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THE DEVELOPMENT OF CORPORATE GOVERNANCE IN TOULOUSE: 1372-1946

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ABSTRACT

We document a sequence of institutional innovations associated with the corporate form over the course of several centuries in Toulouse. Shareholding companies that began in the 11th century formally incorporated themselves into two large-scale, widely held firms by 1373. In the years that followed they experienced the economic challenges and conflicts we now recognize as inherent in the separation of ownership and control. Using new and existing archival research, we show how the Toulouse firms developed institutional solutions including tradable shares, limited liability, governing boards, cash payout policies, external audits, shareholder meetings and mechanisms for re-capitalization.

We examine these developments in the context of institutional economic theory and the received history of the corporation. The Toulouse companies preceded the birth of the Dutch and English East India companies by centuries. The Toulouse firms shed light on the necessary and sufficient conditions for the development of the corporate form. We show that the constellation of features associated with the corporation can appear in situations of relative economic certainty and in the context of Medieval legal code that did not require the granting of governmental approval or patent. The Toulouse firms are a unique case in which the corporation appears as a nexus of private contracts.

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In this paper we document a sequence of institutional innovations associated with the corporate form over the course of several centuries in Toulouse. Shareholding companies that began in the 11th century formally incorporated themselves into two large-scale, widely held firms by 1373. In the years that followed they experienced the economic challenges and conflicts we now recognize as inherent in the separation of ownership and control. Using new and existing archival research, we show how the Toulouse firms developed institutional solutions including tradable shares, limited liability, governing boards, cash payout policies, external audits, shareholder meetings and mechanisms for re-capitalization.

We examine these developments in the context of institutional economic theory and the received history of the corporation. The Toulouse companies preceded the birth of the Dutch and English East India companies by centuries. Many of the elements of the corporate form initially attributed to the peculiarities of long-distance maritime trade appeared earlier in a quite different economic context. The Toulouse companies were grain-milling enterprises whose profits were relatively predictable, except in case of disasters such as floods or fires. But a common economic features of both the India and the Toulouse companies was the huge capital expenditures requested to set up a long-distance maritime expedition and to set up and rebuild the watermills and the river dam, respectively.

The Toulouse firms shed light on the necessary and sufficient conditions for the development of the corporate form. We show that the constellation of features associated with the corporation can appear in situations of relative economic certainty and in the context of Medieval legal code that did not require the granting of governmental approval or patent. The Toulouse firms are a unique case in which the corporation appears as as a nexus of private contracts.

Located in Toulouse, the Bazacle and Castel milling companies were created in 1372 and 1373, respectively, from the merger of several independent, jointly-owned mills. The Bazacle company was situated on an island near a traditional ford across the Garonne River,

downstream from the city. It, or its predecessor firms, had milled grain there since the 11th century. The Bazacle company switched to hydro-electric power generation in 1888 and was nationalized into the French national electricity company, EDF in 1946. The Bazacle hydroelectric power plant is still operating today.

The Castel company was located upstream on an island in the Garonne near the original castle of Toulouse. Like the Bazacle company, it milled grain over several centuries before finally going bankrupt in 1910 after a fire destroyed its mills. The locations of both of these firms made them naturally suitable for milling operations and created the conditions for profitable and relatively stable business over approximately nine centuries.

Germain Sicard (1953), in his landmark study of the Toulouse companies in the Middle Ages, shows that they resembled modern corporations in many respects. They had shareholders who were not millers, who could sell their shares without the consent of their fellow shareholders and who received dividends in proportion to their shareholdings (see also Le Bris, Goetzmann, and Pouget, 2015). In this paper we build upon the archival research by Sicard and extend the analysis of the archives of these early firms from the 16th through the 19th centuries in order to trace the evolution of corporate governance mechanisms over the "longue durée." While the corporate form is often modeled as a static structure, in this paper we document institutional "learning" as well as innovative, institutional problem-solving in response to major crises. We examine the emergence of the corporate form as a rational answer to economic issues identified by the modern economics literature.

Scholars have intensively studied the period when the English and Dutch East India companies became publicly traded, limited-liability large-scale trading companies (see, e.g., Harris, 2005; Gelderblom, Jong, and Jonker, 2013 and Dari-Mattiacci, Gelderblom, Jonker, and Perotti, 2013). This research has yielded important insights into how structural change occurs in response to economic challenges.

The novel institutional development of the East India companies has also played an

important role in economic historiography. Douglass North, one of the seminal scholars in institutional economics, argued that the appearance of these firms was a watershed in world history made possible by political and legal change (North, 1991). Dari-Mattiacci et al. (2013), show how the Dutch East India Company evolved as a result of problems particular to the financing of long-distance trade. Our research traces a parallel but separate and earlier developmental sequence that begins in a quite different political and economic context from that studied by North, and a quite different economic context from that studied by Dari-Mattiacci et al..

In this paper we decouple the historical narrative about institutional change in the Netherlands and England in the 17th century from more general hypotheses about the importance of institutions to the emergence of the corporate form – such as property rights (Hart and Moore, 1990), entity shielding (Hansmann, Kraakman and Squire, 2006) and mechanisms for addressing moral hazard (Holmstrom, 1979). On the basis of our new archival analysis, together with the results of prior scholarship, we argue that the corporate form did not depend on conditions previously presumed to have been necessary for its development. These include explicit governmental charter and the particular risks and informational limitations inherent in long-distance trade. By examining an alternative developmental path of for the emergence of publicly traded corporations we separate historical circumstances from necessary institutional conditions.

Our findings challenge some long-held hypotheses from the institutional economics literature which were developed in the context of the traditional Northian "genealogy" of the corporation in northern Europe (North and Weingast, 1989). Our analysis of the case of the Toulouse companies shows that a number of the basic principles of institutional law and economics hold true, but that the mechanisms by which (and the context in which) they were implemented may vary greatly. The emergence of companies with elaborated corporate governance mechanisms in a medieval economic context that fundamentally differed from

the early modern world of merchant empires engaged in long-distance overseas trade has implications for institutional economic theory.

First, it suggests that the property rights in some places in Europe were efficiently protected as early as the 12th century. Shareholders' property was respected for centuries, suffering government expropriation only during the 20th century. Moreover, the feudal institution of property appears to have had some pro-business virtues – contradicting the standard view of the Medieval era as the "Dark Ages" of private enterprise (cf. Acemoglu, Johnson, and Robinson, 2005). This casts doubt on the novelty of the institutional revolution enjoyed by northern Europe during the 17th century and lends support to the literature questioning the true nature of these institutional changes (Clark, 1996; Cox, 2012; Coffman et al., 2013; Pincus and Robinson, 2011).

Second, it suggests that the corporate form, as a solution to a set of economic problems, is quite robust to initial conditions – especially institutional framework – since it has been invented at least twice. Grain milling and the Indies spice trade are two radically different businesses. In addition, medieval Toulouse and 17th century northern Europe differed in their political governance. Never the less, the corporate form emerged in both contexts. It suggests that some latent institutional structure may have been pervasive throughout Europe over long periods of time, occasionally manifesting itself in what we now regard as a novel organizational form form of business. [1]

Finally, the development of the Toulouse companies challenges Northian accounts of the institutional evolution of modern economic institutions (North, 1994, Williamson, 2000). Corporations developed in Toulouse to exquisite perfection and yet they did not reproduce themselves as in England on the eve of the Industrial Revolution. There is little evidence that the sophisticated institutional structure of the mill companies was adapted to other enterprises elsewhere. What strikes us now in hindsight as a dramatic institutional innovation

[1] cf. Richardson on guilds and risk sharing enterprises in medieval England

was not a watershed in the way business was conducted. The invention of the corporation was not a sufficient development to stimulate the emergence of modern enterprise. [2]

In sum, we make three contributions. First, we solve the long-standing problem that corporate finance has a single history. In the presence of a functional institution and only one history of how it developed, one does not know what features of the institution are necessary or sufficient. We solve the one history problem and allow comparative institutional economic analysis of the corporate form. We do some comparison, but our main objective is to provide information for others to also test theories.

Second, we document the institutional "tâtonnement" leading to a stable, long-term institutional equilibrium. In this respect, the case of the Toulouse mills is remarkable because steps in the "tâtonnement" are documented in corporate books and charters because of a need to make them permanent. Instead of observing the institution in different phases as most historians are forced to do, we can actually observe the institutional rules adopted for improvement.

Third, we document a series of solutions to fundamental agency issues as described for example in Tirole (2001). We find both external and internal mechanisms but internal mechanisms seem to have been largely sufficient to keep the Toulouse companies alive for centuries. These internal mechanisms are extensive and detailed, and include shareholder rights, a representative board, specified officer positions with verifiable tasks and independent auditing.

In this paper, we highlight our specific contributions to the history of corporate governance via propositions that connect the historical evidence (novel or reinterpreted) with hypotheses drawn from institutional economics.

[2]Two milling companies with similar organizational structures are found in other cities in the Toulouse region (Moissac and Montauban) but we have not yet collected archival evidence regarding their governance.

1 Historical and legal developments

This section offers historical and legal context for the emergence of the Toulouse companies. It draws heavily from Germain Sicard's (1953) study of the mills in the Middle Ages. Sicard's thesis was submitted in fulfillment of a degree in law, and hence supplies considerable information about the legal foundations of the property rights that secured the perpetual ownership and transferability of shares in the mill companies. We examine this evidence from the perspective of modern institutional economics.

1.1 Property rights in the feudal system

Institutionalism highlights the importance of property rights that protect owners against expropriation by the government and powerful elites. According to North and Weingast (1989), the Glorious Revolution limited the power of the crown and allowed better protection of property rights for English investors. Based on these strong property rights, financial markets flourished (Carlos and Neal, 2011), ultimately leading to the Industrial Revolution (Mokyr, 2005). Similar changes in political institutions also occurred in the Netherlands during the 17th century. Unquestionably, the right to property is a prerequisite to the birth of any corporate form. "The more likely it is that the sovereign will alter property rights for his or her own benefit, the lower the expected returns from investment and the lower in turn the incentive to invest." (North and Weingast, 1989, 803).

It is thus surprising that the property rights necessary for the emergence of corporations in Toulouse derived not from the restriction of monarchical powers but the institutionalization of them. In Toulouse, the exclusive right to use a particular part of Garonne River was necessary in order to invest in a mill. By the same token, the right to use a river for private commercial benefit would seem to present a major challenge to both the rights of the monarch and the more general public interest, since a navigable, potable river is an essential public

good. The legal conditions existed in Toulouse to resolve this apparent conflict.

Sicard (1953) points out that under the Roman and Visigothic laws that governed the city prior to the 9th century a river was not subject to private ownership. However in the Carolingian era, control of navigable rivers was conferred to the monarch or feudal lord, who in turn could alienate it via gift, perpetual lease or term lease. This new property right established the basis for economic development of the Garonne. It also created a legal foundation for the development of a corporation as a nexus of private contracts without the need for an explicit government charter (see Mahoney, 2000). Once a perpetual property right was acquired, a corporation can be thought of as a set of agreed-upon rules specifying how to share in its benefits.

The fundamental medieval property contract was the fief. A fief was enfeoffed (i.e., granted) by a lord to a vassal in return for compensation. The well-known case is the noble fief in which the vassal supports military duties, but the most frequent was the common fief (fief roturier) in which the vassal's duty was to pay revenues to his lord. Shareholders in the Toulouse mill companies derived their ownership rights to the Garonne at specific locations from the enfeoffment of both the riverbanks and the river.

A unique word, honor, was used in the Toulouse region in medieval times to designate both a common fief and a freehold (Castaing-Sicard, 1959). The term found its way into English to denote a "seigniory of several properties held under one feudal lord " (OED). The term honor was applied to a milling entity in Toulouse at least as early as the enfeoffment of the precursors to the Castel Narbonens (the original Occitan name of the Castel company) in 1183. As an indication of the crucial role played by the designation of an honor institution, the term "honor" was used up to the 19th century in the names of the Toulouse mill companies (e.g., "Honneur des Moulins du Bazacle").

The initial owners of the properties on which the two milling companies operated were the Count of Toulouse, who owned the banks at the Castel by inherited feudal right from

the Carolingian era, and the monastery of the Daurade which had been conferred the banks as a freehold property at the Bazacle (see Mot, 1910:74 and Sicard, 1953:56).[3] These two feudal owners (the count and the prior of the Daurade) then enfeoffed the properties to two groups of investors who served as vassals.

The two lords received an annual rent (a census called a "maienca", paid in specie and in wheat), a tax on transactions such as sale and pledge, and a financial penalty when a complaint deriving from the fief was lodged to the lord (Sicard, 1953:75). In exchange, the vassal was free to sell or pledge a mill or a share of a mill, called an "uchau." The vassal at first needed the agreement of his lord (Count or Prior) for the transaction but this agreement was evidently a pro-forma ratification to insure that the tax on transaction was paid (Richardot, 1935:337). Moreover, the lord provided a guarantee ("guirens") – a proof of property in the event that the owner's title was challenged, and agreed to address judicial issues that arose in case of litigation concerning the vassal property rights. Ultimately these feudal rights and responsibilities, with the notable exception of vassal property rights, fell into disuse.

1.1.1 Mill ownership through pariage

The fiefs used to convey the property rights to the Toulouse mill companies were of a particular legal type called"pariage." The pariage institution is a form of joint ownership and control that survives individual lives (Sicard, 1953: 146, 157-161). The most famous example of pariage is the Principality of Andorra, established in 1278 under joint royal and ecclesiastical rule. Pariage holdings were especially common in the period from 1200 to 1400 and used for the development of new townships in the Occitan and Catalonian regions. The Toulouse mills are a somewhat unusual application of pariage, in that they were industrial business

[3]Notre-Dame de la Daurade is a monastery and basilica established on the site of the Roman Temple of Apollo in 410. It was thus an early and important ecclesiastical institution in the city, and a recipient of charitable rights and gifts – presumably via feudal contract

ventures. Unfortunately, a full enumeration of pariage contracts does not exist. The form may well have been used in similar business circumstances and the archival records have not survived.

The first mention of the mills appears in the charter of the Saint Raymond Hospital around the end of the 11th century although it lacks any indication of the nature of the enfeoffment (Douais, 1887), however in 1182, the enfeoffment of the Castel mills by the Count of Toulouse was made to several persons called "pariers," and to anyone else they wished to add (Mot, 1910: 16). This extension explicitly allowed for the increase in the capital base of the group of investors acquiring the rights to the property. At the Bazacle, the first enfeoffment of 1177 does not mention the term parier, but the word is present in the second enfeoffment in 1184. Several persons associated by pariage thus owned the Bazacle and Castel fiefs.

These fiefs had two levels of association. At the first level, several pariers formed a group to own one mill in common. At the second level, an association of several groups of pariers contract together with the lord to own the fief. The first level of association in the pariage allowed several owners to cooperate using different forms of contribution of capital, and a theoretical division of the asset in different shares. This theoretical division of the asset is attested in the earliest documents pertaining to the firms. The Castel's enfeoffment of 1182 clearly explained that shares in the mill could be sold, since a tax on sales is detailed for a half, third, quarter or smaller part of a mill (Mot, 1910: 16). Thus, permanent capital (divided into shares) was present from the beginning of the mill companies. In contrast, capital was of limited duration in the original capitalization of Dutch and English East India trading companies and the English trading companies that preceded them. Permanent capital was achieved thanks to state intervention in 1612 for the Dutch East India Company [VOC] (Dari-Mattiacci et al., 2013) and in 1657 for the English East India Company (Harris, 2005). Permanent capital constituted a key evolutionary transition for these northern European

companies, but not for the Toulouse companies we study. It existed prior to their formation, thanks to medieval law.

1.1.2 Share transferability, entity shielding and separation of ownership and control

A parier was free to sell his share of a mill without the consent of the other pariers (Sicard, 1953:150), and a number of these sales were recorded in the notary documents of Toulouse. In the share sale contracts found in the archives (the first one dates from 1221), there is no mention of the assent of other pariers, whereas the permission of the lord is explicitly mentioned – although it gradually disappeared (Sicard, 1953: 151). This suggests that the pariage enjoyed entity-shielding. The law recognized a self-perpetuating, mutually owned organization that was not liable for debts of its individual owners (Hansmann, Kraakman and Squire, 2006). There is no archival evidence that there was a risk of seizure or liquidation of the mills due to a claim against an individual parier.

As early as the 12th century – and likely from the very outset of milling operations in Toulouse, there was at least a partial separation between ownership and control. Some pariers were capitalists; they were investing rather than working as millers in the companies. The capitalist nature of these initial businesses is demonstrated by the identity of the owners. The Daurade monastery was a parier (in addition to its ownership as lord). Moreover, two out of the nine pariers in Bazacle mills in 1177, and seven out of the eight in Daurade mills in 1194, had been, were, or would be consuls of the city – a position of political influence and power.[4] It is unlikely that a consular position would have been held regularly by millers. On the other hand it is not unlikely that a consul position would have been held by a wealthy investor. (Sicard, 1953: 154).

The pariage system among a groups of fief holders who independently owned mills in

[4]The Daurade mills constituted a third group of mills that were merged with the Bazacle mills in the fourteenth century.

key locations on the Garonne river, worked well for several centuries. However in the 14th century it later evolved into a larger collective organization, a change triggered by technical advances and perhaps by competition or at least imitation among the two main groups of mills.

1.1.3 Legal context

The medieval legal system in Toulouse differed in some respects from the Corpus Juris Civilis, the familiar Roman code of Justinian. Castaing-Sicard (959) argues that the medieval legal system in Toulouse developed from the Alaric code which dates from the period when Toulouse was the capital of the Visigothic kingdom. The Alaric Code incorporated codifications of Roman law prior to Justinian's efforts. Casting-Sicard also demonstrates how the legal system in Toulouse reflected laws enacted by the city consuls who came primarily from the merchant bourgeoisie. In particular, it had significant protections for creditor rights. Legal scholars like Placentin, who moved to Montpellier (a city close to Toulouse) around 1170, reintroduced the Justinian codification of Roman law into southern France from Bologna. After the Albigensian crusade, the Treaty of Paris in 1229 created a university in Toulouse with two professors "explaining Justinien" (Picavet, 1929). The research of the Sicards – both separately and together – consider how this legal change affected financial arrangements in general and the contractual basis for the corporate form in particular.

Initially, local legal practitioners refused to adopt the Corpus Juris Civilis. According to Sicard (1953) in the enfeoffment of the Bazacle in 1248, it is clear that parties renounced Roman law and instead followed traditional Toulouse contract law. Gradually, however, Roman law influenced the legal status of the mill companies. For example, in the new, partial enfeoffment of the Castel in 1351, and in the last enfeoffment of the Bazacle in 1474, the term fief was replaced by emphyteusis (Sicard, 1953), a Roman institution first adopted

by scholars and then practitioners to describe the enfeoffment.[5]

The other major changes in the Toulouse legal environment were the due to the abolishment of feudal rights in 1789 after the French Revolution and the transition to the Code Civil des Français – the Napoleonic Code promulgated in 1804 and the Code de Commerce that derived from it in 1807. Neither of these two major transitions eliminated the property rights of the mill shareholders. The French government effectively expropriated the assets of French religious institutions in 1789. This theoretically had the potential to undermine the rights of the mill companies to use the banks of the Garonne. In fact the French government affirmed the legitimacy of property rights that were granted prior to 1566 [6]. The abolition of feudal and clerical rights actually benefitted the companies as they no longer had to make even token payments to a feudal lord. The mills made no claims themselves to be feudal lords. Interestingly, the charter of the Bazacle contains an explicit rejection of any shareholder's potential claim to privilege, which was one of the central tenets of the 1789 declaration; i.e. the removal of any special privilege to gentry or clergy.

Legal freedoms granted by the Revolutionary government included the right to form companies. The Code de Commerce formalized this right but required governmental concession and regulation. This seems not to have led to the construction of new mills in the Garonne around Toulouse. This potential had already existed through Toulouse history because the property rights of both companies was limited to only the section of the river they owned. The new company laws ultimately led to the rules governing the creation of société anonymes. The Bazacle firm simply adopted this structure when it became expedient.

[5]As described by Tisserand (2013), medieval scholars such as Pierre Hélie, a law professor at Toulouse University around 1350, have theorized a transition from fief to emphyteusis.

[6]Article 1er de la loi du 14 Ventôse An VII

1.2 Protection of property rights

1.2.1 Cost of feudal protection

Shareholder property rights did not go unchallenged. Although the feudal rights provided a firm foundation, these had to be positively reaffirmed via occasional court rulings. One early challenge to the property of mills as fiefs was a trial in 1177 between the prior of the Daurade (the lord) and the owners of the mills of the Bazacle. The mill owners started to build a dam in the Garonne, but the Prior claimed that the construction was forbidden according to previous agreements. The two parties agreed to arbitration by three arbitrators. The records of this arbitration, discussed in detail by Sicard (1953) reveals an efficient defense of the respective property rights. The arbitration permitted the mill owners to conclude the building of their dam, but the prior obtained a higher rent and kept the right to establish more mills. However, when doing so, he was instructed to seek the advice of a council of eight owners of the mills and dam.

Despite this re-interpretation of their initial contract, the rights of the owners were maintained through time. Gradually, both the feudal nature and its financial implications decreased. The rights of the mill owners became known as "proprietas" after 1404 (Sicard, 1953: 90). In 1404, the pariers of the Castel called themselves "lords for 6/7." The king was called "lord for 1/7" since he owned 1/7th of the shares. This overlooked or dismissed the fact that the king was the true lord, in the feudal sense, as successor of the count of Toulouse. When this royal participation was sold on April 8, 1514, only 1/7th of the shares were mentioned; not the initial feudal rights of the king as lord.

The feudal requirements with respect to the mills seem to have lost their significance over time. At the Bazacle, in the middle of the 15th century, the pariers signed a pariage with the King of France regarding fishing rights. Acting as if they were lords, they did this without ratification from their own true lord, the Prior of the Daurade. But in 1474,

the last enfeoffment restated this feudal link with the Prior of the Daurade, still providing his guarantee against eviction (Sicard, 1953: 90). Later, in the mid-seventeenth century, the kingdom of France organized a commission to study feudal rights in the Languedoc. A lawsuit in 1671 indicates that the pariers of the Castel had not paid any feudal dues for decades, potentially vitiating their property claim.

This mitigation of the feudal nature of property was accompanied by a fall in its cost. First, the amount of the rent paid fell in real terms. At the Castel, the census was a fixed amount of 1 shilling toulza for each mill (contract of 1183). In 1177, one shilling toulza represented 11.29 grams of pure silver (Blanchet and Dieudonné, 1936: 236). In 1500, due to monetary inflation, the same shilling toulza was equivalent to only 2.09 grams of silver – thus a fall of about 80% in real terms. In 1700, the value in silver of this shilling toulza was only 0.66 grams of silver.

At the Bazacle, the census included two parts: one in silver and a second in wheat (one "carton" per mill, and thus 12 cartons for the 12 mills). We know that in 1367, the mills provided at least 341 cartons to the pariers; the feudal burden is thus about 3.5% of the revenues of the mills. In the last enfeoffment of 1474, this rent in wheat decreased to about 7.5 cartons, while the amount distributed to the pariers was 756 cartons (in 1470); thus the burden dropped to about 1% of the revenues. The firm still paid the rent to the Daurade (in the form of wheat) up to 1603. At this time, the firm bought this right (for 3,630 livres Tournois).[7]

1.2.2 Avoiding expropriation

Institutional protection of property rights was highly effective in Toulouse during the Middle Ages and into the early modern period, with the caveat that occasional attempts to take

[7]As for the rent, the value of the transaction tax paid to the lord quickly became close to nothing. The feudal justicia had disappeared by the beginning of the 16th century, as was also the case for other real estate properties in Toulouse.

them did occur. There were four attempted expropriations over the entire eight centuries of existence of the mill companies. A first attempt appeared during a trial involving the Castel company around 1428-1432. It was argued that the Garonne could not be a private property according to the rediscovered Justinian Code, but the firms' pariers succeeded in defending their rights over the river (Sicard, 1953: note 325).

The companies also resisted state expropriation of the private rights over the river. In 1666, the agent of the King of France, Louis XIV, observed that no taxes had been paid on share transactions for decades. Several buyers were condemned to pay the standard tax on transactions, which was 1/12th. The pariers sued the agent of the King in court to contest the level of this tax. The agent of the King claimed that the enfeoffement of 1351 made no exceptions, and that they thus had to pay the standard tax. The pariers answered that the enfeoffment of 1351 was only partial (following a destruction of the mills in 1346) and the title they were subject to was the original enfeoffment of 1192, which mentions a tax of five shillings toulzas. The court, the "Conseil d'Etat," recognized the validity of this original enfeoffment, which at the time was almost five centuries old, leading to a tax of five shillings toulzas, i.e., almost nothing due to monetary inflation.

Another attempt at state expropriation occurred in 1669. The King appropriated the rivers of France (cf. the ordinance of 1669, title 27, art. 41) except for properties owned according to a title pre-dating 1566. This exception was confirmed in 1683 and again in 1693. It remains in force today (Sicard, 1953: 67). The two Toulouse mills resisted this expropriation attempt thanks to documents proving the age of their ownership.

Paradoxically, property rights became weak only in the 20th century. A true state expropriation occurred at the Bazacle in 1946 when all of the French electricity producers were nationalized to create the state company EDF.[8]

[8]The Castel company was bought by the city of Toulouse at the beginning of the twentieth century, in 1910, when the firm was close to bankruptcy. In a testament to the enduring protection of property rights in France, the city of Toulouse for the Castel and EDF for the Bazacle still enjoy today complete legal ownership of the river due to the feudal enfeoffments signed in the 12th century.

Overall, the story of the property rights of the pariers with respect to the mill companies in Toulouse does not confirm the Northian assertion about the high risk of expropriation before the 17th century, at least in the region of Toulouse. Whether this was the case for all of Western Europe is open to debate, but evidently strong property rights in Toulouse created the conditions for the development and sustained existence of corporations.

Proposition 1.1. *Shareholders in the Toulouse mill companies resisted governmental expropriation several times over their history. Their rights, derived from feudal concessions, were successfully defended up into the 20th century.*

This evidence contrasts with commonly held views about the evolution of European property rights from relatively weak in the Middle Ages to strong in the modern era. This in turn has implications for analysis of the role of the legal environment in supporting complex, large-scale business instututions.

2 Emergence of corporate governance institutions

This section documents how the mill companies developed various corporate governance institutions. It highlights the economic factors that triggered the design of these mechanisms and shows how this process relates to modern economic theory. We will use the archaic terms "pariers" and "uchaux" to refer to shareholders and shares, respectively. Sicard (1953) demonstrates that, even if they did not have the name, the Toulouse mill companies were indeed shareholding companies. As an illustration, the formal transformation of the Bazacle company to a publicly held and traded société anonyme occurred in 1910 with the direct transformation of the term parier into shareholder and of the term uchau into share. We use archaic terms to highlight the differences in cultural and legal background that surrounded the emergence of corporate governance institutions. Despite these differences, the governance institutions are strikingly similar to modern ones.

2.1 The integration into larger companies

Prior to the formal mergers into the Bazacle and the Castel companies in 1372 and 1373, two initial forms of cooperation existed to manage the mills. Each of the several independent mills at the location of the Bazacle and the Castel was owned in common by several pariers. At the location level, i.e., at the Bazacle and at the Castel, owners of different mills acted in common vis-à-vis the lord to rent the fief. This second level of cooperation between owners of different independent mills gradually increased. One way to increase the return on capital is to increase productivity. The price for milling services was fixed by regulation.[9] An effective way to increase productivity was thus to spread fixed costs and to increase cooperation between mills using more complex contractual agreements. These developments can be interpreted in terms of the modern theory of the firm. Coase (1937) which suggests that activities should be carried out within a given firm when the costs of contracting on a regular basis outweigh the benefits of market competition. Clearly, integration into larger firms reduced the need to renegotiate collective expenses.

A first step beyond the ancient pariage was a form of mutual insurance at the Castel, signed as early as 1194. In case a mill was destroyed by a flood, it would be rebuilt at the expense of all the pariers of the Castel mills, and the pariers of the destroyed mill would be allowed to use the other mills until the rebuilding was completed (Sicard, 1953: 153). Remarkably, this insurance agreement was perpetual and committed successors to compliance in perpetuity ("pro eorum suceessoribus per omnia tempura," see appendix 7 in Sicard, 1953).

At the Toulouse mills, cooperation eventually increased further. During the 13th century, mills were still independent but different owners also acted in common in each location – not only in relation to their lords, but for many other purposes like lawsuits, dam maintenance

[9]Milling activities were regulated as early as 1152, with a rule of the city consuls stating that a miller could take no more than 1/16 as payment for his service; this ratio remained constant up to the 19th century (Limouzin-Lamothe, 1932).

and mill rentals (Sicard, 1953: 178). Gradually, common business in each location became more important than the business of each individual, independent mill. Several times (at the Castel in 1296 and the Bazacle in 1367) all the mills from one location were leased together by their pariers (Sicard, 1953: 188). This is not surprising, given that the firms were all exposed to the same exogenous economic shocks and had caps on profits. They differed only in their respective costs and physical capital. As cooperation equalized costs, the relative efficiency of physical capital; i.e. access to the Garonne, the number and quality of millstones, and the efficiency of mill buildings must have been the only economically relevant distinguishing factors.

Additional evidence of the importance of the common component of their business is a huge financial penalty paid in 1367 by all the pariers of the independent mills of the Bazacle: 1,000 livres tournois (compared to an estimated total value of the mills in 1372 of 13,280 livres). This financial penalty implies a primitive form of incorporation, as the penalty was paid by pariers who were not present in the company at the time the fault was committed (Sicard, 1953: 109-113, 302).

Recognizing the increasing need for common action, the independent mills merged twice. They first tried a temporary merger before signing a permanent association. At the Castel, all the mills were destroyed in 1346, which helped foster unification. In 1351, the pariers chose to be associated for 4 years after the beginning of the rebuilding. A perpetual association occurred in 1373 (Sicard, 1953: 179). At the Bazacle, the management of the company was unified for a two-year period, starting in 1369, while properties remained separate. Revenues were shared according to a rule that recognized different mill qualities. Expenses were only partially shared (Sicard, 1595: 181). Then, in 1372, a unique company was created via a merger of twelve firms. The fact that the mergers happened in successive years suggests that a genuine institutional change occurred. Did the Castel follow the Bazacle because the pariers recognized the incorporation as a superior financial innovation? Were they motivated

by competition? The answers are unknown.

We have little information about the 1373 merger of the Castel firms, but the unification contract of the Bazacle is still extant in the Toulouse archives (ADHG 5j12). The contract uses the principle of property exchange, which was considered an irrevocable sale in Toulouse law (Castaing-Sicard, 1959). A group of pariers calling themselves the major and senior parts ("maior and sanior pars") decided to perpetually merge their properties "to improve the governance, conservation, tuition and defense of the mills as of the honor." Governance ("gubernatione" in the text) is thus clearly indicated as the first motivation for the merger. The owners of each mill that participated in the merger were endowed with eight uchaux of the newly-created company. To compensate pariers for differences in mills' valuation, three pariers were chosen to estimate the valuation of each mill. The average valuation was then computed. Pariers of mills with a value below the average paid a compensation in specie to pariers of mills above the average. This merger contract preserved equal representation of shareholders in the new company.

Proposition 2.2. *Improving governance of the business activities was invoked in the great charter of 1372 as one of the main motivations for creating large companies.*

2.2 Shareholder democracy

Common ownership of productive assets is plagued with the risk of opportunistic behavior by some of the partners (Hart and Moore, 1990). The pariers had to find a way to protect the mill companies from such behavior. This was all the more crucial that, according to Roman Law (at least since the Twelve Tables and later on in the Justinian code), none could be forced to remain in an undivided partnership. This legal right could trigger a holdup problem if one parier demanded his or her share of the commonly held assets. This potential problem was explicitly solved thanks to special written renunciations of the right to a share of the liquidation of the property, as in other forms of pariage (Débax, 2012).

In particular, at the Bazacle, when shareholders signed the merger in 1372, a long list of renunciations to special rights was indeed attached: "... those with privilege obtained from the King, the Pope or other, by inhabitants of bastides, soldiers due to wars or fight against companies of thieves in Occitania, or even to support the transfer overseas to the Holy Land... and all others, canon or civil, from God or man, new and old, published and to be published, written and non-written, uses, customs, statutes, privileges, in the whole or in part... renounce any special rights" (ADHG 5j12). Pariers thereby indicated their willingness to be equally unable to break their commitment.

Even after their formation, the new corporations continued to use written contractual arrangements in the form of statutes to explicitly state internal rules. The first corporate statute (and, to the best of our knowledge, the oldest documented corporate statute in the world) was written in 1417 by the pariers of the Castel (AMT 18th series). It is a short document of seven articles, written in Occitan. It is clear that this document was intended to offer solutions to problems arising within the company, as it only deals with a few specific points. In particular, the text says that, in the case of a dispute among pariers, each party should provide a memory that seems fair and reasonable (Article 5 of the Castel statute). Another article indicates that the king of France, owner of 1/7 of the shares, should contribute to the company's expenses as any other parier (Article 7 of the Castel statute). It is interesting because it sheds some light on the debate regarding the states commitment to respect private property (North and Weingast, 1989). It is also interesting because this commitment to equal treatment further elaborates rules preventing a classic holdup problem among shareholders.

Proposition 2.3. *In the great unification charter of 1372 and in the corporate statute of 1417, shareholders commit to not exercising any special right based on their personal or social status in an attempt to hold up their fellow shareholders.*

Apart from the (failed) expropriation attempts discussed in the previous section, we did

not identify in the archival documents any attempt by a parier to break the commitment and hold up his or her fellow pariers. This indicates that the contractual renunciation of specific rights embedded in the unification charter and in the corporate statute was strong enough not to be disputed for centuries.

2.3 General meetings

The origin of shareholder general meetings at the Toulouse companies can be traced back to the feudal legal system. In 1177, an arbitration tribunal required an assembly of pariers to provide advice to the lord of the Bazacle before he created new mills. This first council was composed of eight people: four owners of mills and four from the "estanco" (which probably meant the dam). Another council of 12 owners was organized in 1184 by the lord to resolve litigation among millers about the payment of maintenance costs for the dam (Sicard, 1953: 78, 153). The existence of these councils may have been due to the fact that the lord was a religious institution accustomed to collegial decisions.

A feudal institution that protected property rights was thus at the origin of both the first council of owners and the first resolution of a conflict among owners. This evidence shows the capacity of the feudal legal system to accommodate collaborative decision-making. The settlement of real property litigation by a council under the patronage of the lord was standard in feudal Toulouse: the Custom of Toulouse, written in 1286 to codify age-old practices, states that the lord organizes, more than judges, a lawsuit (article 127 of the Custom; see Gilles, 1969, for a transcription of the Custom of Toulouse and an early comment). Each party chose one or two people to compose the Court (article 134). In case of a tied decision, the lawsuit was transferred to the city consuls (article 139). It was the lord who was responsible for organizing the justice in his fief by gathering a council of owners to resolve (by themselves) problems of economic coordination.

The councils of pariers eventually became permanent: several documents indeed reveal

the reliance on a majority of pariers in a vote on important decisions, which implies the existence of a council. For example, a shareholder meeting existed in 1278 when an agent ("procureur") was chosen by the "pariers all together to represent them in justice (Sicard, 1953: 268). A first mention of the majority rule is found in the minutes of a trial in 1308 (Sicard, 1953: 295). In 1372, the pariers who led the unification of the Bazacle mills called themselves "maior and sanior pars, a formula coming from canonic law that is used often in the two mills.

The first clear mention of a shareholder general meeting ("cosselh general dels senhors paries") appears in the Castel's corporate statute of 1417.[10] The general meeting was designed to take decisions on important issues, and these decisions were recorded. An accounting document from 1443-1444 at the Castel mills company mentions an expense to pay a notary to record minutes of meetings (Mot, 1910: 56). Between 15 and 45 pariers (out of a total of about 80) participated in meetings from 1463 to 1473 despite the possibility of representation it seems that decisions were taken on a one parier - one vote basis, rather than a one-share one-vote basis (Sicard, 1953: 269).

This deviation from the one-share one-vote rule is interesting in light of recent scholarship regarding how concentrated ownership could influence corporate externalities. According to Hilt (2008), many corporations in New-York at the beginning of the 19th century applied graduated voting rights schemes rather than a one-share one-vote rule to attract the participation of small investors in a context of weak legal protections. Hansmann and Pargendler (2013) argue for a different interpretation. They note that many early U.S. corporations were created to supply a public good, such as a bridge or turnpike, and the voting rules they adopted favored small investors over large ones. They argue that this prevented larger shareholders from influencing decisions which would affect users of the infrastructure. The smaller investors could prevent favoritism with respect to the location of the road or bridge.

[10]The full denomination of the meeting was: "cosselh general dels senhors paries dels molis del Castel Narbones de Tholosa am gran deliberacio."

The fact that the Toulouse mill companies were, in effect, regulated utilities whose decisions had large externalities aligns them with this U.S. example. The one-shareholder one-vote would have kept in check the designs of larger shareholders to preferentially capture the external benefits that could affect smaller investors and Toulouse consumers alike.

Proposition 2.4. *As revealed by the corporate statute of 1417, a shareholder meeting was in place early in the history of the milling companies.*

In a later period for which more documentation exists, the general meeting appears to have been well structured. In 1639, the rule for the Bazacle company is that a parier must own at least one-half uchau to participate in meetings (ADHG 5j438.194). According to the notes of a general meeting of the Bazacle in 1618, to guarantee an informed vote, a parier cannot vote if he was not present during the presentation of the issue at stake (ADHG 5j438.336). With a similar goal, information about technical choices was printed in 1771 by the Castel before a General Meeting to prepare the vote: "everybody must form his opinion in advance with wisdom, otherwise, the shares of the mills will fall and everyone will be ruined" (AMT 17ème série carton 8). In short, a system of shareholder representation appears to have evolved from an ad hoc feudal council to an annual general meeting with rules to ensure decisions acceptable to all, and recognizing the benefit of independence of opinion in the decision-making process.

2.4 Limiting moral hazard

The governance system of the mill companies reveals a radical way of controlling management. The revenues of the mills (1/16 of the grain milled) were paid directly to the pariers. Indeed, when the granary of the mills was full, the grain was distributed via an operation called a "partison," which occurred about once a month. The firm itself only earned secondary revenues, such as rents on non-grain mills or fees from leasing fishing rights. Part of

companies' current expenses were paid out of these secondary revenues. The remaining costs were covered by an annual contribution from pariers (called a "talha"). At the beginning of each annual general meeting, the treasurer presented estimates of revenues and expenditures for the next year. Based on these estimates, pariers voted a budget for future talhas (see, e.g., general meeting of the Bazacle in December 21st, 1676, ADHG 5j439.7). In case of an unexpected expense, an exceptional talha could be voted by an exceptional general meeting. These unexpected talhas were clearly distinguished in the accounting; during certain periods, they were even named differently ("coécation").

The talha mechanism represented a radical solution to the free cash flow problem identified by Jensen (1986). The Toulouse mill companies' governance was such that there was virtually no free cash flow at all. Managers had to justify all major future expenses before collecting the corresponding financial resources: for example, in 1667, one general meeting of the Bazacle voted to allow managers to keep and sell wheat (an operation called burning a partison) to reimburse a debt (ADHG 5j.438.347). The pariers clearly explained that the money coming from this sale could not be used for anything else. The talha mechanism resulted from a gradual adaptation of the governance system of the mills over the years. According to Sicard (1953: 225), before the end of the 14th century, the mills retained part of the wheat to pay the expenses but this mechanism was later abandoned.

This talha mechanism contrasts with the governance of modern shareholder corporations in which shareholders are distributed only the residual cash flows. A drawback of this mechanism is that financial resources to cover unexpected expenses need time to be obtained. The statute of the Castel in 1417 clearly shows that pariers were aware of this drawback. In article 3, the statute indicates that managers can keep and sell wheat in case of urgent needs because collecting an extraordinary talha would require too much time and would delay the execution of important actions. The article explicitly indicates that giving the exceptional right for managers to keep and sell wheat enables the firm to avoid major damage ("esquivar

maior dampnatge"). This shows that pariers were aware of a tradeoff between the control of managers and the speed of action in the firm.

Proposition 2.5. *A strict "no free cash flow" policy was in place that could only be bypassed in exceptional situations as stated in the corporate statute of 1417.*

Towards the end of the 18th century, the talhas gradually disappeared. During the Revolution, inflation related to the creation of paper money ("Assignats") renders difficult the implementation of the talha system because the amount to be paid by pariers lost a large part of its value between the time of the vote and the time at which the expenses were actually paid (ADHG 5j807). During this period, at the Bazacle, the company set the talha as a percentage of partison, i.e., in wheat, rather than livres tournois. A last huge talha was imposed in Germinal Francs in 1814 to repair the mills after an important fire. The talha system was replaced in 1843 by a standard dividend payment. Thus, the mechanisms for controlling the agency relationship evolved through various phases over four centuries in Toulouse in a setting in which shareholders were aware of the economic tradeoffs that arise when trying to address the free cash flow issue.

2.5 Financing expenditures: limited liability and outside equity

The downside of the "no free cash flow" policy analyzed above was that one parier could refuse to pay his share of the expenditures. The firm solved this problem by adopting an interesting system that enabled the firm to receive external equity financing while avoiding dilution. This system preserved limited liability for pariers because it did not force them to pay for their share of the expenses.

When a parier did not pay his talha, the firm could respond in several ways. First, the pariers unpaid but owed talha became a claim used to pay expenses of the mills (Sicard, 1953: 264). This was a technique akin to securitization of a parier's obligation towards the

mills, and suggests that the firm at times extended what amounted to negotiable credit to pariers. Second, the share of wheat due to the parier as dividend could be sold to pay his talha (according to Castel corporate statute of 1417). This solution was sufficient in regular times, i.e., when the value of the partison was higher than the talha, but was not enough in cases of large talhas, such as those required to repair the mills or the milldam.

In case of important capital expenditures that needed to be financed, another solution was to seize uchaux of noncontributing pariers and to sell them via auction in order to obtain outside capital. The procedure of seizure/auction is clearly explained in the Castel corporate statute of 1417 (article 4). In 1369 at the Bazacle, even before the merger into one unique company, one parier said that his share was "occupied and kept" by co-pariers, and that he then lost it (Sicard, 1953: 264).

Seizure had to be ratified beforehand by the Parliament of Toulouse (Mot, 1910: 41; Sicard, 1953: 266). A trial in 1450 applied this rule at the Castel and it was also effective at the Bazacle as early as 1432 (Sicard, 1953: 311). The article 4 in the Castel corporate statute explicitly mentions the risk of fire sales that may depreciate the capital obtained in case too many uchaux are sold at the same time. The text indicates that "los governadors ... applicar a ... conservar la honor dels ditz molis e la resta del pretz ... sera observat si trops uchaus dels ditz molis se vendian" meaning that the governors of the Mills will endeavor to preserve the mill company and its share price by observing if too many shares of the Mills are being sold.

The need for external finance delineated the pariers' limited liability. In article 4 of the statute of the Castel in 1417, this limited liability is clearly stated. The company could not ask more from one parier than the value of his share in the mills (in the text of the statute: "aytant o plus que no val la part que an en los ditz molis"). Hence, limited liability appeared in some business enterprises by the 15th century, nearly 200 years before the appearance of corporations in Northern Europe. The provision of limited liability to shareholders was a

long and complicated path for the East India companies. This solution is reached in 1623 by the Dutch VOC, more than 20 years after its creation (Gelderblom et al., 2013). For a long time, limited liability remained a privilege granted by the state. Hansmann and Kraakman (2000) observe that limited liability was believed to be infeasible via pure private contracts.

The Toulouse mill companies' institutional form demonstrates that the limited liability was achievable by private contracts without any explicit public intervention. The source of this institutional form may be traced back to feudal practices of seizure and re-enfeoffment of fiefs and to the business law described in the Custom of Toulouse that allowed, under explicit conditions, a creditor to seize and auction a debtor's assets to cover unpaid debt.

Given the significance of limited liability as an important feature of the corporate form, it is useful to provide more detail on this topic. First, the seizure/auction mechanism is related to feudal law. The failure to pay the talha amounted to the abandonment of a fief. When the feudatory abandons his fief, it returns to the lord to be again enfeoffed. In a case in which a fief is shared among several owners in pariage, the new feudatory needs to be agreed on by the others. It must pay the talha that the prior parier failed to pay.

For example, in 1331, a flood destroyed the Castel mills. Fifteen years later, many pariers in the Castel firms had not paid their talha for repair. This situation had negative externalities. The city suffered because enemy soldiers were able to cross the river without a boat due to the destruction of the Castel milldam. The potential occupation threatened the city with starvation (Mot, 1910: 19). The agent of the king (the Sénéchal) called the pariers and asked them to pay to rebuild the dam. Twenty-six abandoned their shares to the King who then applied a new partial enfeoffment to 5 others (all five of whom were money changers) in exchange for an offer to contribute to the repair. The twenty-six pariers who surrendered their shares evidently no longer were obliged to contribute to the rebuilding of the dam their obligations were transferred to new shareholders.

We conjecture that, with the gradual decline of the role of the lord, the pariers would do

the same without the lord – the honor eventually assumed the role of the enfeoffing body. Seizure and re-enfeoffment appears to have evolved into the surrender of shares to the firm in lieu of talha payment. This process of absolution of debts through seizure and re-auction appears to have been a standard mechanism in bankruptcy. Medieval Toulouse law allowed seizure and auctioning of personal assets to pay debts after proper validation by the city council (Castaing-Sicard, 1959). Regardless of the origin of the limited liability, it was not related to any explicit state decisions, as in the Dutch and English East India companies' case.

2.6 Debt in the capital structure

The mill companies used debt contracts to finance their operations. We observe the use of debt by the predecessor firms to the Bazacle and Castel, and there is evidence of debt used by the Bazacle company in 1413 (ADHG 5j8.30). Debt contracts were issued in the name of the companies. Moreover, we never observe, in the archival material, any reference to the fact that these debts are repaid from the personal wealth of a parier. This indicates that limited liability was enforced on counterparties of the milling companies.

On the contrary, in 1711, a kind of Chapter 11 protection was obtained by the Bazacle company from the Parliament of Toulouse after the dam was destroyed in 1709 and was difficult to rebuild. This protection stated that creditors of the Bazacle could not undertake any action because of their debts until August 1, 1722 (ADHG 5j2.8). This protection helped the firm concentrate its resources on repairs. Several pariers preferred "to abandon their shares, rather than add to the loss" (ADHG 5j65). Many uchaux were integrated into the firm since no one attended the auction (ADHG 5j65). Again, this indicates that no creditor of the firm had a claim on the personal wealth of pariers.

Proposition 2.6. *Shareholders benefited from limited liability. We observe debt financing, as early as 1413, in the name of the company without any evidence that a debt could be or*

has been paid back by a shareholder, despite several episodes of financial distress.

The seizure/auction mechanism enabled the firms to raise money after major events such as mill or dam destructions. In 1351, the Castel mills raised money from investors. This seems to also have been the case in 1418, according to a sale of 6 uchaux owned by the mills to finance repairs (Sicard, 1953). However, a legal innovation reduced the effectiveness of this procedure. Sometime before 1597, a parier who saw his or her shares seized and auctioned was granted an option to repurchase them ("recrobit") at a strike price equal to the auction price plus all the subsequent talhas. We do not have the exact date of this legal change: the first case we observe is the sale in 1597 of 6.25 uchaux with an option to rebuy. The presence of this option persisted, showing up in auctions for Bazacle shares both in 1613 and 1648 (ADHG 5j.438.179.182).

The introduction of a option to buy back the seized shares had negative consequences for the financing capacity of the mill companies. Upon facing major capital expenditures, no investor would be willing to buy shares and contribute to the rebuilding of the mills given that they could not benefit from the upside. The mill companies found two different answers to this problem, demonstrating a certain level of creativity and flexibility in governance design to adapt to circumstances.

First, uchaux not sold by auction were simply reclaimed as permanent assets of the firm. The former owner then had no possibility of repurchasing the uchaux. In 1654, 3.5 uchaux were owned by a minor under guardianship; he had not paid his talhas after the dam destruction and nobody was willing to purchase his shares at auction. They were thus integrated into the body of the mill company. Later, when the mills were working again, the minor asked to repurchase his shares but the un-auctioned uchaux remained the property of the firm (AMT 17ème série boite 5).

As early as 1365, mill firms themselves owned uchaux. The company was recognized as a standard parier in the partison register to receive grain partison and was also called to

pay talhas. This is an early instance of a company's self-owned shares. These uchaux could then be sold (Sicard, 1953: 314). In a Bazacle general meeting of 1639, the integration of non-auctioned uchaux was justified "so as to not delay payment of amounts due" (ADHG 5j438.192). Pariers who accepted the future payment of the talha would also pay the talha of those who did not want to pay their own; while they supported all the investment, they would also benefit from all the potential return. This solution would be unsatisfactory if all the initial pariers could not or would not pay more than the initial talha for their own uchaux.

The mill companies designed a second solution to raise capital and avoid the negative consequences of the option to buy back. In 1597, they called on the judicial authority to obtain a limitation of the option duration: a Parliament sentence confirms that shares of non-paying shareholders at the Bazacle can be seized and auctioned, and states an explicit limitation of the option: the seized owner could not repurchase for 30 years (De La Roche-Flavin, 1745, p. 590).[11] This latter provision amounted to a thirty-year European-style call warrant.

The seizure/auction mechanism could be ineffective in case of major disasters. At two occasions, the mills remained out of order for several years until the design of two clever financial solutions. In 1641, the Castel company collected a huge talha of 300 livres tournois Pthanks to a 12-year protection against the option to buy back (AMT 16th series). In 1643, the mills still did not work. Minutes of meetings show pariers lamenting that things were almost "hopeless and abandoned" (AMT 16th series). The Castel mill company needed 50,000 more livres to repair the dam, but several pariers did not want, or could not, invest further. On December 2, 1643, a group of 16 pariers intended to establish a new company to provide money for repairs, offering other existing pariers the opportunity to join them. This initiative found strong opposition by at least one important parier, the Chapitre Saint

[11]This decision is important enough to be printed in several books of the jurisprudence of the Toulouse Parliament.

Etienne.

Three general meetings, on December 21 and 28, 1643, and on January 3, 1644, were needed to resolve the issue (AMT 16th series). The group explained first that everybody wanted the "public good and chose to make repairs following the "old orders that consist in imposing [a fee on] each uchau" – or 714 livres per uchau (50,000/70). The problem was that several pariers did not pay. The solution was for the group of 16 to pay for them under "reasonable conditions," described in several articles allowed by a notification of the Parliament of Toulouse. By accepting this agreement, the group of 16 proved "their desire to do good for that mill, it was the key to the business, without which it was impossible to conclude anything." The group of 16 accepted, signed and expressed their "will not to cause any prejudice to property rights."

The uchaux of pariers who did not pay were transferred to the group of 16 using the standard sale after seizure for non-payment of talhas. However, the group of seized pariers would have the option to repurchase from the mill after 6 years, fixed at a price equal to the capital plus the accumulated interest at 6.25 % ("Denier 16"). During the 6 years while the mills were being repaired, the group of 16 would receive fixed interest of 6.25% per year from the firm. During this time, the officers of the mills company would be appointed only by pariers who paid their talhas. Others would appoint one representative without the right to know the accounting of those who paid. The accounting would be presented in a monthly general meeting with four pariers appointed to help the officers during the repairs. Thus, as a result of the re-organization, the firms capital structure combined two kinds of equity claims, with one providing a fixed interest for a 6-year period.

Sixty years later, a similar disaster occurred at the Bazacle leading to another innovative financial solution. The dam was destroyed by ice in 1709. Despite 100,000 livres being spent by 1714, the dam was not fixed. A hydraulic engineer, Mr. Abeille – almost certainly the same Joseph Abeille who was famous for supplying the city of Geneva with waters from the

Rhone – agreed to undertake the repairs (both technically and financially) in exchange for half the uchaux and the appointment as perpetual chairman of the company, as long as he owned at least 30 uchaux (ADHG 5j65). This is an example of financing and advising being jointly offered as analyzed by Casamatta (2003). Abeille decided to abandon the initial dam and a new one in a near-by location. The repairs were difficult. Abeille sold half his shares to Geneva investors and other pariers sued him for not fulfilling his commitments (ADHG 5j3.9.22). After 12 years of inaction, the Bazacle mills resumed operations on October 4th, 1720. Abeille would sell all his uchaux over 3 months in 1732, allowing the company to return to its initial corporate governance with an elected board of directors (ADHG 5j3.63).

Proposition 2.7. *Ad-hoc solutions such as special share provisions in 1597, dual shares in 1644, and a corporate takeover by a shareholder in 1714 accompanied by special governance provisions were invented and allowed in order to re-capitalize the companies in periods of crisis.*

2.7 Delegated management

The separation of ownership and control is viewed as a particularly efficient form of economic organization by corporate finance scholars. It places the operation of an enterprise in the hands of those most competent to run it, and allocates the risk of the enterprise to those most able to bear it. Shleifer and Vishny (1997) define corporate governance as "the ways in which the suppliers of finance to corporations assure themselves of getting a return on their investment." These assurances rely on external and internal mechanisms. Externally, as discussed above, firm property rights and a fair legal system allow potential recourse to investors concerned about fraud. Internally, corporate governance relies on a set of rules by which the organization selects, monitors and replaces management and the means by which it delegates to them. Prior work on the history of corporate governance by necessity has had to focus on the corporate histories from northern Europe. Freeman et al. (2012), for

example shows that the emergence of an investor class that specialized in risk-bearing and delegated control led to the emergence of professional managers, who lacked the resources for ownership but who specialized in managing. Their central thesis is that, over the period 1720 to 1844, corporate governance shifted from shareholder participation in company affairs to rule by a managerial elite who purportedly represented shareholders interests. We are particularly fortunate in that the development of the internal corporate governance rules in Toulouse can be studied in great detail, thanks to the survival of the Bazacle and the Castel archives.

Coase (1937) and Williamson (1975) point out that the extent of reliance on external vs. internal control mechanisms depends upon organizational costs and contracting frictions. A major friction is the maintenance of managerial expertise. Consistent with the Coasian predictions about the relative efficiency of external contracting, in the history of the Toulouse firms, we observe internal management for the central business of the companies coupled with a willingness to contract externally for peripheral operations. Early in the history of the mills, pariers occasionally resorted to renting out all the mills to outside operators. This occurred in 1374, 1383 and 1389 (Sicard, 1953: 190). Fishing rights were typically rented out in the 15th century. Finally, secondary activities of the mills – sawing, sharpening and tanning – were typically rented out for most of the time up to the 19th century. This fine parsing of internal vs. external contracting, including occasional instances of complete external contracting in the decade and a half following the major incorporation events provide great potential for future research into Coasian conditions for external contracting. In this section, however, we document the broad processes by which the internal governance mechanisms evolved.

The pariers of the Toulouse firms were typically accustomed to delegating power. From the very first enfeoffment contracts, one parier could represent others (Sicard, 1953: 151). The construction of the dam leading to the trial of 1177 already implied a set of agreements amounting to governance among pariers of different mills although there is no surviving

documentation about this. Evidence of pariers acting in concert can be found. For example, on July 2, 1234 at the Castel. 59 pariers including women signed the purchase of land for themselves, other pariers and their successors (Sicard, 1953: 156, 295). Hence this act implied a form of delegation of negotiation of a transaction by the entire group of shareholders to the 59 signatories [12]. In other instances, pariers at the Bazacle and the Castel acted in common via a representative agent, called a bayle or procureur, from at least the end of the 13th century (1278 in the Bazacle, 1292 in the Castel, Sicard, 1953: 178, 202, 268). At the end of the 14th century, these agents had various names: bayle, regent, procureur, gouverneur or recteur. They managed revenues and expenditures (Mot, 1910: 52). The role of bayle ultimately evolved into that of a corporate employee, however it did not start out that way. In the early history of the governance of the Toulouse firms, managers were typically drawn from the group of shareholders and served temporarily in operational roles.

We know something of how this worked for the precursor to the Bazacle company in 1369. At that time, the mills at the Bazacle were experimenting with a temporary alliance for a two-year term. At the end of each year, the pariers chose two or three among themselves as representatives (Sicard, 1953: 203). At a given location, these pariers managed the mills, decided on repairs, asked other pariers for contributions and fought in court on behalf of the various mills. However, it is stated that they could not affect the firm's capital structure or modify its statutes (Sicard, 1953: 204). Other agents had more specific tasks: collecting the talhas (first mentioned in 1358), acting in a trial (the agent being called "procureur") or supervising repairs (first mentioned in 1364) (Sicard, 1953: 206). Sometimes, the procureur was not a parier himself, as in a trial in the Parliament of Paris in 1384 (Sicard, 1953: 207). But most of the time, management was associated with ownership since the owners chose amongst themselves agents to represent them and to act as managers.

Another step in the delegation of management was taken with the separation of own-

[12] As early as the enfeoffment of 1192 in the Castel, women are mentioned as pariers "predicto capicio molendinos habent vel habuerint quod aliquis homo vel femina non faciat molendinos..."

ership and control. In 1374 at the Bazacle, two years after its permanent merger in 1372, new kind of agents appeared; "aconseilhars" whose explicit role was to represent the pariers. Their role was to oversee the firm's operating managers, the bayles. This new institution allowed a clear separation of ownership and management and provided an additional fiduciary layer in the organization. The manager ("bayle") needed the approval of at least 4 of 8 aconseilhars for important decisions.[13] The medieval term baille referred to an administrative agent of the king or feudal lord. The word bayle in the context of the Toulouse mill companies came to be used for employees of the firm who were assigned to circumscribed, technical tasks. For example, one bayle recorded the grain brought to the mill and processed ("receptors bladorum") and another monitored the income and outflow of specie ("receptor pecuniarium").

The statute of the Castel in 1417 provides a brief but fascinating picture of the state of corporate governance early in the 15th century. Among other things, it reveals the separation of ownership and control as a fait accompli for the firm except for one crucial function: the treasurer. This charge remained in the hand of one parier. This statute mentions several agents ("administrador de la presa et de la despensa," "los regidors," "gobernado de la recepta"...) different from the representatives of the pariers ("los administradors" and "los paries deputatz"). The most important agent seems to have been the "administrador de la presa e de la despensa" who evidently fulfilled the role of treasurer. The treasurer provided an accounting of the talhas collected (Article 2) and also of the sales of seized uchaux (Article 4). He owed duty explicitly to the shareholders alone – no-one outside of the honor could demand from him an accounting of the talhas (Article 1 in the statute).

Article 1 of the 1417 statute also indicates that the cash received by the mill company could not be seized by anyone. This supports the hypothesis of "entity shielding" as an institutional feature of widely held share companies (c.f. Hansmann, Kraakman and Squier,

[13]This organization was in place beginning in 1379 at the Bazacle and in 1388 at the Castel (Sicard, 1953: 210).

2006). The treasury function continued at the Castel unchanged for more than a century. In the 16th century, the treasurer of the Castel was still a parier chosen as the "most adequate and able" (Mot, 1910: 54). An arrêt of the Parliament of Toulouse in 1565 (Mot, 1910: 54) indicates that serving as a treasurer was a parier's contractual obligation – the arrêt affirmed the legal requirement to serve.

In contrast to the relatively brief 1417 Castel statute, a stature adopted by the Bazacle in 1587 provides a more complete specification of the institutional structure of the company. It includes 59 articles that were probably written in 1531, corrected in 1587, and then reprinted in 1699 and again in 1728. Only the 1587 version is still in the archives.

The statute of the Bazacle in 1587 allows us to more clearly understand the agency relationship between shareholders and management. It provides useful detail on the roles of the company officers and the process by which they were appointed. The aconselars were now referred to as Regents. They continued to act as the pariers' representatives. The first article of the statute states that the administration shall begin on the first day of January and run until the same day one year later. On January 1, a board meeting of the Regents shall take place to deal with issues selected by members from the previous board who remained in charge for an additional year (Article 2). As discussed in more detail below, the structure of the board established two "hold-over" directors who provided continuity from year to year. Thus the 1587 statute established an agenda for the first board meeting and a process by which issues of concern over the prior year could be discussed.

The statute specifies a number of roles for company officers. In fact, the statute itself uses the term "Officers" to refer to the principal managers of the companies. One of these officers, the "Conterôlle" (Articles 10-16) was given the responsibility for "all business and commercial activities of the mills" (Article 10). He was required to live in the mill (Article 16), but he was not required to be a parier. The conterôlle appears to serve in a role much like the Chief Executive Officer of a modern corporation. We do not know, however, how he

reported to the Regents, or the length of his term of service.

Other officers detailed in the 1587 Bazacle statute include the "Trésorier" who served as the book-keeper for specie. He could not disburse funds without a signed order from the Regents (Articles 17-20). This procedure existed in the first accounting documents we have from the middle of the 15th century. The "Syndic" for the firm was in charge of all lawsuits. He maintained the archives and the record of the ownership and transfers of uchaux (Articles 21-23). The "Greffier" wrote all contracts, kept the board meeting minutes and wrote firm correspondences (Article 24). The "Saint Martin" was the foreman (crew chief) of the mill (Articles 25-27). A "Mande" alerted the pariers of the days on which partison payments were made (Article 54).

Proposition 2.8. *The corporate statutes of 1417 and 1587 demonstrate a clear delegation of business operations to special agents. The attributes of the chief executive officer are explicitly detailed in the Statute of 1587. The 1587 statues amend a prior requirement that the CEO must hold shares in the company.*

The role of the treasurer evolved significantly over time towards an increasingly independent role. If these developments were responses to instances of treasurer malfeasance we have no record it it, but they suggest an understanding of the potential for conflicts of interest. The Statutes of 1587 removed the requirement that the treasurer be a parier. While this reduced the alignment of incentives with respect to the maximization of shareholder value, it also reduced the incentive to misrepresent the financial well-being of the firm. The General Meeting of 1642 set a three-year term limit on the treasurer's appointment (ADHG 5j438.224).

In 1648 the procedure for appointing the treasurer was changed; he was no longer appointed by the board but instead by a vote at the shareholders' General Meeting (ADHG 5j438.266). This presumably reduced the potential for (or the appearance of) collusion between board and treasurer. To avoid nepotism it was decided in 1661 that uncles,

nephews, brothers and sons of the treasurer would not participate in board elections (ADHG 5j438.318). Around 1679, it was decided that a parier of the Castel could not be treasurer at the Bazacle (ADHG 5j439.45) and by 1679 it was firmly established that the treasurer could not be a parier (ADHG 5j439.45).

Proposition 2.9. *Separation of ownership and control is fully achieved in 1679. Before this date, the treasurer could be (but did not have to be) chosen from among shareholders.*

This process of development at the Bazacle and Castel companies show how the separation of ownership and control evolved from an alignment of interests to a recognition of the benefits of separation, at least for certain officer roles. The mill companies clearly learned from their individual and joint experience with management over the first four centuries of pariage, and made specific adjustments to the roles and duties necessary for effective administration. By the 17th century, these decisions resulted in a governance structure similar in many ways to the modern corporation with respect to the separation of ownership and control.

2.8 Incentives

Despite the gradual elimination of the requirement that the principal officers also be pariers, financial incentives existed to align the interest of agents with those of shareholders. As revealed by the registers of the Bazacle company, even though it was not written in the corporate statutes, the main managers received, in addition to a fixed wage, a variable remuneration in the form of a fixed quantity of wheat for each partison. Thus, the more partisons the mills realized, the more they earned.[14]

Standard workers (millers, "toqueases" in charge of the donkeys,...) also had an additional economic incentive since they earned 1/10 of the grain – the remaining 9/10 was

[14] A partison was made when the granary was full, so this mechanism incentivized managers to try and maximize the amount of wheat ground.

distributed to the pariers – in addition to their fixed remuneration. This 10% share of revenues was used to finance half the costs of the beasts of burden used by the firm; the firm needed donkeys to pick up the grain and return the flour to clients. In case of the death or voluntary departure of an employee, the former worker or his heirs received the monetary value of his share of the donkeys (Articles 46 and 47).

Like everyone else, workers and pariers had to pay the standard regulated fees of 1/16 for milling their own grain (Article 58); this constitutes further evidence of entity shielding (Hansmann et al., 2006). The constraint on millers was strong because if they broke the rules they were excluded from milling activities, according to a decision of the city consuls of February 22, 1222 (Mot, 1910: 65).

Pariers also used intrinsic incentives to align workers' interest with that of shareholders (see Benabou and Tirole, 2003, for theoretical work on this issue). One way of relying on intrinsic incentives is to resort to religious beliefs. Although the Christian religion was never used to justify decisions, there are cases in which it is referred to. The statute of 1417 states that a new parier must swear on the "Sans Evangelis de Dieu Nostre Senhor" to respect the statute and obtain his grain (Article 7).[15]

The statute of 1587 of the Bazacle mentions the obligation, for each new employee, to swear the usual oath, but we do not know the nature of the oath. Sometimes, "Ave Maria" or "Jhesus" is mentioned at the beginning of company documents. Jhesus is also often written at the top of the pages of the accounting registers. Independent mills, as they appear in the merger of 1372 in the Bazacle or later, were almost all named after saints. Additional evidence of the role of religion was the fact that the role of overseer of millers was named after a saint, San Martin. This seems to have also tied into local religious practice. Each year for centuries, the Bazacle company offered free bread and organized a party on San Martin's day. It is documented in the annual account of expenditures.

[15]Pariers were afraid that some of them would use the granary for their own private interest thereby inducing overloading of the granary.

Proposition 2.10. *Both explicit and implicit incentives were provided to agents of the mills as indicated by the Statutes of 1417 and 1587.*

2.9 Monitoring management

According to Tirole (2001), much of the debate about corporate governance focuses on what constitutes an efficient monitoring structure. Monitoring is important because it determines the ability to find external funds, and the ability to transact in the secondary market for corporate shares and obligations. Three mechanisms enable the monitoring of management by pariers: the board of representatives, the accounting auditors, and shareholder engagement.

2.9.1 Board of shareholders' representatives

As discussed above, the separation between ownership and management evolved over time, but the first major step took place in the 14th century with the introduction of a new governance institution aiming at monitoring management: the "Aconseilhars." This new institution has its own evolutionary sequence leading to a modern board. It is likely that the reliance on a council derives from the political organization of Toulouse itself, which was governed by an autonomous city council (cf. Goetzmann and Pouget, 2011).

In 1390 in the Castel, six aconseilhars also called "Conselhes" and "Regents" were chosen by their predecessors and confirmed by the assembly of pariers. It was the same in the Bazacle at the end of the 15th century, with eight aconseilhars. The board of aconseilhars had a staggered structure: two aconseilhars remained in charge for one extra year so that only six were nominated every year. The choice of the aconseilhars was made at the end of the year and they could not be re-elected (Sicard, 1953: 211-213). The fact that a staggered board was part of a company that survived for several centuries suggests that such a governance feature is not necessarily bad for sustainable corporate performance (cf. Cremers, Litov and Sepe, 2015).

The statute of 1587 clearly explains how the board was composed. This specificity suggests that pariers were concerned about potential moral hazard at the level of the monitors (Tirole, 2001): board members were acting on behalf of all the pariers and thus these pariers required a well functioning board. The statute indicates that, a few days before the end of the year, the members of the board (Regents) elected their successors including the ones who continued for an extra year. These were called "Surintendant" or "Old Regents" (Article 4).

In addition to the company statutes, management often referred to the "ordinances and customs" or to the "antic rules" – terms that appear early in the history of the companies (Sicard, 1953: 311). To keep track of prior customs and topics of importance, in 1782 the Bazacle company created an index of all the issues contained in the general meeting registers from 1618 onwards. One of these registers indicates that the board meeting was charged with proposing the agenda for the general meeting. This indicated its ability to highlight potential issues to the broader collective (ADHG 5j439.15). Another register states that a board meeting took place before each general meeting (ADHG 5j442.81).

The members of the board took turns every quarter exerting the main monitoring activities. They were called the quarter regents. The chair of the board was thus collegiate and rotating during the year. The quarter regents were supposed to be very active in monitoring the business. They signed the expenses proposed by the conterôlle, i.e., the CEO, before they were paid by the treasurer. The quarter regents attended each partison in order to control operations and to record the amount of grain distributed to each parier (Article 5 of the statute of 1587). Since they changed frequently, to be recognized, the regents wore a particular dress and hat during partisons (the general meeting voted to buy two new uniforms in 1694, ADHG 5j439). The quarter regents of the Bazacle, at least in the 18th century, set the agenda for the board meetings (ADHG 5j440.38). In the same vein, in 1623, they led the general meetings (ADHG 5j438.24).

The fact that board members were elected for only one year mitigated the temptation

to use the charge as a way to obtain private benefits. However, it limited the continuity of monitoring and made it difficult to oversee the implementation of important projects. The two Surintendants provided the necessary continuity. To improve management, the general meeting of 1768 discussed appointment of four instead of two Surintendants; thus, during each quarter, one new and one old Regent would be in charge.

The minutes of the general meeting clearly state the economic motivation for this new governance arrangement: "... the management would be better directed given that there were many cases in which a quarter had only new regents without experience that prevented the assembly to take actions" (ADHG 5j442.56). The general meeting even decided on an exemption to this annual rotation. On December 21st, 1727, after a destructive event, all the regents remained in charge for an extra year in order that repairs not be delayed "due to the lack of knowledge of the new board" (ADHG 5j440.9). When the engineer Abeille bought half the uchaux, he became a perpetual Regent and ran the repairs.

Apart from the exceptional circumstances described above, the traditional governance of the mill companies of Toulouse involved a board with a double rotation: board members changed on a yearly basis and the chair position was held by two of them on a quarterly basis. This double rotating structure might have circumvented the issue of monitoring the monitors.[16]

Proposition 2.11. *As early as 1390, shareholders monitored management through a board of directors. The board used a double rotation: directors sat on the board for one or two years and were in charge of personally monitoring operations on a quarterly basis.*

[16] Apart from monitoring activities, board members had some executive functions. In particular, the board appointed the officers of the mills. According to Article 8 of the statute of the Bazacle of 1587, the board appointed the "conterôlle, trésorier (which applied until the 1648 statute), syndic, greffier, Saint Martin, pagelaire, pourgeurs, meuniers, toqueases, faure and maitre d'oeuvre." The board also awarded leases "to the highest and last bidder" using a "candle auction" after public notification at several points of the city (Article 9 of the Statutes). Board members in their executives attributions were themselves monitored by pariers via the general meeting. In 1626, we observe a clear prohibition against debate in a board meeting on subjects that were decided in a general meeting (ADHG 5j438.44) – thus rules of order governing agenda and discussion were made explicit. Moreover, the board could not spend more than 100 livres tournois without a deliberation of the general meeting (ADHG n.5 F. 57, 59, 61, 76, and 96 ; n.7 F. 34).

Any parier could be elected as regent and could not refuse, but several exceptions existed. In the case of rebuff, the corporation first kept the parier's grain, and then it forced him to accept the charge of regent using the judicial system[17]. This way of involving the shareholders was the same for the elected treasurer. These charges were not remunerated, but was evidently thought necessary for the common benefit of the pariers – presumably because having pariers monitoring management was a necessary condition for efficient separation between ownership and management. This duty to act as regent may have been a means to alleviate the free-rider problem. However, it appears problematic to have to appoint a monitor or a treasurer without his explicit consent – it might lead to a perverse outcome. Thus cases in which pariers were brought to trial for refusing to serve seem difficult to rationalize. Perhaps the trials served to establish the credibility of the nomination process.

Several situations prevented a parier from becoming a regent. In 1585, only a parier with an uchau free of the repurchase option could be a regent of the Castel (Mot, 1910: 48). Otherwise the regent could be forced to sell his share during the year and this would undermine his willingness to monitor management on behalf of pariers. In 1641, the general meeting of the Bazacle imposed a delay of five years before becoming a regent a second time; this period was reduced to four years in 1667 (ADHG 5j438.214 and ADHG 5j438.344). In 1648, a parier of the Castel could not be a regent at the Bazacle, probably to avoid conflicts of interest with the main competitor (ADHG 5j438.269). Finally, in 1693, a minimum of one-half uchau was required to become a regent (ADHG 5j437.48). This was probably to ensure that the parier had enough at stake to be willing to incur monitoring costs (Tirole, 2001).

[17]This was demonstrated by a trial in 1571 involving the Castel (AMT 19th series number 3 piece number 21).

2.9.2 Accounting auditors

The accounting books for each firm were available to shareholders for inspection. Monitoring was facilitated by the fact that accounts showed as their first entry the amount of talhas paid, in total and per uchau, during the year: the oldest accounting books that are present in the archives date from 1443 at the Castel and 1469 at the Bazacle (AMT 19th series 44 and ADHG 5j573, respectively). The accuracy of these accounts required attestation. Both firms used a process of validating the accuracy of the accounts by appointing independent auditors. As early as 1381, two pariers of the Bazacle, who were not seated on the board of regents served as controllers of the accounting kept by the treasurer (Sicard, 1953: 229). At the Castel in 1524, the custom was to have three accounting auditors appointed by the regents.[18] At the Bazacle, the statute of 1587 states that, a few days before the end of the year, the regents will vote to elect two pariers as accounting auditors.

All the accounting registers still present in the archives are signed by the auditors. Auditors signed the accounts after writing down and validating the sum of the expenses and the sum of the revenues. The practice at the Bazacle evolved over time: according to a general meeting of January 24th, 1694, regents could not elect the accounting auditors (ADHG 5j439.201). Incentivizing auditors was probably an issue because, in 1693 at the Bazacle, only pariers with at least one-half uchau could be an auditor (ADHG 5j437.48).

Proposition 2.12. *As early as 1381, some shareholders were designated to audit the accounts on a yearly basis.*

2.9.3 Institutional shareholder engagement

Private investors were involved in a third type of monitoring activity: shareholder engagement. Both companies had individual and institutional shareholders from early in their

[18] "L'an 1524 ainsi que es de bona costoma se son trobatz les messieurs conselhes vielhs et novels losquals an deputatz auditors de contes 3 paries" (Mot, 1910: 55).

histories. In this section we describe some of the ways in which the institutional shareholders exercised influence through engagement. We document the behavior of two institutional investors, the College of Mirepoix, part of the University of Toulouse, and the Chapitre Saint Etienne, attached to the Toulouse cathedral. These investors were large and long-term oriented and thus incentivized to exert voice rather than to exit (Hirschman, 1970).

The College of Mirepoix bought one uchau of the Castel in 1433 and two half-uchaux of the Bazacle in 1433 and 1434 (Foissac, 2010). These investments were important enough to be covered in one specific article in the Statutes of the College dealing with "de cura molendinorum" (on the care of the mills). In an early example of the practice of a college endowment exercising its responsibility for corporate monitoring, the chaplain of the college was obliged to take part in meetings, to visit the mills twice per month and to present the accounting of the Mills companies to the College each January 2nd with a specific oath (Fournier, 1890-1894: 785).

Proposition 2.13. *To ensure that the mill companies are managed in their interest, institutional investors as early as 1433 formalized their asset management policy to include engagement.*

The Chapitre St. Etienne was, for centuries, also very active in monitoring management. It was the the largest shareholder in the two companies. We do not have direct evidence on how it performed its monitoring activities, but indirect information attests to important engagement episodes. The Chapitre St. Etienne's interests diverged in some ways from those of secular pariers. One such divergence was due to different investment horizons: religious institutions were longer-term investors (several of them held uchaux for centuries). They did not turn their shares over and thus did not incur transactions costs. This conflict emerged in a dispute over the "droit de bienvenue" which was a substantial fee paid into the firm by a new parier. Secular pariers complained that the uchaux of religious institutions never had to pay the droit de bienvenue. This transaction tax affected the share price and thus affected

shareholders who anticipated the need to sell. Religious institutions claimed that they in fact paid their fair assessment via a "vingtième" assessment (5%) and in fact requested reimbursement of the "vingtième" in the general meeting of 1770 (ADHG 5j442.130). One such reembursement appears in March 1788 (Astre, 1791). Thereafter, the seizure and auction of ecclesiastical property by the Revolutionary government rendered this dispute mute. Thus, despite the intent of firms to render all shareholders equal, evidently religious institutions were effective in advancing their interests.

A second and more important divergence was due to the conflict over the one shareholder-one vote rule. As a major shareholder, St. Etienne tried repeatedly through the 17th and 18th centuries to gain greater control through a position on the governing board. For example, In the general meeting of December 27th, 1627 of the Bazacle company, the Chapitre St. Etienne sought to appoint a regent each year. The recorded deliberation referred to a "statute is the law of the mill" that "none of its members can have a privilege" (ADHG 5j438.64). Recall from above that the rule gave each parier with at least one-half uchau one vote, and thus the numbers of uchaux held by St Etienne did not impact its influence in the decision process. However, St. Etienne maintained its claim, and in 1640, the regent of St. Etienne continuing for one additional year (ADHG 5j438.195).

In the 1660s, a lawsuit took place between the Bazacle company and the Chapitre. The details of the case are too involved to recount in the current paper, however it involved the Parliament of Grenoble and a judgment by the Parliament of Pau on June 10th, 1664. This judgment finally allowed the Chapitre St. Etienne to appoint a regent each year. There were some constraints. The regent could not be the same person for two consecutive years unless he was chosen by others to be Surintendant. He was obliged to participate in person and could not be represented by another member of the Chapitre. In addition, presidency of the general meeting was assigned to one member of the Parliament, if any parier present at the meeting was also a member of the Parliament, or otherwise to the regent appointed by

the Chapitre St Etienne. This arbitration did not completely solve all conflicts since further claims by St. Etienne returned in 1766 (ADHG 5j16).

The lawsuit of 1664 is particularly interesting because it indicates that, while the Toulouse companies were generally successful at avoiding expropriation by government, they were not entirely successful at avoiding the use of government to implement limited expropriation of control by a major shareholder.

Despite this instance, however, the corporate governance of the Toulouse mills companies appears to have been highly effective in defending the rights of the pariers, or, in modern parlance, shareholder interests. The strict control of management by an active board reduced the moral hazard between owners and management. The one-year term of the board members, the two-step process of nomination (three potential successors named by past members before an election by the general meeting with duty to act in case of election) and the weak latitude of the board left most choices to the general meeting and reduced the potential for moral hazard between the formal monitors and other standard investors. Passive monitoring was facilitated thanks to the talha system and the explicit vote on expenses during shareholder meetings. Occasional conflicts arose between the firms and activist shareholders, but the one-shareholder one-vote rule mitigated against capture by a controlling or influential shareholder – at least until the 17th century.

3 Conclusion

The existence of modern corporations in medieval Toulouse constitutes an important empirical observation for several fields of research: corporate finance, institutional economics and economic history. From the perspective of corporate finance, the arrangements we document in this paper contributed to protecting shareholder value by addressing the fundamental problems of agency. Generally, investors were protected without legislative regulation, but

rather by the specific rules of governance enacted by contract. This included a combination of incentives and monitoring and rules preventing conflicts of interest. The corporate governance techniques deployed in the Toulouse milling companies appear very similar to the standard "Anglo-Saxon" form of corporate governance, introducing a new, independent observation into the debate on the origin and explanation of capitalism's observed variety (Hall and Soskice, 2001; Guinnane et al., 2007). The similarities might be due to the universal nature of mankind; certain arrangements to mitigate or to take advantage of self-interest work in different places and different times.

The observation of efficient corporate governance in the context of an economy ruled by Roman law at first glance seems to contradict the law and finance theory that a codified legal regime restricted the adaptability of institutions to economic needs (Beck et al., 2003). However the fact that Toulouse law has its foundations in a mercantile Visigothic tradition may mitigate this contradiction – it highlights the importance of understanding the details of the legal environment in which an institution appears.

Another field of research to to which the analysis of the Toulouse companies contributes is economic history. The revelation of the existence of modern corporations in medieval Toulouse has also important implications for the role played by economic history as evidence in the analysis of institutions. The genesis of the modern corporation we analyze in this paper is totally different from the Northean account, and from the narrative of the genesis of the East India companies. This independent genesis provides an opportunity to distinguish among the institutional changes occurring in the Netherlands and England in the 17th century which innovations are a function of specific context as opposed to an equilibrium institutional solution. For companies involved in long-distance trade, a major challenge was to find long-term capital and to extend that investment over multiple voyages (Dari-Mattiacci et al., 2013). In the case of the mills of Toulouse, due to the nature of the business, the capital was permanent from the beginning. The second step for the East India companies

was the tradability of shares. In the Toulouse case, due to the nature of the asset and to the institution of pariage, the tradability was a basic feature already mentioned in the first enfeoffement at the end of the 12th century. The division of an asset into transferable shares was a recognized institutional practice due to the rule of strict equality among heirs in the Roman law (including female heirs via dowry) (Débax, 2012).

In terms of institutional analysis, the main difference between the Toulouse and Dutch evolutionary paths to the corporate form in the case of the Toulouse companies had little to do with legislative decisions allowed by the limitation of the state power, as was the case with the East India companies (Dari-Mattiacci et al., 2013). The development in Toulouse of a business structure with many features of modern corporations achieved via private contracting provides a counter-example to the hypothesis of a required legislative role (Hansmann and Kraakman, 2000). This is a potentially important difference because, among other things, it suggests that strong legal institutions (i.e. contracting and property right institutions) as opposed to strong legislative institutions (i.e. a parliamentary control on the state decisions) are sufficient to support the emergence of the corporation. In fact, the Toulouse political framework over the life of the companies passed through various stages of strength and weakness as its ultimate incorporation into the French state evolved.

The Toulouse companies shed light on the necessary and sufficient conditions to support the development of the corporation and related corporate-like forms. A potential survival bias exists by focusing on the successful East India companies as original models of the corporation when other examples of corporations may exist elsewhere in Europe. We identify in the feudal regime a favorable institutional environment for the emergence of a corporate form. Several of the predecessor mill companies flourished in a time and a place where the state was very weak and individual rights well defended by the city consuls; the Count renounced most of his rights in 1189, and the King of France did not play a major governance role for a long time. Thus, these mills enjoyed in medieval Toulouse a favorable institutional

context as did the later VOC in the Netherlands (Gelderblom, 2013). Of course the charge of survival bias applies to the Toulouse companies as well. They evolved a set of rules that led to long-term institutional stability. Perhaps other corporate-like forms appeared and disappeared throughout history because they failed to adequately develop techniques for preventing institutional failure.

The development of the corporate form in Toulouse does not refute the standard view that this evolution required efficient property right institutions with limited state expropriatory power. Rather, it refutes the idea that this kind of environment was not available in medieval times and appeared only in the English-Dutch countries of the 17th century after the emergence of the credible commitment of the state (Coffman et al., 2013). Perhaps medieval Toulouse was an exceptional window of opportunity. However, despite the rise of the power of the French king, these institutions continued to prosper for centuries.

The existence of corporations in medieval Toulouse set up to mill wheat also suggests that the corporate form is robust to business and legal context. Indeed, the Dutch maritime trade and the Toulouse milling industry are radically different. But in the two cases, the corporate form emerged as an efficient solution to solve economic problems.

According to New Institutional Economics, a favorable institutional environment is a precondition to complex economic development. "Once property rights have been defined and their enforcement assured, the government steps aside. Resources are allocated to their highest value as the marvel of the market works its wonders" (Williamson, 2000). In the Toulouse area, these favorable rules of the game led to only a few institutional examples of the corporate game being played, and in any case, the European economic take-off did not start there. Empirical tests of the relation between institutions and growth frequently suffer an endogeneity bias (institutions cause development but development also causes institutions). In the Toulouse case, it appears that a modern institution was not accompanied by "modern growth," raising the question of how to reconcile this unusual situation.

Three explanations seem reasonable. First, a powerful economic takeoff took place in the Middle Ages especially in the Toulouse area but may have been impeded by other factors such as the cost of the Crusade to the Holy Land, its inclusion in the French kingdom after the Albigensian crusade, the plague of 1348 or the Hundred Years War. According to this potential explanation the absence of growth after the design of effective corporate governance mechanisms is not due to an institutional factor because the Toulouse companies survived for a long time afterward.

A second potential explanation for the existence of modern corporate institutions without growth is that the presence of efficient institutions is a necessary but not sufficient condition for economic growth. This explanation would encourage scholars to look for other determinants of economic growth. Besides institutions, what was present in late 18th century England that was not present in 14th century Toulouse? Current research investigates potential candidates such as Atlantic trade (Acemoglu, et al., 2005), demographic transition (Voigtlander and Voth, 2006) and coal (Pomeranz, 2000).

A third explanation could be that the European economic takeoff is a longer process than generally accepted. Europe had been developing institutions since the Middle Ages – the Toulouse companies were forerunners of this evolution. This view joins recent research finding a long-term correlation between current levels of development and very long-term history (Spolaore and Wacziarg, 2013). It would also be consistent with the concept of the "Western legal tradition" of Berman (1985) which is the particular set of legal institutions, values, and concepts capable of stimulating growth and development over an extended period. Considered in this light, the understanding of the evolution of the governance of the Toulouse companies might even help design pro-business policies for tomorrow.

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