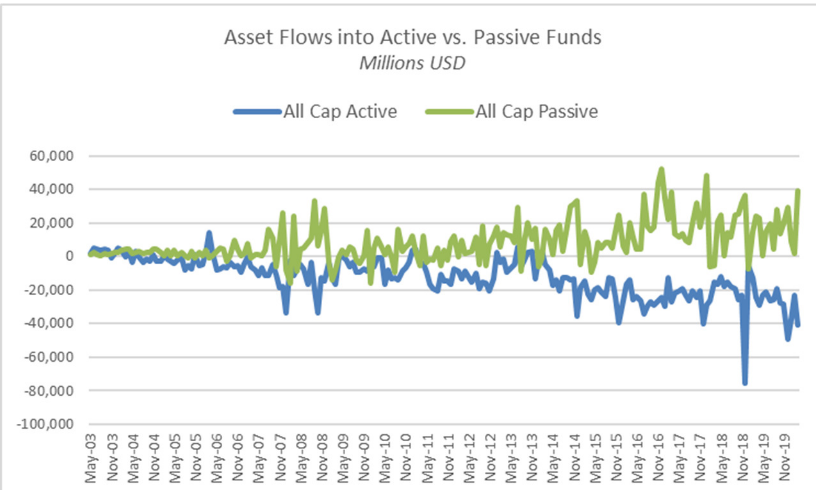
But how far behind us *is* this crisis– and what conditions will determine when the Fed will ''put these emergency tools away?'

The Fed opened its wallet in the thick of the 2008-09 Global Financial Crisis – and were joined by Central Bankers across the globe as they embarked on a period of prolonged easing in many markets. The long term implications and effects of this remain debatable. What is clear is we have witnessed a new, and again unprecedented, action shaping the market, in the form of a 60,000 pound gorilla with the potential to bring all of that heft to bear actively.

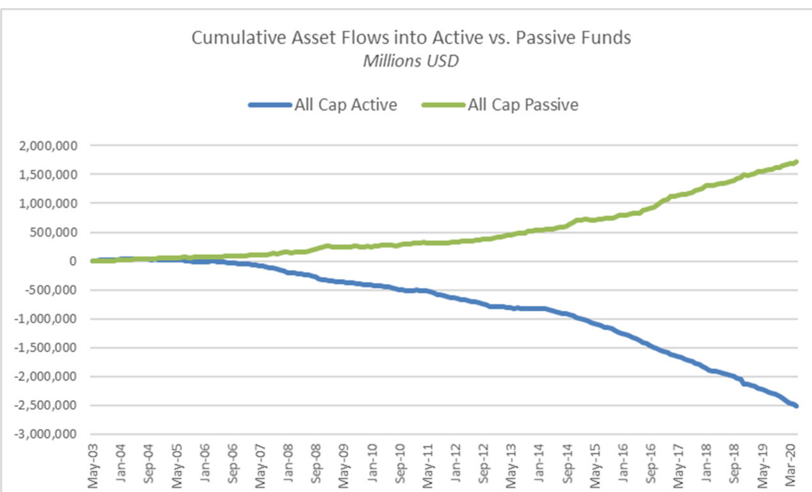
WHAT ABOUT THAT 'OTHER' BIG TREND: ACTIVE & PASSIVE?

The biggest story of the last decade (or at least a top three contender) was the rise of passive management. In fact, in 2019 for the first time, passive assets under management exceeded those that are actively managed.[25] This trend continued into 2020, but unlike other trends – which many expect Covid to accelerate – in a more moderate manner.

After witnessing exponential growth of passives vs. actively managed funds, at least for recent months, things have tempered somewhat. It is far too early in what has become a completely unpredictable year to gauge whether markets will continue to rise *again*, which many attributed to one of the factors driving the growth of passive.



Source: EPFR, Jefferies



Source: EPFR, Jefferies

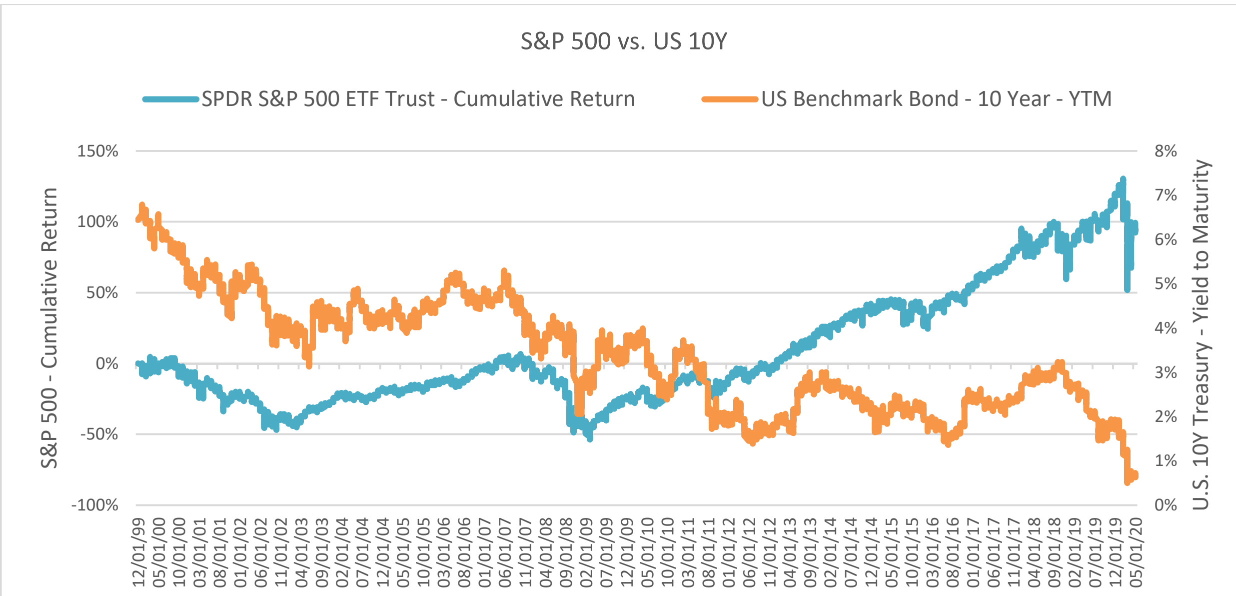
Given the reminder that the first quarter provided, that the longer periods of underperformance, the greater the outperformance of actively managed hedge funds, it will be interesting to see if flows to passive moderate in the coming months.

OVERALL? WE WERE REMINDED THAT SOMETIMES, CORRELATIONS JUST GO TO 1

We also explored the relationship between broader equity markets and 10Y yields. Our most salient takeaway from this exercise is—in times of uncertainty, we can only be certain of one thing: we must question everything we think we know about how the market behaves. Jimmy Iovine would be proud.

What strikes us most is how times of crisis have tended to interrupt the general inverse correlation between equities and fixed income products—instead, they begin to move in lockstep.

The 2000-01 dot com crisis. The Global Financial Crisis. Most notably, this year's sharp drawdown. Each have been unforgiving for both asset classes alike. Though it's too early to say precisely when, why and in what matter each of these asset classes will recover over time.



Source: FactSet, Jefferies

WHAT DOES THIS MEAN AND HOW CAN JEFFERIES HELP

Few would have expected in January of this year that the next few months would witness the closure of the floors of the Nasdaq and New York Stock Exchanges (NYSE). Or that virtually overnight, the vast majority of trading would be conducted in our homes, under the watchful eyes of our kids, pets and other loved ones and roommates.

Things we are keeping an eye on for the second half of the year:

1. **Will bid/ask spreads continue to narrow back to 2019 levels?** Bid/ask spreads averaged 3.5 bps for the S&P 500 in 2019 before widening to double digit highs in March of this year. More recently, they have come back in, with May averages hovering around 5 bps.[26]

2. **Will off exchange trading remain elevated?** Slightly over one-third of trading occurred off exchange, on average, in 2019. In the last few months, this has risen above 40%, where it has sat since the beginning of April.[27]

3. **Will we see a resurgence in active management?** After a decade of blockbuster passive growth, many investors feel that active management is poised for a resurgence – particularly in certain sectors. Hedge funds have reasserted their value proposition, outperforming broader markets by double digits through May 15th, and witnessing muted outflows in the first quarter amid the market turmoil.

4. **Will volumes remain elevated through the summer?** After peaking at over 17 billion shares per day in March, volumes have declined, but remain above 2019 averages.[28]

5. **What does all this mean for ESG?** At the start of 2020, you couldn't have a conversation about the investing year ahead without touching on ESG. Has environmental, social and governance related investing hit "pause" – or is a global pandemic and individual company responses to the new landscape precisely what investors needed to turn a closer eye on these issues?

Jefferies has earned accolades for its client response to these unprecedented and volatile markets – a recent Greenwich Associates survey put Jefferies at the top of navigating market turmoil in 2020.[29] With broad and deep expertise across the Equities, Fixed Income and Capital Markets and Investment Banking franchises, we are well poised to assist clients in responding to these times, and helping to build more agile and resilient organizations. We look forward to connecting with you to learn more about how we can help clients better understand the rapidly changing and complex market environment.

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Endnotes

[1] S&P
[2] U.S. Department of Labor, Bank of England
[3] EPFR, Jefferies
[4] EPFR, Jefferies
[5] EPFR
[6] The Financial Times
[7] The Financial Times
[8] Jefferies, Reuters
[9] EPFR, Jefferies, HFR
[10] EPFR, HFR
[11] The World Bank
[12] The World Bank
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[14] SIFMA
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[16] Reuters, Jefferies
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[21] FactSet, Flashwire, U.S. Monthly. May 2020 https://www.factset.com/hubfs/mergerstat_em/monthly/US-Flashwire-Monthly.pdf
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[23] SIFMA Fixed Income Market Structure Primer
[24] Chair Jerome H. Powell remarks at the Peterson Institute for International Economics, Washington, D.C. (via webcast). May 13, 2020
[25] Morningstar
[26] Reuters, Jefferies
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[29] Greenwich Associates