Ilana and I negate the resolution: Resolved: The United States federal government should enforce antitrust regulations on technology giants.

Our sole contention is If it isn't broken, why fix it

Edward W. Younkins writes in 2002 that "antitrust is largely a failed and discredited policy. Laws passed to protect customers instead punish efficient companies that have increased output and lowered prices. Rather than protect consumers, antitrust laws subsidize and protect less-efficient firms from the rigors of the competitive process."

Enforcing antitrust is going to harm big tech in one crucial way.

Delrahim, the assistant attorney general for the antitrust division of the DOJ, said last month that the DOJ is examining online advertising models as an avenue for anti-competitive behavior, and were going to "block everything that, to them did not make economic sense, and was in their view simply anti-competitive practice." AEI in 2018 critiques this plan, writing that the government doesn't have an adequate awareness of the economic structure of technology firms to break them off without breaking up their profitability.

Zoffer of the Stanford Law Review in 2019 explains that" because big tech's business models generate large and protected cashflows at relatively low cost, investors let them invest in ways that would be taken as a threat to share prices at other firms, going for long-term projects as their short term gains are secured." However, problematically, "the cash flows funding this innovation are derived from concentrated or quasi-monopolistic market structures," comprised of the very mergers that antitrust would block. That's why he concludes that if antitrust were to be enforced, they would shift from investing in longer-term projects, to focusing on protecting their business model in the short term.

Because of a decline in profitability, and a decreased willingness to make risks, two offshoots of big tech will suffer

1. **Spreading the Internet**

Rineheart for the American Action Foundation furthers that big tech subsidizes the expansion of the internet throughout the world, however if antitrust were enacted, "it would likely pare down significantly, if not outright eliminate, the funding that allows these programs to exist." given that they're not profitable on their own.

This would be devastating, as these programs have been extremely successful.

For example, according to Constantine of TechCrunch ion 2018, Facebook's project to expand the internet - Internet.org, has "helped almost 100 million people get access to the internet who may not have had it otherwise, .up from 40 million in November 2016.."

The BBC writes in July of 2018 that Google has developed a balloon which transmits internet signals to the ground, reaching places which would never get access otherwise.

Constantine furthers that big tech is also seeking to expand to places without internet in New Mexico, Tanzania, and many other locations. Dreyfuss in 2018 for Wired writes that almost 50% of the world doesn't have consistent access to the internet.

Having access to the internet drastically changes life outcomes.

Castillo for CNBC writes in 2018 that internet access projects have allowed for mom and pop businesses and startups in the developing world to become more marketable, for people to trade and sell, and created jobs by creating interconnectedness.

In total, because of things like this Deloitte in 2014 writes that " **extending internet access to the developing world could create 140 million jobs**,.

As many as 44 million jobs could be generated in Africa, and nearly 65 million in India.

Deloitte concludes that as it would increase wages, it would also have the impact of lifting 160 million people out of extreme poverty.

2. **Economic Productivity**

Lowry of POLITICO in 2019 reports that the top five R&D spenders are tech companies. Rineheart for the American Action in 2018 provides the warranting: that because big tech companies are multi-platformed (for example, operating in publishing, and manufacturing, and advertising) they face constant competition in all of those directions.

Unfortunately, Pecman of the CFO explains by regulating companies since they're successful reduces incentives to innovate, invest, and compete.
This is problematic, as Zoffer furthers, that both small firms and public investment could not substitute the investment of big tech. He concludes that enforcing antitrust on up big tech would decrease this investment, decreasing innovation and leading to declines in productivity, wage, and job growth.

Pethokoukis for AEI writes in 2018 that the impact of this investment has been massive, finding that big Tech accounts for 20% of absolute business investment across the whole economy and 83% of the [economic] rise in the first quarter.

The Economist in 2018 quantifies this, writing that the scale of investment by big tech means that they employ almost 1 million in staff, almost as many people as Walmarts 1.5 million, not counting those jobs which are created as a byproduct of tech in manufacturing and other industries.

Because antitrust law was created to protect citizens from harm, not inflict it upon them, Ilana and I are proud to negate.

Cut Cards

Edward W. Younkins, 12-21-2002, "ANTITRUST LAWS HARM CONSUMERS AND STIFLE COMPETITION," No Publication, http://www.quebecoislibre.org/021221-15.htm
Antitrust is largely a failed and discredited policy. Laws allegedly passed to protect customers have been used to punish efficient companies that have increased output and lowered prices. Rather than protect consumers, it is possible that antitrust laws are enacted to subsidize and protect less-efficient firms from the rigors of the competitive process. Antitrust enforcement can be used as a war against the competitive practices that businessmen can employ to better serve customers. Antitrust laws thus discourage abler firms from operating to the best of their abilities. In essence, the effects of antitrust laws are like those of a cartel – maintaining the status quo by stabilizing prices and assuring each firm that its profits and market position are secure.

(Delrahim) Cole, Law360, May 2019
https://www.law360.com/articles/1155980/online-ads-come-under-tight-doj-lens-antitrust-chief-says
Regulators are reconsidering how they analyze media markets thanks to the rapid migration of advertisers to digital platforms and their increasing ability to target consumers with laser precision, the U.S. Department of Justice's top antitrust enforcer said Thursday at a D.C. event.
Makan Delrahim, assistant attorney general for the antitrust division, told an audience at the DOJ's Public Workshop on Competition in Television and Digital Advertising that federal watchdogs — who are responsible for determining if media mergers and concentration in the industry harms consumers — are stepping up their scrutiny of online advertising in order to better understand how the media sector is transforming. Entire business models are changing, he said, with such strategies as free but ad-supported digital platforms and micro-targeted ads presenting new challenges to traditional media. Ad-supported models are a form of a multisided platform, Delrahim said.

DOJ antitrust explanation

Feiner, CNBC, June 2019

https://www.cnbc.com/2019/06/11/makan-delrahim-speech-lays-groundwork-for-antitrust-versus-big-tech.html

The Department of Justice's assistant attorney general brought the case against big tech into focus in a new speech delivered at the Antitrust New Frontiers Conference in Tel Aviv on Tuesday. Makan Delrahim laid out some possible arguments against the tech giants as his office is reportedly taking the lead on investigating Google parent company Alphabet and a potential probe into Apple. The Federal Trade Commission, meanwhile, reportedly has taken jurisdiction over Facebook and Amazon.

Shares of these companies dropped on last week's reports that U.S. antitrust officials were beginning to take action on long-anticipated investigations. But the case against the companies has remained unclear as some tech advocates have argued that old school antitrust laws don't have a place in the digital economy.

Delrahim's speech, as transcribed on the DOJ's website, argues existing antitrust laws are strong enough to regulate tech.

"We already have in our possession the tools we need to enforce the antitrust laws in cases involving digital technologies," Delrahim said. "U.S. antitrust law is flexible enough to be applied to markets old and new." Google declined to comment on the speech. Apple, Facebook and Amazon did not immediately respond to requests for comment.

Here are some of the possible arguments antitrust regulators could use against Big Tech based on Delrahim's speech: **One way of evaluating whether a company has violated antitrust law is through what Delrahim called the "no economic sense test." A monopoly that makes a decision that makes no economic sense except for "its tendancy to eliminate or lessen competition" would fail the test, according to Delrahim's definition.**"But **even if a company achieves monopoly position through legitimate means, it cannot take actions that do not advance plausible business goals but rather are designed to make it harder for competitors to catch up," he said.** This test suggests **antitrust regulators may look into tech companies' acquisitions and decisions around product development to evaluate whether they made business sense or simply hindered or squashed competition**.

Rinehart, American Action Forum, July 2018

https://www.americanactionforum.org/insight/breaking-up-tech-means-breaking-up-technology-and-teams/

Facebook is facing this dynamic presently as the company reconsiders aspects of its platform. While it is often assumed that ad-based platforms stack the deck for advertisers, advertisers have long had concerns about online ad effectiveness and whether or not they're getting their money's worth. As Talking Point Memo reported, advertisers "started noticing a new level of platform instability and reductions in targeting efficiency" on Facebook. If this instability persists, advertisers will move elsewhere. That report concluded by noting the challenge facing Facebook, For now, keep in mind that Facebook isn't just dealing with a reputational crisis. It's having to clean up the reputational mess by rejiggering parts of its core revenue stream [and] it's not clear it really knows how to do [this]. That creates a lot of unpredictability. More than most people seem to realize. Put simply, competition analysis for platforms is more complex than the analyses that have typically been used for one-sided companies. If the interdependencies among the sides of the platform aren't carefully considered, then the typical analytical tools will yield incorrect assessments. **As scholars David Evans and Richard Schmalensee explained, "The key point is that it is wrong as a matter of economics to ignore significant demand interdependencies among the multiple platform sides**." As countless competition regulatory authorities across the world have recognized, multi-sided platforms don't conform to the standard approaches for assessing market definition and market power. **In the case of Google and**

Facebook, analysts must move away from the simple logic of "these companies are monopolies, therefore break them up" and engage in more pointed and nuanced analysis.

Zoffer, Stanford Law Review, May 2019

https://www.stanfordlawreview.org/online/short-termism-and-antitrusts-innovation-paradox/

Because their business models generate large and protected cashflows at relatively low cost (and because these companies have shown a propensity for innovation), investors seem comfortable letting them invest in ways that would be taken as a threat to share prices at other firms.

Zoffer, Stanford Law Review, May 2019

https://www.stanfordlawreview.org/online/short-termism-and-antitrusts-innovation-paradox/

But the cashflows funding this innovation are, like the AT&T profits that funded R&D behemoth Bell Labs, derived from concentrated or quasi-monopolistic market structures (and from anticompetitive acquisitions, like Facebook's purchase of Instagram). And like AT&T during its heyday, the big tech firms have tested the boundaries of—if not abused, at times—their market power.14

Zoffer, Stanford Law Review, May 2019

https://www.stanfordlawreview.org/online/short-termism-and-antitrusts-innovation-paradox/

Here is where these conversations converge: The same qualities that make big tech companies prime targets for antitrust enforcement are those that have seemingly enabled them to resist short-term pressure. If breaking them up would undercut a substantial and hard-to-replace source of innovation, the U.S. economy could see declines in productivity, wage, and job growth unless lost R&D funding is replenished by public sector or other large-scale investment.16

Whatever remedy is chosen, short-termism and the U.S. innovation economy must be part of that decision.

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Zoffer, Stanford Law Review, May 2019

https://www.stanfordlawreview.org/online/short-termism-and-antitrusts-innovation-paradox/

Second, and more importantly, big tech firms—especially Alphabet, Amazon, and Facebook—invest differently than even other superstar firms. Unlike, for example, pharmaceutical companies whose business models require high investment for sustained success, the big tech firms are not especially capital intensive.28

They invest not primarily to protect their current cash flows but—if their public statements on strategy are to be taken at face value—to create new products and technologies "that could eventually become the *next* Google." Those sorts of breakthroughs are essential for long-term productivity growth and job creation, although productivity-driven economic shifts pose other questions of cost and adverse redistribution beyond the scope of this Essay

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Zoffer, Stanford Law Review, May 2019

https://www.stanfordlawreview.org/online/short-termism-and-antitrusts-innovation-paradox/

The importance of big tech cannot be understated in light of the short-termism hypothesis. If correct, that theory suggests that big tech firms are *unique* (or nearly so) in their ability to invest this way. Without high and relatively protected cashflows, investors do not seem to tolerate such behavior, which even big tech's detractors acknowledge. Should big tech's positioning be undercut, these firms' contributions to innovation and productivity in their present forms could be difficult to replace.

It might be the case that other firms would step in to capture the opportunities left on the table without big tech. But the implications of the short-termism hypothesis and evidence from the superstars literature suggest that big tech's replaceability in the private sector is far from clear, at least in the near-term.

The answer, whether or not big tech firms are broken up, may lie in substantially increasing public sector investment.38

Without government-funded R&D, however, a significant decline in big tech's investment spending could be damaging to economic growth.

Rinehart, American Action Forum, July 2018

https://www.americanactionforum.org/insight/breaking-up-tech-means-breaking-up-technology-and-teams/

Second, there is no reason to think multiple ad networks would emerge if Facebook and Google were forced to divest. Breaking off the ad portions of Google and Facebook from the user base and parent company would only create a guaranteed ad-seller to these companies. In practice, the independent ad company would work closely with Facebook and Google to serve ads. The user network would need to share

demographic data with the new ad company to ensure that the ads were seen by the intended audiences. Both companies would also need to integrate their services tightly, as the current companies do now, so that ads are served quickly. In other words, while the companies might be structurally separated in some sense, they would be functionally integrated. As antitrust scholars have long noted, contracts achieve the same thing as vertically integrating, so there is little reason to keep the two sides arms-length apart. Last, this type of ad divestiture would set in motion a radical restructuring of the digital economy. **Many of the biggest firms engage in internal cross-subsidization, supporting services that simply aren't profitable on their own.** YouTube is the classic example, as it is widely assumed not to be profitable(because there isn't specific data, there is no way to know for sure). Google has also funded broadband through Google Fiber, self-driving cars through Waymo, and AI through Google Brain, which was only recently integrated under the Alphabet, Inc. banner. In just the first quarter of 2016, Alphabet announced they had spent over $800 million on these and other "moonshot" bets—none of which are profitable on their own, but each of which can gestate under the support of Google's overall profitability. Facebook has also been underwriting moonshot technologies. **Not only has it supported Internet access throughout the world through Internet.org and its Terragraph projects, the company backs researchers in AI, computer science, and human-computer interaction. Breaking up the tech companies would likely pare down significantly, if not outright eliminate, the funding that allows these programs to exist. Cleaving the ad network from these tech companies would have drastic ramifications for the tech marketplace**, but it would also erect legal barriers to experimentation and innovation. Splitting up platforms would require explicit limits on those companies from expanding into other markets through line-of-business restrictions as well as an adjudication apparatus to make Final Judgments.

BBC, July 2018

https://www.bbc.com/news/technology-44886803

Loon's balloons float high in the stratosphere, around 20km (12.4 miles) above sea level; a height the company says is out of range of air traffic, storms and wildlife. The tennis-court-sized balloon is made from polyethylene, filled with helium and powered by a solar panel. The balloons are designed to stay aloft for months at a time, and move by surfing wind channels, predicting speeds and directions so that they can navigate in the direction they need to travel. **Each balloon carries an antenna, which relays internet signals transmitted from the ground, extending coverage over an area of 5,000sq km.** In the case of this new partnership, Telkom Kenya will be providing the internet signals, and Loon will spread it over remote areas of Kenya. At the mercy of Alphabet "**Connectivity in these rural locations is a big problem," said Ken Banks, an expert in African connectivity**, and head of social impact at Yoti. **He explained that attempts to install a physical infrastructure in the region have been plagued with problems.** The vast distances of the region mean that laying fibre cables or building an array of mobile masts is impractical.

Castillo, CNBC, August 2018

https://www.cnbc.com/2018/08/28/a-look-at-facebooks-efforts-to-expand-wi-fi-in-developing-countries.html

Fees are low, and users are allowed to access the entire internet through their device and are not limited to Facebook platforms. The company settled on this paid model after noticing people stopped using the service if they were required to go through a registration landing page in order to get access for free. For example, **in Tanzania, Facebook is providing funding to Habari Node to identify which areas have high foot traffic, like mosques, temples, schools and offices. The company then reaches out to nearby entrepreneurs like mom and pop shops that are open to running an additional Wi-Fi business.** The company also has begun exploring partnerships with satellite providers, who would also provide internet access through access points like Express Wi-Fi, Mordecai said. It is also working on "mesh" networks where one Wi-Fi access point talks to another to create broader areas of internet access. Tanzania is the first test area, with more regions to be announced. The information from the Aquila project is also being used to develop a high altitude platform station (HAPS) system to also provide Wi-Fi in these regions.

Constantine, TechCrunch, April 2018

https://techcrunch.com/2018/04/25/internet-org-100-million/

Facebook is getting the developing world online, even as the developed world criticizes its privacy practices. Mark Zuckerberg said today on Facebook's Q1 2018 earnings call that "our **Internet.org efforts have helped almost 100 million people get access to the internet who may not have had it otherwise." That's up from 40 million in November 2016.** Internet.org uses its Free Basics app with access to low-bandwidth services and Express Wi-Fi hotspots operated by local merchants to give people connectivity. Facebook is also testing its Aquila solar-powered drone, which will be able to beam bandwidth down to users in remote areas. Most recently, Facebook is reported to be seeking government approval to test Aquila for delivering LTE access in New Mexico. Facebook has also experimented with using lasers and satellites to get bandwidth into places without decent mobile networks. However, Facebook has received backlash from some who believe that Free Basics violates net neutrality because it doesn't give completely unfettered access to the open web. That led the app to be banned in India. Yet others, myself included, believe that some internet is better than none for those who wouldn't otherwise be able to afford it. The rest of Facebook's connectivity delivery methods provide unrestricted access to the open web.

Dreyfuss, Wired, October 2018

https://www.wired.com/story/global-internet-access-dire-reports/

Four years ago, the United Nations predicted that more than half of the global population would be connected to the internet by 2017, buoyed in part by "the fastest growing technology in human history": mobile broadband. The world missed the mark. **Now the UN expects to achieve that goal by the end of 2019, and that still leaves an estimated 3.8 billion people offline**. What happened? Though global access to the internet grew between 2002 and 2016, the rate of growth has slowed in the past two years, according to an analysis from the Web Foundation that was first reported by The Guardian. It's important to be clear that slower growth doesn't mean people aren't still gaining access. You could have the same number of people get connected every year, and the percentage growth rate would drop. What surprised the Web Foundation team, led by research director Dhanaraj Thakur, was how much the gains have slowed: The connected population grew by 19 percent in 2007; last year it grew by less than 6 percent. Thakur is still studying exactly what accounts for the slowdown.

Deloitte, February 2014

https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/TechnologyMediaCommunications/2014_uk_tmt_value_of_connectivity_deloitte_ireland.pdf

The internet creates new jobs through numerous avenues: directly through the demand for labour from new technology-based enterprises; and indirectly through the demand from the wider ecosystem of companies that are created to support technology-based enterprises; for example, network installation and maintenance providers and providers of other skill-based services such as advertising and accounting. Importantly, the internet has the potential to create jobs that would not otherwise become available and, as seen above in the case of Bangalore, encourages the shift towards higher-skilled labour, resulting in an increase in wages and earning power. Jobs in businesses that employ the internet as primary source of trade are directly enabled by the internet, as are jobs in innovation hubs and jobs in professions that require constant access to data. The impact of increases in internet penetration on employment have been analysed by the ITU. Based on the ITU's analysis, **Deloitte estimates that extending internet access to levels seen in developed economies today could create 140 million jobs, an increase of 9% compared with what might have existed with current levels of internet growth. The majority of these jobs will be created in the poorest regions, where the increase in penetration would be higher. As many as 44 million jobs could be generated in Africa, and nearly 65 million in India.** Not only does internet access create additional jobs, it also enables a shift towards higher-skilled labour and an increase in the levels of responsibility and autonomy given to workers. This creates a move towards a knowledge based economy, as firms that invest in information technology and the associated organisational changes experience faster productivity growth.

Deloitte, February 2014

https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/TechnologyMediaCommunications/2014_uk_tmt_value_of_connectivity_deloitte_ireland.pdf

Expanding internet access can also lead to a more fundamental advancement in the structure of economies across the developing world. Many of these economies are driven by agriculture and natural resources, and the internet can unlock a knowledge-based economy whereby information is shared without barriers: skills and knowledge, not access to resources, become key. In a knowledge-based economy, people and enterprises increasingly have the ability to develop specialised expertise and adopt new business methods. Increased demand in sectors such as software development, combined with an increase in innovation and the emergence of new technology-led enterprises, can increase the demand for high-skilled labour. Expanded access to information, increased business and job opportunities, and ultimately higher incomes are all factors that can combine to reduce extreme poverty. **As a result of the economic growth jump-started by extended internet access, the number of people living on less than $1.25 per day may be reduced by a third compared to current levels**. This means that extending internet access has the potential to significantly contribute to the UN Millennium Development Goals of eradicating extreme poverty and hunger. Extreme poverty reduction A number of studies have investigated the relationship between income increases and reductions in extreme poverty. On the basis of a study that shows how this relationship varies by region according to income distribution patterns, and on the income impacts resulting from internet access reported above, **Deloitte estimates that about 160 million people would be lifted out of extreme poverty. The majority of this impact will be felt in Africa, where it is estimated that extreme poverty levels would be reduced by 30% and nearly 120 million would be lifted out of extreme poverty**, reflecting the higher incidence of extreme poverty and the stronger response of poverty reduction to increases in GDP per capita observed in the continent today compared to the other regions. However, these effects will also be felt in somewhat more developed regions: the internet has the potential to lift 3 million out of extreme poverty in Latin America and 20 million in South and East Asia, where the extreme poverty rate could decrease by 28%. The effects of extending internet access could be particularly important for rural communities. Beneficial impacts of technology advancements in these communities are not limited to just agriculture: constraints on the flow of information have limited these communities' access to wider markets and to a variety of employment opportunities, and access to mobile and internet-based applications can extend the range of business services that become available to these communities. Internet access is also valuable when placed at the service of rural development-oriented organisations that act as local communication conduits or intermediaries. Along with providing improved market knowledge, they can also develop locally appropriate applications and creative services, provide knowledge about successful development strategies, enable efficient regional, national and global organisational efforts, and be used as marketing tools to promote rural tourism and market the products of small secondary industries and home-based businesses. Finally, the internet enables local NGOs to gain a global presence and make better contact with potential donors and supporters through the online publication of resources and information and through the use of electronic mail.33 Improvements in connectivity play an important role in overcoming this urban-rural divide and stimulating economic growth in these areas.

Pethokoukis, AEI, May 2018

http://www.aei.org/publication/the-growing-investment-impact-of-big-tech-on-the-us-economy/

Ten years ago the five largest spenders were old-economy stalwarts: AT&T, Chevron, ExxonMobil, General Electric and Verizon (see chart 3). Now the top five are Alphabet, Amazon, Apple, Intel and Microsoft. In the first quarter, tech firms accounted for 26% of the S&P 500's market capitalisation, 31% of its investment and a staggering 47% of the absolute rise in that investment. Budgets for 2018 suggest a similar mix. Tech firms don't just write code and hoard the proceeds. The share of their total gross cashflow that they reinvest has risen from 40% in 2010 to over 50%, similar to the level for non-tech firms. Almost half of their investment is in property, plant and equipment. Alphabet is pouring cash into data centres and a redevelopment of Chelsea Market in New York. Amazon is building out e-commerce fulfilment centres. Semiconductor firms are expanding plants that make chips for machine learning and autonomous cars. What's more, tech firms are also investing on behalf of ordinary companies by building cloud-computing capacity that is increasingly replacing other firms' in-house IT investments. The picture for the economy as a whole—rather than just for listed companies—looks similar. Plenty of tech activity is not captured by the figures for investment in the accounts of listed tech firms, most notably venture-capital activity, capital spending done off-balance sheet by Amazon and Microsoft using leases and Netflix's relentless spending on its content library, which counts as an expense. Include all this and **tech accounts for 20% of absolute business investment across the whole economy and 83% of the rise in the first quarter**. Furthermore, some investment by non-tech firms is linked to the tech boom. FedEx and UPS, two distribution firms, are boosting investment at a double-digit rate, buying planes and building depots to cope with e-commerce.

The Economist, November 2018

https://outline.com/up3AZd

Despite the ubiquitous use of the term "giant", today's tech firms are not unprecedentedly large. Ranked by domestic sales Apple is 14th in America, Amazon is 15th, Alphabet 37th and Facebook 107th. Uber and Airbnb are minnows that don't even make the top 300. The tech firms are accused of extracting giant rents from society. But the largest five have lower earnings relative to the economy than the mightiest monopolists of the past did, with a median profit of 0.16% of GDP. That compares with a median of 0.24% of GDP for four historical goliaths in the year that antitrust regulators hit them: Standard Oil and US Steel (1911), IBM (1969) and AT&T (1974). For Amazon and Netflix the rents flow in the other direction because their prices are low today: in total they subsidise their combined 240m paying subscribers to the tune of about $50 per person per year, based on the amount of additional free cashflow they would have needed to cover their cost of capital in 2017. Their effect on the economy has been positive in many ways. Online inflation is running at one percentage point below official inflation, reflecting the bargains available on the web. Economists have criticised the firms for employing only a few tech bros and creating no assets apart from executive Koi carp aquariums. But this view is out of date. **The big five tech firms have almost 1m staff, not far off the 1.5m Walmart has in America. They are investing at a massive pace: some $137bn in 2017.** As a result their combined hoarding rate (their free cashflow) actually fell from a peak of 0.66% of GDP 2015 to 0.61% last year. The tech firms can be a powerful source of competition. Think of Amazon threatening to take on America's rotten drug-distribution industry, or Netflix's detonation of the cable-TV racket in America. The danger of digital disrupters is forcing comfortable incumbents to raise their game, from Germany's car firms to Walmart. Meanwhile, the perception that big tech is entrenched is itself new. Facebook almost missed the mobile revolution: in 2012 it had fewer than 20 staff working on its core mobile team. Today Apple, Facebook and Google still depend on one main source of revenue. If they ever face a serious threat they could crumble.

Rinehart, American Action Forum, July 2018

https://www.americanactionforum.org/insight/breaking-up-tech-means-breaking-up-technology-and-teams/

First, **any single-sided firm on any one side of the platform can put competitive pressure on the platform.** Large retail stores, to take one example, often offer store credit or charge cards, which compete with platform payment systems like Visa or Mastercard. Second, **multi-sided platforms can compete against other platforms on some but not all sides**. Google's Android operating system acts as a platform for handset manufacturers, users, mobile operators, and software developers. The Apple iPhone runs on a similar system, but it doesn't have to work with outside handset manufacturers since it produces the iPhone in-house. For Apple, the iPhone also competes against Google's Android operating system in addition to handset manufacturers such as Samsung, LG, and, Huawei. This final dynamic is the third kind of competition, where multi-sided platforms. All together, **these angles of platform competition make competition asymmetric, eroding the possibility of using simpler analytical tools applied to traditional markets.** Consider a platform with two sides, users and advertisers. If users experience an increase in price or a reduction in quality, then they will exit the platform, reducing overall participation. Since advertisers value the platform because they can access users, advertiser demand will drop even if the prices they face stay constant. As a result, user demand will fall further because the total amount of content has dropped, making the platform less valuable to them. (Research on magazine price changes confirms this theory.) Small changes in price or quality tends to have a much bigger impact in chasing off both groups from the platforms than one-sided goods. Because of their two-sidedness, platforms also tend to have less power over pricing than one-sided companies, lessening their power over consumers.

Author By Ben Thompson, 4-26-2016, "Antitrust and Aggregation," Stratechery by Ben Thompson, https://stratechery.com/2016/antitrust-and-aggregation/

This monopoly, though, is a lot different than the monopolies of yesteryear: aggregators aren't limiting consumer choice by controlling supply (like oil) or distribution (like railroads) or infrastructure (like telephone wires); rather, consumers are self-selecting onto the Aggregator's platform because it's a better experience. This has completely neutered U.S. antitrust law, which is based on whether or not there has been clear harm to the consumer (primarily through higher prices, but also decreased competition), and it's why the FTC has declined to sue Google for questionable search practices.

The Economist in 2017
https://outline.com/up3AZd
Tech firms get so much flak that it is worth considering the case for the defence. It is surprisingly easy to make. Consumers love their products. Between them the big Silicon Valley platform firms have 8bn customers. They have increased choice for consumers. If you want to watch the greatest hits of Scottish curling or Arnold Schwarzenegger you no longer have to dig around car-boot sales. Amazon has 353m products on sale, 3500 times more than the typical supermarket. In one poll Americans said they would have to be paid an average of $17,500 a year to forfeit the use of their search engine, which if true means that total search revenues could be 83 times higher than the sales of Google's parent, Alphabet, last year.

About The, 11-30-2018, "Congress is 'Fed Up' With Big Tech, But Antitrust Action May Be Impossible – InsideSources," InsideSources,
https://www.insidesources.com/congress-is-fed-up-with-big-tech-but-antitrust-action-may-be-impossible/
"It's about market power," Lawrence White, professor of economics at New York University's Leonard N. Stern School of Business, told InsideSources. "The antitrust laws are not about pure size."

Because market power is defined in terms of price-setting, he said, "Facebook may not be an antitrust problem."

"Facebook got to its size because it was pretty good at what it was doing, which was providing all kinds of connectivity for individuals who really liked that connectivity," White added. "Under current interpretation of antitrust laws, no one thinks that case could be won (to break up Facebook or Google). Even if you could break them up, five years later there will be one big social media company [again] just because people will be gravitating to where all their friends hang out. Facebook has other things, like the Cambridge Analytica scandal, and that is a problem, but not an antitrust problem."

Rich Lowry, 3-13-2019, "Don't Break Up Big Tech," POLITICO Magazine,
https://www.politico.com/magazine/story/2019/03/13/dont-break-up-big-tech-225808
The tech giants aren't stand-pat companies. The top five spenders in research and development in 2017 were all tech companies. Amazon alone spent more than $22 billion. The development of autonomous vehicles, artificial intelligence and voice recognition wouldn't be nearly as advanced as they are now if it weren't for the work of Google and Amazon. The behemoth of yesteryear, General Electric, isn't making these investments.

James Pethokoukis, 3-14-2019, "Elizabeth Warren's fairy tale about Big Bad Tech," No Publication, https://theweek.com/articles/828707/elizabeth-warrens-fairy-tale-about-big-bad-tech
Moreover, Big Tech didn't get big because of nefarious business practices. Or as Warren puts it, "They've bulldozed competition, used our private information for profit, and tilted the playing field against everyone else." Alternate explanation: They have created superior and innovative products and services that consumers love. Indeed, a much-cited study by economist David Autor finds that industries, like tech, that have become more concentrated are exactly those that have been increasing their innovation most rapidly.
This is hardly surprising. Big Tech firms are the biggest corporate spenders on R&D, more the behavior of paranoid competitors than satisfied monopolists. There's no sign that Warren has considered how her plan would affect all that investment spending. Nor has she considered how these companies will continue to deliver free services if government regulation undermines the current ad-driven business model. Everything would change, she promises, but all only for the better for consumers.

Matt Rosoff, xx-xx-xxxx, "Op-ed: The idea of using antitrust to break up tech 'monopolies' is spectacularly wrong," CNBC, https://www.cnbc.com/2017/04/23/why-antitrust-should-not-be-used-against-tech-monopolies.html
The Big Five are in constant competition. The fact that there are five powerful companies at the top of this industry, rather than one (as was arguably the case with Microsoft in the 1990s) should be a clear clue that the tech industry is exceptionally vibrant.

In fact, it's not clear that any of these companies has an actual monopoly, and it depends on how you define the market.

Does Google have a monopoly in the search market? Probably. But it makes its money from online advertising, where it faces clear competition from Facebook. Amazon arguably has a monopoly only if you define e-commerce as a separate market from retail. Apple doesn't seem to have a monopoly anywhere.

But more to the point, these five companies are in constant battle, both at the margins and in their core areas of business. Consider the following:

Apple invented the modern smartphone business with the iPhone in 2007, but Google quickly rolled out a competing platform, Android, and licensed it broadly to the point where it now has more than 80 percent of the global market;

Amazon is constantly improving product search in an effort to undercut one of Google's core sources of revenue—search ads that appear when the user seeks information on a particular product;
Facebook is competing against Google for every dollar available in online advertising, particularly in video;
Apple has its own suite of mobile productivity apps that compete with Microsoft's Office apps on its devices, while Google has a strong online version of these kinds of apps;
Amazon, Microsoft, and Google are in brutal competition for the cloud computing market, which itself is disrupting traditional software vendors like Oracle and SAP, with hundreds of billions of dollars of corporate IT budgets at stake.

Financial Times in 2014
https://perma.cc/95CQ-4893
These are the sort of questions that occupy Larry Page. At 41, the co-founder and chief executive of Google is freeing himself up to think big. A reorganisation in recent days has shifted responsibility for much of his company's current business to a lieutenant and left him with room to indulge his more ambitious urges. The message: the world's most powerful internet company is ready to trade the cash from its search engine monopoly for a slice of the next century's technological bonanza.

Diamandis, Singularity Hub, July 2016
https://singularityhub.com/2016/07/18/why-the-cost-of-living-is-poised-to-plummet-in-the-next-20-years/
People are concerned about how AI and robotics are taking jobs, destroying livelihoods, reducing our earning capacity, and subsequently destroying the economy. In anticipation, countries like Canada, India and Finland are running experiments to pilot the idea of "universal basic income"—the unconditional provision of a regular sum of money from the government to support livelihood independent of employment. But what people aren't talking about, and what's getting my attention, is a forthcoming rapid demonetization of the cost of living. Meaning—**it's getting cheaper and cheaper to meet our basic needs. Powered by developments in exponential technologies, the cost of housing, transportation, food, health care, entertainment, clothing, education and so on will fall, eventually approaching, believe it or not, zero**. In this blog, I'll explore how people spend their money now and how "technological socialism" (i.e., having our lives taken care of by technology) can demonetize living. As an entrepreneur, CEO or leader, understanding this trend and its implications is important...it will change the way we live, work, and play in the years ahead.