Journal of Economic Perspectives—Volume 31, Number 3—Summer 2017—Pages 113–130

Towards a Political Theory of the Firm

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The revenues of large companies often rival those of national governments. In a list combining both corporate and government revenues for 2015, ten companies appear in the largest 30 entities in the world: Walmart (#9), State Grid Corporation of China (#15), China National Petroleum (#15), Sinopec Group (#16), Royal Dutch Shell (#18), Exxon Mobil (#21), Volkswagen (#22), Toyota Motor (#23), Apple (#25), and BP (#27) (Global Justice Now 2016). All ten of these companies had annual revenue higher than the governments of Switzerland, Norway, and Russia in 2015. Indeed, 69 of the largest 100 corporate and government entities ranked by revenues were corporations. In some cases, these large corporations had private security forces that rivaled the best secret services, public relations offices that dwarfed a US presidential campaign headquarters, more lawyers than the US Justice Department, and enough money to capture (through campaign donations, lobbying, and even explicit bribes) a majority of the elected representatives. The only powers these large corporations missed were the power to wage war and the legal power of detaining people, although their political influence was sufficiently large that many would argue that, at least in certain settings, large corporations can exercise those powers by proxy.

Yet in contemporary economics, the commonly prevailing view of the firm ignores all these elements of politics and power. According to this view, the firm is a simple "nexus of contracts" (Jensen and Meckling 1976), with no objectives or

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† For supplementary materials such as appendices, datasets, and author disclosure statements, see the article page at
https://doi.org/10.1257/jep.31.3.113 doi=10.1257/jep.31.3.113

life separate from those of its contracting parties, a veil or—better—a handy tool for individuals to achieve their personal goals. This view might be a reasonable approximation for small or closely held private corporations, but certainly it does not accurately describe giant global corporations.

The largest modern corporations facilitated a massive concentration of economic (and political) power in the hands of a few people, who are hardly accountable to anyone. The reason is not simply that many of those giants (like State Grid, China National Petroleum, and Sinopec) are overseen by members of the Chinese Communist party. In the United States, hostile takeovers of large corporations have (unfortunately) all but disappeared, and corporate board members are essentially accountable to no one. Only rarely are they not re-elected, and even when they do not get a plurality of votes, they are co-opted back to the very same board (Committee on Capital Market Regulation 2014). The primary way for board members to lose their jobs is to criticize the incumbent chief executive officer (see the Bob Monks experience in Tyco described in Zingales 2012). The only genuine pressure on large US corporations from the marketplace is exercised by activist investors, who operate under strong political opposition and not always with the interests of all shareholders in mind.

In this essay, I will argue that the interaction of concentrated corporate power and politics is a threat to the functioning of the free market economy and to the economic prosperity it can generate, and a threat to democracy as well. I begin with a discussion of how these concerns were present in Adam Smith's (1776) work, how they were neutralized in the neoclassical theory of the firm, and then how they were reborn, at least to a certain extent, in the "incomplete contracts view" of the firm. However, even the incomplete contracts view is designed for an environment in which the rules of the game are exogenously specified and enforced. Once we recognize, however, that large firms have considerable power in influencing the rules of the game, important questions arise: To what extent can the power firms have in the marketplace be transformed into political power? To what extent can the political power achieved by firms be used to protect but also enhance the market power firms have?

The phenomenon of corporations becoming large enough to influence and in some cases to dominate politics is not new. In their 1932 classic, *The Modern Corporation and Private Property*, Berle and Means wrote: "The rise of the modern corporation has brought a concentration of economic power which can compete on equal terms with the modern state—economic power versus political power, each strong in its own field. The state seeks in some aspects to regulate the corporation, while the corporation, steadily becoming more powerful, makes every effort to avoid such regulation. ... The future may see the economic organism, now typified by the corporation, not only on an equal plane with the state, but possibly even superseding it as the dominant form of social organization."

I will argue that US economic patterns in the last few decades have seen a rise in the relative size of large companies. Thus, I call attention to the risk of a "Medici vicious circle," in which economic and political power reinforce each other.

The "signorias" of the Middle Ages—the city-states that were a common form of government in Italy from the 13th through the 16th centuries—were a takeover of a democratic institution ("communes") by rich and powerful families who ran the city-states with their own commercial interests as a main objective. The possibility and extent of this Medici vicious circle depend upon several nonmarket factors. I identify six of them: the main source of political power, the conditions of the media market, the independence of the prosecutorial and judiciary power, the campaign financing laws, and the dominant ideology. I describe when and how these factors play a role and how they should be incorporated in a broader "political theory" of the firm.

From Adam Smith to the Neoclassical Theory of the Firm

Adam Smith's View of Joint Stock Companies

Economists have not always been blind to the power of corporations. Adam Smith (1776 [1904], Book V, chap. 1) himself had a very negative view of corporations, then called joint stock companies, which were granted monopoly rights by the Crown: "The directors of such companies, however, being the managers rather of other people's money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. … Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. It is upon this account that joint stock companies for foreign trade have seldom been able to maintain the competition against private adventurers. They have, accordingly, very seldom succeeded without an exclusive privilege, and frequently have not succeeded with one." As Anderson and Tollison (1982) argue, much of Smith's negativity stemmed from empirical observations of the functioning of joint stock companies of his time.

In Smith's time, one of the oldest and largest joint stock companies was the East India Company, which was founded in 1600 for an original period of 15 years, but its desire to extend its monopoly impacted British politics for two centuries. When the British Parliament sought to introduce competition for the East India Company, by giving a charter to one other competitor, some East India Company stockholders simply bought enough shares of the one rival and forced it into a merger, thereby regaining the monopoly position. To seal the deal and prevent future competitive challenges, the East India Company extended a £3.2 million loan to the British Treasury, which, in exchange, again granted the monopoly of trade, allegedly only for a few years. But repeatedly, when the monopoly expired, the East India Company would lobby and pay bribes so that it would be extended—until 1813 for most goods and until 1833 for tea. That a 15-year monopoly right lasted 233 years is a harsh reminder of how dangerous the commingling of economic and political power can be.

Yet the typical high prices and limited output of monopolists was the least of the problems created by the East India Company. The worst aspects were experienced by people of India and China. By 1764, the East India Company had become the de facto ruler of Bengal, where it established a monopoly in grain trading and prohibited local traders and dealers from "hoarding" rice (which to modern economists looked like a reasonable practice of keeping reserves as insurance against from crop fluctuations). A year after drought struck in 1769, the East India Company raised its already heavy tax on the land. In the aftermath, one out of three Bengalis—more than 10 million people—died of starvation. Another claim to shame for the East India company involved opium. Having lost its monopoly of trade with India (except for tea) in 1813, the East India Company aggressively promoted its export of Bengali opium to China. To defend the right of the East India Company to sell opium to China, the British Empire would wage the two "opium wars."

The Gilded Age

In the heyday of the East India Company, incorporation was a privilege granted only to a few parties by the government. But over time, incorporation became a right of citizens, subject to only a basic registration procedure. This transformation dramatically increased entry in the corporate sector, boosting the degree of competition. But by the late 1800s, another phenomenon contributed to ensuring corporations' market power: the rise in economies of scale, during what Chandler (1977) labels the Second Industrial Revolution. It began with railways, then followed with oil refineries, steel, and chemical production. Great technical achievements were brought about by aggressive entrepreneurs, whom Chernov (1998) calls "titans" and Josephson (1934) calls "robber barons."

In fact, they were both titans and robber barons. In a sports competition, the more disproportionate the reward for the winner vis-à-vis second place, the larger the incentive to take performance-enhancing drugs. Similarly, the more an economy becomes winner-take-all, the bigger the incentives to corrupt the political system to gain a small, but often decisive, advantage. As a result, Chernov's (1998) industrial titans were at the same time the greatest corruptors. In the words of California railway baron Collis Huntington (as quoted in Josephson 1934): "If you have to pay money [to a politician] to have the right thing done, it is only just and fair to do it. ... If a [politician] has the power to do great evil and won't do right unless he is bribed to do it, I think ... it is a man's duty to go up and bribe." Not surprisingly, legal campaign spending reached a peak (in GDP-adjusted terms) at the end of the 19th century (as noted in this journal by Ansolabehere, De Figueiredo, and Snyder 2003). In a cartoon by Joseph Keppler that appeared in *Puck* in 1889, the Senate was labeled "of the Monopolists by the Monopolists and for the Monopolists!"

In a winner-take-all economy, entrepreneurs lobby and corrupt, not only to seize a crucial first-mover advantage, but also to preserve their power over time. They fear political expropriation, which can stem from a populist revolt against the monopolist's abuses or from the rent-seeking of other politically influential parties. This expropriation is made easier when market power does not arise from a technological lead or a skills gap, but from a first-mover advantage or the luck of being a focal point (such as control over a certain trading venue), because in these cases the transfer implies relatively small deadweight losses.

The overwhelming political power of business was first tamed during the Progressive Era and later by the New Deal. The passage of the Tillman Act in 1907 (which prohibited corporations from making direct contributions to federal candidates) and the Clayton Act in 1914 (which made antitrust enforcement easier) started to limit corporate influence. The New Deal legislation went further, forcing a break up of some of the strongholds of corporate power: investment and commercial banks with the 1933 Glass Steagall Act and corporate pyramids with the 1935 Public Utility Holding Company Act. The coup de grâce, at least for that time period, was provided by the aggressive antitrust enforcement in the later part of Franklin D. Roosevelt's administration, when Thurman Arnold was appointed head of the Antitrust Division of the US Justice Department (Waller 2004).

The Power of Competition and Takeovers

As a result of the political reforms during the first part of the 20th century, the United States entered the second part of the century with a less-concentrated economy. It is not surprising, thus, that economists of that time started to emphasize the limits to firms' power imposed by product market competition and the market for corporate control. For example, Stigler (1958) argued that competitive pressures would determine the scale of firms observed in the marketplace: neither too large nor too small. A competitive selection process in markets for inputs and outputs also eliminates much (if not all) managerial discretion. Thus, in a perfectly competitive industry, as Alchian and Demsetz (1972) wrote: "The firm has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between two people."

Even in the absence of competition in product markets, managerial discretion can be constrained by the pressure of the corporate control market. As Manne (1965) first points out, a publicly traded firm that is being run inefficiently represents an arbitrage opportunity. A raider can buy the firm, fix the inefficiency, resell the firm or continue to operate it, and make money.

In these years, neoclassical economics was very successful in moving attention away from the "power" dimension of firms towards the more benign technological aspect. For example, in his prominent microeconomics textbook, Varian (1992) defined firms as "combinations of inputs and outputs that are technologically feasible," and assumes that "a firm acts so as to maximize its profits." When this objective is not assumed, it is derived as a necessary implication of the threat of takeovers (Manne 1965) and intense product market competition (Stigler 1958). Thus, neoclassical economics argued, in a world with perfect competition and no transactions costs, firms are nothing more than isoquant maps.

However, it turns out that even in a perfectly competitive environment, corporations are powerless only if there is perfect contractibility. To understand this idea, we need to depart from the standardized world of neoclassical economics.

The Incomplete Contract Paradigm

The neoclassical framework only describes well one set of transactions, called "standardized" transactions by Williamson (1985), which involve many producers of similar quality products and many potential customers. Many common transactions, however, do not fit this mold.

For instance, consider the purchase of a customized machine. The buyer must contact a manufacturer and agree upon the specifications and the final price. More importantly, signing the agreement does not represent the end of the relationship between the buyer and the seller. Producing the machine requires time. During this time, events can occur that alter the cost of producing the machine as well as the buyer's willingness to pay for it. Before the agreement was signed, the market for manufacturers may have been competitive. Once production has begun, though, the buyer and the seller are trapped in a bilateral monopoly. The customized machine probably has a higher value to the buyer than to the market. On the other hand, the contracted manufacturer probably has the lowest cost to finish the machine. The difference between what the two parties generate together and what they can obtain in the marketplace represents a quasi-rent, which needs to be divided. Of course, the initial contract plays a main role in dividing this quasi-rent. But most contracts are incomplete, in the sense that they will not fully specify the division of surplus in every possible contingency (this might be too costly to do or even outright impossible because the contingency was unanticipated). This creates an interesting distinction between decisions made at the time when the two parties entered a relationship and irreversible investments were sunk, and decisions made later in the process when the quasi-rents are divided.

The incompleteness of the contract creates room for bargaining. The outcome of the bargaining will be affected by several factors besides the initial contract. First, it will depend to some extent on which party has ownership of the machine while it is being produced. Second, it will depend on the availability of alternatives: How costly is it for the buyer to delay receiving the new machine. How costly is it for the seller of the machine to delay the receipt of the final payment? How much more costly is it to have the job finished by another manufacturer? Finally, the institutional environment plays a major role in shaping the bargaining outcome: How effective and rapid is law enforcement? What are the professional norms? How quickly and reliably does information about the manufacturer's performance travel across potential clients? All these factors determine the allocation of authority or power. In this setting, given that not all contingencies can be specified, what is often specified instead is who has the right to make decisions when unspecified contingencies arise, which in turn will influence strategic bargaining over the surplus. In this context, Grossman and Hart's (1986) "residual right of control" is both meaningful and valuable.

Extending the Incomplete Contract Paradigm

The incomplete contract literature started by Grossman and Hart (1986) explains how firms' power stems from their market power (Rajan and Zingales

1998). While it focuses only on the market power arising from past investments, this link also holds when the source of market power is economies of scale, network externalities, or government-granted licenses (Rajan and Zingales 2001).

Furthermore, emphasizing the incomplete nature of contracts and rules, the theory of incomplete contracts creates scope for lobbying, rent seeking, and power grabbing. The traditional contributions focus on the under- or overinvestments in firm-specific human capital, but the framework can easily be extended to the political arena. If rents are not perfectly allocated in advance by contracts and rules, there is ample space for economic actors to exert pressure on the regulatory, judiciary, and political system to grab a larger share of these rents.

As far as I know, the interaction between these dimensions has thus far gone largely unstudied. In a world where cash bribes are illegal and relatively rare, firms need other means to lobby and pressure the political and regulatory world. One common mechanism is, for example, the (implicit) promise of future career opportunities. The credibility (and thus the effectiveness) of such promises strongly depends upon the current and future economic power of a firm. At the peak of the financial crisis, Citigroup offers were not very credible, because there were serious doubts that Citigroup would survive. By contrast, JP Morgan Chase chief executive officer Jamie Dimon was seen as a reliable player, because of the staying power of his bank. Thus, even without mobilizing its finances, the more economically powerful a firm is, the more politically powerful it can be.

If the *ability* to influence the political power increases with economic power, so does the *need* to do so, because the greater the market power a firm has, the greater the fear of expropriation by the political power. Hence, the risk of what I will call the "Medici vicious circle."

The Medici Vicious Circle

A competitive advantage often starts as temporary. The video rental chain Blockbuster was founded on the idea that videos had become a mainstream product, which no longer needed to be rented in shady stores full of compromising material, and could instead be rented in a family-friendly setting with bright lights and a vivid store logo. This simple (and replicable) idea was quickly transformed into a network of stores across cities. Once the network of local stores was in place, Blockbuster had a huge barrier to entry vis-à-vis any competitor, but a barrier that was eventually overcome by the technology of accessing and renting movies over the internet.

Most firms are actively engaged in protecting their source of competitive advantage through a mixture of innovation, lobbying, or both. As long as most of the effort is along the first dimension, there is little to be worried about. The fear of being overtaken pushes firms to innovate (Aghion, Akcigit, and Howitt 2013). What is more problematic is when a lot of effort is put into lobbying.

In other words, the problem here is not temporary market power. The expectation of some temporary market power based on innovation is the driver of much innovation and progress. The fear is of a "Medici vicious circle," in which money is used to gain political power and political power is then used to make more money.[1] This vicious circle needs to be broken. In the case of medieval Italy, this cycle turned Florence from one of the most industrialized and powerful cities in Europe to a marginal province of a foreign empire. At least the Medici period left some examples of great artistic beauty in Florence. I am not sure that market capitalism of the 21st century will be able to do the same.

The Increasing Market Power of US Firms

In a perfectly competitive world, the economic power of firms stems only from the past specific investments. The potential magnitude of this economic power is limited and does not benefit much from the support of political power. In this Economics 101 world, lobbying is an activity limited to firms that are trying either to escape from the jaws of regulation or to attract government contracts. In this setting, the neoclassical description of the firm as having "no power of fiat, no authority" is a reasonable approximation of reality.

One can argue whether such a close-to-competitive economy ever existed, but one cannot argue that this is the world we live in today, even in the United States, which historically has done fairly well relative to many other countries along this dimension. In the last two decades, more than 75 percent of US industries experienced an increase in concentration levels, with the Herfindahl index increasing by more than 50 percent on average. During this time, the size of the average publicly listed company in the United States tripled in market capitalization: from $1.2 billion to $3.7 billion in 2016 dollars (Grullon, Larkin, and Michaely 2017; see also the discussion by Kahle and Stulz in this symposium).

This phenomenon is the result of two trends: On the one hand, the reduction in the rate of birth of new firms, which went from 14 percent of existing firms in the late 1980s to less than 10 percent in 2014 (Haltiwanger 2016); on the other hand, a very high level of merger activity, which for many years in the last two decades exceeded $2 trillion in value per year (Institute for Mergers, Acquisitions & Alliances, at https://imaa-institute.org/mergers-and-acquisitions-statistics/).

Impact on Margins

Higher concentration does not mean necessarily higher market power, yet there is increasing evidence that market power has increased. First of all, these mergers do seem to improve productivity, but only to raise mark-ups from 15 percent to over 50 percent of the average markup (Blonigen and Pierce 2016). The market power enjoyed by larger firms is also reflected in the increasing difficulty that smaller firms

[1] Several recent secondary sources claim that the Medici family motto was: "Money to get power. Power to protect money." However, none of these sources offers a primary attribution. For example, this claim appears in the Santi (2003) book of quotations, in the 2005 movie "The American Ruling Class" (as discussed in Walton 2011), and in Gross (1980).

have in competing in the marketplace: in 1980, only 20 percent of small publicly traded firms had negative earnings per share; in 2010, 60 percent did (Gao, Ritter, and Zhu 2013).

The most convincing evidence on this theme is provided by Barkai (2016), who finds that the decrease in labor share of value added is not due to an increase in the capital share (that is, the cost of capital times amount of capital divided by value added), but by an increase in the profits share (the residuals), which goes from 2 percent of GDP in 1984 to 6 percent in 2014. This is not just a relabeling. By separating the return to capital and profits, we can discern when profits come from (nonreplicable) barriers to entry and competition rather than from capital accumulation. Distinguishing between capital and profit share allows Barkai also to gain some insights on the cause of the decline in the labor share. If markups (the difference between the cost of a good and its selling price) are fixed, any change in relative prices or in technology that causes a decline in labor share must cause an equal increase in the capital share. If both labor and capital share dropped, then there must be a change in markups—that is, the pricing power of firms to charge more than their cost. In support of this "market power" hypothesis, Barkai finds that sectors that have experienced a higher increase in concentration between 1997 and 2012 also experienced a higher decline in labor share of output and thus (presumably) a higher increase in the share of profits.

Possible Explanations

A first popular explanation for these trends is the emergence and diffusion of network externalities: that is, situations in which an increase in usage leads to a direct increase in value for other users. These externalities have been present at least since the telephone, but they have become much more widespread with the diffusion of the internet and of social media.

A second explanation is the increased role of winner-take-all industries, driven by the proliferation of information-intensive goods that have high fixed and low-marginal costs (Zingales 2012; Autor, Katz, Patterson, and Van Reenen 2017). A related explanation has to do with information complementarities. The value of the data derived from Facebook and Instagram combined is likely to be higher than the sum of the value of the data derived from Facebook and Instagram separately, since the data can be combined and compared. Thus, Facebook is likely to be the higher-value user of Instagram data, even ignoring any potential market power effect. If you add market power effects, the momentum toward concentration might be irresistible.

A final explanation is reduced antitrust enforcement. Section 2 of the Sherman Act makes it unlawful to "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce." During the period 1970–1999, the Department of Justice and the Federal Trade Commission (FTC) together brought an average of 15.7 cases under Section 2. Between 2000 and 2014, they brought only 2.8 cases a year (Grullon, Larkin, and Michaely 2017). These explanations are not mutually exclusive; in fact, they are mutually reinforcing.

Political Power of Firms

There are many misconceptions about the nature and the importance of political power of firms. If politics is identified along partisan lines, corporations are not very relevant, nor do they want to be. Rich individuals, like casino magnate Shelden Adelson, play a big role in funding political campaigns; corporations do not. As Ota (1998) reported: "'Mickey Mouse is not a Republican or a Democrat,' said Joe Shapiro, who oversaw Disney's Washington lobbying office in the early 1990s. 'If you take a strong position either way, you are looking at offending roughly half of the people.'" The secondary impact of corporations in determining which party prevails explains how Donald Trump could be elected to the presidency in 2016 despite not having the endorsement (and the money) from political action committees at any of the top 100 US corporations.

Corporations need some friends in Congress (and in the executive branch) on specific issues, and they generally succeed in having them, regardless of the political affiliation. Consider Citigroup's effort to change the Glass–Steagall Act, which severed the economic ties between investment banking and commercial banking. In 1998, Citigroup acquired Travelers (an insurance company), even though the law prohibited banks from merging with insurance companies. At the time of the merger, Travelers' CEO, Sandy Weill (as reported in Martin 1998), explained why the companies were moving forward in spite of an apparent conflict with the law: "[W]e have had enough discussions [with the Fed and the Treasury] to believe this will not be a problem." The head of the US Treasury then was Richard Rubin, who worked very hard to convince his fellow Democrats to change the law. Rubin left the Treasury in July 1999, the day after the House of Representatives passed its version of the bill by a bipartisan vote of 343 to 86. Three months later, on October 18, 1999, Rubin was hired at Citigroup at a salary of $15 million a year, without any operating responsibility.

Even when it comes to lobbying, the actual amount spent by large US corporations is very small, at least as a fraction of their sales. For example, in 2014 Google (now Alphabet) had $80 billion in revenues and spent $16 million in lobbying (see the Lobbying Database at OpenSecrets.org, https://www.opensecrets.org/lobby). To the extent that US corporations are exercising political influence, it seems that they are choosing less-visible but perhaps more effective ways. In fact, since Gordon Tullock's (1972) famous article, it has been a puzzle in political science why there is so little money in politics (as discussed in this journal by Ansolabehere, de Figueiredo, and Snyder 2003).

One possible explanation is that corporations do not need as much to prevail politically because the opposition they face (which might be broadly understood as the interest of the general public) is very disorganized and they can prevail with very little effort (Zingales 2012, chap. 5). If money is used only in the marginal cases, one can observe very little correlation between donations and success (Ansolabehere, de Figueiredo, and Snyder 2003). However, it certainly seems in specific cases that big corporations have a high success rate in getting their wishes to come true; for example, see Pierson's (2015) discussion of the health care reform legislation.

Another explanation is that actual donation amounts and lobbying are so small because big corporations are so good at achieving their goals without the need of cash transfers. Nobody would try to measure the influence of the Mafia with the size of the bribes they pay. In fact, the power of a boss, like Vito Corleone in Mario Puzo's 1969 book *The Godfather*, does not rest on his ability to pay, but on his power to make offers to people that they cannot refuse. Of course, the Mafia relies on not-so-veiled threats of violence, while corporate interests do not. Yet, the successful Mafia boss is able to minimize violence: it is an out-of-equilibrium threat, rarely carried through. Corporate interest can use a threat of ostracism from the business world at the end of a public official's mandate. That such ostracism is rarely observed is consistent with the belief that it is a highly effective threat.

In other words, to detect the power of corporations we need to look at output, not inputs. Is it a coincidence that the common term of copyright is extended every time the copyright of the Walt Disney Company on Mickey Mouse is close to expiration (Lessig 2001)? This case is so outrageous not because it is so unique, but because there is no ideological cover for it: extending retroactively copyright to long-dead authors is not likely to stimulate production of new works!

Similarly, we can ask why the antitrust case of the Federal Trade Commission against Google was dropped in the United States, while parallel efforts were not dropped in Europe. A leaked FTC staff report (available via the *Wall Street Journal* website at https://graphics.wsj.com/google-ftc-report/img/ftc-ocr-watermark.pdf) concluded that Google had unlawfully maintained its monopoly over general search and search advertising by "scraping content from rival vertical websites," "by entering into exclusive and highly restrictive agreements with web publishers that prevent publishers from displaying competing search results or search advertisements," and "by maintaining contractual restrictions that inhibit the cross-platform management of advertising campaigns." Nonetheless, the FTC unanimously decided to drop the case. One wonders if the frequent visits paid by Google employees to the White House played a role: between Obama's first inauguration and the end of October 2015, employees of Google and associated entities visited the White House 427 times, including 21 small, intimate meetings with President Obama (as reported by the Google Transparency Project at http://googletransparencyproject.org/articles/googles-white-house-meetings).

From Brown and Huang (2017), we learned that the share price of companies whose executives visited the White House from 2009–2015 increased an extra 1 percent in the following two months. It might not seem very much, until you discover that during Obama's presidency, the chairman and chief executive officer of Honeywell international visited the White House 30 times, while the head of General Electric visited 22 times.

If companies do not succeed in preventing unfavorable legislation in Congress, they can stop it by suing the regulators who try to implement it. The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 required that the US Securities and Exchange Commission repeal its rules that prevent institutional investors from nominating their own representatives to corporate boards. In fact, the requirement was very timid, posing so many restrictions in terms of quantity and length of ownership as to leave the bar to institutional investors effectively in place. Still, the Business Roundtable sued the SEC to block the rule. The case was argued by Eugene Scalia, the son of then-US Supreme Court Justice Antonin Scalia, and was won in the US Court of Appeals, DC Circuit, on a technicality—the failure of the SEC to conduct a cost–benefit analysis ahead of time. This small setback turned into a major defeat for shareholders when the SEC, rather than performing such an analysis and re-proposing the rule, chose to withdraw. At a conference in December 2011, I asked then-SEC Chairwoman Mary Schapiro when her agency was planning to reintroduce the rule. I even offered to do the cost–benefit analysis for free. But she confessed that the SEC had many other items on its agenda, and had placed the issue on the back burner, which seems to me a polite way of saying that the SEC had surrendered under pressure.

If all else fails, large companies can succeed in avoiding regulation by lobbying the regulator directly, so as to avoid enforcement. Lambert (2015) finds that regulators are 44.7 percent less likely to initiate enforcement actions against lobbying banks.

Lobbying is not the only way companies have to avoid enforcement: they can do so by hiding crucial information. As described in Shapira and Zingales (2017), DuPont was able to delay by more than 30 years any liability for contaminating the water supply near its West Virginia factory, by hiding information and protecting itself behind the trade secret law.

Why the Problem Is Getting Worse

All the actions described above require not only money, but also power of fiat and disciplinary action, which differ from ordinary market contracting between two economic actors. Thus, in a fragmented and competitive economy, firms find it difficult to exert this power. In contrast, firms that achieve some market power can lobby (in the broader sense of the term) in a way that ordinary market participants cannot. Their market power gives them a comparative advantage at the influence game: the greater their market power, the more effective they are at obtaining what they want from the political system. Moreover, the more effective they are at obtaining what they want from the political system, the greater their market power will be, because they can block competitors and entrench themselves. Hence, the risk of a Medici vicious circle.

In the last three decades in the United States, the power of corporations to shape the rules of the game has become stronger for three main reasons. First, the size and market share of companies has increased, which reduces the competition across conflicting interests in the same sector and makes corporations more powerful vis-à-vis consumers' interest. Second, the size and complexity of regulation has increased, which makes it easier for vested interests to tilt the playing field to their advantage. Finally there has been a demise of the antibusiness ideology that previously prevailed among Democrats, and this has reduced the costs of being perceived as too friendly to the interests of big business for both parties.

An example of this increased power of corporations is found in the legislative history of the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act described in Zingales (2012, chapter 4). In the words of one legal scholar: "Never before in our history has such a well-organized, well-orchestrated, and well-financed campaign been run to change the balance of power between creditors and debtors." (Tabb 2007).

Towards a Political Theory of the Firm

It is not at all my intention to conclude that business should have no voice in the political process. After all, other powerful special interests, such as unions, play a role in politics. Without some corporate voice, the outcome of political decisions could become too tilted in other directions. Even more importantly, the power of the state over its citizens might become excessive without a strong constituency that defends property rights.

The ideal state of affairs is a "goldilocks" balance between the power of the state and the power of firms. If the state is too weak to enforce property rights, then firms will either resort to enforcing these rights by themselves (through private violence) or collapse. If a state is too strong, rather than enforcing property rights it will be tempted to expropriate from firms. When firms are too weak vis-à-vis the state, they risk being expropriated, if not formally (with a transfer of property rights to the government), then substantially (when the state demands a large portion of the returns to any investment). But when firms are too strong vis-à-vis the state, they may shape the definition of property rights and its enforcement in their own interest and not in the interest of the public at large, as in the Mickey Mouse Copyright Act example. The feasibility of a "goldilocks" equilibrium depends upon a mixture of institutional and economic characteristics.

By this metric, the United States does relatively well in international and historical comparisons. This fortune, however, should not be taken for granted. The Second Industrial Revolution, at the end of the 19th and start of the 20th century, upset the "goldilocks" equilibrium, which was only restored with great effort over four decades of reforms. The Third Industrial Revolution now underway is having similar effects. To understand this phenomenon in an historical and international context, it is useful to review the different types of equilibria present around the world.

Institutional Characteristics

In most autocratic regimes, the main source of power is the control of the armed forces and police—that is, a monopoly over the legal use of force. In such countries, de facto control of the armed forces greatly depends upon the personal loyalty of the rank-and-file soldiers to some commanders and the future rents a leader can credibly promise. By contrast, in democratic regimes the source of political power is a broad social consensus, formalized through an election process.

One key mechanism in the formation of this democratic consensus is the world of the media, itself influenced by the political power (through censorship, ownership, subsidies, and leaks) and by the economic power (through advertising, direct ownership, financing, and access to information). Traditionally, media have been considered free if they were not affected by government censorship. Yet, it is equally important that they are (mostly) not affected by corporate censorship, which can be a frequent phenomenon especially in small countries, where the media market is often controlled by few well-connected families (for example, Zingales 2016).

A second key mechanism in the formation of political consensus is the electoral process, shaped both by the electoral law and by the rules for campaign financing. A more proportional system of representation favors new entry and competition, but it also makes it easier for vested interests to capture small parties and turn them into lobbying organizations for special interests. The source of campaign financing is also crucial. When campaign financing comes from the government, the political control is greater; when it comes from private donations, economic power can be greater. A mixture of limitations on private donations, matched to some extent by public financing, is an attempt to find a balance between these alternatives.

In the formation of consensus and in legitimizing the political authority, a third factor is the role of ideology. In some countries, political legitimization is linked to a formal election process; in other countries, governments formed in different ways are nonetheless regarded as legitimate. Ideology is also based on perceptions of the relative benefits of being dominated by economic interests.

Finally, a crucial role is played by the prosecutorial and judiciary powers. These differ in their degree of independence from the political and the economic powers and in their prevalent ideology. For example, Epstein, Landes, and Posner (2013) document the big increase in pro-business decisions in the US Supreme Court between 1946 and 2011.

Economic Characteristics

Given the legal and social restrictions on explicit bribes in most countries, a company's ability to obtain what it wants from the political system is highly dependent upon: 1) its ability to make credible long-term promises (for example, future employment opportunities for politicians and regulators), which is highly dependent upon a company's long-term survival probability; 2) the grip a company has on the market for specific human capital (for example, how many potential employers of nuclear engineers there are); 3) a company's ability to wrap its self-interest in a bigger, noble, idea (for example, Fannie Mae and the goal that every American should be able to borrow to purchase a house); 4) the control that a company has through its image in society by way of employment, data ownership, media ownership, advertising, research funding, and other methods.

In economic terms, a firm's size and the level of concentration within a market affect positively all the crucial factors that determine a firm's ability to influence the political system. What matters here it is not just product market concentration, but in general all concentration of economic power. The main employer in a town or jurisdiction is very politically influential, even if the firm sells in a competitive market outside that town.

A Taxonomy

If we focus on the balance between economic and political power, we can identify some prototypical regimes. At the one extreme, there are traditional communist dictatorships, like the old Soviet Union, as well as North Korea and Cuba. In a communist dictatorship, political power has captured all important sources of economic power. At the other extreme, there is the most extreme form of plutocratic regimes, like the East India Company protectorate of India or the King Leopold II ownership of Congo. In such cases, the economic power has captured the functions of the political power. The "banana republics" of the early 20th century (the term is used to describe how large US firms like United Fruit Company created a near-monopoly supply of bananas from countries in Latin America and the Caribbean) were a modified version of these pure plutocracies. At least formally, the banana republic countries had an alternative source of political power, while the East India Company system in India before 1858 and the Congo Free State before 1908 did not.

Moving towards the center we find two types of regimes that, while very different in their nature, tend to be similar in their outcomes. On the one hand, we find the political patronage regimes of Suharto in Indonesia, Goodluck Johnathan in Nigeria, and many heads of government in Africa today. In these regimes, political power grants economic power through methods like concessions of either mineral extraction rights or monopoly (or quasi-monopoly) rights to operate certain businesses. A special mention is due to Egypt, where the army has transformed itself into a conglomerate, running all sort of commercial enterprises on the side.

On the other hand, we have the "vertical politically integrated" regimes (Haber, Razo, and Maurer 2003), where rich businessmen control the political system, sometimes directly (as was the case in Thailand under Thaksin Shinawatra and Italy under Silvio Berlusconi) or sometimes indirectly (as the Russian oligarchs under Vladimir Putin). These regimes differ in the degree of concentration in the main source of power. Suharto in Indonesia or Robert Mugabe in Zimbabwe had close to a monopoly grip on political power, while Goodluck Johnathan in Nigeria did not. In the same way, British Petroleum before its Middle Eastern operations were nationalized had close to a monopoly on the sources of economic power in Iran, while oligarchs in Russia and Berlusconi in Italy did not. While the original source of power is very different, political patronages and vertical politically integrated regimes are very similar in the way they use the political power to protect and enhance business. In fact, countries often oscillate between these regimes: for example, Russia moved from a vertical politically integrated regime under Boris Yeltsin, to a political patronage under Putin.

While the perfect "goldilocks" balance is an unattainable ideal, given that ongoing events will expose the tradeoffs in any given approach, the countries closest to this ideal are probably the Scandinavian countries today and the United States in the second part of the twentieth century. Crucial to the success of a goldilocks balance is a strong administrative state, which operates according to the principal of impartiality (Rothstein 2011) and a competitive private sector economy.

In Scandinavian countries, the competitiveness of the sector is ensured by the small size of these countries, which forces them to be open and subjected to international competition. The quality of government is ensured by a long tradition of benign and enlightened monarchies that have evolved smoothly into democracies, along with ethnic homogeneity that favors an identification of the citizens with the state.

Historically, competition in the United States was ensured by the very large size of the country relative to the size of the then-existing companies and the ability of their managers to travel and congregate, which made it more difficult for a small group of producers to "own" the government. During the Cold War period after World War II, the efficiency of the government was required by the threat of military conflict. Both these aspects have diminished now, increasing the risk that the United States becomes a vertical politically integrated regime with greater similarity to some countries of Latin America.

Conclusion

In a famous speech in 1911, Nicholas Murray Butler, President of Columbia University, considered the practical advances made by large corporations in the late 19th and early 20th century and stated:

> I weigh my words, when I say that in my judgment the limited liability corporation is the greatest single discovery of modern times, whether you judge it by its social, by its ethical, by its industrial or, in the long run,—after we understand it and know how to use it,—by its political, effects. Even steam and electricity are far less important than the limited liability corporation, and they would be reduced to comparative impotence without it.

Butler was right, but incomplete. This discovery of the modern corporate form—like all discoveries—can be used to both to foster progress or to oppress. The size of many corporations exceeds the modern state. As such, they run the risk of transforming small- and even medium-sized states into modern versions of banana republics, while posing economic and political risks even for the large high-income economies.

To fight these risks, several political tools might be put into use: increases in transparency of corporate activities; improvements in corporate democracy; better rules against revolving doors and more attention to the risk of capture of scientists and economists by corporate interests; more aggressive use of the antitrust authority; and attention to the functioning and the independence of the media market. Yet the single most important remedy may be broader public awareness. Without an awareness of this risk of deterioration of the corporate form, and a sense of how to strike the appropriate balance between corporations and governments, there is little hope for any remedy.

■ *I thank Mark Gertler, Gordon Hanson, Enrico Moretti, and Timothy Taylor for very useful comments and Steve Haber for educating me on the multiple ways in which Google lobbies. Financial support from the Stigler Center and from the George Rinder Research fund at the University of Chicago is gratefully acknowledged.*

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