Inequality Has Been the Price of Winning in Big Tech; That’s Changing

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Defending Digital Series, No. 10: The unique economics of the Internet have enabled the creation of vast riches for today’s Big Tech winners. As societal priorities and business opportunities shift to the physical world, and as the tech industry matures, inequalities in both wealth and income are likely to narrow.

As a symbol of extreme wealth, it’s been irresistible. The masts on Jeff Bezos’ new 417-foot sailing yacht are so tall that they wouldn’t fit under the historic Koningshaven bridge. Not surprisingly, the citizens of Rotterdam were unimpressed by the Dutch shipbuilder’s plan to temporarily dismantle the bridge at the Amazon founder’s expense. After protestors vowed to pelt the ship with eggs, it was the masts that were temporarily lowered.

Today, there is also less-symbolic evidence that Big Tech’s clout is receding. The world’s richest person, Elon Musk, has made most of his fortune in cars, batteries, and rockets. The war in the Ukraine has made it clear that the world is nowhere near ending its reliance on fossil fuels, and that the global food supply is less reliable than most people thought. Americans and Europeans are finally waking up to how their dependence on China and Russia for essential goods is fueling inflation, shortages, and empty shelves. Taken together, Disney’s Hulu, Disney+ and ESPN+ now have more subscribers than the once all-powerful Netflix.¹

Extreme individual wealth during the 1995–2020 period was driven by the consumer market. The Internet enabled new online services to reach billions of individuals, creating unprecedented economies of scale. In contrast, the 2020–2045 period will be much more about applying technology to the physical world—food, housing, water, transportation, the environment, energy, and the military—as well as leveraging innovations in batteries, robots, space, and biotech. These new, and fundamentally more important, societal priorities are why we believe that the power of Big Tech—and its income inequalities—peaked during the covid pandemic.²

THE ROOTS OF INCOME INEQUALITY

Looking back, the colossal fortunes of the consumer-tech era weren’t surprising. Whether we are revisiting the history of shipping, railroads, oil, motor vehicles, or steel, the winners in major new
industries all have accumulated comparable individual wealth. But information technology has taken this dynamic an important step farther. Unlike those earlier industries, software and data have effectively zero marginal cost. This means that information, applications, operating systems, search engines, social media, and similar products and services have nearly infinite scale economies. The resulting “increasing returns” have often led to industry structures that have remained much more concentrated over time than other sectors.

(Although digitized audio, video, and text also have zero marginal costs, media businesses don’t generate similar concentration or accumulate the associated riches. People might watch a thousand movies and TV shows, read a thousand books, or listen to tens of thousands of songs, but they typically use just one word processor or search engine, and just a few social media services. This is why America’s tech giants—and their Chinese equivalents—operate at the scale of billions of users, whereas most content businesses are much more fragmented.)

The unique economics of information technology have enabled Jeff Bezos, Bill Gates, Larry Page, Sergey Brin, Larry Ellison, and Steve Balmer to become 6 of the world’s 10 richest people. All told, roughly 20 percent of this year’s Forbes 400 list is from the IT industry, whereas some 25 percent are from private equity, hedge funds, investing, venture capital, and other financial services.3 (It’s difficult to give the exact percentages because definitions are tricky. For example, some crypto-billionaires are deep technologists, while others are mostly speculators. Should a hi-tech venture capitalist be counted as part of the technology or financial services industry?)

**THREE-PRONGED EXAGGERATIONS**

Unfortunately, it’s easy to exaggerate the extent of digital inequality today.4 First, astronomical wealth has made a handful of high-profile individuals the poster children of economic unfairness, even though Big Tech’s winners create great and obvious societal value, while the financial services group (especially those not in venture capital) mostly just “bet” bigger and better than the rest of us. Additionally, tech’s strong presence at the 0.0001 percent level obscures the fact that the top 1 percent of U.S. income earners includes far more lawyers, doctors, dentists, celebrities, executives, and financial services participants than IT professionals.

Secondly, the great wealth of the technology industry is much more widely shared than it might appear. If you compare the wealth of the titans to the value of the firms they built, the numbers are remarkably consistent. Taken together, Bill Gates, Melinda French, and Steve Ballmer are worth 13.2 percent of Microsoft’s current market capitalization. Larry Page and Sergey Brin are worth 12.9 percent of Google’s; Jeff Bezos and Mackenzie Scott are worth 14 percent of Amazon’s; and Mark Zuckerberg is worth 13.3 percent of Meta’s. The outlier is Laurene Powell Jobs who is worth less than 1 percent of Apple.5 This means that some 90 percent of Big Tech’s market value has gone to employees and investors, including pension funds. Again, the contrast with hedge funds is striking.

Third, the vast wealth of a few individuals has long overshadowed the millions of high-paying jobs that the digital world has created.6 This higher compensation should also not be surprising. Above average wages have always been a characteristic of major new industries during their high-growth years, as the demand for skilled workers inevitably outstrips supply. The problem has been the inability of other industry sectors to come close to keeping pace. Globalization and outsourcing have aggravated this shortfall, as many manufacturing and other jobs have been
shipped overseas. America’s resulting “services economy” has featured too many low-wage jobs where productivity gains are much harder to come by.

While all three prongs have created tensions, they also point toward less inequitable times. If the physical industries of the future meet society’s needs—still a very big “if”—the gaps between the digital and nondigital worlds should narrow. Entrepreneurs and companies in these industries will amass great new fortunes for themselves, their employees and their investors, but since these businesses will not have zero marginal costs, their riches should be less extreme than during the Internet era. The wage outlook should also move in the right direction. The reshoring of traditional work, the new skills needed for new physical world industries, rising labor costs in Asia, and new IT-based technologies that help automate low-wage services should all help boost wage growth going forward.

A MATURING TECH SECTOR

Technologists forecast that digital innovation has only just begun, and that artificial intelligence, virtual reality, smart products, personalized health and education, blockchains, quantum computing, and other advances will continue to transform the world far into the future. Many of these predictions will almost certainly prove correct. Nevertheless, there is still strong evidence that today’s Big Tech leaders have entered the mature phase of their corporate evolution. They clearly check most of the mature-business boxes:

- Many core products have saturated their markets in the developed world.
- Existing revenues are so large that it’s hard for new offerings to move the needle.
- Big Tech is mostly run by appointed managers, not the company founders.
- New employees will make most of their money via salaries and bonuses, not stock options.
- There is growing pressure to pay dividends, as Microsoft and Apple already do.
- Internal operations often seem bureaucratic, with overlapping roles and responsibilities.
- Major new initiatives have a relatively low rate of success.
- Competition and protectionism are increasing in many international markets.
- Both at home and abroad, there are growing regulatory pressures.

Contrast these familiar traits of a mature industry with the huge uncertainties in the emerging markets of the physical world. No one knows how quickly electric cars will catch on, let alone self-driving ones. There is still no clear path to efficient energy storage. The minerals needed for batteries and the disposal of solar panels and other electronic waste present all manner of environmental challenges. Growing “meat” at scale remains unproven. The speed, extent, and impact of climate change can be modeled but are inherently unknowable. Space exploration is scientifically exciting, but commercial applications are mostly speculative. America’s technological leadership is being challenged as never before, especially by China. As all of these issues are extremely important to society, they offer enormous financial and status upsides for whichever individuals, companies, and nations eventually prevail.
THE PRICE OF WINNING

The great individual wealth of company founders is not primarily the result of greed; it is mostly the output of winning. The bigger the win, the more inequality. This is especially true when one—or several—individuals create a company that dominates a major new industry over an extended period of time, as the founders of Microsoft, Amazon, Google, Facebook and their Chinese equivalents all did. (Steve Jobs left and then rejoined Apple which is why his wealth—while still in the billions—was far less than it might have been.)

This recognition raises three questions about the nature of winning in the years ahead:

▪ Will a handful of new companies dominate the physical industries of the 2020s and 2030s as they have with Big Tech?
▪ Will this domination continue over several decades as it has with Big Tech?
▪ Will these firms mostly be American as they have been with Big Tech?

If the answer to any of these questions is “no”—and it might well be “no” for all three—then America will experience much less extreme technology-based wealth creation than it did during the Internet era. For example, if traditional or new car companies effectively compete with Tesla (as looks increasingly likely), electric vehicle wealth will be distributed across the industry. If China, or any other nation, dominates emerging sectors such as solar panels, batteries, or quantum computing, then America won’t have to worry so much about extreme wealth being created at home—but it will have other, much bigger concerns. If climate change greatly damages societal well-being and the global economy, there will be few winners anywhere.

One thing seems certain: Food, energy, transportation, and other physical industries won’t have zero marginal costs or many network effects, and this suggests that over time these sectors will be significantly less concentrated than many Big Tech markets are today. As with tech markets such as those for personal computers, Android-based smart phones, disk drives, printers, and memory sticks, lower levels of industry concentration mean lower profit margins, and this should lead to less extreme individual wealth.

In terms of wages, the issue is more about speed than concentration. Compensation in the digital world is higher than the national average regardless of whether one works at one of the Big Tech giants or not. The key wage determinant is how quickly the demand for new skills rises. The faster and richer the industry grows, the higher the wages. This is an important issue because the rate of growth for today’s physical world industries remains so uncertain. Thus far, these sectors have grown more slowly than many had predicted (and hoped), and thus the wage impact has been modest. Much depends on whether this changes.

The bottom line is that the physical industries of the future are vital to both society and American competitiveness. If these sectors thrive and America plays a leadership role, then we should expect many great new fortunes. This wealth won’t be as extreme as it has been with Big Tech, but there will still be vast rewards for the winners of the future, in part to compensate for the vast losses of those who tried but failed. More importantly, fast-growing new industries can deliver sustained wage gains, as innovations in food, energy, transportation, and the environment boost productivity and are less susceptible to offshore outsourcing. But the big question is
whether businesses will deliver what society needs in a timely manner (and whether policymakers will support that). If they do, then any resulting inequalities will be a price well worth paying.

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ITIF’s “Defending Digital” series examines popular criticisms, complaints, and policy indictments against the tech industry to assess their validity, correct factual errors, and debunk outright myths. Our goal in this series is not to defend tech reflexively or categorically, but to scrutinize widely echoed claims that are driving the most consequential debates in tech policy. Before enacting new laws and regulations, it’s important to ask: Do these claims hold water?

About the Author
David Moschella is a non-resident senior fellow at ITIF. Previously, he was head of research at the Leading Edge Forum, where he explored the global impact of digital technologies, with a particular focus on disruptive business models, industry restructuring and machine intelligence. Before that, David was the worldwide research director for IDC, the largest market analysis firm in the information technology industry. His books include Seeing Digital—A Visual Guide to the Industries, Organizations, and Careers of the 2020s (DXC, 2018), Customer-Driven IT (Harvard Business School Press, 2003), and Waves of Power (Amacom, 1997).

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ENDNOTES


4. This paper is about income inequality, but we recognize that there are other forms of digital inequality, such as broadband access, device ownership, data representation, and economic opportunity.

5. In each case, the total current wealth of the individuals named has been drawn from public sources and then divided by the stock market capitalization of the firm they created/built. All data as of Sept 1, 2022. Melinda French and Mackenzie Scott are divorced from Bill Gates and Jeff Bezos respectively. Laurene Jobs was married to Steve Jobs at the time of his death.