



5 Important Facts About Big Tech & Antitrust

Alec Stapp, Director of Technology Policy at the Progressive Policy

Thank you for inviting me to testify today. It is a great privilege to be able to share my thoughts with this esteemed committee.

Throughout the long pandemic shutdown, Big Tech has supplied the products and services that allow many Americans to keep working remotely and to stay in touch with family and friends while socially distancing. Our connectedness is one of the few bright spots in this ordeal.

That is important context to keep in mind when making major changes to our laws. Before we upend decades-old statutes, common law evolution, and economic learning, we should be confident that our current laws are failing us. In regard to Big Tech and antitrust, we have reached a point where perception outweighs substance. On the merits, Big Tech companies are engaged in intense competition to deliver ever-improving products and services for consumers. As I'll share today, the data on prices, output, R&D investment, and capital expenditures show that the tech sector is arguably the healthiest of our economy.

Changes to New York State's antitrust laws, while laudable in their intentions, would actually make American consumers worse off in the long run. The urge to follow the European Union standard is misguided, as the EU's regulatory and competition framework has failed to produce a tech sector close to the size of the US. Rather, EU regulators and legislators should be asking what about the US system is worth copying so that they can create a vibrant tech sector that produces more innovative products for consumers and high-paying jobs for workers.

Here are five points I hope you consider during this legislative process:

1. Big Tech companies aren't monopolies

There is a difference between the layperson's use of "monopoly" and the technical meaning of the term. In casual commentary, "monopoly" is often used interchangeably with "large" or "dominant" when describing a company. But the term has a much more precise legal definition, and future court cases will hinge on its technical rather than colloquial meaning. According to [DOJ guidelines](#), a company has monopolized a market when it has "maintained a **market share in excess of two-thirds** for a significant period and market conditions (for example, barriers to entry) are such that the firm's market share is unlikely to be eroded in the near future." The tech companies are not above that threshold:

- Amazon has [38%](#) of the US e-commerce market, including first party sales and sales from third parties on the Amazon Marketplace.
- Apple has [58%](#) of the US smartphone operating system market.
- Google has [29%](#) of the US digital advertising market

- Facebook has [23%](#) of the US digital advertising market.

Amazon is actually a surging competitor in digital advertising, and has an estimated [10%](#) market share this year. It is deeply ironic that multiple Big Tech companies have been accused of monopolizing the advertising market at the same time. In reality, the largest player — Google — has less than a third of the market. The second largest — Facebook — has less than a quarter of the market. And Amazon is nipping at their heels.

Critics of Big Tech often try to define arbitrarily narrow markets to show a market share in excess of two thirds. That's why you'll hear that Google has "[89-93%](#)" of the US digital *search* advertising market or a large share of the "US digital *display* advertising market" or the "US digital *video* advertising market." What these critics fail to show is why these should be distinct antitrust product markets. Advertisers maximize return on investment. If prices increase in one advertising channel, they likely substitute that spending to other channels. If anything, the [simultaneous](#) rise of digital advertising and fall of print advertising — while other advertising channels have remained flat — suggests that "US digital advertising" might be too *narrow* of a market. It seems that advertisers are substituting digital advertising for print advertising. A good rule of thumb in antitrust is that the more adjectives someone tries to use to define a market, the less likely it has any relation to economic reality.

2. Big Tech benefits consumers

Next, let's look at consumer harm. According to [DOJ guidelines](#), an antitrust enforcer must show that a company has used its monopoly power to "**harm society by making output lower, prices higher, and innovation less** than would be the case in a competitive market." But prices in digital markets have been falling (or at zero) for years.

- The price of digital advertising has [fallen](#) more than 40% in the last decade (while the price of print advertising has increased 5% over the same period).
- The price of books has [fallen](#) more than 40% since 1997, the year Amazon [went public](#).
- Social media and messaging apps are priced at zero.
- Apple's 30% App Store "tax" is actually the going rate for platform commissions (and once you account for the revenue generated by free apps, effective app store commission rates are in the range of [4-7%](#)).

While the prices for these services are low or even zero, consumers value them a great deal. Research has [shown](#) that, on average, consumers value search engines at \$17,530 per year, email at \$8,414 per year, digital maps at \$3,648 per year, and social media at \$322 per year. Again, the price to access these services is typically zero.

3. Big Tech invests in innovation

But what about innovation? It's a hard thing to measure directly. One proxy variable we can look at is spending on research and development (R&D). A complacent incumbent harvesting monopoly rents tends not to invest much in the future. By contrast, in a competitive

marketplace, even the dominant firms are nervous they will be unseated by nascent or potential competitors. To prevent that from happening, they invest in the next generation of technology that will benefit consumers.

Tech companies lead in R&D spending (billions of USD)

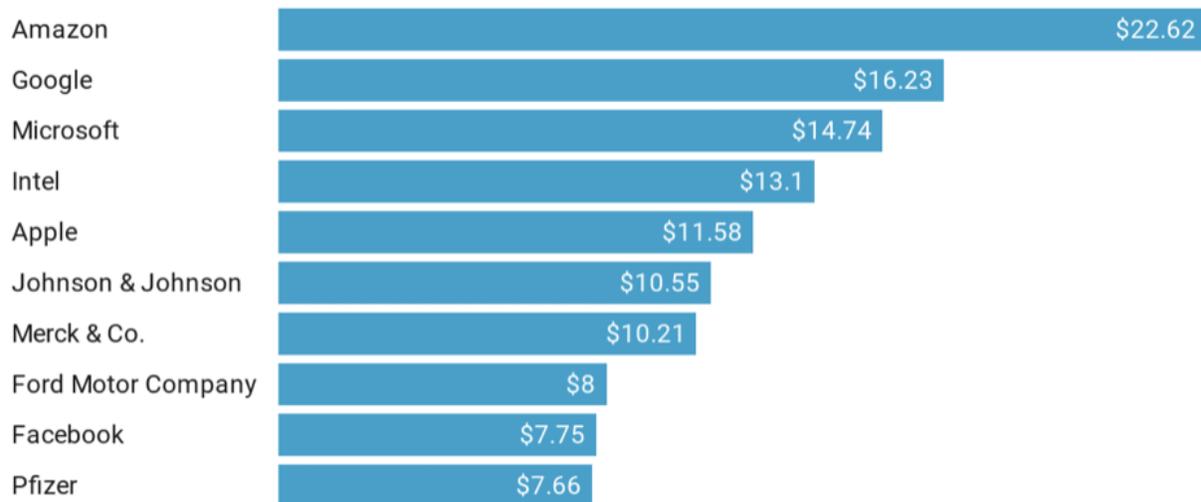


Chart: Alec Stapp (PPI) • Source: ideatovalue.com • Created with Datawrapper

Another metric that's worth looking at is capital expenditures. The line of reasoning here is similar: a monopolist secure in its market position would rather distribute profits to shareholders than make risky investments. Here again, the tech companies lead the country in spending in this category, according to the Investment Heroes [report](#) by Michael Mandel and Elliott Long at PPI.



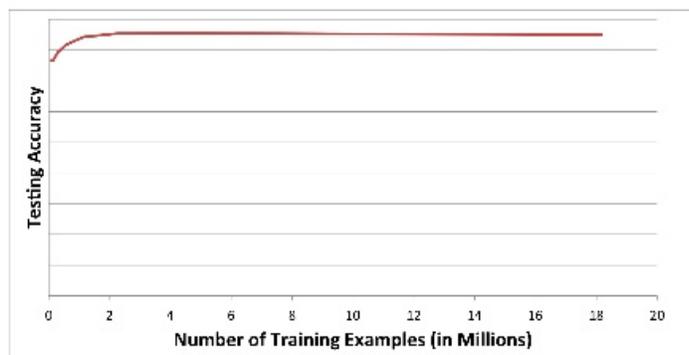
TABLE 5: NON-ENERGY U.S. INVESTMENT HEROES: TOP 25 NONFINANCIAL COMPANIES BY ESTIMATED U.S. CAPITAL EXPENDITURE*

	COMPANY	ESTIMATED 2018 U.S. CAPITAL EXPENDITURES (MILLIONS USD)
1	ALPHABET	20,188
2	AT&T	19,209
3	AMAZON.COM	15,577
4	VERIZON COMMUNICATIONS	14,912
5	MICROSOFT	11,469
6	COMCAST	10,890
7	FACEBOOK	10,763
8	CHARTER COMMUNICATIONS	9,125
9	WALMART	7,683
10	INTEL	7,426
11	APPLE	7,129
12	FORD MOTOR	6,513
13	GENERAL MOTORS	5,756
14	FEDEX	5,255
15	DELTA AIR LINES	5,168
16	UNITED PARCEL SERVICE	5,125
17	UNITED CONTINENTAL HOLDINGS	4,177
18	WALT DISNEY	3,794
19	AMERICAN AIRLINES GROUP	3,745
20	TARGET	3,516
21	UNION PACIFIC	3,437
22	HCA HEALTHCARE	3,413
23	CENTURYLINK	3,175
24	KROGER	2,967
25	HOME DEPOT	2,298

*Based on latest fiscal year through June 30, 2019.
Data: Company financial reports, PPI estimates

4. Data is not a significant barrier to entry to competing with Big Tech

More data or better models?



Sometimes, it's not about more data

NETFLIX

People like to say that “data is a [barrier](#) to entry.” But the barrier is much smaller than many think. When data is used as an input for an algorithm, it shows rapidly [diminishing returns](#), as the charts collected in a [presentation](#) by Google’s Hal Varian demonstrate. The initial [training data](#) is hugely valuable for increasing an algorithm’s accuracy. But as you increase the dataset by a fixed amount each time, the improvements steadily decline (because new data is only helpful insofar as it’s differentiated from the existing dataset).

As the chart above shows, using a real world case of a machine learning algorithm in production at Netflix, adding more than 2 million training examples had very little to no effect. That means the key differentiator is often the quality of the model, not the quantity of data used to train it. And how do you engineer a better model? By hiring top-level machine learning scientists. In the end, the binding constraint is still the humans.

5. The American public has a favorable view of Big Tech

In survey after survey, Americans say they approve of the tech companies, trust them more than companies in other industries, and don’t think politicians should [prioritize](#) regulating them more. According to a [survey](#) from The Verge, 91% of Americans have a favorable view of Amazon; 90% have a favorable view of Google. According to a [poll](#) by the National Research Group, 9 in 10 Americans have a better appreciation for tech during the pandemic. As shown in the chart below, when Georgetown University [surveyed](#) Americans on which institutions they had the most confidence in, Amazon and Google ranked second and third respectively, only behind the military.

How Much Confidence Do You Have in the Following Institutions?

Mean confidence (ranging from "no confidence" to "a great deal of confidence")

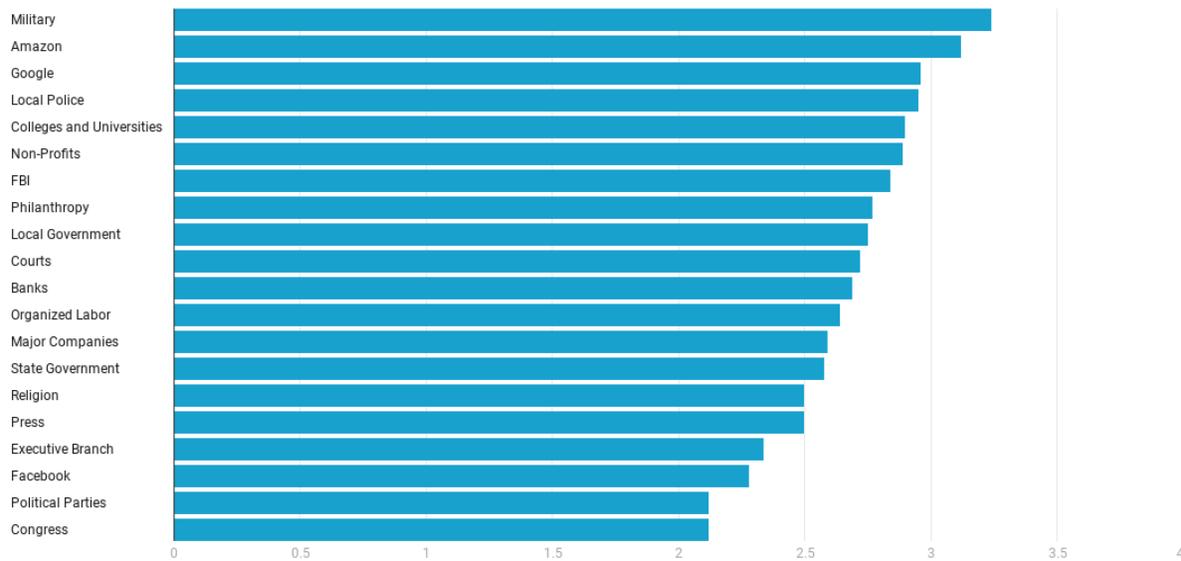


Chart: Alec Stapp (PPI) • Source: Baker Center • Created with Datawrapper

Conclusion

In aggregate, I think this data shows that there is not an antitrust problem in tech and new legislation would only be detrimental to consumers. Thank you for your time.