On Firms
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This Essay is about firms as a type of economic coordination and about how we think about them in relation to other forms of coordination as well as in relation to competition and markets. A prominent stream of thought about firms—which has both strongly influenced contemporary competition law and, more indirectly, served as a support to the fundamental ideas of neoclassical price theory that guide many areas of law and policy—ultimately explains and justifies the centralization of both decision-making rights and flows of income from economic activity on productive efficiency grounds. The Essay makes two simple points, drawing upon and synthesizing prior contributions where relevant. First, we have very good reasons to doubt this approach as explanation because power perpetuation by incumbent control groups is often a better explanation for such centralization (of coordination rights and income flows) than productive efficiency. Second, we should also be skeptical of the approach as justification because it often either takes as given (or assumes away) contested legal rules that also affect productive efficiency outcomes; because the approach’s conception of productive efficiency is impoverished; and because the nature of competition and markets itself gives us no good reasons to limit the normative bases for our legal choices about economic coordination to productive efficiency alone. Together, these points ought to ultimately change our starting points for evaluating policy across a range of areas of antitrust, corporate, and labor law.

INTRODUCTION

This Essay is about firms as an instance of economic coordination, and about how to think about them in relation to other forms of coordination as well as in relation to competition and markets. Our thinking about these matters affects, of course, how the law structures coordination within firms themselves, but it

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1 For recent examples of the resurgent discussion within corporate law regarding the purposes of the corporation and workers’ participation in intrafirm decision-making, see generally Grant M. Hayden & Matthew T. Bodie, Reconstructing the
also shapes the scope of firm-based coordination within markets, the types of interfirm coordination the law permits or discourages, and the regulation or prohibition of other forms of economic coordination. Changing our thinking about firms thus has the potential to transform all of these regulatory areas because it is such a significant category within both law and theory.

The Essay begins (in Part I) by setting out, at the broadest level, the treatment of firms and other forms of coordination within competition law. Aside from regulatory implications, this helps us think concretely about how the law links up its ideas of competition with its ideas of various forms of coordination. Next, in Part II, we inspect the paradigm, “base case” of the firm—namely, where the scope of coordination rights is roughly coextensive with the scope of operational integration (i.e., where firm boundaries correspond to the boundaries of the production unit). This Part highlights how such firms, while generally associated with the rise of markets and competition, also suppressed

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2 Not only can contemporary competition law’s relatively lax merger policy be described as a regulatory expansion of firm-based coordination, but it has also been expressly understood as appropriately reflecting instances in which the efficiencies of firm-based coordination outweighed the benefits of market competition. See, e.g., Robert H. Bork, The Antitrust Paradox 107–09 (citing Oliver E. Williamson, Economies as an Antitrust Defense: The Welfare Tradeoffs, 58 Am. Econ. Rev. 18, 21 (1968) [hereinafter Williamson, Antitrust]; see also Oliver E. Williamson, Allocative Efficiency and the Limits of Antitrust, 59 Am. Econ. Rev. 105, 115 (1969) [hereinafter Williamson, Efficiency].

3 This is because the theory of transaction costs has been generalized beyond the context of firms to justify various forms of “integration through contract,” or vertical restraints. For a recent summary, see, for example, Brian Callaci, Sôrgio Pinto, Marshall Steinbaum & Matt Walsh, Vertical Restraints and Labor Markets in Franchised Industries 2–3 (July 6, 2022) (working paper) (available at https://perma.cc/JGW4-8TVY) (discussing, for example, an argument for liberalizing vertical restraints on efficiency grounds advanced in Roger D. Blair & David L. Kaserman, Law and Economics of Vertical Integration and Control (1983)).

4 Many forms of coordination—“cartels” (or forms of looser horizontal coordination beyond firm boundaries), labor unions, and public market coordination of various kinds—are, at least as a first cut, conventionally viewed as distorting allocative efficiency by reducing competition. Some are nevertheless conditionally tolerated to fix narrowly defined “market failures,” but their social benefits are often not considered alongside the social benefits of firm-based coordination in a true apples-to-apples comparison. Because allocative-efficiency arguments based in price theory ultimately assume firms as the foundational units of coordination, the argument of this Essay also aims to induce a reconsideration of the reflexive presumption that these other forms of coordination represent, ipso facto, efficiency losses.
competition in certain salient ways and are not obviously explained or justified on technical efficiency (as opposed to power perpetuation) grounds. Finally, in Part III, the Essay directly takes up an influential stream of thinking about firms, which may be offered as an explanation or justification for the special treatment of firms (in both regulation and theory) among forms of coordination, ultimately on productive-efficiency grounds. But power perpetuation by incumbent control groups is often a better explanation than productive efficiency for the centralization of decision-making rights and flows of incomes that seems to typify firms. And the “theory of the firm” often assumes (or assumes away) contested legal rules that also affect productive efficiency outcomes, while using an impoverished conception of productive efficiency, particularly where labor effort is concerned. Moreover, the intrinsic character of competition and markets gives us no good reason to limit the normative bases for our legal choices about economic coordination to productive efficiency in the first place, much less to choose hierarchy as a unique solution to efficiency problems.

I. ANTITRUST EXEMPTIONS

One way to examine, and perhaps improve upon, our thinking about the relationship between firms and markets is to start by considering the role of firms within the area of law that is commonly understood today to aim at perfecting market competition. Antitrust law—which generally limits, regulates, and channels both economic coordination and competition—contains a number of exemptions, or categorical authorizations of economic coordination. Foundational among them is the authorization of firms as the basic unit of economic coordination.5

The firm suspends or suppresses competition in various ways. It engages in price coordination and market-allocation activities that are standard focuses for antitrust law when they take place beyond firm boundaries. This coordination—and the implicit legal authorization that it receives—is perhaps easiest to see when one firm displaces two or three previously existing firms in a given market, or when comparing a firm and a functionally

similar cartel, but it exists more generally. To be sure, intrafirm coordination remains visible for some purposes—notably, monopolization claims, an area of enforcement that has also retreated under the force of arguments relating to the putative efficiencies of intrafirm coordination (even or especially within firms holding significant market power). Conversely, the fact that some coordination beyond firm boundaries is authorized does not undermine the primacy of firm-based coordination. The permissive contemporary attitude toward vertical restraints—contracts or other arrangements between actors in adjacent markets that preempt a material business decision by one or the other party (e.g., with whom to deal or what prices to set) pertaining to a transaction other than the immediate one between the contracting parties—was indeed underwritten by the same transaction-cost stream of thinking that is closely connected with the theory of the firm literature (discussed further in Part III). Nor does the existence of joint venture and related doctrines undermine the primacy of firm-based coordination. While the law has some malleable

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7 See id. at 398 n.67; Verizon Commc’ns Inc. v. Law Offs. of Curtis V. Trinko, 540 U.S. 398, 411 (2004) (contracting the scope of the monopolization doctrine in refusal-to-deal cases).

8 See Blair & Kaserman, supra note 3, at 102; see also Callaci et al., supra note 3, at 2–3; Sanjukta Paul, Fissuring and the Firm Exemption, 82 LAW & CONTEMP. PROBS. 65, 67–68 (2019) [hereinafter Paul, Fissuring] (discussing vertical restraints in the context of fissured work and business arrangements).

9 As Professor Steve Salop has distilled it, under current law even “production integration among association members is not enough to justify marketing integration (including joint pricing).” Email from Steve Salop, Professor, Georgetown University Law Center, to Sanjukta Paul, Professor, University of Michigan Law School (on file with author). This point is made clear in National Collegiate Athletic Association v. Board of Regents of the University of Oklahoma, 468 U.S. 85, 119–20 (1984), where joint marketing (i.e., coordinating on price and quantity) was not permitted despite joint production (coordinating scheduling, football rules, etc.). And as a practical matter, recognized joint ventures in the cases have frequently been between very powerful firms. See, e.g., Texaco Inc. v. Dagher, 547 U.S. 1, 3 (2006) (recognizing lawful price setting by a joint venture between oil companies Texaco and Shell Oil). This aspect of the law is therefore probably better understood as akin to vertical restraints and the putative “price leadership exemption,” see Nathan Tankus & Luke Herrine, Competition Law as Collective Bargaining Law, in THE CAMBRIDGE HANDBOOK OF LABOR IN COMPETITION LAW 72, 89–91 (Sanjukta Paul et al. eds. 2022), which extend the scope of conventional firm-based coordination rather than challenging its primacy. Could the doctrine be pushed and expanded to become a challenge? Certainly. See, e.g., Laura Alexander & Steve Salop, Antitrust Worker Protections: The Rule of Reason Does Not Allow Counting of Out-of-Market Benefits, 90 U. CHI. L. REV. 273, 335–37 (2023) (discussing the application of the joint venture doctrine to worker...
joints, a joint venture or other interfirm association must generally affirmatively justify its internal coordination on terms (e.g., that the association is necessary in order to create a particular product or benefit) not demanded of traditionally organized firms. Moreover, in its recognition of the “firm exemption” (as I refer to competition law’s categorical authorization of and preference for firm-based coordination), the law not only permits coordination but also reflects and encourages a particular form of it—a form in which both participation in decision-making (over prices, production decisions, the organization of production) and flows of pecuniary benefits are generally centralized.\(^\text{10}\) I refer to this participation in decision-making within firms in terms of “coordination rights” in order to emphasize the continuity between the legal organization of what takes place within firms and what takes place—or could take place—outside them in other types of associations.

Within positive law, antitrust exemptions are categorical authorizations of economic coordination. Aside from exemptions, antitrust law also frequently authorizes coordination in noncategorical ways in the application of its first-order rules (rules prohibiting some price-fixing beyond firm boundaries and authorizing others, prohibiting some sorts of domineering conduct by dominant firms and authorizing other sorts, prohibiting some corporate mergers and authorizing others, for example).\(^\text{11}\) However, it makes sense to call a set of such authorizations of economic coordination an “exemption” when it is categorical in some way, or durably appears so. The key feature of exemptions then is not that they are express but that they are categorical. So the labor exemption, the agricultural cooperative exemption, and the firm exemption are all exemptions, even though only two of them are currently expressly stated. There may be border cases: when a first-order rule becomes exceedingly permissive (the authorization of “price leadership,” for example), it may become sensible to...

\(^{10}\) See Alexander & Salop, supra note 9, at 335–37; R. Whitley, Firms, Institutions and Management Control: The Comparative Analysis of Coordination and Control Systems, 24 ACCT. ORG. & SOCY 507, 508 (1999). Antitrust law is not singularly or primarily responsible for this particular form of coordination, of course, but it is not neutral about it either: it not only reflects but also reinforces it.

\(^{11}\) See Paul, Antitrust, supra note 6, at 390, 394.
start thinking of it as an exemption. But the distinction is useful, in part because of the ready correspondence between an exemption and a relatively stable, socially recognizable form of coordination.

While we tend to take some of these forms of coordination for granted, an exemption from competition law also implies a set of substantive criteria. Put another way, antitrust exemptions are not merely formal categories: the exemption typically exerts some causal influence in the world, whether past or present, in shaping the type of economic coordination it authorizes. The criteria the law uses to decide whether a given instance of economic coordination qualifies for the exemption give that exemption its particular shape and character.

For example, antitrust law does not simply bless all economic coordination that takes place within the boundaries of a corporation or other entity duly formed under the law of business associations. If it did, then any coordinating parties could incorporate (or form a partnership, etc.) and thereby insulate their internal coordination from antitrust scrutiny. Instead, antitrust law imposes its own criteria to define an association that will count as a firm, or a “single entity,” and whose internal coordination is therefore insulated for key antitrust purposes. Similarly, the law of the labor exemption imposes (often quite exacting) demands and strictures on labor coordination, which in turn shapes it. The law of the agricultural exemption also sets out the types of associations and associational activity that will be authorized, thus shaping that activity and those associations. Generally, exemptions imply criteria for permissible coordination and thus help to shape the social forms of coordination.

Indeed, even beyond the current legal criteria that accompany and define an exemption, criteria contained in earlier phases of law also likely helped to shape the directions that economic associations took. Judge-made antitrust rules soon after the passage of the Sherman Act (together with changes in state corporate law) ushered in the great merger movement and

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12 See Tankus & Herrine, supra note 9, at 89–91.
13 Paul, Antitrust, supra note 6, at 397.
reinforced a particular template for the business firm, a template that had come into existence only relatively recently. At the same time, incorporated farmers’ groups struggled to access the simple firm exemption in antitrust law’s formative era, and similarly, labor incorporation would have been unlikely to have solved labor’s Gilded Age antitrust problems. Both these types of coordination eventually gained their own antitrust exemptions (and to different extents, their own areas of affirmative “coordination law”). Like the more ad hoc judicial pronouncements of yore, later statutory enactments not only authorized a preexisting form of economic coordination but also further defined and shaped it.

The influence of the law on the directions taken by the labor movement and labor associations is a canonical strand of U.S. labor historiography. The legal regulation of agricultural coordination also channeled and shaped organizing among farmers in enduring ways.

To be sure, antitrust exemptions also often correspond to social forms of coordination that have at least some independent social existence and recognition beyond their legal construction. Labor unions, farmers’ associations, and business firms have all had durable social lives to various extents. Those social existences can sometimes implicitly lend legitimacy to the legal exemption—and can also sometimes detract from it (think of some of the negative portrayals of the social dimensions of labor unions in popular media over the decades). At the same time, the fact that exemptions are not merely formal categories implies that the law

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18 See, e.g., Reeves v. Decorah Farmers’ Coop. Soc’y, 140 N.W. 844, 845 (1913); Ford v. Chicago Milk Shippers’ Ass’n, 46 Ill. App. 576, 583 (1892), rev’d, 39 N.E. 651, 656 (Ill. 1895). These cases and the broader issue of the types of associations that were permitted to access the firm exemption in formative periods are discussed at greater length in a separate forthcoming work: Sanjukta Paul, Solidarity in the Shadow of Antitrust: Labor and the Legal Idea of Competition [hereinafter Paul, Solidarity] (unpublished manuscript) (on file with author).
22 See, e.g., On the Waterfront (Horizon Pictures 1954).
also shapes the social reality that it sometimes appeals to for legitimacy—and that the theory sometimes assumes (for instance, as neoclassical price theory assumes discrete units of coordination called firms).

A given authorization of economic coordination, together with the social and economic forms it encourages, may either serve a given policy goal or subvert it. For example, in the criteria it uses to implement the firm exemption, the law relies on factors that have little to do with promoting competition. Instead, the criteria antitrust law uses to permit or prohibit coordination under its firm exemption largely emphasize operational efficiency, which centralized decision-making is presumed to serve. To be sure, these criteria and their effects are often described in terms of promoting competition. If that is true at all, it is in an indirect, causal sense (i.e., that the criteria have the effect of constituting the units that will then engage in competition). A different firm exemption, constituted by principles of internal competition, or democratic coordination—or one that balances operational efficiency with democratic coordination, or any number of other permutations—would also constitute units that engage in competition with each other. One might make policy arguments comparing the various options to one another along various dimensions, but there is no sense in which one criterion (except perhaps one that insists on maximizing internal competition) is actually more “procompetitive” than another.

If the argument is that an operational efficiency criterion for the exemption helps a given entity compete with other entities, then it is also not obvious that other criteria (such as democratic governance) could not in many circumstances aid in this as well. Moreover, it is not at all clear that the legal constitution of economic entities in a way that (putatively) maximizes each of their abilities to compete with the others is required or even recommended in a system that prizes competition between the entities as a process that conduces to social goals and encourages or discourages various behaviors. The usual causal pathways by which

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23 Paul, Antitrust, supra note 6, at 414–15.
24 Id.
business rivalry is thought to deliver social and economic benefits do not particularly require legal criteria for constituting business and economic associations that specifically select for operational efficiency. In fact, one would suppose that the existence of sufficiently robust business rivalry would itself push democratically constituted entities in the direction of operational efficiency, without the law micromanaging it.

In effect, what the law has done is internalize, into its very concept of “competition,” a particular vision of intrafirm relations, as it has grown up over time in response to social, economic, and legal factors. It is notable that law has not performed this same internalization activity with respect to the acknowledged purposes of many other economic associations, even ones it conditionally tolerates.

II. THINKING ABOUT FIRM-BASED COORDINATION IN DEVELOPMENTAL TERMS

While the internal organization of firms is not addressed in neoclassical theory itself, it is loosely associated with a kind of ideal type of the firm, deviation from which must be either corrected or compensated for in other ways. This base case can be described as a proprietary firm that makes a single tangible good in a single plant and operates in a market consisting of other such firms. Plant-level operational integration presumably creates technical efficiencies that explain this form of coordination and (tacitly) justify any legal privileges that authorize that coordination. The base case is the best example of a firm that supports the firm exemption on its own terms, in that it does not involve all the later deviations from technological integration (and from single products and markets, not to mention from single plants) that many real firms involve. While discourse broadly presumes that firms’ legal privileges are justified far beyond this base case, it is useful to consider the best case for it. Not only does the base case of the firm involve the suspension of competition just as much as the more horizontal forms of coordination that it broadly replaced (which are more often construed as

26 Paul, Antitrust, supra note 6, at 386.
28 See, e.g., Paul, Antitrust, supra note 6, at 426–27.
anticompetitive), it also uniquely suppressed competition in certain ways relative to the arrangements it displaced.

A. Development of the Base Case of the Firm

The paradigm firm, as an analytical unit of economic coordination, is a proprietary firm making a single product at a single factory. This picture of the firm is implicit in the ideal theory of not only the market of classical theory but also of neoclassical perfect competition.30 Only later did sprawling firms characterized by significant vertical integration become a common reference point; theorists of various political persuasions tended to understand them as deviations from the base case, and as bringing about administered rather than competitive markets.31 To be clear, I am not saying that such ideal markets ever existed, even though the small proprietary firms associated with them were once much more common.32 What I want to establish here is that even in this imagined base case of the firm, a de facto “exemption” from market competition was and is already operating, authorizing a particular form of economic coordination instead of others. Many views—both celebratory and critical—of the system of production and commerce built upon firm-based coordination equate the rise of firms as units of production with the rise of “markets” and “competition.”33 But the even the classical firm suppressed competition in ways that paralleled earlier forms of coordination

32 Instead, it seems that small firms in the nineteenth century were embedded in a complex and rapidly changing matrix of business conventions and customs and local regulation, in short, in express interfirm (and public) coordination of markets—rather than being regulated primarily by competition, as the Smithian ideal would hold. See, e.g., WILLIAM G. ROY, SOCIALIZING CAPITAL 189 (1997) (discussing and showing that interenterprise price coordination was still conventional in the nineteenth-century United States); WILLIAM J. NOVAK, THE PEOPLE’S WELFARE 195–11 (2000); Sanjukta Paul, Recovering the Moral Economy Foundations of the Sherman Act, 131 YALE L.J. 175, 193–94 (2021) [hereinafter Paul, Moral Economy].  
33 Paul, Antitrust, supra note 6, at 430.
and also in ways that were distinctive. Finally, we have very good reasons to embrace a power-perpetuation explanation for the rise of hierarchical firm-based coordination, rather than the technical-efficiency explanations that still predominate.

Let's consider an example of a proprietary firm—a single-factory hat-making firm, for instance. Because this type of firm had fleeting historical existence (or predominance), generally sandwiched temporally between smaller and more informal workshops on one end and vertical integration on the other, its owner may once have been a journeyman hatter himself. We will also assume that there is some degree of technological complexity and operational integration in this illustrative single-factory firm (relative to the guild, workshop, or putting-out systems that it succeeded). In the case of hat making, this might consist of pouncing machines, brim-rounding machines, fur-cutting machines, and more. One of these industrial innovations present in many hat-making factories, a special chemical treatment process for the fur pelts bound for hats, resulted in serious mercury poisoning of workers, sometimes known as the Danbury Shakes.

To see the firm exemption at work in this type of firm, consider what it displaced, and how that earlier system of coordination has been viewed through contemporary and later eyes. At one point in time, most material production was done in the context of workshops and (in the British Isles and Europe) the more

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34 The example is inspired by the most famous labor-antitrust case in U.S. history, the Danbury Hatters Case, or Loewe v. Lawlor, 208 U.S. 274 (1908), in which the Supreme Court approved the use of federal antitrust law against a number of forms of labor organizing and protest. Id. at 308–09. Many then and now have argued that this approval was contrary to congressional intent. See, e.g., EDWARD Berman, LABOR AND THE SHERMAN ACT 8 (1930); Paul, Moral Economy, supra note 32, at 210–11.
35 This was true of Dietrich Loewe, a German immigrant and proprietor of the shop at issue in Loewe. Andrew Wender Cohen, Business Myths, Lawyerly Strategies, and Social Context: Ernst on Labor Law History, 23 LAW & SOC. INQUIRY 165, 175 (1998). These transitions were likely messy and overlapping. For instance, even among proprietary firms in the context of millinery (the making of women’s hats) and dress making in the United States, where women once predominated both as entrepreneurs and workers, functional production and commercial processes in many ways “exceeded the rather narrow boundaries of the commercial enterprise.” WENDY GAMBER, THE FEMALE ECONOMY 3 (1997).
38 While “workshop” is a loose term that extends to the putting-out system, it also encompasses the significantly more autonomous forms of production that predominated
formal guilds, rather than within what we now understand as proprietary firms. This was true of hat making, among many other trades. Conventional theory since Adam Smith has tended to view guilds and workshops as hubs of anticompetitive price-fixing, while seemingly turning a blind eye to the coordination within proprietary firms.

While the guilds and their workshop analogues in the early United States certainly represented a form of coordination, the implicit “exemption” from competition that they enjoyed was very different from that of the base case firm. Generally speaking, the organization of material production in this context was looser, more horizontal, and less formalized: there were far fewer distinctions between workers and owners, and critically, many or most workers (journeymen and apprentices) could look forward to becoming master craftspersons, such that much (though of course not all) of the hierarchy was defined by the human life cycle. This means production units were not characterized by the centralization of decision-making and pecuniary benefits to the same degree associated with what would come to be called the “classical firm.” Moreover, firms’ displacement of workshops was not one-to-one; generally speaking, a firm might have absorbed several workshops.


40 See ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 140 (1976); SHEILAGH OGLVIE, THE EUROPEAN GUILDS 176–79 (2019). Smith’s oft-quoted passage assumed to be about price-fixing in the modern sense is really about price setting in the context of the guild system. Paul, Moral Economy, supra note 32, at 189–90. For a very helpful survey of this predominant view of the guild system, and its limitations, see Gary Richardson, A Tale of Two Theories: Monopolies and Craft Guilds in Medieval England and Modern Imagination, 23 J. HIST. ECON. THOUGHT 217, 234–36 (2001). Other historians have pointed out the various public-facing social benefits of guilds—from quality control to innovation, not to mention maintaining the livelihoods of workers—as well as the evidence that their price setting was socially constrained. See, e.g., Epstein, supra note 39, at 158–60; Richardson, supra note 40, at 234–35.

41 See STEPHEN A. MARGLIN, WHAT DO BOSSES DO?, 6 REV. RADICAL POL. ECON. 60, 63 (1974); Holt, supra note 39, at 606–07.

42 Cf. Holt, supra note 39, at 607–08 (detailing the entrepreneurial commercialization of trades following the American Revolution). One might reply that guilds (and
Conversely, a firm making a single product at a single factory (the base case) represents an exemption from competition in a way that conventional theory does not seem to fully recognize. While price (or other nonoperational economic coordination) across a set of technologically less advanced products produced by individual artisans may be easier to see, it would be more accurate to say that more complex technological production obscures the price coordination taking place at the factory level rather than actually erasing it. To take an example, perhaps there were previously ten hatters in a given market town, making hats in a semicommunal, semiautonomous fashion, and observing collective pricing norms. Later, let’s say we have nine hatters employed in a small hat factory by a single owner (previously a journeyman himself). Even if the hatters are now making use of a somewhat more centralized technical apparatus (whose ownership is centralized in the hands of the owner of the firm), the suspension of competition in this production unit, in this market, is functionally equivalent to that worked by its predecessor form. Commentary, to the extent it approaches the issue at all, tends to blur the separate question of whether such technological and operational integration justifies the allocation of such coordination rights as a policy matter—or even whether it would be practically possible to withhold them—and whether such coordination is occurring in the first place. Regarding the practical possibility point, factory-level price coordination is not strictly necessary even in the case of tight technical integration. For example, ownership in the output of the factory could be divided among the ten hatters, each of whom could individually price his or her “share” however they liked. (Ownership could also be divided in other ways, but this method would preserve as many independent pricing decisions as possible.)
Once we recognize that even this type of firm enjoys price coordination rights, we might be tempted to dismiss their significance, on the strength of the (also contemporaneously emerging) idea of the self-regulating market. Why? Because in theory, the price coordination rights granted to an individual production unit, an individual firm, have no impact on market prices anyway: every firm is a “price taker” under conditions of perfect competition. (Of course, this idea is not usually applied consistently to “cartels” nor to analysis of predecessor production forms like guilds.) Such a dismissal, however, would be a refusal to take the social construction of prices seriously. A growing literature emphasizes the ubiquity of such coordination.45 On the latter view, it is not just that firms in many markets have pricing power: the question is how pricing power is distributed, not whether it exists.46

Now, what about the particular form of coordination that the base case of the firm represents? The fact that this form was constituted substantially by hierarchy, both in terms of decision-


46 Boyd, supra note 45, at 760–65. Some firms in some markets certainly look like price takers—but in many cases this is due to concentrated power in adjacent markets (think of consolidated, well-capitalized agricultural processors buying from small farmers, for instance) rather than perfect competition in their own markets. In other cases, such as decentralized markets with some other coordination mechanism (an active trade association, say), firms might also look like price takers, but only in the sense that a voter in a large polity or a small shareholder in a large public corporation is a price taker: the fact that any one voice does not control the outcome does not imply that the outcome is not the product of coordination. But in either of these scenarios, the price-coordination rights granted to firms of course do matter—just as governance rights, or votes, in political or corporate governance matter. It is true that market governance built on the firm exemption is usually less formalized and more tacit than most systems of either political or corporate governance. (And it is true that a given firm’s price-coordination rights may matter less or more depending on the broader context, but that is true for other types of governance as well.) For illustrations of patterns of market governance building on the firm exemption, particularly focusing on the “price leadership exemption” and on commodities exchanges, see Tankus & Herrine, supra note 912, at 89–91. We are in sore need of more empirical research dealing directly and on its own terms with existing patterns of market governance, their variations, and their interaction with the specific competitive dynamics that obtain in particular sectors.
making and in terms of flow of incomes, is not in serious dispute, regardless of normative positionality. While Smith’s contemporaneous discussion was mainly framed in terms of “division of labor” rather than expressly in terms of hierarchy, division of labor itself to some degree implied hierarchy in the form of a durable management role; in other ways it led causally to both concentrated coordination rights and concentrated distribution of incomes. Interestingly, a key part of that causal chain runs through reducing competition: by producing an intermediate rather than a final product, the artisan/worker was subject to a much smaller market for his or her product, and thus was more greatly at the mercy of the “putter-outer” (his buyer), sometimes entirely so. In the U.S. context the courts’ regulation and limitation of journeymen’s organizations—the common law antecedent and template for federal antitrust law’s later regulation of labor organizations, and ultimately for its labor exemption—was expressly founded not on principles of competition but on the recognition of new types of property rights (i.e., the right of certain members of the firm to control the firm as property) without “interference” by the collective action of workers within that firm. The denial of coordination rights to workers under fledgling judge-made antitrust law therefore not only allocated coordination rights to other actors but also relied on a particular substantive vision of intrafirm coordination rather than on neutral principles of competition.

So, why did this unique form of coordination eventually come to displace others? The conventional story is that it succeeded because it offered technical efficiency benefits, which ultimately “grew the pie” for everyone, even as both coordination rights and

\[47\] See, e.g., Whitley, supra note 10, at 508.
\[48\] See Marglin, supra note 41, at 75–77, 104.
\[49\] Id. at 63–64.
\[50\] The logic of the post–Civil War common law labor-conspiracy cases was that an employer’s right to control his business, justified by reference to property concepts, placed a limit on coordination among workers. See, e.g., Christopher Tomlins, The State and the Unions 71 (1985); Victoria C. Hattam, Labor Visions and State Power: The Origins of Business Unionism in the United States 70 (2014) (“In the postwar cases judges and prosecution attorneys no longer stressed the public dimension of economic benefits and harms . . . Instead, in the second wave of conspiracy trials economic injuries were described in individual terms, as a loss or harm suffered by specific businessmen and their firms.”); State v. Glidden, 8 A. 890, 894 (Conn. 1887). See also generally State v. Donaldson, 32 N.J.L. 151 (1867) (starting the conspiracy analysis at the right to control the business). This topic is discussed at much greater length in a separate forthcoming work. See Paul, Solidarity, supra note 18.
pecuniary benefits associated with productive activity were concentrated in fewer hands. A famous version of this explanation was given by Smith using the example of pin making. There are, however, good reasons to dispute this explanation. For one, it is uncontroversial that the hierarchical organization of production, as found in the “putting-out system,” actually somewhat preceded the technological advances associated with factories—the same advances that are broadly understood to explain and justify the hierarchical organization of the firm on technical efficiency grounds. (This does not in itself mean that the hierarchical organization of economic activity generally associated with the firm could not have other technical efficiency justifications, but it does change the terrain of the debate significantly.) Moreover, the technological changes that led to the industrial revolution had started and were well underway under the older, supposedly inefficient guild system. The fact that further technological change took place after both coordination rights and flows of income at the production level had been consolidated obviously does not show that this legal organization was required for further technological change. We do not have access to the counterfactual in

52 Interestingly, economist Oliver Williamson pointed out that Smith failed to consider other modes of economic organization (as alternatives to independent artisan production), thereby “rigging” the comparison. Oliver E. Williamson, Hierarchies, Markets and Power in the Economy: An Economic Perspective, 4 Indus. & Corp. Change 21, 22–30 (1995) [hereinafter Williamson, Hierarchies]. Williamson, to his credit, cannot be accused of this. In his own account, he began: “So as to avoid imputing benefits to hierarchy that can be had, in some degree, by simple nonhierarchical associations of workers, it will be useful to begin with an examination of worker peer groups.” Oliver E. Williamson, Markets and Hierarchies: Some Elementary Considerations, 63 Am. Econ. Rev. 316, 321 (1973) [hereinafter Williamson, Markets]. In his discussion of Smith, he noted:

[O]nly a single alternative to factory organization of the kind described is considered. The alternative is for each man to work “separately and independently,” each pin being crafted separately, start to finish, before work on the next is begun. Intentionally or not, the comparison is thereby rigged in favor of factory modes of organization.

53 See Marglin, supra note 41, at 70.
54 Maybe this isn’t an accident: Smith himself noted that the variety of tasks and requisite skill levels required in production contexts where the “division of labor” has not yet become too minute fosters a climate of innovation and invention. Marglin, supra note 41, at 64 (discussing Smith, supra note 40, at 3–8).
which factories were co-owned by workers and managers, but we certainly cannot assume that technological change would not have occurred or would not have occurred as rapidly. Nor can we assume that any slowing of the pace of technological change, to the extent it would have occurred, would not have been a net good for humanity at the time and for the planet and humanity in the long run.55

Economist Stephen Marglin’s classic paper on the development of the putting-out and factory systems, What Do Bosses Do?, concluded that instead of technical efficiency gains, the best explanation for emergent hierarchy at the firm level was simply about interested parties seeking to entrench a distributional arrangement that benefitted them.56 In other words, some people sought to consolidate and entrench (for themselves and for those they viewed as their social successors) their relative gains (in both control and income) in durable ways, and they succeeded. Accepting this explanation does not mean waving away technical efficiency questions as unimportant, and it does not even mean that those questions were not important in shaping behavior at the time. It just means that hierarchy did not so distinctively solve technical efficiency problems across a variety of very different sectors around roughly the same time, that neutral solutions to operational problems—rather than the human urge to consolidate power in interaction with favorable existing legal and social tools—mainly explains its entrenchment.

Importantly, the power-perpetuation story challenges the technical-efficiency story, but it also contains little to support the

55 See supra note 37 regarding the Danbury Shakes as just one of the tragically numerous examples from the past. See also generally NATE HOLDREN, INJURY IMPOVERISHED: WORKPLACE ACCIDENTS, CAPITALISM, AND LAW IN THE PROGRESSIVE ERA (2020). What would have happened differently if worker participation in such decisions had been the norm when industry chose to continue to use the mercury process in fur pelt preparation after its effects had become evident and when it increased its use on the cheaper material intermixed with the fur after World War I? See HAMILTON, AUTOBIOGRAPHY, supra note 37, at 288. We might ask the same counterfactual questions about broader decision-making mechanisms as they relate to the effects of rapidly changing industrial processes on the water, the air, and the land.

56 Marglin, supra note 41, at 70. I do not summarize the entire argument here, but Marglin drew in detail from available empirical evidence both before and after the organizational changes in question, in addition to dissecting the conventional story as advanced by Smith and others. Williamson directly engaged and rejected Marglin’s conclusion. “Although it is possible to argue that later modes displaced earlier modes because the ‘interests’ were determined to stamp out autonomy, an alternative hypothesis is that successor modes have superior efficiency properties to predecessor modes.” Williamson, Organization, supra note 52, at 29.
view of many critiques of capitalism that would explain hierarchical and extractive forms of coordination in terms of the growth of markets or competition generally. Of course, markets had existed for quite some time, and power-concentrating phases of human organization have probably vied, alternated, or coexisted with more democratic and egalitarian forms of organization for a very long time as well. The explanation for the rise of firm-based coordination given by Marglin and supported by other accounts does not make that rise fundamentally different from other instances of the power-concentration mode: it is simply an instance of people and groups who already enjoy legally and socially sanctioned power over others using legal and social tools to entrench and expand that power. This explanation does not say that markets or even competition caused that result, much less that they did so uniquely. Indeed, one crucial foothold gained by early capitalists was constructed by reducing competition through the division of labor, effectively slicing what had previously been relatively larger markets for finished goods into many smaller (and less competitive) markets for intermediate goods. Initially at least, therefore, it may not have been that expanding markets drove wages down but that narrowing markets did so (while aiding in the consolidation of legal and social forms codifying this hierarchy in decades to come).

Moreover, the archetypal firm suppressed competition in other distinctive ways, further casting doubt on the idea that competition rather than hierarchy is what is distinctive about the type of economy that firm-based coordination helped to create.

57 See, e.g., Giulio Palermo, *Competition: A Marxist View*, 41 Cambridge J. Econ. 1559, 1571 (2017). To generalize a bit, many critical views hold roughly that competition among capitalists tended to produce and reinforce hierarchical and extractive forms of organization.


60 Marglin, supra note 41, at 79–80.

61 On that consolidation of legal forms, through the common law of employment, see Professor Chris Tomlin’s masterful discussion in *Law, Labor, and Ideology in the Early American Republic*, supra note 39, at 128–79. See also Karen Orren, *Belated Feudalism* 68–118 (1992). Professor Karen Orren’s account emphasized greater continuity with hierarchical medieval forms, while Tomlin—without contradicting that element of continuity—brought out the somewhat democratic and egalitarian forms that preceded the consolidation of common law employment in the nineteenth century.
Some new proprietary capitalists overtly hoarded certain specific pieces of market or industry information from their workers and even from their managers to help ensure that they did not strike out on their own and become rivals. And as Marglin pointed out, even without such overt action the division of labor itself helped to constrain such competition: a worker trained in just one piece of a highly segmented process is much less likely to threaten the owner or coordinator of the entire process as a potential rival.

Ultimately, these suppressions of competition did not just stamp out potential rival capitalists but potential rival forms of coordination as well. The “Rochdale experiments” in democratic industrial organization, which were also a template for the U.S. agrarian antimonopoly movement, were seen by some as a threat in real time. At the broadest level, the social and economic inequality that the production-level consolidations brought about itself suppressed competition. Such inequality allowed a small elite to monopolize all of the economic and social resources in which potential rivals would need to get at least a foothold in order to challenge incumbents—whether as rival capitalists or through alternative forms of coordination involving dispersed decision-making and more equitable division of incomes.

In short: The firm exemption from competition exists, even if we assume only firms whose boundaries correspond to tightly integrated production units such as single plants. Its appearance is likely explained better by power perpetuation than by technical efficiency (aided by contemporaneous legal developments). And firm-based coordination suppressed competition at least as much as, if not more than, more horizontal predecessor forms did.

III. THEORIZING THE THEORY OF THE FIRM

It might now be objected that whatever the genesis of firms, contemporary theory now explains them in efficiency terms—and that this explanation is sufficient to justify their central role in economic theory as well as in the actual regulation and construction of the economy.

Unlike some things we call “theories,” the theory of the firm generally isn’t (just) an attempt to inductively generalize from the
existing things in the world that we call firms in order to give a normatively neutral account of a category that comprises them. Rather, at the broadest level it aspires to answer the more general question of how best to organize economic activity, answering that question in part by reference to existing forms.\textsuperscript{65}

Generally speaking, accounts of the firm that go under this moniker tend to assume that economic activity, to the extent it is organized at all, ought to be organized to optimize operational or productive efficiency.\textsuperscript{66} They then go about answering that more general question by (at least as a first cut) posing a binary choice: firm or market; make or buy. As an initial matter, units of economic coordination (optimizing operational efficiency) thus exist as islands or nodes in a market regulated by competition (optimizing allocative efficiency). The primary question then becomes how to further specify the essential aspects of these islands of coordination in a way that would help predict (or recommend) where the islands should end and where the sea of contracts and competition should begin.

It is precisely this combination of three things—aiming at a general theory about economic coordination, limiting the values around which that theory revolves to operational efficiency, and drawing on relatively limited and contingent attributes of the world in answering even that narrow question—that leads to problems when this thinking is then deployed in a normative vein to guide law and policy—as it has been in competition law, for example.

Assuming for the moment the singular aim of efficiency, the theory of the firm generally narrows the choice for economic

\textsuperscript{65} This is why some of the theory’s conclusions have been extended to forms of economic coordination beyond the firm (notably to contractual relations often known as “vertical restraints” in competition law). See, e.g., BLAIR & KASERMAN, supra note 3, at 102.

\textsuperscript{66} There are certainly discussions of the firm in the academic literature that don’t do this, or that in other ways may not bear out the other general attributes I discuss here. I refer here to a relatively well-defined stream of thought sometimes known as “neo-institutionalist” or “transaction cost” theory that begins with the work of Ronald Coase and is continued by key figures such as Oliver Williamson, Armen Alchian, Harold Demsetz, Oliver Hart, and others. See generally Williamson, Hierarchies, supra note 52; Armen A. Alchian & Harold Demsetz, Production, Information Costs, and Economic Organization, 62 AM. ECON. REV. 777 (1972); Oliver Hart & John Moore, Property Rights and the Nature of the Firm, 98 J. POL. ECON. 1119 (1990). Certainly, boundaries of conversations are not fixed, and this is particularly true of a stream of thought that—while it does have defining features—is not defined by deductively binding axioms in the same way that some other aspects of economic theory (to which it is nevertheless linked) are. See supra note 52. Yet these theorists have influenced law and legal thinking in enduring ways that I would argue flow from the features identified here.
coordination mechanisms to firms and markets—hence the shortening of the general query to “make or buy?” Given the understanding of markets implicit in most theorists’ views, this could also be restated as “to coordinate or not?” Contained in this question, in other words, are two important background assumptions: that unconditioned competition can be posed as an alternative to coordination, on the one hand, and that firms (and perhaps units of coordination generally) represent coordination by command, on the other.

The “make or buy” binary may make some sense for household economic decisions (thus motivating our intuitions), but at the level of firm-to-firm relations, it belies the networks of coordination between commercial and industrial enterprises that exist and have existed—to say nothing of alternative forms of coordination and production that are possible.\(^\text{67}\) What if “cartels” of smaller producers and service providers were permitted to coordinate aboveground in a way that made more robust interfirm investments and collaboration (including on operational matters) feasible—while price leadership by dominant firms and coordinating activity by commodities exchanges in more dispersed markets was more strictly scrutinized by competition law? What if labor unions were permitted by labor law and by competition law—and had built up institutional memory, through the institutional structure that the law helps to create—to coordinate not only regarding wages and working conditions but also regarding prices, operational decisions, and more? In short, how would the literature on the “efficient” balance between the costs of various forms of association look different if the law governing them was different? By the time the conversation we now know in terms of


\(^{68}\) I am not necessarily endorsing this approach, particularly not among already powerful firms, but I am suggesting that assessment of operational-efficiency tradeoffs could look very different if such coordination were permitted. For a case in favor of permitting joint bargaining among small and medium-sized businesses from a labor perspective, see Tess Hardy & Shae McCrystal, *Bargaining in a Vacuum? An Examination of the Proposed Class Exemption for Collective Bargaining for Small Businesses*, 42 SYDNEY L. REV. 311, 332 (2020) (analyzing the new rule by the Australian competition agency providing for such joint bargaining).
the "theory of the firm" began to get off the ground, this basic legal structure for economic coordination was essentially in place (in U.S. law). It is understandable to look around oneself at the existing world in an attempt to understand why it is the way it is, and even, in various ways, why it should be that way. I do not dispute that the theory-of-the-firm literature (or the "neo-institutionalist" literature, or transaction cost literature) has yielded many useful insights that can be carried forward as we think about how to organize economic activity. I also do not, however, think it provides a basic justification for the legal and social structure of economic coordination it assumes—centrally, the analytical and regulatory primacy of firm-based, hierarchical coordination.

The remaining discussion attempts to survey key moves in this literature in terms of whether they may provide justification for the preferred legal (and analytic) treatment given to coordination within firms. This will necessarily cover well-trodden ground, and far too briefly and summarily for anyone's liking. Yet it is necessary to take a partial step back in order to see the picture this Essay seeks to bring into view. Following a bit of context, I consider three primary justifications for the primacy of hierarchical, firm-based coordination: the costs of too little labor effort ("shirking" or "malingering"); the relative costs of democratic association; and the costs of holdups (insufficiently large markets, for instance in case of complementary assets or simply intermediate inputs, leading to opportunistic bottlenecks). I conclude that these reasons are insufficient, and that an attempt to leverage the theory of the firm literature in favor of the primacy of firm-based coordination fails to consider other important reasons.

A. A Brief Note on Genesis and Context

When the institutionalist economist Walton Hamilton catalogued the relationship between schools of economic thought for the American Economic Review in 1919, he identified both neoclassical economics and (early) institutionalist economics as heirs to the classical economics of the previous century: neoclassical

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69 I discuss some of these developmental points in a separate work. Paul, Solidarity, supra note 18.
70 See infra Part III.A.
71 See infra Part III.C.
72 See infra Part III.D.
73 See infra Part III.E.
theory was essentially a refinement and formalization of the concept of the self-regulating market in classical economics, while institutionalism was the continuation of its focus on elucidating the legal and social—institutional—structure of markets, and their resultant qualitative characteristics. As institutionalism’s influence and presence waned in the United States by midcentury, a new current of thought—which would come to be known as neo-institutionalism, among other names—staked out and claimed institutionalism’s erstwhile domain. But that newcomer took a much less ambivalent attitude toward neoclassical theory than its predecessor had.

As previously noted, neoclassical price theory itself at best does not define the internal organization of its fundamental units of analysis—firms—and at worst assumes them away as infinitely small or effectively individual producers. It is this black box, or black hole, at the center of price theory into which Ronald Coase’s germinal 1937 paper entered. And it is the resultant stream of thought—the theory of the firm, focusing on transaction costs and productive efficiency—that forms much of the intellectual core of “Chicago School” developments in competition law.

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75 It was not the only current within this subject matter domain: as Professors Elizabeth Popp Berman and William Kovacic both describe, the subfield of “industrial organizations,” then dominated by the “Harvard School,” already incorporated some of the features of the early institutionalists as well as neoclassical analysis in their accounts of markets and organizations. See William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLOMBUS L. REV. 1, 31 (2007); EIZABETH POPP BERMAN, THINKING LIKE AN ECONOMIST 75–78 (2022). Ironically, thinkers like Coase and Williamson pushed further beyond neoclassical analysis into essentially internal and qualitative features of economic organization, even as they understood their project as complementary to neoclassical analysis. See Williamson, *Organization*, supra note 52, at 11–14; Coase, *Nature of the Firm*, supra note 52, at 386–87.

76 See, e.g., Williamson, *Organization*, supra note 52, at 5, 9–10 (“Questions regarding alternative modes of internal organization do not arise naturally within, and in some respects are even alien to, the neoclassical tradition.”); Robert Aaron Gordon, *Rigor and Relevance in a Changing Institutional Setting*, 66 AM. ECON. REV. 1, 3 (1976) (“Nor . . . should we forget the extent to which conventional theory ignores how and why work is organized within the firm and establishment in the way that it is.”); Marglin, *supra* note 41, at 83–84 (“In the competitive model, there is no scope for supervision and discipline except for that imposed by the market mechanism.”).


78 An assumption of robustness of potential competition, as a disciplining factor on current market participants, was probably the other key intellectual component of this policy influence. See POPP BERMAN, *supra* note 75, at 79–80 (“Stimulated by the studies of his students, Director gradually embraced the position that competition would tend to
Even though both price theory and its accompanying organizational theory employ the term of art “efficiency,” the productive efficiency invoked by the theory of the firm and the allocative efficiency of neoclassical price theory are far from equivalent, and how the concepts are to relate to each other is in many ways ambiguous.\(^79\)

Very broadly, the paradigmatic firm of theory centralizes or concentrates both decision-making and flows of incomes (whether by centralizing ownership of assets, or in some other way) in relation to a given instance of economic activity. The degree to which this is true will obviously vary (and individual situations of reversal will arise), but overall this is what firm-based coordination seems to have signified, in contrast to other types of economic coordination, both in transition\(^80\) and in the twentieth-century literature that conceptualized it.\(^81\) Alchian and Demsetz defined the “classical firm,” the organization they wanted to explain, in the following terms: joint production, coordinated by a central party who enters into contracts with all “input owners,” who holds the residual claim, and whose bundle of rights is alienable.\(^82\) They contrasted what they dubbed this “classical firm” to various other sorts of economic organizations, including, in their words: partnerships, nonprofit enterprises, labor unions, and

underline monopoly, that barriers to entry were of little importance, and that high levels of market concentration typically reflected business efficiency, not exploitation of market power.\(^)\ The study of economic governance within both firms and markets that is usually identified as “industrial organizations economics” predates Williamson, though his work transformed it. See, e.g., Hillary Greene, James Cooper, Ahmed Ghappour, David Lieber & Felix Wu, Data Collection and the Regulatory State, 49 CONN. L. REV. 1733, 1746 (2017). Broadly speaking, prior to his influence the field was both defined more by neoclassical price theory than by Coasean transaction cost considerations and focused more on market structure than enterprise governance. For a broader discussion of the origins and history of industrial organizations, or “I/O,” see POPP BERMAN, supra note 75, at 72–97.

\(^79\) See Paul, Antitrust, supra note 6, at 415–31, for a discussion in the context of Bork. It is my broader contention that both wings have worked together to favor hierarchical coordination: price theory by condemning various forms of democratic association as anti-competitive and the theory of the firm by elevating firm-based coordination (and some other forms of hierarchy) as offering productive-efficiency benefits that often outweigh competition considerations. (See, for example, the Williamson diagram showing how merger efficiencies can outweigh “deadweight loss,” later adopted by Bork. Williamson, Antitrust, supra note 2, at 21; BORK, supra note 2, at 107.) The applicability of neoclassical price theory to bar horizontal coordination beyond firm boundaries, and thus many relatively democratic forms of economic coordination, is straightforward on its own terms. The force of transaction cost theory in justifying the classical firm (as well as its relationship to price theory), which is discussed here, is less deductively straightforward.

\(^80\) See supra Part II.

\(^81\) Paul, Antitrust, supra note 6, at 419–29.

\(^82\) Alchian & Demsetz, supra note 66, at 780–83, 794.
“socialist firms.” Nonetheless, it would be a mistake to pin this particular configuration of economic coordination—and its accompanying privileged place in law—only on transaction cost theorists or on Chicago School–associated thinkers. A version of it was baked into the New Deal settlement itself, a fact that is evident within the key legal developments that constituted the foundations of that settlement, and also in contemporaneous intellectual work that was influential in New Deal reform. Transaction cost analysis can then be understood as an important intellectual tendency in the latter half of the century, which effectively served to extend and purify this already-existing legal and economic preference for firm-based coordination, while at the same time helping to discourage competing forms of economic organization as much as possible.

B. The Ambiguous Role of Perfect Competition

Perfect competition as a normative benchmark, though it does not provide a logical foundation for transaction cost analysis or for the concept of efficiency it elevates, does shape this stream of thought. Most obviously, neoclassical price theory’s ideal of a self-regulating market, governed only by competition, naturally suggests forms of economic coordination that are contained rather than diffuse—units of coordination, like firms, rather than broader patterns of coordination that could be market-wide in scope. More, it may lead us to minimize the price coordination rights allocated to particular forms of organization, because in perfect competition the price that firms “choose” just is the market-clearing price.

The two analytical frameworks (price theory and transaction cost theory) are sometimes simply assimilated into one another within descriptive accounts of the development of economic thought or its influence on policy. For example, Williamson’s

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83 Id. at 787.
84 Defining New Deal legal developments, including the Wagner Act, internalized the firm exemption in structural ways. And influential contemporaneous commentary dramatized a kind of transition from antimonopolist contestation about the basic forms of economic coordination to the acceptance of hierarchical firm-based coordination as part of the New Deal bargain. See generally BERLE & MEANS, supra note 31. This theme is discussed at greater length in a forthcoming work. See generally Paul, Solidarity, supra note 18).
85 Williamson, Organization, supra note 52, at 12.
86 Paul, Antitrust, supra note 6, at 386–87.
87 Id. at 396–97.
influence on antitrust law is sometimes assimilated to the ascent of “neoclassical” economics’ policy influence. Yet Williamson himself characterized his influence in the field as focused on bringing in questions about “organizational design” that were “outside the canon” of the “price-theoretic” approach that dominated antitrust agencies when he came to them in the mid to late 1960s.

Transaction cost analysis overlaps with price theory insofar as imperfect competition is typically the opening that makes it salient (for someone already committed to price theory) in the first place: “bilateral monopoly” or small-numbers dealing provide some of the primary reasons for coordination through ownership, employment, or other “non-market” association rather than through contracts “in the market.” But from there, as it begins comparing types of association—and even to some extent as it compares association with market contracting—this current of theorizing about economic associations mostly departs from the realm of neoclassical price theory altogether (even if it shares the latter’s penchant for formal analysis and for some of the same analytical terms). Instead, transaction cost analysis draws ultimately upon a collection of qualitative observations and inferences regarding human behavior, group dynamics, economic and social history, and the comparative characteristics of various occupations, trades, and types of economic activity, in order to compare and assess solutions to “coordination problems.” Its key conclusions certainly do not follow deductively from the framework of neoclassical price theory, nor even from some other distinct set of shared commitments.

88 POTT BERNER, supra note 75, at 76–87.
89 Oliver E. Williamson, Oliver E. Williamson: Biographical, THE NOBEL PRIZE (2009) [hereinafter Williamson, Biographical], https://perma.cc/9XNV-TPLL: Although the leadership and staff of the Antitrust Division in the late 1960s were both superlative, the prevailing attitude toward nonstandard and unfamiliar contractual practices and organization structures was that such “abnormalities could be presumed to have anticompetitive purpose and effect.” Indeed, given that the prevailing price theoretic orientation effectively disallowed economies of a non-technological kind, it could hardly have been otherwise. That economies could result from organizational and contractual design was simply outside the canon.
90 Williamson, Markets, supra note 52, at 318.
91 This is evident in the nature of the disagreements among theorists in this tradition. For instance, Hansmann draws very different conclusions regarding the management of “shirking” within various organizational forms, and across different types of work, than do Alchian and Demsetz. See Alchian & Demsetz, supra note 66, at 786–89; HENRY
In Coase’s foundational account of the firm, he undertook to explain the presence of firm-based coordination in a market economy. He began by observing that organizing production through “the price mechanism” on the open market has costs: specifically, the cost of discovering the “true” prices of inputs, and the time/effort cost of negotiating contracts for each individual input. This is his original definition of transaction costs. The second type of transaction cost is a more intuitive, empirically observable one that does not depend on any given theoretical framework: it may take more time and energy to negotiate individual contracts for every step of production than it does to employ people who can handle or alternate between several functions, for example. But the first type of transaction cost (discovering the prices of inputs) has no existence at all apart from the theoretical perfect competition benchmark. That is, if there are no “true” equilibrium prices given by perfect competition, then discovering the true price of an input is no longer a cost at all.

Moreover, the focus on maximizing output and (somewhat less straightforwardly) on minimizing costs is a shared focus connecting the two frameworks. But this shared focus also highlights a basic divergence. In a sense, the defining feature of neoclassical price theory, both on its own technical terms and in terms of its wider influence beyond strict professional borders, is its explanatory focus on market dynamics external to the enterprise—competition—in determining key outcomes, whether those outcomes are framed in terms of output, costs, prices, or something else. The broader, commonsense interpretation of this basic idea is fundamentally in causal terms: the discipline of market competition induces participants in the market to organize and manage themselves—whether through technological innovation, internal organization, or simply self-cultivation—in ways that tend to save costs, increase quality, and/or increase output. (In this sense, many people who do not necessarily subscribe to neoclassical price theory—including this author—believe that economic competition is important and valuable, even though it is not the only important organizing principle for economic systems.) Yet the more formal version of this idea, within price theory, collapses...
time horizons in a way that largely erases any space for causality. That is, in perfect competition, managers or workers in firms do not really innovate, manage, or work their way to particular price or even quality outcomes. Instead, there simply is a market-clearing price, and all firms are price takers. To the extent that quality can be translated into price terms (or simply understood in terms of product differentiation, so that a higher-quality product is in a different market altogether), it is also just another given within this analytical framework.\(^94\) Technological development, too, is considered “exogenous” to neoclassical price theory.\(^95\) The analysis of qualitative forms of organization in the tradition of Coase and Williamson does, of course, delve into these negative spaces left by perfect competition. But that does not mean that the two streams of thinking necessarily constitute complementary halves of a coherent whole.\(^96\)

C. Labor Effort, Technical Efficiencies, and Outputism

Coase posited that a particular type of economic coordination—the type embodied in the employment relationship, as structured by master-servant law—helped to solve the problem of transaction costs.\(^97\) Coase’s explanation of firms therefore relied crucially on labor regulation.\(^98\) In so doing, it also took a particular, contingent legal form for organizing work as given. The employment relationship, in contrast to contract relationships, defines the essence of what firm-based coordination (in contrast to market-based coordination) is for Coase.\(^99\) But Coase’s account assumed a selectively simplified picture of the legal form of employment—essentially a version of common law employment.\(^100\) The key element of this legal form for Coase’s purposes was the command relation inherent to master-servant law, or of principals to agents. In short, for Coase the employment relationship

\(^94\) Marglin, *supra* note 41, at 65–66, 84.
\(^95\) *Id.* at 112.
\(^96\) A deeper and sustained investigation of the analytical relationship between the two would be very helpful.
\(^97\) Coase, *Nature of the Firm*, *supra* note 52, at 403–05.
\(^98\) *Id.*
\(^99\) *Id.*
\(^100\) *Id.* For a more recent and even more express endorsement of this simplified version of common law labor regulation as fundamental to structuring markets, see Richard A. Epstein, *The Application of Antitrust Law to Labor Markets – Then and Now*, 15 NYU J.L. & Lib. 327, 386–88 (2022).
represented economic coordination through command, which in turn defined the firm.

The central role played by labor within transaction cost analysis continued in the formative work of Oliver Williamson, Coase’s intellectual heir. Williamson argued for the indispensability of hierarchical economic organization (even while later recalling quite fondly his own upbringing in the “most democratic” milieu of a prairie town shaped by populist and egalitarian traditions).\(^{101}\) Williamson began where Coase left off, first restating the Coasean point that market-based coordination incurs costs.\(^{102}\) The limited “computational capacity” of humans entails that contracting can be costly.\(^{103}\) Moreover, humans may not always be honest, and they may be influenced or motivated by nonpecuniary factors, which Williamson sometimes interestingly referred to as “atmosphere” or “energies.”\(^{104}\) Partly as a result of these human factors, market contracting is also often subject to asymmetric information and to the “small numbers” problem (another way of saying that situational monopoly or market power can arise through relationship-specific or transaction-specific knowledge or capital).\(^{105}\)

Where Williamson went beyond Coase is that he did not take hierarchy, as embodied for instance in master-servant law, for granted as a solution to the “transaction costs” that attend market-based coordination. Instead, he expressly named and considered the possibility of “nonhierarchical associations of workers” as an alternate solution to the problem of transaction costs posed by market-based coordination.\(^{106}\) However, Williamson importantly posited that just as transaction costs may attend market-based coordination, coordination through association can incur certain costs as well—a problem better solved by some forms of association than others.\(^{107}\) He then argued that hierarchical organization is ultimately superior to nonhierarchical organization in solving the costs that attend association, and thus is usually more productively efficient.\(^{108}\)

\(^{101}\) See generally Williamson, Biographical, supra note 89.

\(^{102}\) Williamson, Markets, supra note 52, at 321–22.

\(^{103}\) Id. at 317.

\(^{104}\) Id. at 317, 321.

\(^{105}\) Id. at 318.

\(^{106}\) Id. at 321.

\(^{107}\) Williamson, Markets, supra note 52, at 321.

\(^{108}\) Id. at 317–24.
For Williamson, one of the central problems of economic associations is the prospect of “malingering” by workers. While he posits other types of “opportunism” (by a variety of actors) that may arise in multilateral economic activity as well, this particular problem is essential for generating the particular solution of hierarchical organization associated with the classical firm. He argued that the superiority of hierarchy over “nonhierarchical associations of workers,” for purposes such as prescreening workers (with respect to skills and propensity for effort) and for policing “malingering and other ex post manifestations of moral hazard,” accounts for hierarchy’s observable frequency and explains its superior productive efficiency. On this basis and others, Williamson was quite explicit about the “transaction cost disabilities which non-hierarchical work modes commonly experience.”

Williamson emphasized that questions of human effort and human decision-making (including shirking), rather than technology or technological change, were the ultimate basis for the transaction cost analysis of the firm (and other economic organizations). Fellow travelers like Alchian and Demsetz—while they began from a critique of the Coase-Williamson account, emphasizing the contractual nature of the firm—ultimately also shared the focus on “shirking” and insufficient effort by workers, and specifically in explaining the superior productive efficiency of the organizational structure associated with the “classical firm” in most circumstances.

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109 Id. Williamson characterizes the more general problem of association as “opportunism,” which may be exhibited both by controllers of firms in their dealings with each other and by individual workers toward the enterprise. Id. Note that “opportunism” can arise for Williamson both in market dealings (thanks to situational market power) and in associations. See id.

110 Id. at 321–24 (emphasis in original).

111 Williamson, Organization, supra note 52, at 37 (concluding a survey of the efficiency of various work modes).

112 Id. at 316 (“[T]he interesting problems of economic organization are mainly to be explained by reference to the conjunction of a set of human attributes with a related set of (largely nontechnological) transactional factors . . . . Discussions of economic organization nevertheless are frequently dominated by references to technology.”).

113 Alchian & Demsetz, supra note 66, at 784. They do predict that worker ownership will be more likely where the costs of supervision (policing shirking) are high, which they identify as the situation of many professional service firms (where worker ownership in fact predominates) in contrast to, for example, the supervision of dockworkers. For a discussion that inverts this supposition, see HANSMANN, ENTERPRISE, supra note 91, at 70–71.
The prospect of shirking is, ultimately, one of the key reasons for favoring hierarchy over democracy in industrial organization, within this larger stream of thought. Yet there is no obvious space within these accounts for the converse problem: too much, or greater-than-optimal, effort. This is partly due to the lack of any developed concept of the real, objective, and often physical costs of labor effort. Instead, the costs of labor, to the extent they are acknowledged at all, are typically cast in terms of purely subjective “disutility,” as opposed to an objective sense of cost that is at least available when discussing business costs.114

The prominence of shirking costs and the lack of space for overwork costs is also encouraged by the focus on output that transaction cost analysis shares with ideal price theory and that links them together in various areas of policy analysis (such as antitrust law).115 John Newman has usefully labeled contemporary antitrust law’s fixation on output effects “outputism.”116 In fact, while there might, just, be a way to make sense of too much output in a perfect competition framework—allocating too many social resources to a particular sector of production—there is no straightforward way to accommodate the idea of excessive output from a transaction cost perspective, focusing on a particular firm or sector. In fact, output is typically an indication of productive efficiency. It is not entirely a surprise, then, that the current antitrust framework, shaped as it has been by transaction cost theory, has had so much trouble making sense of too much work for too little remuneration as a problem.117

This underlying approach to output and labor effort does not change fundamentally even within strands of the neo-institutionalist tradition that are much friendlier to democratic and worker-controlled organizations. Henry Hansmann’s work (discussed further below) ultimately concluded that despite the time and effort costs of democratic decision-making, worker-owned firms will be productively efficient in a wider range of circumstances than theory had previously assumed,118 but the ultimate role of labor effort in his account remains similar. Hansmann noted the

114 See Williamson, Organization, supra note 52, at 10.
115 BORK, ANTITRUST, supra note 2, at 107–09 (citing Williamson, Economies, supra note 2, at 18, 21); see also Williamson, Efficiency, supra note 2, at 106.
117 On this tendency in the law, see, for example, Hiba Hafiz, Labor Antitrust’s Paradox, 86 U. Chi. L. Rev. 381, 391–404 (2020).
118 See HANSMANN, ENTERPRISE, supra note 91, at 118–19.
advantages of worker-run firms in monitoring shirking, for example.\textsuperscript{119} The focus on shirking was even greater in the case for democratic enterprise advanced by economists Bowles and Gintis, who argued expressly that "democratic firms" systematically incentivize greater labor effort or "labor intensity" in comparison to "capitalist firms."\textsuperscript{120} But the primary associational problem where work is concerned in these accounts is still shirking—and not overwork.\textsuperscript{121} The idea of too much effort or too much work does not enter in.\textsuperscript{122}

Developing alternative conceptions of productive efficiency as a policy goal is possible and indeed desirable. True technical efficiencies consist in deriving more output while holding inputs—including labor effort—fixed. They do not consist in increasing output simply by \textit{increasing inputs}. (We would still need to separately determine what levels of labor effort are socially desirable.) Yet our standard ways of conceptualizing economic coordination frequently run together the question of technical (or productive, or operational) efficiency with the question of increasing output by increasing input.\textsuperscript{123} This tendency seems to be exaggerated in the case of labor effort, given the evident difficulty of conceiving of too much of it. Imagine if more labor effort were substituted for more of some other input: land, or raw materials, or investment capital. While outputism might still lead us to be overly sanguine about such deployments of resources,\textsuperscript{124} we are somewhat less likely to mistake increases in those inputs (even where they ultimately increase output) with technical efficiency. Yet we seem to frequently do just this in the case of labor effort.

\begin{footnotes}
\item[119] Id. at 71–72. Hansmann is also equally concerned with monitoring managers and other actors for opportunism, it should be noted, and is also concerned with the lack of market power of workers. The point here is not that the concern with labor effort is always overriding but that, to the extent labor effort is considered, there is no straightforward way to make sense of \textit{too much} of it in efficiency terms (as opposed to too little).
\item[120] Samuel Bowles & Herbert Gintis, A Political and Economic Case for the Democratic Enterprise, 9 ECON. & PHIL. 75, 75–77 (1993). Bowles and Gintis are Marxists as opposed to neo-institutionalists (albeit Marxists using traditional neoclassical methods). On their account, the primary efficiency advantage of worker-owned firms is their greater propensity for labor effort.
\item[121] HANSMANN, ENTERPRISE, supra note 91, at 70–71.
\item[122] Contrast the neo-institutionalist approach to labor effort—where it is at best subjective disutility—with both Brandeis and the original institutionalists, who recognized the substantive efficiency implications of \textit{too much} labor effort, particularly on a social scale. See, e.g., SIDNEY WEBB & BEATRICE WEBB, INDUSTRIAL DEMOCRACY 399–469 (1902); LOUIS D. BRANDEIS, BUSINESS—A PROFESSION 28–36 (1914).
\item[123] HANSMANN, ENTERPRISE, supra note 91, at 84–88.
\end{footnotes}
It may be high time for theories of the firm to recognize, and be guided by, the “sweatshop problem”—the persistent occurrence of overwork—as a problem for law and policy to navigate, right alongside the agency problem and the shirking problem. But it appears that conceptual slippage between technical efficiency and increased labor effort, together with the failure to account for the costs of too much labor effort, are deeply woven in with our standard forms of thinking about how to choose between forms of economic coordination.

D. Costs (and Benefits) of Democratic Association

As already noted, some more recent thinking in the neo-institutionalist vein has taken a more friendly view toward democratic governance of enterprise. Henry Hansmann’s study of worker- and producer-owned enterprises focused on ownership as a proxy for control, concluding that worker ownership may be productively efficient in a number of circumstances. Capital, like labor and like other inputs, is on this framework just another factor of production: shareholders are providing capital to the firm, just as workers are providing labor.

Hansmann then proceeded by considering whether one mode of organization may have more productive efficiencies than others, depending on the circumstances. Like many other theorists in this tradition, he tended to infer that existence, persistence, and frequency at least roughly indicate superior productive efficiency, absent legal or other bars. Like Williamson, Hansmann supposed that association, and specifically association through

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125 Hansmann largely assumes that ordinary business corporations are owned by shareholders and also that these shareholders have formal, though often not effective, rights of control. Henry Hansmann, Ownership of the Firm, 4 J.L. ECON. & ORG. 267, 269–72, 291–96 (1988) [hereinafter Hansmann, Ownership]. But see LYNN STOUT, THE SHAREHOLDER VALUE MYTH 44–45 (2012) (arguing that even in investor-oriented firms, shareholders do not in fact own the corporation). Hansmann also treats the concept of ownership as coextensive with, or even defined by, internal governance rights. HANSER, ENTERPRISE, supra note 91, at 19–20.

126 In a way, Hansmann actually recedes further than Williamson—who is quite frank about hierarchical relations and expressly engages the question of power, though he eventually rejects it as explanatory—from the consideration of power as determinative of organizational relations. Hansmann, Ownership, supra note 125, at 281–83; Williamson, Hierarchies, supra note 52, at 32–33.

127 HANSER, ENTERPRISE, supra note 91, at 33. Hansmann largely dismisses the possibility of multiple classes of firm stakeholders sharing internal governance rights, on the ground that the costs of collective decision-making would be too immense given the divergent interests involved. Id. at 62–64.

128 Id. at 84–87.
ownership, is most viable where competitive markets are not. And for him, as for Williamson, the costs of a particular type of association in comparison with another type, and with the costs of market-based transactions, were a key factor. Also similar to others, his approach predicted that worker-owned firms are superior and will therefore be more frequent in those situations where the assignment of ownership to workers (as opposed to some other set of the firm’s “patrons”) results in a net savings in costs, considering both the transaction costs of contracting and the costs of ownership (or association). In other words, worker governance of enterprises is most viable where contracting with workers in the market is particularly costly (in comparison with contracting with other firm “patrons”) or where the associational costs of worker ownership are particularly low.

Hansmann ultimately put less stock in “shirking” and “malingering” as determinative problems of association than did Williamson, Alchian, and Demsetz, and more stock in the simple time and effort costs of democratic and horizontal decision-making (which are a primary liability of worker ownership for him). As previously noted, he in fact starts by supposing that worker-owned firms offer comparative productive efficiencies where shirking is concerned, in that they give workers an incentive to police each other’s shirking unlike in investor-owned firms. He also argues, in opposition to Alchian and Demsetz, that the difficulties of policing shirking are actually much more pronounced in the context of complex, capital-intensive production (e.g., traditional manufacturing operations) than in the context of services, where an individual’s contribution to the firm’s earnings is much easier to isolate. Although these two inversions put Hansmann in a position to claim that minimizing shirking is an explanation for the incidence of worker-owned firms (given their frequency in the context of professional service firms), he instead primarily emphasizes that worker ownership

129 See id. at 33.
130 Id. at 2.
131 Id. at 20–22.
132 HANSMANN, ENTERPRISE, supra note 91, at 20–21. Note that none of this captures any of the many things that are distinctive about his account; rather, it emphasizes what makes his account part of the neo-institutionalist stream of thought.
133 Id. at 70–71.
134 Id.
135 This is the primary argument made by Bowles and Gintis. See Bowles & Gintis, supra note 120, at 92–93.
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is most efficient, and most likely to arise, where the costs of collective decision-making among workers are the lowest. These he identifies as contexts in which workers within the firm are relatively homogenous in terms of the type of work they do, where their status within the firm (and one might add, in society more broadly) is relatively equal, and where there is a relative lack of hierarchy or supervisory relationships between them.

Notably, the second and third of these three factors (status among workers and flatness of hierarchy) and arguably also the first (which implicates the division of labor) would seem to be constitutive of the questions at hand. In many ways, the professions (such as law), where worker ownership is still relatively common, still do involve relatively horizontal social and economic relations, both within firms and within the profession as a whole, with differences largely defined in terms of experience and seniority (i.e., largely across the life cycle rather than across persons, broadly speaking). But this was also once true in other contexts too—as Wythe Holt said of U.S. apparel makers in the early nineteenth century, for example. One can quite easily imagine things being much more hierarchical and specialized in the legal services sector—entailing further specialization and greater status distinction both within firms and across the profession, and a more unequal distribution of revenues within enterprises. And one can also imagine things being much less stratified in apparel making. There is no natural or technological inevitability to the vastly different social and economic statuses currently occupied by fashion designers and garment workers, for example; we certainly should not assume this is any more inevitable than the relative social parity between law partners and associates is.

In fact, the professions today in some ways represent the limited survival of guild-like economic organization, which once obtained throughout manufacture as well. It is far from clear that the relative prevalence of worker-owned (or controlled) firms in the context of professional services today should be explained in terms of neutral, objective differences in the heterogeneity or homogeneity of the work involved, rather than by contingent social

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136 HANSMANN, ENTERPRISE, supra note 91, at 92–98.
137 Id. at 91–92.
138 Id. at 72–73.
139 See Holt, supra note 39, at 606.
140 TOMLINS, LAW, LABOR, AND IDEOLOGY, supra note 39, at 135–44; Epstein, supra note 39, at 168–69.
and legal evolution. It is also worth considering whether those in the relatively privileged strata of society, who retain more power to choose or at least influence the economic organization of our work, also tend to choose relatively horizontal organization for ourselves, for our peers, and for those we view as our descendants or successors in social terms.\footnote{One might even think of this retention of flatter decision structures and income distributions in the professions as an aspect of what anthropologist David Graeber called “the communism of the rich,” by which he just meant that the sort of moral economy framework—wherein economic activity was mediated through thick social ties, and in which a “social safety net” was woven in—that once suffused traditional societies effectively persisted in many ways in the upper strata of modern commercial societies. \textsc{David Graeber}, \textsc{Debt} 326 (2011).}

Finally, one wonders whether the more direct benefits of democratic economic governance are overly discounted in the neo-institutionalist stream of thinking. Williamson at one point refers to these as “energies” that some workers (or participants in the economic activity, more broadly) may prefer.\footnote{Williamson, \textit{Markets}, supra note 52, at 321.} But there are also often objective, substantive benefits for productive efficiency when all participants in a productive process are able to contribute their insights and experiences to decision-making that will direct that process.\footnote{A number of lines of existing empirical inquiry, particularly comparative, can help inform a broader consideration. \textit{See, e.g.}, Jan Ekke Wigboldus, Jan Kees Looise & André Nijhof, \textit{Understanding the Effects of Works Councils on Organizational Performance: A Theoretical Model and Results from Initial Case Studies from the Netherlands}, 19 \textsc{Mgmt. Revue} 307, 319 (2008) (emphasizing the efficiency effects of workers’ insights about enterprise processes themselves, i.e., efficiency effects do not run only via greater worker satisfaction or fulfillment). Hansmann also considers many of these benefits in terms of flow of information about the work process from workers to other actors.} Moreover, even the “subjective” benefits of shared governance are also likely understated in a framework that views labor effort mainly in terms of subjective disutility,\footnote{In fairness, Bowles and Gintis acknowledge these subjective benefits of democratic governance and also argue that they may incentivize more labor effort. \textit{Supra} note 120, at 93 (calling this “the participation effect”). Yet this is still an explanation that turns on the benefits of more labor effort, rather than the basic value of meaningful work.} rather than something anyone in society (rather than only a select few) can, under the right circumstances, find fulfillment in. In other words, appropriate democratic governance may be one factor (among others) that has the potential to make any work \textit{meaningful} in a way that subjective utilities do not capture.\footnote{This undervaluing of work to the worker—perhaps ironically, accompanying the emphasis on shirking—too goes back at least to Adam Smith. \textit{See} Smith, \textit{supra} note 40, at 14–15. As Karl Marx observed regarding the potential inherent value of work:}
E. Solving Holdup Problems

As a final stop on this whirlwind survey, holdup problems are a key reason for firm-based coordination from Coase to Williamson to Hart, and they are worth our attention.\(^\text{146}\) While labor effort may be overvalued in this stream of thought, and the benefits of democratic association and meaningful work may be undervalued, economic bottlenecks where one or a few actors have almost unilateral power to hold up a transaction are a real economic prospect, independently of how we view or value these other things. Hart and Williamson (among others) both emphasize relationship-specific investments and the potential they create for one or the other party to hold up a transaction (for unreasonable terms), as an important impetus for firm-based coordination (or ownership integration of the relevant assets).\(^\text{147}\) While these problems are real, it is not clear that one would need hierarchical (as opposed to democratic) association to solve them. Moreover, various types of fair contracting rules would help to ameliorate, though perhaps not eliminate, such problems.

A key problem for Williamson was the kind of opportunism that may arise given the tendency of markets to shrink or disappear under conditions of non-homogeneity and transaction-specific investments.\(^\text{148}\) An example sometimes given in illustrating Williamson’s work is that of the railroad owner who invests in a spur that goes nowhere (of economic relevance) other than to a particular coal mine at the top of a particular mountain, owned by another person.\(^\text{149}\) Once he builds the spur, the railroad owner

\[\text{[The is labour for Smith, a curse. “Tranquillity” appears . . . as . . . identical with “freedom” and “happiness”. It seems quite far from Smith’s mind that the individual, “in his normal state of health, strength, activity, skill, facility”, also needs a normal portion of work . . . . But Smith has no inkling whatever that this overcoming of obstacles is in itself a liberating activity—and that, further, the external aims become stripped of the semblance of merely external natural urgencies, and become posited as aims which the individual himself posits—hence as self-realization . . . hence real freedom.}

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KARL MARX, GRUNDRISSE 10–11 (1973) (emphasis added). This is Marx criticizing Smith for failing to recognize that—under the right conditions—work can represent one of the “real freedoms” of being human, rather than being counted only in negative utils.

\(^\text{146}\) See Coase, Nature of the Firm, supra note 52, at 388–89; Williamson, Hierarchies, supra note 52, at 30–31; Hart & Moore, supra note 66, at 1144.

\(^\text{147}\) Hart & Moore, supra note 66, at 1120; Oliver E. Williamson, The Vertical Integration of Production: Market Failure Considerations, 61 AM. ECON. REV. 112, 117 (1971).

\(^\text{148}\) See, e.g., Williamson, Markets, supra note 52, at 318.

\(^\text{149}\) This example seems to originate in empirical work applying the transaction-cost framework but was subsequently used to illustrate Williamson’s ideas more generally. See
is effectively at the mercy of the coal mine operator, who—in the absence of competing buyers for the use of the spur—can bargain him down, perhaps below the costs incurred for the project. The railroad operator can no longer threaten not to build the spur, and moreover, he now has incurred costs that he will want to mitigate to whatever extent he can. Of course, there will usually be a contract in place before the spur is built. Williamson supposed that contracts would often be insufficient to police opportunistic behavior (at least without symmetrical investments by the counterparty, or “hostages”) while others supposed that contracts would generally be sufficient.\footnote{Russell Pittman, Specific Investments, Contracts, and Opportunism: The Evolution of Railroad Sidetrack Agreements, 34 J.L. \\& ECON. 565, 565–67 (1991) (discussing divergence between Coase’s heirs).}

While Williamson’s solution to the holdup problem ultimately emphasized hierarchy (insofar as he expressly understands the character of firm-based coordination this way),\footnote{Williamson, Markets, supra note 52, at 322.} Oliver Hart’s solution to the problem of relationship-specific investments (as for example arises in cases of complementary assets—such as the railroad spur and the mine) instead emphasized centralization of ownership.\footnote{Hart & Moore, supra note 66, at 1135.} Restating this slightly, we can understand the first approach as centralizing decision-making rights (over the economic activity at issue) and the second as centralizing the income streams that flow from the activity (through ownership, or residual rights in the asset)—which will in turn result in centralizing decision-making rights, by investing a particular party with bargaining power relative to other participants.\footnote{See generally Sanford J. Grossman & Oliver D. Hart, The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, 94 J. POL. ECON. 691 (1986). For a nice discussion, see Kevin Bryan, Oliver Hart and the Nature of the Firm, VOXEU (Nov. 1, 2016), https://perma.cc/5MWM-7VTK. Hart’s framework formalizes and sharpens certain questions about how particular ownership and contracting structures—ultimately, the allocation of decision-making rights and responsibilities and financial rights and responsibilities—will create incentives and opportunities to do (or not do) certain things that have implications for efficiency and output. Id. Those include: labor effort, careful supervision, risk-taking, and use of expertise, based on various actors’ incentives, capabilities, and preferences. See also Hart & Moore, supra note 66, at 1122–24. Hart’s framework may be useful as a way of investigating specific coordination questions once we have already delimited the available legal structures of economic coordination. But it does not seem to introduce a new normative or conceptual basis for centralizing decision-making rights in economic activity.} (Hart also
suggested that the person with the clearest incentive to “improve” the asset, or more generally to take productive efficiency-enhancing action with respect to the process or activity as a whole, ought to be invested with ownership.)

Holdup problems seem to militate in favor of vertical integration. But the reason that “centralization” is preferred in these instances is because the dispersed decision-making scenario to which it is being compared is one in which the dispersed coordination rights correspond to the complementary assets (i.e., we each control one of the complementary assets). If instead we disperse decision-making rights to the same numerical extent but across those assets, the holdup problem is also solved. What we may not want is one party (or faction) with veto power over a given (complementary) asset—but we can set up various coordination mechanisms that avoid that, without centralizing decision-making rights overall. One example would be an integrated enterprise with internally democratic governance mechanisms, but various forms of market-wide coordination could play this role without even requiring integration. For instance, we can imagine fair contracting and even pricing norms (enforced by law, regulation, or a public-private governance body) that would constrain the sort of opportunistic holdups that vertical integration is meant to solve. Holdup problems are not limited to strictly complementary assets; they may extend to intermediate input markets generally under conditions of either demand or supply shocks. In these contexts, overreliance on firms as units of economic coordination may actually worsen holdup problems by encouraging firm-level hoarding (that in turn intensifies bottlenecks), while market-wide coordination might better solve these problems.

155 One could articulate a version of the holdup problem even with some very strong forms of “internal” democratic governance, of course (even aside from the issue of complementary assets). But all but the most extreme consensus-based governance mechanisms should avoid this problem.
156 These issues have been highlighted lately given the effects of the COVID-19 pandemic on both production and demand patterns in various sectors at various points. See, e.g., Nathan Tankus, Joe Weisenthal on Supply Chains, NOTES ON THE CRISIS (Nov. 3, 2021), https://perma.cc/3D3-WUYZ (interview). For one approach to begin thinking about fair contracting norms, see Sandeep Vaheesan, The Morality of Monopolization Law, 63 WM. & MARY L. REV. ONLINE 119, 138 (2022). And while pricing norms to anticipate every instance of specialized commercial dealing may not be realistic, even in the original railroad-spur scenario, for example, the original contract would serve as a quite serviceable basis to work out a fair price. (If specific commodity prices impacting one party or the other have changed, that is also fairly easily taken into account if not already in the contract.)
In short, holdup problems are real, but it is unlikely that internally hierarchical vertical integration (i.e., the expansion of traditional firm-based coordination) is the only coordination mechanism that can handle them.

IV. IMPLICATIONS

This Essay has discussed, briefly, an influential stream of thinking about economic coordination and specifically about firm-based coordination. That stream of thought has also influenced the legal organization of the economy. It has done so by functioning as both explanation and tacit justification for the de facto foundational unit of economic coordination that law favors and that new policy is often built around (the traditionally organized firm, centralizing both coordination rights and flows of income); by acting as a key “linking theory” for neoclassical perfect competition as a goal of law and policy;157 and in the United States, by forming the primary intellectual groundwork for a program of legal and policy changes in competition law that have collectively tended to further concentrate both coordination rights and the flow of incomes (and as a result, economic power) in markets more broadly.158

I have discussed the preferred features of economic coordination in this approach in broad strokes. There is of course variation and debate—much more than could be captured in this Essay—but the debate is bounded by some common features. In identifying preferred forms of economic coordination, the most currently influential stream of thought has sought to ask how they solve for problems of productive or operational efficiency, confronting both “transaction costs” (of marketing) and “associational costs” (of intra-enterprise coordination), effectively trading these off against each other in various circumstances. Functionally, much of the variation can be described in terms of the allocation of coordination rights over the economic activity itself, and the allocation of material or pecuniary benefits (or simply flows of income) from


158 The mechanisms for the latter effects (via changes in competition law) have in turn been both direct—expanding the scope of firm-based coordination through lax merger and monopolization policy—and indirect—legitimizing interfirm coordination that mirrors the preferred features of intrafirm coordination. See, e.g., Callaci et al., supra note 3, at 3 (citing BLAIR & KASERMAN, supra note 3).
that economic activity. Broadly speaking, centralized coordination rights are presumed to solve both holdup problems and associational costs better than dispersed ones (Williamson159), except perhaps in cases of functional and status homogeneity among workers (Hansmann160). Centralized flows of economic benefits are also presumed to conduce to productive efficiency, by incentivizing efficiency-conducing actions by those best positioned to undertake them (Hart,161 others).

However, this approach in the end does not really justify or explain the basic pattern of economic coordination it assumes. Often, it simply assumes hierarchy is the only alternative to “the market” (Coase, Smith162), or fails to consider forms of broader and more participatory decision-making—including fair contracting rules and various forms of public pricing norms (all). Overall, the dominant accounts are also inflected with “outputism,” a bias toward more output that is baked in at the level of the analytical approach. This tendency becomes exaggerated where labor effort is concerned because the neo-institutionalist stream of thinking has few conceptual resources for making sense of too much labor effort rather than too little—as a productive efficiency cost in itself, particularly on a social scale. By inscribing these tendencies into the ideas about organizational design that aim to fill in the black box at the center of neoclassical price theory, analysis in this vein will always be hobbled in dealing with the “sweatshop problem”—one that casual observation tells us is endemic in our world. Bringing this in after the fact at the level of features of markets, as the consequence of monopsony or some other “market failure,” will not be sufficient to ameliorate a tendency that has been baked into the theorization of economic units themselves. Similarly, describing these problems in terms of special, post hoc humanitarian exceptions tends to project them as deviations from a rational market order.

Finally, while I have argued that neo-institutionalist approaches to economic coordination have in many cases ignored possible or alternative legal rules, in other ways these accounts also ignore how actual economic actors making decisions about firm boundaries are often motivated to maximize benefits to

159 Williamson, Organization, supra note 52, at 15–21.
160 Hansmann, Ownership, supra note 125, 295–96.
161 Bryan, supra note 153.
162 Coase, Nature of the Firm, supra note 52, at 388–89; Smith, supra note 40, at 3–4.
themselves under actual legal rules. One example of this is the control groups within firms that engage in merger and acquisition activity not in order to realize pure operational efficiencies, but in order to realize the pecuniary benefits to themselves (and shareholders) that so often flow from merger activity but do not (necessarily) reflect any particular operational business reality at all.\textsuperscript{163} Another example is decisions made by “lead firms” to shed divisions into subcontractor or “independent contractor” relationships as long as they can still effectively control the actors involved through contract, while shedding the responsibilities and countervailing rights implied by the employment relationship under the New Deal settlement.\textsuperscript{164} The phenomenon of business or work fissuring, in fact, poses counterexamples to some of the predictions flowing from accounts assuming that “make or buy” decisions reflect optimizations of productive efficiency.\textsuperscript{165} Fissuring—frequently discussed by labor scholars—directly implicates the explanatory domain of the theory of the firm.\textsuperscript{166} Overall, it is likely better explained by the tendency of existing differentials in coordination rights and flows of income to intensify themselves—a power-perpetuation explanation rather than a technical-efficiency explanation—just as the advent of firm-based coordination itself is better explained this way.\textsuperscript{167}

\textsuperscript{163} J.W. Mason, Acquisitions as Corporate Money Hose, J.W. MASON (Sep. 6, 2018), https://perma.cc/2KPY-4GM6 (discussing mergers and acquisitions in terms of a net transfer, at the level of the whole economy, from the production to the financial sectors).


\textsuperscript{165} See, e.g., George P. Baker & Thomas N. Hubbard, Contractibility and Asset Ownership: On-Board Computers and Governance in U.S. Trucking 24 (Nat’l Bureau of Econ. Rsch. Working Paper No. 7634, 2000) (arguing that the advent of surveillance tech in the trucking industry would lead to ownership integration of trucks by trucking companies). Generally speaking, the trucking industry in the United States remains “fissured,” with drivers designated as independent contractors; when trucking companies do own the trucks it is often because drivers in a given market generally don’t have access to capital. See, e.g., STEVE VISCELLI, U.C. BERKELEY CTR. FOR LAB. RSCH. & WORKING P’SHIPS USA, DRIVERLESS? AUTONOMOUS TRUCKS AND THE FUTURE OF THE AMERICAN TRUCKER 16 (2018).

\textsuperscript{166} WEIL, supra note 164158, at 7 (originating the concept of “fissuring”); id. at 224–42 (showing that surveillance technology spurred vertical disintegration across a number of sectors, with control reproduced through contract (vertical restraints) instead); see also Brishen Rogers, The Law and Political Economy of Workplace Technological Change, 55 HARV. C.R.-C.L. L. REV. 531, 569–71 (2020) (describing “data-driven fissuring”).

\textsuperscript{167} Cf., e.g., Lamoreaux et al., supra note 67, at 406 (discussing vertical disintegration partly in efficiency terms).
This doesn’t mean, of course, that real differences in productive efficiency do not ever explain the advent or persistence of various economic arrangements. But overall, we have undervalued the tendency of patterns of economic power to reproduce themselves through institutional design. When studying these arrangements, we only intensify that tendency if we assume that status quo arrangements tend naturally toward neutral solutions of productive efficiency problems. The argument in this Essay encourages us not to make this assumption, but it also opens the way to considering values in addition to productive efficiency—fairness, democratic governance, economic security at a personal level, and ecological considerations, alongside an appropriate conception of productive efficiency (cleansed of a bias toward outputism and incorporating an accounting of the efficiency costs of too much labor effort)—from the ground up in constructing forms of economic coordination. One of the implications of the argument is that norms based upon these considerations have just as much to do with markets and competition in principle—and thus just as much of a claim to govern them—as norms based upon productive efficiency do.