

A discusión

THE SECRET OF VENETIAN SUCCESS: THE ROLE OF THE STATE IN FINANCIAL MARKETS*

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ABSTRACT

The commercial success of Venice hinged on her merchants' ability to do business with borrowed money. However, to raise other people's capital, merchants needed to commit not to embezzle the capital received. Despite this commitment problem, the evidence indicates an active financial market through which the Venetians, by and large, mobilized their savings to investments. What were the institutional foundations of this market? This paper claims that neither reputation-based institutions that did not rely on the state nor a coercive legal system provided such foundations. Instead, the state generated the rents and information required to induce merchants to refrain from acting opportunistically.

Keywords: Institutions for Contract Enforcement; State Formation; Financial Markets; Late Medieval Venice

Long-distance trade contributed much to the great European expansion of the late Middle Ages from the eleventh to the fourteenth centuries.¹ The Italian city-states were the nerve centers of this process and, among them, Venice excelled in economic growth, political stability, and social development.² The commercial rise of Venice depended to a large measure on the extent to which financial markets enabled Venetian citizens to convert their savings into risky investments in overseas trade.³ However, the operation of financial markets required that merchants were able to commit ex-ante not to embezzle ex-post part or all of the investors' capital. How was the commitment problem mitigated?

Previous historical institutional analyses, most notably the work by Avner Greif, have found that various reputation mechanisms in the absence of the state or even despite the abuses of the state enabled trade relations to expand during the Commercial Revolution.⁴ In contrast, this paper finds that the state played an active and salutary role in encouraging commerce and suggests that this distinctiveness might well be among the factors leading Venice to be the most economically successful and lasting among the maritime Italian city-states. Yet, the Venetian state cannot be identified with the legal system, at least as traditionally described by economic historians and economists. For example, some scholars, such as Roberto S. Lopez and Raymond de Roover, have implicitly assumed that the legal system could enforce the execution of all contracts.⁵ Others, such as Carlo M. Cipolla and Douglass C. North, have noted the limits on exchange imposed by the boundaries of the court's jurisdictional power and information costs, but have failed to provide any detailed analysis of the institutions that motivated merchants to refrain from renegeing and misrepresenting information in the absence of an effective legal system.⁶

This paper, in contrast, argues that the Venetian state supported a reputation mechanism through which the carrot of economic rents, on the one hand, and the stick of losing these rents and, possibly, legal suits, on the other hand, *induced* merchants to fulfill

¹ Cipolla, *Before the Industrial Revolution*; Lopez, *Commercial Revolution*; and de Roover, "Organization."

² Lane, *Venice*, and Norwich, *History of Venice*.

³ Lane, *Venice and History*, pp. 56-57.

⁴ Greif, "Reputation," "Contract Enforceability," "Cultural Beliefs," "Political Foundations," and *Institutions*. For other non-state reputation mechanisms, see also, Clay, "Trade;" Greif, Milgrom, and Weingast, "Coordination;" Hicks and Thompson, "New Theory;" Hoffman, Postel-Vinay, and Rosenthal, *Priceless Markets*; Moriguchi, "Implicit Contracts;" and Yang, "Transacting." For other related works on development economics and public finance, see, among many, Banerjee, Besley and Guinnane, "Thy Neighbors's Keeper;" Besly, "Property Rights;" Besly, Coate, and Loury, "Economics;" and Fafchamp, *Market Institutions*.

⁵ Lopez, *Commercial Revolution*, and de Roover, "Organization."

⁶ Cipolla, *Before the Industrial Revolution*, p. 164 and North, *Institutions*, p. 57. Other works in the area of Law and Economics have stressed the fixed cost of lawsuits, the offender's inability to repay in the absence of collateral, the long duration of judicial proceedings, and the potential subversion of justice (Posner, *Economic Analysis*; Shavell, "Model;" Djankov, La Porta, Lopez-de-Silanes and Shleifer, "Courts," and Bianco, Japelli and Pagano, "Courts and Banks;" and Glaeser and Shleifer, "Rise of the Regulatory State").

their contractual obligations with other Venetians, thereby enabling them to exchange through financial markets. First, Venice exclusive trading rights and political barriers to entry created the economic rents required to motivate city-merchants not to embezzle the investors' capital and flee to avoid sanctions. Second, tight administrative controls over trade provided the (verifiable) information required to evaluate merchants' conduct and to punish cheaters. Third, the state used both its administrative power to exclude fraudulent merchants from enjoying present and future economic rents and its coercive power to confiscate their properties within Venice and her colonies. Finally, Venice limited government induced those running the state to provide impartial third-party enforcement to the Venetians and to not abuse their power.⁷

The fact that Venetian citizens benefited from economic rents is not new. For example, Frederic C. Lane has formerly pointed out that outstanding commercial privileges abroad, protective convoys, and staple rights made Venetian commerce more secure and profitable.⁸ Yet, the interplay between the subsequent economic rents and the state's ability to enforce contracts has passed unnoticed. Furthermore, the state did not only implement a commercially-oriented naval and diplomatic policy aimed at achieving economic rents but it also introduced political restrictions on entry when the commercial expansion that it fostered eventually pushed rents down. The Venetian state thus enabled the mobilization of the entire City's resources to long-distance trade for over two centuries but excluded foreigners and after 1305 Venice general populace below the rank of citizen from Venetian privileged trade. Nonetheless, the Venetian state sustained broader financial relations than those prevailing in other contemporary cities where the government played only a minor role in enforcing contracts.

Yet, an important question remains to be addressed. Was the state a self-enforcing institution? An analysis of the interaction among Venice economic institutions, social structure and political system suggests that the state actually motivated the Venetians to take the actions that, on the aggregate, perpetuated the state. The operation of the state as an impartial third-party enforcer enabled the Venetians to exchange through financial markets and hence ensured a wide distribution of trading profits. This motivated the Venetians to cooperate in rendering the polity of Venice supportive to trade and to resist anyone's attempt

⁷ In this respect, this paper links to the political science literature on the governments' commitment problem: any government strong enough to define and arbitrate property rights is also strong enough to abrogate them for its own benefit. Unless the government finds a way to tie its own hands, the population will not invest, thereby depriving the government from the tax revenues necessary to ensure its own survival. For some historical solutions to this problems, see Caballero, "Institutional Change;" Greif, "Political Foundations;" Greif, Milgrom and Weingast, "Coordination;" Haber, Razo and Maurer, *Politics of Property Rights*; North, *Structure and Change*; and North and Weingast, "Evolution of Institutions." See also Olson, *Power and Prosperity*.

⁸ Lane, *Venice*, pp. 32-43, 58-63 and 125.

to gain political control over the city and its economic resources, which in turn reduced the incentives to challenge the existing institutions.

To conduct this work, I draw on the almost 1000 notary acts preserved in the State Archive of Venice and transcribed in full by Raimondo Morozzo della Rocca and Antonio Lombardo for the period 1021-1261.⁹ To better interpret this fragmentary and notary-biased evidence, I compare it with secondary studies based on Genoese notary records of the twelfth century. These historical records enable me to, first, build up a context-specific game in which the state emerges as an institutional equilibrium and, second, evaluate various theoretical predictions generated by the game under the assumption that the state governed financial relations. Empirical confirmation of these predictions lends support to the hypothesis that the state functioned as an enforcement and information-transmission mechanism. This view is further corroborated by the weakness of alternative explanations: neither the fear of God, loyalty among the family, nor private-order institutions based on bilateral or multilateral reputation are theoretically consistent with the observed operation of anonymous markets among the Venetians and with the exclusion of non-Venetians.

1. Financial Markets

The large extent to which financial markets operated among the Venetians from the eleventh to the thirteenth century has been celebrated by the eminent historian of Venice, Gino Luzzatto. According to him, “the situation and mentality of those crowded groups of financiers of maritime trade did not differ much from that of today's savers in a big city where wealth prevails in the form of personal estate. Soon after they observe a joint stock company to flourish, they hasten to buy the equities it issue although they are awarded of the complete lack of control over its management.”¹⁰ The evidence indeed reveals that financiers of all means, social status and occupations invested a substantial part of their wealth in overseas trade. For example, at the time of his death in 1268 the ruler of Venice doge Raniero Zeno held over half of his fortune in 132 commenda contracts of various amounts.¹¹ From the testament of the prosperous although non-noble merchant Lazzaro Mercadante we know that in 1281 he also held most of his property invested in overseas trade.¹² Besides, the funding of long-distance trade in Venice was in no way confined to a professional merchant class, but it

⁹ Morozzo de la Rocca and Lombardo (henceforth MRL), *Documenti and Nuovi Documenti*.

¹⁰ Luzzatto, *Studi*, p. 72. The Venetian commenda has been often assimilated to an equity contract. In other localities, however, the commenda worked both as a financial and as a labor contract. There is no controversy about the financial character of the sea loan, which has been identified with a bond or a debt contract.

¹¹ Luzzatto, *Studi*, pp. 81-87.

¹² *Ibid.* pp. 61-65.

was rather opened to orphans and widows, priest and nuns, craftsmen and other persons without business experience.¹³ In sharp contrast, Genoese cartularies indicate that the Genoese invested a significant portion of their capital in non-trade related activities and that trade investments were concentrated on the hands of a few noble families.¹⁴

Financial relations in Venice were very flexible. Well-established merchants received funds from investors with considerable assets and political influence as well as from small investors. For example, Domenico Gradenigo, who had been born into a centuries' old Venetian patrician family, raised funds for a voyage from Venice to Constantinople and back in 1223 simultaneously from Pietro Ziani, the ruler of Venice himself and probably the richest men in town, and from a widow of aristocratic origin.¹⁵ Likewise, ambitious young merchants received funds both from rich investors with a high social and political standing and from ordinary members of society with some cash. During the late-twelfth century Pangrazio Stagnario, the son of a liberated Croat slave, raised funds from both Pietro Ziani and various other investors whose families are unknown.¹⁶ That one of Pangrazio's sons, Zaccaria Stagnario, handled much larger sums in commerce than did Domenico Gradenigo, owned significant estates, and held high public office testify to the fluidity of Venetian society.¹⁷

Usually a merchant received funds from several investors, while investing in other merchants' ventures for the sake of diversification. In 1167 Romano Mairano outfitted two ships for a round trip from Constantinople to Alexandria. In addition to raising funds "to carry on the ship in which he was master" both internally through his own investments and externally through eight sea loans, he financed several of the merchants who voyaged on the second ship. The extent to which this practice was commonplace is reflected by the fact that half of Romano's eight documented creditors were themselves merchants on this latter ship.¹⁸ Cautious investors did not only diversify by giving their money to several merchants going to the same destination, but also trading in different goods, centers and periods of time. For

¹³ The Author based on MRL, *Documenti* and *Nuovi Documenti*.

¹⁴ Greif, *Cultural Beliefs*, pp. 928-29. In actual fact, the number of the Genoese active in trade increased dramatically by the end of the twelfth century. Yet, Venice stood out for channeling the capital of a wider range of people into overseas commerce. In 1305 political barriers to entry excluded the common people below the rank of citizen from Venetian financial markets but all citizens engaged in overseas trade with almost the same rights.

¹⁵ MRL, *Documenti*, # 604-605. More generally, see Buenger, "Domenico Gradenigo."

¹⁶ MRL, *Documenti*, # 265, 301, 333, 357, and 415.

¹⁷ Ibid. # 370, 444, 467, 487, 517, 526, and 566, and Ibid. *Nuovi Documenti*, # 75. See also Buenger, "Domenico Gradenigo." From the eleventh to the thirteenth centuries Venetian society was characterized by a high but decreasing degree of upward mobility (Castagnetti, "Comune;" Gasparri, "Orseolo," pp. 797 and Lane, *Venice*, pp. 89-91). However, the Closing of the Great Council in 1297 made political office a prerogative of the *patriciate* and regulations passed in 1305 excluded Venice populace from the rank of citizens admitted to overseas trade.

¹⁸ Ibid., # 183, 187-190, 193-198, 201, 203.

example, in 1235 Gabriel Marignoni invested in two sea ventures, one to Fermo in the West Adriatic and the other to the Eastern Mediterranean, and in 1238 he once again financed another two merchants, one heading to Ancona in Italy and the other to Zara in Dalmatia.¹⁹

To spread the risks inherent in overseas trade, the Venetians, in addition to diversifying their portfolios to the extent possible, used sea loans and commenda contracts. The sea loan was a fixed payment loan with the particular feature that the investor took the risk of loss by shipwreck, piracy or confiscation by greedy rulers in foreign lands and was therefore allowed a higher rate of return. The commenda or *collegantia*, as the Venetians called it, was a partnership agreement through which an investor supplied funds on which he both accepted the risk of loss and received a return depending on the trade conducted by a merchant. The sea loan, which was the dominant contract in Venetian long-distance trade during the early and mid twelfth century, was progressively replaced by the commenda, which prevailed by the third decade of the thirteenth century.²⁰

2. The State as a Self-sustaining Institution for Contract Enforcement

Venetian financial markets were instrumental to the City commercial success. However, mobilizing capital from savings into risky investments in overseas trade required that merchants were able to commit on their financial obligations. For example, a potential investor would not fund a sea venture without being assured that the merchant would not take his money and run. Neither would he enter into a risky exchange unless he was convinced that the merchant would comply with the terms of the contract. In the absence of institutions enabling merchants to commit on their agreements, financial relations would have not transpired. Yet, the evidence indicates a very active financial market through which Venetians of all means, ranks, and professions invested sizeable sums into a partially diversified portfolio in long-distance trade. What were the institutional foundations of this market?

2.1. The Legal System, Incentives and Economic Rents

Although long-lasting legal institutions— such as a codified system of law, permanent courts, and judicial enforcement based on confiscation of the offender’s property— emerged during this period of time, a medieval court could not use coercion over a merchant who emigrated. Tracking down a fleeing merchant at a time previous to the passport, the credit card, and the current communications and information technology was still more difficult than

¹⁹ See *Ibid.*, # 694 and 701, and 709, 711 and 715.

²⁰ The Author based on MRL, *Documenti* and *Nuovi Documenti*.

locating today a fraudulent CEO who secretly moves to a fancy villa in the middle of nowhere. Even if a merchant could be located, a Venetian court had no jurisdiction over a rival state's newly naturalized citizen.²¹ In later centuries the frightful Council of Ten was renowned for hiring assassins to hunt down traitors to the Republic throughout Europe, but late-medieval Venetians could not count on these coercive means to enforce their financial agreements.

Incentives for merchants to resist the temptation of fleeing with the investor's capital were thus necessary to enable them to commit on their financial obligations. The theory of repeated games tells us that a merchant can be induced to voluntarily refrain from embezzling the investor's capital and never return to Venice by creating a gap between the merchant's expected lifetime utility of keeping his city affiliation and his best alternative elsewhere. The evidence indicates that the Venetian state created such gap by generating exclusive economic rents and distributing them among all Venetian merchants fairly.

The economic rents derived mainly from Venice staple rights, the organization and protection of state's convoys, and commercial privileges abroad. First, staple rights favored the staple city over others on a certain area by requiring all wares exchanged in that area to be brought to the staple city, unloaded there to pay taxes, and put there for wholesale. Venetian *Lordship of the Gulf* gave Venice a staple status over the Northern Adriatic to the exclusion of potential competitors, especially of nearby Ferrara, Ancona, and Zara, and enabled all the Venetians to make a profit as middlemen on the transit trade between Europe and the East.²² Second, Venice provided protection from pirates and from rival cities at less cost than was available to others. She did so chiefly by outfitting a fleet devoted to making the seas safe for City merchants and renting space to all of them equally on the state-owned galleys escorted by that fleet.²³ Last but not least, commercial privileges secured merchants' property rights abroad, reduced the punitive custom duties they must have paid otherwise, provided attractive lodgings and warehouses facilities, and so forth. Venice, of course, was not the only European polity that acquired possessions and legal rights in the Mediterranean, but she proved particularly successful in assuring commercial privileges to all her merchants and in excluding others from this advantageous trade.²⁴

From as early as the late eleventh century the Venetians enjoyed a competitive advantage over others in the Byzantine Empire, including native merchants who paid a 10 percent tax on trading transactions from which all the Venetians were exempted. They had

²¹ Inter-community litigation, although possible, was particularly costly and time-consuming (Greif, *Institutions*).

²² Lane, *Venice*, pp. 58-63.

²³ *Ibid*, pp.125 and 145-46.

²⁴ The main references in English are *Ibid*, pp. 23-43 and 73-85 and Norwich, *History*, pp. 65-147.

won their privileged position in 1082 in return for their naval aid against the Normans and kept on using their naval strength to persuade the Byzantine emperors to renew and even extend their privileges.²⁵ Furthermore, Venice leading role in the Fourth Crusade assured the Venetians a trading monopoly in the subsequently constituted Latin Empire of Constantinople— the former Byzantine Empire— from 1205 to 1261. Contrary to the Genoese colonization, which was the work of private consortiums, the ruler of Venice himself, doge Enrico Dandolo, negotiated the transport contract with the crusaders for the Venetians as a whole, committed at least half of all the Venetians fit for fighting to service for a year with the crusades and led the assault on Constantinople.²⁶

Venetian commercial penetration into Muslim territories was also facilitated by the grant of privileges. For example, the predominance of Venetian merchants in Alexandria during the first half of the thirteenth century responded to their privileged position there from

²⁵ In 1082 the Byzantine emperor Alexius I Comnenus liberated the Venetians from all tariffs in most cities, granted them whole districts in Constantinople and Durazzo, and gave a tribute to the Venetian church of St. Mark, the more acceptable as it was raised from a tax on their rivals of Amalphi. In 1099 the Venetians, who had at first refused to join the First Crusade, assembled the largest fleet that had ever sailed from Italy to the East after the Pisans occupied the Byzantine island of Corfu and forced the remnants of the Pisan crusading fleet to stop any trade within the Empire. In 1120 the Venetians concealed under the cover of a holy Crusade a punitive expedition against the Byzantines, whose emperor John II Comnenus had recently suspended their lucrative privileges. Apart from inflicting a crushing defeat on the Fatimid army just off Ascalon in 1123, marking the beginning of the Italian naval domination of the entire Mediterranean and obtaining as reward the exemption from all taxes and a commercial quarter in every town in the Latin Kingdom of Jerusalem, the Venetians raided the Byzantine parts of the Aegean and the Adriatic, forcing the emperor to restore their privileges.

To check Venetian domination, the Byzantine emperors repeatedly tried to replace the Venetians with the Genoese and the Pisans under less favorable terms. Most notably, Manuel I Comnenus signed treaties with Genoa in 1169 and with Pisa in 1170 in which tariffs were reduced from 10 to 4 percent— as opposed to the total exemption for the Venetians— and had all the Venetians who were in the Empire arrested on a single day (12 March 1171) and their goods impounded. However, the Byzantines found the Genoese and the Pisans no better to deal with than the Venetians and, accordingly, expelled the formers from Constantinople in 1182 and allowed the latter to return to the city in 1183. In the meanwhile, the Venetians concentrated on the recently open and very profitable trade with Alexandria.

²⁶ Venice thus became the *Lord of One Quarter and a Half of a Quarter of the Roman Empire* and actually took possession over a chain of naval enclaves that formed the basis for her maritime supremacy in the eastern Mediterranean from that time forward. The Venetians also obtained the right to trade free of all controls and requisitions, without paying a tax, and under her own law over the whole Empire, from which both the Genoese and the Pisans were to be rigorously excluded.

In 1261 Genoa assisted the Byzantines to recover Constantinople in return for the latter's promise to expel the Venetians from that city and to grant them favored status there. Yet, the Venetians were readmitted in 1268 and the Genoese obtained a suburb across the Golden Horn in Pera, rather than the docks in Constantinople itself that the Venetians had possessed since the eleventh century. Moreover, while the Genoese were in favor with the Byzantines at Constantinople and in the Black Sea area, the Venetians continued to exert substantial influence on the eastern Mediterranean and became the closest trade partners of the Mamluk sultan of Egypt, by then the most profitable trading region.

about 1200.²⁷ Furthermore, the Venetians, unlike the Genoese and then the Catalans, resisted engaging in piracy raids on Muslim shipping and ports and used Venice skilful diplomacy to extract more and more special privileges from the Mamluks, who ruled Egypt and then Syria from 1250 to 1517. As a result, Venetian trade expanded, whereas Genoese and Catalan trade decreased.²⁸

2.2. Political Restrictions on Entry

Exclusive commercial privileges, protected convoys, and staple rights created economic rents to which only Venetian merchants had access, thereby inducing them to keep their City affiliation and enabling them to credibly commit not to embezzle the investors' capital outright. Economic rents thus generated effective barriers to exit but attracted labor and capital, which, unless constrained, would have congested the market and forced rents down. To sustain the rents on which Venetian institution for contract enforcement was based, the state introduced political barriers to foreign and domestic entry.

As we have seen, foreigners were strictly barred from Venetian privileged trading. In addition, they were outlawed to testify against a Venetian, which impaired their ability to rely on the state for their contracts enforcement and discouraged their investments in Venetian trade.²⁹ Yet, as long as a foreigner investor could assure a Venetian merchant that their bilateral relation would last for a long time and that the latter's share on profits would be higher than it was customary among the Venetians, he could be certain that the Venetian merchant would both agree to do business with him and repay his debts. During the late thirteenth century foreigners were thus prohibited to appoint Venetians as agents or otherwise use their names to avoid taxes or participate in business reserved for Venetian citizens. To

²⁷ Jacoby estimates that the vast majority of the 3000 Italian merchants or so present in Alexandria during 1215-1216 were Venetians ("Dimensione," p. 690). Like other naval powers, Venice had obtained a *fondaco*— a walled enclosure that served as a combined warehouse and hostel— in Alexandria in the 1170s but, unlike her competitors, Venice gained a second *fondaco* and the privilege to have consular representation in the city in 1208. Among other things, Venetian consuls were in charge to adjudicate disputes among Venetian merchants and between Venetians and other Latins. New privileges were granted in 1238 and renewed in 1244. Local (Ayyubid) rulers in Syria granted privileges to the Venetians in 1207/1208, 1225, 1229 and 1254.

²⁸ Venetian trade with Egypt and Syria was able to continue under Mamluk rule (1250-1517) on the basis of privileges granted in 1254 and 1289, respectively. After the fall of Acre in 1291, the popes prohibited trade with the Mamluks but the Venetians did not implement the ban except for the period 1323-1345 and then complied with it only partially: the Venetian lucrative trade with the Mamluks continued by way of the intermediate ports of Cyprus and Lesser Armenia. In 1370 Venice actually secured a general peace with the Mamluks, which permitted the Venetians to dominate European trade in Alexandria and to develop and expanding trade in cotton with Syria.

²⁹ An 1162 document reads that "according to the custom of the court of the doge, no one except a Venetian can testify against a Venetian" (Roberto, 1906, p. 23. See also, Besta and Predelli, "Statutti," p. 67).

enforce these laws, colonial governors were ordered to check all commercial contracts within their jurisdictions and to verify the merchants' financial statements.³⁰

During the twelfth and thirteenth centuries immigrants were required to reside and pay taxes in Venice for ten years to become citizens. This is in sharp contrast with most other medieval cities, where naturalization required only one year of residence, without tax-paying. In 1305 regulations concerning admission to citizenship were tightened. Immigrants needed then to reside and pay taxes for 25 years before ranking as Venetians in shipping merchandise and paying customs in overseas trade. At the same time Genoa, with a slightly smaller population, granted full citizenship by three years of residence.³¹

The 1305 regulations also established that out of the individuals born in Venice only those who could claim three generations of Venetian descendant and who had never engaged in "mechanical" labor were to be considered *original citizens* or citizens-by-birth. Thus, after almost three centuries of population growth hindered by trade expansion in which significant numbers of new men were able to acquire economic and political prominence, the vast majority of Venice residents were excluded from the ranks of citizens allowed to trade and invest overseas.³²

Also, at various points during the fourteenth century when overabundance of Levantine products in Venice was eroding profits, Venetian merchants were prohibited to import Levantine wares of more value than their assessed patrimony in the *estimo*, on the basis of which they contributed forced loans.³³ The evidence indicates, however, that the *Officium de Navigantibus*, the newly established magistracy in charge of enforcing the law, did not curtail commercial credit among citizens-by-birth but it rather restricted investments in overseas trade made by foreigners and recently naturalized citizens.³⁴ An investment ceiling had in fact been applied to naturalized citizens in 1318 and the rule that new citizens could not invest in maritime commerce sums exceeding the amount of personal wealth for which they were assessed for fiscal purpose was maintained after the demise of the *Officium*

³⁰ Jacoby, "Venezia," p. 291; and Lane, *Venice*, p. 140.

³¹ Caravale, "Istituzioni," pp. 304-12; Jacoby, "Dimensione," Lane, *Venice*, pp. 151-52; and Lopez, "Trade," p. 333 and 348. The 1305 regulation distinguished between full citizenship and half citizenship. The latter entailed immigrants to Venetian trade privileges within the city after fifteen years of tax-paying residence. Contrary to the Genoese liberal policy in granting colonial citizenship, the Venetians barely admitted foreigners to their colonies.

³² Caravale, "Istituzioni," pp. 304-12, and Lane, *Venice*, pp. 151-52. According to Bairoch, Batou, and Chevre, the city population grew steadily from about 45,000 inhabitants in 1050 to over 110,000 in 1330 ("Population"). Since no medieval city reproduced itself, most new inhabitants must have been immigrants.

³³ The law was in force for a few months in 1324 and for the periods 1331-38 and 1361-63. The same restrictive mechanism was applied in 1404 during the banking crisis to limit the bankers' investments of depositors' funds in maritime commerce (Lane, *Venice*, pp. 140 and 185 and Müeller, *Venetian Money Market*, pp. 168 and 503).

³⁴ Luzzatto, *Storia*, pp. 123-24; Lane "Recent Studies," p. 138; and Müeller, *Venetian Money Market*, p. 503.

de Navigantibus in 1363 and the definitive lifting of investment's quotas for original citizens.³⁵

The identification of these political barriers to entry as essential elements of the Venetian institution for contract enforcement thus helps explain the distinctiveness and timing of the Venetian legislation. Governed by the state, the Venetians needed both to reserve to themselves the rents of their privileged trade and to maintain these rents high by restricting access to citizenship and limiting the supply of Levantine wares in Venice when competition was pushing rents down.

2.3. *Verifiable Information*

Economic rents induced merchants not to change destination once en-route and never return to Venice. However, even if turning back to the city, merchants could still breach their contracts, for example, by falsely reporting a small profit and embezzling the difference. To reward honest merchants and punish cheaters, the state needed to know when and to what extent a contract had been violated. Tight administrative controls over trade provided the (verifiable) information required to adjudicate commercial disputes. Since evidence on this respect has been presented in detail somewhere else, a brief summary will suffice here.³⁶ State delegates in the Venetian colonies abroad, scribes en-route, and public brokers in Venice increasingly monitored commercial ventures in each and all of their phases, thereby generating verifiable information which the parties could present in disputes. The resulting enhanced state's ability to verify information, however, did not crystallize all at once, but it rather developed incrementally as overseas trade became well-established throughout the Venetian enclaves in the East and trading voyages were organized in state's round convoys from Venice to her colonies. As a result, the commenda contract progressively replaced the sea loan as the twelfth century turned to its close and prevailed by the third decade of the thirteenth century, when Venice consolidated her commercial and colonial Empire in the East.

2.4. *Judicial Enforcement and Exclusion*

The state could thus inflict sanctions on returning merchants known to be in bad standing. Another issue is whether the state was willing to do so. As it has already been mentioned, the state discriminated against foreigners but, at least in theory, provided the

³⁵ Müeller, *Venetian Money Market*, pp. 151, 265, 503 and 616; and Hocquet, "Mecannismi," pp. 573 and 595-96.

³⁶ González de Lara, "Institutions."

Venetians “a responsible justice equal to all.”³⁷ According to Lane, the Venetian system of law had in fact a high reputation of impartiality.³⁸ The existing evidence indicates that the state indeed used its legal and administrative powers to punish City merchants found guilty of having violated their financial agreements with other Venetians.

On the one hand, offending merchants were subject to the legal seizure of their properties within Venetian jurisdiction. The Statutes of the City, which basically endorsed the prevailing custom, established, probably in 1192, that court sentences be fulfilled within eight days during which the offender could neither leave Venice nor dispose of his goods. If a debtor failed to pay in full or otherwise arrive at an agreement with his creditors within that time, he ought to be incarcerated in court for a month and thereafter in prison for another month. After these two months, the sequestration of his goods was to proceed.³⁹ Litigation over various commenda contracts indeed resulted in the forced sale of the merchant’s real property in 1195 and in the transfer of the possession of a particular property from the guarantor to the plaintiff in 1226. Another case from 1241 shows that the Doge and his court auctioned the personal property of a deceased merchant and, because the amount retrieved was insufficient to fully satisfy his creditors, the merchant’s house was publicly sold.⁴⁰ Furthermore, confiscation of real property due to failed credits was also extended to properties in the colonies. For example, in 1178 Leone Falier gave power of attorney to act against one of his debtors’ property in the Venetian colony at Tyre.⁴¹ Evidence on a few successful legal actions notwithstanding, attempts to collect defaulters’ assets might prove

³⁷ *Promissione* of doge Giacomo Tiepolo, 1229, cited in Besta and Predelli, “Statuti,” p. 60.

³⁸ Lane, *Venice*, p. 251. See also Gasparini, “Venice,” and Norwich, *Venice*, p. 151.

³⁹ Besta and Predelli, “Statuti,” St. Enrico Dandolo, c. 36. See also c.7-14 and c.73.

⁴⁰ See, respectively, MRL, *Documenti*, # 424, 626, and 743. For evidence on the merchant’s prohibition to administer his property before settling his legal disputes, see *Ibid.* # 466; 630-31; and 853; and MRL, *Nuovi Documenti*, # 20 and 41. For the legal seizure of real property due to failed loans, see MRL, *Documenti*, # 76, 174 and 175; 176; 281-83; and 528. For the existence of a very active market for rights over alienated property, see *Ibid.* # 281; 424; 554, 556, 557 and 581; and 624 and 844. The court helped enforce contracts even under extreme circumstances. In 1170 the brothers Marco and Pietro Giustiniani had financed Vitale Bembo for his disastrous trip to Constantinople, where his property was impounded by order of the Byzantine emperor Manuel Comnenus. Since Vitale had received funds through a sea loan, he was exempted from re-payment. However, twenty years later the Byzantine emperor Issaaco sent compensation for damages, thereby reversing the outcome of Vitale’s venture from loss to profit. On request of the brothers Giustiniani, the Doge and his court ordered that their credit be fully satisfied before delivering any compensation to Vitale (*Ibid.* # 466).

⁴¹ *Ibid.* # 295. See # 783 for a 1247 document revealing the similarities between courts in Venice and Negroponte.

fruitless.⁴² In that case, the City Statutes established the garnishment of one-third of the debtor's future income until completing the payment.⁴³

On the other hand, merchants with a pending debt were barred both from holding any public office and from entering the marketplace of the Rialto and the administrative and judicial site of San Marco, which in all effect excluded them from doing business.⁴⁴ Besides, they faced the prospect of being denied permission to join the convoys organized and protected by the state. The existing contractual evidence for the thirteenth century indicates that the parties indeed expected the state to select the personnel of the trading fleets. A 1242 commenda contract reports that a merchant had received an amount

*... to do business with by sea and by land ... if [he] will be among those chosen men who are chosen according to the decree given by the lord Doge and his council; and if [he] will not be among those chosen, [he] will have the power to commit that merchandise or a part of it, with the witness of good men or with a charter, to some or to someone among those chosen.*⁴⁵

More generally, over half of the 261 thirteenth-century trading contracts make explicit the merchant's requirement to obtain a *licentiam* from the Doge and his council.⁴⁶

2.5. A Limited Government

In sum, the state— an impartial third-party enforcer that created economic rents and a legal system, established political barriers to entry, generated and transmitted verifiable information, and punished cheaters— supported the operation of financial markets among the Venetians. Why did the state behave the way it did? To understand the reasons underlying the state observed behavior, one must turn to the political system. First, Venice governing

⁴² For example, in 1249 the heirs of a certain Giacomo Mudaccio started a lawsuit to get payment for an overdue commenda his father had financed in 1221. At the time of the indictment, the merchant in arrears had also died and his heir Bartholotta declared herself insolvent. In 1254 Giacomo's sons acquired legal rights over whatever property Bartholotta might have, but no property or goods were found (Ibid. # 822).

⁴³ Besta and Predelli, eds. "Statuti," St. Enr. Dandolo, c.36.

⁴⁴ Castagneti, "Primo Commune," p.101; Lane, *Venice*, p.143; and Müller, *Venetian Money Market*, pp. 124-25. Although there is no evidence on the exclusion of deceitful merchants from Venetian privileges abroad, Venetian tight administrative controls over her colonies could have been used for that purpose. The Civil and the Maritime Statutes indeed established that colonial governors made sure that merchants were subject to the same rules and regulations abroad as in Venice itself (Besta and Predelli, eds. "Statuti," St. Enr. Dandolo, 1192, c.40, and Predelli and Sacerdoti, eds. "Statuti Marittimi," St. Tiepolo, 1229, c.45 and c.52 and St. Zeno, 1255, c.86 and c.98).

⁴⁵ MRL, *Documenti*, # 752 and 753. The translation is from Pryor, "Mediterranean Commerce," p. 141.

⁴⁶ MRL, *Documenti* and *Nuovi Documenti*. This practice is first documented in 1200 and prevailed by the 1220's.

structures reduced each office holder's space of strategies in a way that curbed his ability to use the state power in his own interest at the expense of the rest of the society. Second, a vigilant oversight over state activity supported a system of punishments and rewards that made each office holder's best strategy not to abuse his (limited) power or shirk from his duty.

During the eighth century the residents of the Venetian lagoon established themselves as an autonomous political unit, at the top of which was the doge. At first, the doge was an elected monarch of unlimited power but, starting in 1032, the doge's prerogatives and freedom of action were continuously limited until he became nothing more than a magistrate. Doges were "leaders, no lords, nay not even leaders, but honored servants of the State."⁴⁷ The actual exercise of power was carefully distributed among a large number of interlocking councils and magistracies whose members were elected for a brief term and were ineligible to succeed themselves, thereby ensuring that none of them had a large share on power, even at the cost of losing some executive efficiency.⁴⁸

Unlike modern limited governments, the division of power in Venice ignored completely the separation of the legislative, administrative, and judicial functions. Instead, various governing bodies were given overlapping jurisdictions so that each council or magistracy was checked by some other council or magistracy as to assure the rule of law. Within each magistracy or *officia*, the clerks exercised mutual monitoring and rendered various sets of accounts on the basis of which performance was evaluated. Besides, every official, including the Doge, was subject to strict independent reviews after his office came to term and was liable to prosecution for abuse of his office or dereliction of duty by a distinctively Venetian group of officials, the State Attorneys, who had investigating powers and to whom all office holders were to notify any observed wrongdoing.⁴⁹

Severe punishment for failing duty was applied to all Venetian officials. All office holders had to give an oath of impartiality and good behavior and were subjected to both hefty monetary sanctions and retirement from office if caught in whatever kind of fraud. For example, any official found guilty of having "put his hands in the state's goods" had to pay back the amount taken plus a fine of half the amount within three days from the conviction. In

⁴⁷ Petrarch, in a letter of May, 1355, cited by Lane, *Venice*, p. 181.

⁴⁸ For a concise description of the organization of Venice governing structures and their evolution over time, see Gasparini, "Venice." See also, Castagnetti, "Comune;" Gaspari, "Orseolo;" and Lane, *Venice*, pp. 88-117. For a comparison with the Genoese political system, see Greif, "Political Organizations."

⁴⁹ See Lane, *Venice*, pp. 95 and 251, and Gasparini, "Venice." See Stahl, *Zecca*, pp. 245-297 for an excellent overview of the application of these disciplinary mechanisms to the internal operation of the mint.

addition, he was to be banned for ever from the specific office in which he embezzled the money and, if the amount taken was relatively high, from holding any public office.⁵⁰

On the other hand, good performance ensured the continuation of a very profitable public life. Although the same man could not serve in the same council or magistracy for two consecutive terms, nothing prevented an individual to rotate through the most important offices. Before the end of the twelfth century the selection of men for councils and magistracies consisted of two parts: nomination by a committee whose members were chosen by lot, thereby curtailing each faction's ability to influence the outcome of the election, and approval by the Great Council, thereby ensuring that corrupt and/or incompetent people would not be elected. Public clerks were directly chosen by the councils or magistrates who needed them and their re-election was tied to the auditing of accounts. Furthermore, all officers charged with enforcing regulations were induced to diligence by receipt of a portion of the fines levied in addition to their salaries.⁵¹

2.6. *Was the State a Self-Enforcing Institution?*

Asserting that Venice distinctive limited government constrained political agents to protect rather than abuse the contract and property rights required for the operation of financial markets hides a key question. Why did Venetian prominent families and the doge in particular support the existing economic and political institutions instead of attempting to establish an autocracy? After all, autocracy is a most profitable occupation, welfare losses notwithstanding.

This paper tentatively argues that the Venetians were motivated to support rather than challenge the state by the belief that cooperating to render the polity of Venice conducive to trade would ensure each of them a fair share in the gains from their collective action while any attempt to subvert Venice limited government would be successfully resisted and penalized with capital punishment. This belief was rendered self-enforcing by the operation of the state, which, on the one hand, generated economic and political rents and allocated them among all Venetian citizens fairly and, on the other hand, guaranteed a balance of power among all the important Venetian families, thereby making it impossible for any one family or group to attain unchallenged supremacy. Given the gains the Venetians expected to gain from supporting the prevailing institutions and the fear of becoming victims of autocratic

⁵⁰ Stahl, *Zecca*, p. 271. This 1359 law basically standardized the punishment for embezzlement of state goods. To make sure that it was enforced, the State Attorneys were given the right to sell the property of the convicted official. For a 1385 case in which this procedure was applied to a noble, see *Ibid.* p. 261. Evidence on the payment of fines for breaking the law dates back to at least the mid-twelfth century (MRL, *Documenti*, # 143, 163, 226 and 402). More generally, see Lane, *Venice*, pp. 98-100.

⁵¹ Lane, *Venice*, pp. 98 and 100, and Gasparini, "Venice."

extraction, the best they could do was to join together to confront anyone's attempt to make himself a dictator and to impose on him the heaviest punishment, which in turn deterred each of them from trying.

On the one hand, trading profits and political authority remained highly diffused. As we have seen, trade regulations and state's control over the city and her colonies assured all Venetian merchants almost an equal chance to make a profit in oversea trade. Furthermore, any Venetian with little money to invest could obtain up to 40 percent interest on sea loans or three fourths of the net venture's return on commenda contracts without adventuring overseas. Finally, the large number of governing bodies and high turnover in office enabled to distribute political power and honors widely. To make sure that no single family or faction controlled access to public life, campaigning for office was outlawed, the selection of men for important offices was delegated to nominating committees whose members were chosen by lot, and no family was allowed more than one member on any such committee or office.⁵²

To preserve the economic and political rents that rendered the institutional foundations of markets self-enforcing and to make the state more likely to be an equilibrium, the Venetians established barriers to entry and created intergenerational links. Between the end of the thirteenth century and the early years of the fourteenth century, those families who had taken active part in political life during the former century became a hereditary aristocracy, whose male members of age would henceforth exercise a monopoly over political activity. This, of course, deprived the vast majority of Venice residents from any political power, but assured all the members of the existing ruling class that they and their offspring would continue enjoying economic and political rents.⁵³ Furthermore, Venice dwellers that were at the time comfortably well-off but who they themselves or their forefathers had not sat in the Great Council during the previous century, and were hence excluded from the aristocracy, soon came to form an hereditary privileged class of citizens-by-birth, who were admitted to foreign trade with almost the same rights as the patricians and from whose ranks all the public clerks were to be chosen. Nobles and citizens had all much the same interests and, although they did not obviously treat common people below the rank of citizens as well as they treated themselves, they nonetheless granted them economic rights according to the guilds to which they belonged.⁵⁴

On the other hand, a broadly equal dispersion of economic and political power made it imprudent for any leader or group to attempt to overpower the others. After the ignominious

⁵² Lane, *Venice*, pp. 98, 100 and 110; Gasparini, "Venice;" and Stahl, pp. 245-97. For the tortuous procedure for appointing the doge, see Norwich, *History*, 166-67, and Greif, "Political Organization," pp. 738-39.

⁵³ Lane refers to the process as the *enlargement* of the Great Council (*Venice*, p. 111). According to Chojnacki, it was "an act less of exclusion than of inclusion" ("Search," p. 56). For an opposite view, see Rösch, "*Serrata*."

⁵⁴ Lane, *Venice*, pp. 151-52, and Gasparini, "Venice."

endeavor by doge Domenico Orseolo to seize power in 1032 and the subsequent constitutional reform, there were only two attempts in over seven hundred years to subvert Venice limited government.⁵⁵ Both occurred at times of exceptional distress. Both miserably failed. In 1310 Bajamonte Tiepolo, taking advantage of the disruptions caused by the papal excommunication of the City and the general discontent with the ruling doge, led a plot to overthrow the doge and establish himself and his followers as despots in the Venetian domains.⁵⁶ Bajamonte was generously sentenced to exile in Dalmatia for fear of provoking a civil war if otherwise, but his house was razed to the ground and on its site it was raised a Column of Infamy bearing the inscription: *This land was the property of Bajamonte// And now, through his infamous betrayal,// Is held by the Commune as a lesson to others // So let these words proclaim to all, for ever.*⁵⁷ In 1355, after the “most disastrous decade Venetians had ever known,” the doge Marin Falier was discovered conspiring to slaughter most of the nobility and make himself an autocrat.⁵⁸ He was beheaded according to due process of law and his portrait in the Hall of the Great Council was substituted with a black curtain reading “*Here is the place of Marin Falier, beheaded for his crimes.*” Subsequent doges were followed in official procession by a sword-bearing symbolic executioner as a reminder of the punishment intended for any leader who attempted to assume dictatorial powers.⁵⁹

3. Institutions for Contract Enforcement: Theory and Evidence

The previous section presents the state as a self-sustaining institution for contract enforcement, i.e. as an institutional equilibrium in which financial relations took place. Yet, game theory warns us of the possibility of multiple equilibria. Can we discern, on the basis of the observed relations, whether the state was the most relevant institution in early Venetian trade? Can we generate predictions based on the assumption that the state provided effective

⁵⁵ The Venetians governed themselves essentially through the same institutions they had developed from the eleventh to the early-fourteenth centuries until the Napoleonic invasion in 1797.

⁵⁶ The papal interdict brought Venetian trade almost to a halt. According to Norwich, “in every corner of Europe and a large part of Asia, Venetian goods were seized, Venetian assets confiscated, and Venetian ships attacked and plunder” (*History*, pp.188-89). Besides, doge Pietro Gradenigo was detested by some rich and able men who found themselves permanently debarred from political advancement by the closure of the Great Council in 1297.

⁵⁷ Norwich, *History*, p. 195. In addition the good name and reputation of his family was systematically destroyed.

⁵⁸ The quotation is from Lane, *Venice*, p. 179. The Black Death had cut the city population by three fifth and had extinguished at least 50 noble families (out of about 200) during the years 1347-49 (Lane, *Venice*, p. 173 and Norwich, *History*, p. 214). Such a high mortality might have likely caused a decrease in the time discount factor and hence might have undermined the reputation mechanism underlying the state. Also, Venice had been defeated in 1354 by Genoa which, like most other Italian cities at the time, was under the rule of a *Signore*. According to Lane, Marin Falier was impelled not by personal ambition or hatred to the class that had put him in office, but by the conviction that despots were more successful in war than republics (Lane, *Venice*, p. 183).

⁵⁹Gasparri, *Venice*, Norwich, *History*, p. 299, and Olson, *Power*, p. 40.

contract enforcement and confirm them empirically? Can we account for other trade-related phenomena under this assumption? Affirmative answers would further substantiate the hypothesis that financial relations were indeed governed by the state.

To answer these questions, I use the 969 notary acts fully-transcribed by Morozzo de la Rocca and Lombardo for the period 1021-1261 in which 435 sea loans and commenda contracts involving 543 individuals are mentioned.⁶⁰ To better interpret the Venetian scattered and notary-biased evidence, I confront it with secondary studies based upon Genoese notary records of the twelfth century, most notably with the work by Greif on the entire cartulary of John the Scribe for the years 1155-1164 in which 612 contracts involving 479 individuals were annotated (see table 1).⁶¹

TABLE 1.
Genoa versus Venice

	Genoese (John the Scribe) *	Venetians (MRL)
Time Period	1155-1164	1021-1261
Documents	entire cartulary	455 (out of 969) notarial acts
Contracts (sea loan and commenda)	612	435
Traders¹	479	543
Investors	180 (37.5 %)	334 (61.5 %)
Merchants	335 (69.9 %)	233 (42.9 %)
Families²	?	320
Investor's Families	about 34	221 (69.0 %)
Merchant's Families	229	59 (49.6 %)
Intra Family Relations	6.45 % of capital	10 %
Average merchants per investor³	1.57	2.25
Average investors per merchant³	Close to 1	4.57
Non-Genoese/Non-Venetian		
Investors		3.8 %
Merchants	12 %-15 % (18.3 % of capital)	4.2 %

Source: For Genoa, Greif, "Contract Enforceability", "Cultural Beliefs," and Institutions. For Venice, the author based on Morozzodella Rocca and Lombardo, Documenti and Nuovi Documenti.

¹ 'Traders' refers to the individuals who originally entered into a contractual relation. In the Genoese and the Venetian sources, 36 and 24 traders, respectively, performed as both an investor and a traveling merchant.

² In terms of Venetian families, 60 out of the known 320 trader's families have members who acted as investors and members who acted as merchants.

³ Excluding investors/merchants who appear only once as such.

⁶⁰ MRL, *Documenti and Nuovi Documenti*. This evidence constitutes a very partial listing. First, since cartularies did not stand as legal proof in Venice until well-into the thirteenth century, none has been preserved. All Venetian evidence comes from the few original notary acts and their certified copies that, deposited for their safe keeping in monasteries or within the *Procuratori di San Marco*, survived fires, floods, rats and human apathy until they were rescued by the *Archivio di Stato di Venezia*. Second, data from before the mid twelfth century is particularly scarce: only 94 documents have been preserved. Third, since the evidence is based on notarized documents, it underestimates the importance of verbal and not-legally binding contracts.

⁶¹ Greif, "Reputation", "Contract Enforceability", "Cultural Beliefs," and *Institutions*.

3.1. Social Control Systems and Ethics: the Family and the Fear of God

Although the role of social control systems and ethics in surmounting contractual problems is not of course to be ignored, we cannot explain some observed patterns based on loyalty among family members or the fear of God.⁶²

First, financial relations were not confined to the family: 89.2 percent of the 435 Venetian contracts of sea loan and commenda were agreed upon by people without any family tie.⁶³ Since financial exchange among trustworthy relatives may have not required the services of a notary, this information is, however, biased. Yet, the data suggests that the Venetians relied on notaries under standard conditions for their inter-family relations. For example, various investors registered their loans *pro amore* to their close relatives with a notary despite its cost.⁶⁴ Even a widow lending to her own granddaughter “*for the needs of her home*” and a nun investing in his son’s voyage sought the protection of a notarized act.⁶⁵ As it was customary, a penalty of double payment with a 20 percent yearly interest was imposed for any delay and the contracts were guaranteed by a pledge of the entire debtor’s present and future property. These clauses were far from purely decorative, as demonstrated by the many cases in which unsatisfied creditors executed the collateral to get payment of double the amount due plus interests, regardless of kinship bonds.⁶⁶

Furthermore, contrary to the Genoese experience, the rate of interfamily financial relations declined over time: whereas roughly 40 percent of the contracts for overseas trade were entered by members of the same family during the eleventh century, only 7 percent of the sea loans and commenda contracts signed during the twelfth and the thirteenth centuries were agreed upon relatives.⁶⁷ The evidence thus supports the view that, despite potential

⁶² Impure altruism is not here considered, although certain internalized values might have also constrained merchant’s behavior. In Venice merchants did not form a distinctive and antagonist class from their financiers, but they all form a quite cohesive society with a common interest in commerce. As we have seen financial relations were very flexible: investors of all means, ranks and occupations funded wealthy and poor merchants alike. Excluding the merchants who appear only once, and could not hence show up performing both roles, 36 percent of the merchants invested in other merchants’ ventures and over 72 percent of the 83 merchant’s families who appear twice or oftener had members who acted as merchants and members who acted as investors.

⁶³ Two individuals are considered to be family members if the contract mentions that they are relatives, if they have the same surname or if there is any evidence indicating they were relatives.

⁶⁴ MRL, *Nuovi Documenti*, # 90 and 104.

⁶⁵ *Ibid. Documenti*, # 146, and *Ibid.* # 356.

⁶⁶ For the legal seizure of collateral involving close relatives, see MRL, *Nuovi Documenti*, # 38. More generally, see the references in footnote 40. For the application of a penalty for late payment in financial contracts, see MRL, *Documenti*, # 28, 114, 307, 427, 433-435, 458, and 733-34, and *Ibid. Nuovi Documenti*, # 3.

⁶⁷ The cartulary of John the Scribe (1155-164) indicates that 6.45 percent of the capital raised externally was entrusted to family members. Later cartularies reflect a higher rate of intra-family agency relations: about 16 percent at the turn of the twelfth century (Greif, *Institutions*).

bonds among family members, kinship provided a limited and declining role for the compliance of financial contracts in Venice.

Besides, next in kin resorted to the courts. For example, the Venetian merchant Pietro Badoer brought a lawsuit against his father in 1258. In 1209 Giovanni Badoer, Pedro's father, had received in commenda from his "beloved" father in law, Andrea Donato, a certain amount, which he failed to repay. In 1224 Andrea started litigation and obtained a house of Giovanni's property for compensation of his credit plus a penalty of double the amount due plus interests. In the same year, Andrea transferred part of his rights over the house to his "beloved" grandson who, in turn, sold the rights over the alienated property to Pietro Badoer. Pietro, who had acquired legal capacity in 1218 with the consent of his "beloved" father, saw nothing wrong in bringing a charge against his father over the property rights he had acquired in 1226 and proclaimed in court in 1230.⁶⁸

Second, both the phraseology in which notary acts were framed and the statutory law suggest that the Venetians perceived divine penalties as being insufficient to curtail opportunistic behavior. For example, besides appealing to the fear of God, the standard formula under which dying merchants abroad entrusted their wares for shipment to their legitimate heir imposed the usually high monetary penalty for a breach of contract:

"if you infringe your duty or you are corrupted, let God Father Almighty and his Son our Lord and the Saint Spirit be against you ... and let you burn in hell with Juda the betrayer forever and, in addition, you ought to compensate my will executor with five golden lire".⁶⁹

Likewise, the Maritime Statutes of the thirteenth century required all seamen to swear under oath that they would report the misbehavior of anyone on board but, just in case, also established hefty monetary sanctions for those who refused to compel with this obligation. Also, the early City Statutes of the late twelfth century foresaw that government officials be retired from office if caught in fraud, despite the fact that they were required to give an oath of impartiality and good behavior upon their appointment.⁷⁰

Furthermore, ethics alone seems unable to provide a satisfactory explanation for some observed phenomena. For example, young and experienced merchants alike were required to collateralize their debts with their entire present and future property and they relied on both

⁶⁸ MRL, *Documenti*, # 625 and 844. For other intra-family litigation, see *Ibid.* 71 and 538; 281; 465; and 554, 556, 557 and 581, and *Nuovi Documenti*, # 38.

⁶⁹ MRL, *Documenti*, # 362. See also *Ibid* # 100, 246, 326, 535, 559, 595, 636, 661 and 731.

⁷⁰ Predelli and Sacerdoti, eds. "Statuti Marittimi" and Besta and Predelli, eds. "Statuti Civili."

sea loans and commenda contracts.⁷¹ Yet, if financial relations were based upon ethics, one would expect that young merchants, for whom information about their “pious” character was missing, were constrained to give more secured collateral than experienced merchants whose records demonstrated to be intrinsically “honest” and to rely more on the less conflictive sea loan. Also, commenda contracts exhibited an almost fix sharing rule: three fourths of the profit accrued to capital and the remaining one fourth remunerated labor. Yet, one would expect that young merchants, if exceptionally raising capital through a commenda, obtained a less favorable sharing rule, for investors were taking the risk of funding a “bad type,” i.e. an individual whose behavior was unconstrained by the fear of God.

3.2. Bilateral and Multilateral Reputation-based Institutions

Private-order institutions based on reputation can potentially foster financial relations beyond ethics and family by enabling self-interested merchants to establish ex-ante that their most profitable course of action ex-post is to fulfill their contractual obligations. Under a bilateral reputation mechanism a merchant is motivated to honor his contracts by the carrot of an “efficiency wage”— a share on profits higher than what a merchant can obtain elsewhere— and the stick of terminating his relations with a particular investor. For a sufficiently high “wage,” the investor can insure that the long-run benefit an honest merchant can reap from continuing this bilateral relation is larger than the short-run gain from renegeing today. Hence, the best the merchant can do, ex-post, is to respect his contractual agreements. Since this is known, ex-ante, to the investor, he can trust the merchant, the merchant acquires a reputation for honesty, and mutually beneficial exchange occurs.

Such a bilateral reputation mechanism seems to have prevailed in late medieval Genoa. Greif shows that the Genoese played bilateral reputation strategies according to which an investor tended to use the same merchant for a prolonged period of time and each merchant tended to raise funds from the same investor.⁷² In the cartulary of John the Scribe, an investor funded, on average, 1.57 merchants. Also, despite the fact that most families appear twice or oftener, members of 178 merchant’s families out of 229 (i.e. 71.6 percent) received funds from only one investor, or at least 90 percent of the total sum they raised externally from outside their family came from an specific investor (see table 1).

⁷¹ Typically, twelfth-century merchants used sea loans, whereas their thirteenth-century counterparts relied on the commenda. Sometimes, individual merchants used both types of contract. For instance, Pietro Tiepolo raised funds through a commenda contract in 1182 for a return trip from Venice to Ragusa, in the *Gulf of Venice*, but used a sea loan for a much more adventurous voyage from Constantinople to Alexandria in 1184 (MRL, *Docuemnti*, # 334 and 347. As already mentioned, the choice of a particular type of contract can be linked to the state’s ability to verify information rather than to individual merchants’ characteristics.

⁷² Greif, “Reputation”, “Contract Enforceability”, “Cultural Beliefs”, and *Institutions*.

To the contrary, the strategy played by the Venetians did not lead them to establish bilateral financial relations. As we have seen, diversification was pervasive. For example, Lazzaro Mercadante, who is named eight times in the documentation, funded seven different merchants to trade both in the Adriatic and in the Levant from 1242 to 1258.⁷³ Giovanni Serzi, who also appears eight times, funded four merchants voyaging on three different ships on a trip from Armiro to Constantinople in 1169 and one year later provided funds to other four merchants on similar conditions.⁷⁴ Gabriel Marignoni, the investor who appears the most as such, relied on nine merchants, once again the number of times he is mentioned.⁷⁵ On average, an investor funded 1.24 merchants, but excluding the great majority of investors who appear only once as such and are hence forced to rely exactly on one merchant, an investor financed, on average, 2.25 merchants (see table 1 and 2).

TABLE 2.
Presence of Venetian traders

No. of times that Traders appears	Only as Investor	Only as Merchant	As both Investor and Merchant	Total %
Once	252	166	0	76.98
Twice	40	20	10	12.89
Three times	6	10	4	3.68
Four times	4	6	2	2.21
Five times	0	1	3	0.74
Six times	2	0	0	0.37
Seven times	3	1	0	0.74
Eight times	2	0	0	0.37
Nine times	1	2	2	0.92
Eleven times	0	1	1	0.37
Fifteen times	0	1	0	0.18
Twenty two times	0	0	1	0.18
Twenty eighth times	0	1	0	0.18
Fifty two times	0	0	1	0.18
TOTAL	310	209	24	100

Source: The author based on Morozzodella Rocca and Lomabrdo, Documenti and Nuovi Documenti

Also, a Venetian merchant typically raised funds from various investors. On average, traders who functioned as merchants twice or oftener received funds from 4.57 investors and the more a merchant is mentioned, the more likely he raised funds from many several investors (see table 1). In contrast with the Genoese legislation and practice, Venetian merchants were allowed to amalgamate funds for a single trip without the investor's permission. Thus, a certain Rodolfo Suligo gathered funds from at least fifteen investors for a

⁷³ MRL, *Documenti*, # 746, 759, 764, 771, 793, 831, 839, and 843.

⁷⁴ *Ibid.* # 214-217 and 219-223.

⁷⁵ *Ibid.*, # 694, 701, 707, 709, 711, 715, 745, 809, 820, and 842.

sea venture he undertook in 1234.⁷⁶ Similarly, the noble Tomasso Viadro relied on at least four investors to finance a trading voyage on the Adriatic Sea in 1202, on two different ones to fund a round trip from Venice to Alexandria in 1205, and yet on another two investors for a Levantine venture in 1208.⁷⁷ Lane concluded that “a typical cargo probably represented the stakes of something like a hundred investors who had confided sums of various amounts to more than a dozen traveling merchants”.⁷⁸ Likewise, the evidence shows that merchants received funds from many different investors along their trading careers. Particularly revealing are the stories of the two best documented merchants. Romano Mairano—who is mentioned 49 times as a merchant and 3 times as an investor—raised capital from 43 individuals belonging to 35 families.⁷⁹ Domenico Gradenigo entered into 28 commenda contracts with various members of his family and with 14 other investors, of whom only two (that is 14.2 percent) financed him repeatedly.⁸⁰

Contrary to the Genoese practice, trust relations appear to have been established even when the merchants knew beforehand that the present value of their future interaction with a particular investor would be small. The 612 annotations of John the Scribe report only 180 investors, 12 of whom contributed more than 40 percent of the total amount invested in the Genoese trade.⁸¹ In Venice the situation was rather different: the 435 preserved sea loan and commenda contracts mention as many as 334 investors, several of whom are known to be minors, nuns, artisans, and humble people who most likely invested sporadically small sums in overseas trade (see table 1). The difference remains striking even if accounting for potential family ties: whereas 37 families contributed 90 percent of the capital raised in Genoa, the Venetian source mentions as many as 221 different investors’ families, the majority of whom appear only once in the documentation (see table 1 and 2).⁸²

In sum, the observations that financial relations were typically of short duration and that financiers of all means funded merchants with whom they had no family-ties and with whom they hardly expected to interact in the future indicate that financial relations went beyond those that can theoretically be sustained by the family or by a bilateral reputation

⁷⁶ MRL, *Documenti*, # 675-690 and 804.

⁷⁷ MRL, *Nuovi Documenti*, # 56-59, 64-66, and 73-74.

⁷⁸ Lane, *Venice*, p. 52.

⁷⁹ MRL, *Documenti*, # 99, 104, 112, 116, 118, 122, 124, 127, 128, 130-132, 154, 155, 157, 167, 182, 183, 188-190, 193-198, 201, 203, 228, 231, 247, 248, 256, 261, 267, 278, 284, 285, 293, 294, 306, 309, 310, 312, 318, 323, 329, 335, 345, 381, 383, 384, 385, 387, 447. See also *Ibid.* # 191, 207, and 321.

⁸⁰ In terms of investing families, apart from his own, Domenico raised funds from ten different families, four of whom provided him capital twice or oftener. MRL, *Documenti*, # 475, 488, 489, 494-498, 505, 506, 511, 512, 524, 525, 545, 549, 554-558, 563, 569, 571, 573, 575, 587-588, 601-605, 620, 633, 642, 670, 736, and 744 and *Ibid.* *Nuovi Documenti*, # 80.

⁸¹ Greif, “*Cultural Beliefs*,” p. 928.

⁸² Greif, *Institutions*. The Venetian source does not provide consistent information on the amounts invested.

mechanism. These observations, though, are consistent with the operation of the state as an institution for contract enforcement. Since a merchant who considers cheating a particular investor risks losing future economic rents and, possibly, his property within the Venetian territory, the merchant's choice of action will be independent of the ex ante known length and value of his future relation with a particular investor.

Short term relations of little value can theoretically be enforced also by informal institutions based on multilateral reputation. A multilateral reputation mechanism differs from a bilateral one in that an investor is expected to stop his relations with a merchant who cheated any other investor even if he himself was not cheated by that merchant. Since a merchant is induced to honor his contracts by the expectation that cheating would lead to the termination of his relations with *all* the members of the group among which the mechanism prevails, the merchant's behavior will be rather robust to the present value of his future association with a particular investor.

Yet, such an informal community enforcement mechanism is at odds with the observed investments by individuals who had no control over the ventures they financed. As Venetian investors were not actively engaged in business, information regarding the merchant's conduct was not generated as a by-product of the commercial activity. Without an essentially free mechanism for information transmission, investors would not exercise costly monitoring to the benefit of the community and would hence lack the information required to practice collective punishment.

Indeed, the Venetian data indicates that investors did not participate in the venture's management. Besides a number of investors whose main occupation is known to have been other than long-distance commerce and the difficulties that a merchant might have encountered in following instructions from the many investors who typically fund each merchant, there is no evidence whatsoever that Venetian investors were involved in management. Since commenda contracts in other localities frequently bound the merchant to bring back from precise localities certain specified wares and to follow whatever instructions he received by letter or by messenger from the investing party, the absence of any such reference in Venice suggests the independent character of the Venetian merchant.⁸³ Moreover, in contrast with the statutory law of Barcelona, Marseilles, Pisa, and the Genoese colony of Pera, the Statutes of Venice treat both the sea loan and the commenda as titles of credit.⁸⁴ Luzzatto thus concludes that Venetian investors had no control over the ventures they financed.⁸⁵

⁸³ See Luzzatto, *Studi*, pp. 70-71 and *Storia*, pp. 82-84; and de Roover, "Organization of Trade," p. 50.

⁸⁴ See Pryor, "Mediterranean Commerce," p. 155, and Luzzatto, *Studi*, pp.70-71.

⁸⁵ Luzzatto, *Studi*, p.72, cited in p. 4 of this paper.

In this respect the Venetians differed essentially from the celebrated Maghribi traders, who indeed practiced multilateral punishment. Greif shows that social ties and business relations within the Maghribi coalition provided an essentially costless network for information-transmission which, in turn, determined the coalition's boundaries. Trust relations among the Maghribies were hence limited to a relatively narrow group of business associates who personally engaged in the trades they financed, as demonstrated by the many letters in which the investor requested information or mentioned that he was expecting to receive additional information before making a business decision.⁸⁶

In sum, financial relations in Venice went beyond those that can be theoretically sustained by a multilateral reputation mechanism, but were consistent with the operation of the state. Like the Maghribi coalition, the Venetian state provided third-party enforcement, thereby enabling financial relations which the parties knew ahead of time would be of short duration and little value. Unlike the Maghribi traders, the Venetians relied on the state to both generate verifiable information which the parties could present in disputes and to punish cheaters, thereby enabling investments from persons without business experience.

3.3. State-based Institutions for Contract Enforcement

As we have seen, the state was both unwilling to provide impartial third-party contract enforcement to non-Venetians and unable to punish foreigners outside its domains. Therefore, if the state actually governed financial relations, we would expect to observe prevalently intra-Venetian relations.⁸⁷ The Venetian source is particularly suitable to evaluate this prediction because, on the one hand, it covers a period prior to the introduction of political barriers to foreign capital and, on the other hand, the documented acts were written in the most disparate markets, from one to the other side of the Adriatic, from the Aegean islands to the Black Sea, and from Greece to Asia Minor, Egypt, and even Tunisi.

Despite the time-period and the variety in the geographical origin of the Venetian material, the evidence indicates that over 95 percent of the known contracts were entered by Venetians, the great majority of whom resided in the *Rialto*, the city we know today as Venice (table 3). In terms of traders, 97.8 percent of the 321 investors (out of 334) who are identified as Venetians financed City merchants only and 95.9 percent of the 223 merchants (out of 233) who are said to be Venetians relied exclusively on Venetian capital (table 1).⁸⁸ Furthermore,

⁸⁶ Greif, "Reputation," p. 880. See also Greif, "Contractual Enforceability", "Cultural Beliefs", and *Institutions*.

⁸⁷ Inter-community relations, though, could take place outside the rule of the state. Provided that an investor could assure a merchant that their bilateral relation would last for a long time and would be very profitable, he could be certain that the merchant would not cheat him, regardless of the investor's and merchant's political affiliations.

⁸⁸ As expected, Venetian notaries did not record contracts in which both parties were non-Venetian.

eight out of the ten known foreign merchants were attached to Venice by residing in the City or in the Venetian colony of Constantinople.

TABLE 3.
Venetian Contracts classified by traders’ place of origin and residence

	Investors		Merchants	
Venetians residing in <i>Rialto</i>	380	87.36 %	407	93.56 %
Venetians residing in the lagoon	28	6.44 %	16	3.68 %
Venetians residing in the Greek Empire, Istria or Dalmatia	18	4.14 %	3	0.69 %
Non-Venetians residing in <i>Rialto</i>	3	0.69 %	5	1.15 %
Non-Venetians residing outside the lagoon	6	1.38 %	4	0.92 %
Total	435	100 %	435	100 %

Source: The author based on Morozzodella Rocca and Lomabrdo, *Documenti and Nuovi Documenti*.

The segregated character of Venetian trade is the more striking if compared with the Genoese. Although Genoese cartularies were written in Genoa and are thus more likely to reflect agency relations among the Genoese, they nevertheless clearly show the establishment of financial relations between Genoese and non-Genoese. According to the cartulary of John the Scribe, at least 18.4 percent of the total value of goods shipped abroad was sent or carried by a non-Genoese trader. More generally, it has been calculated that 12 to 15 percent of the 1345 traders that are mentioned in the Genoese cartularies for the period 1155-1200 were truly non-Genoese (see table 1).⁸⁹

Another kind of evidence that would refute the conjecture that the state provided contract enforcement is the observation of investments through individuals who already had a personal and bilateral relation with the merchant to be funded. The Genoese source, but not the Venetian, indicates that an investor in search of funding a merchant once formed a partnership with another investor who regularly backed that particular merchant and together they supplied him funds. Furthermore, contrary to some Genoese prominent families who seem to have been amalgamating the entire family’s fortune, Venetian families usually invested separately, each member investing his own capital. Besides, Venetian patrician

⁸⁹ Consistent with a bilateral reputation mechanism, the Genoese “integrated” themselves with natives in other political centers in possession of better knowledge of local conditions (Greif, “Cultural Beliefs,” pp. 930-935).

families did not live together as clans in large compounds, as did the Genoese.⁹⁰ The evidence thus suggests that while the Genoese combined their resources to form a unit of decision with a longer life span and a lower probability of bankruptcy, thereby increasing the unit's ability to commit to a bilateral long-term relation, the Venetians operated individually through anonymous markets.

Yet, the Genoese introduced legal constraints to reinforce the operation of their bilateral reputation mechanism. For example, Genoese courts held a merchant and all his family responsible for observable transgressions, such as outright embezzling the investor's capital. The Genoese reliance on the legal system to enforce contracts characterized by symmetric information is also clear from the specification in loan contracts and sea loan contracts that a delay in repayment was subject to a double penalty. Furthermore, to help the investor evaluate the true venture's profit, the typical Genoese commenda contract stipulated that, after the completion of the voyage, the merchant was to place the entire proceeds of the commenda in the hands of the investor, under whose direction, though with the merchant assistance, the division of profits was carried out.⁹¹

In sharp contrast, Venetian law clearly established that only the son under parental authority or jointly with his father was liable for his father's debts.⁹² Also, commenda contracts in Venice typically laid down a double penalty for late payment and increasingly allowed the merchant to "*dispatch the proceeds that accrued to the [investor] in the care of a third-party..., without returning in person to render accounts*" and "*to retain possession of his own part.*" In addition, the typical thirteenth-century Venetian commenda contract left the merchant free to "*do business by land or sea, carrying, entrusting, abandoning, and recovering all or part of the merchandise wherever it seems good to [him],*" so long as he joined the convoys organized by the state from Venice to her colonies in the East.

Why did family's legal responsibility and contracts' dispositions vary so widely? Why did the Venetians feel the need neither to hold family members liable for the merchant's verifiable illegal actions nor to limit the merchant's freedom of action? A consistent explanation can be advanced based on the assumption that the state provided contract enforcement in Venice. Economic rents enabled Venetian merchants to commit not to

⁹⁰ For Genoa, see Greif, *Institutions*. For Venice, see Buenger, "Domenico Gradenigo," p. 28, and Chojnacki, "Search," p. 60. In Venice, even women invested on their own account, not for their husbands (MRL, *Documenti*, # 475, 495, 506, 588, 602, and 604). During the thirteenth century, the Genoese adopted the family firm, the essence of which was a permanent partnership with unlimited and joint liability that preserved the family's wealth under one roof. Although a kind of family firm, the *fraterna*, was known in Venice from at least the tenth century, it soon became obsolete and always remained a purely family concern.

⁹¹ Byrne, "Commercial Contracts," pp. 136-37; Greif, *Institutions*; and Pryor, "Mediterranean Commerce," pp. 175-76.

⁹² St. of Enrico Dandolo, 68, edited by Besta and Predelli.

embezzle the whole or part of the investor's capital without making their relatives legally responsible for their business dealings, while tight administrative controls over trade provided the verifiable information require to evaluate merchant's conduct. This suggests that Venetian sea loans and commenda contracts were indeed governed by the state.

4. Conclusions

A theoretical and empirical analysis of the Venetian institutions for contract enforcement reveals that, above and beyond the role of the family, ethics, and bilateral reputation in constraining the merchants' opportunistic behavior, the state functioned as an enforcement and information-transmission mechanism. However, the nature, role and foundation of the state differed substantially from that posited by economic historians and economists to the legal system.

The Venetian state cannot be identified with a third party that uses *coercion* to enforce contracts. The state *induced* merchants to fulfill their contractual obligations with other Venetians by supporting the belief that living up to their contracts would lead to the enjoyment of present and future rents, while a contract's violation would be followed by exclusion from these rents and, possibly, legal sanctions. This reputation mechanism, however, differed from that prevailing among the Maghribi coalition in that the Venetians did neither engage in informal monitoring of the merchants' conduct nor practice collective punishment. On the contrary, the Venetians relied largely on the state to generate verifiable information and to punish cheaters.

The role of the state, though, went beyond regulating the ex-ante behavior of merchants in a manner that facilitated the ex-post verification of a breach of contract and forcing solvent borrowers within its jurisdiction to repay if they failed to do so spontaneously. To guarantee property rights and the enforceability of contracts, the Venetian state coordinated a collective military and diplomatic action, became the major shipbuilder, leased state-owned galleys to private enterprise, arranged the organization, protection and timing of trading convoys, and restricted foreign and domestic entry. In other words, to enable the smooth operation of financial markets among the Venetians, the state converted private trade into a public affair and introduced barriers to labor and capital mobility. This historical episode thus suggests that state ample intervention might have a positive role on growth and questions our inherited wisdom about the virtue of liberalizing all markets at once.

The state was a self-enforcing institution for contract enforcement, exogenous to each individual but endogenous to the society. The state operated both as an economic institution,

which enabled the Venetian citizens to exchange through financial markets and hence resulted in a wide distribution of trading profits, and as a political institution, which restrained the tyrannical exercise of power and ensured a pluralistic dispersion of power. This motivated the Venetians to support the existing economic and political institutions and to resist anyone's attempt to challenge the state, which in turn deterred anyone from trying.

The constancy of the rule of law and domestic peace in Venice might have not been perfect but the contrast with other strife-ridden city-state remains stark. For example, Genoa was characterized by violent internal political conflicts which hindered economic growth and, at times, submitted her political independence to foreign lords. The intriguing questions then are why these otherwise similar Italian city-states evolved along such different institutional trajectories? What dynamics characterized the process of equilibrium selection? Did distinctive historical experiences ultimately bring about distinct institutional equilibria in Venice and Genoa, and if so, what prevented the Genoese from adopting similar institutions. These questions lead the way to a future comparative and historical institutional analysis that may facilitate our understanding of both past economic developments and the political impediments to economic growth in contemporary developing countries.

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