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Abstract

This chapter introduces a property-rights theory of business organizations and contrasts it with the contractual theory that has dominated scholarship in law, economics and finance since the '70s. Since firms can take different organizational forms, this chapter also discusses how the theory of business organizations relates to the property-rights theory of the firm. It shows that these two theories, although complementary, are based on different notions of property rights. The chapter further unpacks the fundamental features of business organizations, examining their origins, historical evolution and functions in western economies. Two stereotypical organizational forms—the partnership and the corporation—will take center stage in the analysis as two different degrees of separation between a business and its owners. Finally, the chapter examines how the organizational form a firm takes affects its relationship with creditors in the case of default and contractual counterparts in the case of transfer of essential assets, thus shaping the way in which firms borrow on and trade their assets.

Keywords: theory of the firm, legal entity, legal personality, nexus of contracts, capital lock-in.
JEL codes: G30, K22.

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Contents

1 Introduction

The last half a century of research has produced greatly influential scholarship on business organizations. Yet, while the theory of the firm has clarified how the rights to control strategic firm assets within economic enterprises are allocated, there has been no comparable effort to understand how businesses are legally organized. Basic questions, such as those addressing the difference between firms organized as partnerships and firms organized as corporations, have largely gone unanswered. Similarly, while corporate finance has yielded a comprehensive theory of debt, we still know preciously little about equity.[1] At a very fundamental level: Why does equity have such long—mostly indefinite—maturity while often characterized by little power to control management? In this chapter, I show that these features of the current theorizing about business organizations have a common root in the purely-contractual approach that, with only a few notable exceptions, has dominated scholarship since the '70s. I will leverage on these exceptions to build a property-rights theory of business organizations and show its potential for addressing fundamental, unanswered questions.

In the dominant view, corporations—and, by reflection, also other organizational forms—are little more than a nexus of several contracts among the individuals—owners, managers, creditors, employees, suppliers, customers and others—who form and interact with the organization. This view originates from Jensen and Meckling (1976), who argued that organizations could be understood as complex contractual webs aimed at solving agency problems among the individuals involved and, in particular, between those making strategic decisions (management) and those with claims to the organization's profits (owners and creditors).[2] This perspective goes hand-in-hand with a second, equally powerful notion proposed earlier by Berle and Means (1932): ownership and control are starkly separated in large corporations. The combination of these two ideas has been the canon for economists and legal scholars for decades and has given rise to a large and important literature on corporate governance, which studies ways to design organizations so as to limit principal-agent problems (for a review, see Shleifer and Vishny, 1997; Hermalin and Weisbach, 2017). The impact of this approach and its importance for modern scholarship cannot be overstated.

For all its merits, however, reducing organizations to contracts obfuscates two important aspects of the problem, both of which will play a central role in the present analysis. First, it neglects the problems arising with third parties who were extraneous to the original contract, as privity is a fundamental principle of contract law. Second, it frames the problem largely in terms of default rules that the parties can adjust at their convenience and, hence, reduces organizational law to a menu of default—therefore customizable—contractual arrangements. Although largely correct, this approach underplays the role of mandatory (unmodifiable) rules. In this view, there is little to nothing the law does to shape organizations.

A contractual view of organizational and, in particular, corporate law is not in-

[1] See Bolton (2014) for a review of the literature and an assessment.

[2] Jensen and Meckling (1976, 311) argued, even more radically, that firms existed only as legal fictions and that the web of contracts among the individuals involved was the only real phenomenon to be studied. In this sense, there is no "inside" or "outside" the firms and firm behavior is just an equilibrium outcome like any other in the market.

correct, but a *merely* contractual approach would be, both doctrinally and historically. Almost two millennia ago, the jurist Gaius (in Digest 3.4.1pr.) stressed that it was a prerogative of the state to give "corporate status" to selected bodies, which were to be understood as pools of assets, not as collections of individuals. Most telling is one of the examples of *corpora* in Roman law: estates opened but not yet distributed to the heirs, which were pools of assets with temporarily no relation to any living individual (see Robbe, 1975). Organizational law is best understood as a set of property-like arrangements—creating rights *in rem*, that is, rights attached to assets—in addition to through the contract lens—focusing on rights *in personam*, that is, creating obligations among individuals.

The theory of the firm has long recognized the importance of property rights in understanding economic enterprises. The "property turn" in the theory of the firm, however, did not translate automatically into a similar revolution in understanding how such enterprises are legally organized. The reason is twofold. First of all, a firm and its legal organization are typically not overlapping notions. A firm could be, and often is, organized in different legal entities and, conversely, an entity could be a legal umbrella for several firms. Laws dealing with fundamental issues, such as bankruptcy and the assignment of contracts, do not apply directly to firms, they apply to legal entities. Second, property may seem to be a clear-cut concept; it is not. A theory of business organizations built on property rights requires a preliminary clarification of what property is. Most importantly, the present analysis will leverage on a notion of property that is markedly different from and complementary to the one advanced in the theory of the firm.

As a first step, we need to clarify how "property" is different from "contract." This is not a trivial exercise and it will help us appreciate the difference between economic activities of a business organization (as in Coase, 1937) versus those supported by a (relational) contract (as in Goetz and Scott, 1981). There are (at least) three commonly used definitions of property (and contract) that have contributed profoundly to economic theory in the last several decades. Disentangling them is important insofar as different notions of property play a role at different junctures of the theory laid out in this chapter. Section 2 discusses these notions of property and lays the foundations of the theory. Section 3 reviews the theory of the firm, emphasizing both its property-like foundations and its limited expandability to the study of business organizations.[3] Section 4 illustrates how the fundamental features of legal entities in general—and of the corporate form in particular—can be understood through a property lens. Section 5 zeroes in on the most fundamental feature of the corporate form: the lock-in of capital for the long term. This section connects the theory of business organizations to an embryonic theory of equity. Section 6 investigates the implications of the theory in two cases concerning the ways organizations raise capital through debt (and may fail to repay it) and transfer their essential assets, respectively. After having stressed the importance of organizational law as a set of rules that apply essentially to assets, in Section 7 I bring individuals back into the picture, connecting the theory with the contractual view. In advocating for a "property turn" in the theory of business organizations, I hope both to

[3]For an analysis of how the theory of the firm can be used to illuminate the study of organizational law see Armour and Whincop (2007).

push the theory of business organizations forward and to bring it closer to its historical roots.

2 The economics of property rights

In the literature, the term "property" is used to refer to several different notions. This section focuses on three approaches: property as protection against expropriation from powerful groups, property as unified ownership of complementary assets, and property as rights that run with assets. I will focus in particular on what distinguishes property from contract.[4]

2.1 Property as stable ownership

A commonly-used and powerful definition of property rights frames them as rights that are protected against expropriation from powerful individuals, in the tradition of North and Weingast (1989). This perspective goes beyond the distinction between default and mandatory rules. Private individuals cannot negotiate around mandatory rules—as they can with default rules—but legislators have the power to amend even mandatory rules. In contrast, property rights protection comprises constraints on expropriation that are embedded in a series of institutions (like the "constitution") that cannot be easily dismissed by the elite. Property, in this view, is a set of constitutionally protected mandatory rules.

A notable application of this idea can be found in Acemoglu and Johnson (2005), where the authors "unbundle" property and contract by defining the first as a set of institutions that protect individuals' private property against expropriation by powerful elites and the second as a set of default rules around which individuals can negotiate. From this perspective, property solves problems associated with the fact that contract rights can be negotiated around, reneged and violated. In line with Coase (1960), the authors show that rights that cannot be altered through negotiation have a deeper impact on the economy than negotiable rights. In legal scholarship, these notions find a parallel in the view that property law is a set of rules designed to maximize the value of ownership while minimizing the costs of defending against challengers (Bell and Parchomovsky, 2005, with a review of the literature).

These ideas play an important role in political economics and development, and stress the fundamental observation that property rights are, in a broad sense, a set of institutions that constrain rulers and other potential takers.[5] While important and influential, this view of property differs drastically from the two definitions that follow, which are based on a "horizontal" view of property, that is, on a notion of property grounded in how an individual relates to other private individuals.

[4]This section is arguably as much about contract as it is about property, since the focus is the distinction between them. Yet, the narrative focuses on property because it is instrumental to the next sections, which build on it.

[5]A fascinating application of this idea to the ancient world can be found in Fleck and Hanssen (2006). For a review of the literature on property rights see Besley and Ghatak (2012).

2.2 Property as a residual control right

A second way to define property is to view it as an owner's residual right to control assets, after rights assigned to others by contract have been satisfied. This is the definition on which Grossman and Hart (1986) and Hart and Moore (1990) built the now-standard theory of the firm. Their crucial observation is that, since contracts are inherently incomplete, it is virtually impossible to specify rights under all contingencies by contract and, hence, there will always be some residual contingencies that have escaped specification. If one of these contingencies materializes, then the individual who holds the property right to the asset is in control of it. In short, property is designed to solve problems arising from incomplete contracts (Barzel, 1997).

In legal scholarship, this approach finds a parallel in the literature on commons versus anticommons (starting with Hardin, 1968; Heller, 1998; Heller and Eisenberg, 1998), which shows that residual rights to use and exclude others from using complementary assets should be held under unified ownership. In particular, Parisi (2002) argues that property is subject to an inevitable transition towards higher entropy, because it is easy for a unified owner to fragment property by selling partial rights to different buyers, while holdup makes it very costly for a subsequent potential owner to re-unify property by buying back the pieces. The need to counter this process and keep complementary assets under unified control is said to justify fundamental differences between property and contract and, in particular, the fact that only a limited number of rights (a *numerus clausus* of them; see Merrill and Smith, 2000) can be qualified as property rights and is protected by a property rule, that is, violations are prevented by injunctive remedies and, if they occur, are undone (Calabresi and Melamed, 1972).

Contract law scholarship, however, has emphasized that, while contracts may be incomplete ex ante, they will necessarily be completed ex post by courts, if disagreement results in litigation. Contract law (not property law) defines the courts' interpretive and gap-filling functions (Goetz and Scott, 1985; Scott, 2006). In addition, the assumption that parties cannot write a complete contract does not account for the fact that contracts are, often, deliberately incomplete (Scott, 2003; Choi and Triantis, 2010). Finally, the notion that the assignment of residual control rights requires property rights has been called into question within a mechanism-design framework by Maskin and Tirole (1999), who showed that an appropriately designed contract can assign residual control rights in the same way as property rights would. In the next section, it will be illustrated how the notion of property that is standard in legal scholarship differs from the one described here.

2.3 Property as a right *in rem*

Neither of the definitions provided above fully accounts for the way legal scholars have traditionally viewed property. Historically, the preoccupation with contracts has been due to privity. In principle, a contract between A and B has no effect on C. Similarly a contract between A and C has no effect on B. What happens if it is impossible to enforce both contracts at the same time, that is, if these two contracts are incompatible? For instance, A could have sold the same asset both to B and to C; who is then the owner of the asset, B or C? The answer is typically to be found in property law. Different from contractual rights, property rights are rights *in rem* (literally, rights to a "thing") and are good *erga omnes* (against the world). That is, property rights are attached to an asset and not to particular individuals and, hence, run with the asset irrespective of the asset owners and apply also to third parties (Merrill and Smith, 2000, 2001a,b; Hansmann and Kraakman, 2002).[6]

In this view, property solves problems arising from *incompatible* (as opposed to incomplete) contracts. This is a fundamental problem in property law, in light of the fact that ownership has a sequential structure. The current owner's right depends on the previous owner's right, which in turn depends on a previous owner's right and so forth until the chain of transfers can be traced back to an original acquisition. At any juncture in the chain of transfers, mistakes, abuses or theft could create a bifurcation resulting in two competing claims on the same asset. Modern legal systems have developed (property) institutions, such as property and business registries, to deal with and alleviate these and similar problems (Arrunada, 2012; Bell and Parchomovsky, 2016).

Yet, the problem is more general.[7] Consider, for instance, a borrower A who pledges the same assets to B and C or (as in Ayotte and Bolton, 2011) a borrower, A, who promises to B that she will not borrow from C. Yet, she eventually does so and then fails to repay. How are the rights to A's assets to be allocated between B and C? This example shows that this definition of property does not apply only to physical assets. A general problem arises from the fact that contracting parties (say, A and B) cannot perfectly and costlessly give notice of their contractual arrangements to third parties (say C), who could later enter into a contract with one of the original parties (say, A). This possibility gives rise to a trade-off. Upholding the rights of the contract that was first in time (B's contract) could create problems for innocent third parties (C) who enter into an incompatible contract at a later time. Vice versa, protecting the rights arising from the later contract (C's contract) would open the door for strategic behavior (to the detriment of B).

Property as rights *in rem* addresses problems arising from incompatible rights that different contracts assign to different individuals. More generally, property defines rights that are valid irrespective of express agreements and, hence, requires supporting institutions to address the problem of notice. This notion of property is essential for understanding organizational law.

3 The theory of the firm

This section introduces the theory of the firm,[8] which addresses the question of what distinguishes organizations from arm's length transactions. The origin of this inquiry

[6]The notion of property employed in Coase (1960) is compatible with the one described in this section, although Coase used a different definition, that of property as a bundle of rights, which was dominant at the time. Merrill and Smith (2011) explain that Coase's conception of property is correct from a property-as-right-in-*rem* perspective but obfuscates the important problem of dealing with third parties while stressing the role of the state in defining such a bundle. They also show that the implications of the Coase Theorem are enriched if property is redefined as a right in *rem*.

[7]For an overview of several scenarios in which this problem may arise see Dari-Mattiacci and Guerriero (2015).

[8]For a review of the literature see Holmström and Tirole (1989) and Foss, Lando, and Thomsen (2000).

is generally attributed to Coase (1937), who noted that the economic theory of his time did not distinguish between individuals and firms acting in the market, although the latter might reach impressive size and encompass the work of hundreds or even thousands of individuals. Coase noted that one of the key characteristics of firms was that parts of the production process were removed from the market and dealt with internally. Identifying which transactions are better dealt with inside the firm and which are better handled in the marketplace would then lead to a theory of why firms exist and when they are more efficient than market transactions.

Coase argued that firms exist to economize on transaction costs—that is, the costs of using the market to complete transactions—at the price of incurring organizational costs. Firms grow to the point that internal organization costs exceed transaction costs saved. However, an important source of both transaction and organization costs is the fact that the principal has limited control over the agent. The degree of control that a firm has over its employees is not necessarily greater than the degree of control that a buyer exercises over a seller in the market. For instance, a large buyer may exert more power on a small-scale seller than an employer on her employee. Therefore, it is difficult to make sense of organizations as ways to replace market transactions with some form of control within a hierarchy, as control can also be exerted in the market.

Alchian and Demsetz (1972) noted these limitations in Coase's approach, and proposed to instead think of firms as ways to manage teams. Team production is problematic because marginal contributions are difficult to measure. Thus, the team—that is, the firm—hires a monitor whose task is to reward effort by team members. Holmstrom (1982) showed that the monitor cannot give each team member his marginal product if the budget has to be balanced, but, in a firm, third parties inject capital, so that employees do not need to balance their budget. Along these lines, Holmstrom and Milgrom (1991) showed that a firm is preferable to a contract when effort is multidimensional and some dimensions are not measurable. The high-power incentives provided by markets would not work well because employees would only care about measurable dimensions. In contrast, in a firm, low-powered incentives are used to incentivize both measurable and non-measurable effort (see also Barzel, 1997).

The theories illustrated above demonstrate a view of firms as ways to solve market failures (Arrow, 1969, 1974). In fact, these theories do not show that contracts cannot be engineered to support the mechanisms indicated above, such as, for instance, that contracts cannot be designed to provide low-powered incentives. Is a firm just a contract?

An alternative approach is to think of firms as ways to solve contract failures and, namely, contract incompleteness. Williamson (1971, 1975) identified the source of contract incompleteness as a combination of bounded rationality and uncertainty. In turn, an incomplete contract invites opportunism and, hence, generates the need for effective technology to enforce the agreement the parties had in mind. An organization provides a sort of alternative enforcement system that may work more flexibly and effectively than courts and, thus, could be better capable of dealing with incomplete contracts. Transactions will be allocated inside or outside the firm depending on which "contract law" is better between the one administered by courts or the one administered by the manager. However, this is essentially a theory of differential costs of writing and enforcing contracts inside and outside the firm and hence reduces again the firm to a set of contractual arrangements and, namely, to something analogous to an arbitration clause.

A radically different, and now standard, perspective on the problems arising from incomplete contracts was provided by Grossman and Hart (1986) and Hart and Moore (1990). The Grossman-Hart-Moore theory stems from the recognition that contracts can be renegotiated to achieve the efficient outcome. Therefore, contrary to Williamson's view, it is relatively unimportant which interpretation of the contract a court would enforce ex post. Ex ante, however, a party expects to earn a larger share of the joint surplus if it can steer renegotiation in her favor, securing a larger slice of the pie. In turn, the expectation of larger ex post gains provides incentives to make non-contractible investments ex ante. Since ex post bargaining power crucially depends on a party's control of essential firm assets—which confers holdup power in renegotiation—asset ownership can be used to protect crucial ex ante investments by giving the party making those investments greater bargaining power ex post.

What sets this theory apart from all previous approaches is the fact that the firm is explicitly defined as a pool of assets (Grossman and Hart, 1986), rather than as a group of individuals. This is a fundamental intellectual step. Specific rights over firm assets can be assigned by contract, but any right that is not specifically assigned belongs to the asset owner. From this perspective, property confers the residual rights to control the assets after all contractually assigned rights have been enforced. Since contracts are naturally incomplete, it is impossible to specify control rights by contract under all circumstances and, hence, there will always be a residual set of rights that belongs to the asset owner. It is thus relevant how property rights over firm assets are allocated. Quite differently from Berle and Means (1932), in this approach, ownership *is* control.

In the model, at date 0 parties make ex ante investments, at date 1 they make management decisions, then (private) benefits are realized. Investments, decisions and profits are not contractible at date 0, but decisions can be costlessly renegotiated at date 1. Therefore, the ex post allocation will be efficient and, hence, the only problem is how to distribute profits in a way that optimally incentivizes ex ante investments. In a simple two-firm setting, there are three options: (1) no integration, (2) firm 1 owns firm 2 and (3) firm 2 owns firm 1. The decision whether to integrate production in a single firm (and how) or to rely on a contract between firm 1 and firm 2 (option 1) depends on which party (firm) makes the most important ex ante investment, which should be protected through asset ownership. The theory also shows that complementary assets should be owned together, providing an alternative justification for vertical integration (the traditional explanation is based on the need to prevent double markup: Cournot, 1838; Ellet, 1839)

The Grossman-Hart-Moore theory of the firm is grounded in the view that a firm is a pool of assets and ownership gives residual control rights over those assets. These premises are at odds with the nexus-of-contract approach to business organizations, which views the firm as a web of contracts among individuals (Jensen and Meckling, 1976) and control as separate from ownership (Berle and Means, 1932). In the next section, I will emphasize the property foundations of organizational law and reconcile the theory of the firm with a theory of how firms are legally organized.

4 The corporation as a firm with "legal entity" status

Most continental legal systems treat corporations as "associations of capital," This notion could not be more starkly opposed to the nexus-of-contracts approach, which stresses agency relationships among individuals. To some extent, this section describes how scholars thought of corporations before the onset of modern corporate governance theory. The corporate form is just one of the many possible ways in which a firm can be legally organized, but it is useful to focus on it both for its economic importance and because it helps illustrate the theory. As a comparison, I will refer to the partnership as an alternative organizational form. There are many differences between partnerships and corporations: I will focus on whether the organization can rely on permanent capital, using the term "corporation" to refer to an organizational form with permanent capital and the term "partnership" to refer to an organizational form with uncommitted capital.[9]

The discussion will zero in on the notion of legal entity (or legal personality), what it entails and how it is achieved. Broadly speaking, the legal entity status allows a corporation to behave as a "person" under the law. In turn, this feature requires, somewhat paradoxically, that the firm be "depersonalized," that is, legally detached from the individuals behind it. To provide a very sharp background for the analysis, it is useful to conjecture how a firm would operate in a world in which firms do not have relevance under the law—that is, where firms are reduced to a simple contract among individuals. I will use this example to illustrate the components of the corporate form introduced in the next section. Finally, I will investigate their historical emergence.

4.1 Elements of the corporate form and the role of law

In modern business organizations, to depersonalize business—that is, to detach a pool of assets from the individuals behind it—the law provides a set of proprietary rights that confer to an otherwise private contract effects that go beyond the parties involved. Property here does not assign residual rights of control as in the theory of the firm. Quite differently, this notion of property refers to rights *in rem*: rights that run with the assets and are enforceable *erga omnes*, irrespective of whether an individual was party to the original contract. As a result, potential conflicts may arise between mutually incompatible contractual arrangements; one of the primary functions of property rights in these cases is to resolve those conflicts. I will stress here the features of the corporate form and emphasize the difference between corporations and partnerships as two different degrees of separation between the business organization and the individuals behind it.

Representation (agency). A business organization operates through the actions of (human) actors. While in economics the focus is on conflict of interest and asymmetric information between the principal and agent (Ross, 1973), in legal terms agency refers to the possibility that agent enters into contracts on behalf of the

[9] This is of course a coarse simplification. Partnership law may allow partners to lock in capital and there are other organizational forms, such as the business trust, which may come very close to the corporation in terms of capital commitment (see Morley, 2016).

principal, so that the principal, not the agent, is a party to the contract. Agency law applies more generally, also covering agency relationships between individuals. Yet, in the context of business organizations, agency is a crucial feature, because without it the organization cannot operate. An agency relationship cannot be established by mere contractual rights. It is key that the agency contract between the agent and the principal affects for third parties who enter into contractual relationships with the principal through the agent. The agency contract applies *erga omnes*, possibly to any party with whom the agent contracts. It is important to stress that third parties were not part of the original contract between the principal—that is, the organization—and the agent. The potential for incompatible contracts is evident. The agent may exceed the scope of her mandate and make promises that the principal did not anticipate. In this case, the contract between the agent and the principal conflicts with the contract between the agent and a third party. The law of agency is precisely the set of rules designed to address these conflicts. In this sense, agency law defines property rights.

Together, the next three features address the problem of identifying a pool of assets as the organization's, and disciplining claims to them. I will proceed by addressing three different sets of claims in turn: claims by business creditors of the organizations, claims by personal creditors of the equity holders, claims by the equity holders and themselves. These features are proprietary in the sense that they run with the business assets irrespective of a specific agreement with individual creditors or equity holders.

Limited liability. Limited liability regulates claims by business creditors and limits those claims to the organization's assets, so that personal assets of the equity holders cannot be attached by creditors of the organization. The proprietary nature of this arrangement is most evident when considering involuntary creditors of the organizations, such as tort victims.

Entity shielding. Entity shielding (Hansmann and Kraakman, 2000b; Hansmann, Kraakman, and Squire, 2006) concerns the opposite problem, disciplining personal creditors' claims on the organization's assets. The problem with these claims is that the personal exposure of an individual equity holder to debt makes the organization vulnerable to possibly inefficient liquidation. Entity shielding may protect the organization's assets more or less strongly. Weak entity shielding simply gives business creditors priority over personal creditors to firm assets. Strong entity shielding adds liquidation protection, barring personal creditors from being able to force the liquidation of the company to satisfy their claims. This is the form of protection seen in corporations.[10] Entity shielding can also be engineered to isolate different business units of a parent company from each other, so that the creditors of one unit cannot attach the other unit's assets, nor an they be subordinate to the other unit's creditors.

Capital lock-in. Shielding the organization from the personal creditors of the equity holders is not enough to guarantee that the organization's capital remain stable

[10]A more extreme form is complete entity shielding, denying any claim on the organization's assets by personal creditors; this is usually associated with nonprofit corporations and charitable trusts.

over time. The equity holders themselves could be a substantial source of instability depending on whether they—including, importantly, their heirs—retain the right to withdraw capital from the organization. From a different angle, the question is whether participation in a business organization is at will or, rather, equity holders commit their capital for a term or indefinitely. At a very general level, this is possibly the most fundamental difference between a partnership and a corporation. Although a commitment for the short term may be allowed, partnerships do not have permanent capital and participation is generally at will, which implies that individual partners retain the right to withdraw their capital and possibly force the liquidation of the partnership. Continental legal systems think of partnerships as "associations of persons." In contrast, capital in a corporation is generally committed indefinitely, such that individual shareholders cannot withdraw their capital at will. In continental legal systems, a corporation is a "association of capital." Exit is possible only through the sale of shares. However, note the important difference between withdrawal, which deprives the organization of capital, and trade in shares, which only replaces one investor with another, without affecting the organizations' assets. The commitment of capital is an *in rem* feature to the extent that it is enforceable against heirs and other acquirers from the original equity holders.

Finally, what is probably the most recognizable feature of the corporate form:

Tradable shares. Committing capital to a business entails a loss of liquidity for investors. To compensate for this loss, the commitment of capital is usually paired with share transferability — that is, the possibility to trade one's position in the organization on a market. The flip-side of tradability is the acceptance, on the part of the remaining shareholders, of a change in the identity of the trading investor. Tradability can be free or limited by specific conditions, such as approval by the surviving shareholders.[11]

These features make it possible for a business organization to rely on a clearly identified and stable pool of assets, enter into contracts, own property and stand in court independently and largely irrespective of the individuals behind the organization. In theory, these features could be engineered in a multilateral contract between equity holders, (potential) creditors, managers, buyers, sellers, and other parties expecting to deal with the organization at some point in the future, including potential acquirers from the equity holders and their heirs. The impracticability of such a multilateral contract is evident. A series of bilateral contracts runs the risk that two or more of these contracts will conflict and therefore cannot be simultaneously enforced. The role of property rights in organizational law is to take over this coordination problem.

Yet, property rights are not equally important in all the cases mentioned above. For instance, limited liability can, in theory, be achieved contractually by an agreement between the creditor and the organization to the effect that the creditor's rights are limited to the organization's assets at the cost of a higher cost of debt. Although seemingly fundamental to the modern notion of business organizations, this feature is both theoretically and, as we will see, historically of secondary importance when it comes to

[11] See Bolton and Samama (2013) for an analysis of voluntary restrictions on share transferability.

voluntary creditors. (With involuntary creditors, such as tort victims, the problem is, of course, different.)

In contrast, entity shielding is of more central importance than limited liability because it is much more difficult to establish by contract. Since this provision limits the recourse rights of personal creditors, it raises the personal cost of debt for each equity holder and, hence, is vulnerable to free-riding. In a business organization with multiple equity holders, each equity holder has an incentive to reduce her personal cost of debt by deviating from a hypothetical agreement to shield the company from personal debts. This coordination problem makes it unlikely that a business organization with entity shielding can be sustained by contracts only and requires the law to step in to provide the necessary property rights. In turn, entity shielding makes the organization's assets more stable and less vulnerable to liquidation; it lowers the cost of debt for the company and simplifies monitoring by creditors—as they do not need to monitor the personal exposures of individual equity holders (Hansmann and Kraakman, 2000a,b).

4.2 Firms without legal-entity status

To stress the importance of property rights in business organizations, it is instructive to assume them away and follow the life of a firm constructed as a mere contract. In fact, there is no need to conjecture a fictitious counterfactual world: firms operating under traditional Roman law were in this situation, because Roman law did not grant the corporate form (or any other entity status) to private businesses (see Abatino, Dari-Mattiacci, and Perotti, 2011; Abatino and Dari-Mattiacci, 2019). Analysis of this case will also provide the starting point for the analysis of the evolution of the corporate form in the next section.

How does a firm deal with its clients, creditors, debtors and equity holders in such a world? Assume that, in the late Republican period—in the last two centuries BC—two individuals called Emeritus and Ennius—"e" as in equity holders—jointly put some capital into a business venture, buy essential assets, hire Marius—a manager—and incur debts from a creditor called Carus. All of them are Roman citizens, have free status and are legally independent (*paterfamilias*); under these conditions, they have full rights under the law.

To start with, imagine that Emeritus and Ennius send Marius to buy wine on credit from Carus. In economic terms Marius is an agent of Emeritus and Ennius, the principals, but his legal status is quite different. A practical question that needs to be addressed is who owns the wine and who is Carus' debtor. Ideally, we would expect the firm—that is, the collection of Emeritus and Ennius—to acquire rights and obligations from the transaction effected by Marius. However, Roman law did not recognize the legal principle of agency. Therefore, the wine is owned by Marius, who also contracts a debt vis-à-vis Carus. In turn, Carus has no claim against Emeritus and Ennius, as they were not parties to the contract; if Marius does not repay him, Carus cannot sue Marius' principals. The problem is that the Roman agency contract (*mandatus*) between the equity holders and their manager was limited by a strict application of the principle of privity of contract and had no effect on on Carus, a third party external to that contract. It only regulated the relationship between the principal and the agent.

To complete the transaction, Marius needs to repay Carus, transfer the wine to his principals, and claim from them what he paid to Carus. The lack of external relevance for the agency contract necessitates for additional transactions and exposes Marius and Carus to financial risks. In turn, Emeritus and Ennius cannot commit through Marius to repay Carus.

To be sure, the situation would not be different if either Emeritus or Ennius went directly to Carus to buy the wine. Although Ennius and Emeritus were parties to a partnership contract (the *societas*), this contract had purely private effects and no relevance to third parties. From the perspective of Carus, a contract he has with, say, Emeritus, does not create liabilities or rights for Ennius and vice versa—that is, there is no mutual agency. As a result, if one of the partners raises capital through debt, only he will be personally liable, but to what extent? Roman law did not recognize the principle of limited liability in this case and, hence, the partner contracting debt was unlimitedly liable. In turn, since the partnership contract does not have any other effect besides creating rights and obligations between Ennius and Emeritus. From the perspective of a third-party creditor, there is no such a thing as firm assets. There are only assets that are owned jointly by two individuals. Thus, Carus can only freely attach the "firm assets" belonging to Emeritus if Emeritus does not repay, and can attach other personal assets Emeritus may have, without limitation. Carus cannot, however, attach Ennius' share in the firm assets, nor any other asset he may have.

What if Ennius has a personal creditor, say, Camillus, whom he did not repay? Since, again, the partnership contract had no external relevance, Camillus can attach the share of the "firm assets" that belong to Ennius, even though Camillus is not a creditor of the firm. Roman law did not shield firm assets from the personal creditors of the equity holders and, hence, firms faced a risk of liquidation whenever one of the owners became insolvent. The lack of partitioning between personal and firm assets is again a product of the fact that the partnership contract is just that, a contract giving rise to purely contractual—*in personam*—rights.

What if Ennius needs to divest or, worse, dies? Since the partnership contract was irremediably linked to the individuals who created it, if a partner died or otherwise wished to exit, the contract ceased to exist and the partnership was immediately dissolved. Heirs did not inherit shares in the partnership, they inherited directly a share in the jointly owned assets, outstanding credits and liabilities. Therefore, if Ennius suffers a liquidity shock and needs capital, he cannot easily sell his "shares." The process of replacing Ennius with a new equity holder was complex and effectively required liquidating the original partnership and creating a new one— not a smooth path. The most straightforward way for Ennius to exit is to force the liquidation of the firm. Engrained principles of partnership and property law allowed him to do so at will. Importantly, Roman law did not enforce a commitment to remain in business for the long term or indefinitely, nor did it enforce a commitment to own property in common for the long term—which could be a way to sidestep the limitations of partnership contracts.

To sum up, traditional principles of Roman law did not allow private parties to set up a business with partitioned assets (including limited liability and entity shielding), permanent capital, and tradable shares, that could act in the market (and under the law) through agents. There were two notable exceptions to this background set of rules. Partnerships set up by government leaseholders (*societates publicanorum*) were—for a relatively short period of time at the end of the Republic—allowed a structure that, according to Malmendier (2005, 2009), closely resembled that of modern corporations. However, these were atypical businesses, dealing almost exclusively with public procurements and hence exercising functions, such as tax collection, public construction works, and supply for the army, that were of clear public relevance.[12]

A second and, for our purposes, more relevant exception concerned businesses run by slaves (Di Porto, 1984; Abatino, Dari-Mattiacci, and Perotti, 2011; Abatino and Dari-Mattiacci, 2019). Instead of hiring Marius, a free man, Emeritus and Ennius could jointly purchase Marcipor, a slave. This was a generally available solution, not limited to specific firms providing services to the state. The mechanism through which those businesses operated is interesting because it is both radically different and, in spirit, perfectly aligned with modern instantiations. One or more private individuals interested in setting up a limited liability company with a manager acting (from a legal point of view) as their agent could jointly purchase a slave and endow him with dedicated assets, called the *peculium*. They would then have to take some distance from management, which often meant posting a sign that publicly warned third parties that the slave was managing a business—for instance, a workshop—independently.

Slaves were considered objects under the law and thus could not enter into contracts, own property or stand in court. However, slowly, magistrates (the *praetores*) started to extend some forms of legal protection to individuals who dealt with slaves, creating remedies such as the *actio de peculio*, which recognized the liability of slave masters for debts incurred by their slaves, limited to the *peculium* assets.[13] Technically, those assets remained property of the masters. But since the claims of the slave's contractual parties were now enforceable in court against the master, the slave could commit those assets by, for instance, borrowing on or selling them. In turn, masters could delegate managerial decisions to slaves without fear of being personally liable beyond what they had invested in the *peculium*.

Slave-run businesses had limited liability, could be managed by an agent (the slave), and shares in them could be relatively easily traded because one of the masters could sell his property interest in the slave and the *peculium* without causing the liquidation of the business. (However, slave-run businesses did not have permanent capital and entity shielding.) Interestingly, is that remedies such as the *actio de peculio* created limited liability by, in fact, extending the liability of the master for obligations contracted by a slave from null to a positive measure. In contrast, modern implementations of limited liability entail a contraction of liability.

The way in which these features emerged in ancient Rome was surprisingly simple and leveraged, like in modern entities, on the notion of property. The firm was, from a legal point of view, a pool of assets; the peculiarity of this construction was that the manager was one of those assets. The organization was therefore not purely based on the partnership contract, which continued to have only internal effects; it was instead grounded in joint ownership of a slave and dedicated assets. A business was deperson-

[12]The mills of Toulouse provide a similar exceptional case for a much later period, in the first centuries after the year 1000 A.D. (Sicard, 2015). Also in this case, those businesses were not purely private. Rather they administered an important public utility and hence were not much different in function from public institutions that were traditionally allowed the corporate form, such as municipalities, hospitals and charities.

[13]There were also other analogous cases in which slave creditors had actionable remedies, they are discussed in Abatino, Dari-Mattiacci, and Perotti (2011).

alized in ancient Rome by relying on an individual who was not a person in the eyes of the law to manage it.[14]

The demise of chattel slavery brought with it the end of slave-run businesses—while oppression and exploitation continued under different guises. Yet, in the Middle Ages, a somewhat analogous, property-like alternative to the corporate form was provided by the trust. The trust emerged as a legal institution to detach assets from their owners for the purpose of avoiding feudal obligations and was slowly adopted by businesses. In a business trust, firm assets were detached from their owners because they were legally owned by a trustee. Slowly, rules emerged that legally separated the personal assets of the trustee from those she owned in trust, mainly for the purpose of shielding the latter from the personal creditors of the trustee. The trust became a particularly popular alternative to the corporate form during the period of consolidation of the corporation as a generally available organizational form (Morley, 2016).[15] In the business trust as in slave-run businesses, property takes center stage.

4.3 The historical evolution of corporate features

The traditional Roman principles that reduced business organizations to private contracts served as the background legal framework for centuries after the fall of the Roman Empire. The two exceptions illustrated above did not have any traceable influence on legal history. The *societates publicanorum* were lost as Rome evolved away from its republican origins; emperors concentrated administrative power and did not view favorably the role of large private organizations in providing public services (Malmendier, 2009). Slave-run businesses became unfeasible after the demise of large-scale chattel slavery. The modern version of the corporate form slowly emerged through centuries of commercial practice and coalesced as a bundle of features that developed at different speeds.

As economic activities and trade picked up during the Middle Ages, the possibly least desirable feature of the Roman law was the strict adherence to the principle of no representation, which severely constrained the ability of traders to act through agents. Although this principle was not clearly rejected in legal scholarship until 1625 by Hugo Grotius in his *De iure belli ac pacis* (Zimmermann, 1996, 41-44), in practice, courts and commercial communities had long before recognized the possibility that the agent could create legally binding commitments for the principal, such that agency was a key feature of medieval businesses.

Rules allowing for asset partitioning also developed during the Middle Ages. Limited liability for passive partners was a relatively uncontested possibility. Providing capital to a business without contributing to its management did not generally entail unlimited exposure to liability. In the Greco-Roman world, the financing of maritime expeditions had long allowed for this option and analogous business forms, like the

[14] For an analysis of incentives in the slave-master relationship see Dari-Mattiacci (2013).

[15] Importantly, however, it was the corporation, not the trust, that fueled innovation in organizational forms and, in particular, introduced capital lock-in for large businesses as we explain in the next section; the business trust provided an imperfect alternative (Morley, 2016, 2157). See also Frankel (2001), arguing that current trust law does not allow the same degree of flexibility as corporate law, and hence the business trust remains a less widely applicable alternative to the corporate form.

commenda, were common in the Middle Ages both in the east and the west (Favali, 2004; Mignone, 2005).

Full limited liability of active partners in a private business enterprise emerged first through a contractual rather than legal innovation. An early instantiation was the limitation of liability of the directors of the Dutch East India Company in 1623. Their exposure was already effectively limited by maritime law, which dealt with liabilities arising from loss of cargo at sea, and the company's 1602 charter, which had the force of an *ad hoc* law and regulated liabilities arising from obligations toward employees. Given the limited relevance of tort law for such businesses in the 17^{th} century, the only salient residual source of liability was company bonds. The charter was silent about them and general principles implied that directors—that is, the company's managing partners—were personally liable for the company's debt (Gelderblom, de Jong, and Jonker, 2013). Contractual exposure, however, can be limited by contract. Since charter renewals failed to do so, the company directors simply wrote limited liability into the company bonds from 1623 on and the courts enforced the new provision. Only later did the principle percolate into the law to became a generally applicable feature of corporations (Punt, 2010).

In contrast, while entity shielding in its weak form—priority of firm creditors over personal creditors on firm assets—could be found in medieval businesses at least from the 13^{th} century (Hansmann, Kraakman, and Squire, 2006), asset partitioning and tradibility of shares did not reach their full state until the 17^{th} century. To be sure, although some businesses recognized the possibility of trading shares, tradability requires a liquid stock market in order to be an effective option, and the first such market did not emerge until the 17^{th} century.

In fact, strong entity shielding and tradable shares could not emerge before another fundamental change had taken place: the emergence of business organizations with permanent capital. While public bodies, such as monasteries, universities, and municipalities had long relied on permanent capital, the first private organizations with the same long-term horizon were the East India companies, first in the Dutch Republic and later in England, obtaining permanent capital in 1612 and 1657, respectively. Overall, in a relatively short timespan in the beginning of the 17^{th} century, the Dutch Republic completed a long process of evolution of the features of the corporate form. Two of them, agency and limited liability, had evolved in practice before they were embedded in law. The remaining three features (strong entity shielding, tradable shares and permanent capital) evolved at once as a result of one particular legal innovation: the enforceability of a commitment to lock in capital for the long term, which was introduced for the first time in Western legal history in 1612 by the Dutch East India Company (Dari-Mattiacci et al., 2017). I turn to this issue in the next section.

5 Capital lock-in and the separation between ownership and control

When the Dutch East India Company (VOC) was chartered in Amsterdam in 1602, the company could rely on agency and limited liability for passive investors, owing to previous legal developments, and on a national monopoly for trade with Asia, which was clearly defined in its charter. Conspicuously, the charter did not introduce limited liability for active investors (the company directors), who remained personally liable for company debts. In these respects, the VOC charter was almost identical to the charter of its main competitor, the English East India Company (EIC), chartered in 1600.

However, the two charters differed in a fundamental detail. In the EIC charter, the initial subscription was to finance one fleet for one voyage. At the return of the fleet—mostly after two to three years—assets would be liquidated and profits distributed; only then, possibly, a new subscription could be launched under the same umbrella (Harris, 2005). The VOC charter, instead, provided for a ten-year maturity, after which liquidation and distribution would follow. The difference was substantial, since it allowed the VOC to reinvest profits from the initial voyages into subsequent ones. In 1612 the ten-year term was extended indefinitely. The impact of this provision was disruptive for both legal and economic history. Arguably, it allowed the VOC to outperform, in all measurable outcomes, all its European competitors taken together, including the EIC (Dari-Mattiacci et al., 2017).

One of the most resilient of the Roman law principles illustrated in the previous section was the idea that a partner could exit at will by forcing the liquidation of the partnership. Similarly, a tenant in common could exit at will by forcing the liquidation of the co-owned asset. The flip-side of these principles was that an agreement to remain in a partnership or a joint ownership for the long term was not enforceable in court. As the VOC charter broke with this principle, it set in motion a series of additional changes.

Strong entity shielding is not practical without committed capital, and vice versa. This is because creditors and equity holders could collude to liquidate (possibly inefficiently) the company if either group has a right to do so. Therefore, the introduction of permanent capital also meant that entity shielding against the investors' personal creditors could be strengthened. In turn, tradable shares were not necessary without committed capital. The EIC charter allowed trade in shares but there was very little of it (Harris, 2005), since investors had committed their capital only for the shortest possible duration, that of a return voyage. In contrast, trade in VOC shares picked up immediately after the chartering of the company, owing to the longer maturity of the equity, the need to balance the inevitable loss of liquidity on the part of individual equity holders, and a simplified procedure for their transfer, which also improved notice of ownership.

Permanent capital gave the VOC a crucial advantage at the margin, allowing the company to invest more heavily on infrastructure and their large fleet stationed in Asia, which in turn made return trade voyages both faster and safer, and boosted company profits. The growing company could (and needed to) borrow on a large scale to keep up with its activities. In turn, the massive debt exposure transformed the unlimited personal liability of the director into a reason for concern and spurred action on their part. After a series of failed attempts to have full limited liability written into the new charter, the directors simply decided to write it into the company bonds in 1623, a solution that the courts later upheld (Punt, 2010; Gelderblom, de Jong, and Jonker, 2013). Though obtained contractually, limited liability was a byproduct of the scale of the business operations made possible by permanent capital.

Throughout the 17^{th} and 18^{th} century, the corporate status remained a privilege granted ad hoc by the state. In the 19^{th} century, however, a series of general incorporation statutes both in the United States and in Europe made the format available to any company satisfying certain predetermined conditions and procedures (Butler, 1985). According to Blair (2003), it was the lock-in of capital that made the corporate form so popular in the 19^{th} century in the United States, compared to other organizational forms, such as the partnership, whose capital could be withdrawn at will. Since it has locked-in capital, the corporation requires more severe checks on directors than would be necessary in partnerships, which explains the different fiduciary duties imposed on corporate directors (Stout, 2005). (Alternatively, unincorporated businesses could rely on the business trust to achieve similar results, Morley, 2016.)

The lock-in of capital is conspicuously absent from the menu of options offered by traditional Islamic law. Kuran (2012) argues that the absence of ways to lock-in capital in private corporations and reliance on an inadequate trust-like institution held back the economic development of the Islamic world, setting it on a suboptimal path with lasting consequences. The corporations that emerged in the North of Europe in the beginning of the 17^{th} century were motivated by the possibility of making enormous profits by trading directly with Asia. The Cape route effectively bypassed the local monopolies on sections of the traditional silk road to the East that had made Italian and Ottoman traders rich for centuries. In turn, the need for capital lock-in in the North stemmed from the fact that equipping a ship for oceanic travel was about four times as expensive as doing the same for Mediterranean or North-Sea trade. The scale of the investment made it impossible for any individual, family or close kin to supply the necessary resources, and hence pushed traders to collect large amounts of capital from strangers, who could not be trusted to keep their capital invested. This evolution required particularly favorable political conditions, characterized by relatively weak governments with strong commitments to protect trade, such as those in England after the Civil War and the Glorious Revolution and in the Dutch Republic (North and Weingast, 1989; Dari-Mattiacci et al., 2017).

Indefinite maturity is a defining characteristic of equity. Extant accounts of this feature in corporate finance leverage on the need for an infinite horizon to align the interests of managers and owners (Fluck, 1998; Myers, 2000). In contrast, the analysis above suggests an alternative reason. The lock-in of capital emerges as an expansion of the set of enforceable promises among partners[16] and allows investors to protect the company from inefficient individual withdrawals, which, for instance, could be motivated by sudden liquidity needs.

The historical account provided above shows that a crucial legal innovation took place when an agreement to lock in capital became enforceable. However, this goes beyond contract enforcement. Since the lock-in is enforceable against any potential acquirer (including heirs), lock-in is to be conceptualized as theft.

Conceptualizing equity as committed capital yields novel insights about the relationship between ownership and control. To expand: the lock-in of capital and the separation of ownership and control are complementary features of the corporation. As we

[16]For a theory of optimal enforcement of contracts see Goetz and Scott (1980).

have seen above, historically they emerged together. The lock-in of capital facilitates the separation of ownership and control. Compared to a partnership (where individual withdrawals are allowed), in a corporation, incentives for equity holders to acquire information about the company's profitability are diluted, because of lower marginal benefits in the face of similar costs. Unable to withdraw assets, shareholders have weak incentives to control management. Conversely, the separation between ownership and control lowers the costs of locking in capital. The fact that potential equity sellers in the stock market are less likely to be informed reduces the degree of asymmetric information in the market and, hence, improves its liquidity. In turn, greater liquidity makes the restriction on the right to withdraw and liquidate less costly because investors with sudden liquidity needs can easily divest and exit without losing much value. Ex ante, the prospect of easy exit through the sale of shares makes investors more willing to commit their capital (Dari-Mattiacci, 2017).

In this model, the advantages of having committed capital are more prominent when there is a large number of shareholders, while the partnership remains more viable for small groups. With uncommitted capital, an increase in the number of investors generates centrifugal forces that, due to the risk of individual liquidity shocks, make the organization particularly unstable. Most importantly, this analysis suggests that the separation between ownership and control is a feature, not a bug, of the corporate form. Namely, it reduces the private cost (in terms of loss of liquidity) of committing capital for the long term and makes it possible for large numbers of investors to form a business organization.

6 Applications

In this section, I introduce two applications that show the relevance of entity status at two topical moments in the life of a firm: when the firm borrows funds and when it trades essential assets. In both cases, the main focus will be on showing that the legal entity and the firm are two radically different notions and that important details are lost when one focuses solely on the firm without properly accounting for its organizational structure under the law.

6.1 Credit and bankruptcy

The first application concerns the relationship between the firm and its creditors. In a recent case discussed by Baird and Casey (2013), a firm is organized in multiple legal entities, say, a stadium and the adjacent parking lot. If the firm is in financial distress, it may incur bankruptcy and, with it, creditors may be subject to the automatic stay, which limits their ability to attach the firm assets. The firm's organizational structure is relevant because entities, not firms, are subject to bankruptcy law. If the firm is organized in two separate entities and only one of them enters into bankruptcy, the creditors of the other entity are not subject to the automatic stay.

While it is not possible to contract around bankruptcy law—that is, the firm cannot waive a creditor's automatic stay in bankruptcy by contract—organizing the firm in several legal entities does allow some measure of flexibility in the way bankruptcy law applies. The crucial difference between contracting around bankruptcy and doing essentially the same though legal entities is that legal entities are property structures and, hence, the legal organization of the firm can be easily verified in public registries—more generally, is subject to notice—while contracts could not be. But why would a firm give some creditors—that is, those of the entity at low risk of bankruptcy—such strong rights to start with?

Partitioning off assets in separate legal entities gives a creditor guaranteed on those assets stronger rights than secure credit does. In particular, if the entity is kept out of bankruptcy, the creditor will not be subject to the automatic stay and hence will retain the right to withdraw the asset if not repaid in full. This hostage value increases the likelihood that the firm will repay to start with and could, on balance, reduce the firm's cost of credit. Thus, allowing firms to tailor bankruptcy law through legal entities could be beneficial.

Ayotte (2018) identifies a trade-off that the law should address. The automatic stay induces debtors to borrow excessively from creditors who are informed about the firm's going concern value. These creditors are better positioned to assess the risks in bankruptcy but may inefficiently push for continuation, because they can externalize some of the risks onto earlier creditors. Instead, being able to work around the automatic stay through legal entities induces debtors to borrow excessively from uninformed lenders, who are now willing to lend at lower rates because they are protected by the withdrawal rights. This, in turn, results in inefficient liquidations ex post due to the exercise of those rights. Finally, if debtors are allowed to partition off assets into separate legal entities, they often may do so inefficiently because of inefficiencies caused by sequential contracting with different sets of creditors.

Therefore, the flexibility allowed by entities should be regarded with caution. What is important for our purposes is that an analysis such as the present one cannot be carried out unless the important differences between a firm and its legal status are properly accounted for, that is, without a theory of business organizations.

6.2 Contract assignability

Similarly, legal entities can also be used as a way to bundle contracts that are complementary to each other. This approach complements the theory of the firm as property rights over complementary assets by extending the analysis of complementarities among contracts. Ayotte and Hansmann (2012, 2015) consider a firm whose only assets are contracts; say, a bundle of complementary licenses to distribute certain products. The question they address is whether the firm owner should be allowed to assign—that is, to sell—these contracts to third parties.

A trade-off arises from the need, on the one hand, to permit the owner to sell assets—contracts, in this case—to cover for liquidity shocks and, on the other hand, the risk that once the contracts are bundled together, the owner might assign strategically only some of them to low-value third parties and externalize the costs of doing so onto the parties to the contracts that remain bundled.

Legal entities allow parties to resolve this problem. If the firm has legal entity status, the party to the contract is the firm, not the firm owner. As a result, even if contracts are not assignable, the owner can cover for liquidity shocks by selling the firm. Sale, in fact, allows the owner to assign all contracts together as a bundle while, due to the lack of assignability, disallows her from assigning individual contracts, separating them from the bundle. In essence, legal entity status allows for an easily verifiable way—as above, through notice attached to the proprietary status of legal entities—in which contracts can be made assignable, conditional on the whole bundle being assigned.[17] As we have noticed above, the property rights supporting legal entity status are a substitute for the (impractical) multilateral contract that would be necessary to mimic this result.

7 Epilogue: business organizations as collections of individuals redux

Both the theory of the firm and the theory of business organizations illustrated in this chapter are squarely centered on assets. Firms and organizations, however, critically rely on the contribution of individual employees and managers. They bring human capital into the firm, which is often as valuable, and sometimes more valuable, than the physical capital that the firm owns. Human capital is different from physical capital because individuals cannot be owned and, hence, human capital cannot be easily committed for the long term (Hart and Moore, 1994).

Rajan and Zingales (1998) bring human capital to bear on the theories we are considering. It is essential to recognize that giving a party contributing human capital to a business project property rights on essential assets might overshoot. This is because, since that party can take the asset with her if she leaves the firm, she might not have incentives to make firm-specific investments. In contrast, if the assets are owned by a third party and she only has *access* to them, she will be able to use the assets as long as she remains in the firm but will no longer be able to use them if she leaves. When a party has no interest in the assets outside the firm, she will have optimal incentives to specialize investments to the firm's activities. By considering access to essential assets an important component of a firm's organization, the authors stress the importance of individuals, next to assets, in defining what a firm is, and allow for the possibility that allocating control rights away from those making essential contributions might improve incentives.

Very loosely, this approach reconsiders some of the points made by Alchian and Demsetz (1972) about team production, but it nevertheless remains firmly grounded on the fact that ownership is a necessary component of organizations. Blair and Stout (1999) extend this approach to examine the legal organization of firms and the role and duties of corporate directors. In corporations, assets are owned by the entity, not by any of the individuals making human capital investments (who only have access to them). For this reason, the corporation is managed by directors whose independence is guaranteed by law, so that they do not only cater to the interest of the shareholders, but of the corporation as a whole.

I conclude this chapter with a reflection on how the theory developed here relates to extant literature on organizations and, in particular, with the large body of scholarship on corporate governance. Corporate governance examines ways in which providers of

[17] Parties remain free to opt out through anti-assignment clauses.

finance assure that they receive a return on their investment in the face of agency problems caused by the separation of ownership and control (Shleifer and Vishny, 1997). The law offers a set of default contractual arrangements that can be tailored to the specific needs of each organization. In this chapter, I have showed that this "contract approach" to the study of corporations and other business organizations is complementary to a second, possibly more fundamental, "property approach." What I have called the theory of business organizations stresses the role of organizational law in defining property rights—or, more generally, claims—on firm assets. Through this lens, the separation of ownership and control is a feature, not simply a problem, of large business organizations.

Organizational law is a mixture of default rules, which set the reference points around which contracts are negotiated, and mandatory rules, which define the boundaries of such contracts and create a number of fundamental proprietary rights that allow business organizations to operate as fictitious "subjects" under the law. While both perspectives are important to understand how organizational law shapes organizations, the property approach is essential to distinguish organizational law from general contract law (Hansmann and Kraakman, 2000b), and business organizations from relational contracts (Goetz and Scott, 1981). Contracts do not own assets, stand in court, go bankrupt and trade in the marketplace; organizations sometimes do.

The theory of business organizations explains when and how organizations are regarded as "bodies" (*corpora*), that is, fictitious "persons" under the law and can thereby act, in many ways, as human persons. In turn, the personification of an organization requires detaching the organization's assets from the individuals who provide, manage and hold claims to them; that is, it requires depersonalizing business. Once this step is taken—we have seen two diametrically opposed ways in which this outcome was reached in history—the organization's assets can operate autonomously from the individuals behind them. Consequently, a business organization *is* a pool of assets with its relations to several classes of individuals—owners, creditors, managers, contractual counterparts, employees, and so forth—it is not a group of individuals.

While the theory of business organizations focuses on what organizations are and explains the relationship between an organization and the individuals with whom the organization interacts, corporate governance focuses on the relationships among those individuals. To expand, the perspective emphasized in corporate governance is the agency relationship between management and shareholders. Managers have a contract with the corporation, which in turn is owned by the shareholders; they are not in a direct contractual relationship with the shareholders. However, through the lens of agency theory, the latter is a relatively unimportant detail. What counts is that management can be seen as an agent of the shareholders. Yet, thinking of an organization as a nexus of contracts sheds too little light on the fact that relationships between individuals and the organization—that is, the organization's assets—are characterized and regulated by rights *in rem*—that is, property rights.

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