

SCHUMPETER PROJECT ON COMPETITION POLICY



Platforms Are the New Organizational Paradigm

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Just as there was opposition to the corporate economy in the early 1900s, there is opposition to the platform economy today. But limiting "platformization" would have considerable long-lasting economic costs for the nation and consumers.

KEY TAKEAWAYS

- Corporate form evolves in response to external forces, particularly technology. The latest evolution is the IT-enabled platform, which may make sense in a wide variety of industries and functions, including banking, travel, education, law, and medicine.
- IT-based platforms naturally tend toward concentration, with one or two companies holding most of the market share. Through this scale and efficiency, they often provide higher quality and lower costs than a more dispersed market would.
- As with the last two major transitions—the rise of corporations in the early 1900s, then "managerial corporations" after World War II—the rise of the platform economy today is beneficial for the economy and society, but it has stirred discontent.
- Criticism from "muckrakers," small businesses, and politicians in the early 1900s produced the Sherman and Clayton antitrust acts. But courts in that era focused mostly on abusive corporate behavior, including trusts, not market share itself.
- The post-WWII policy response to "managerial corporations" caused far more harm, leading to the decline or extinction of a many technologically advanced U.S. firms. Today's opposition to platforms also poses a severe challenge to America's future.
- Antitrust must recognize that below-cost pricing can be beneficial to consumers, develop new rules to better account for platform market dynamics, and analyze allegations of anticompetitive behavior based on conduct rather than size.

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INTRODUCTION

Business organizations can take many forms, from founder-led to multidivisional multinationals to emerging IT-enabled platforms. The prevailing organizational form in business is neither set in stone nor decided upon by fad. It is largely a result of the technological and economic conditions of the time. There were no large U.S. corporations before the emergence of the railroad because the production system neither required nor enabled scale, which corporations are designed to manage. When rail and industrial production technologies evolved after the Civil War, large corporations became the norm. Justice Louis Brandeis and other opponents of these new corporations sought to squelch them in their infancy, preferring a prior economy dominated by owner-led, small and mid-sized firms. Even with the passage of the Sherman Act, their opposition was largely stillborn; the benefits of the corporation were simply too vast. However, had the Brandeisians succeeded in their quest to turn back time America would not be the global economic leader it is today.

We are potentially at a similar transformative point in history, with digital technologies enabling the rise of a new kind of productive organization: the platform. Digital platforms, not just in the information sector, have the potential to transform many industries for the better: raising productivity, improving quality and consumer choice, and reducing prices. But just as there was significant opposition against the transition to the corporate economy, today there is significant opposition to the platform economy, although this time not among the populace but rather among the elites: activists, public intellectuals and academics, and elected officials of both parties. If their attempts to roll back the "platformization" of the U.S. economy succeed, the economic costs to the nation and to consumers would be considerable and long-lasting.

This report assesses the past two major changes in corporate form, and the public and government responses to them. It then examines the prospect and potential benefits of the "platformization" of the economy, as well as current opposition. Finally, it discusses the variety of policy approaches proposed to address platform governance and why most will lead to more harm than good.

BUSINESS FORM AFTER THE CIVIL WAR

Large corporations seem to be a force of nature. In fact, for the first 100 years of the Republic, they played a minimal role in the economy. Prior to the 1880s–1890s industrial revolution, virtually all firms were small, local, or regional, and family-owned and run. For example, in 1860, Pittsburgh boasted 17 foundries, 21 rolling mills, 76 glass factories, and 47 other manufacturing establishments, but none were incorporated and almost all were small.¹ Before the Civil War, there were few manufacturing plants with more than 500 workers, as the corporation had not yet been widely adopted as the legal form of business.

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The reason for this was threefold. First, getting goods to market was expensive, so it made little sense for establishments to get bigger and produce large quantities. Second, there was extremely limited communication, which made managing multi-establishment enterprises extremely difficult. Finally, machinery was quite limited, making it hard to do more than only limited craft production. With these limitations, the corporate form was not needed.

With the development of steam engines and cheaper and better iron and steel, the telegraph (and then the telephone) and railroads emerged and because of the capital costs involved and geographic scale needed, became the first large corporations. Railroads then enabled the emergence of broader regional markets, letting fewer and larger firms gain scale and expand output. As new technologies emerged, more industries evolved into mass production industries (e.g., iron and steel, textiles, ceramics, agricultural equipment, etc.) which in turn enabled and required larger enterprises that took advantage of economies of scale. At the same time, the emergence of new industries based on new technologies (chemicals, sewing machines, electrical equipment, machine tools, autos, etc.) meant that scale was the order of the day. All this means that the U.S. economy led the world because of its embrace of the large corporation.

By 1900, the corporate form, especially in transportation and production, had become dominant. For example, half the world's glass and iron and two-thirds of the steel came from Pittsburgh's factories, most of them medium-sized to large corporations. The largest company of the day, US Steel, was formed from a plan hatched by J.P. Morgan and Carnegie Steel's president to merge Carnegie Steel with Morgan's number two-sized Federal Steel to make US Steel the nation's first billion-dollar company. Due to the unprecedented size of this new corporation, financiers on Wall Street gave it the nickname "The Corporation." By 1920, there were more than 10,000 manufacturing plants with more than 500 workers.

Firms did not get bigger because their owners acquired a new taste for wealth and power. Rather, the new technology let—in fact, required—establishments to grow to hitherto unprecedented

size. The larger the factory or the corporation, the more efficient it could become and the more it could drive down costs and grow even more. The cost reductions resulting from factory operations and geographic concentration of production overwhelmed made-to-order and small-volume production in industry after industry.

Until the emergence of the factory economy, there was no straightforward legal form that was appropriate to such size. As the technology system made it possible for industry to become larger, companies initially turned to trusts as a way to become big. Trusts were made up of stockholders of individual smaller firms that gave their stock to a central board in trust. Though trusts were sometimes used to engage in anticompetitive behavior, they nevertheless reflected an underlying reality that efficient production required increased size and coordination.

However, law caught up to the economic system. The enactment in 1889 of the New Jersey corporation law that allowed companies to buy stock in other corporations, along with the passage of the Sherman Act in 1890 that outlawed trusts, gave way to mergers between separate corporations. By 1904, one or two giant firms, usually put together by merger, controlled at least half the output in 78 different industries. In 1896, there were fewer than 12 firms worth \$10 million, but by 1904 there were more than 300.

By the late 19th and early 20th centuries, the advantages of large corporations were widely recognized by leading American economists. John Bates Clark observed that large industrial companies were:

the result of an evolution, and the happy outcome of a competition so abnormal that the continuance of it would have meant widespread ruin. A successful attempt to suppress them by law would involve the reversion of industrial systems to a cast-off type, the renewal of abuses from which society has escaped by a step in development.²

The economist and leader of the progressive movement Richard T. Ely agreed that "owing to discoveries and inventions, especially the application of steam to industry and transportation, it became necessary to prosecute enterprises of great magnitude."³

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OPPOSITION TO THE INDUSTRIAL CORPORATION

While many Americans, especially economists, recognized the enormous benefits of large corporations to the nation, especially in terms of raising wages and living standards, change is hard and some muckrakers, interest groups (mostly small businesses), and political figures decried the rise of the corporation.

More and more Americans began to distrust this new and unprecedented form of corporate organization. Indeed, in documenting the emergence of the large corporation, Alfred Chandler argues that before 1940, these changes were almost certainly opposed by a majority of the American people.⁴ In addition, many small business owners saw the corporation as a distinct threat. As a result, many of the new regulatory initiatives put in place between 1880 and 1920,

including the Sherman and Clayton antitrust acts, were spurred by small-business leaders resisting the changes brought on by the factory revolution.⁵

One of the most prominent critics of the shift to a corporate, industrial economy was the philosopher and social critic William James. He stated his case against the emergent new economy:

As for me, my bed is made: I am against bigness and greatness in all forms, and with the invisible molecular moral forces that work from individual to individual, stealing in through the crannies of the world like so many soft rootlets, or like the capillary oozing of water, and yet rendering the hardest monuments of man's pride, if you give them time. The bigger the unit you deal with, the hollower, the more brutal, the more mendacious is the life displayed. So I am against all big organizations as such, national ones first and foremost; against all big successes and big results; and in favor of the eternal forces of truth which always work in the individual and immediately unsuccessful way, underdogs always, till history comes, after they are long dead and puts them on top.⁶

Ida Tarbell's muckraking exposé of Standard Oil made Americans aware of the ruthless practices of John D. Rockefeller and documented his use of legal and illegal means to crush his competitors, even if overall productivity might have risen as a result. The emergence of these large trusts dominated the imagination of friends and foes alike. Tarbell stated that the rapidly changing economic landscape and the rise of monopolistic trusts was "disturbing and confusing people."⁷

In the face of such concerns, Congress was aroused to pass antitrust laws. But far from breaking up large firms, the laws in some ways encouraged mergers. What was outlawed were trusts.

Opponents even argued that not only did trusts and big corporations unfairly dominate small business and farmers, but they were actually no more efficient than the small businesses they put out of business. Before he became a supreme court justice, Louis Brandies argued in a famous rate case against the railroads that big railroads were economically inefficient. In fact, Brandies argued that medium-sized companies in general were most efficient.⁸ He and his allies made this argument because they knew that the strongest case for the industrial corporation was the vast increases in efficiency they produced. Indeed, Brandeis went to great pains to try to paint small firms as being as efficient as large ones were, declaring in testimony before the U.S. Senate in 1911, for example, that "a corporation may well be too large to be the most efficient instrument of production and of distribution."⁹

In addition, he and others argued that corporations only got big by cheating. As the economic historian Thomas K. McGraw wrote, "Early in his career, Brandeis decided that big business could become big only through illegitimate means. By his frequent references to the 'curse of bigness,' he meant that bigness itself was the mark of Cain, a sign of prior sinning."¹⁰

In the face of such concerns, Congress was aroused to pass antitrust laws. But far from breaking up large firms, the laws in some ways encouraged mergers. What was outlawed were trusts. Since firms could no longer get the benefits of coordination from trusts, they sought them out through

mergers. In 1896, there were fewer than 12 firms worth \$10 million, but by 1904, there were more than 300, most created through mergers.

Unlike Brandeis and other populists, many American political leaders supported large firms and mergers because they saw them as the path to American greatness. For example, today, Theodore Roosevelt is often remembered only as a trust buster. But this is a distortion of history, as he distinguished between "good" and "bad" trusts and preferred federal licensing and regulation of corporations to the adversarial methods of antitrust litigation. In his 1905 Annual Message to Congress, Roosevelt declared:

I am in no sense hostile to corporations. This is an age of combination, and any effort to prevent combination will not be useless, but in the end vicious, because of the contempt for law which the failure to enforce law inevitably produces. We should, moreover, recognize in cordial and ample fashion the immense good effected by corporate agencies in a country such as ours, and the wealth of intellect, energy, and fidelity devoted to their service, and therefore normally to the service of the public, by their officers and directors. The corporation has come to stay, just as the trade union has come to stay. Each can and has done great good. Each should be favored so long as it does good. But each should be sharply checked where it acts against law and justice.¹¹

Roosevelt insisted that business "cannot be successfully conducted in accordance with the practices and theories of sixty years ago unless we abolish steam, electricity, big cities, and, in short, not only all modern business and modern industrial conditions, but all the modern conditions of our civilization."¹²

The historian Martin J. Skylar noted that "Roosevelt's position was not that of 'Trust-Buster' but of 'Trust-Muster'—he would muster the trusts into the national service."¹³

As the legal scholar Daniel A. Crane noted, "By 1912, Roosevelt was staking a position against any trustbusting at all. Far from honoring his 'trustbuster' moniker, Roosevelt argued for just the opposite—the legality of large combinations of capital, nonetheless subject to pervasive governmental regulation."¹⁴

Indeed, although his administration had brought the antitrust case against Standard Oil, Roosevelt privately regretted the decision of the Supreme Court in 1911 to break up the company:

I do not myself see what good can come from dissolving the Standard Oil Company into forty separate companies, all of which will still remain really under the same control. What we should have is a much stricter governmental supervision of these great companies, but accompanying this supervision should be a recognition of the fact that great combinations have come to stay and that we must do them scrupulous justice just as we exact scrupulous justice from them.¹⁵

The Sherman Antitrust Act of 1890 declared that "every contract, combination in the form of trust or otherwise, or conspiracy in restraint of trade among the several states ... was illegal."¹⁶ As a result, the focus was more on anticompetitive conduct than it was on structure (e.g.,

breaking up firms). We see this in the Progressive Party national platform from 1900 which stated:

We favor strengthening the Sherman Law by prohibiting agreement to divide territory or limit output; refusing to sell to customers who buy from business rivals; to sell below cost in certain areas while maintaining higher prices in other places; using the power of transportation to aid or injure special business concerns; and other unfair trade practices.¹⁷

And the courts did focus mostly on abusive behavior to attain or retain market share, not possession of significant market share itself. As the Supreme Court wrote in the *Alcoa* case of 1945, "The successful competitor, having been urged to compete, must not be turned upon when he wins."¹⁸ Indeed, as applied by the courts, antitrust law enforcement in the early 20th century frequently fell heavily on small businesses, many of which would end up getting charged with collusion.

ORGANIZATIONAL FORM AFTER WORLD WAR II

Many see the rise of industrial-era companies as one development from the 1880s to the present. The reality is that while the post-Civil War corporations represented a significant evolution from the merchant-era family enterprise, they were still a far cry from the large managerial corporations that became the standard after World War II. Starting in the 1930s, corporate form once again changed with the rise of what Chandler termed the "managerial corporation."

Pre-WWII, most decisions continued to be made in informal ways, with owners and top managers acting on their own intuition and limited information. Strict and clear lines of authority were not laid out, and decisions depended on personal priorities and discretion. Unlike the corporation of the 1950s, with its large masses of middle managers and supervisors, a small group of managers oversaw thousands of workers. Chandler noted that "the Carnegie Corporation did little to coordinate its various mining, shipping and manufacturing units, which remained separate companies under independent management."¹⁹ Most corporations were one-product companies run by their owners and a small executive cadre. It was not until the emergence of the post-WWII economy that the practice of management became the standard. As a result, by 1948, the corporate sector held almost 60 percent of national income-producing wealth, and the largest 200 employers accounted for 20 percent of private nonagricultural workers. By 1950, the 200 largest nonfinancial corporations accounted for 40.3 percent of value added. In 1901, only one corporation, US Steel, had over \$1 billion in assets. By 1960, 638 corporations had more than \$1 billion in assets (in constant dollars). Bigness was the order of the day.²⁰

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There were two other key changes. First, corporate form before WWII was largely in finance and manufacturing. After WWII, it extended to many other sectors, such as retail, hospitality, construction, and business services. As historian Robert Griffith stated, "By the middle of the twentieth century, corporate reorganization of the economy had taken place."²¹

In the 1960s, Galbraith captured the change:

Seventy years ago the corporation was confined to those industries—railroading, steam boating, steel making, petroleum recovery and refining, some mining—where, it seemed production had to be on a large scale. Now it also sells groceries, mills grain, publishes newspapers and provides public entertainment, all activities that were once the province of the individual proprietor or the insignificant firm.²²

Second, scientific and engineering discovery became more important for competitive advantage, as many corporations after the 1920s developed dedicated research and development (R&D) labs. The sources of innovation changed from being based largely on technical tinkering and trial and error by mechanics and inventors working in their garages to a science-based one in corporate laboratories where innovation was derived from a more fundamental understanding of underlying processes.²³ As Joseph Schumpeter argued, "Technological progress is increasingly becoming the business of teams of trained specialists who turn out what is required and make it work in predictable ways."²⁴ As a result, R&D expenditures skyrocketed by 400 percent between 1953 and 1964. For example, Dupont's R&D expenditures increased from around \$1 million per year in 1921 to over \$60 million by the mid-1950s.²⁵ R&D laboratories increased from around 1,000 in 1927—with few doing basic research—to almost 5,000 in 1956, with many, such as Bell Labs conducting extensive basic research.²⁶ One reflection of this is the fact that in 1901 there were 20,896 patents issued to individuals, with only 4,650 going to corporations. These balanced out by the 1930s, but by the mid-1950s, the corporate rate had taken off. By 1980, corporations had obtained about five times more patents than individuals.

By the 1950s, big corporations had become a way of life and Americans had grown used to them. Professional managers now ran corporations, so much so that the period became known as the "era of managerial capitalism." Here, ownership and management became separated, in large part because, as companies became much larger and more technologically sophisticated, there was a need for large ranks of professional managers to run them. Yet, as corporations grew, became ever more complex, and had a vastly increased need for management and administration, they became controlled by a new class of professional managers.

The completion of the continental rail system, telephony, air travel, and the interstate enabled a truly integrated national market that in turn enabled scale. At the same time, a wide array of new process technologies (technologies involved in making products) enabled and required larger and more sophisticated companies. Finally, the rise of computing (initially mainframes) and telecommunications allowed companies to much more easily manage large amounts of complex data. Indeed, that postwar "mixed economy" was so different from the one that preceded it that an issue of *Fortune* magazine in October 1955 was devoted to the "New Economy" and dealt with the "American breakthrough" and the "new management."²⁷

Finally, as Chandler noted:

In the first decade of the twentieth century, the control of the large corporation was, in fact, the paramount political question of the day. The protest against the new type of business enterprise was led by merchants, small manufacturers, and other businessmen, including commercial farmers, who felt their economic

interests threatened by the new institution. By basing their arguments on traditional ideology and traditional economic beliefs, they won widespread support for their views. Yet in the end, the protests, the political campaigns, and the resulting legislation did little to retard the continuing growth of the new institution and the new class that managed it.

The same cannot be said of the next transition.

OPPOSITION TO THE MANAGERIAL CORPORATION

Like in the early period of corporate industrialization, in the postwar period, many opposed the rise and spread of the managerial corporation. While the Right rejected the growing power of government, the Left rejected the growing concentration of power in business and the pernicious effects of a mass society on democracy and individualism. The most vociferous critic on the left was sociologist C. Wright Mills. In his landmark book, *White Collar*, Mills attacked the new corporate economy as a threat to fundamental American values of independence and decentralization. To Mills, the transition to the corporate economy had destroyed the American tradition of independence, craftsmanship, and entrepreneurship and had given way to alienation and exploitation. Starting a tradition of neo-Marxist critique, Mills argued that workers were exploited as their formerly skilled craft jobs were being transformed into unskilled assembly line jobs. Mills also rejected the new social order. In *The Power Elite*, which became a bible of the 1960s New Left movement, Mills defined the new social classes as consisting of the blue collar, white collar, and ruling class power elite. And in a national economy in which corporations run things, "in so far as national events are decided, the power elite are those who decide them."²⁸

In the 1950s, the Left complained that a mass society, dominated by big institutions, was forcing people into dehumanizing, bureaucratic structures. Man had become a cog in the faceless machine with large-scale organizations creating hierarchy and imposing control. This was all part and parcel of the sociology of the 1950s that focused on the "mass society" and alienation. Daniel Bell summed it up: "The theory of mass society no longer serves as a description of western society but as an ideology of romantic protest against contemporary life".²⁹

Economist and social critic Robert Theobald complained that "any observers feel that the improvement in economic standards during the past fifteen years has been bought at a heavy social cost. They suggest that the attitudes necessary for the most rapid rate of growth are not those which encourage a meaningful life for the individual or a valid sense of community."³⁰

This was not just a concern of a rebellious and isolated Left. It reflected liberal thinking as a whole. In 1956, Democratic presidential candidate Adlai Stevenson warned:

It is not true that the individual rolls around today like a kernel of grain between the upper and nether millstones of Big Government and Big Business—but there is a danger here that is great enough to warrant our keeping such a picture always in mind. Even as we become increasingly vigilant in our battle against the debilitating force of communism we must be aware of another enemy that creeps upon us even more quietly and insidiously: the army of mass mediocrity, with banners flying. We are concerned about a strange, not wholly definable force in which there are at least the identifiable elements of 'government' and technology and massiveness in this age of mass population, mass education, mass communications—and yes, mass manipulation. Indeed, it seems that in the midtwentieth century, mass manipulation is a greater danger to the individual than was economic exploitation in the nineteenth century; that we are in greater danger of becoming robots, than slaves ... Technology, while adding daily to our physical ease, throws daily another loop of fine wire around our souls.³¹

He went on to complain, "By destroying competition in industry after industry, this policy puts the consumer at the mercy of the joint monopoly action of capitalists and workers in the best organized industries."³²

Congress and various administrations were not deaf to complaints. As large corporations came to dominate an array of sectors in the postwar period, small businesses and their ideological fellow travelers complained that left alone, big business would crush the independent businessperson. To check the feared growth of big business, the Celler-Kefauver Act of 1950 sought to strengthen the Clayton Antitrust Act of 1914, which itself amended the 1890 Sherman Antitrust Act. The act empowered the federal government to thwart competition-limiting vertical mergers, in addition to the horizontal mergers that had been the focus of previous antitrust laws. The high-water mark of political concern about concentration was the 1968 submission of the Neal Report, a task force report commissioned by President Lyndon Johnson.³³ It recommended enactment of a "concentrated industries act" and a "merger act" that would mandate deconcentration of any "oligopoly industry" and limit conglomerate mergers.

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The Celler-Kefauver Act had one pernicious and unanticipated effect, which is often the case when government tries to engage in large-scale regulatory restructuring of society and the economy. Because companies were so restricted from merging to gain scale and domestic market share, companies turned instead to horizontal mergers in completely unrelated industries. As former deputy assistant attorney general in the Antitrust Division, William Kolasky, has noted, "In the 1960s the United States experienced a wave of conglomerate mergers, driven in part by overly restrictive antitrust policies toward horizontal and vertical mergers."³⁴

In *Lords of Strategy*, a history of the business consulting industry, Walter Kiechel wrote, "Antitrust law ruled out acquisitions in your own industry ... So to plow the proceeds back into your company and to keep getting bigger, you often seemed to have only one choice: buy something in an area unrelated to those you were already in."³⁵ Among the 148 firms that were in the top 200 corporations in both 1950 and 1975, the mean number of lines of business a firm engaged in grew from 5.2 to 9.7.³⁶ Between 1950 and 1978, Beatrice Foods made 290 acquisitions and W. R. Grace made 163. The latter, originally a chemical company, acquired Hostess Twinkies snack cakes, Mexican restaurants, sports teams, fire extinguisher makers, banks, and western wear makers, among other firms. The Radio Corporation of America (RCA) purchased book publisher Random House, Hertz Rent-a-Car Company, frozen-meal producer Banquet Foods, furniture and floor-covering manufacturer Coronet, and a company that made golfing attire.³⁷

The problem with these kinds of mergers is they generated little added value through scale economies or synergies and were largely undone 20 years later. But the damage had been done: Companies not able to gain the scale they needed to effectively compete with rising international competitors, often backed by their governments with subsidies and trade protection, instead spent their valuable managerial time and effort on largely worthless mergers.

There was a second problem with the aggressive approach to antitrust in the 1950s and 1960s, and that related to innovation. From the "second new deal" to the 1970s, U.S. antitrust enforcers took a very Brandeisian view of the economy, prosecuting a wide array of firms for having supposed market power. But in many cases, this aggressive antitrust enforcement was based on prior conceptions and did not fully take into account the emergence of either the R&D-and intellectual property-based corporation or the rise of international trade competition. So, in their zeal to limit market power, U.S. antitrust enforcers imposed real damage on a number of important firms and industries, and in so doing seriously set back the U.S. economy, the effects of which continue to be felt to this day. As historian John Steele Gordon wrote:

Those with the hammer of antitrust in their hands have had a record of doing at least as much harm as good. Often their timing has been nearly surreal. Standard Oil was broken up just as Royal Dutch Shell was beginning to provide true competition. In 1948, the very year that television really took off in this country with the debut of the "Texaco Star Theater," with Milton Berle, Hollywood studios were forced to change several practices. The purpose was to lessen their stranglehold on popular visual entertainment; the result was to move power in Hollywood from the Samuel Goldwyns to the Barbra Streisands. I am not sure that is progress.³⁸

So, in their zeal to limit market power, U.S. antitrust enforcers imposed real damage on a number of important firms and industries, and in so doing seriously set back the U.S. economy, the effects of which continue to be felt to this day.

Over the course of several decades, aggressive antitrust enforcement significantly weakened, and in some cases helped kill, a number of leading American technology companies. As Lynn and Longman wrote approvingly, "Antitrust enforcers weren't content simply to prevent giant firms from closing off markets. In dozens of cases between 1945 and 1981, antitrust officials forced large companies like AT&T, RCA, IBM, GE, and Xerox to make available, for free, the technologies they had developed in-house or gathered through acquisition."³⁹ They praised such actions as opening up patents to other companies: "Over the thirty-seven years this policy was in place, American entrepreneurs gained access to tens of thousands of ideas—some patented, some not—including the technologies at the heart of the semiconductor."⁴⁰ Lynn elsewhere noted that "a study done in 1961 counted 107 judgments just between 1941 and 1959, which resulted in the compulsory licensing of 40,000 to 50,000 patents."⁴¹

In some cases, compulsory sharing of trade secrets—mostly ones, it should be noted, developed fairly through hard work and investment—no doubt helped spur innovation, at least in the short

term. But this overlooks two serious problems. The first is the absurdity of having a nation's industrial policy be carried out not by the Commerce Department or another agency tasked with promoting long-term national productivity growth and export success but by the Department of Justice (DOJ), in adversarial settings dominated by lawyers and academic economists, on the basis of government litigation or threats of government litigation.

Praise for DOJ as the promoter of innovation through compulsory sharing of intellectual property also overlooks the very severe damage this policy did to leading U.S. technology companies, along with the benefits to foreign companies at enormous cost to American economic development, innovation, and job creation.

The *AT&T* case is a good example. After inventing the transistor at its Bell Labs facility, the company faced pressure from antitrust regulators to license that technology. So in 1952, AT&T licensed the technology for a small fee to 35 companies. At one level, this spurred innovation, as it helped emerging companies such as Texas Instruments and the predecessor of Intel, Fairchild. But because of government pressure, AT&T also licensed this technology to foreign companies, including Sony, which was the core advantage Sony needed to propel itself to global leadership, in the process taking market share from the leading U.S. consumer electronics firms. At the time, no one in the U.S. government could conceive that a company such as Sony could pose a competitive threat to U.S. companies. RCA is another case (see Box A).

Box A: How Antitrust Authorities Contributed to the Demise of the U.S. Television Industry: The Case of RCA

The case of the demise of RCA demonstrates the unintended damage done by antitrust policy. As Gordon wrote, "Perhaps the best example of the harm antitrust has sometimes done to our economy is RCA."⁴² Because RCA had a dominant share in the emerging color television industry, achieved by its own internal R&D, DOJ required RCA to share its patents with U.S. companies for free, stating, "By this criminal indictment, we seek to restore competition in this significant industry so that all competitors of RCA can compete with it at every level from the research laboratory to the sale of end products."⁴³ As an article in *Time* magazine noted, "In what the department considers 'a stroke of industrial statesmanship,' an agreement was reached on a color TV patent pool."⁴⁴

DOJ required RCA to provide its valuable patent portfolio to U.S. competitors at no cost. However, RCA was allowed to license the patents to foreign companies for the usual royalty arrangement. Because RCA had long relied on licensing revenue, it now was essentially forced to license its technology to foreign firms, in this case predominantly Japanese firms that were seeking, with little success, to break into the color TV market. As James Abegglen, a leading technology historian, wrote, "Unwittingly, RCA actually assisted the Japanese by selling them whatever technology licenses they required. It was a highly profitable exercise.... Japan was dependent on foreign sources for virtually all of the technology employed even to the stage of color television ... RCA licenses made Japanese color television possible."⁴⁵ But without the criminal indictment by DOJ, RCA would in all likelihood not have licensed its crown jewels to foreign companies, and very well could have survived to this day as a leading global TV producer.

Armed with this valuable technology, produced through years of research and engineering costing RCA billions of dollars, the Japanese TV manufacturers, which were protected from foreign competition by the Japanese government, soon took over the U.S. market, and an industry

invented in America was destroyed. The Japanese government understood the remarkable gift RCA, under pressure from the U.S. government, had given Japanese TV makers. Indeed, when RCA CEO David Sarnoff visited Japan in 1960, he was awarded the Order of the Rising Sun for his contributions to the Japanese electronics industry.

What was the real cost to consumers of this RCA "monopoly"? One study found that it raised the price of televisions by just 2.26 percent.⁴⁶ This was despite the fact that most of the product and process innovations in the TV industry came from RCA because RCA had the scale and scope to be able to invest in innovation. As one study of radio producers at the time, including RCA, found, "Firms that were larger and had prior radio manufacturing competence innovated far more than other firms, and pursued more challenging innovations including more mechanization innovations, confirming cost-spreading models of innovation incentives."⁴⁷ Indeed, the two leading producers of radios, RCA and Philco, produced more process innovations (e.g., innovations related to how to produce TVs) than did any other firms in the industry. As Margaret Graham noted in her history of RCA, "If RCA was no longer entitled to claim licensing revenues for maintaining the whole state of radio-related research, the obvious question for the company was which kind of research should it continue to support, and at what level?"⁴⁸ The answer was there would be less research funding and the research would be much less risky. In summary, as Gordon wrote, "To protect an American industry from the dominance of one company, antitrust had killed off the entire industry. That's a bit like using a guillotine to cure a headache."⁴⁹

Oblivious to the possibility that its actions might end up driving out of business a U.S. technology leader, the government went after other leaders, including AT&T, Xerox, Kodak, and IBM. Indeed, nearly 100 of America's most innovative companies were forced to give away their patents, over 50,000 of them, by 1960.⁵⁰ A 1954 consent decree put Eastman Kodak put on notice that its attempt to protect its film-processing technology would be heavily constrained. One effect of the Federal Trade Commission's (FTC's) intervention was to allow Japan's Fujifilm to enter the U.S. market for film essentially unimpeded by a competitive response.

A decade later, in 1969, the Antitrust Division sued IBM. As Gordon wrote, "With 65 percent of the market at that time, IBM was the eight-hundred-pound gorilla of the computer industry. But by the time the case was finally abandoned as unwinnable, in 1982, the next Schumpeterian disrupter, Microsoft, was already shipping its software and IBM was headed into the worst decade of its existence."⁵¹ A few years later, the FTC filed suit against Xerox, accusing it of monopolizing the office copier business, with the head of FTC's Bureau of Competition stating that he would be "dissatisfied if Xerox's market share isn't significantly diminished in several years."⁵²

Rather than accept and even embrace this new and more productive and innovative business form, too many policymakers sought to squeeze into a preconceived box, through ill-advised antitrust legislation and enforcement, the negative consequences from which America is still suffering.

And indeed, Xerox soon lost half its market share, mostly to Japanese firms, in large part because Xerox was forced to provide its Japanese competitors with "written know-how, including drawings, specifications and blueprints for existing and subsequent machines. It made an estimated 1,700 patents available to its competitors."⁵³ As former Boston Consulting Group consultants Mark Blaxill and Ralph Eckardt wrote, "Practically speaking, they forced Xerox to

license their patents to the world. The company agreed to license any three of its patents for free, the next three for a maximum royalty of 1.5% and then the entire remainder of its portfolio for nothing."⁵⁴ However, the unintended consequence of the FTC's compulsory license was to donate Rochester's technology to the Japanese, who were able to take decades of American investment and innovation and deploy it in their own products for free. Moreover, because Xerox was so afraid of increasing its market share owing to challenges from U.S. antitrust authorities, it did not respond to emerging Japanese competition by lowering its prices. Within a few short years after the consent decree, Xerox's market leadership had withered, as Japanese competitors such as Canon, Toshiba, Sharp, Panasonic, Konica, and Minolta each claimed a significant share of the U.S. market.⁵⁵

Rather than accept and even embrace this new and more productive, innovative, and competitive business form, too many policymakers sought to squeeze into a preconceived box, through ill-advised antitrust legislation and enforcement, the negative consequences from which America is still suffering today.

THE RISE OF THE PLATFORM ECONOMY?

As noted, corporate form is not set in stone and changes in response to external forces, particularly technology. As such, given the rise of the new IT system (pervasive and cheap computing and communications, coupled with new developments in software), it should not come as a surprise to see that a new form of business organization has emerged and is spreading: the IT-enabled platform.

While there is no one definition of a platform, there are two main types of platform organization models. The first is where the company uses technology to integrate solutions. Think Microsoft, Google, or a digital-first insurance vendor. The second is two-sided cocreation platforms that link buyer and seller, as in the case of Facebook, Uber, Airbnb and LinkedIn. These platforms grow more valuable the more people are on them.

It is not just the original pure-play IT platform companies where platform organization makes sense. As IT expert David Moschella noted, "Traditional organizations are seeking to re-platform their business."⁵⁶ He added, "Not surprisingly, the resulting multinational structures have become highly complex. In response, many companies are now asking if digital platforms can bypass these challenges and provide the synergy, simplicity, collaboration, and responsiveness they seek."⁵⁷

Likewise, scholars Martin Kenney, Petri Rouvinen, Timo Seppälä, and John Zysman wrote, "Digital platforms are reorganizing markets, restructuring the labour force, and redefining the scope of competition. These new intermediaries are transforming economic value creation, industrial structures, and innovative activity, all of which are about to undergo their biggest changes in the post-war era."⁵⁸

Platforms are powered by software, something that is getting more sophisticated all the time because of artificial intelligence (AI) and the like. This means these business models can scale easily because marginal costs are close to zero. Digital firms can replace costly human services with cheap and scalable digital ones. There is no person matching the Uber passenger with the Uber driver.

Because of this, platforms can provide higher quality and lower-cost services. Again, as Moschella wrote:

In 1995, Michael Treacy and Fred Wiersema argued that companies could excel in one of three areas—product leadership (PL), operational efficiency (OE), or customer intimacy (CI). Strategically, they needed to choose which discipline to focus on, and then be competitive in the other two. This thinking made great sense in the pre-digital age—with Sony (PL), McDonald's (OE), and the Ritz-Carlton (CI) serving as iconic examples of each approach. But the digital leaders shown in the figure typically excel in all three dimensions. For example, Amazon and Netflix have the widest product selection, the most efficient operations, and the most personalized customer experience in their respective markets. Today's digital giants can do this because they replace costly human services with scalable digital ones.⁵⁹

Likewise, as Martin Kenney, Petri Rouvinen, Timo Seppälä, and John Zysman stated:

Platforms have benefited from faster, cheaper, more scalable, and more diffused computing and connectivity available on demand via commercial cloud computing services. Software has been modularized and become more readily available, as programming and contracting tools have evolved rapidly. Firms attempting to establish platforms have complemented these developments by providing boundary resources, such as software development kits (SDK), application programming interfaces (APIs), and application contracting interfaces (ACIs) to be used by potential ecosystem complementors.⁶⁰

Platforms as an organizational and business model can make sense in a variety of industries and functions, including banking, transportation, lodging insurance, education, law, and medicine.

It's not clear how extensive platforms will become. Clearly, in the information sector (e.g., Internet search, social networks) and retail (e.g., Amazon) they are the leaders. They will likely also be in industries that provide services or information or in segments of these industries. Case in point is the Silicon Valley Farmers' Business Network (FBN). The company has stated, "As each new farmer joins the FBN Network, every member's seed information, agronomic analytics and buying power gets stronger. When farmers connect, farmers win—and the services, technology and network keep growing."⁶¹ In other words, FBN is a platform that relies on software, analytics, and network effects to improve the agriculture industry.

Platforms as an organizational and business model can make sense in a variety of industries and functions, including banking (e.g., fintech platforms), insurance, education (e.g., Coursera), transportation (e.g., Uber), lodging (e.g., Travelocity), law, and medicine. Improving technologies such as AI, shared ledger systems, digital IDs, 5G, and others will all likely work to enable broader platformization. The importance of data will drive this, as we see with the early lead of Tesla, which is enabled in part by the data sharing systems involved; as such, Tesla is more than a car company, it's a network company.

Internet platforms naturally tend toward concentration, with one or two companies controlling most of the market share. On the supply side, platforms experience very low marginal costs. Although launching a platform may require large up-front costs in developing the software, purchasing equipment, and attracting users, once the platform has been established, the marginal cost of adding another user is virtually zero. As Joseph Farrell and Michael Katz wrote, "In network markets subject to technological progress, competition may take the form of a succession of 'temporary monopolists' who displace one another through innovation. Such competition is often called Schumpeterian rivalry."⁶²

On the demand side, platforms benefit from large network effects, with each user growing as more users join the platforms. At the extreme, societally optimal benefits might be maximized when everyone uses the same platform. As an Obama administration Council of Economic Advisers' report notes, "Some newer technology markets are also characterized by network effects, with large positive spillovers from having many consumers use the same product. Markets in which network effects are important, such as social media sites, may come to be dominated by one firm."⁶³ In other words, there is a reason why there is only one major social networking firm (Facebook), one microblogging site (Twitter), one major professional networking site (LinkedIn), and so on: Consumers get much more value by being able to communicate efficiently with a lot of people. So rather than being a problem, this concentration is a benefit. In contrast, in the prior economy, many industries had as many as three market leaders.⁶⁴

OPPOSITION TO THE PLATFORM ECONOMY

Like the past two major transitions to new business forms, this one is not without its discontents. As such, the current animus and opposition toward platforms, from both the Right and the Left, poses a severe challenge to America's future.

Indeed, just as we saw a backlash to the rise of the industrial corporation grounded in fear and appeals to special interests a century ago, we see a Neo-Brandeisian backlash today against IT-enabled platforms. The movement's champions frame their campaign to prevent the transformation of the U.S. economy in appeals to patriotic values and the public interest. For instance, Biden-appointed FTC Chair Lina Khan has stated her quest to break up "big tech," and thereby protect small businesses from more effective competitors, is an effort to "protect our economy and our democracy from unchecked monopoly power."⁶⁵ This is a much more powerful argument than acknowledging that protecting small businesses against more effective competitors will come at a steep economic cost.

Indeed, just as we saw a backlash to the rise of the industrial corporation grounded in fear and appeals to special interests a century ago, we see a Neo-Brandeisian backlash today against IT-enabled platforms.

In unguarded moments, leading Neo-Brandeisians will concede that point, but they argue that it is less important than their social and political goals. In that respect, they are more intellectually honest than Brandeis himself, who tried to persuade people that if government took an ax to big companies, then productivity would not drop and prices would not rise. Perhaps because so few progressives today value productivity (they see it as harmful to workers) and so many look down on consumerism (it's vulgar and bad for the planet), some actually acknowledge the costs their campaign would impose. Outspoken Neo-Brandeisian Matt Stoller, author of the anticorporate book *Goliath*, admits that a world of yeoman producers might mean higher prices (i.e., lower living standards), but he argues that it would be a small price to pay for democracy and dignity. He's complained that, over the last half-century, "the rights of producers, of small business, or small banks and credit unions, did not matter next to the need to hold down prices for consumers."⁶⁶

Likewise, Brandeis admirers Barry Lynn and Phil Longman have admitted that "breaking up monopoly has little to do with promoting efficiency or better deals for consumers, and everything to do with protecting political equality, self-government, and democratic institutions."⁶⁷ For the progressive Roosevelt Institute, the goal is to "curb corporate power," even if consumers get hurt.

Roosevelt Institute scholar K. Sabeel Rahman gave away the game when he admitted, "If consumer prices are our only concern, it is hard to see how Amazon, Comcast, and companies such as Uber need regulation."⁶⁸ Indeed, the issue is not that big tech companies are hurting consumers, it's that they are big and powerful and represent a transformation to a new era.

It took at almost half a century for most Americans to come to terms with the fact that the U.S. economy had permanently transformed, for the better, into a corporate industrial economy. What ended up clinching the deal for all but the most committed antibusiness progressives (in contrast to progressives, Marxists actually favored "monopoly capitalism"; they just wanted it unionized) was the previously unimaginable high standard of living large corporations enabled. Industrial corporations had made the American Dream a reality.

Hopefully, we will not have to wait 25 more years (Google, for example, was founded in 1998) for most policymakers to come to a similar realization that 1) large, Internet-based platforms in a wide range of industries represent the new form of industrial organization made possible by the underlying digital technology system, and 2) these platforms provide massive societal benefits, especially choice, lower prices, and higher productivity. In the meantime, we can only hope that legislators and administration officials don't get swept up in the anticorporate, Neo-Brandeisian wave and enact the kind of laws and regulations that would slow this needed transition.

If America is to have any chance of staying ahead of the rising Chinese technology behemoth, it must not hobble its tech firms with backward-looking antitrust laws and undue enforcement. To paraphrase Thurman Arnold, there can be no greater nonsense than the idea we can get by in a digitized age without big tech.⁶⁹

It is hard to underestimate how important it is for policymakers to get this right. The last time the global economy underwent such a change, it was America that led the way. And even though there was ideological and special-interest opposition to this transformation from Brandeis and his followers, along with small firms and their allies, that opposition was in fact much less intense than in the rest of the world, and the U.S political system was less susceptible to being affected by it. This is a principal reason why America was able to dominate the 20th century economy. As Chandler noted, there was "even stronger ideological and political opposition, in western Europe and Japan," which is why it took them an additional three to four decades to fully make the transition to big-firm industrialization.⁷⁰

American GIs in WWII could be grateful for that difference, for, as Stefan Link wrote in *Forging Global Fordism*, it was U.S. leadership in mass production, pioneered and led by U.S. corporate giants, that played a key role in America prevailing over the Axis powers.⁷¹ Today, while Chinese leaders may fire the occasional shot across the bow at its tech leaders such as Jack Ma to make sure they know who's really calling the shots, the last thing the Chinese Communist Party (CCP) wants to do is risk hobbling their big tech champions through some kind of ideological, big-is-bad campaign. In fact, the Chinese government does everything it can to foster large, globally dominant corporations, going so far as forcing mergers to achieve scale.

If America is to have any chance of staying ahead of the rising Chinese technology behemoth, it must not hobble its tech firms with backward-looking antitrust laws and undue enforcement. To paraphrase Thurman Arnold, there can be no greater nonsense than the idea that we can get by in a digitized age without big tech.⁷²

This next section explores antitrust policy for the platform economy era.

ANTITRUST FOR THE PLATFORM ECONOMY

The old way of thinking about concentration was based on the corporate, the industrial, and then the tech model—but it doesn't fit for the platform economy. What is needed today is not a wholesale rejection of current antitrust doctrines, especially of the consumer welfare standard, but rather modest reform.

To guide that, three issues are paramount to get right if platforms are to play a needed role:

- 1. Is overall social welfare higher or lower with more competitors?
- 2. The potential of Schumpeterian disruption.
- 3. The need for evidence of any anticompetitive conduct.

Is Overall Social Welfare Higher or Lower With More Competitors?

Too often, the focus is on supranormal profits of platforms. But the right focus is on whether overall social welfare minus platform profits is higher having a certain number of dominant platforms or a more deconcentrated market. If it is, then the more concentrated market is better for society. Indeed, deconcentration in pursuit of a "perfectly competitive market" usually comes at the expense of innovation through scale efficiencies and vertical integration. Too often, antitrust policy ignores dynamic competition that arises from firms' capacities for innovation in favor of focusing on static competition by artificially deconcentrating industries. This holds truer than ever in the age of the platform economy: Platforms do not easily fit into the conventional antitrust analysis of price in terms of marginal cost because of the importance of network effects and the high, long-term sunk costs of investments. Investments in the digital infrastructure supporting the platforms, in other words, call for a protracted payback period. Yet, these long-term returns are sometimes misunderstood as predatory pricing. For example, Amazon's long-term strategy for profits rather than short-term profitability was seen as suspect rather than admirable in the House Report co-authored by current FTC Chair Lina Khan.⁷³

Indeed, the House Report's final version of 2022 states: "Predatory Pricing. As part of its business strategy, Amazon has historically placed a higher premium on long-term growth at the expense of short-term profitability."⁷⁴ The reality behind pricing below cost is not the traditional

argument of predation, but rather an emphasis on long-term growth and profit. For antitrust to identify long-term goals as corporate wrongdoing is to invert the fundamental premise of competition and to hinder innovations from investments in particular.

Hence, antitrust rules must incorporate the unique characteristics of the platform economy, including network effects and substantial investments to build digital infrastructures, which necessitate the opportunity to collect long-term gains. In the absence of such a transition, the Neo-Brandeisian revolution of antitrust is likely to undermine the platform economy by ironically requiring short-term profitability with minimal to no investments in digital infrastructure. Hence, antitrust enforcers must adopt a more evolutionary and long-term perspective. Antitrust enforcers must keep in mind what the U.S. Supreme Court stated in *Trinko*:

The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system. The opportunity to charge monopoly prices—at least for a short period—is what attracts 'business acumen' in the first place; it induces risk taking that produces innovation and economic growth. To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct.⁷⁵

In the absence of such a transition, the Neo-Brandeisian revolution of antitrust is likely to undermine the platform economy by ironically requiring short-term profitability with minimal to no investments in digital infrastructure.

In other words, an "imperfect" market structure composed of oligopolists and monopolists is not always anticompetitive because introducing innovation requires market power. Antitrust should encourage enterprises to develop by maintaining their creative efforts through investments and long-term profitability in the absence of anticompetitive behavior. This is especially true in the platform economy, wherein network effects can cause successful and creative companies to acquire substantial market share through visionary investments. Antitrust regulators should evaluate corporate strategies (and their relative effectiveness) over the long term as platforms build and develop digital infrastructures. A short-term approach to long-term entrepreneurial initiatives in the complex platform economy will further exacerbate an already significant antitrust enforcement and entrepreneurial rift.

The Potential for Schumpeterian Disruption

Platforms operate in highly competitive and fast-changing market contexts, frequently introducing new goods and services, always posing a challenge to conventional industry leaders, and often being challenged by other platforms. Nevertheless, market definition, the first and most crucial phase of antitrust analysis, remains too formalistic and inadequately adapted to the platform economy for two reasons.

First, market definition defines the product market in a manner that makes platforms appear to be monopolists. For instance, ad-funded digital platforms provide advertisers with innovative services that might be deemed novel in the advertising industry, but which also fiercely threaten traditional advertising (e.g., TV, radio, and print advertising). To define the market as digital advertising without taking into account the competitive constraints other forms of advertising

impose on digital platforms not only misrepresents the reality of competition, but also fails to account for the positive impact digital platforms have on traditional incumbents in TV and print advertising. Sadly, the latest DOJ action against Google's ad-tech services falls into the excessive market definition of digital advertising without enough consideration of the company's competitive environment.⁷⁶

The recent FTC case challenging the acquisition by Meta of Within is also illustrative of the toonarrow product market definition.⁷⁷ The federal judge noted that "the FTC alleges that the relevant market consists of [virtual reality] dedicated fitness apps in the United States," and defined virtual reality (VR) dedicated fitness apps as those "designed so users can exercise through a structured physical workout in a virtual setting anywhere they choose to use their highly portable VR headset."⁷⁸ Such narrow market definition led to absurd exclusions, notably of Apple+ fitness app only because Apple "does not currently offer its own headset."⁷⁹ This blatant disregard for market dynamics through inflexible market definitions failed to persuade the judge, who dismissed the case, thereby eroding the legitimacy of antitrust by disregarding the dynamic structure of markets in which antitrust intervenes.

Antitrust must better understand the concept of dynamic competition, not as a basis for offense, as the Neo-Brandeisians desire, but rather as a source of potential disruption by major corporations caused by innovators of all types. In this way, disruption disciplines businesses prior to an assault. The unexpected disruption of Google's search engine market share by the integration of ChatGPT into Microsoft's Bing search engine is a prime example. If market definition criteria fail to adequately account for market dynamics, antitrust is on a collision course with established case law and legal principle in the courts.

Second, the Schumpeterian gales of creative destruction as a source of dynamic competition suggest a reform of geographic market definition rules. Not only can platforms compete with adjacent sectors and challenge conventional incumbents, but they also compete globally with large platforms, thereby enhancing U.S. competitiveness anytime they acquire market share abroad. In particular, the narrow antitrust emphasis on domestic markets (if not regional markets) prevents antitrust enforcers from including the intense rivalry waged by overseas rivals into their analyses. For example, large digital platforms are deemed monopolists when enforcers disregard their immediate foreign competitors, particularly Chinese ones, in the global market.

Amazon is only a monopolist if Alibaba is neglected; Apple is only a monopolist if Huawei is disregarded; Facebook is only a monopolist if TikTok remains absent; and Google is only a monopolist if Baidu is unknown to antitrust regulators. While these platforms may not always compete head to head in China and the United States, they do in many other markets. In other words, incorporating the competition imposed by overseas rivals would refine and create more realistic antitrust analyses. In addition, it would combine the antitrust policy's competition objectives with the trade policy's competitiveness objectives. U.S. antitrust enforcers' treatment of U.S. digital platforms as monopolists during a period of intense competition with Chinese tech platforms is not just a faulty antitrust analysis, but it also actively damages U.S. competitiveness.

Thus, a revision of market definition rules—on both the product market definition aspect and geographic market definition side—is required, or else the U.S. platform economy will be hampered to the advantage of foreign competitors.

The Need for Evidence of Any Anticompetitive Conduct

According to *Trinko*, antitrust rules are not broken unless antitrust enforcers can prove that an anticompetitive practice actually existed. To rephrase, size alone is not a basis for antitrust liability; rather, it is a company's actions that give rise to such charges. But antitrust law still pays too much attention to corporate size. Even worse, current legislative initiatives and regulations risk hurting platforms' capacity to innovate and deliver benefits to customers because their scale has become a regulatory culprit, instead of retreating from a flawed size-centric strategy in favor of a conduct-centric approach.

Indeed, the antitrust legislation from Sen. Amy Klobuchar (D-MN) only applied to platforms with a market valuation of \$550 billion or more, and by imposing responsibilities and restrictions of pro-competitive business practices on them, the measures aimed to artificially benefit their immediate (domestic and international) competitors.⁸⁰ The regulatory prohibitions are not introduced because the business practices undermine competition, but rather because these business practices are conducted by platforms that are the targets of a small number of congressmembers. Antitrust through discretionary punitive actions does not enhance societal welfare through innovation and consumer gains; rather, it weaponizes antitrust through agencies and Congress to distort competition to the advantage of inefficient rivals. It is due to these factors that several such bills in Congress failed to pass.

The Biden administration should push back the unintended consequences of the Digital Markets Act on U.S. platforms in terms of both lost innovation and lost worldwide competitiveness.

Regrettably, Europe approved a similarly inspired law: the Digital Markets Act (DMA).⁸¹ By prohibiting pro-competitive business activities for so-called "gatekeepers" the European Commission would appoint based on size criteria, the DMA exacerbates the excessive size centricity of antitrust rather than its conduct centricity. This size-centric approach is particularly ill advised for platforms, given that they can only achieve profitability through tremendous growth. Hence, the Biden administration should push back the unintended consequences of the DMA on U.S. platforms in terms of both lost innovation and lost worldwide competitiveness.

Therefore, antitrust for the platform economy must i) embrace the business models of platforms, in which large investment costs necessitate long-term profitability expectations without unfounded accusations of predatory pricing; ii) change market definition rules to better account for market dynamics and competitiveness; and iii) analyze allegations of anticompetitive behavior based on conduct rather than size.

CONCLUSION

Technological innovation often leads to organizational innovation, and organizational innovation often leads to organizational opposition. As new forms of business organizations emerge and become dominant, interest groups and others often resist the change, decrying the new models as fundamentally negative. The reality of economic history is these new business models have been enormously positive. The world would be a vastly poorer place without the rise of the industrial organization, then the multidivisional corporation and now the Internet-based platform. As such, policymakers should be extremely cautious in their efforts to limit this next potential transition.

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