TECH TAKEDOWN: COME EASY, GO EASY!

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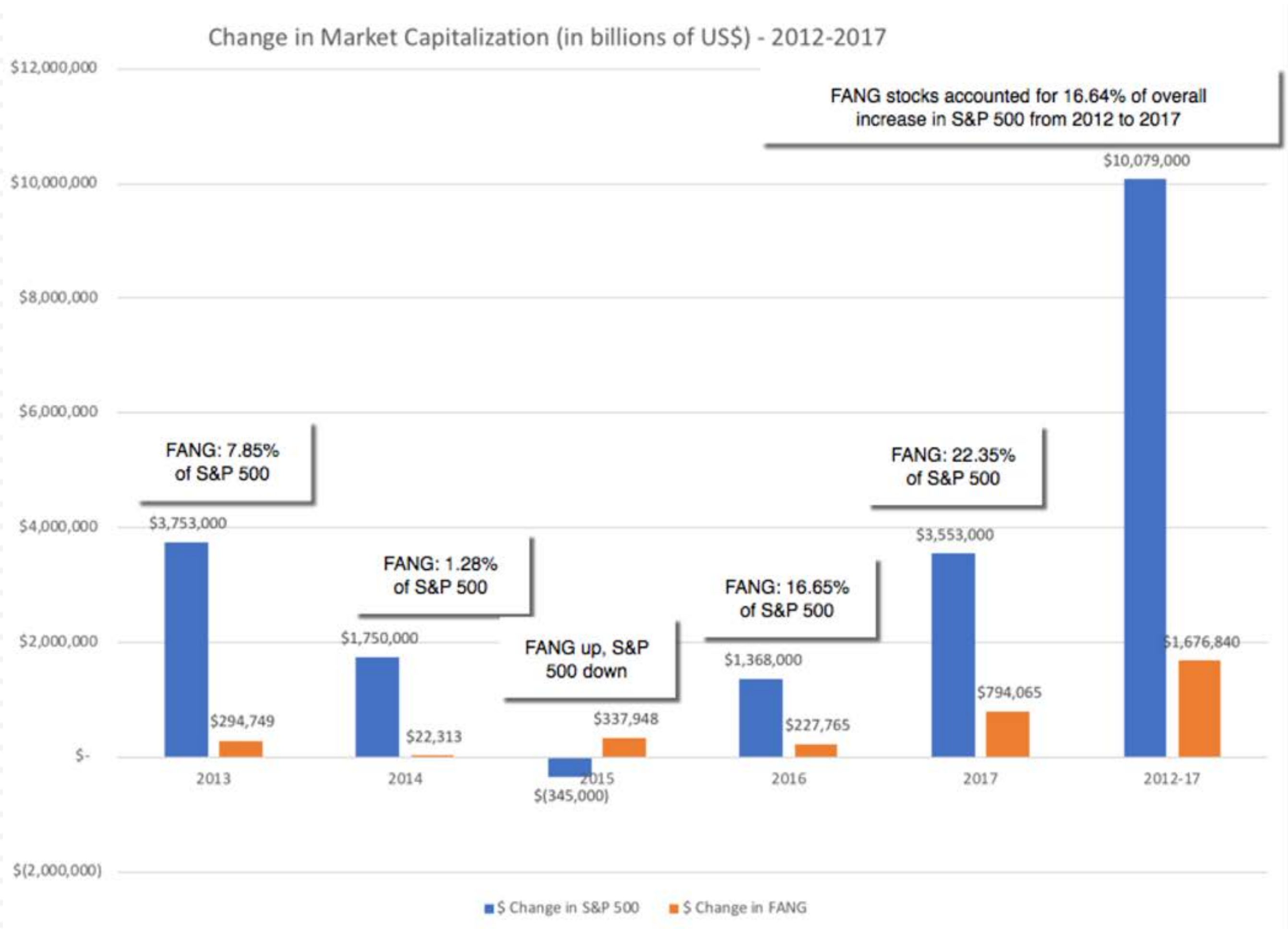
Change in the air?

- The last three weeks have been humbling ones for tech companies, especially the big four (Facebook, Amazon, Netflix and Alphabet or FANG) which seemed unstoppable in their pursuit of revenues and ever-rising market capitalizations, and for tech investors, many of whom seem to have mistaken luck for skill.
- Some of the cheerleaders who were just a short while ago telling us that nothing could go wrong with these companies are in the midst of a mood shift, where they are convinced that nothing can go right with them.

The Rise of FANG: From 2012 to 2017

Date	S&P 500	Google (2006)	Amazon (2005)	Facebook (2013)	Netflix (2010)	FANG	FANG as % of S&P 500
12/31/12	$12,742,000	$248,461	$123,985	$ 70,821	$ 9,228	$ 452,495	3.55%
12/31/13	$16,495,000	$398,788	$164,734	$159,537	$ 24,185	$ 747,244	4.53%
12/31/14	$18,245,000	$359,747	$164,638	$218,323	$ 26,849	$ 769,557	4.22%
12/31/15	$17,900,000	$478,168	$278,364	$310,558	$ 40,415	$1,107,505	6.19%
12/31/16	$19,268,000	$500,588	$394,840	$378,530	$ 61,312	$1,335,270	6.93%
12/31/17	$22,821,000	$752,662	$692,249	$560,927	$123,497	$2,129,335	9.33%

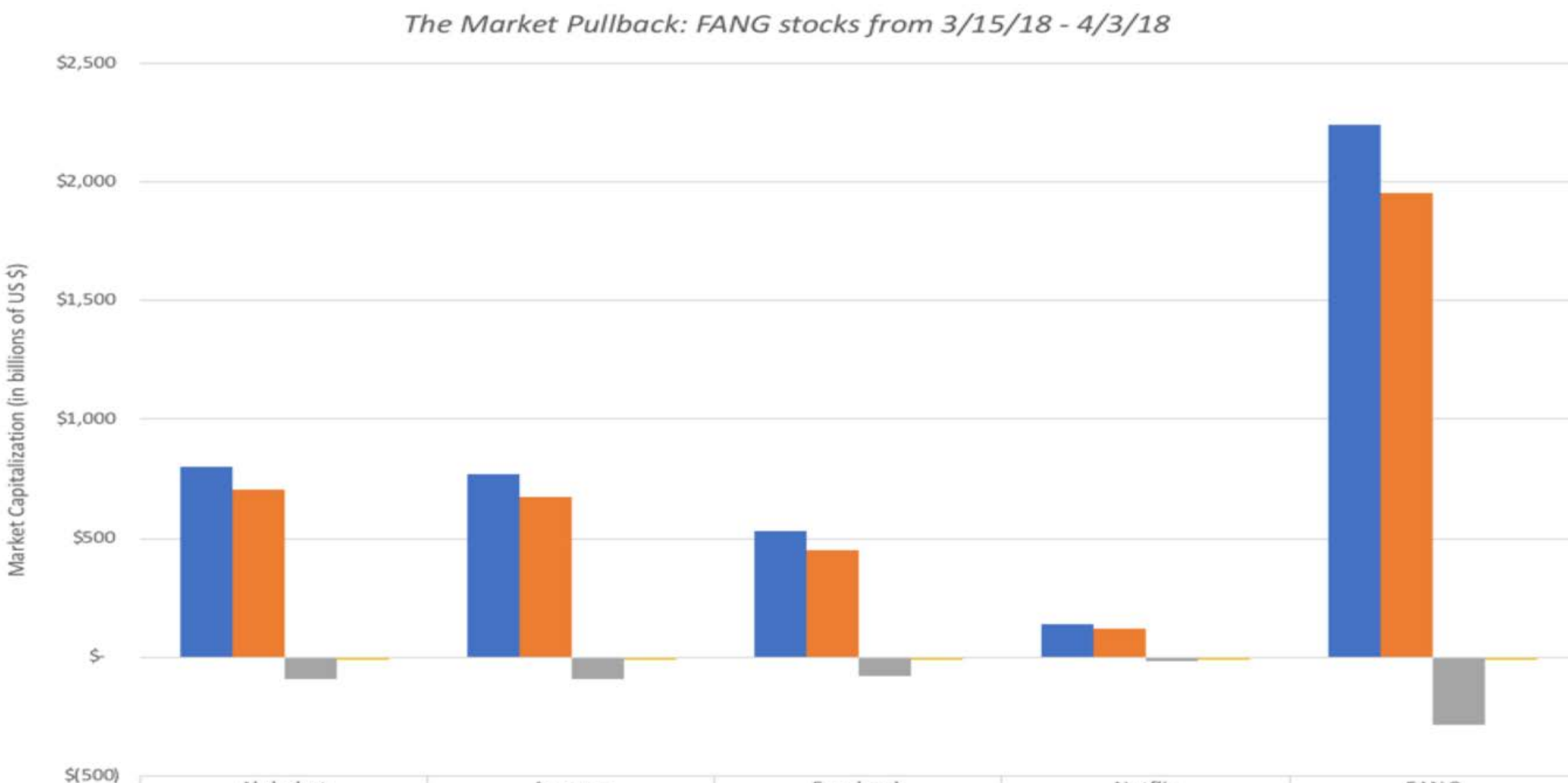
FANG and the S&P 500: Change in Value



Some perspective on the rise of FANG

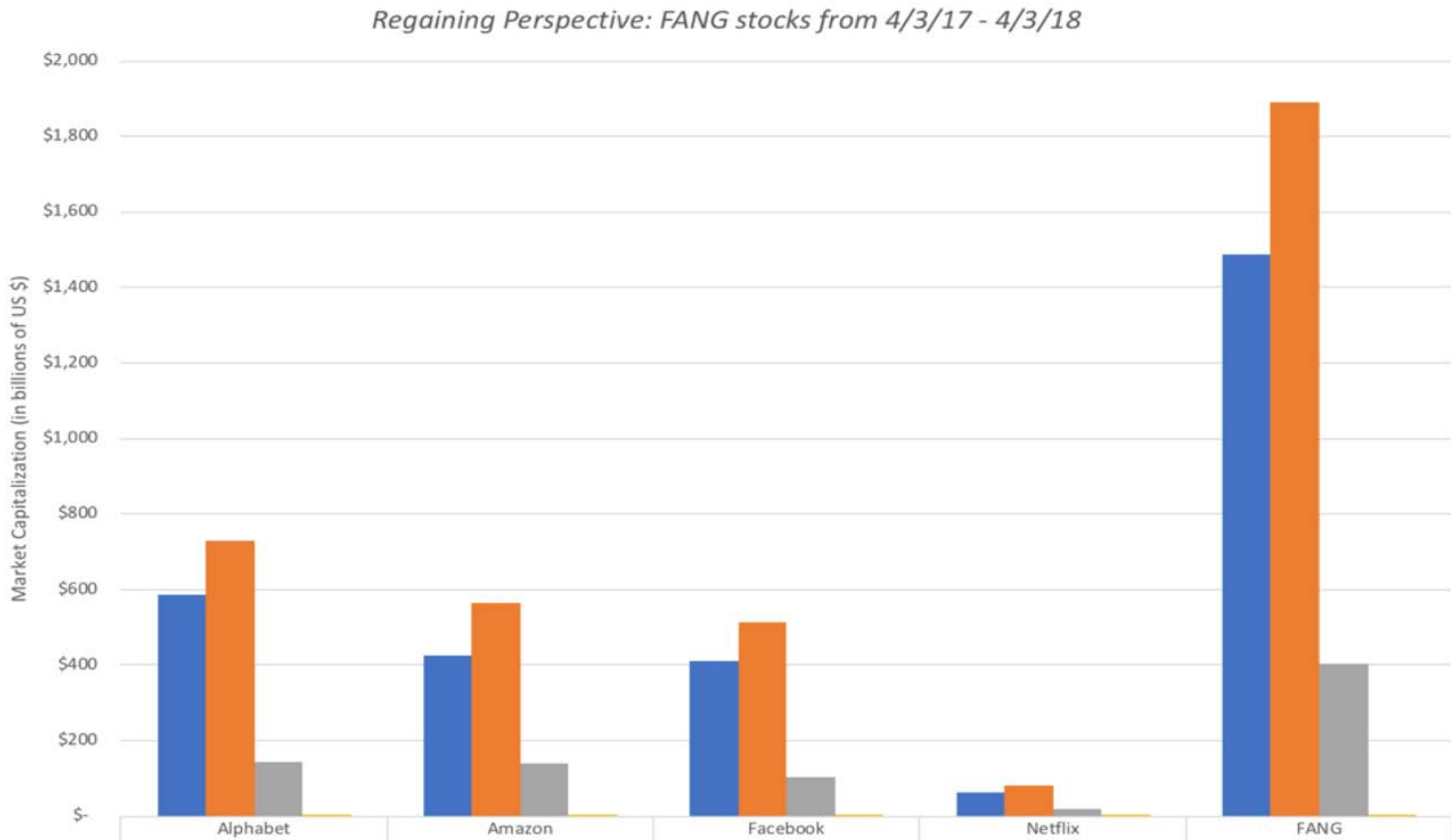
- The four companies that comprise FANG added almost $1.7 trillion in market capitalization over these five years and accounted for one-sixth of the increase in value for the entire index.
- Put simply, if you were a large-cap US portfolio manager and you held none of these stocks between 2013-2017, it would have been very, very difficult, if not impossible, to beat the S&P 500 over this period.
- Alternatively, if you had one or more of these stocks in your portfolio over the entire five-year period, your odds of beating the market went up dramatically.

A Reversal in Fortunes: March 15, 2018 – April 2, 2018



	Alphabet	Amazon	Facebook	Netflix	FANG
3/15/18	$800	$766	$534	$139	$2,239
4/3/18	$706	$674	$453	$123	$1,957
$ Change	$(93)	$(92)	$(81)	$(16)	$(282)
% Change	-11.66%	-12.02%	-15.09%	-11.65%	-12.60%

Here's some perspective



	Alphabet	Amazon	Facebook	Netflix	FANG
4/3/17	$586	$425	$411	$63	$1,486
4/3/18	$729	$564	$513	$83	$1,889
$ Change	$143	$138	$102	$20	$403
% Change	24.47%	32.47%	24.70%	31.36%	27.12%

The FANG Story Line

- Scaling Success: Each of these companies has been able to keep revenue growing rapidly, even as they scale up and acquire larger market share.
- Bigger Slice of a Bigger Pie: They have changed the businesses that they have entered, increasing the size of the total market by attracting new customers, while also changing the way business is run to their benefit.
- Profitability: Google and Facebook are money machines. Amazon and Netflix don’t look as good on the surface, but capitalizing some of their mis-categorized operating expenses makes them look better.

1. Scaling Success

	Facebook Revenues		Amazon Revenues		Netflix Revenues		Alphabet Revenues		FANG Revenues	
2012	$ 5,089		$ 61,093		$ 3,609		$ 46,039		$ 115,830	
2013	$ 7,872	54.69%	$ 74,452	21.87%	$ 4,375	21.22%	$ 55,519	20.59%	$ 142,219	22.78%
2014	$ 12,466	58.36%	$ 88,988	19.52%	$ 5,505	25.83%	$ 66,001	18.88%	$ 172,961	21.62%
2015	$ 17,928	43.82%	$ 107,006	20.25%	$ 6,780	23.16%	$ 74,989	13.62%	$ 206,704	19.51%
2016	$ 27,638	54.16%	$ 135,987	27.08%	$ 8,831	30.25%	$ 90,272	20.38%	$ 262,729	27.10%
2017	$ 40,653	47.09%	$ 177,866	30.80%	$ 11,693	32.41%	$ 110,855	22.80%	$ 341,068	29.82%

2. Bigger Pie + Bigger Slice

- <u>Make businesses bigger</u>: Each of these companies has made the business they have entered bigger by drawing in new customers and users.
  - With Google and Facebook, that business is advertising, and with Netflix, it is entertainment.
  - With Amazon, it is just about any business it enters, from retailing to entertainment to cloud services.
- <u>Change them to their advantage</u>: They have also changed the way the business is run to their advantage, thus claiming a larger share of the business.

3. Profitability

	Operating Income					Operating Margin				
	Facebook	Amazon	Netflix	Alphabet	FANG	Facebook	Amazon	Netflix	Alphabet	FANG
2012	$ 538	$ 676	$ 50	$ 13,634	$ 14,898	10.57%	1.11%	1.39%	29.61%	12.86%
2013	$ 2,921	$ 745	$ 228	$ 15,403	$ 19,297	37.11%	1.00%	5.21%	27.74%	13.57%
2014	$ 4,994	$ 178	$ 403	$ 16,874	$ 22,449	40.06%	0.20%	7.32%	25.57%	12.98%
2015	$ 6,225	$ 2,233	$ 306	$ 19,360	$ 28,124	34.72%	2.09%	4.51%	25.82%	13.61%
2016	$ 12,427	$ 4,186	$ 380	$ 23,716	$ 40,709	44.96%	3.08%	4.30%	26.27%	15.49%
2017	$ 20,203	$ 4,106	$ 839	$ 28,882	$ 54,030	49.70%	2.31%	7.18%	26.05%	15.84%

The Roots of Success

- Centralized Power: These companies are more corporate dictatorships, than corporate democracies. All four of these companies continue to be run by founder/CEOs, whose visions and narratives have focused these companies.
- Big Data: You can argue that what Google learns from our search behavior, Facebook from our social media interactions, Netflix from our video watching choices and Amazon from our shopping carts (and Alexa) is central to these companies being able to scale up successfully and change the businesses they are in.
- Intimidation Factor: There is one final intangible in the mix and that is the perception that these companies have created in regulators, customers and competitors that they are unstoppable.

Has the story changed?

- CEO heads cannot roll: Unlike traditional companies facing crises, where CEOs can be offered by a board of director as a sacrificial offering to calm investors, regulators or politicians, the FANG companies and their CEOs are so intertwined, with power entrenched in the current CEOs, this option is off the table.
- The Dark Side of Sharing The recent news stories about how the data that Facebook has accumulated on us was used has pushed some of us out of denial and perhaps into a reassessment of how we share data and how that data is used. It has also created a firestorm about data sharing and privacy that may result in restrictions in how the data gets used.
- No Friends: When other companies feel threatened by your success and growth, it should come as no surprise that many of them are cheering, as you stumble.

Three Scenarios

1. Sharing Pull Back: It is possible that the news stories about how exposed we have left ourselves, as a consequence of our sharing, will lead us to all to reassess how much and how we interact online.
2. Tempest in a teapot: The story will blow over and that not only will the companies revert back to their old ways, but that they will continue to accumulate users and grow revenues, while doing so.
3. Data Protections: There may be new restrictions on how the data that is collected from their usage is utilized by the companies. That would include not only privacy restrictions, similar to those already in place in the EU, but also regulations on how the data is collected, stored and shared. In addition, the companies themselves may feel pressure to change current business practices, which while profitable, have left data vulnerabilities.

The Bottom Line (to be continued)

- Sharing genie is out of the bottle: I think that we are too far gone down the sharing road to reverse field, and that while we will have a few high profile individuals signal their displeasure by abandoning (or claiming to abandon) a platform, most of us are too attached to these firm's products/services
- Bu there will be changes: There are changes coming to these firms, from within and without, that will increase costs and crimp revenue growth, and through those changes, the value.
- Buy, sell or sit on your hands: The only way to answer is to value each of these companies and I will in the next posts/sessions.