

## 1 Introduction

*“I’m using Robinhood on my Android to trade Dogecoin, which is a meme-based sarcastic cryptocurrency.”*

*Imagine explaining this sentence to someone in 1990, before the Web, internet memes, smartphones, apps, and cryptocurrency. Now imagine explaining it to the 1890 US Congress that passed the Sherman Act.*

Corporate power is out of control. Despite widespread political polarization in the United States, there is a surprisingly broad consensus on this one issue. Senators Josh Hawley and Amy Klobuchar agree with populists on the left and the right: Big business has grown too big and needs to be brought to heel.

The Biden Administration made taming the undue power of giant corporations a central theme of its first year. In his sweeping executive order to rein in big business in July 2021, President Biden said, “A fair, open, and competitive marketplace has long been a cornerstone of the American economy, while excessive market concentration threatens basic economic liberties, democratic accountability, and the welfare of workers, farmers, small businesses, startups, and consumers.”<sup>1</sup>

Big Tech is especially fearsome. Information technology has seeped into every moment of our existence, from the cameras that scan our faces as we walk down the street and the online services that deliver our groceries to the smartphone resting a few inches away as we sleep. How we work, how we play, how we connect, and how we know increasingly take place through tools created and controlled by a small set of unaccountable corporations in Silicon Valley and Seattle. The COVID-19 pandemic exacerbated our vital dependence on online technologies for basic daily activities – school, work, shopping, dining, visiting friends and family – leaving us at the mercy of a handful of peculiar tax-dodging billionaires.

There is also broad consensus on the cause of our ills: monopoly power. Industry after industry is dominated by a small number of giant corporations with little or no competition. Monopolists – companies with too big a share of their market – have a habit of underpaying their suppliers and workers, overcharging their customers, strangling current or future competitors, and using their unjust profits to buy off politicians and regulators. The proceeds of their monopolistic activities enrich the aristocrats who own giant corporations, handing political power to unaccountable elites who play by their own rules.

<sup>1</sup> The White House, 2021. “Executive Order on Promoting Competition in the American Economy,” [www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/](http://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/).

How did we get here? According to the standard narrative, America’s economic vibrancy in the twentieth century was protected by antitrust laws that promoted competition, limiting mergers among rivals and the sleazy tactics that allow big companies to dominate their industry. The cure for the “curse of bigness” was mercifully straightforward: cut giant corporations down to size using the tools of antitrust, limit growth through mergers, and encourage more markets and more competition. Unfortunately – according to the narrative – smooth-talking economists from Chicago managed to hijack the noble mission of antitrust during the 1970s and sent us down the path of monopoly. As President Biden put it, “over the last several decades, as industries have consolidated, competition has weakened in too many markets, denying Americans the benefits of an open economy and widening racial, income, and wealth inequality. Federal Government inaction has contributed to these problems, with workers, farmers, small businesses, and consumers paying the price” (The White House, 2021).

The rare consensus about the dangers of monopoly relies on a set of stylized facts about how the economy works. But the stylized facts are wrong. They come from a twentieth-century understanding of the economy that no longer fits the situation we are in now. Information and communication technologies (ICTs) have undermined the basic categories we use to describe the economy: firm, industry, employee, income, nationality, monopoly – even size – are all contentious. To say that one or two giant corporations unfairly dominate an American industry due to their outsized market share (a standard notion of monopoly) is to misunderstand how power works in the new economy. And if we get the diagnosis wrong, we will not get the cure right – it will be like trying to fix the carburetor on a Tesla.

Take Zoom, the videoconferencing platform that became pervasive overnight during the COVID-19 pandemic. The Zoom app was downloaded a half-billion times in 2020 and has 300 million daily users. Zoom single-handedly enabled the work-from-home economy for white collar workers, and many of us do not pass a single day without a Zoom call. It introduced major product improvements throughout the pandemic: the Zoom of February 2022 works very differently from the Zoom of February 2020. Is Zoom a giant corporation? As of July 2021 it had a stock market value of over \$110 billion (comparable to Goldman Sachs and IBM), yet it has only 4,422 employees around the world and rents server space from Amazon and Oracle.<sup>2</sup> What industry is it in, and who does it compete with – videoconferencing (so Google, Apple, Facebook,

<sup>2</sup> United States Securities and Exchange Commission, [www.sec.gov/ix?doc=/Archives/edgar/data/1585521/000158552121000048/zm-20210131.htm](http://www.sec.gov/ix?doc=/Archives/edgar/data/1585521/000158552121000048/zm-20210131.htm).

Microsoft, Cisco), telecommunications (add in AT&T and Verizon), or something broader? Would we be better off if Zoom had more mutually incompatible competitors with slightly different versions of its features? (Those who have to endure meetings on Teams or Webex or Meet/Hangout etc. know the answer.) How did a tiny company with few employees and rented assets beat the most unscrupulous monopolists of our time? And would it make any difference if Zoom was incorporated in Ireland (like Accenture and Medtronic), or owned by a Chinese parent (like TikTok and Grindr)?

Over the past forty years, ICTs have enabled more expansive markets in successive domains, first for capital (financialization), then for supply (Nikefication), then distribution (Amazon), and, finally, labor (Uberization). Along the way, the purpose of the corporation was narrowed to one: creating shareholder value. A matrix of institutions grew up to enforce this purpose and to punish those who deviated. Far more than monopoly, this is the source of our societal ills: The rules of the game under shareholder capitalism favor profit, whatever its source and whatever its consequence for society. Sometimes monopoly helps corporations create shareholder value, but it is only one tool among many. And as long as the business sector is dominated by the idea that corporations exist to create shareholder value, altering the rules of competition will not make the economy more humane, democratic, or sustainable.

The digital transformation of business is changing the shape of the American economy in unpredictable ways. How companies recruit labor, capital, and supplies, how they distribute their products, and how they manage their people and operations are all metamorphosing, creating new opportunities and new hazards. The basic architecture of enterprise today looks radically different from a generation ago, and even different from the start of 2020, when the COVID-19 pandemic began. Work-from-home will inevitably lead to a greater use of global contractors rather than local employees, and we are increasingly seeing “placeless” businesses that assemble and manage their components entirely online. When Coinbase went public in April 2021, its prospectus listed no physical headquarters address and noted that it was a “remote-first” enterprise.<sup>3</sup> And after Proposition 22 in California,<sup>4</sup> we are likely to see even more frontline work done by app-based gig workers (delivery drivers, warehouse laborers, kitchen staff) recruited by the task or by the shift, their daily wages subject to the whim of the market.

More markets and more competition are not the solution to every problem, and sometimes giant scale has its advantages. Walmart, the scourge of the

<sup>3</sup> United States Securities and Exchange Commission, [www.sec.gov/Archives/edgar/data/1679788/000162828021003168/coinbaseglobalincs-1.htm](http://www.sec.gov/Archives/edgar/data/1679788/000162828021003168/coinbaseglobalincs-1.htm).

<sup>4</sup> Athreya (2021) details the post-election trajectory of Proposition 22.

anti-monopolists, has the monopsony power to force its biggest suppliers to reduce their carbon emissions, to stock energy-efficient light bulbs at a sufficiently massive scale to make them cost effective for its customers, to get affordable organic groceries into thousands of stores, and to put solar panels on roofs across America.<sup>5</sup> No coalition of Main Street retailers could accomplish this so rapidly. (Walmart also had the power to force suppliers to meet its “China price,” driving down the wages of workers at its biggest providers.<sup>6</sup>) Or consider health care affordability. The governmental equivalent of Walmart (say, Medicare For All) could quickly drive down the price of medicines by surpassing the bargaining power of pharmaceutical companies, streamlining unnecessary paperwork, and coordinating care across geographies. Big companies and big government can be bullies, but sometimes it is beneficial to have bullies on your side – if they can be made democratically accountable. And more competition is not always the right answer. The opioid crisis will not be solved with more competitors for Purdue and Insys. The obesity epidemic will not be fixed with even more producers of hyperprocessed food. And in a world hurtling toward climate collapse, we don’t need more petroleum companies, airlines, or meatpackers spewing more greenhouse gases into the atmosphere.

The challenges we face are on the same scale as the shift from agriculture to manufacturing around the turn of the twentieth century when the modern corporation took over the economy. But we can’t simply rely on the same tools we did then. In an age when all our human transactions and relationships are intermediated online, reviving twentieth-century antitrust is not sufficient. We need a new understanding of the place of business and government in organizing the economy so that it is democratically accountable and serves human needs. My aim here is to provide a starting point.

This Element is a short take on a big topic. In Section 2 I describe the digital transformation of business and how ICTs have transformed how companies access the raw ingredients of business – capital, labor, supplies, and distribution – in ways that favor the use of markets. Increasingly, the parts needed to create a business are available online, ready to snap together like a set of Legos, which helps explain the long-term decline in the number of public corporations in the United States.<sup>7</sup> In Section 3, I discuss the new anti-monopoly movement and its diagnosis of our current era. From the Sherman Act of 1890 until the 1950s, the US Congress guided corporations to behave themselves by regulating how they compete with each other and engage with their suppliers

<sup>5</sup> See Barbaro (2007) and Plambeck and Denend (2008).

<sup>6</sup> Wilmers (2018) describes the supplier wage effects of Walmart’s monopsony power.

<sup>7</sup> “Public corporations” are companies listed on a stock market like the New York Stock Exchange. See Davis (2016a, 2016b) on the decline of the public corporation and the rise of alternatives.

(primarily during the Progressive Era) and by regulating the capital and labor markets during the New Deal era. This limited the “curse of bigness” and aligned what’s good for business with what’s good for society. But, according to the anti-monopolists, the curse that plagued the American economy at the turn of the twentieth century is back, brought about by a wrong turn in antitrust four decades ago. In response, they propose a revival of trustbusting. I break down how this diagnosis gets it wrong in Section 4, suggesting that it is not creeping monopoly but shareholder capitalism that got us into our current mess. Contrary to the monopoly narrative, there is little evidence that industry has become massively more concentrated since Reagan took office – but there is compelling proof of the hegemony of shareholder value as the North Star for corporate activities.

Technology has undermined some of the basic categories we use to understand the economy. Sections 5, 6, and 7 describe fundamental changes in three basic terms. *Nationality* seems fairly basic, but scores of US-based firms such as Apple, Google, and Netflix make most of their revenues overseas, many are incorporated outside the United States, and new virtual businesses undermine the very idea of “place.” *Industry* was straightforward when the biggest businesses made steel or cars or they refined oil or operated railroads. Today, however, there is often a disjuncture between what companies do, what markets they operate in, and where their revenues come from. The “technology” industry ends up encompassing businesses that operate in nearly every market, from hotels and restaurants to transportation and construction to national security, which makes it tough to define terms like market share. Finally, *size* is an increasingly unhelpful metaphor to describe corporations as revenues, employment, assets, and market capitalization are increasingly uncorrelated. Corporations with minimal assets and employees can have vast market caps (e.g., Netflix, Zoom); enormous employers can have petite valuations (e.g., the retailers Kroger, Walgreens, Albertsons), as can those with world-beating revenues (drug middlemen McKesson and AmerisourceBergen). The “curse of bigness” is too blunt a term to be useful today because we no longer agree on what *bigness* is. If nationality, industry, and size elude easy definition, then identifying monopoly power in a rigorous way will be even more troubled, no matter what the public consensus may be. As the judge who threw out the Federal Trade Commission’s (FTC) initial filing of an antitrust case against Facebook put it,

It is almost as if the agency expects the court to simply nod to the conventional wisdom that Facebook is a monopolist . . . Yet, whatever it may mean to the public, “monopoly power” is a term of art under federal law with a precise

economic meaning: the power to profitably raise prices or exclude competition in a properly defined market. (Kang, 2021)

The American dream of starting a business and being your own boss is still alive, and all the parts a business needs are available online – yet, paradoxically, business startup rates, by some measures, have been in a long-run downward spiral, albeit with a surprising upward blip during the COVID-19 pandemic. In Section 8, I unpack the myth of entrepreneurship and highlight the dangers of using the rhetoric of self-employment to cloak an increasingly precarious employment relation. Finally, in Section 9, I dive into what comes next. A buffet of policy options has been proposed to take on the new monopolies, from more vigorous antitrust enforcement to a new regulatory agency for digital platforms. I end by considering the bigger stakes we need to consider when we rein in the new economy, and why we need to put democracy first.

## 2 The Digital Transformation of Business

Suppose you came up with a brilliant invention that would make life easier for busy people – say, a computerized pressure cooker that allowed home chefs to throw raw ingredients into a pot, push some buttons, and come back an hour later to a healthy dinner. How would you turn that into a business?

To create a working prototype, you might have to buy some capital equipment. Perhaps you have rich friends or family who could lend you some money. If the product you develop is viable and your market research is solid, you might ask a bank for a loan to build a factory and hire skilled workers. You'd need to retain a sales force to get stores like Sears and JCPenney to stock your product, and a shipping company to distribute it. As sales grew, you might hire more workers and expand your factory. If you got big enough, you might even list shares on a stock market to fund your expansion. Within a few years, or decades, you might grow the business into a lasting legacy, a pillar of your local community.

At least, that's what you would have done forty years ago. Today, after you created your initial design sketch, you might recruit some freelance designers on Upwork to perfect your idea. You could raise funding for your venture on Indiegogo – but you might not need much. Alibaba lists scores of factories waiting to manufacture your product once you have design specifications that you can send over the Internet.<sup>8</sup> And Amazon is happy to advertise and distribute your product to customers and collect their payments. (If your product is really popular, they might even compliment your business by creating an

<sup>8</sup> Dozens of low-cost Instant Pot knockoffs can be found at [www.alibaba.com/showroom/electric-pressure-cooker.html](http://www.alibaba.com/showroom/electric-pressure-cooker.html).

*Taming Corporate Power in the 21st Century*

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Amazon-branded knockoff, produced by the same manufacturer, that undercuts your price.)

This is, more or less, the story of the Instant Pot. Robert Wang, an Ontario computer science PhD who was out of work after the 2008 financial crisis, along with two other engineers, spent eighteen months perfecting a design for a versatile, low-cost, computerized pressure cooker, funded by \$350,000 of his savings. After its debut on Amazon in 2010, Wang sent 200 Instant Pots to influential food bloggers and chefs, who shared positive evaluations (and, crucially, Instant Pot-specific recipes) online. Thanks to a cascade of rapturous reviews on Amazon, the product went viral and grew a large cult following. Hundreds of Instant Pot cookbooks have been published for every kind of cuisine, and thousands of recipes are posted online. Distribution was handed off to Fulfillment By Amazon, which received the products directly from the factory in China, packed them, and shipped them to customers. Product research consisted of reading the many thousands of reviews on Amazon and updating the appliance based on user experiences. By 2018, the Instant Pot was selling 300,000 units on Amazon’s Prime Day alone – all from a company with just 50 employees in Ottawa. No advertising, no factories, few employees, and almost no assets – yet the Instant Pot had become a global phenomenon.<sup>9</sup>

The Instant Pot story demonstrates that the American dream is still alive and well – in Ontario, Canada. The bigger lesson of Instant Pot is about the digital transformation of business. Information and communication technologies have transformed every aspect of how business is done over the past generation. In the words of Marc Andreessen, “Software is eating the world,” and that applies to all the core components for creating an enterprise (Andreessen, 2011). They have reshaped the basic raw materials for building a company – just as structural steel, reinforced concrete, and plate glass changed buildings in cities around the world over a century ago.

Because software is “eating the world,” markets are eating the world, too. Information and communication technologies have changed how companies raise capital (hello Indiegogo, Robinhood, and Coinbase), find suppliers (Alibaba), recruit labor (Uber, DoorDash, Mturk, Upwork), and distribute their products and services (Amazon, Shopify). They have also changed how firms operate internally, as employees (or contractors) are increasingly supervised by algorithms, not human managers. In a world where any kid in a dorm room can assemble a business from online parts, the corporation itself is increasingly becoming an obsolete way to organize economic activity. This helps explain why there are half as many corporations listed on the stock market

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<sup>9</sup> For details on the Instant Pot story, see Montag (2017) and Roose (2017).

as there were twenty-five years ago.<sup>10</sup> It's as if the National Basketball Association (NBA) were replaced by impromptu pickup games, all over the economy.

The core factor markets that make up a corporation have changed in parallel ways in recent years due to ICTs. In the United States, the recurring theme across all these markets is the same: ICTs enable markets for things that were previously too complicated or too costly to trade on markets, leading companies to outsource rather than doing things internally. As Nobel economist Ronald Coase (1937) would put it, ICTs are driving down the transaction costs of using online markets for inputs. More and more, it's cheaper to buy (or perhaps more aptly, to rent) than to make. This transformation has happened successively across markets for capital (financialization), supplies (Nikefication), distribution (Amazon), and labor (Uberization), and is changing practices inside the business as well.

## 2.1 Financialization: How Capital Markets Spread from Wall Street to the Parking Meters on Your Street

Over the past forty years, financing for business has increasingly taken place through markets rather than institutions like banks. And even if you do pass through a marble bank lobby to take out a mortgage or a business loan, the odds are good that the loan will be resold, bundled, and sliced into bonds before you make it out the door (a process known as “securitization”).

Financialization is what happens when financial markets become central to the operations of the economy.<sup>11</sup> Thanks to ICTs, financial markets have spread broadly around the world and deeply into the economy. Dozens of countries opened stock exchanges over the past four decades, enabling global investors to invest in distant markets and to fund ventures that might have been beyond the reach of domestic savers.<sup>12</sup> Kids waiting for the school bus with their smartphones may be trading emerging market Exchange Traded Funds (ETFs) or GameStop options on Robinhood. And almost anything with a reliable cash flow has been securitized, from college loans and sitcom royalties to life insurance payoffs of the elderly and future collections from parking meters.

The most familiar form of securitization is the home mortgage market. For generations, people seeking to buy a house might take out a thirty-year mortgage from a local bank, which funded the mortgage through the deposit accounts of local savers. In the early 1970s, government-sponsored organizations in the

<sup>10</sup> See Davis (2016b) on the vanishing American public corporation.

<sup>11</sup> Davis and Kim (2015) trace the history of financialization.

<sup>12</sup> Weber et al. (2009) describe the global spread of stock exchanges after 1980.