



A VIRAL MARKET UPDATE XIII: THE STRONG (FANGAM) GET STRONGER!

Market Domination!

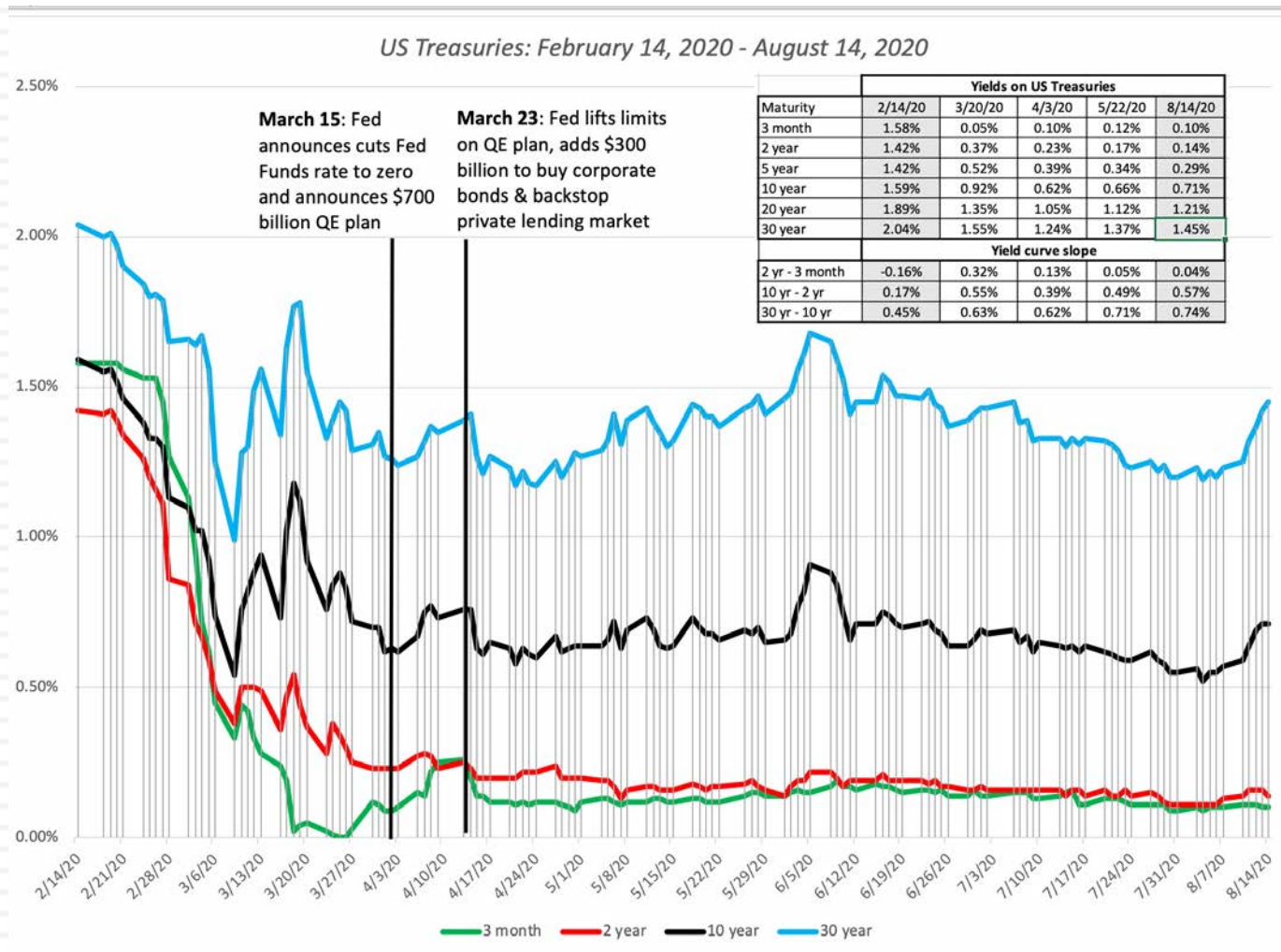
From meltdown to update..

- When I started these updates on February 26, 2020, about two weeks after the markets had gone into free fall, my first six posts were titled as "Viral Market Meltdowns", reflecting the sell off across the globe. About midway through, I changed the title, replacing the word "meltdown" with "update", since markets turned around since those dark days.
- In fact, by August 14, the date of this update, US equities had recouped all of their crisis losses and were trading higher than they were on February 14, the start of the crisis. In that six-month period, though, there has been a reallocation of value, from old to young, value to growth and manufacturing to technology companies, and I have tried to both chronicle and explain this shift in earlier posts.
- In this one, I plan to focus on a subset of technology companies, the FANG (Facebook, Apple, Netflix and Google) stocks, younger companies that have soared in value over the last two decades, and two other tech companies of longer standing, Apple and Microsoft. These companies have key to the market comeback, and assessing whether their valuations are sustainable is key to also assessing the market.

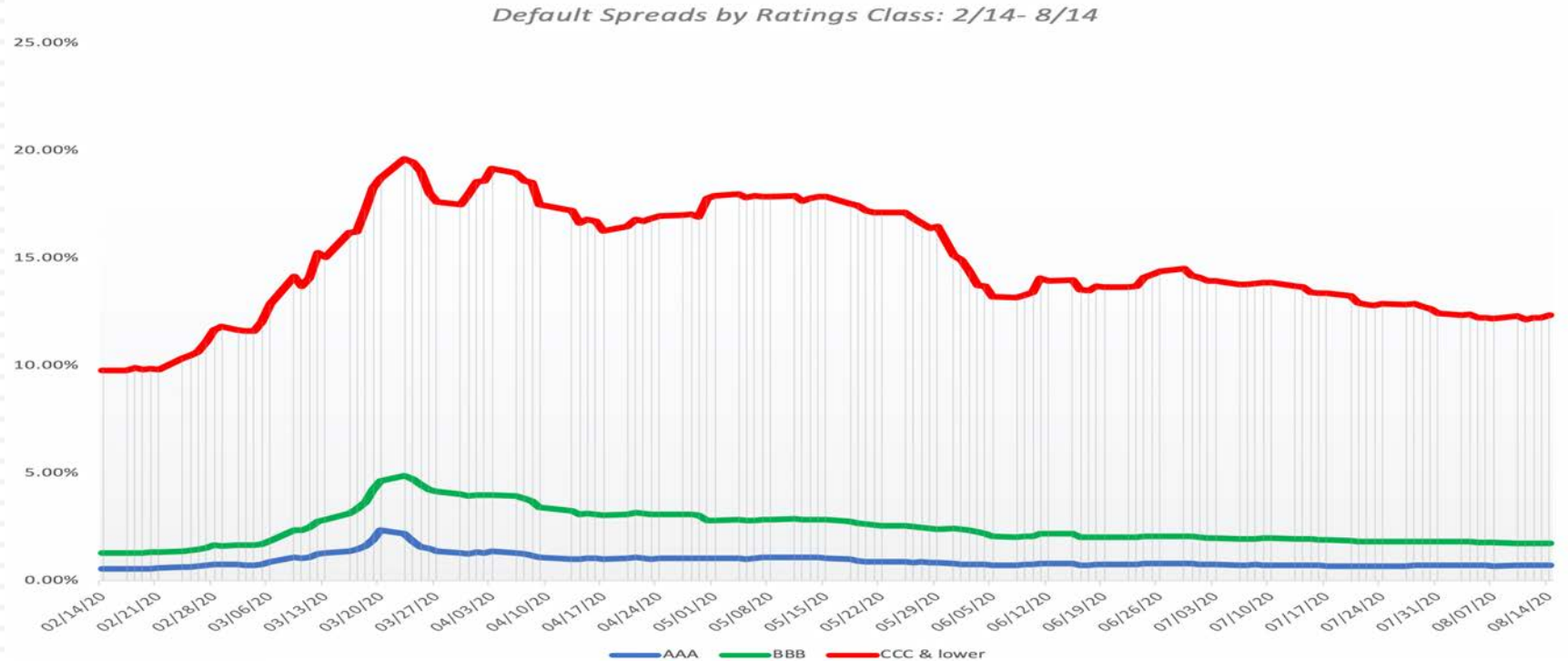
Market Overview: Equities

			Levels			% Change				
	Index	Country/Region	14-Feb	20-Mar	14-Aug	8/7-8/14	7/14-8/14	2/14-3/20	3/20-8/14	2/14 - 8/14
Americas	S&P 500	US	3374	2305	3373	-0.02%	0.64%	-31.68%	46.33%	-0.03%
	NASDAQ	US	9712	6880	11019	-0.21%	0.08%	-29.16%	60.17%	13.46%
	TSX	Canada	17848	11852	16515	-0.09%	-0.18%	-33.59%	39.34%	-7.47%
	IPC Mexico	Mexico	45000	34270	38950	0.87%	2.46%	-23.84%	13.66%	-13.44%
	iBovespa	Brazil	114381	67069	101353	0.89%	-1.38%	-41.36%	51.12%	-11.39%
Europe	FTSE 100	UK	7409	5191	6090	-1.55%	0.96%	-29.94%	17.32%	-17.80%
	DAX	Germany	13744	8929	12901	-0.71%	1.79%	-35.03%	44.48%	-6.13%
	CAC 40	France	6069	4131	4963	-1.58%	1.50%	-31.93%	20.14%	-18.22%
	S&P Europe 350	Europe	1731	1181	1463	-1.26%	1.33%	-31.77%	23.88%	-15.48%
Asia	Nikkei 225	Japan	23688	16553	23289	0.17%	4.30%	-30.12%	40.69%	-1.68%
	Shanghai 50	China	2895	2628	3289	1.44%	0.76%	-9.22%	25.15%	13.61%
	Hang Seng	Hong Kong	27816	22805	25183	-0.19%	2.66%	-18.01%	10.43%	-9.47%
	Sensex	India	41258	29916	37877	-1.13%	-0.43%	-27.49%	26.61%	-8.19%
Australia & NZ	ASX 200	Australia	7133	4825	6126	0.58%	2.02%	-32.36%	26.96%	-14.12%
	NZX 50	New Zealand	11835	9202	11452	-0.42%	-1.67%	-22.25%	24.45%	-3.24%
Africa	FTSE/JSE TOP 40	South Africa	52050	36302	52737	-0.65%	0.58%	-30.26%	45.27%	1.32%
	NSE-All Share	Nigeria	27756	22198	25200	-0.15%	0.63%	-20.02%	13.52%	-9.21%

Market Overview: Treasuries

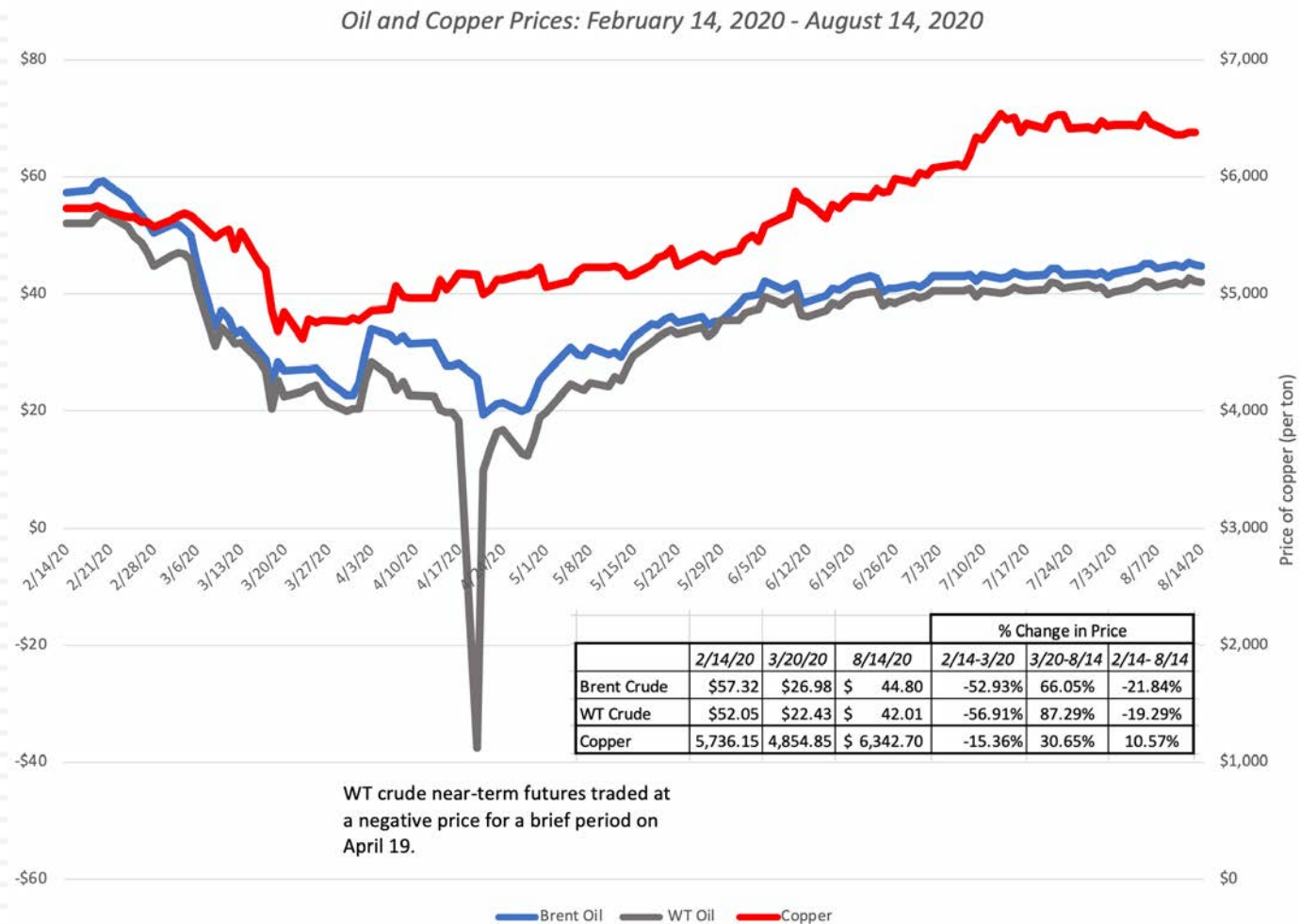


Market Overview: Corporate Spreads



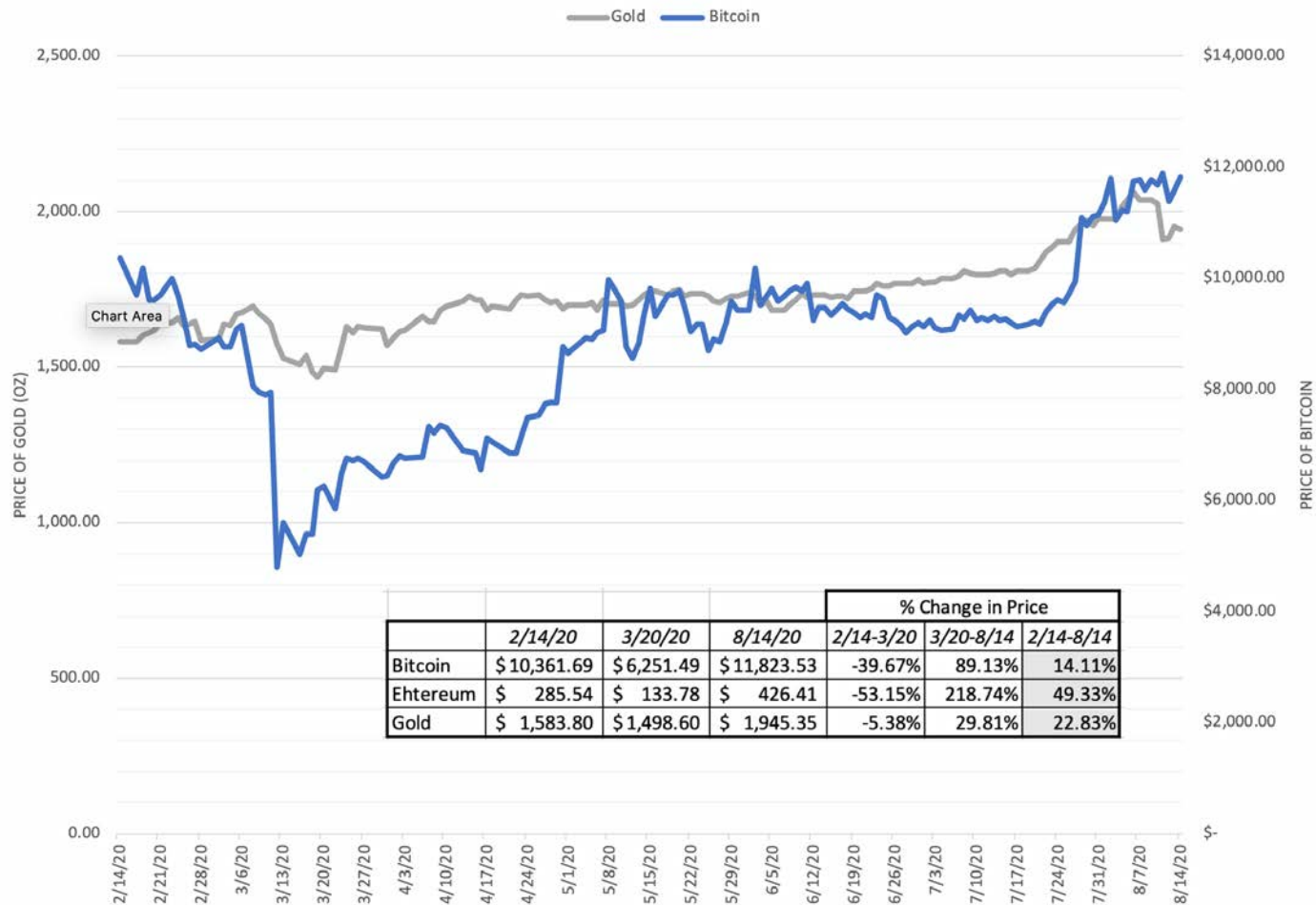
	Yields and Spreads on Corporates						Change in default spread		
	Spread over 10-yr Treasury			Yield on Corporate			2/14-3/20	3/20-8/14	2/14 -8/14
S&P Bond Rating	2/14/20	3/20/20	8/14/20	2/14/20	3/20/20	8/14/20			
AAA	0.69%	1.43%	0.74%	2.28%	2.35%	1.45%	0.74%	-0.69%	0.05%
AA	0.72%	2.64%	0.76%	2.31%	3.56%	1.47%	1.92%	-1.88%	0.04%
A	0.80%	3.15%	0.91%	2.39%	4.07%	1.62%	2.35%	-2.24%	0.11%
BBB	1.33%	3.73%	1.68%	2.92%	4.65%	2.39%	2.40%	-2.05%	0.35%
BB	1.93%	7.45%	3.42%	3.52%	8.37%	4.13%	5.52%	-4.03%	1.49%
B	3.40%	10.74%	5.11%	4.99%	11.66%	5.82%	7.34%	-5.63%	1.71%
CCC or lower	9.65%	17.81%	11.89%	11.24%	18.73%	12.60%	8.16%	-5.92%	2.24%

Market Overview: Commodities



Market Overview: Gold and Bitcoin

Price of Gold & Bitcoin: Feb 14, 2020 - August 14, 2020



Global Equities: By Region

Sub Region	Number of firms	Market Cap (\$ Millions)				\$ Change in Market Cap				% Change in Market Cap			
		2/14/20	3/20/20	5/22/20	8/14/20	2/14 - 3/20	3/20 - 5/22	5/22 - 8/14	2/14 - 8/14	2/14 - 3/20	3/20 - 5/22	5/22 - 8/14	2/14 - 8/14
Africa	844	\$ 580,467	\$ 363,856	\$ 416,477	\$ 455,329	\$ (216,611)	\$ 52,621	\$ 38,851	\$ (125,139)	-37.32%	14.46%	9.33%	-21.56%
Australia & NZ	1,665	\$ 1,613,977	\$ 948,950	\$ 1,258,699	\$ 1,540,230	\$ (665,027)	\$ 309,749	\$ 281,531	\$ (73,747)	-41.20%	32.64%	22.37%	-4.57%
Canada	2,496	\$ 2,229,440	\$ 1,353,166	\$ 1,763,631	\$ 2,097,775	\$ (876,274)	\$ 410,465	\$ 334,144	\$ (131,664)	-39.30%	30.33%	18.95%	-5.91%
China	6,348	\$ 13,996,094	\$ 12,396,026	\$ 13,033,689	\$ 16,162,756	\$ (1,600,069)	\$ 637,663	\$ 3,129,067	\$ 2,166,661	-11.43%	5.14%	24.01%	15.48%
EU & Environs	5,563	\$ 13,611,699	\$ 9,226,315	\$ 10,992,480	\$ 13,077,435	\$ (4,385,384)	\$ 1,766,165	\$ 2,084,956	\$ (534,264)	-32.22%	19.14%	18.97%	-3.93%
Eastern Europe & Russia	517	\$ 824,836	\$ 498,861	\$ 639,042	\$ 686,946	\$ (325,975)	\$ 140,181	\$ 47,904	\$ (137,890)	-39.52%	28.10%	7.50%	-16.72%
India	3,333	\$ 2,205,941	\$ 1,520,879	\$ 1,584,046	\$ 2,007,518	\$ (685,062)	\$ 63,167	\$ 423,472	\$ (198,423)	-31.06%	4.15%	26.73%	-8.99%
Japan	3,807	\$ 6,031,796	\$ 4,458,917	\$ 5,369,361	\$ 5,945,226	\$ (1,572,879)	\$ 910,445	\$ 575,865	\$ (86,570)	-26.08%	20.42%	10.73%	-1.44%
Latin America & Caribbean	1,215	\$ 2,424,762	\$ 1,414,848	\$ 1,577,197	\$ 1,877,563	\$ (1,009,915)	\$ 162,349	\$ 300,366	\$ (547,200)	-41.65%	11.47%	19.04%	-22.57%
Middle East	1,504	\$ 3,102,408	\$ 2,578,565	\$ 2,906,678	\$ 3,041,760	\$ (523,843)	\$ 328,112	\$ 135,082	\$ (60,648)	-16.89%	12.72%	4.65%	-1.95%
Small Asia	8,793	\$ 5,146,057	\$ 3,607,804	\$ 4,329,250	\$ 5,173,937	\$ (1,538,254)	\$ 721,446	\$ 844,687	\$ 27,879	-29.89%	20.00%	19.51%	0.54%
UK	1,261	\$ 3,067,659	\$ 1,922,892	\$ 2,332,401	\$ 2,631,288	\$ (1,144,767)	\$ 409,509	\$ 298,887	\$ (436,371)	-37.32%	21.30%	12.81%	-14.22%
United States	6,623	\$ 35,563,273	\$ 23,829,663	\$ 31,007,415	\$ 35,651,806	\$ (11,733,611)	\$ 7,177,752	\$ 4,644,391	\$ 88,533	-32.99%	30.12%	14.98%	0.25%
Global	43,970	\$ 90,398,411	\$ 64,120,740	\$ 77,210,365	\$ 90,349,568	\$ (26,277,671)	\$ 13,089,625	\$ 13,139,203	\$ (48,843)	-29.07%	20.41%	17.02%	-0.05%

Global Equities: By Sector

Primary Sector	Number of firms	Market Cap (\$ Millions)				\$ Change in Market Cap				% Change in Market Cap			
		2/14/20	3/20/20	5/22/20	8/14/20	2/14 - 3/20	3/20 - 5/22	5/22 - 8/14	2/14 - 8/14	2/14 - 3/20	3/20 - 5/22	5/22 - 8/14	2/14 - 8/14
Communication Services	2,094	\$ 7,318,018	\$ 5,480,236	\$ 6,692,664	\$ 7,600,357	\$ (1,837,783)	\$ 1,212,428	\$ 907,693	\$ 282,338	-25.11%	22.12%	13.56%	3.86%
Consumer Discretionary	5,961	\$ 10,161,829	\$ 7,074,627	\$ 8,957,811	\$ 11,227,438	\$ (3,087,202)	\$ 1,883,184	\$ 2,269,627	\$ 1,065,609	-30.38%	26.62%	25.34%	10.49%
Consumer Staples	2,853	\$ 7,165,378	\$ 5,727,389	\$ 6,488,812	\$ 7,453,394	\$ (1,437,989)	\$ 761,424	\$ 964,582	\$ 288,016	-20.07%	13.29%	14.87%	4.02%
Energy	1,673	\$ 5,935,002	\$ 3,851,638	\$ 4,740,250	\$ 5,008,071	\$ (2,083,364)	\$ 888,612	\$ 267,821	\$ (926,931)	-35.10%	23.07%	5.65%	-15.62%
Financials	4,887	\$ 14,952,738	\$ 9,946,720	\$ 10,750,668	\$ 12,561,583	\$ (5,006,018)	\$ 803,948	\$ 1,810,915	\$ (2,391,154)	-33.48%	8.08%	16.84%	-15.99%
Health Care	3,978	\$ 8,914,843	\$ 6,859,450	\$ 8,831,226	\$ 9,861,810	\$ (2,055,394)	\$ 1,971,777	\$ 1,030,584	\$ 946,967	-23.06%	28.75%	11.67%	10.62%
Industrials	7,589	\$ 10,111,374	\$ 6,886,933	\$ 8,106,858	\$ 9,780,741	\$ (3,224,441)	\$ 1,219,924	\$ 1,673,884	\$ (330,632)	-31.89%	17.71%	20.65%	-3.27%
Information Technology	5,589	\$ 13,593,741	\$ 9,731,172	\$ 12,616,961	\$ 15,171,759	\$ (3,862,569)	\$ 2,885,790	\$ 2,554,798	\$ 1,578,019	-28.41%	29.66%	20.25%	11.61%
Materials	5,738	\$ 4,987,456	\$ 3,522,367	\$ 4,327,783	\$ 5,297,134	\$ (1,465,089)	\$ 805,416	\$ 969,351	\$ 309,679	-29.38%	22.87%	22.40%	6.21%
Real Estate	2,674	\$ 4,051,571	\$ 2,707,513	\$ 3,069,197	\$ 3,472,740	\$ (1,344,058)	\$ 361,684	\$ 403,543	\$ (578,831)	-33.17%	13.36%	13.15%	-14.29%
Utilities	922	\$ 3,205,899	\$ 2,332,261	\$ 2,627,550	\$ 2,913,938	\$ (873,638)	\$ 295,289	\$ 286,388	\$ (291,961)	-27.25%	12.66%	10.90%	-9.11%
All	43,970	\$ 90,398,411	\$ 64,120,740	\$ 77,210,365	\$ 90,349,568	\$ (26,277,671)	\$ 13,089,625	\$ 13,139,203	\$ (48,843)	-29.07%	20.41%	17.02%	-0.05%

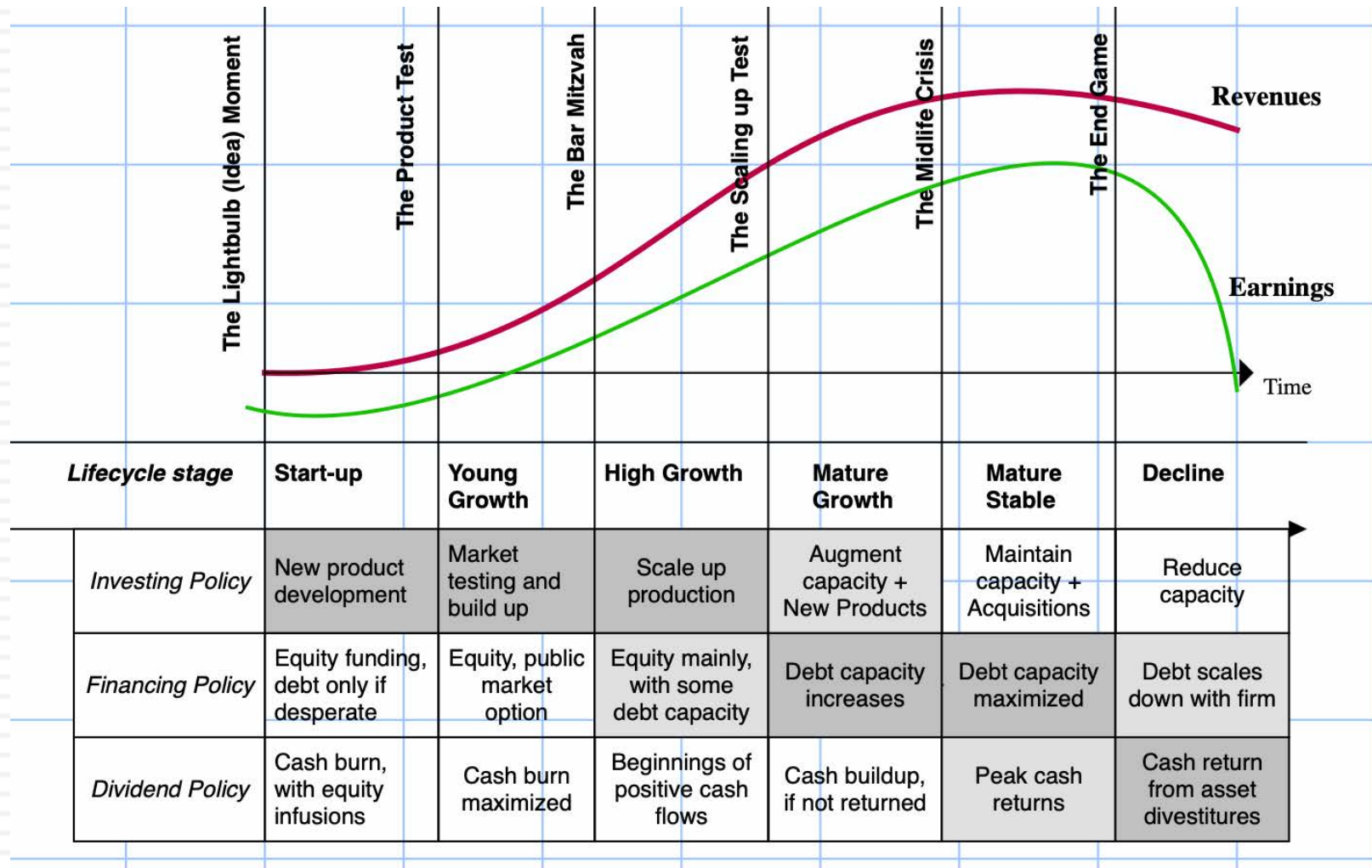
Global Equities: Industry Winners & Losers

Worst Performing Industries (% Return from 2/14- 8/7)									
Industry	Number of firms	Change in Aggregate Market Cap				% Change in Aggregate Market Cap			
		2/14-3/20	3/20-5/22	5/22-8/7	2/14-8/7	2/14-3/20	3/20-5/22	5/22-8/7	2/14-8/7
Air Transport	155	\$ (243,374)	\$ 20,939	\$ 39,895	\$ (182,540)	-43.54%	6.64%	11.86%	-32.66%
Oil/Gas (Production and Exploration)	493	\$ (374,502)	\$ 155,570	\$ 16,300	\$ (202,633)	-53.97%	48.70%	3.43%	-29.20%
Broadcasting	126	\$ (70,845)	\$ 17,460	\$ 8,691	\$ (44,694)	-42.85%	18.48%	7.76%	-27.03%
Reinsurance	34	\$ (82,379)	\$ 17,172	\$ 19,709	\$ (45,498)	-45.60%	17.47%	17.07%	-25.18%
Oil/Gas Distribution	186	\$ (289,376)	\$ 114,336	\$ 14,452	\$ (160,589)	-44.85%	32.13%	3.07%	-24.89%
Aerospace/Defense	213	\$ (545,975)	\$ 110,763	\$ 142,074	\$ (293,137)	-44.75%	16.43%	18.10%	-24.03%
Bank (Money Center)	629	\$ (2,193,580)	\$ 89,519	\$ 463,000	\$ (1,641,061)	-32.03%	1.92%	9.76%	-23.96%
Hotel/Gaming	570	\$ (315,790)	\$ 103,985	\$ 49,451	\$ (162,355)	-45.39%	27.37%	10.22%	-23.34%
Food Wholesalers	121	\$ (43,106)	\$ 13,828	\$ 8,262	\$ (21,016)	-46.15%	27.49%	12.88%	-22.50%
Beverage (Alcoholic)	205	\$ (274,413)	\$ 139,955	\$ 246,597	\$ 112,139	-23.87%	15.99%	24.29%	9.75%
Best Performing Industries (% Return from 2/14- 8/7)									
Industry	Number of firms	Change in Aggregate Market Cap				% Change in Aggregate Market Cap			
		2/14-3/20	3/20-5/22	5/22-8/7	2/14-8/7	2/14-3/20	3/20-5/22	5/22-8/7	2/14-8/7
Software (Internet)	110	\$ (59,988)	\$ 120,235	\$ 59,964	\$ 120,211	-26.49%	72.23%	20.92%	53.08%
Precious Metals	525	\$ (121,871)	\$ 185,862	\$ 135,869	\$ 199,859	-29.05%	62.45%	28.10%	47.64%
Retail (Online)	256	\$ (466,099)	\$ 644,043	\$ 787,747	\$ 965,691	-18.96%	32.34%	29.89%	39.29%
Healthcare Information and Technology	317	\$ (164,899)	\$ 219,572	\$ 186,953	\$ 241,626	-21.37%	36.19%	22.63%	31.32%
Education	193	\$ (42,983)	\$ 25,498	\$ 63,884	\$ 46,399	-22.13%	16.86%	36.15%	23.89%
Drugs (Biotechnology)	915	\$ (273,557)	\$ 408,636	\$ 195,823	\$ 330,901	-19.44%	36.05%	12.70%	23.52%
Computers/Peripherals	299	\$ (650,845)	\$ 450,965	\$ 640,234	\$ 440,354	-29.37%	28.81%	31.76%	19.87%
Entertainment	526	\$ (272,224)	\$ 239,920	\$ 230,123	\$ 197,819	-24.39%	28.44%	21.24%	17.73%
Transportation	242	\$ (132,944)	\$ 68,676	\$ 153,330	\$ 89,061	-24.26%	16.54%	31.69%	16.25%
Software (System & Application)	1,084	\$ (977,210)	\$ 906,354	\$ 600,756	\$ 529,900	-25.87%	32.37%	16.21%	14.03%

The FANGAM Stocks

	<i>Facebook</i>	<i>Amazon</i>	<i>Netflix</i>	<i>Google</i>	<i>Apple</i>	<i>Microsoft</i>
Founded in	Feb-04	Jul-94	Aug-97	Sep-98	Apr-76	Apr-75
IPO date	5/18/12	5/15/97	5/23/02	8/19/04	12/12/80	3/13/86
Mkt Cap at IPO (\$ millions)	\$ 80,000	\$ 438	\$ 300	\$ 23,000	\$ 1,800	\$ 780
<i>Mkt Cap Milestones (year reached)</i>						
\$100 billion	2012	2012	2018	2005	2007	1996
\$500 billion	2018	2017		2012	2012	1999
\$1 trillion		2018		2020	2018	2019
\$ 2 trillion					2020	
<i>Revenue Milestones</i>						
In 2000	NA	\$ 2,762	\$ 37	\$ 19	\$ 7,963	\$ 22,956
In 2010	\$ 1,974	\$ 34,204	\$ 2,163	\$ 29,321	\$ 65,225	\$ 62,484
In 2019	\$ 70,697	\$ 260,522	\$ 20,156	\$ 161,857	\$ 260,174	\$ 125,843

Corporate Life Cycle



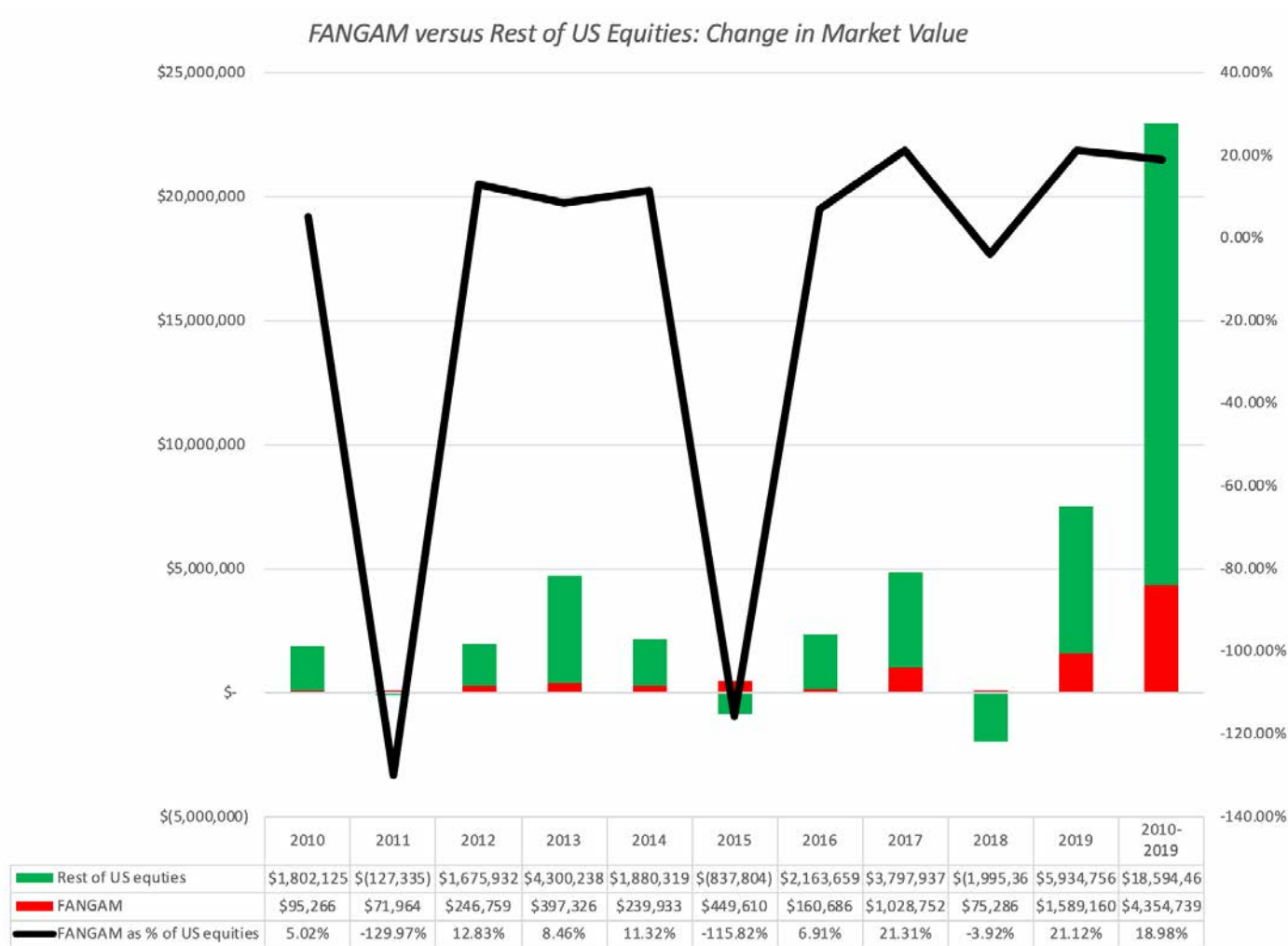
FANGAM: Exceptions to the rule?

- Amazon, the Original: After its stint as poster child for the dot com boom, Amazon's online retail business flirted with failure in 2001, but survived and prospered in the next decade. By 2010, though, it seemed like Amazon's story had run its course, but just as investors were readying for the company becoming a mature retailer, the company reinvented itself as a disruption platform, ready to go after any business it chose to, with an army (Amazon Prime) backing it up.
- Apple and Microsoft, the Reincarnation Duo: By tech company standards, Apple and Microsoft are old companies that should be struggling to hold on to their customers and fighting off competition. Both companies though seem to have found a way to move the clock back and retain their status as growth companies, Apple with the smart phone and Microsoft with Azure.
- Alphabet and Facebook, the Advertising Juggernauts: Google and Facebook have had almost uninterrupted growth, since their founding, taking advantage of the shift to online advertising and dominating that shift, while also delivering profit margins in the stratosphere.
- Netflix, the Shape Shifter: Of the six stocks, the one that has had to make the most mid-course corrections, changing its business model, from video rental company to content renter to content provider, to reflect a changing world, is Netflix. It started life as a video rental service, mailing DVDs to its customers, and undercutting Blockbuster, the dominant player in the business then.

The FANGAM stocks, in January 2010

- The Lagging Giant: At the start of 2010, Microsoft had a market capitalization in excess of \$270 billion, and was second only to Exxon Mobil, with a market cap of \$320 billion, but that represented a come down from its status as the largest market cap company at the start of 2000, with a market cap exceeding \$500 billion.
- The Rising Star: At the start of 2010, Apple's market cap was approaching \$200 billion, a quantum leap from its market cap of \$16 billion, ten years earlier.
- The Field of Dreams Company: By early 2010, Amazon had cemented its status as online retailer, capable of growing its revenues at the expense of its brick and mortar competitors, but without a clear pathway to profitability. The market seemed to be willing to overlook this limitation, giving the company a market cap of more than \$50 billion, a significant comeback from the dot-com bust days of 2001, when it was valued at less than \$4 billion.
- The New Tech Prototype: In January 2010, Google was already the prototype for the new tech model, reaching a hundred-billion dollar market cap threshold than any other company in history, with a market capitalization of more than \$160 billion in early 2010.
- On the cusp: In early 2010, it is unlikely that anyone would have put Netflix on the list of big-time winners, since its market capitalization was less than \$4 billion and its business model of renting content and signing up subscribers was already under strain.
- The glimmer in the market's eye: At the start of 2010, Facebook was still a private business, though venture capitalists were clearly excited about its prospects, pricing it at roughly \$14 billion in January 2010, based primarily on its user numbers.

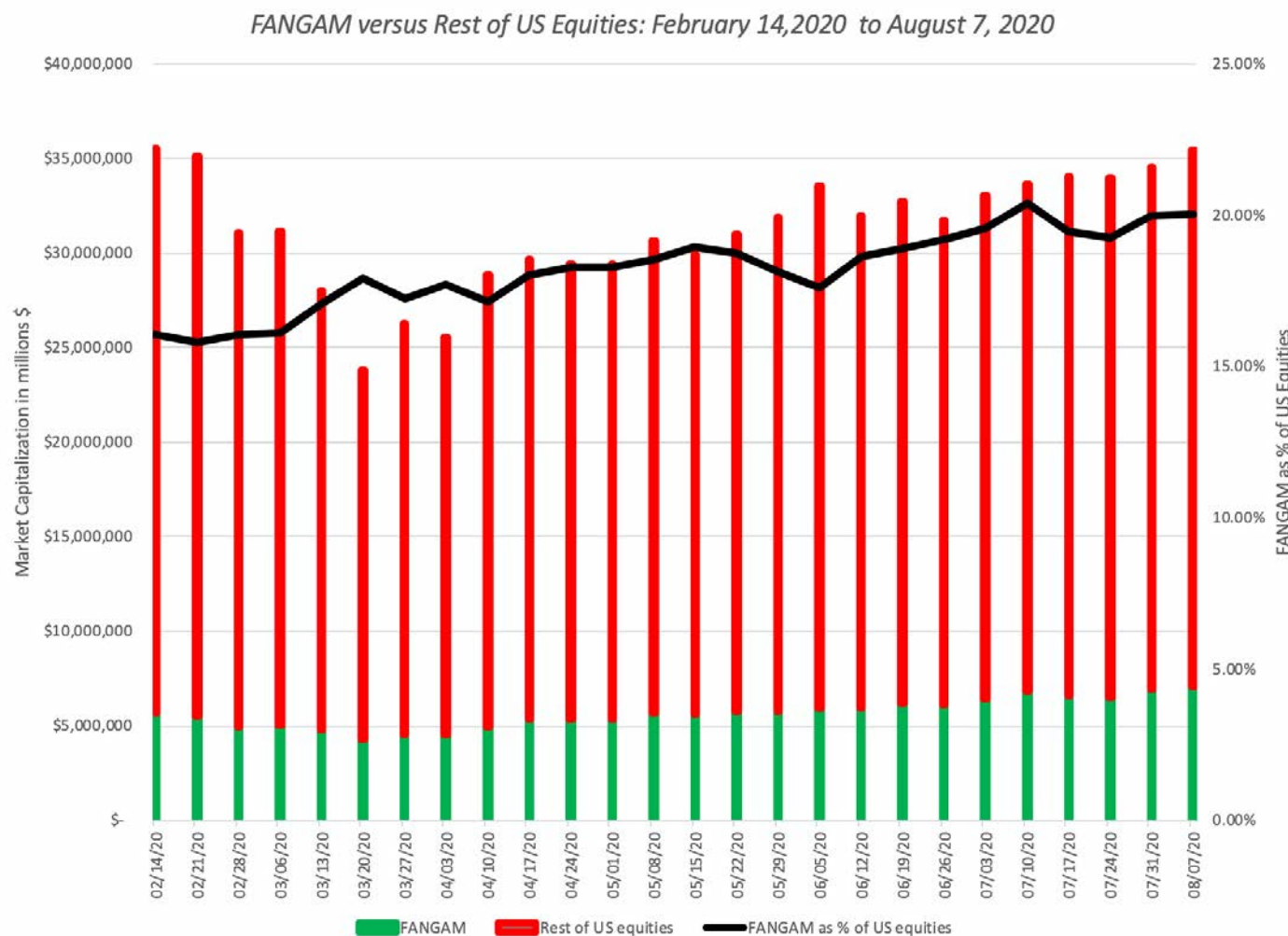
And its outsized role in the bull market



The COVID Crisis: Time for a reckoning?

- For many old-time value investors, the FANGAM stocks became a symbol of growth and momentum run amok, though the best investment made by a legendary member of this group (Warren Buffet) was in one of the companies (Apple).
- Between January 1, 2020 and February 14, 2020, the FANGAM stocks continued to rise more than the rest of the market and they collectively accounted for 16.08% of the market cap of all US equities on February 14, up from the 14.94% at the start of the year.
- When the crisis hit, there were some in this group who felt that the market correction would be felt disproportionately by this group, given their status as growth and momentum stocks.

The COVID test



The FANGAM Strengths

- Cash Machines: Each of these companies has a business or segment that is a cash machine, generating high profitability and huge amounts of cash for the company, iPhone for Apple, the online ad business for Facebook and Alphabet, the software and cloud businesses for Microsoft, the cloud business for Apple and subscription revenues for Netflix.
- Platform of users/subscribers: The FANMAG stocks also share user bases that are immense, with Facebook leading that numbers game with close to 2.7 billion users, many of whom spend large portions of each day in its ecosystem. Microsoft, Google and Apple all also have more than a billion users apiece, using multiple ways to entangle them. Amazon and Netflix may not be able to match the other four companies on sheer numbers, but each has hundreds of millions of users.
- Proprietary and Actionable Data: What sets the FANMAG companies apart is that they use big data to create value, partly because the data that they collect is **proprietary** (Facebook from your posts, Amazon/Alexa from your shopping/interactions, Netflix from your watching habits, Google from your search history and Apple from your device usage) and actionable.

The COVID crisis and Backlash..

- Each of these strengths has contributed to helping these companies not just ride out the COVID storm, but also emerge stronger from it.
 - ▣ The cash machines embedded in each company, combined with light debt loads (relative to their earnings and valuations), have left them unscathed, while their debt-laden competitors are hamstrung by default and distress concerns.
 - ▣ The economic shut down has left people home-bound and more dependent than ever before on the FANGAM companies to get through the day.
- In fact, it is the fact that these companies are doing so well that is giving rise to the biggest threat to their continued success, which is regulatory and legal pushback.
 - ▣ With Facebook and Google, this is already a reality, especially in the aftermath of the privacy debates and worries about their platforms being used for political influence.
 - ▣ Amazon's disruption of retail has long been a source of concern for critics, but voices pushing for the use of legal restraints on the company are growing louder.
 - ▣ Apple operated under the radar of political and legal scrutiny for a long time, but [recent attempts to force app sellers to sell only through its App Store](#), have drawn calls for restrictions.
 - ▣ While Microsoft is now viewed as the most virtuous of the six, and is in fact [the most widely held stock in ESG portfolios](#), I am old enough to remember when Microsoft was viewed as the Darth Vader of technology and [targeted by the Justice department for breakup](#), because of its monopoly power.

Valuing the FANGAM Stocks

Company	Base Year Numbers	Valuation Story	Valuation Inputs	Value per Share (Simulation)		Pricing per share	
Facebook	Revenues = \$75 B	User Base pays off: Immense & Intense user base allows for continued ad growth & new business potential.	Rev Growth = 10%	10th:	\$ 267.77		
	EBIT = \$27.9 B		Target Margin = 40%	25th:	\$ 293.89	Price =	\$262.59
	Oper. margin = 44.3%		Sales to capital = 2.64	Median:	\$ 327.68	Under/Over =	Under valued
	Rev Growth (LTM) = 13.02%		Cost of capital = 6.08%	75th:	\$ 364.79	% under/over	-19.86%
				90th:	\$ 398.85	IRR	7.16%
Amazon	Revenues = \$ 322 B	Disruption Platform rolls on: Continue to expand into new businesses, delaying profitability to deliver higher growth.	Rev Growth = 20%	10th:	\$1,479.65		
	EBIT = \$16.7 B		Target Margin = 12%	25th:	\$ 1,969.46	Price =	\$3,260.48
	Oper. margin = 7.99%		Sales to capital = 1.94	Median:	\$ 2,778.22	Under/Over =	Over valued
	Rev Growth (LTM) = 31.58%		Cost of capital = 6.11%	75th:	\$ 3,617.74	% under/over	17.36%
				90th:	\$ 4,295.58	IRR	5.77%
Netflix	Revenues = \$ 22.6 B	Streaming Player: Wiith new competitors, will continue to add subscribers, but struggle to control content costs.	Value/Existing Subscriber = \$446.	10th:	\$ 312.79		
	# Subscribers = 192.3 mil		Growth in Subscribers = 12%	25th:	\$ 372.49	Price =	\$484.53
	Growth in LTM = 27.3%		Growth in Content Costs = 5%	Median:	\$ 445.53	Under/Over =	Over valued
	Cost/New Subscriber = \$103		Cost of capital (Existing)= 6.5%	75th:	\$ 519.34	% under/over	8.75%
	Content Cost = \$9.95 B		Cost of capital (New) = 7.5%	90th:	\$ 585.58	IRR	6.16%
Google/ Alphabet	Revenues = \$166 B	More than a Search Engine: While the search box will continue to be the money-maker, other bets will start to pay off in growth.	Rev Growth = 8%	10th:	\$ 1,165.57		
	EBIT = \$33.4 B		Target Margin = 24%	25th:	\$ 1,267.31	Price =	\$1,544.61
	Oper. margin = 23.8%		Sales to capital = 2.64	Median:	\$ 1,406.96	Under/Over =	Over valued
	Rev Growth (LTM) = 5.22%		Cost of capital = 6.25%	75th:	\$ 1,551.26	% under/over	9.78%
				90th:	\$ 1,676.02	IRR	5.87%
Apple	Revenues = \$274 B	Cash Machine revs up: The iPhone will keep the cash machine going up, but services business will be growth driver.	Rev Growth = 8%	10th:	\$ 285.67		
	EBIT = \$52.6 B		Target Margin = 26%	25th:	\$ 312.28	Price =	\$462.83
	Oper. margin = 25.9%		Sales to capital = 4.00	Median:	\$ 350.22	Under/Over =	Over valued
	Rev Growth (LTM) = 7.07%		Cost of capital = 6.58%	75th:	\$ 390.66	% under/over	32.15%
				90th:	\$ 425.04	IRR	5.30%
Microsoft	Revenues = \$143 B	Old company Reborn: Cloud/software business mix will continue to deliver growth with high margins.	Rev Growth = 12%	10th:	\$ 143.98		
	EBIT = \$52.6 B		Target Margin = 40%	25th:	\$ 157.81	Price =	\$209.70
	Oper. margin = 40.1%		Sales to capital = 1.44	Median:	\$ 176.66	Under/Over =	Over valued
	Rev Growth (LTM) = 13.65%		Cost of capital = 7.11%	75th:	\$ 196.77	% under/over	18.70%
				90th:	\$ 214.83	IRR	6.32%

Action Time!

- In the interests of full disclosure, at the time that I started on this post, I owned three of these six stocks, Apple, Facebook and Microsoft, with each having spent significant time in my portfolio; my posts detailing their acquisitions are [here](#), [here](#) and [here](#).
- After my valuations,
 - ▣ I did sell my Apple holdings today (August 19, 2020) as the company crested the \$2 trillion mark.
 - ▣ I will continue to hold Microsoft, even though I believe that it is moderately overvalued, and Facebook, hoping for more upside.
 - ▣ Google and Netflix will remain on my watch list, and I plan to add either stock, on weakness.
 - ▣ I will not tempt fate, and sell short on Amazon, partly because I have seen what the market does to Amazon short sellers and partly because I struggle to think of a catalyst that will cause the price to adjust.