

Living & Loving Tail Risk

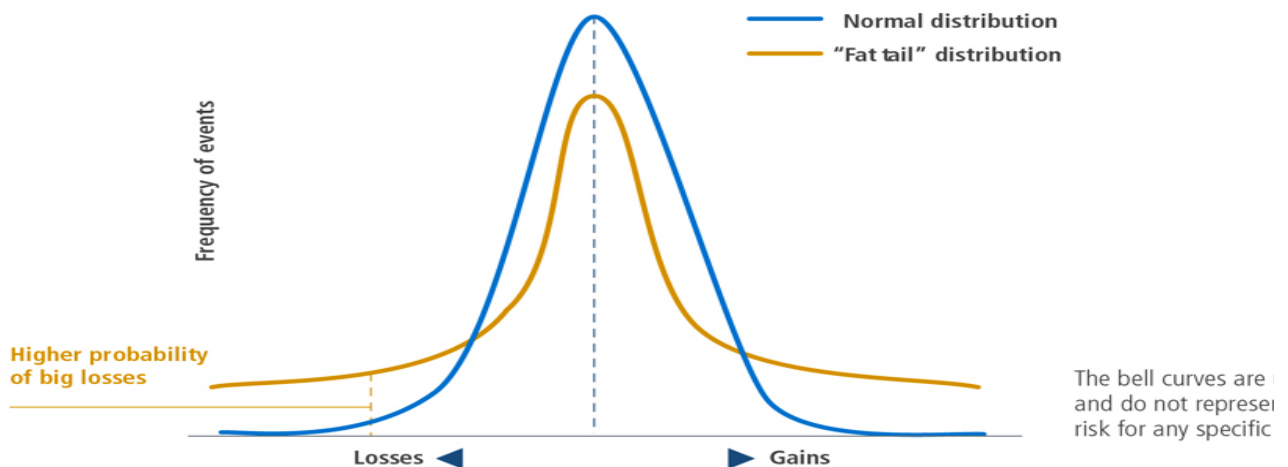
As promised, our special focus this week is on understanding the bell curve and what is meant by 'tail risk', the concepts imbedded in this model, and the standard deviation events on the edges.

To set the stage, we borrowed the image below from PIMCO. While our semantics may not match 100%, we are both 'directionally accurate' as they say. The left and right 'tails' represent events or investment gains and losses that are far larger than average, but also far less frequent or probable. That said, we are living in a moment where these are more prevalent and have a higher probability, hence the term 'fat tail' distribution.

For Whom the Bell Curve Tolls

FIGURE 1: MARKET TAILS MAY BE "FATTER" THAN NORMAL

Tail events are very rare in a normal curve, but market tails are in fact "fatter," or more frequent, than many people realize.



Source: Pimco

Stillwater News

Our general policy is to keep these pages as commercial free as possible, that said, we are a commercial enterprise, and happen to be on a good roll. If we don't promote ourselves now, then when are we going to?

Last week our commentary [made the pages](#) of the weekly financial publication *Barron's* and we look forward to more coverage in the future. The sister publication of the *Wall Street Journal* also ran a great special section titled ['Recession Shelter'](#) that walked through different

ways to ‘Hope for the best, prep for the worst’, a subject that lines up well with our tail risk focus topic.

BARRON'S

Included in the commentary *Barron's* ran, was the mention of a short position we hold in Facebook. On Friday, we received further confirmation that we were on the right track and that the government at the federal and state levels are not sitting by idly when it comes down to potential user data violations and antitrust issues.

This time New York Attorney General Letitia James is out front. In a statement she said, “I am proud to be leading a bipartisan coalition of attorneys general in investigating whether Facebook has stifled competition and put users at risk, we will use every investigative tool at our disposal to determine whether Facebook’s actions may have endangered consumer data, reduced the quality of consumers’ choices, or increased the price of advertising.” Also joining the New York AG is Colorado, Florida, Iowa, Nebraska, North Carolina, Ohio, Tennessee, and the District of Columbia.

The Social Network



Source: The Nation

Building on the success of Stillwater's main body of work, Hedged Equity Income, we are introducing a Ray Dalio inspired portfolio we have yet to name, but inside the Stillwater walls call 'Break the Glass', a reference to getting ready to pull the alarm and set off the sprinkler system. This was the same name Hank Paulson's Treasury Department used for their 'save the financial system' plan in 2008. It was introduced five months before the financial markets froze.



The design is to be in a position to take advantage of the growing number of factors that are lining up on the left side of the tail that could lead to serious market dislocations in the near future. Unique to the strategy is that it is not intended to be an 'evergreen' portfolio that will then advance into the next phase of the market. This strategy will be straight designed to put significant risk off positions in place at the appropriate time. While we wait this rally in the indexes, we will continue to pick off good short positions as they present themselves.

'Break the Glass' will also be differentiated from other pools of capital by not being locked up. The target duration we will want clients to stay in is from now out 12 to 24 months. As they say in our business, 'down is faster'. Please contact Stillwater Capital to get a better understanding of how the strategy will work how you can gain access contact@stillcap.com

The Economy

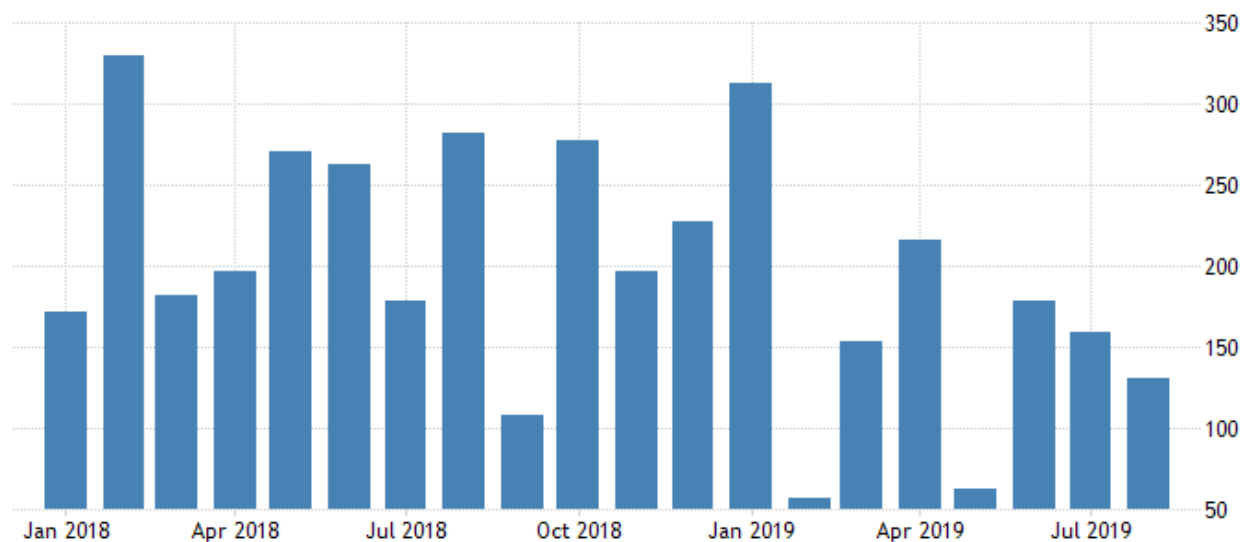
The top-down was once again dominated by the on-again, off-again, on-again trade negotiations between the United States and China. This time it was announced that we were



Source: New York Magazine

The August jobs report came in on the low side with only 130,000 people added to the payrolls. The market shrugged off the report, as it has most every bit of bad news lately, blaming the weakness on the ‘simmering trade war and growing concern over the economy’. That comment becoming the Miranda Rights equivalent of describing why the market is down on any given day. Clearly the clouded backdrop has had an impact this year, as employment gains have been lower and far more volatile than last year.

Employment Growth



SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS

We would go in depth on the ongoing saga of Brexit, Britain's exit from the European Union, but nobody seems to care anymore, at least nobody who cares about the market. The *New York Times* provided a great read-in on the political beating Prime Minister Boris Johnson took this week, and in one short paragraph aptly described what has been hanging over the country since a narrow public vote propelled the issue of bailing out upon Parliament in 2016.

Britain has since unwittingly become a laboratory for how a deeply rooted parliamentary democracy can be shaken to its core by populism, especially when wrapped in the democratic legitimacy of a public referendum. Parliament has become a theater, beamed live around the world, in which democracy's messy, self-interested and self-destructive tendencies are laid bare in real time.

All that said, the goings on inside the House of Commons is truly a spectacle to behold. Notably in the chamber this week was Winston Churchill's grandson, who gave an emotional speech after he was expelled from the Conservative party for voting against the Prime Minister. Boris Johnson's brother, Jo, also stepped down from Parliament, citing the conflict he faced of being 'torn between family loyalty and national interest'.

Watching the theatrics inside the walls of Parliament is great entertainment, one that is worthy of a drinking game based on how many times members chortle under their breath or offer an 'ahum ahum'. Needless to say, players would not be upright for long.

Boris Johnson Addressing Parliament



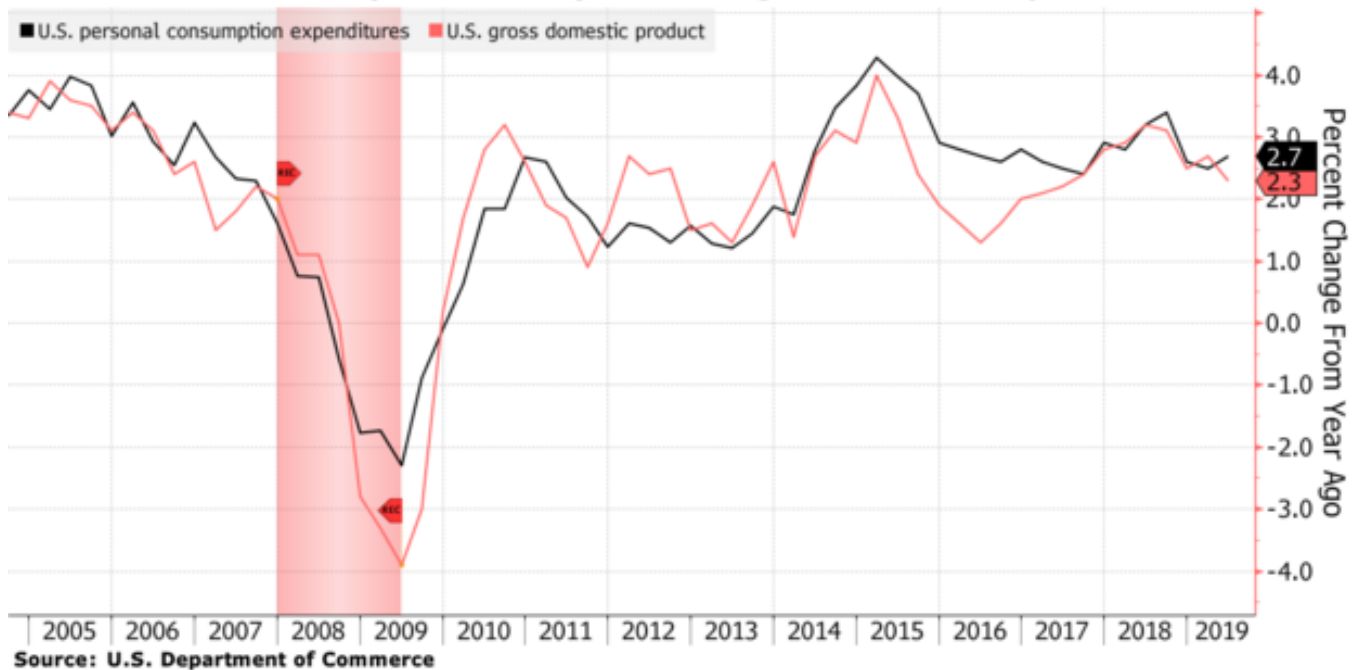
Source: BBC

John Williams, the President of the New York Federal Reserve, told many economists what they already knew, and that is the American consumer is once again carrying the global economy on its back. Which is what it needs if there is any hope of keeping things on the rails.

Keep up the Buying, Baby!

Shoulders of Giants

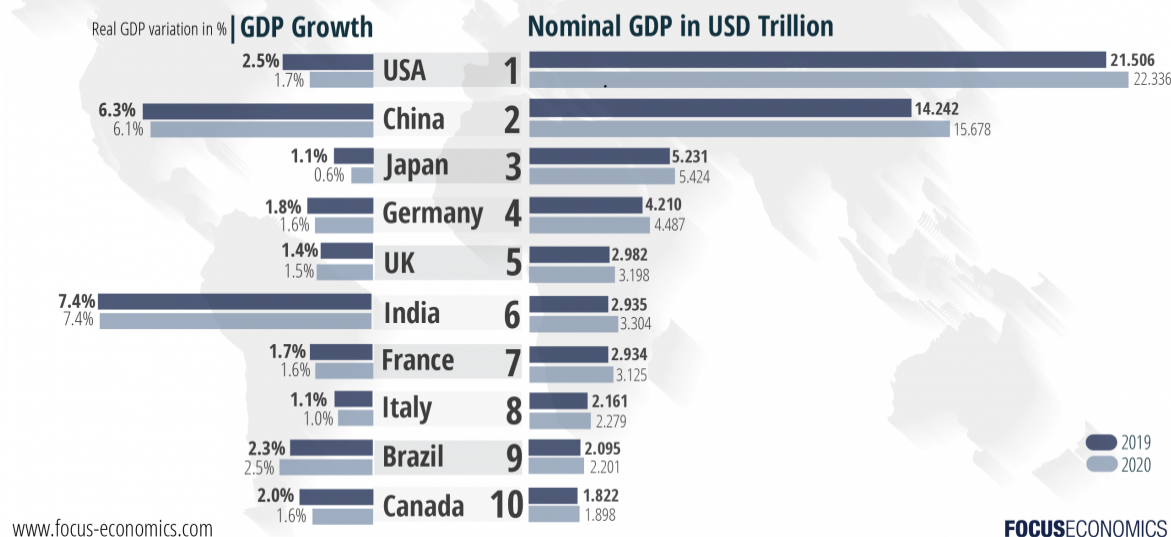
Growth in U.S. consumption has outpaced GDP growth in recent years



Why is the American consumer so important to holding the world together? For starters, our wallets make up 70% of domestic GDP. Taken a step further, as measured against the rest of the world the United States is the dominant engine for global growth. China is next up and is a full one-third our size.

The World's Biggest Pistons of Growth

TOP 10 The World's Biggest Economies for 2019 and 2020



The Fed

Former New York Fed President, Bill Dudley, wrote another op-ed for *Bloomberg* better explaining his position that the Fed should not be an enabler to the President if his bold policies are questionable and wind up failing. In his explanation, titled ‘What I meant when I said, don’t enable Trump’, he defended his position by questioning Trump’s characterization of Chairman Jerome Powell as an “enemy”.

He also made it clear that by no means should the Fed watch the house burn down out of spite, perceived or otherwise, for the man at the top of the totem pole. The White House’s National Economic Director, Larry Kudlow, lashed out at again at Dudley on Friday calling his comments ‘utter nonsense’. In the meantime, Jerome Powell keeps doing what he needs to do, adding comments in Zurich that there is not a recession on the horizon, but they stand ready to cut anyway. So we have that going for us, which is nice.

‘Now Take Your Glasses Off, Jerry’



Source: Politico

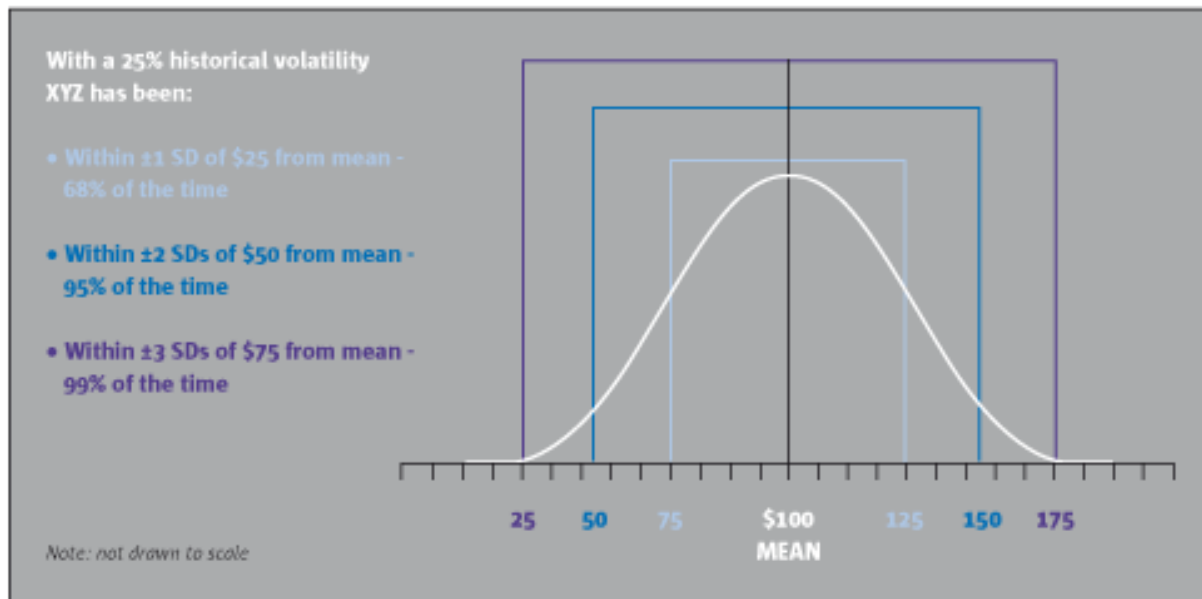
We have on what we think is good authority, the inside story that Trump and Powell get along well, have lunch together, and the perceived animosity seen in public is for show. Given how the President opines on other topics, we have no reason to believe this isn't true.

The Bell Curve and Tail Risk

And so, our discussion of a critical subject in finance begins with a very simple look at the bell curve, and the distribution of probabilities imbedded in it. Don't be scared off by technical aspects like standard deviation. Instead, take a seat as Tail Risk 101 class is now in session.

Fig.1 Historical volatility and standard deviation

Source: OFC



Whether they be in a single stock, ownership in a private company, or a big win in a venture capital fund, above market returns and events reside on the right side of the curve, and extremely successful and life changing amounts of money events live out on the far-right edge as well. On the flip side, the left tail is representative of where things go wrong. At the far edge of this side of the ledger are events like the collapse of Enron and Lehman Brothers bankruptcies and the Global Financial Crisis of 2008. In either case, the perceived risk of them occurring was low. When the sequence of events that led to them transpired, really good and really bad headlines were written.

On the Right Tail, Two Regular Guys



Source: Business Insider

On the Left Tail, End of Days for Wall Street

Visit WSJ.com to See Our New Look and Features

THE WALL STREET JOURNAL.

DOW JONES

TUESDAY, SEPTEMBER 16, 2008 - VOL. CCLII NO. 65

***** \$2.00

DJIA 10917.51 ▼ 504.48 -4.6% NASDAQ 2179.91 ▼ 3.6% NIKKEI Closed(12:214.76) DJ STOXX 50 2746.81 ▼ 4.0% 10-YR TREAS ▲ 2 3/32, yield 3.462% OIL \$95.73 ▼ \$5.47 GOLD \$793.10 ▲ \$22.80 EURO \$1.4310 YEN 104.81

AIG, Lehman Shock Hits World Markets

Focus Moves to Fate of Giant Insurer After U.S. Allows Investment Bank to Fail; Barclays in Talks to Buy Core Lehman Unit

The convulsions in the U.S. financial system sent markets across the globe tumbling, as two of Wall Street's biggest firms looked set to exit the scene and insurance titan American In-

By *Susanne Craig, Jeffrey McCracken, Jon Hilsenrath and Deborah Solomon*

ternational Group Inc. turned to the Federal Reserve and the state of New York for assistance.

The U.S. stock market suffered its worst daily point plunge since the first day of trading after the Sept. 11, 2001, terrorist attacks. Financial markets were rattled by the rushed sale Sunday of Merrill Lynch & Co. and the bankruptcy-court filing of Lehman Brothers Holdings Inc., which scrambled Monday to sell its most prized businesses before too many employees and customers walk out the door. (Please see related article on Page C1.)

All day Monday, top Lehman officials were huddled in Manhattan at their Seventh Avenue

ing. For much of the day, the major U.S. market indexes were down 2%, which, while a good-sized decline, was smaller than many had thought would be the case. But in the final hour of trading, a wave of selling hit, driven by concerns about the fate of AIG. The Dow Jones Industrial Average ended down 504.48 points on Monday, off 4.4%, at its daily low of 10917.51, down 18% on the year. Of the Dow industrials' 30 components, all but one—Coca-Cola Co.—fell, led by a 60.8% plunge in AIG.

In Europe, London's FTSE 100 index dropped 3.9%. Several Asian markets, including Japan and China, were closed Monday due to holiday. By Tuesday, Tokyo shares were down 5.1% in early trading, and Hong Kong's Hang Seng index was down 6.1%.

Monday's action was the latest fallout in a widening financial crisis that began a year ago with the fall of American housing prices and is now reentering the U.S. financial system. Steps unveiled by the Federal Reserve to expand its emergency lend-



AIG Faces Cash Crisis As Stock Dives 61%

By *Matthew Karnitschnig, Liam Pleven and Serena Ng*

American International Group Inc. was facing a severe cash crunch last night as ratings agencies cut the firm's credit ratings, forcing the giant insurer to raise \$14.5 billion to cover its obligations.

With AIG now tottering, a crisis that began with falling home prices and went on to engulf Wall Street has reached one of the world's largest insurance companies, threatening to intensify the financial storm and greatly complicate the government's efforts

To understand how this applies to markets, we dive deeper into the 'butterfly effect' and chaos theory. Distilled down, the butterfly effect says that seemingly small changes at the margins can have a significant impact on future events and outcomes. In the case of Lehman Brothers, the simple advice CEO Dick Fuld was given to de-lever early on was disregarded. The cartoon below says it all, 'everything effects everything'.

everything



...affects everything

Now let's lay this all on the markets and investment returns. To do so, let's keep the idea of not putting all your risk in one bucket in mind. If you've already made your money, or hit it big, you probably did so through concentration. Now that you are less reliant on that giant payoff, spreading wealth over the bell curve not only keeps you in the game, but it can also keep you from blowing up.

The randomness of returns tells you this and shows us, this time vertically, where some of the tails exist over time. Looking back at 2018 and 2017 is almost a perfect example of how a bell curve is structured over a two-year period. It's almost symmetrical in terms of the best performing and worst performing asset classes over that 24-month time period.

See the Pattern?

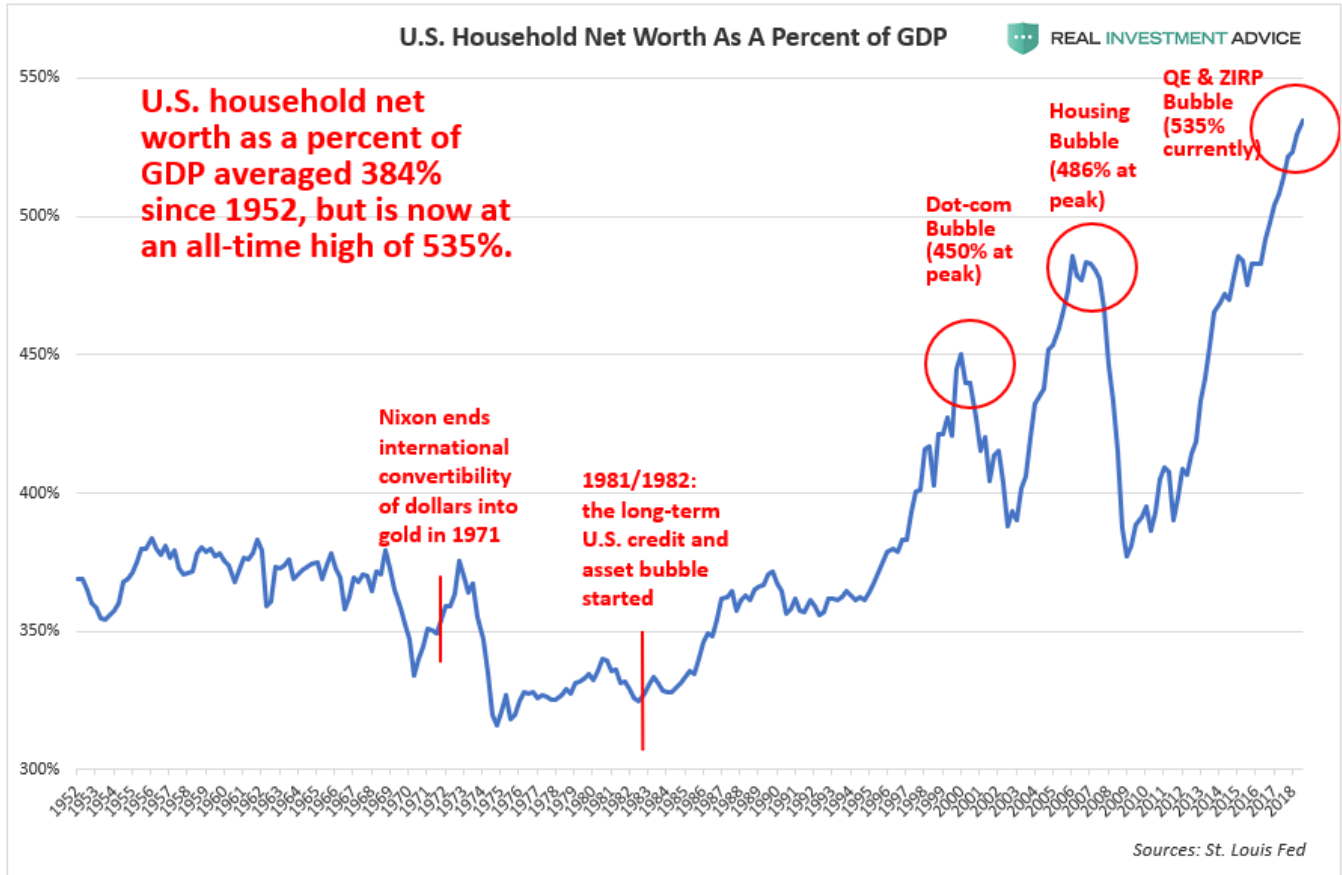
	2010	2011	2012	2013	2014	2015	2016	2017	2018
	REIT 28.0%	REIT 8.3%	REIT 19.7%	Sm Cap 38.8%	REIT 28.0%	REIT 2.8%	Sm Cap 21.3%	EM 37.8%	Cash 2.0%
	Sm Cap 26.9%	HG Bnd 7.8%	EM 18.6%	Lg Cap 32.4%	Lg Cap 13.7%	Lg Cap 1.4%	HY Bnd 17.5%	Int'l 25.6%	HG Bnd 0.0%
	EM 19.2%	HY Bnd 4.4%	Int'l Stk 17.9%	Int'l Stk 23.3%	AA 6.9%	HG Bnd 0.6%	Lg Cap 12.0%	Lg Cap 21.8%	HY Bnd -2.3%
	HY Bnd 15.2%	Lg Cap 2.1%	Sm Cap 16.4%	AA 11.5%	HG Bnd 6.0%	Cash 0.1%	EM 11.6%	Sm Cap 14.7%	REIT -4.0%
	Lg Cap 15.1%	AA 0.3%	Lg Cap 16.0%	HY Bnd 7.4%	Sm Cap 4.9%	Int'l Stk -0.4%	REIT 8.6%	AA 14.6%	Lg Cap -4.4%
	AA 13.5%	Cash 0.1%	HY Bnd 15.6%	REIT 2.9%	HY Bnd 2.5%	AA -1.3%	AA 7.2%	REIT 8.7%	AA -5.6%
	Int'l Stk 8.2%	Sm Cap -4.2%	AA 12.2%	Cash 0.1%	Cash 0.0%	Sm Cap -4.4%	HG Bnd 2.7%	HY Bnd 7.5%	Sm Cap -11.0%
	HG Bnd 6.5%	Int'l Stk -11.7%	HG Bnd 4.2%	HG Bnd -2.0%	EM -1.8%	HY Bnd -4.6%	Int'l Stk 1.5%	HG Bnd 3.5%	Int'l Stk -13.4%
	Cash 0.2%	EM -18.2%	Cash 0.1%	EM -2.3%	Int'l Stk -4.5%	EM -14.6%	Cash 0.3%	Cash 1.0%	EM -14.3%

Source: A Wealth of Common Sense

What is the punchline for today's markets? Our view is this, for those who took on greater risk beginning in 2009, you have been paid well for that move. For those that were stopped out or panicked at the market bottom in late 2008 and early the following year, our condolences. You got tripped at the exact wrong time when the world was experiencing a horrible three sigma event. If you were smart or lucky enough to put cash to work at that time, as Blackstone did in real estate, you may want to start harvesting those gains.

This doesn't mean selling everything, we simply suggest looking at your investment portfolio to see where you are. As we like to say, take risk off the table when you can, not when you have to, especially when you've been paid, and the value of the aforementioned risk has moved to the right side of the bell curve.

'I'm Feeling Alright...'



In terms of where to re-allocate, cash is always king. That said, there are firms like Stillwater that design strategies to take advantage of the left tail, profiting from a market when it's tough to do so. That's not to say you should sell everything and hide it under the mattress or buy gold bars, simply make the move to adjust your holdings to things that will do well when the scale slides to the left.

While we don't expect a relapse into the depths of 2009, the bell curve shows anything can happen. Especially when global central bankers start going back to the beer supply and its smaller than last time. A decade ago, they had the keys to the brewery, today it looks more like the tap for the pony keg.

Smaller Than Needed?



Hedge Funds

The Wall Street Journal reported this week that the \$6 billion hedge fund, Autonomy Capital, was down 24% in August on a bet that the Argentinean markets were on the verge of a recovery after a very rough first half of the year. For those who don't subscribe to the Journal, a shortened version of events was run by *Business Insider*. For us, it doesn't matter who ran the story, losing a quarter of client assets in one month is still losing a quarter of clients' money in a very short period of time. Autonomy was up 17% last year.

This is Bad

Argentine peso vs US dollar

You now need 53 peso to buy 1 US dollar



Source: Bloomberg

BBC

Bill Ackman is finally not having a really bad year. His main fund is up a whopping 54%, this after four years of losses. Pershing Square's biggest holdings are Chipotle, Starbucks, Restaurant Brands, Fannie & Freddie Mae, and ADP where he booked a big gain earlier this year. To be clear, Ackman doesn't really run a 'hedge fund' where he is active on the 'hedged' side of the ledger. His last big short selling fight was with Herbalife and was as high profile as they get. Outside of positions like that, he runs what can be described as a private yet public equity firm. His most recent thoughts on the portfolio can be read in [Q2 2019 letter to investment partners](#).

What Makes Pershing Square Tick

January 1, 2019 - May 14, 2019

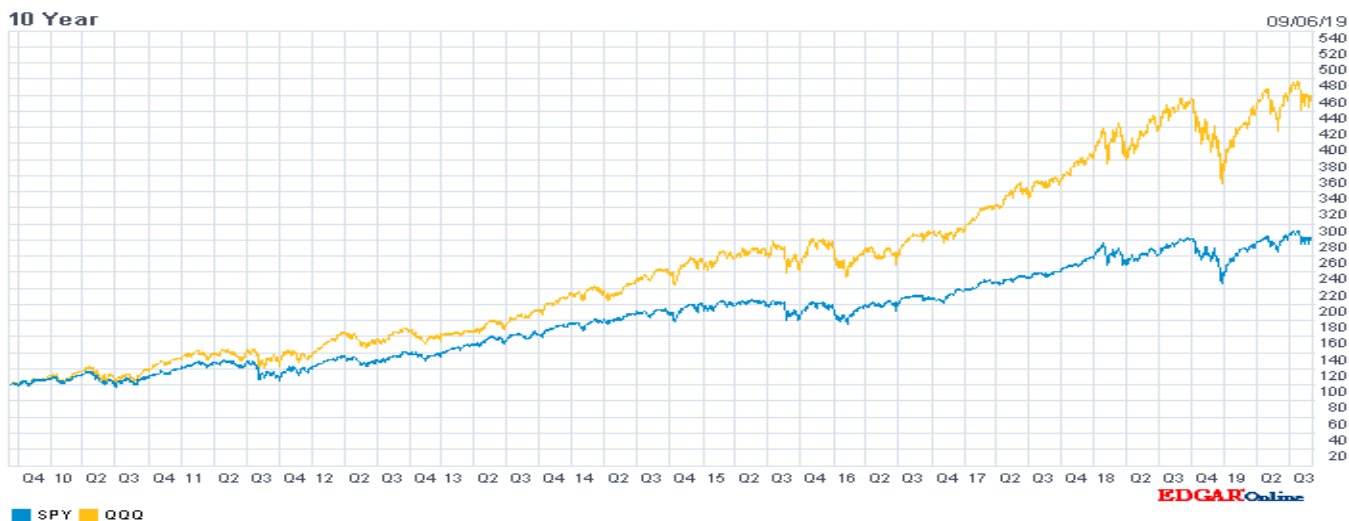
Chipotle Mexican Grill, Inc.	9.8%
Restaurant Brands International Inc.	5.3%
Hilton Worldwide Holdings Inc.	4.5%
Automatic Data Processing, Inc.	4.0%
Federal National Mortgage Association	3.4%
Starbucks Corporation	3.2%
United Technologies Corporation	2.9%
Lowe's Companies Inc.	2.5%
Federal Home Loan Mortgage Corporation	2.1%
Platform Specialty Products Corporation	1.0%
The Howard Hughes Corporation	0.7%
Other Income and Expense	-0.5%
Net Contributors and Detractors	38.9%

Source: Value Walk

Ray Dalio, the head of the world's biggest hedge fund, Bridgewater Associates, made ominous comments this week about the current economic conditions reminding him of a pending Depression-era environment. Our friends at Zero Hedge did a great job of deep diving on the content of his post.

The three pillars by which he makes his judgement: ineffective central banks with less to play with, the emerging China-U.S. cold war, and high levels of debt. All of which are pretty agreeable observations. The trouble is, the market is partying like its 1999 all over again.

S&P 500 v. Nasdaq



Bridgewater’s non-consensus views have cost them between 8% and 10% this year, depending on the day. For perspective, they were up 16% last year, and few could match those results. To be clear, Dalio has the kind of hedge fund billionaire jack in his back pocket to make whatever comments, ominous or otherwise, he wants. Including these from last week’s gathering in the Black Rock Desert, better known as Burning Man.

Dalio in the Desert



Ray Dalio ✓
@RayDalio



Just back from Burning Man. Reminds me of Woodstock with better art (installations) and less good music. What a great vibe and what amazing creativity!

Photo is with my pal and coworker Jeff Taylor at his great music camp Root Society. If you go next year, 1-5am is best.



1:08 PM · Sep 2, 2019 · [Twitter for iPhone](#)

452 Retweets 3.8K Likes

Up & Down Wall Street

In what we consider to be big news for White Shoe firms on Wall Street, Goldman Sachs is culling the partner ranks to the tune of 15% of total headcount. On the outbound manifest so far are some of the firm's top bankers, researchers, and stock trading pros. Earlier this year, two longtime trading heads walked off the floor with a four-piece band playing Frank Sinatra's 'My Way', which we happen to think is pretty awesome. The number of partners at the firm has doubled from 250 to 500 since Goldman went public in 1997.

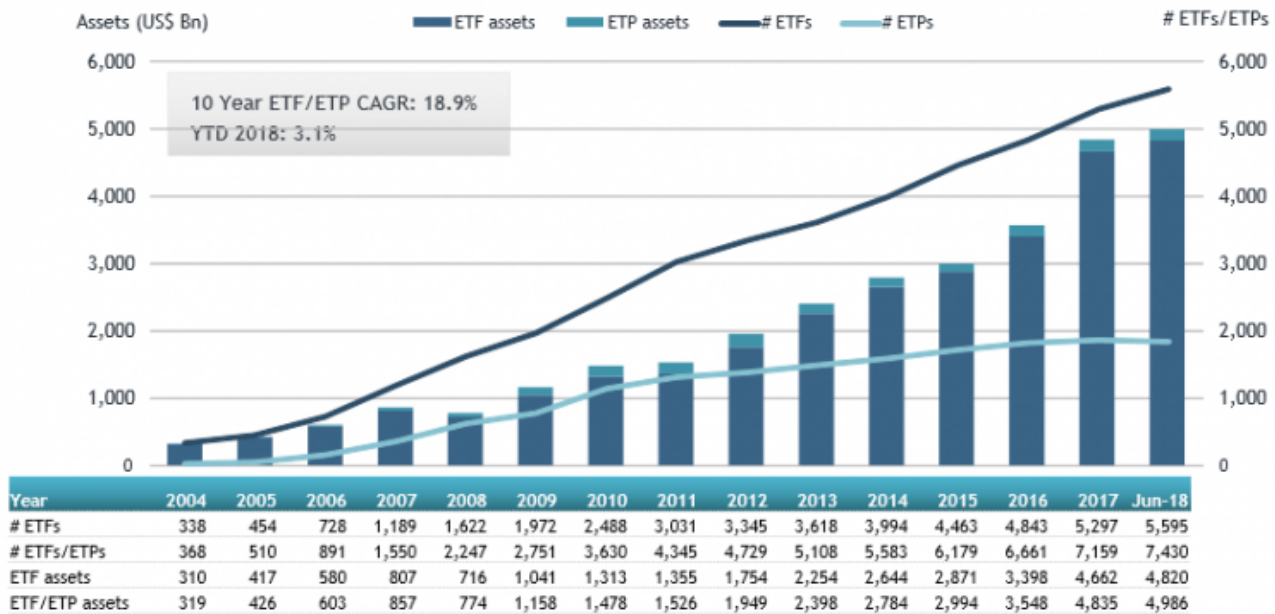
Goldman Rings the Open



Source: Goldman Sachs

The man who both called the housing bust, and profited mightily from it by shorting CDOs, is out with another big call that exchange traded funds (ETF) are becoming the next big bubble. Michael Bury, who runs \$350 million at his firm Scion Capital, provided *Bloomberg* with a lengthy and detailed explanation as to why he sees ETFs and other index funds as the next subprime.

Bubbling Upward



Source: ETFGI data sourced from ETF/ETP sponsors, exchanges, regulatory filings, Thomson Reuters/Lipper, Bloomberg, publicly available sources and data generated in-house.
Note: "ETFs" are typically open-end index funds that provide daily portfolio transparency, are listed and traded on exchanges like stocks on a secondary basis as well as utilising a unique creation and redemption process for primary transactions. "ETPs" refers to other products that have similarities to ETFs in the way they trade and settle but they do not use a mutual fund structure. The use of other structures including grantor trusts, partnerships, notes and depositary receipts by ETPs can create different tax and regulatory implications for investors when compared to ETFs which are funds.

Diversions

A rare trumpet, commissioned by Jazz legend Miles Davis in 1980, will be auctioned off by Christie's next month. While not the one used when Davis recorded the iconic 'Kind of Blue' album, this piece bears a very distinct design and is appropriately named 'Moon and Stars' for the images inlaid into the instrument. *Rolling Stone* magazine provides a preview, as does the auction house conducting the sale. The trumpet is estimated to go for between \$70,000 and \$100,000.

A Horn with History



Source: Christie's

Keeping it musical, documentary film maker Ken Burns will introduce the world to 'Country Music' on September 15th in primetime on PBS. This genre of music, with its agrarian roots, is now incredibly mainstream, stepping over racial lines thought nearly impossible only a decade or two ago. Who better to give us their thoughts and a preview than the newspapers that cover the music capitals of the world, Nashville and Los Angeles.

In true Ken Burns' fashion, the film took 8 years to make, is 16 hours long split into 8 parts, with 175 hours of interviews edited down. Without giving away too much about the author of these pages likes and dislikes, I'm really looking forward to cracking a beer and sitting back while taking in what should be an epic tale.

A STORY OF AMERICA, ONE SONG AT A TIME.



COUNTRY MUSIC

A FILM BY KEN BURNS

— TUNE IN OR STREAM —

SUN SEPT 15 8/7c

— AVAILABLE ON THE PBS VIDEO APP —



PBS

#CountryMusicPBS

pbs.org/countrymusic

We've said on several occasions that one of the best interviews on television originates from *Bloomberg TV*, but it may not be the market commentaries you think of. What we are talking about is Carlyle Group founder David Rubenstein's 'Peer to Peer Conversations', the most recent of which aired this month with Jack Nicklaus as the guest.

This of course has us excited because, for one, Jack is an icon of the sport. Two, he makes us feel better about how poorly we all can play what should be an otherwise elegant and genteel game. For this author, and his 'high handicap', golf is what the famous book once

called 'A Good Walk Spoiled'. I'm also the same guy who Sports Illustrated reporter Rick Riley once counseled to never have O.J. Simpson be my group's fourth. True story.

Jack Nicklaus – 1986 Master Champion



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