

## Fueling the FANGs: The Future Is All About 'Personalization'

Michael Lippert, Portfolio Manager of Baron Opportunity Fund, discusses how FANG companies use data to drive continuous improvements, which, in turn, drives growth.

Since a massive breakout year in 2015, the group of stocks known as FANG -- Facebook, Amazon, Netflix, and Google (now called Alphabet) -- has been a hotly-debated topic among investors. They averaged returns of 83% between them in 2015 and posted another solid year, albeit without the same degree of outperformance, in 2016. As of early September, 2017 has been more of the same, with all four comfortably pacing ahead of the broader market. The continued strength of these household names fosters natural questions about whether they are becoming overvalued or if the growth stories being priced into the shares have run their course.

When looking at investments, it is very difficult to predict what is going to happen next from a macro, political, or economic point of view. What we can do is identify and endeavor to capitalize on the big trends shaping growth. Cloud computing, digital advertising and e-commerce are a few examples of seismic trends that have meaningful investment impact. The very best companies in these spaces, ones that have massive growth opportunities, sustainable competitive advantages, and great management teams, will reap the biggest rewards, in our view.

Perhaps most importantly in this new era, digital services get better the more they are used. Consider the digital services that infuse our lives today. Log into or open the app for Facebook, Instagram, Amazon or Netflix. What you see is personalized for you. Amazon shows you the products it thinks you might want to buy. Facebook and Instagram show you posts from your friends or on the topics you are most interested in. Even on Netflix, each family member can have his or her own profile, personalized for each individual, not just the family. Now turn on your cable box. The guide you see is the same for everybody. Flip to ESPN -- what you see is what everybody sees. Same for CBS or HBO. Grab

today's paper -- you choose the New York Times or the Wall Street Journal. That's right, same articles in each copy. If you read on an iPad, open one of the apps -- they are digital and connected, but still the same articles. The big advancements are "Most Popular" or "Most Read" -- an improvement, but not personalized to what you want to read.

For each of the FANGs, improving personalization for users and customers is critical to future growth and opportunities:

Facebook tracks your engagement to learn what content and ads you prefer in your news feed.

Amazon continues to benefit from its flywheel strategy, where more participation from Prime members drives greater loyalty and purchasing on Amazon.com. Professor Scott Galloway of NYU has posited that pretty soon Amazon may send two boxes a week – one containing the products it thinks you want and one in which you can return the ones you don't. One day Amazon's personalized predictions might get so precise that only a single box will arrive at your door!

Netflix tracks everything you watch and learns what types of movies and shows you like and makes more precise recommendations each time you sign on.

Google has occupied the virtuous cycle of more searches, better tuned algorithms, more relevant results, more searches.

In the analog world, the moment you take a product out of the store it begins to lose value and, over time, decline in usefulness. In today's "big data" era, more use and users yield more data, which can be captured and analyzed to improve the service. Those improvements fuel the continued growth of these FANG businesses.

Because of the criticality of these direct and persistent relationships with users and the importance and value of the data these connections provide, we live in a world where strength begets strength and scale begets scale. Because of this, we believe that for many of the

critical vertical tech themes in which we invest, it is a "winner take all" or "winner take most" paradigm. We

think the FANGs remain well positioned to dominate this paradigm over the long-term.

Investors should consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The prospectus and summary prospectus contains this and other information about the Funds. You may obtain them from its distributor, Baron Capital, Inc., by calling 1-800-99BARON or visiting www.BaronFunds.com. Please read them carefully before investing.

Baron Opportunity Fund portfolio holdings as a percentage of net assets as of June 30, 2017 for securities mentioned are as follows: Alphabet, Inc. – 4.2%; Amazon.com, Inc. – 6.5%; Facebook, Inc. – 2.2%; Netflix, Inc. – 2.0%.

Portfolio holdings may change over time.

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