



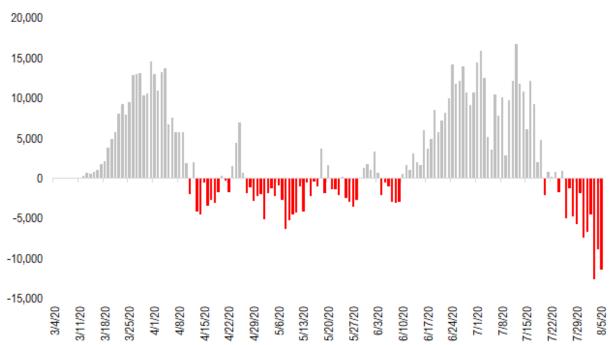
COVID-19 UPDATE: COVID-19 seeing triple confirmation -- cases, hospitalizations, deaths consistently down. What is right P/E for an unkillable company?

THIS MESSAGE IS BEING SENT SOLELY TO CLIENTS OF FS INSIGHT

From a COVID-19 perspective, this week and next week are critical, as this plateauing of cases needs to turn into a downright retreat, before anyone can breathe a sigh of relief. The good news is the case data this week has consistently shown that COVID-19 seems to be in retreat. The daily cases today at 52,300, while up vs 1D ago (expected seasonality), is down 11,327 vs 7D ago. So, the R0 is essentially falling below zero.

In fact, as this expanded series below shows, this decline (7D delta) is even faster than the retreat seen in April/May after this initial surge. Thus, it seems like COVID-19 cases are improving at a faster pace.

US daily new cases rolling 7D delta



Source: COVID-19 Tracking Project



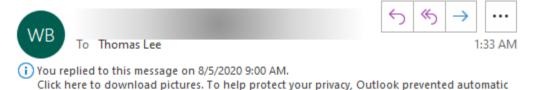
And the epicenter of this June/July surge, the 4 states, FL, CA, AZ, TX, or F-CAT, is seeing daily cases consistently slow. This is highlighted below and in our commentary, we also point out that even hospitalizations are dropping rapidly in these states. If the disease were worsening, we would expect hospital utilization to be rising, not falling.



Source: COVID-19 Tracking Project

But this slowdown is no fluke. About a month ago, every state took corrective action -- closing bars, requiring masks, enforcing social distance, etc. And while many skeptics said this was just for "show," the results suggest these measures worked. In fact, one of our clients sent me this email yesterday, commenting about the situation in Florida:

- the key takeaway, for me, is that Floridians got the message and are wearing masks.



Great work, as usual, Tom.

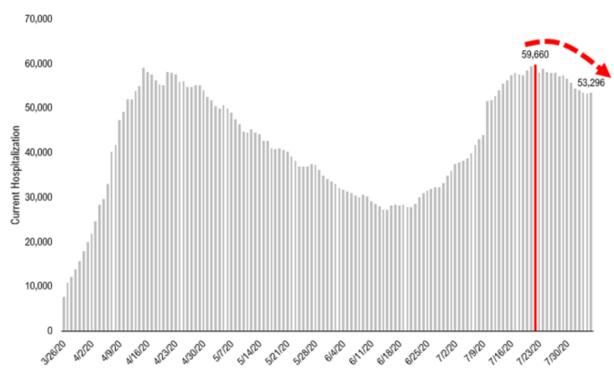
download of some pictures in this message.

Just some anecdotal observations for FWIW: I escaped NYC for Fort Myers, FL maybe 5-6 weeks ago. When we first came down here, there was almost no one wearing masks anywhere we went (Walmart, Home Depot, gas stations, grocery stores, McDonalds, Starbucks, etc.). In fact, we were the ones getting funny looks for even wearing them. However, today, wearing masks across all the same places named above has become ubiquitous in rather short-order. Some places (Best Buy) are even giving out free masks at the door. Now, it's rare to see anyone NOT wearing a mask – both old and young alike. These anecdotal experiences line up well with the patterns being seen in your data.



This is good news as it highlights that Americans can rapidly adjust. And we think this makes living with COVID-19 far less deadly and makes operating the economy much safer. After all, none of these 4 states had to close again. But cases are now falling rapidly.

Total COVID-19 hospitalizations in the USA are down ~6,500 from their peak two weeks ago (7/23) and this is further good news. Cases plateaued and while many expect deaths to soar (it should, it does lag), the fact that hospitalizations is trending down means fewer infected require hospitalizations = good.



Source: Fundstrat, COVID-19 Tracking Project

So there is essentially triple confirmation now:

- daily cases rolling over
- hospitalizations rolling over
- daily deaths rolling over

There will be other things to worry about-- school, flu season, etc. But US cases are falling at the moment.



STRATEGY: What is the right P/E for an "unkillable" company?

We understand the argument for those who see elevated equity valuations as making "no sense" -- how can P/E rise in the midst of a pandemic and global economic depression?

That said, we believe there are two arguments, which, if correct, argue P/E valuations could rapidly expand in the next 12-18 months:

- Equity P/E vs bond P/E, who is right?
- "Unkillable" companies, which went through an ultimate stress test, will see dramatically lower risk premia = big P/E re-rate

P/E of fixed income is massively higher than equity P/E...

Let's start with the first assertion. Take a look at the yields of UST, Investment Grade bonds and even high-yield. We can convert these yields to P/E by taking 1/yield. As you can see, the incredibly low yields lead to monstrously high P/E.

- the 10-yr P/E is 183X
- the future growth rate of the coupon on all 3 is zero, no growth

	Yield		P/E (2021)	5-yr EPS CAGR
UST 10-yr	0.55%	\longrightarrow	182.6x	0%
US Investment grade bonds	1.89%	\longrightarrow	52.9x	0%
US High yield	5.22%	\longrightarrow	19.2x	0%

Source: Fundstrat

Below is the corresponding data for segments of the US equity market and also some other country indices. These are sorted from highest to lowest P/E.

- FANG has the highest P/E, but at 32.4X, it hardly seems expensive compared to Investment grade bonds



	Yield		P/E (2021)	5-yr EPS CAGR
UST 10-yr	0.55%	\longrightarrow	182.6x	0%
US Investment grade bonds	1.89%	\longrightarrow	52.9x	0%
US High yield	5.22%	\longrightarrow	19.2x	0%
FANG			32.4x	25%
S&P 500			20.2x	12%
US Technology (Large-cap)			24.6x	20%
Utilities			18.0x	5%
Eurostoxx 600			16.0x	5%
US Healthcare (Large-cap)			15.8x	10%
Epicenter (Large-cap)			15.1x	25%
MSCI EM			13.7x	12%

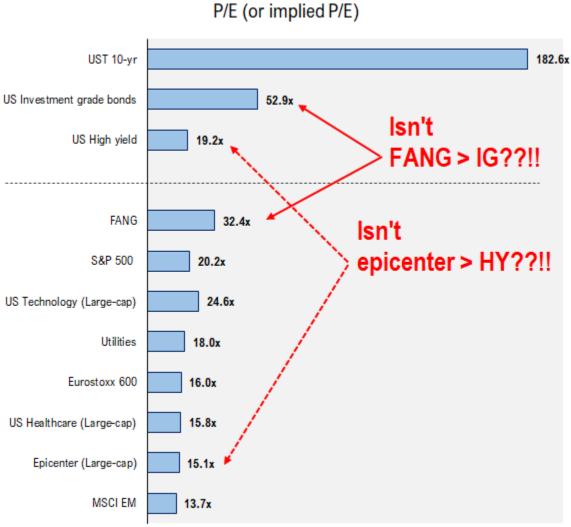
Source: Fundstrat



This is the ultimate question for me. FANG has a projected 25% EPS growth, already proven to be dominating in a weak growth environment.

- and yet its P/E is less than an investment grade bond.
- similarly, epicenter groups (Industrials, Discretionary, Energy, Financials) have a lower P/E than a high-yield bond

Aren't even epicenter companies better credits than HY? Yes.



Source: Fundstrat



Google just borrowed \$10 billion for 5 years at 0.45%... yikes

Google issued 5-yr bonds (\$10 billion worth) at a coupon of 0.45%. This is a 222X P/E for that bond. By the way, the US 5-yr is yielding 0.22%, so Google and the UST have similar borrowing costs.

- Google is borrowing \$10 billion and is paying a mere \$45 million/year for the debt service.

Pretty insane. Yet, somehow, one wants to say a 22X P/E is expensive for GOOGL?

Google owner Alphabet issues record \$10 billion bond at lowest-ever price



FILE PHOTO: A 3D printed Google logo is seen in this illustration taken April 12, 2020. REUTERS/Dado Ruvic/Illustration/File Photo

NEW YORK (Reuters) - Alphabet Inc (GOOGL.O) borrowed \$10 billion in the investment-grade corporate debt market on Monday, the Google parent's largest ever bond issue, which it secured at its lowest-ever cost of financing.

Of the \$10 billion on offer, the \$1 billion five-year tranche was issued at a coupon of 0.45%, the lowest coupon seen on a U.S. corporate bond at that maturity, according to Refinitiv data, which goes back to 1980.

Source: Reuters



Premium for unkillability...

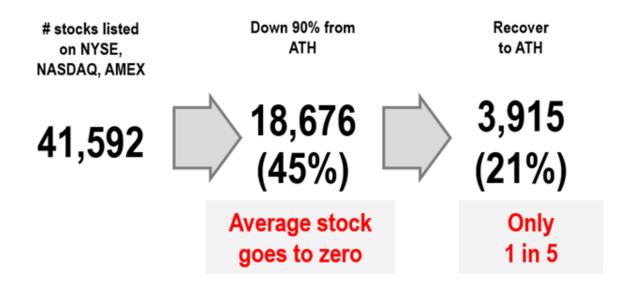
The other argument we make for stocks is this data below. We first published these statistics in 2018 and highlight the true longevity of companies. According to data compiled by tireless Ken, our head data scientist:

- 41,592 companies have been listed since 1975 (45 years)
- 45% of these, or roughly half, fell by 90% or more
- of those falling 90%, only 1 in 5 recovered

Thus, the majority of publicly listed companies become zombies or disappear. Most of these are small-cap companies. In fact, as we discuss in this commentary below, about 50% of small businesses fail within 5 years. So this mortality is high for businesses, generally.

Some validity to why institutions "write-off" 90% down...

Since 1975...



Source: Fundstrat

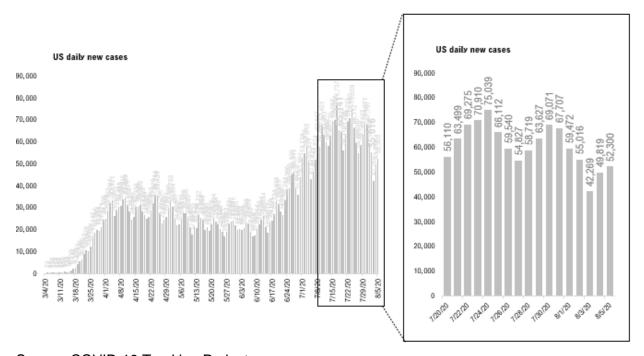
But if a company survives today, particularly after experiencing the worst economic contraction ever and even exceeding the Great Depression, doesn't this survivor warrant a higher P/E?



POINT 1: Decline in USA COVID-19 cases accelerating...

The decline in COVID-19 cases in the US continues to accelerate to the downside. There is a consistent weekly seasonality, so midweek cases are higher (weekend lags, etc.), so measuring progress is best looking at 7D ago.

- Daily cases are up slightly Wednesday (vs 1D ago) at 52,300 but down 11,327 vs 7D ago
- In other words, instead of spread accelerating, the R0 looks to be below 1.0

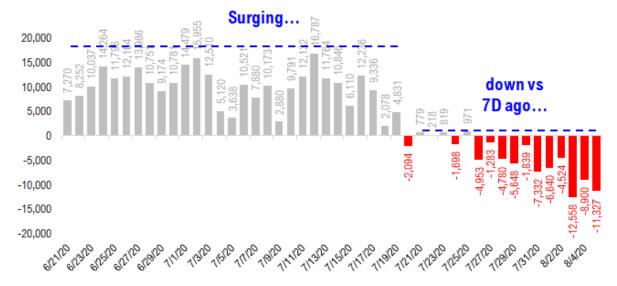


Source: COVID-19 Tracking Project

As we have said for the past few weeks, the 7D delta of daily cases is a leading indicator, and arguably way more important than reported daily cases. This highlights the true trend and as you can see, the decline in cases vs 7D ago is accelerating.



US daily new cases rolling 7D delta - past 6 weeks



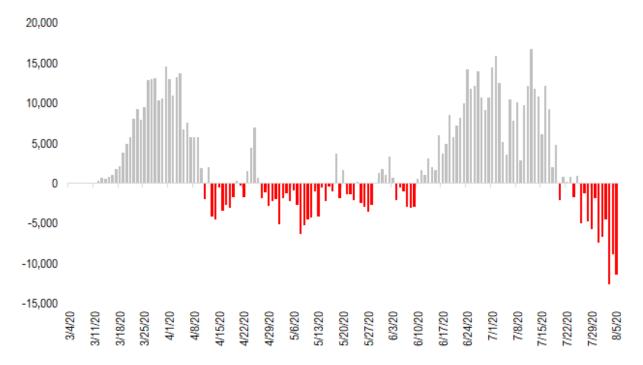
Source: COVID-19 Tracking Project

In fact, this decline in daily cases vs 7D ago is even faster than the pace seen in April. As this chart below highlights, in April, daily cases vs 7D ago were declining at 4,000 and they are now declining >11,000 vs 7D ago.

- thus, we would argue this points to a faster decline in cases in August



US daily new cases rolling 7D delta



Source: COVID-19 Tracking Project

6 states reported sizeable 1D rises

Georgia	3,765 vs 2,513 (1D)) +1,252
California	5,295 vs 4,526	+769
Arizona	1,698 vs 1,008	+690
Iowa	617 vs 201	+416
Illinois	1,759 vs 1,471	+288
Oklahoma	1,101 vs 861	+240
Total		+3,655

6 states report sizable 1D declines

North Carolina 1,127 vs 1,629 (1D) -502					
Texas	8,706 vs 9,	-461			
Louisiana	1,482 vs 1	,874	-392		
Virginia	798 vs 1	,145	-347		
Nevada	649 vs	980	-331		
Pennsylvania	705 vs	854	<u>-149</u>		
Total			-2,182		

FS^{INSIGHT} | www.fsinsight.com | Page 11



Daily Case Increases (by State) (08/05)

% total new cases (state cases/ total US cases) % total US pop (state population/ total US population)

Sorted

Last 3-day trend growth rates

		8/3/20	8/4/20	8/5/20	
	United States	42,269	49,819	52,300	+2,481
	States:				
1	Texas	5,303	9,167	8,706	
2	Florida	4,752	5,446	5,409	
3	California	5,739	4,526	5,295	
4	Georgia	2,258	2,513	3,765	<higher< td=""></higher<>
5	Illinois	1,298	1,471	1,759	
6	Arizona	1,030	1,008	1,698	<higher< td=""></higher<>
7	Tennessee	1,009	1,805	1,657	
8	Louisiana	1,099	1,874	1,482	
9	South Carolina	1,163	1,239	1,282	
10	Mississippi	572	1,074	1,245	
11	Missouri	1,047	1,193	1,241	
12	Ohio	932	1,143	1,199	
13	North Carolina	1,313	1,629	1,127	
14	Oklahoma	377	861		<higher< td=""></higher<>
15	Alabama	1,217	1,041	952	
16	Arkansas	787	784	912	
17	Wisconsin	404	728		<higher< td=""></higher<>
18	Kansas	1,064	0	841	
19	Virginia	1,324	1,145	798	
20	Indiana	576	822	720	
21	Pennsylvania	565	854	705	
22	Washington	632	542	664	
23	Michigan	604	664	657	
24	Nevada	994	980	649	
25	New York	545	746	636	
26	Minnesota	622	602	617	
27	lowa	349	201		<higher< td=""></higher<>
28	Colorado	252	426		<higher< td=""></higher<>
29	Maryland	870	710	572	
30	Kentucky	323	689	544	
31	Idaho	331	559	473	
32	Massachusetts	199	546	440	
33 34	Utah	354	378	421	
35	New Jersey	264 254	356	357	
36	Nebraska	272	222 333	280	<higher< td=""></higher<>
37	Oregon Puerto Rico	278	300	271	
38	New Mexico	114	210	226	
39	Hawaii	205	143	173	
40	Delaware	106	82		<higher< td=""></higher<>
41	North Dakota	125	148	124	4 mgnor
42	Montana	60	82		<higher< td=""></higher<>
43	Connecticut	252	48	115	- mgmon
44	West Virginia	119	78	108	
45	Rhode Island	53	144	91	
46	South Dakota	65	59		<higher< td=""></higher<>
47	Alaska	61	53	55	
48	District of Columbia	39	85	45	
49	Wyoming	40	36	39	
50	New Hampshire	26	33	26	
51	U.S. Virgin Islands	18	24	18	
52	Maine	12	5	17	
53	Guam	1	7		<higher< td=""></higher<>
54	Vermont	0	5	5	
55	Northern Mariana Islands	1	0	0	
56	American Samoa	0	0	0	

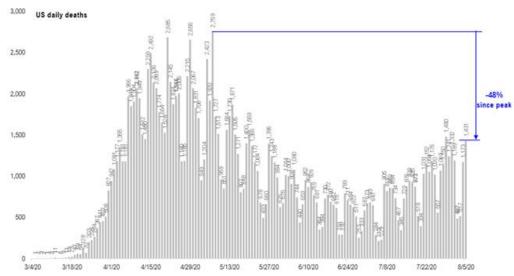
Source: COVID-19 Tracking Project

FS^{INSIGHT} | www.fsinsight.com | Page 12



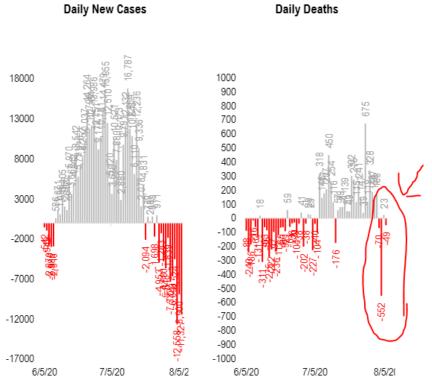
Daily deaths are up, but this is somewhat expected. But the trend in deaths seems to be slowing.

US daily COVID-19 Fatalities



Source: Fundstrat, COVID-19 Tracking Project

The 7D delta in deaths is down for 3 of the 4 days. Looking below, you can see this surge in daily deaths is now turning into a flattening and given hospitalizations down (see next section), we should see it to fall.



Source: COVID-19 Tracking Project

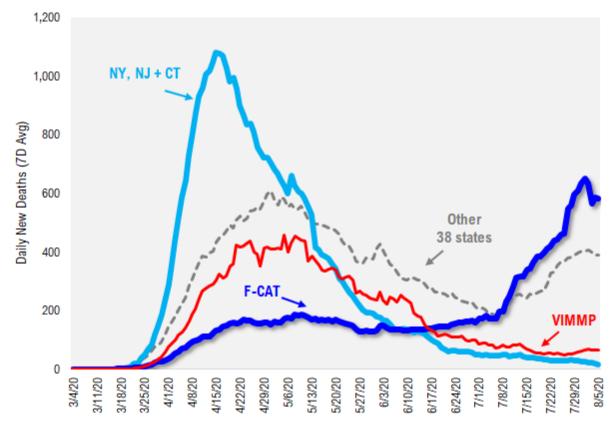
FS^{INSIGHT} | www.fsinsight.com



Even daily deaths in the epicenter, FL, CA, AZ, TX, or F-CAT, is rolling over. So, there is essentially triple confirmation now:

- daily cases rolling over
- hospitalizations rolling over
- daily deaths rolling over

There will be other things to worry about-- school, flu season, etc. But US cases are falling at the moment.



Source: COVID-19 Tracking Project

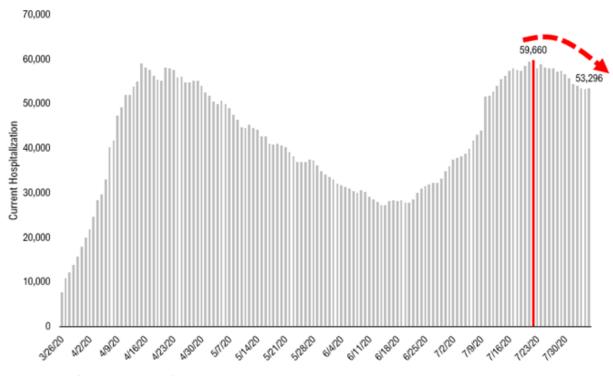


POINT 2: More reason "surge" behind us, as hospitalizations falling broadly...

Below is the total number of Americans currently hospitalized with COVID-19. Every state reports this data (although the history is not full for many, such as FL). The trend is pretty clear.

- Hospitalizations peaked 7/23 at 59,660
- In past 14 days, this is down ~6,500 to 53,296

The number of Americans hospitalized with COVID-19 is declining for the past two weeks.



Source: Fundstrat, COVID-19 Tracking Project

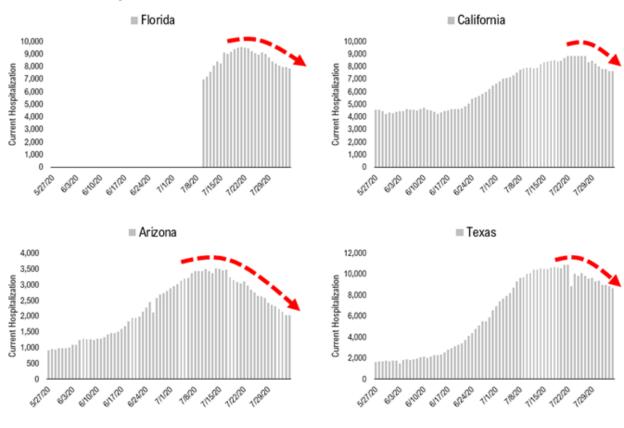
This affirms our view that the June-July surge in COVID-19 cases plateaued in late July. And now we are seeing a steady decline in cases. If this is a textbook peak, similar to what was seen in NY tristate, we could see crushing declines in coming weeks.

Below is the current hospitalizations for F-CAT. These are the number of people currently in a hospital. Thus, if this figure is falling, hospitalizations are declining:

- every single F-CAT state is seeing a downturn in hospitalizations.
- this means more people are being discharged than admitted.
- even as some are seeing elevated cases levels, hospital utilization is actually falling.



Current Hospitalizations

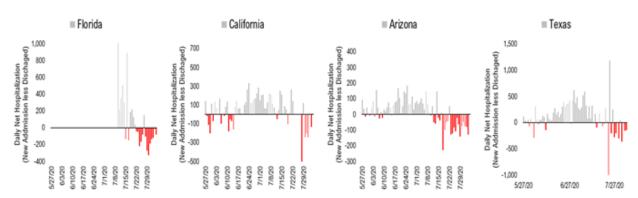


Source: Fundstrat, COVID-19 Tracking Project, State and county websites

The chart below is the same 4 states, but showing the net change in hospitalizations. If it is a negative value, the hospitals are discharging more than admitting.

- again, 4 of 4 states are now discharging more COVID-19 patients than it is admitting.
- it is another strong sign that the surge in F-CAT is over.

Daily Net Hospitalizations



Source: COVID-19 Tracking Project



This is important, because if someone is going to suggest that deaths are about to soar, the decline in hospitalizations is somewhat arguing against that.

And if deaths are not soaring, this does mitigate the tragedy of COVID-19, to an extent. There are multiple reasons this could be happening:

- younger infected (youth and teens partying)
- better treatment
- nursing homes protected
- is disease weakening?

POINT 3: COVID-19 accelerating creative destruction = high ROIC for new capital

In many of my conversations, someone will cite the expected collapse of small businesses and soaring bankruptcies as a reason to be negative on the future growth outlook for the US economy. It is certainly true that business failures, bankruptcies, mass layoffs create economic losses. The current holders of these assets and their creditors will realize losses. This is a negative consequence. And there is also the human tragedy and toll that stems from this. But at the same time, the destruction of capital and associated losses leads to innovation and high returns for incremental capital.

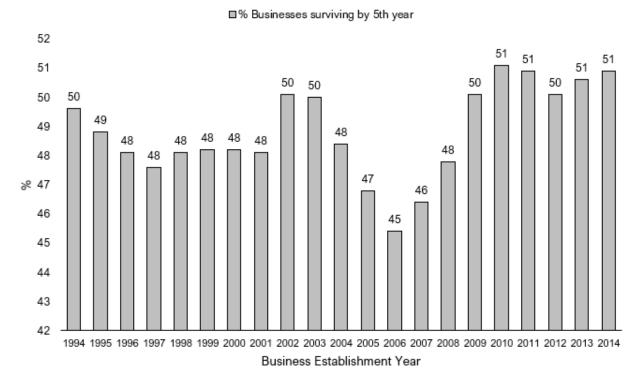
Take a step back. The success of FANG likely caused thousands and thousands of businesses and industries to fail -- these innovative companies made many billions of dollars of capital obsolete.

This is what is happening at a larger scale from COVID-19.

Below is a chart from the BLS (Bureau of Labor Statistics) and it shows what % of businesses survive by its fifth year after inception. There are ups and downs associated with business cycles, but it shows a consistent pattern.

- roughly 50% of any US business created fails by its fifth year.
- thus, many small businesses were not likely going to survive.





Source: Fundstrat, BLS

We also realize this is not a fair comparison, because that survey is only for "newly formed" businesses, and with 30% unemployment, a large percentage of mature businesses will fail.

But some businesses will fail because the world has changed...

But the point we are making is that this COVID-19 is a massive stress test. Many businesses will recover once the economy can operate with reasonable restrictions. And if there is a cure/vaccine, this is accelerated.

But temporary stoppage of the economy is not the only source of failure. Multiple factors are behind it:

- temporary loss of business
- working capital mismatch
- negative operating leverage
- cannot adjust to the new world

This latter category of companies are those that will not likely ever come back.



Latest McKinsey survey highlights some changes in consumer behavior that could be "longer term"

McKinsey published a new consumer survey of US shopping behavior.



By Tamara Charm, Becca Coggins, Kelsey Robinson, and Jamie Wilkie



Our research indicates what consumers will continue to value as the coronavirus crisis evolves.

The study has many interesting charts, but I wanted to highlight two of them. The first one is where digital spending is set to rise. This is shown below, but there is a notable increase in what purchases consumers will make online. The 8 biggest increases are (based on the survey):

- OTC medicine
- Groceries
- Household supplies
- Personal care
- Alcohol
- Furnishings
- Food takeout
- Fitness

Wow.

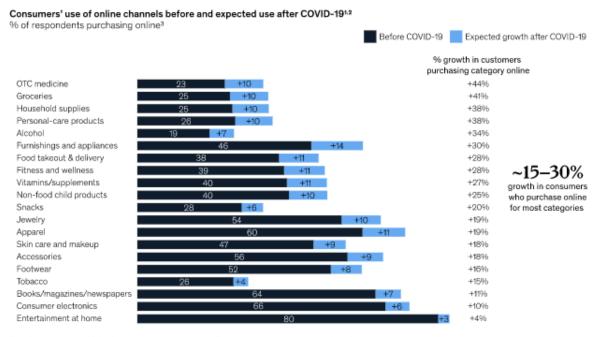
This is a pretty significant share of existing physical retail space. The expected percentage increases are in the chart below, but the top 8 have anywhere from a 28%-45% rise in expected spending online. Now, this could be the same company now getting the same sale digitally, rather than physical.

But the broader point is the stranded PP&E (property plant and equipment, not PPE, personal protective equipment). This is capital losses ala creative destruction.



Exhibit 1

More people expect to make a portion of their purchases online post-COVID-19 than before.



10: Before the caransvirus (COVID-19) situation started, what proportion of your purchases in this category were arkine as from a physical store/in person?

10: Once the coransvirus (COVID-19) situation has subsided; fell us what proportion of your purchases in this category you think will be ordine as from a physical store/in person?

12-Respondents who indicated that they have not bought the category office and do not intend to do so in the next 2 weeks are classified as not purchasing ordine.

13-Source: McKinsey & Company COVID-19 US Consumer Pulse Survey 6/15–6/21/2020, n = 2,006, sampled and meighted to match the US general population 18+ years

Sources architesty a Company COVID-18 CS Consumer Pulse Survey by 13-6721/2020, n = 2006, samples and mediting to match the CS general population 10* ye

McKinsey & Company

https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-great-consumer-shift-ten-charts-that-show-how-us-shopping-behavior-is-changing?cid=other-eml-alt-mip-mck&hlkid=69d8f7161c9948ec858d7df0bdd7dbfb&hctky=9489327&hdpid=53369599-0702-4df1-a824-310b2d7c65cb

The past 6 months has also created significant changes in how Americans spend time...
This second chart shows how there have been material changes in how Americans allocate

FS^{INSIGHT} | www.fsinsight.com



their time. The chart below is a diffusion chart, and the column on the right shows whether this category is seeing a net increase or decrease.

Topping the list of increases:

Cooking +33%
Home improvement +18%
Movies or Shows +17%
Exercising +12%

Again, what stands out to me is the discovery of cooking and more exercise (I assume either outside or at home, but not at a gym). These could be the structural changes that lead to more stranded capital. But this is also new opportunities for innovative companies.

Exhibit 8

Americans are changing how they spend their time, dedicating more time to domestic activities, media, and news.

Expected change to time allocation over the next 2 weeks1

% of respondents

			Decrease	Stay the sam	e 🔣 l	ncrease
					Net i	ntent2
Cooking	6	55		39	1 1	+33
Home improvement	13	56		31	l t	+18
Movies or shows	13	57		30	1 1	+17
Exercising	15	59		27	1 1	+12
Live news	16	58		26	l t	+10
Video content	16	59		26	l t	+10
Social media	16	58		25	l t	+9
Texting, chatting, messaging	9	68		24	11	+15
Reading news online	17	60		23	11	+6
TV	16	63		22	1 1	+6
Working	21	62		17	Ţ	-4

^{&#}x27;Q: Over the next 2 weeks, how much time do you expect to spend on these activities compared to how much time you normally spend on them? Figures may not sum to 100%, because of rounding.

McKinsey & Company

https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-great-consumer-shift-ten-charts-that-show-how-us-shopping-behavior-is-changing?cid=other-eml-alt-mip-mck&hlkid=69d8f7161c9948ec858d7df0bdd7dbfb&hctky=9489327&hdpid=53369599-0702-4df1-a824-310b2d7c65cb

FS^{INSIGHT} | www.fsinsight.com

^aNet intent is calculated by subtracting the % of respondents stating they expect to decrease time spent from the % of respondents stating they expect to increase time spent.

Source: McKinsey & Company COVID-19 US Consumer Pulse Survey 6/1–6/7/2020, n = 1,966, sampled and weighted to match the US general population 18+ years



Disclosures

This research is for the clients of FS Insight only. For additional information, please contact your sales representative or FS Insight at http://www.fsinsight.com/.

Conflicts of Interest

This research contains the views, opinions and recommendations of FS Insight. At the time of publication of this report, FS Insight does not know of, or have reason to know of any material conflicts of interest.

General Disclosures

FS Insight is an independent research company and is not a registered investment advisor and is not acting as a broker dealer under any federal or state securities laws.

FS Insight is a member of IRC Securities' Research Prime Services Platform. IRC Securities is a FINRA registered broker-dealer that is focused on supporting the independent research industry. Certain personnel of FS Insight (i.e. Research Analysts) are registered representatives of IRC Securities, a FINRA member firm registered as a broker-dealer with the Securities and Exchange Commission and certain state securities regulators. As registered representatives and independent contractors of IRC Securities, such personnel may receive commissions paid to or shared with IRC Securities for transactions placed by FS Insight clients directly with IRC Securities or with securities firms that may share commissions with IRC Securities in accordance with applicable SEC and FINRA requirements. IRC Securities does not distribute the research of FS Insight, which is available to select institutional clients that have engaged FS Insight.

As registered representatives of IRC Securities our analysts must follow IRC Securities' Written Supervisory Procedures. Notable compliance policies include (1) prohibition of insider trading or the facilitation thereof, (2) maintaining client confidentiality, (3) archival of electronic communications, and (4) appropriate use of electronic communications, amongst other compliance related policies.

FS Insight does not have the same conflicts that traditional sell-side research organizations have because FS Insight (1) does not conduct any investment banking activities, (2) does not manage any investment funds, and (3) our clients are only institutional investors.

This research is for the clients of FS Insight only. Additional information is available upon request. Information has been obtained from sources believed to be reliable, but FS Insight does not warrant its completeness or accuracy except with respect to any disclosures relative to FS Insight and the analyst's involvement (if any) with any of the subject companies of the research. All pricing is as of the market close for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, risk tolerance, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies. The recipient of this report must make its own independent decision regarding any securities or financial instruments mentioned herein. Except in circumstances where FS Insight expressly agrees otherwise in writing, FS Insight is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice, including within the meaning of Section 15B of the Securities Exchange Act of 1934. All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client website, fsinsight.com. Not all research content is redistributed to our clients or made available to third-party aggregators or the media. Please contact your sales representative if you would like to receive any of our research publications.

The Yellow Thunderlight over the "BLAST" logo is designed by rawpixel.com / cited from Freepik.

Copyright 2020 FS Insight LLC. All rights reserved. No part of this material may be reprinted, sold or redistributed without the prior written consent of FS Insight LLC.