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The secret of Venetian success: a public-order, reputation-based institution

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This article examines the institutional foundations of the financial market underpinning Venice's commercial success during the late medieval period. A public-order, reputation-based institution enabled merchants to commit (i) not to flee with investors' capital, despite the limited geographical reach of the legal system, and (ii) not to breach their contracts, despite the investors' inability to directly monitor them. Economic rents in Venice motivated merchants to submit to the city's authorities, while tight administrative trading controls provided the information required to verify a contractual breach. These institutional arrangements differed from other public-order and reputation-based institutions that have been considered in the literature.

> The basic fact in the economic history of Europe from the eleventh century onward was that savings were activated for productive purposes to a degree inconceivable in previous centuries.
>
> – Cipolla 1993, p. 164

1. Introduction

The expansion of Venetian trade during the late medieval period (1050–1350) had a lasting impact on the development of Europe (Luzzatto 1962; De Roover 1963; Lane 1973; Lopez 1976; Cipolla 1993). Crucial to this expansion was an active financial market through which Venetians of various means, ranks and occupations mobilized their savings into risky investments in overseas trade (Luzzatto 1952, pp. 59–80, 89–115; Lane 1966, pp. 56–7).[1] This mobilization, however, required merchants to commit *ex-ante* not to embezzle the invested capital *ex-post*. What arrangements

[1] For the general importance of credit to late medieval economic growth, see Byrne (1917, pp. 135, 169); Lopez (1976, p. 72); Pryor (1984, p. 438); and Cipolla (1993, p. 164).

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enabled such commitment? What were the institutional foundations of the Venetian financial market?

Some scholars, such as Raymond de Roover (1963), Roberto S. Lopez (1976) and Douglass C. North (1981, 1990), have argued that the legal system supported the emergence of a market economy during this period. Yet, asymmetric information and the geographical boundaries of the courts' jurisdictional power limited the ability of such public-order, coercion-based institutions to enforce financial contracts for overseas trade (Cipolla 1993, p. 164; North 1990, p. 57).[2] Other scholars, particularly Avner Greif (1989, 1993, 1994a, 1998, 2006), have emphasized the role of informal monitoring and reputation among traders in supporting late medieval overseas trade in the absence of an effective legal system.[3] However, the legal system often reinforced such private-order, reputation-based institutions. With respect to Genoa, for example, Greif has noted how, by punishing observable transgressions such as outright embezzlement of an investor's capital and holding a merchant's family liable for these transgressions, the legal system supplemented a bilateral reputation mechanism. This mechanism relied on the investor's ability to reward an honest merchant with a sufficiently high rent and to punish a cheater by excluding him from this privately generated rent. The institutional system prevailing in Genoa, that is, the Genoese institution thus combined public coercion with private reputation.[4]

In contrast, this paper finds that the Venetian institution for contract enforcement was neither public-order, coercion-based, nor private-order, reputation-based. Instead, a public-order yet reputation-based institution supported the Venetian financial market. It was public-order in the sense that the state generated the rents required to motivate a merchant to keep his affiliation with Venice, gathered the information needed to detect a

[2] Other works in the area of law and economics have stressed the fixed cost of lawsuits (Posner 1973), the court's high transaction costs of enforcing incomplete contracts (Williamson 1975), the offender's inability to repay in the absence of collateral (Shavell 1984), the long duration of judicial proceedings (Djankov *et al.* 2003; Bianco, Japelli and Pagano 2005), and the potential subversion of justice (Glaeser and Shleifer 2003).

[3] For other private-order, reputation-based institutions, see, for example, Clay (1997); Fafchamps (2004); Greif (1994b); Guinnane (2001); Hickson and Thompson (1991); Hoffman, Postel-Vinay and Rosenthal (2000); Moriguchi (2003); Rauch (2001); and Yang (2000). Ideological commitments to honesty and loyalty among family members may have played a role as well. I discuss these issues in Section 3.

[4] Greif (1994a, pp. 937–8; 1998, ch. 8, p. 4, ch. 9, p. 10; 2006, p. 295). The complementarities between public and private institutions may take many forms. For other institutions combining public coercion and private reputation, see, for example, Greif (1998, ch. 10; 2004); Greif, Milgrom and Weingast (1994); Johnson, McMillan and Woodruf (2002). For the role of the legal system in coordinating collective punishment, see Greif (2006, p. 93); Greif, Milgrom and Weingast (1994); and Milgrom, North and Weingast (1990). For the interaction between dysfunctional legal systems with coercive power and various private-order institutions not based on reputation, see, among many, Dixit (2004); North (1990, pp. 35–40); and Williamson (2000).

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contractual breach, and punished a merchant if he cheated. It was reputation-based in the sense that the merchant was motivated to submit to the Venetian authorities and comply with his contractual obligations not only due to the threat of legal sanctions but also of losing his reputation with the state and thus access to state-generated rents. Reputational concerns vis-à-vis the state and legal sanctions enabled Venetian merchants to commit to neither embezzle *all* the capital received and flee nor misreport trading profits and embezzle *part* of it.

The Venetian public-order, reputation-based institution differs from other institutions previously considered in the literature. In public-order institutions à la North, enforcement is based on the coercive power of the state, but is limited by the information (exogenously) provided to the courts. In late medieval Venice, however, the state could not exercise coercion over a merchant who fled with both an investor's capital and his own possessions, but it could and did generate the information required to enforce contracts otherwise characterized by asymmetric information. In reputation-based institutions à la Greif, private agents create rents through their bilateral or multilateral association, monitor each other, and punish cheaters by terminating their valuable association with them. In late medieval Venice, however, the state created rents, monitored merchants, and punished cheaters with legal and administrative (rent-exclusion) sanctions. In mixed institutions such as Genoa's, commitment is achieved through the interaction of public coercion and private reputation. Legal sanctions and exclusion from privately generated rents are central to these institutions. In late medieval Venice, however, a merchant's ability to commit relied on public contract enforcement. The Venetian institution combined coercion and reputation, but it was a fully public-order institution: threats backed by the coercive power of the state of legal sanctions and of exclusion from state-generated rents supported the Venetian financial market.[5]

The elements upon which the Venetian institution or institutional system was built have been noted in the literature. Yet, the extent to which these elements formed a system has not been recognized. Frederic C. Lane (1967, pp. 45–52, 78, 133–5; 1973, pp. 23–43, 58–63, 73–85, 125, 145–6), for example, has underlined that the state, by establishing staple rights in Venice, organizing protective convoys and obtaining exceptional trading privileges abroad, made Venetian commerce more secure and profitable than that of other city-states, but has never linked the resulting rents to the enforceability of trading contracts.[6] Lane (1967, pp. 95–111; 1977,

[5] Note that the public-order, reputation-based institution prevailing in Venice also differs from other mixed institutions that combine public coercion and private reputation in which public authority backs threats of exclusion from privately generated rents. For a discussion with a focus on today's licensing systems, see Section 5 below.

[6] For Lane's thesis on protection rents, see Lane (1979). For a discussion and critique, see Bullard *et al.* (2004).

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pp. 182–4) and Reinhold C. Mueller (1997, pp. 493, 502) have also emphasized the state's ability to verify information regarding dues paid to local consulates and foreign rulers, freights and even prices during the fifteenth century, but have overlooked the institutional arrangements that supported the verification of such information prior to that time. Finally, various legal scholars, such as Alessandro Lattes (1880, pp. 8–13) and Giovanni I. Cassandro (1936, pp. 75–91; 1938, pp. 98–127), have noted that, from the fourteenth century, the state punished cheaters with both legal sanctions and exclusion but have failed to explain why exclusion sanctions were needed and how their effectiveness depended on rents.[7]

By examining this system and dating its beginning to the late eleventh century, this article sheds light on various well-known but poorly explained phenomena, such as the exclusion of foreigners from Venetian trade, the tightness of Venetian citizenship regulations, its fluctuating commercial policy with sporadic restrictions on imports, the role of trading licences in disciplining merchants, and the transition from the sea loan to the commenda.

While future research will elucidate whether public-order, reputation-based institutions prevailed in other historical episodes, our knowledge so far suggests that the institutional distinctiveness of Venice enabled it to become the most economically successful among the maritime Italian city-states. Its relative success has been attributed to its superior political organization, which motivated the Venetians to cooperate in supplying the naval and commercial infrastructure required for trade expansion (Byrne 1917, pp. 129; Epstein 1996, pp. 195–9, 229; Greif 1994b; 2006, pp. 170–7; Lane 1967, pp. 45–52; 1973, pp. 175–9; 1979; Lopez 1938, pp. 261, 738; 1982, p. 393). Although this article takes the political system as given, it contributes to this line of research by investigating how the resulting rents supported the operation of an active financial market among the Venetians and hence enabled large amounts of capital to be mobilized into trade.

This article uses historical data from primary and secondary sources and game theory. The evidence provides the basis for both specifying the assumptions and evaluating the predictions of a context-specific theoretical framework in which financial relations are enforced by a public-order, reputation-based institution. Empirical confirmation of the predictions lends support to the hypothesis that such an institution prevailed in Venice. This conjecture gains further support from the weakness of alternative explanations: private-order institutions based on bilateral or multilateral reputation, loyalty among family members and ethics are theoretically inconsistent with the observed patterns of financial exchange.

In particular, this historical institutional analysis draws on the works of previous generations of economic historians and medievalists and especially on the archival work of Raimondo Morozzo della Rocca and Antonio

[7] See also Lane (1967, pp. 97–8; 1973, pp. 143 and 251); and Mueller (1997, pp. 124–5).

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Lombardo, henceforth MRL (1940; 1953), who transcribed all the surviving trading documents for the period 1021–1261.[8] This evidence consists of 969 notarial acts in which 435 trading contracts involving 547 individuals can be identified. The acts were drawn up by a variety of notaries throughout the Mediterranean and the Black Seas and are hence believed to be representative. Yet, the source is biased towards legally binding contracts, even though Venetian courts enforced both notarized and verbal agreements.[9] To better interpret this fragmentary and notary-biased data, the evidence is compared with secondary studies based upon Genoese notarial records from the twelfth century, most notably the work by Greif (1994a; 1998, chs. 8–10; 2006, chs. 3, 9) on the entire cartulary of John the Scribe (1155–64) in which 612 contracts involving 479 individuals were drawn up. The contractual analysis is further complemented with the study of the cities' Statutes.

2. The Venetian financial market for overseas trade

Venice was established as an autonomous political unit in the eighth century after a period of Byzantine dominance. Initially it was ruled by a dictator-like doge but, beginning in 1032, the autocratic prerogatives of the doge were progressively limited until he became only a top magistrate elected for life. Political power was distributed among a large number of interlocking councils and magistracies whose members were elected for brief terms and could not succeed themselves. To further limit the ability of any individual or faction to abuse the power of the state, campaigning for office was outlawed, selection for important offices was delegated to nominating committees whose members were chosen by lot, and no family was allowed to have more than one member on any such committee or office.[10] This distinctive system of limited government survived with astonishing stability until the Napoleonic invasion in 1797.[11] Furthermore, with a steady population growth from about 45,000 inhabitants in 1050 to over 110,000 in 1330, Venice was the largest and probably the richest city in northern

[8] See also, among many, Luzzatto (1952, 1962); Cessi (1963, 1965); and Lane (1966, 1973). For a highly readable history of Venice, see Norwich (1989).

[9] For further details on the riches and biases of the data, see MRL (1940, pp. i–xxx) and Luzzatto (1952, pp. 60–116).

[10] For a concise description of Venice's governing structures and their evolution over time, see Gasparini (2007). See also Cessi (1963); Lane (1973, pp. 88–117); Gaspari (1992); and Castagnetti (1995). For a comparison with the Genoese political system, see Greif (1994b; 2006, ch. 6).

[11] In over eight hundred years Venice suffered only two revolts. Both occurred at times of exceptional distress during the fourteenth century and failed (Lane 1973, pp. 114–17, 173–83). In contrast, Genoa was torn by recurrent civil wars and at times fell under foreign domination (Epstein 1996, pp. 80–91, 325–7). Venice's other commercial rivals also sunk into civil wars or lost their political independence (Lopez 1982).

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Italy during the late medieval period – on which this study focuses – and eventually vanquished its major competitor, Genoa, in 1381.[12]

The economic rise of Venice was based on the expansion of trade along the Mediterranean and beyond.[13] The most profitable trade was in oriental luxuries, which were available to European merchants in *Romania*, as the Venetians called the territory that belonged or once belonged to the Byzantine Empire, the Crusader States and Alexandria. This trade required large amounts of capital and involved high risks.[14] A commercial round-trip from Venice to the East took six to nine months and overlapping sailing seasons precluded financing it with retained earnings from previous trips.[15] Fitting costs were further increased by the need to carry a large armed crew, sail in convoys with naval protection and secure merchants' property rights abroad.[16] These protective measures notwithstanding, the 'risk of the sea and people', as the Venetians referred to the possibility of loss through shipwreck, piracy or confiscation of merchandise by foreign rulers, remained high.[17] The commercial risk was also high: profits varied widely depending,

[12] For population figures, see Lane (1973, pp. 18–19, 73); Bairoch *et al.* (1988); and Epstein (1996, p. 213). For relative wealth estimates, see Lopez (1976, p. 101; 1982, pp. 326, 386). Venice's populace was relatively well-fed and enjoyed domestic peace, public health, and a more or less impartial system of law (Lane 1973, pp. 201, 215–16, 251; Robbert 1983, pp. 390–3; and Gasparini 2007). For wealth distribution, see Lane (1973, pp. 151–2, 332–4). For Venetian–Genoese wars, see Lane (1973, pp. 73–85, 174–96). After the war of Chioggia, from which the Venetians emerged victorious in 1381, both Venice and Genoa were exhausted. Yet, Venice recovered rapidly but Genoa fell into a decline because of factional rivalries (Lopez 1938, p. 385; 1982, p. 393; Epstein 1996, pp. 272–3, 310).

[13] For Venetian patterns of trade and trading routes, see Luzzatto (1952, pp. 90–3); Lane (1973, pp. 68–73); Lopez (1976, p. 95; 1982, pp. 314, 389, 393); and González de Lara (2007).

[14] Trade in ordinary goods within Europe or the East did not set such high capital requirements but was less profitable and still involved high risks (Byrne 1917, p. 131; Lopez 1976, p. 95; and Pryor 1984, p. 413).

[15] The opening of the seas in winter following the nautical revolution and a better organization of markets abroad enabled the undertaking of two voyages a year after 1290 (Lane 1973, pp. 119–23).

[16] In Venice a typical medieval ship of about 200 deadweight tons capacity (*navis*) needed to be manned with over 60 crewmen to be considered 'armed' (Lane 1973, pp. 46–8). Huge 500-ton round ships had a crew of a hundred on a normal commercial voyage but, if armed for battle, they carried several hundred (ibid., pp. 48–9). A Venetian galley normally carried 140–180 men during the twelfth and thirteenth centuries and about 200 during the fourteenth century (ibid., p. 122). A typical thirteenth-century convoy from Venice to the East consisted of 10 to 20 *navis* or other small ships with one or two really big round ships or a few galleys for protection (ibid., pp. 68–70, 124–31). Genoese convoys were typically smaller (Byrne 1917, pp. 131–3). Protection costs abroad were determined by the cost of the naval and diplomatic action required to secure a merchant's privileges in foreign lands. For Venetian privileges, see Lane (1973, pp. 23–43, 73–85) and Section 4.1 below.

[17] The term is used in all sea loans and commenda contracts (e.g. MRL 1940, no. 134, 522).

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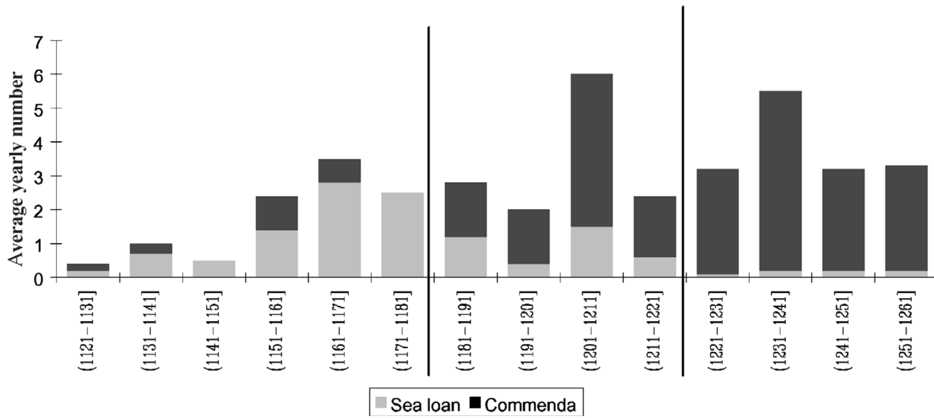

Figure 1. *Documented sea loans and commenda contracts and their distribution over time in Venice*

Sources: The author, based on Morozzo della Rocca and Lombardo (1940, 1953).

There is also evidence on one sea loan and eleven commenda contracts for the period 1021–1120. In addition, there are 38 contracts that cannot be classified with certainty and hence do not appear in the figure.

for example, on the tariffs and bribes paid in customs, the transportation and storage fees, price fluctuations, and the condition of the goods upon arrival after long and perilous trips.

To raise the required capital and diversify the inherent trade risks, merchants used sea loans and commenda contracts. The sea loan was a fixed payment loan with the particular feature that the investor assumed the risk of loss at sea or at the hands of hostile people and was therefore allowed a higher rate of return. The commenda (*collegantia*) was a trading contract whereby an investor assumed liability for any loss in proportion to his capital investment and shared the commercial profits and risks with the merchant.

According to Gino Luzzatto (1952, pp. 59–115), the expansion of Venetian trade was facilitated by an active financial market through which Venetians of various means, ranks and professions invested sizeable sums into a diversified portfolio.[18] The broad participation of the Venetians in the financial market is well reflected in the 435 sea loans and commenda contracts published by MRL. Even though these contracts constitute a tiny sample (see Figure 1), they show investments both by the wealthiest and most politically influential

[18] See also Lane (1966, pp. 56–7) and the references in footnote 19. The mobilization of capital by a relatively large part of the population was particularly important as wealth in Venice was not as concentrated as in other Italian city-states, especially during the twelfth century (Lane 1967, pp. 82–3; 1973, pp. 151–2, 332–4; Castagnetti, 1995; Mueller 1997, pp. 491, 496; Greif 2006, pp. 286–7). Arguably, an active financial market reinforced a relatively wide distribution of wealth in Venice.

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individuals and by small investors, by nobles and by non-nobles, by merchants and by people without business experience such as nuns, priests, craftsmen and notaries.[19] For example, in 1226 the nobles Tommaso Agadi and Tommaso Gradenigo respectively invested 400 and 100 Venetian pounds; the same year a women named Soria entrusted 8 pounds and 4 pence in commenda to a merchant who appears to be unrelated to her family (MRL 1940, nos. 638, 633, 627).[20] Most investors bore noble family names and about half of these belonged to the ruling aristocracy, but over a third of the investors were commoners (see Table 2).[21]

These contracts do not provide information on the ratio of investments to wealth, but surviving testaments indicate that wealthy Venetians invested heavily, probably because they could diversify their investments. For example, at the time of his death in 1268 the doge Raniero Zeno held about half of his fortune in 132 commenda contracts (Luzzatto 1952, pp. 81–7).[22] Similarly, in 1281 the prosperous, although non-noble, merchant Lazzaro Mercadante had almost all his property diversified in overseas trade investments (ibid., pp. 61–5).[23]

The Venetian financial market enabled diversification across trade centres and merchants and over time. For example, in 1235 Gabriel Marignoni invested in two sea ventures, one to Fermo (the western Adriatic) and

[19] Luzzatto (1952, pp. 59–80, 89–115); Lane (1966, pp. 56–7; 1973, pp. 51–4, 90–2); Rösch (1989, pp. 77–80); Ferluga (1992, pp. 710–11); and Gasparri (1992, p. 797).

[20] One pound or *lira* corresponds to 20 pence or *soldi*. In 1225 a basket of pepper was sold in Venice for £170 and a bale of gray cloth for £62 10s; one bundle of figs cost 12s. The monthly salary of a crossbowman in a galley in 1224 was £5 5s. The annual salary of a parish notary in 1266 was £150. For these and other prices, see Robbert (1994, pp. 384–7).

[21] As the 'nobility' was not legally defined in Venice until 1297, nobility is here a proxy for economic and political prominence. A trader is classified as a member of the ruling aristocracy if anyone with his or her family name held high public office during the period in which the contract was signed. A trader is classified as noble if he/she belonged to the ruling aristocracy or anyone with his/her same family name underwrote a ducal charter or sat in the Great Council during the period in which the contract was signed. The following periods are considered: 960–1140, 1140–1204, and 1205–97. The classification is based on Sanudo (1900, pp. 238–57, 277–81), Luzzatto (1929, pp. 25–9), Rösch (1989, pp. 59–60, 65–9, 91–104, 127–33, 209–28), and Castagnetti (1992, 1995). See also Chojnacki (1973) and Ferluga (1992).

[22] He held the rest of his wealth in cash and goods for personal use (10 per cent), jewellery and ornaments (7.5 per cent), loans (4.5 per cent), public debt (13 per cent), and real estate (20 per cent). Surviving documents of last will and testament for the period 1021–1261 identify the same investment opportunities, except for public debt, which was first issued in 1164, and slaves, which gradually disappeared from Venice. These documents do not specify the shares allocated to each asset, but all of them included sea loans and/or credits of commenda (MRL 1940, nos. 9, 22, 43, 100, 131, 156, 232, 535, 559, 595, 636, 661, 731; MRL 1953, nos. 82, 92).

[23] A large part (74.56 per cent) of his investments consisted in personal merchandise and credits in the company *Societas Lazzaro Mercadante*. The remaining 25.44 per cent was held in 25 credits of commenda. Trading companies seem to have been rare from 1021 to 1261, as only 39 such *compagnii* are mentioned in the data.

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Table 1. *Frequency of appearance of Venetian traders*

No. of times that traders appear	Only as investor	Only as merchant	As both investor and merchant	Total
Once	252	170	0	77.15%
Twice	43	19	9	12.98%
Three times	6	13	4	4.20%
Four times	3	5	0	1.46%
Five times	0	1	3	0.73%
Six times	2	0	0	0.37%
Seven times	2	1	0	0.55%
Eight times	3	0	0	0.55%
Nine times	1	2	2	0.91%
Eleven times	0	1	1	0.37%
Fifteen times	0	1	0	0.18%
Twenty-two times	0	0	1	0.18%
Twenty-eight times	0	1	0	0.18%
Fifty-two times	0	0	1	0.18%
Total	312	214	21	547

Source: The author, based on Morozzo della Rocca and Lombardo (1940, 1953).

the other to the eastern Mediterranean, and in 1238 he financed another two voyages, one to Ancona in Italy and the other to Zara in Dalmatia. In all, he is known to have entered into nine commenda contracts, each with different merchants (MRL 1940, nos. 694, 701, 707, 709, 711, 715, 745, 809, 820, 842). Giovanni Serzi also contracted with a different merchant in each of the eight sea loan contracts that have survived. In 1169 he funded four merchants who were sailing on three different ships from Armiro (Peloponnese) to Constantinople and in 1170 he financed another four merchants under similar conditions (MRL 1940, nos. 214–17, 219–23). As we have seen, merchants also diversified by investing in other merchants' ventures. Lazzaro Mercadante, for example, supplied capital through eight commenda contracts to seven different merchants during the period 1242—58 and at a certain point in time in 1281 he held as many as 25 credits of commenda (MRL 1940, nos. 746, 759, 764, 771, 793, 839–40, 843; Luzzatto 1952, pp. 61–5). More generally, almost a third of the merchants who appear at least twice in the Venetian source also performed as investors (see Table 1).

In contrast, Greif (1993, p. 541; 1994a, p. 929; 1998, ch. 8, p. 22) has found that Genoese trade investments during the twelfth century were concentrated in the hands of a few noble families, who invested a significant proportion of their capital in non-trade-related activities and were limited in their ability to diversify.[24] Given the different origins of the Venetian and the Genoese

[24] See also Byrne (1917, p. 168). Changing conditions in Genoa by the turn of the twelfth century, though, opened maritime commerce to a wide range of people (Angelos 1994,

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Table 2. *Differences between Venice and Genoa*

	Venetians (MRL)	Genoese (John the Scribe)
Time period	1021–1261	1155–1164
Number of documents	455 (out of 969) notarial acts	entire cartulary
Contracts (sea loan and commenda)	435	612
Traders (traders' families)[1]	547 (306)	479 (± 266)
Investors (investors' families)	333 (214)	180 (± 37)
Nobles (noble families)	210 (106)	over 90% capital
Non-nobles (non-noble families)	112 (98)	
Foreigners (foreign families)	11 (10)	
Merchants (merchants' families)	235 (152)	335 (229)
Nobles (noble families)	135 (69)	
Non-nobles (non-noble families)	94 (77)	
Foreigners (foreign families)	6 (6)	18.3% capital
Intra-family relations		
Contracts	8.97%	
Capital		6.45%
Average merchants per investor[2]	2.25	1.57
Average investors per merchant[2]	4.57	close to 1

Source: For Genoa, Greif (1993, 1994a, 2006). For Venice, the author, based on Morozzo della Rocca and Lombardo (1940, 1953).
[1]The number of 'traders' does not correspond to the sum of 'investors' and 'merchants' because 21 Venetian and 36 Genoese traders performed both as investors and as merchants, and hence are counted twice. In terms of Venetian families, 60 out of the known 306 traders' families had members who acted as investors and members who acted as merchants.
[2]Excluding investors/merchants who appear only once as such.

data – the former are drawn from all around the Mediterranean and span over two and a half centuries and the latter come from the cartulary of one scribe and span eleven years – any comparison between the two needs to be taken with caution. Yet, it is worth noting that whereas the 435 sea loans and commenda contracts published by MRL mention 333 investors from 214 families, of whom about a half were non-nobles, in the 612 contracts drawn up by John the Scribe only 180 investors are mentioned and 37 noble families contributed 90 per cent of the capital (Greif 1993, p. 540; 1998, ch. 9, p. 20; 2006, p. 287).[25] On average, Genoese investors relied on 1.57 merchants. As the great majority of the Venetian investors appear only once as such, the average in Venice is smaller but, on the basis of those who appear at least twice, Venetian investors financed, on average, 2.25 merchants and 44 per cent of them funded a different merchant each time they are mentioned (see Table 2).

p. 302; Greif 2006, p. 281). Also, it is possible that other twelfth-century notaries had a less wealthy and politically active clientele (Epstein 1996, p. 56).

[25] Comparable information on the capital raised in Venice is not available.

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3. The commitment problem and possible institutions for contract enforcement

The scope, scale and diversification of the Venetian financial market are puzzling given the two commitment problems inherent to overseas trade investments. First, once overseas, a merchant could flee with all the capital entrusted to him. Second, even if he returned to Venice, he could misreport the gains from the venture and misappropriate the difference.[26] Without an institution that enabled a merchant to commit not to embezzle all or part of the capital received, an investor would not have invested to begin with and, hence, mutually beneficial financial relations would not have transpired. Yet, Venetians from various walks of life invested substantial sums into diversified trade portfolios. What were the institutional foundations of this market?

Ethical considerations, such as fear of God or altruism, and loyalty among family members can mitigate a merchant's commitment problems (Lane 1966, p. 36; North 1990, p. 55; Cipolla 1993, p. 164). Although these factors most likely played some role in supporting the Venetian financial market, the evidence reflects that neither one was central. First, the phraseology in which notarial acts were framed indicates that divine penalties were perceived as insufficient curtailments of *opportunism*. Consider, for example, the standard formula under which a dying merchant abroad entrusted other merchants to ship his wares to his legitimate heirs. A hefty monetary sanction was imposed for breach of contract, despite appealing to the fear of God: 'if you infringe your duty or you are corrupted, let God the Father Almighty and his Son our Lord and the Holy Spirit be against you ... and let you burn in hell with Judas the betrayer forever and, in addition, you will have to compensate the executor of my will with five pounds of gold' (MRL 1940, no. 362).[27] Besides, both experienced and inexperienced merchants entered into sea loans and commenda contracts under the same conditions.[28] Yet, if financial relations were based upon ethics alone, one would expect that experienced

[26] Accordingly, commenda contracts invariably required merchants to 'render a complete, fair and true accounting, without any fraud or evil intent, and under oath' (e.g. MRL 1953, no. 53). Sea loans ignored the disclosure of information, except for the claim of losses at sea or at the hands of enemy people, in which case the merchant also ought to swear under oath that the claim exempting him from repayment was true. For other contractual problems due to moral hazard and adverse selection, see González de Lara (2007).

[27] See also MRL (1940, nos. 100, 246, 326, 535, 559, 595, 636, 661, 731). The sanction, which was customary for any breach, was specifically interpreted in the Statutes of 1242 as meaning £5 12s of current money (Cessi 1938, St. Nov., I, 32; see also Besta and Predelli 1901, p. 89).

[28] All merchants were required to collateralize their debts with their entire present and future property and got one fourth of a commenda's profit for their labour. Furthermore, there is no evidence on contract selection based on the individual but rather on the broader situation (González de Lara 2007). Typically, twelfth-century merchants used the

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merchants whose records proved they were *intrinsically* honest would obtain more favourable terms.

Second, the evidence also suggests a limited and declining role of the family in financial relations. Only 8.97 per cent of the 435 sea loans and commenda contracts published by MRL for the period 1021–1261 were established among family members (see Table 2).[29] Furthermore, the rate of intra-family relations dropped dramatically, from 37.50 per cent during the eleventh century to 7.23 and 9.20 per cent during the twelfth and thirteenth centuries, respectively. Clearly, the data might be biased, as financial relations among trustworthy relatives may have not required the services of a notary and Venetian brothers legally constituted a fraternal partnership (*fraterna*) without the need of formal contracts. Yet, the Venetians relied on notaries for both intra- and inter-family relations. Notarial acts show, for example, a loan by a widow to her granddaughter 'for the needs of her home', an investment by a nun in her son's voyage, and commenda contracts between brothers (MRL 1940, nos. 146, 356, 785).[30] Indeed, Venetian merchants during this period of time typically divided their *fraterna* soon after their father died and their sisters were dowered.[31] Furthermore, not all family

sea loan, whereas their thirteenth-century counterparts relied on the commenda (see Figure 1).

[29] Two individuals are considered to be family members if they had the same surname or the contract mentions that they were relatives. Surnames, though, might have been homonymous. On the other hand, contracts did not specify all ties within the extended family. In 1201, for example, Tommaso Viadro is known to have raised capital from Pietro Ziani (MRL 1953, nos. 53, 54). Pietro happened to be Tommaso's maternal uncle (Takada 1995, p. 7). Family ties are given between a merchant and his brother (MRL 1940, nos. 587, 622, 633, 642, 785), sister (MRL 1940, no. 704; 1953, no. 62), mother (MRL 1940, nos. 588, 808), grandfather (MRL, nos. 469, 600, 647), relatives by blood (MRL 1940, no. 234) and in-laws (MRL 1940, nos. 61, 71, 75, 104, 337, 353, 391, 569, 575, 602, 603).

[30] For other notarial acts on loans '*pro amore*' among brothers and other close relatives, see MRL (1953, nos. 104, 90); see also MRL (1940, nos. 28, 114, 307, 427, 433–5, 548–9). For trade investments among kin, including brothers, see the references in footnote 29. As usual, these contracts established a penalty for late payment and a general pledge of the debtor's present and future property. For the execution of such a penalty and the confiscation of real property due to failed loans, see MRL (1940, no. 147; 1953, no. 38).

[31] For documents of dissolution, see MRL (1940, nos. 9, 22, 43, 44, 131, 156, 240, 253, 254, 366, 399, 563, 590, 614, 615, 623, 861; 1953, nos. 36, 55, 84). See also Robbert (1999, pp. 29–34) and Zordan (1966, pp. 191–3). Both the documentary and statutory evidence reflects a limited role of the *fraterna* until the mid thirteenth century. The term *fraterna* does not appear in the above-mentioned documents until 1171. The various compilations of the Statutes prior to 1242 neither use the term *fraterna* nor make any reference to it in the context of trade investments (Besta and Predelli 1901). The Statutes of 1242 dedicate various chapters to the *fraterna* (Cessi 1938, St. Nov., III. cc. 4–6) but only after discussing the far more important *collegantia* or commenda contract (ibid., St. Nov., III. cc. 1–3; see also Lopez 1976, pp. 74–5). According to Lane (1966, pp. 37–44, 52–3; 1967, p. 90), the *fraterna* became the dominant form of business organization during the fifteenth and sixteenth centuries but even at that time strictly temporary and formal

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wealth belonged to the *fraterna*. The 1215 dissolution agreement between the noble merchant Domenico Gradenigo and his brother Marco specifically stated that Domenico had borrowed two sums – £350 in 1210 from Marco's wife's dowry of £1200 and a further £170 in 1213 from Marco's personal patrimony – that were over and above the total fraternal partnership that they divided and had been entrusted to him with a notarial document (MRL 1940, no. 563; Robbert 1999, pp. 31–2, 44).[32]

Private-order, reputation-based institutions theoretically can support financial relations beyond ethics and the family by linking a merchant's past conduct to his future interactions with an investor or group of investors. Specifically, a bilateral-reputation, private-order institution enables a merchant to commit by the carrot of long-term relations of a sufficiently high per-period value with a particular investor and the stick of terminating these bilateral relations if the merchant is discovered cheating. A multilateral-reputation, private-order institution enables a merchant to commit by the expectation of very profitable future relations with a *group* of investors and the fear of losing *all* his multilateral relations if he is ever caught in a contractual breach towards *any* investor in the group (Greif 1993, p. 530 and the references therein).

Such reputation-based institutions prevailed among the Genoese and the Maghribi traders, respectively (Greif 1989; 1993; 1994a; 1998, chs. 8–10; 2006, chs. 3, 9). This, however, was not the case in late medieval Venice.[33] The evidence contradicts the prevalence of bilateral reputation. Investments by relatively humble people who sporadically supplied small sums and the large extent to which investors diversified in Venice suggest that a merchant could commit even when his bilateral relations were expected to last only for a short period of time and be of little value.[34] Venetian merchants indeed contracted with many different investors during their trading careers. For example, 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.[35] Domenico Gradenigo entered into 28 commenda contracts

partnerships between individuals without any family ties were frequent and many merchants, like Andrea Barbarigo, successfully operated without the backing of a *fraterna*.

[32] See also Lane (1966, p. 42); Zordan (1966, p. 182); and Borsari (1978, pp. 39–40). Domenico continued to manage the overseas investments of his family after dissolving the *fraterna* but raised only 17.30 per cent of the capital he is known to have carried abroad during the period 1215–26 from his brothers (see footnote 36).

[33] According to Dean Williamson (2002), though, such an institution governed Venetian trade in Crete during the fourteenth century.

[34] As we have seen, the typical Genoese investor of the mid twelfth century was a wealthy noble who diversified relatively little. Consistent with the operation of a bilateral-reputation, private-order institution, he generally conferred large sums to a few merchants and financed them for a prolonged period of time (Greif 1998, ch. 8, pp. 24–7).

[35] MRL 1940, nos. 99, 104, 112, 116, 118, 122, 124, 127, 128, 130–2, 154, 155, 157, 167, 182, 183, 188–90, 193–8, 201, 203, 228, 231, 247, 248, 256, 261, 267, 278, 284, 285, 293, 294,

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with various members of his family and with 14 other investors, of whom only two (14.2 per cent) financed him repeatedly.[36] On average, merchants who appear twice or more as such in the Venetian data received funds from 4.57 investors, as opposed to Genoese merchants who typically raised capital from only one investor (see Tables 1 and 2).[37]

Similarly, the evidence contradicts the relevance of multilateral reputation. The Venetians, unlike the Maghribi traders, notarized their contractual agreements, codified their trading customs, and brought their commercial disputes to the courts.[38] Such formalization is at odds with the informal enforcement of contracts among a group of investors. Furthermore, the Venetians did not form a coalition of business associates with a thick information network. Most Venetian investors were not personally engaged in commerce and some had no trading experience.[39] Besides, there is no evidence of business communications between Venetian merchants and their financiers.[40] But, without an essentially free mechanism for information transmission, investors would not have exercised costly monitoring for benefit of the community and hence would have lacked the information required to punish cheaters collectively.

Observed formal relations of short duration and low value among self-interested traders who did not generate information as a by-product of their commercial activity can be enforced by the legal system. It enables a merchant to commit by using the threat of imprisonment and confiscation

306, 309, 310, 312, 318, 323, 329, 335, 345, 381, 383, 384, 385, 387, 447. See also MRL 1940, nos. 191, 207, 321. These documents span the years 1150–99.

[36] Domenico Gradenigo operated as a travelling merchant during the period 1205–26. In terms of investing families, apart from his own, Domenico raised funds from ten families, four of whom provided him capital twice or more (MRL 1940, nos. 475, 488, 489, 494–8, 505, 506, 511, 512, 524, 525, 545, 549, 554–8, 563, 569, 571, 573, 575, 587–8, 601–5, 620, 633, 642, 670, 736, 744; 1953, no. 80).

[37] On Genoa, see Greif (1998, ch. 8, pp. 24–7). For differences in the origin of the data samples, see p. 10 above.

[38] For evidence on the Maghribis' reliance on informal means of contract enforcement, see Greif (1998, ch. 3, pp. 63–4, 295). For the operation of the Venetian legal system, see below.

[39] Only 25 per cent of the investors who appear twice or more in the Venetian data, and hence could have appeared acting also as merchants, did so (Table 1). In contrast, almost 70 per cent of the 119 traders who are mentioned more than once in the Geniza documents performed both roles (Greif 1994a, p. 928). For evidence on inexperienced investors, see MRL (1940, nos. 53, 97, 137, 150, 426, 493, 500, 650, 801, 802).

[40] According to Luzzatto, Venetian investors had no control at all over the ventures they financed (1952, pp. 70–2; see also González de Lara 2007). In contrast, many letters have been preserved in which a Maghribi investor requested information or mentioned that he was expecting to receive additional information before making a business decision (Greif 1989, p. 880; 2006, pp. 445–6, 476).

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of his property.[41] Such a public-order, coercion-based institution, however, could not have supported the Venetian financial market alone. First, if a merchant embezzled an investor's capital and took refuge in another jurisdiction, a Venetian court could not force him to repay. Tracking down a merchant at a time prior to passports, credit cards and the internet was prohibitively costly and even if he was located, inter-community litigation was virtually impossible against a state in that Venice could not retaliate, for example, by interrupting their trade.[42] Leaving collateral in Venice could have mitigated the problem but most merchants left few goods behind. Over 40 per cent of the Venetian merchants bore non-noble family names and some had very few assets, like Dobramiro Stagnario, a former slave, and Romano Mairano, whose wife received a humble dowry (Luzzatto 1952, pp. 98–9, 108–16; Lane 1973, p. 52; Robbert 1999, p. 34). Furthermore, rich merchants typically held most of their wealth in movable goods, which they could take with them, and they had real estate holdings outside Venice and its domains.[43] Relying on guarantors or kin to pay in place of insolvent merchants could also have mitigated the problem. Yet Venetian overseas trading contracts did not request naming guarantors, nor was the family held liable for a merchant's illegal actions.[44]

A second problem with the legal system is that to enforce trading contracts, a court requires verifiable information. But Venetian investors could not

[41] For a discussion of the Venetian legal system, see Section 4.4 below. For the resolution of suits via arbitration, especially since the fourteenth century and for labour and inter-family disputes, see Marrella and Mozzato (2002).

[42] For vain attempts to gain extradition of Venetian fugitives, see Mueller (1997, pp. 205–11). A community responsibility system, though, enforced impersonal exchange among members of different trading communities whose affiliations could be verified at a sufficiently low cost (Greif 2004; 2006, ch. 10). For its operation in Venice, see Arias (1901, pp. 230–9); Cassandro (1937, pp. 62–74; 1938); and MRL (1940, nos. 43, 637).

[43] For the patrimony of Lazzaro Mercadante, see footnote 23. For the patrimonies of Andrea Barbarigo and Guglielmo Querini, see Lane (1967, pp. 21–2, 182–93) and Mueller (1997, pp. 506–11). For the state's inability to confiscate a debtor's personal property, see Cassandro (1938, p. 102). For investments in real estate outside the Dogeship, see Pozza (1995). According to a 1306 tax appeal, the Venetian authorities were unable to collect taxes on Venetian property outside the dogeship because, unlike in Venice, they could not assess its value (Pozza 1995, p. 673). Arguably, they could also not seize it for payment of a debt. Real estate ownership in Venice was concentrated in the hands of the Commune, monasteries, and a few very rich and relatively old Venetian families (ibid., p. 667). The legal system could, and most likely did, help deter members of these families from fleeing Venice.

[44] In the 435 sea loans and commenda contracts published by MRL, there are only a few cases in which a father or a mother borrowed capital to finance a son's voyage (MRL 1953, no. 96; 1940, nos. 626, 829; see also 1940, no. 410). In contrast with consumption loans, the sea loan and the commenda never used a specific estate as collateral and very rarely pledged the cargo or a share of the ship (MRL 1940, nos. 184, 293–4, 416, 776). For family law, see Besta and Predelli (1901, pp. 45–6, 57–8); Cessi (1938, St. Nov. I.40); and Section 4.5 below.

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provide it, among other things, because they remained in Venice and, so, could not directly monitor merchants abroad. In the absence of an institution generating and transmitting verifiable information, a Venetian court could have not supported overseas trade investments.

If ethics, kinship, private reputation and the legal system did not provide the institutional foundations of Venice's financial market, how could investors trust merchants not to embezzle all or part of their capital? Theoretical considerations and historical evidence suggest that the observed *trust* reflects the operation of a public-order yet reputation-based institution.

4. A public-order, reputation-based institution

The Venetian state generated the economic rents, verifiable information and punishment capabilities required for a merchant to commit neither to embezzle *all* the capital given to him and flee nor to render a false account and embezzle *part* of that capital. First, exclusive commercial privileges, protective convoys, and staple rights in Venice made its commerce more profitable than that of other cities, thereby motivating merchants to submit to Venetian authority. To preserve per-citizen rents, non-Venetians were denied access to its lucrative trade and the cost of acquiring citizenship was raised. Second, colonial governors abroad, scribes on voyages, and various public officers in Venice gathered the necessary information to verify merchants' accounts. Finally, tight administrative controls and legal sanctions provided the means to reward honest merchants and to punish cheaters.

As a merchant's future gains (or, more precisely, his discounted lifetime expected utility) from keeping his city affiliation and honest reputation with the state were greater than what he could obtain by embezzling *all* or *part* of an investor's capital, it was in the merchant's best interest *ex-post* to return to Venice and render a true account. Since this was known *ex-ante*, the merchant was able to commit and the investor trusted him. Mutually beneficial investments in overseas trade were hence made possible.

To substantiate the conjecture that such a public-order, reputation-based institution supported the Venetian financial market, this section presents exactly how the state created and maintained the rents required for merchants to submit to the authorities; how it generated and transmitted the information necessary for detecting a contractual breach; and how it developed the ability to punish merchants who cheated. The section further supports the conjecture by examining various historically confirmed predictions regarding contractual relations and other trade-related phenomena.

4.1. The basis for reputation: economic rents

Venice enacted three policies that increased the expected profitability of its merchants beyond what they could have gained as residents of other

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cities. First, it established staple rights in the northern Adriatic: all wares exchanged there had to be brought to Venice, unloaded, taxed and sold wholesale. The Venetians thus profited from being middlemen in the transit trade between Europe and the East (Lane 1973, pp. 58–63). Second, Venice outfitted a fleet to secure the seas for its merchants and rented them space on the state-owned galleys escorted by it. This provided the Venetians with protection at less cost than was available to others (ibid., pp. 125, 145–6).[45] Last but not least, the state obtained exceptional trade privileges in *Romania*, the Crusader States and Alexandria, thereby reducing the cost and risk to Venetians of conducting business in the most profitable trading regions.[46] Furthermore, Venice's political stability assured its merchants that they and their offspring would continue enjoying rents from trade, while civil strife and foreign rule in Genoa and other rival cities hampered the long-term sustainability of their particular commerce.[47]

In *Romania* the Venetians enjoyed a competitive advantage from 1082. In return for Venice's naval aid against the Normans, the Venetians were allowed to trade free of most controls and requisitions throughout the Byzantine Empire; were released from all tariffs, while native merchants paid a 10 per cent tax on trading transactions; and were given whole districts in Constantinople and Durazzo (Lane 1973, pp. 23–36; Jacoby 1994, pp. 349–57; Ravegnani 1995b). According to twelfth-century Byzantine sources, 'the Venetians were becoming rich at the expense of others due to their trading privileges' (Stone 2007, based on Nicetas Choniates, chief of the palace secretariat in Constantinople). To check Venetian trade dominance in the Byzantine Empire and raise its tax receipts, the Byzantines repeatedly tried to replace the Venetians with Pisans and Genoese under less favourable terms

[45] Genoese traders, on the contrary, usually organized their own convoys privately, thereby duplicating costs and preventing small merchants from shipping merchandise (Dotson 1999, p. 167).

[46] In contrast, the Genoese colonization was the work of private consortia and developed mainly throughout the western Mediterranean until the mid thirteenth century. In 1261, though, the Genoese obtained outstanding privileges in Constantinople and the Black Sea area and, for the first time, became a menace to Venetian commercial supremacy, especially during the period 1280–1311 (Lopez 1938, pp. 208–17, 230–1, 280–385; Lane 1973, pp. 73–85, 173–9; Jacoby 1995a; 2003; Epstein 1996, pp. 140–60, 202–33).

[47] For example, during the Genoese civil war from 1318 to 1331, Guelfs gained power in Genoa but the most important Genoese colonies at Pera and Kaffa sided with the Ghibellines, so Guelf ships could not participate in the Black Sea trade, while the Ghibellines were denied access to Genoa. In 1354 a Genoese fleet defeated the Venetians at Porto Longo but the Genoese gained little from it as Genoa was then governed by the Visconti rulers of Milan, who wanted a speedy peace with Venice and hence granted favourable peace terms. The Genoese inability to sustain unified action also constrained their ability to defend their trade against Venetians, Catalans or Turks and gain privileges from the Mamelukes (Lopez 1938, pp. 261, 738; 1982, p. 393; Lane 1973, pp. 175–9; Asthor 1983, pp. 125–36, 218–21; Greif 1995; 2006, pp. 170–7; Epstein 1996, pp. 180, 195–9, 258–9, 272–3, 310).

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(Lopez 1938, pp. 117, 136–40; Jacoby 1994; Epstein 1996, pp. 70–80).[48] Yet Venice used its naval power to protect and even extend its privileges (Lane 1973, pp. 23–36; Jacoby 1994).[49] From 1204 to 1261 Venice was further able to create the Latin Empire of Constantinople, in which the Venetians had extraterritorial rights and a trading monopoly (Lopez 1938, p. 170; Lane 1973, pp. 36–43; Ravegnani 1995a; Rösch 1995b; Epstein 1996, pp. 91–110).[50]

In the Crusader States the Venetians obtained the greatest possessions and most liberal concessions granted to any merchant group (La Monte 1932, p. 230; Prawer 1973, p. 636–7; see also Lane 1973, pp. 31–6). Benefiting from extensive commercial privileges in *Romania*, Venice was reluctant to join the First Crusade, but eventually supported the crusaders in return for privileges.[51] In 1123 it defeated the Fatimid navy and helped capture Tyre for the right to establish permanent and extraterritorial colonies in every Christian principality along the Levantine coast, a privilege the Pisans and

[48] In contrast to the full tax exemption the Venetians had usually enjoyed in all types of transactions since 1082, the Pisans obtained an exemption on the import of bullion and a reduction from 10 to 4 per cent on the import of other goods brought to the Empire in 1111. In 1192 the 4 per cent rate was extended to domestic commodities traded on the internal market but exports remained liable to the full 10 per cent tax. The Genoese were granted even inferior privileges and only in 1155. Venetian privileges were suspended from 1118 to 1126, from 1143 to 1147 and from 1171 to 1183. In 1171 all the Venetians who were in the Empire were ordered to be arrested and their goods impounded. In 1182 the Pisans and the Genoese were massacred in Constantinople and their privileges suspended for ten years. The Genoese quarter was further assaulted in 1162 by the Pisans and in 1170 by the Venetians.

[49] In 1122 Venice concealed a punitive expedition against the Byzantines under the cover of a holy Crusade and thus compelled them to restore its privileges and to abolish the double taxation generally imposed on Venetian trading partners. In 1147 Venice agreed to provide naval assistance to the Empire against the Normans in return for the renewal of its privileges and an enlargement of its quarter in Constantinople. In 1171 Venice sent a war fleet in retaliation for the seizure of Venetian citizens and property throughout the Empire, but had little success on account of the plague. However, the Byzantines found the Pisans and Genoese not much better than the Venetians to deal with and, accordingly, expelled them from Constantinople in 1182 and allowed the Venetians to return to the city in 1183.

[50] In 1261 the Genoese assisted the Byzantines in recovering Constantinople in return for the latter's promise to expel the Venetians from that city and grant them favoured status there. Yet, the Venetians were readmitted in 1268 and the Genoese never obtained the privileges that the Venetians had enjoyed during the first part of the century. Furthermore, even when the Genoese dominated the trade in Constantinople and in the Black Sea area, the Venetians maintained their influence on the eastern Mediterranean and became the main trading partners of the Mameluke sultan of Egypt, by then the most profitable trading region (Lopez 1938, pp. 208–17, 230–1, 280–385; Lane 1973, pp. 73–85, 173–9; Jacoby 1995a; 2003; Epstein 1996, pp. 140–60, 202–33).

[51] The death of the Latin King of Jerusalem in 1100, though, seems to have rendered the Venetian trading privileges void. In 1110 Venice sent another crusading expedition and obtained as reward a quarter in Acre and the rights to a permanent magistrate and use of its weights and measures. These same privileges were later granted to the Pisans and the Genoese (La Monte 1932, ch. 12 and appendix D).

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the Genoese were not given. Venice's neutrality in the Second and the Third Crusades enabled the Venetians to retain their privileges, even though they participated only as paid carriers.[52]

Finally, Venice's privileged position in Alexandria from about 1200 enabled the Venetians to dominate European trade there during the first half of the thirteenth century (Jacoby 1995b; Rösch 1995b).[53] Later, the Venetians, unlike the Genoese and then the Catalans, refrained from raiding Muslim ships and ports, thereby permitting Venice's diplomacy to obtain exclusive privileges from the Mamelukes, who ruled Egypt and then Syria from 1250 to 1517. As a result, Venetian trade expanded, whereas Genoese and Catalan trade decreased (Lane 1973, pp. 130–1; Asthor 1983, pp. 125–36, 218–21; Jacoby 1995a, pp. 274–7; Epstein 1996, pp. 180, 258–9).[54]

4.2. Making reputation valuable: barriers to entry

Staple rights, protective convoys and overseas privileges made Venetian commerce more profitable than that of their competitors. For the resulting economic rent to deter cheating, however, a city merchant needed to expect the rent to be maintained over time. But a higher rate of return in Venice would have dissipated if non-citizens had had equal access to this trade. Moreover, reputation with the city's authorities would have had no value if a merchant could have cheated, fled to avoid legal sanctions, yet continued to invest in Venice's lucrative trade, either directly or through a merchant from Venice.

Indeed, Venice passed rules and regulations excluding non-Venetians from its overseas trade. Specifically, the state prohibited foreigners from both shipping merchandise from Venice and trading in its colonies (Lane 1973,

[52] During the thirteenth century Venetian holdings in the Crusader States grew larger than their rivals' particularly during and after the first Venetian–Genoese war, 1257–70 (La Monte 1932, pp. 239–41).

[53] Like other naval powers, Venice obtained a *fondaco* – a walled enclosure that served as a combined warehouse and hostel – in Alexandria in the 1170s and hence could profitably shift its trade there during the period when its privileges in *Romania* were suspended. Unlike its competitors, though, Venice gained a second *fondaco* and the privilege to have consular representation in Alexandria in 1208. 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. According to Jacoby (1995b, p. 690), the vast majority of the 3,000 or so Italian merchants present in Alexandria during 1215–16 were Venetians.

[54] Venetian trade with Egypt and Syria continued under Mameluke rule on the basis of privileges granted in 1254 and 1289, respectively. After the fall of Acre in 1291, the popes prohibited the trade with the Mamelukes but the Venetians did not implement the ban except for the period 1323–45 and then complied with it only partially: the lucrative Venetian trade with the Mamelukes continued by way of the intermediate ports of Cyprus and Lesser Armenia.

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pp. 7, 61).[55] It also denied them access to the legal system, thereby discouraging their investments. In Venice 'no one except a Venetian [could] testify against a Venetian' (Roberti 1906, p. 23).[56] This measure, however, could not prevent foreigners from investing in Venice while relying on a bilateral reputation mechanism. As long as a foreign investor could assure a Venetian merchant that their bilateral relations would last long enough and be sufficiently profitable to the merchant, he could be certain that the merchant would both agree to do business with him and repay his debts. Consistent with the need to exclude foreign capital, in the 1270s the state prohibited foreigners from appointing Venetians as agents or otherwise participating in business reserved for Venetian citizens. The Consuls of the Merchants in Venice and colonial governors abroad were there to enforce the laws (Sacerdoti 1899, pp. 17, 44; Lane 1973, p. 140; Jacoby 1995a, p. 291).

Immigration induced by a higher rate of return in Venice was a similar threat to the system. Consistent with the need to maintain the rent underpinning a merchant's reputational concerns with the city, Venice introduced barriers to immigration. Regulations concerning admission to citizenship were tighter in Venice than elsewhere and became even more restrictive during the fourteenth century when increasing competition was congesting Venetian labour and capital markets for overseas trade.[57] During the twelfth and thirteenth centuries immigrants had to pay taxes in Venice for ten years before acquiring naturalization. In most other cities, one year of residence without taxation sufficed. In 1305 requirements for Venetian citizenship were raised to 25 years of tax-paying residence. At that time Genoa granted citizenship after three years of residence (Lane 1973, pp. 151–2; Lopez 1982, pp. 333; Caravale 1997, pp. 304–12).[58]

Also, at various points during the fourteenth century when an overabundance of eastern wares in Venice was eroding profits, Venetian merchants were prohibited from importing luxuries of more value than their assessed patrimony in the *estimo*, on the basis of which they contributed

[55] This was not the case in Genoa (Lopez 1982, pp. 333, 348).

[56] This was already a custom in 1162 and it became the law during the thirteenth century (Besta and Predelli 1901, p. 67).

[57] As noted, the city population grew steadily from about 45,000 inhabitants in 1050 to over 110,000 in 1330. Since no medieval city reproduced itself, most new inhabitants must have been immigrants. For the labour and capital contribution made by naturalized immigrants, see, for example, the evidence on Vitale Voltani, who acquired citizenship in 1130 (MRL 1940, nos. 129, 166, 234, 239, 273–5, 305, 308, 325, 353, 379, 441). See also Luzzatto (1952, pp. 61–7, 102); Ferluga (1992, p. 712); and Rösch (1995a, pp. 131, 142).

[58] Contrary to the liberal Genoese policy of granting colonial citizenship, the Venetians rarely admitted foreigners to their colonies (Lopez 1982, p. 348). The 1305 regulation distinguished between full citizenship and half citizenship, the latter entitling immigrants to Venetian trade privileges within the city after fifteen years of tax-paying residence. Lane (1973, pp. 20) estimates that about 10 per cent of those who lived in Venice were considered citizens after 1305.

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forced loans.[59] 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 targeted illegal investments made by foreigners and those made by recently naturalized citizens (Luzzatto 1962, pp. 123–4; Lane 1963, p. 138; Mueller 1997, p. 503). An investment ceiling had in fact been applied to naturalized citizens in 1318 and the rule that new citizens could not invest sums exceeding the amount of their assessed wealth in maritime commerce was maintained after the demise of the Officium de Navigantibus in 1363 and the final lifting of investment quotas for original citizens (Hocquet 1997, pp. 573, 595–6; Mueller 1997, pp. 151, 265, 503, 616).

Identifying these barriers to entry as essential elements of the Venetian institution for contract enforcement thus helps explain Venice's legislation. Governed by the state, the Venetians needed both to reserve the rents of their privileged trade for themselves and to keep these rents high by restricting access to citizenship and limiting the supply of imported wares in Venice when sale prices were low.[60]

4.3. Generating verifiable information: administrative controls

Economic rents and restrictions on entry motivated citizen merchants to keep their affiliations with Venice. However, to enforce contingent contracts like the sea loan and the commenda, the Venetian authorities needed to know when and to what extent a contract had been violated. Detecting a breach on a sea loan was relatively easy, as merchants' claims of a loss because of shipwrecks, piracy, or mass confiscation of merchandise abroad could be confirmed by the testimonies of well-identified witnesses, both public and private.[61] In 1219, for example, the captain of the ship *Lo Carello* and various

[59] The law was in force for a few months in 1324 and for the periods 1331–8 and 1361–3. The same restrictive mechanism was applied in 1404 during the banking crisis to limit the bankers' investments of depositors' funds in maritime commerce (Lane 1973, pp. 140, 185; Mueller 1997, pp. 168, 503).

[60] Note that the distinctiveness, timing and nature of the Venetian legislation are inconsistent with a political economy model in which elite merchants introduce entry restrictions simply to obtain monopoly profits. Had this been the case, the Genoese would have introduced similar entry restrictions and the Venetians would have implemented investment quotas at all times and attempted to eliminate competition from less wealthy and politically influential citizens.

[61] Venetian merchants were released from repayment only if such a loss was 'clearly apparent', as specified in all sea loans and commenda contracts (e.g. MRL 1940, nos. 134, 522). To facilitate the verification of such a loss, all contracts identified the master of the ship and the ports of call, or else compelled the merchant to join a state convoy under the constant supervision of well-known officials. The testimony of witnesses in Venice was admitted as legal proof (Besta and Predelli 1901, St. Enr. Dand., c.32, St. Tiep., 1229, c.16; Cessi 1938, St. Nov., III, 2; MRL 1940, nos. 11, 145, 407, 629).

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merchants travelling on it testified that it had wrecked close to Negroponte and that the merchant Domenico Gradenigo had lost merchandise worth 110 hyperpers (MRL 1940, no. 582).[62] Uncovering a breach on a commenda, however, was more challenging. It required verification of the bribes a particular merchant had paid to pass customs, the transportation and storage fees he had arranged for, the price at which he had bought and then sold his wares, whether these had been damaged on the voyage or pilfered by the crew, and so on.[63] For the state to enforce commenda contracts, it had to be able to verify reports regarding such costs, prices and events.

Venice, indeed, developed the regulations and administrative structures required to verify such reports. Colonial governors abroad, various public officers in Venice and scribes on voyages came to monitor commercial ventures in all phases. This information-generation process was cumulative. It began during the 1180s and was completed by the 1220s, after Venice consolidated its colonial empire in the East and trade had been organized into state convoys from Venice to its enclaves and back.

Since 1186 Venetian judges were permanently stationed in Constantinople and in 1205 Venice acquired legal extraterritoriality all over *Romania*. In contrast with the former Venetian colonies, those acquired after the Fourth Crusade were immediately placed under governors sent from Venice: a *podestà* was installed in Constantinople in 1205, a *castellano* in Coron and Modon in 1208, a *bailo* in Negroponte in 1216, and a duke in Crete in 1219. In the Crusader States Venice had obtained large compounds with full extraterritoriality in the early twelfth century, but the Venetian population remained predominantly self-governing until the early thirteenth century. In 1208 Venice also gained consular representation in Alexandria. These colonial governors oversaw customs duties, administered warehouses and lodging facilities and kept public records of the prices the Venetians paid for cotton and pepper, while Venice maintained monopsonies in Acre or Alexandria. In Venice the S*ensali dellla Messetteria* – a group of office holders in charge of collecting trading taxes and policing the market – provided compulsory brokerage services from 1225 (Luzzatto 1952, pp. 62–6; Lane 1973, pp. 99, 144; Day 1984; Ferluga 1992; Ravegnani 1995a; Rösch 1995c, p. 453).

Furthermore, trading voyages were progressively organized as 'community enterprises subject to governmental approval' (Lane 1973, p. 49). Since the

[62] For other notarial evidence on losses at sea or at the hands of hostile people, see MRL (1940, nos. 35, 79, 83, 313, 316, 336, 338, 358, 360–1, 365, 369, 378–80, 403, 417, 466, 787, 798, 848, 854; 1953, no. 11). For the safe arrival of a ship and its cargo, see MRL (1940, nos. 407, 629). For court evidence on disputes concerning losses due to the risk of the sea and people, see MRL (1940, no. 783; 1953, no. 86).

[63] A merchant could also breach a contract by taking excessive risks and/or shirking. For the institutional arrangements that mitigated these (hidden action) problems, see González de Lara (2007).

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early thirteenth century the state organized round-trip convoys from Venice to its colonies in the East. Hence, merchants travelling on them were under the permanent supervision of state officials. Furthermore, they paid public freight rates, which were collected in Venice by customs officials and overseas by the *capitano* in charge of the whole fleet (Lane 1973, pp. 68–70, 129–31, 145–6).

In addition, the Maritime Statutes of 1229 required that a semi-public scribe register the number, weight and owner of any merchandise loaded and unloaded in any big ship (above 200 tons), record the contracts of all merchants on the voyage and report any fraud. The Statutes also made the ship's captain responsible for the merchandise registered with the ship's scribe, excluding losses at sea, from fire, or from the actions of enemies beyond the captain's control (Predelli and Sacerdoti 1902, St. Tiep. c. 17; St. Zeno, cc. 41–3, 51, 53; pp. 132–6).

Permanent administrative and judicial structures both abroad and in Venice, state convoys and strict regulations thus facilitated the verification of a merchant's accounts concerning trading costs, prices and events. The enhanced ability of the state to enforce commenda contracts is reflected in the various compilations of the Civil Statutes. In the absence of verifiable information regarding profits, the earliest Statutes, which were written in about 1195 but codified previous customs, simply required a merchant to render accounts to an investor by the specified time and recognized the merchant's oath as legal proof of his claims (Besta and Predelli 1901, p. 24; St. Enr. Dand., cc. 30–2; see also St. Enr. Dand., c. 35).[64] The Statutes of 1229, however, called for a detailed account of each and every operation made with the capital received in commenda, one by one in sequence, and the revision of 1233 made the court responsible for verifying them in case of litigation (ibid., St. Tiep., 1229, c.16; St. Tiep, IIIA, c.2.). The final Statutes of 1242 further entailed the investor to present reliable witnesses and established the merchant's obligation to compensate him for whatever he could prove to be owed (Cessi 1938, St. Nov., III.2, gloss 3).

4.4. Rendering punishment credible: legal sanctions and trade exclusions

Tight administrative controls provided the state with the (verifiable) information needed to detect a contractual breach. However, to deter a merchant from breaching his contracts, the state needed to support the threat that he would be appropriately punished once he voluntarily returned to Venice. The state, indeed, imposed legal and administrative sanctions on city merchants found guilty of embezzlement. Offending merchants were

[64] The merchant's oath, however, would not exempt him from repayment on the event of loss at sea or from the action of hostile people, an event which had to be verified by reliable witnesses (*legitimis testibus comprobaverit*).

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subject to imprisonment and confiscation of their properties within Venice and its colonies. The procedure had already been established in the earliest Statutes c. 1195 (Besta and Predelli 1901, St. Enr. Dand., cc. 7–14, 36, 66, 73; see also Cessi 1938, St. Nov., I, 51, 63.). If a merchant in arrears failed to pay or otherwise arrive at an agreement with his financiers within eight days after a court had sentenced him, he had to remain within the territorial boundaries of the court for a month and thereafter had to be incarcerated for another month. After these two months, his goods would be sequestrated.[65] Litigation over various commenda contracts in 1195 and 1226 actually resulted in the forced sale of a merchant's estate and in the transfer of property to a plaintiff (MRL 1940, nos. 424, 626). In 1241 the personal property of a deceased merchant was auctioned and, because the amount retrieved was insufficient, the merchant's house was sold by the court (MRL 1940, no. 743).[66] Confiscation of real property due to failed credit was also extended to colonial estates. In 1178 Leone Falier gave power of attorney to act against one of his debtors' properties in the Venetian colony at Tyre (MRL 1940, no. 295).[67]

Even next of kin resorted to the courts. For example, in 1224 Andrea Donato, the 'beloved' father-in-law of Giovanni Badoer, brought a lawsuit against his son-in-law for a failed commenda. He requested the standard penalty of double the amount due plus interest for late payment and obtained a house that had been Giovanni's property. Andrea then transferred part of his rights over the house to one of his grandsons who, in turn, sold them to Giovanni's son, Pietro Badoer. Pietro, who had acquired legal capacity in 1218 with the consent of his 'beloved' father, brought a charge against his progenitor over the property he had acquired in 1226 and proclaimed in court in 1230 (MRL 1940, nos. 625, 844).[68]

[65] To facilitate the enforcement of court sentences, the law prohibited offenders from both leaving Venice and disposing of their goods before their disputes were settled (Besta and Predelli 1901, St Ran. Dand., cc. 8, 28). For the application of the law, see MRL (1940, nos. 466, 630–1, 853; 1953, nos. 20, 41).

[66] For the legal seizure of real property due to failed loans, see MRL (1940, nos. 76, 174, 175, 176, 281–3, 528; 1953, nos. 38, 39). For the existence of a very active market for rights over alienated property, see MRL (1940, nos. 281, 424, 554, 556, 557, 581, 624, 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 repayment. However, twenty years later the Byzantine emperor Isaac sent compensation for damages, thereby reversing the outcome of Vitale's venture from loss to profit. At the request of the brothers Giustiniani, the doge and his court ordered that their credit be fully satisfied before delivering any compensation to Vitale (MRL 1940, no. 466).

[67] For close similarities between thirteenth-century courts in Venice and Negroponte, see MRL (1940, no. 783; 1953, no. 86).

[68] For another execution of collateral by close relatives, see MRL (1953, no. 38). For other intra-family litigation, see MRL (1940, nos. 71, 538, 281, 465, 554, 556, 557, 581).

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Legal sanctions, though, were perceived as insufficient to cope with embezzlement. Venetian law acknowledged the possibility that a merchant fled to avoid incarceration and that only a few assets could be seized (Besta and Predelli 1901, St. Enr. Dand., c. 36; Cassandro 1936, pp. 76–7; 1937, p. 98).[69] Furthermore, Venice did not resort to severe criminal penalties and the public rituals of infamy reserved for bankrupts elsewhere, an indication that contract enforcement did not rely exclusively on the legal system (Lattes 1880, pp. 9–13; Mueller 1997, p. 125). As discussed, economic rents motivated Venetian merchants to return voluntarily to the city. Once in Venice, merchants who were known to have cheated other Venetians faced both legal sanctions and administrative exclusion from economic rents.

By the early thirteenth century the state controlled the personnel of the convoys it organized and thus could exclude offending merchants from the most profitable trading routes. Over half of the 261 Venetian contracts written during the period 1200–61 explicitly stated that merchants were required to obtain a trading licence from the state, a custom which was made law in 1266 (Sacerdoti 1899, pp. 43–4).[70]

A 1242 document reflects that merchants feared exclusion. Omobone Barbo had received capital in commenda to do business on a convoy voyage and was thus liable for any loss incurred on the capital left behind, including loss of anticipated profit. Aware of the higher expected rate of return on such voyages and expecting not to be allowed to join the convoy, he protected himself by restricting his liability to the case in which he 'will be among those chosen men who are chosen according to the decree given by the lord Doge and his council' and specifying that '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' (MRL 1940, nos. 752, 753).[71] The document does not specify why Omobone feared being disqualified from joining the state's convoy but it might have been that a sentence was pending against him. The egalitarian

[69] Specifically, the law punished flight with banishment from Venice and established the garnishment of one-third of the debtor's future income until he paid in full. These measures could have both deterred an offending merchant from fleeing with his assets (at that point *havere aliorum*) to extract a better deal from his creditors and assured an investor repayment by a merchant who kept his affiliation with Venice. Yet, they would have been ineffective in the absence of rents motivating a merchant to submit to the Venetian authorities. As discussed in Section 3 above, inter-community litigation was prohibitively costly and merchants could generally leave very few goods behind in case of flight. As a result, the legal system could not coerce a merchant to repay if he fled with both an investor's capital and his own possessions.

[70] Trading licences were first documented in 1200 and prevailed by the 1220s.

[71] For the documents' translation and interpretation, see Pryor (1983, p. 141). See MRL (1940, no. 593) for a convoy voyage a merchant could not undertake in 1221. Whether the merchant was denied a licence or cancelled the trip for other reasons cannot be determined given the document's very poor condition.

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regulations of the Venetians and their broad participation in trade indicate that merchants were not chosen on the basis of their political power or that of their financiers.[72]

Furthermore, in 1331 Venice prohibited insolvent merchants from entering the marketplace of the *Rialto* and the administrative and judicial site of San Marco, which *de facto* excluded them from Venetian trade. The preamble of the law and its application indicate that its intention was to thwart 'fraudulent' merchants, not those who had failed to pay in full 'because of need or bad luck' (Cassandro 1938, p. 99; see also Cassandro 1936, pp. 77–8; Lane 1973, p. 143; *Castagneti* 1995, p. 101; Mueller 1997, pp. 124–5).[73]

4.5. The structure of Venice's financial market

The conjecture that a public-order, reputation-based institution provided impartial third-party contract enforcement to the Venetians also generates various predictions regarding contractual relationships. If Venice provided 'a responsible justice equal to all [its citizens]' but only to them, one would expect to observe the prevalence of intra-Venetian contractual relations even before foreign investments were outlawed in the 1270s.[74] Also, one would expect to observe very flexible financial relations, at least prior to 1305, when Venetian residents below the rank of citizen were excluded from trading and investing overseas. The Venetian data for the period 1021–1261 confirm these predictions.

First, 96.5 per cent of the contracts were among Venetians, even though they were signed in markets from the Adriatic shores to the Aegean islands, Greece, Asia Minor, Egypt and even Tunisia. Specifically, 95.1 per cent of the 229 merchants (out of 235) who were said to be Venetians relied exclusively on the capital of other Venetians and 98.1 per cent of the 322 investors (out of 333) who were identified as Venetian financed city merchants only (Tables 2 and 3).[75] Moreover, the great majority of these traders resided in the various neighbourhoods of the *Rialto*, the city we know today as Venice, where the

[72] Venetian regulations were professedly designed to provide secure transport to all Venetian merchants equally (Lane 1967, pp. 582–3; 1973, pp. 145–6). As shown on below, trading contracts do not reflect political discrimination.

[73] Offending merchants were also banned from holding public office. There is no evidence of exclusion abroad but merchants were subject to the same rules and regulations in the Venetian colonies as in Venice (Besta and Predelli 1901, St. Enr. Dand., c. 40; Predelli and Sacerdoti 1902, St. Tiep., 1229, cc. 45, 52, St. Zeno, cc. 41, 45, 52, 73, 75, 86, 98).

[74] Besta and Predelli 1901, p. 60: *promissione* of doge Giacomo Tiepolo (1229). Doges customarily promised upon being sworn into office that they would do their duty with diligence and impartiality. Venice was indeed celebrated for the impartiality of its legal system (Lane 1973, p. 251; Gasparini 2007).

[75] Most foreign merchants (five out of six) resided in Venice or in its domains and were therefore under Venetian jurisdiction. Out of the eleven *non-Venetian* investors, three were

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Table 3. *Venetian contracts classified by traders' places of origin and residence*

	Investors		Merchants	
Venetians residing in the *Rialto*	388	(89.20%)	411	(94.48%)
Venetians residing in the *Dogado*	23	(5.29%)	13	(2.99%)
Venetians residing in the Greek Empire, Istria or Dalmatia	13	(2.99%)	3	(0.69%)
Non-Venetians residing in the *Rialto*	2	(0.46%)	4	(0.92%)
Non-Venetians residing outside the *Dogado*	7	(1.61%)	2	(0.46%)
Unknown	2	(0.46%)	2	(0.46%)
Total	435	(100%)	435	(100%)

Source: The author, based on Morozzo della Rocca and Lombardo (1940, 1953).

state could more easily punish fraudulent merchants and access to the courts was cheaper.

The observation that the Venetians contracted mainly with each other is striking given that this was not the case in Genoa. Genoese cartularies, which were written in Genoa and are thus more likely to reflect contracts among the Genoese, reveal the importance of financial relations between Genoese and non-Genoese. At least 18.4 per cent of the total value of goods shipped abroad in the cartulary of John the Scribe (1155–64) was sent or carried by a non-Genoese trader (Greif 1994a, p. 931; see Table 2). More generally, 12 to 15 per cent of the 1345 merchants who are mentioned in the Genoese cartularies for the period 1155–1200 were non-Genoese (Krueger 1962, p. 268). The evidence thus supports the conjecture that a public-order, reputation-based institution prevailed in Venice but not in Genoa, Venice's main commercial rival.[76]

Second, the Venetian data also reveal very flexible financial relations. Venetian trade, unlike the Genoese, was not characterized by a 'class' of rich investors and a separate 'class' of poor merchants who rarely, if ever, functioned as investors (Luzzatto 1962, pp. 59–80, 89–116; Greif 1994a, p. 928). Most Venetian merchants (59.4 per cent) were nobles and 60 of the 82 merchant's families who appear twice or more had members who acted as merchants and those who acted as investors. Also, rich and poor merchants alike received funds from the wealthy and politically well-connected as well as from small investors. For example, to finance a return voyage from Venice to Constantinople in 1223, Domenico Gradenigo, who had been born into a centuries' old Venetian patrician family, raised £81 from Pietro Ziani, the ruler of Venice himself and probably the richest man in town, and £50 from

most likely naturalized citizens and one resided in the Venetian colony of Negroponte. The remainder came from Verona, Bologna, Provence and Florence.

[76] Consistent with a bilateral reputation mechanism, the Genoese 'integrated' themselves with natives in other political centres with better knowledge of local conditions (Greif 1994a, pp. 930–5).

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a noble widow who had been given her dowry back (MRL 1940, nos. 605, 604; Robbert 1999).[77] Likewise, during the late twelfth century Pangrazio Stagnario, the son of a liberated Croat slave, raised £300 from the-doge-to-be Pietro Ziani and £18 from an investor of humble origins (MRL 1940, nos. 301, 265). In total 38.57 per cent of the intra-Venetian contracts were entered among nobles, 19.31 per cent among non-nobles, and 41.42 per cent among nobles and non-nobles.

That the state enforced contracts among Venetians regardless of each party's relative economic and political status during the period 1021–1261 is further suggested by the absence of intermediation. The Venetians operated individually, investing their own capital. Even women invested separately from their husbands (MRL 1940, nos. 475, 495, 506, 588, 602, 604).[78] In contrast, Genoese investors sometimes formed a partnership with an investor who regularly backed a particular merchant and together they supplied him with funds (Greif 1998, ch. 9, p. 20). Also, some prominent investors in Genoa seem to have been investing on behalf of their families (ibid., ch. 8, p. 26). Thus the evidence indicates that while the Venetians operated through an impersonal market, the Genoese invested through individuals with whom merchants had a long-term, high-value bilateral relationship.

Recognizing that a public-order, reputation-based institution prevailed in Venice but not in Genoa also exposes the rationale behind observed legal and contractual differences. Venetian law allowed merchants to amalgamate funds for a single trip without the investor's permission, a freedom the Venetians took advantage of. For example, Rodolfo Suligo reduced the per-pound cost of a sea venture he undertook in 1234 by raising capital from at least fifteen investors (MRL 1940, nos. 675–90, 804; see also Table 2). In contrast, the Genoese legislation prevented merchants from raising funds from more than one investor at a time. Specifically, the first investor who contracted with a merchant in Genoa had the right to determine the amount the merchant could carry for others and shared the profits on additional sums he allowed the merchant to carry (Pryor 1983, pp. 142–3; Greif 1998, ch. 8, p. 25). By limiting what a merchant could gain outside this first relation, that is, by reducing his reservation utility, Genoese law increased the value to the merchant of his bilateral reputation with the first investor, thereby enabling the merchant to commit. In Venice, however, a merchant's ability to commit relied on the value of his reputation with the state and on legal sanctions and, hence, such restrictive law was pointless.

[77] For other investments by widows and married women, both noble and non-noble, see MRL (1940, nos. 61, 71, 136, 426, 475, 495, 506, 511, 512, 543, 578, 602, 604, 627, 654, 671, 673, 704, 724, 742, 767, 805, 806, 808, 811, 829; 1953, nos. 62, 73, 80, 88).

[78] Besides, Venetian patrician families did not live together as a clan in large compounds, as did the Genoese (Chojnacki 1973, p. 60; Robbert 1999, p. 28).

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The legal responsibility of a merchant's family also varied. Whereas Venetian law established that only sons under parental authority were liable for their father's debts, Genoese courts held all members of a merchant's family legally responsible for the merchant's verifiable transgressions, such as outright embezzlement of an investor's capital (Besta and Predelli 1901, St. Enr. Dand., c. 68, St. Ran. Dand., cc. 11–12, pp. 45–6, 57–8; Cessi 1938, St. Nov. I.40; Greif 1998, ch. 8, p. 4, ch. 9, p. 10).[79] Venetian merchants could be held individually liable because they were nonetheless motivated to honour their contractual obligations by the fear of losing access to economic rents – in addition to facing legal sanctions if they ever returned to Venice or its colonies. In Genoa, however, a merchant who embezzled an investor's capital could trade with and invest that capital under the same conditions as the investor he had cheated. Hence, in the absence of legal constraints, a Genoese merchant would have been motivated to embezzle all the capital he received and become an investor himself.[80] The Genoese private-order institution had to be complemented by the legal system, which indeed held a merchant and all his family responsible for any verifiable contractual breach.[81]

The Genoese reliance on the legal system to enforce contracts when actions were verifiable is clear from the specification in loan and sea loan contracts that a delay in repayment was subject to a double penalty. The inability of the Genoese legal system to verify a merchant's commercial accounts, however, is revealed by an absence of this specification in commenda contracts (Greif 1998, ch. 8, p. 4, ch. 9, p. 10). In Venice, sea loans and the commenda contracts both stipulated a penalty for late payment of double the amount due plus 20 per cent yearly interest, a penalty the legal system actually upheld, thereby suggesting the distinctive ability of Venetian courts to enforce commenda contracts.[82]

[79] In 1242 Venetian law recognized the joint and unlimited liability of partners in a *fraterna*. The liability of a non-emancipated son or a partner was generally not contested but could be and occasionally was (Mueller 1997, pp. 96–110).

[80] Under bilateral reputation a merchant will never play 'honesty' on the equilibrium path, as this would require a per-period payoff equal to all the venture's profits and a part of the investor's capital (Greif 2006, p. 295).

[81] In Genoa the legal link between a merchant's past conduct and the future welfare of his family also mitigated the end-game problem (Greif 2006, pp. 434–6). In Venice, however, a merchant was motivated to honour his contracts in old age in the absence of such a link because he still had a very profitable future as an investor and officeholder. Any Venetian merchant could obtain up to 40 per cent interest on sea loans or three-quarters of a net venture's return on commenda contracts without travelling overseas. Furthermore, Venetian merchants were admitted to even the highest public offices (Lane 1973, pp. 90–3).

[82] All Venetian sea loans and commenda contracts established such a penalty. For its execution, see MRL 1940, nos. 53, 118, 122, 132 and 157; 1953 nos. 12, 18, 20, 56–7, 59 and 141, respectively.

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The legal enforceability of the commenda in Venice, but not in Genoa, is also reflected in the account settlement procedures. In Venice a merchant under a commenda was allowed 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' (e.g. MRL 1940, no. 522). In Genoa, however, a merchant was required both to return and to place the entire proceeds of the commenda in the hands of the investor, who then divided the profits with his assistance (Pryor 1983, pp. 175–6).[83] As the Genoese courts lacked the information required to verify commercial profits, Genoese commenda contracts imposed restrictions on merchants to help an investor evaluate their account. These restrictions were unnecessary in Venice, as tight administrative trading controls provided the verifiable information required for adjudicating commercial disputes.

As already noted, colonial governors abroad, public officers in Venice, and scribes on voyages increasingly monitored all phases of commercial ventures. The ability of the state to verify information thus developed incrementally as overseas trade became well established throughout the Venetian enclaves in the East and trading voyages were organized in round-trip state convoys from Venice to its colonies. Consistent with the conjecture that the state enforced Venetian trading contracts, the commenda progressively replaced the sea loan from about the 1180s to the 1220s, and prevailed only when trade was predominantly organized in state convoys from Venice to its colonial enclaves and back (Figure 1).[84]

Finally, the different institutions within which overseas trading contracts were embedded in Venice and Genoa are also reflected in the legal contractual relations created by the commenda. The Venetian public-order, reputation-based institution enabled a merchant to commit not to embezzle the capital raised from any Venetian citizen. The Statutes of Venice hence treated both the sea loan and the commenda as credit instruments (Besta and Predelli 1901, St. Enr. Dand. cc. 30–33, St. Ran. Dand., c. 16, St. Tiep., 1229, c. 16; Cessi 1938, St. Nov., III, 1–3; see also Luzzatto 1952, pp. 71–2; 1962, pp. 82–4). The Genoese legal system limited the amount a merchant could embezzle but could not enforce trade relations characterized by asymmetric information. High-value and long-term bilateral relations, though, were supported by a private-order, reputation-based institution.

[83] Even when the merchant was later allowed not to return to Genoa, he still had to remit his own share of profits to the investor (Byrne 1917, pp. 136–7).

[84] In Genoa, however, this was not the case. Almost 95 per cent of the contracts in the cartulary of John the Scribe (1155–64) are commenda contracts (Greif 1994a, p. 918). Arguably, informal monitoring of a merchant's conduct enabled the Genoese to adopt the commenda before the Venetian state provided the required verifiable information. For other works on the transition from the sea loan to the commenda, see Lane (1966, pp. 61–7; 1967, pp. 94–5); Lopez (1976, pp. 76, 104); Williamson (2002); and González de Lara (2007).

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Hence, in Genoa the commenda was considered a partnership whereby a travelling merchant handled an investor's business abroad (De Roover 1963, p. 50; Pryor 1983, pp. 144, 155; Greif 1994a; 2006, p. 286).

5. Conclusions

In late medieval Venice a public-order, reputation-based institution for contract enforcement prevailed. The state sustained the shared belief among the Venetians that compliance with contracts would be rewarded with economic rents from trade, while a breach would be detected and punished through trade-exclusion and, possibly, legal sanctions. The state thus enabled merchants to commit not to embezzle capital from other Venetians and hence supported a financial market that was crucial to the city's commercial success.

The nature and role of the state in Venice differed from those posited by economic historians and economists to pre-modern and modern states. The state has been modelled as a negligent ruler, who does nothing or little to maintain the rule of law, a predatory ruler, who abuses property rights, or a benevolent ruler, who provides an impartial legal system based on coercive power.[85] The Venetian state was neither negligent nor predatory on its citizens. Like a benevolent ruler, it played an active and salutary role in promoting trade by providing third-party contract enforcement to the Venetians. Yet it went beyond the coercive role traditionally attributed to the legal system, namely 'forcing solvent borrowers [within its jurisdiction] to repay if they failed to do so spontaneously' (Bianco, Japelli and Pagano 2005, p. 225).

The Venetian legal system could not exercise coercion over a merchant who embezzled capital and fled. To motivate him to submit to the authorities, the Venetian state needed to generate and maintain economic rents and this required more extensive state intervention than is usually associated with a benevolent ruler. Venice, in particular, took the military and diplomatic initiative required to gain trading privileges abroad and staple rights within the city, organized protective convoys, and restricted foreign and domestic entry. Furthermore, the Venetian state also regulated the *ex-ante* operation of trading ventures in a manner that facilitated the *ex-post* verification of breach of contract, thereby motivating merchants to comply with their contracts and reducing the cost of litigation if a breach occurred. Specifically, state officials supervised merchants in Venice, on voyages and abroad. Finally, the state used both legal and administrative sanctions to punish merchants who cheated other Venetians.

[85] For a discussion of these three types of states, see Shleifer and Vishny (1998).

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As in Venice, present-day states often combine legal and administrative sanctions to discipline financial markets. Arguably, a financial intermediary monitors security issuers and prevents them from embezzling capital because he is liable as a gatekeeper and fears losing his licence (Kraakman 1986; Glaesser, Johnson and Shleifer 2001; see also La Porta, Lopez-de-Silanes and Shleifer 2006). The value of a licence has been argued to rest on sunk costs, such as acquiring the human capital required to practise a profession in a competitive market, but can also rest on monopoly rights granted by the state.[86] By restricting entry, the state can allow a licence holder to appropriate part of the surplus generated through the private interaction between security issuers and investors, thereby ensuring a rent. In Venice, however, the state created rents mainly by making Venetian commerce more profitable than it would have been otherwise, thereby enhancing the surplus to be generated through the interaction between merchants and investors. To preserve these rents, Venice excluded non-citizens from its privileged trade but, unlike the Soviet Union and other communist states, it did not curtail competition among citizens. According to Lane (1967, pp. 82–4; 1979, p. 58; see also Bullard *et al.* 2004, pp. 102–4), the secret of the Venetian success was this mixture of public intervention and private initiative, a mixture that – as this article argues – was made possible by the Venetian public-order, reputation-based institution.

This institution had both benefits and costs. It sustained broader exchange relations than those made possible by other reputation-based, private-order institutions that prevailed at the time. On the one hand, the Venetian institution, unlike the Genoese bilateral reputation mechanism, supported financial relations that were expected to be of short duration and little value. This enabled the mobilization of legacies, small incomes and personal savings into long-distance trade as well as the diversification of trade investments, which arguably fostered further investments. On the other hand, the Venetian institution, unlike the Maghribis' multilateral reputation mechanism, did not require investors to engage in informal monitoring of merchants' conduct or practise collective punishment. This enabled the mobilization of both merchants' and non-merchants' capital into long-distance trade.

The Venetian public-order, reputation-based institution thus supported a diversified financial market, large in scale and scope among Venetian citizens. Yet it required a costly administration and excluded foreigners and non-citizens. Although data on the volume and value of Venetian trade relative to that of other city-states are not available, it seems that Venice mobilized more capital into long-distance trade than its European rivals. Whether this increased trade over the Mediterranean or simply reflected a shift away from

[86] Kraakman (1986, p. 70). According to Greif (2006, p. 104), monopoly rights granted by the state enabled the merchant guild to discipline its members. See also Hickson and Thompson (1991).

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Muslim countries, however, remains an open question. Anyway, Venice's experience suggests the importance of policies that enhance interjudicial cooperation or political integration. By subduing agents to the coercive power of the state, these policies can foster mobilization of capital beyond the rent level that would otherwise be required to ensure their voluntary submission.

Similarly, the question of why Venice was a benevolent state is left open for future research. While the historical evidence indicates that office holders took the actions that were most beneficial to Venetian citizens, a complete comprehension of the system requires understanding why this was the case. Further examining the state's actions as endogenous will enhance our knowledge both of Venetian history and of the conditions under which states in other contexts would support, at a sufficiently low cost, the operation of public-order, reputation-based institutions.

Finally, the process by which Venice developed this particular self-enforcing institution needs to be better understood. Did its unique historical experience, geographical position and cultural heritage ultimately bring about what seems to be a particularly successful institution? And if so, in what ways did these factors prevent other Italian city-states from adopting similar public-order, reputation-based 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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References

ANGELOS, M. (1994). Women in Genoese *commenda* contracts, 1155–1216. *Journal of Medieval History* **20**, pp. 299–312.

ARIAS, G. (1901). *I tratatti commerciali della Reppublica Fiorentina*. Florence: Successori le Monnier.

ASTHOR, E. (1983). *Levant Trade in the Later Middle Ages*. Princeton, NJ: Princeton University Press.

BAIROCH, P., BATOU, J. and CHÈVRE, P. (1988). *The Population of European Cities from 800 to 1850: Data Bank and Short Summary of Results*. Geneva: Librarie Droz.

BESTA, E. and PREDELLI, R. (eds.). (1901). Gli statuti civili di Venezia prima del 1242. *Nuovo archivio veneto*, n.s. **1**, pp. 5–117 and 205–300.

BIANCO, M., JAPPELLI, T. and PAGANO, M. (2005). Courts and banks: effects of judicial enforcement and credit markets. *Journal of Money, Credit, and Banking* **37**, 2, pp. 223–45.

BORSARI, S. (1978). Una famiglia veneziana del medioevo: gli Ziani. *Archivio Veneto*, ser. 5, **110**, pp. 28–72.

BULLARD, M. M., EPSTEIN, S. R., KOHL, B. G and STUARD, S. M. (2004). Where history and theory interact: Frederic C. Lane on the emergence of capitalism. *Speculum* **79**, pp. 88–119.

BYRNE, E. H. (1917). Commercial contracts of the Genoese in the Syrian trade of the twelfth century. *The Quarterly Journal of Economics* **31**, pp. 128–70.

CARAVALE, M. (1997). Le istituzioni della Repubblica. In G. Arnaldi, G. Cracco and A. Tenenti (eds.), *Storia di Venezia*, vol. 3, pp. 299–364. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

CASSANDRO, G. I. (1936). La Curia di Petizion. *Archivio veneto*, ser. 5, **19**, pp. 72–144.

CASSANDRO, G. I. (1937). La Curia di Petizion. *Archivio veneto*, ser. 5, **20**, pp. 1–201.

CASSANDRO, G. I. (1938). *Le rappresaglie e il fallimento a Venezia nei secoli XIII–XVI* (vol. 14 of Documenti e studi per la storia del commercio e del diritto commerciale italiano). Turin: Lattes.

CASTAGNETTI, A. (1992). Famiglie e affermazione politica. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 1, pp. 577–612. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

CASTAGNETTI, A. (1995). Il primo comune. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 2, pp. 81–130. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

CESSI, R. (ed.). (1938). Gli statuti veneziani di Jacopo Tiepolo del 1242 e le loro glosse. *Memorie dell'Istituto veneto di scienze, lettere ed arti* **30.2**.

CESSI, R. (1963 and 1965). *Venezia ducale*. Venice: Deputazione di Storia Patria per le Venezie.
CHOJNACKI, S. (1973). In search of the Venetian patriciate: families and factions in the fourteenth century. In J .R. Hale (ed.), *Renaissance Venice*. London: Faber and Faber, pp. 47–90.
CIPOLLA, C. M. (1993). *Before the Industrial Revolution: European Society and Economy, 1000–1700*, 3rd edition. London: Routledge (1st edition 1976).
CLAY, K. (1997). Trade without law: private-order institutions in Mexican California. *Journal of Law, Economics, and Organization* **13**, 1, pp. 202–31.
DAY, G. W. (1984). The impact of the Third Crusade upon trade with the Levant. *International History Review* **3**, pp. 159–68.
DE ROOVER, R. (1963). The organization of trade. In *Cambridge Economic History of Europe*, vol. 3, pp. 42–118. Cambridge: Cambridge University Press.
DIXIT, A. K. (2004). *Lawlessness and Economics: Alternative Modes of Governance*. Princeton: Princeton University Press.
DJANKOV, S., LA PORTA, R., LOPEZ-DE-SILANES, F. and SHLEIFER, A. (2003). Courts. *Quarterly Journal of Economics* **118**, 2, pp. 457–522.
DOTSON, J. E. (1999). Fleet operations in the first Genoese-Venetian war, 1264–1266. *Viator. Medieval and Renaissance Studies* **30**, pp. 165–80.
EPSTEIN, S. A. (1996). *Genoa and the Genoese*. Chapel Hill: University of North Carolina Press.
FAFCHAMPS, M. (2004). *Market Institutions in Sub-Saharan Africa: Theory and Evidence*. Cambridge, MA: MIT Press.
FERLUGA, J. (1992). Veneziani fuori Venezia. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.). *Storia di Venezia*, vol. 1, pp. 693–722. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.
GASPARINI, S. (2007). Venice and its law system. http://147.162.217.112:90/prospero/gaspbiblio.htm
GASPARRI, S. (1992). Dagli Orseolo al Comune. In L. C Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.). *Storia di Venezia*, vol. 1, pp. 791–826. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.
GLAESER, E. L. and SHLEIFER, A. (2003). The rise of the regulatory state. *Journal of Economic Literature* **41**, pp. 401–25.
GLAESER, E. L., JOHNSON, S. and SHLEIFER, A. (2001). Coase versus the Coasians. *The Quarterly Journal of Economics* **116**, pp. 853–99.
GONZÁLEZ DE LARA, Y. (2007) Institutions, information, and contracts: from debt to equity in late medieval Venice. Mimeo. Stanford University and University of Alicante.
GREIF, A. (1989). Reputation and coalitions in medieval trade: evidence on the Maghribi traders. *The Journal of Economic History* **49**, pp. 857–82.
GREIF, A. (1993). Contract enforceability and economic institutions in early trade: the Maghribi traders' coalition. *American Economic Review* **83**, 1, pp. 525–48.
GREIF, A. (1994a). Cultural beliefs and the organization of society: a historical and theoretical reflection on collectivist and individualist societies. *Journal of Political Economy* **102**, 5, pp. 912–50.
GREIF, A. (1994b). On the political foundations of the late medieval commercial revolution: Genoa during the twelfth and thirteenth centuries. *The Journal of Economic History* **54**, 4, pp. 271–87.

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GREIF, A. (1995). Political organizations, social structures, and institutional success: reflections from Genoa and Venice during the commercial revolution. *The Journal of Institutional and Theoretical Economics* **151**, 4, pp. 734–40.

GREIF, A. (1998). *Historical Institutional Analysis*. Mimeo. Stanford University.

GREIF, A. (2004). Impersonal exchange without impartial law: the community responsibility system. *Chicago Journal of International Law* **5**, 1, pp. 107–36.

GREIF, A. (2006). *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. New York: Cambridge University Press.

GREIF, A., MILGROM, P. R. and WEINGAST, B. R. (1994). Coordination, commitment and enforcement: the case of the merchant guild. *Journal of Political Economy* **102**, pp. 745–76.

GUINNANE, T. W. (2001). Cooperatives as information machines: German rural credit cooperatives, 1883–1914. *The Journal of Economic History* **61**, 2, pp. 366–89.

HICKSON, C. R. and THOMPSON, E. A. (1991). A new theory of guilds and European economic development. *Explorations in Economic History* **28**, 2, pp. 138–9.

HOCQUET, J. C. (1997). I mecanismi dei traffici. In G. Arnaldi G. Cracco and A. Tenenti (eds.). *Storia di Venezia*, vol. 3, pp. 299–364. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

HOFFMAN, P. T., POSTEL-VINAY, G. and ROSENTHAL, J. L. (2000). *Priceless Markets: The Political Economy of Credit in Paris, 1660–1870*. Chicago: University of Chicago Press.

JACOBY, D. (1994). Italian privileges and trade in Byzantium before the Fourth Crusade: a reconsideration. *Annuario de estudios medievales*, **24**, pp. 349–68.

JACOBY, D. (1995a). La Venezia d'oltremare nel secondo Duecento. In G. Cracco and G. Ortalli (eds.). *Storia di Venezia*, vol. 2, pp. 263–302. Rome: Ist. dell' Encicl. Ital. fondata da G. Treccani.

JACOBY, D. (1995b). La dimensione demografica e sociale. In Cracco G. and G. Ortalli (eds.). *Storia di Venezia*, vol. 2, pp. 681–709. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

JACOBY, D. (2003) Foreigners and the urban economy in Thessalonike, 1150–1450. *Dumbarton Oaks Papers*, **57**, pp. 85–132 (Symposium on Late Byzantine Thessalonike).

JOHNSON, S., MCMILLAN, J. and WOODRUF, C. (2002). Courts and relational contracts. *Journal of Law, Economics, and Organization* **18**, 2, pp. 221–77.

KRAAKMAN, R. H. (1986). Gatekeepers: the anatomy of a third-party enforcement strategy. *Journal of Law, Economics, and Organization* **2**, 1, pp. 53–104.

KRUEGER, H. C. (1962). The Genoese traveling merchant in the twelfth century. *The Journal of Economic History* **22**, pp. 251–83.

LA MONTE, J. L. (1932). *Feudal Monarchy in the Latin Kingdom of Jerusalem, 1100 to 1291*. Cambridge, MA: Medieval Academy of America.

LANE, F. C. (1963). Recent studies on the economic history of Venice. *The Journal of Economic History* **23**, pp 312–34.

LANE, F. C. (1966). *Venice and History: The Collected Papers of Frederic C. Lane*. Baltimore: Johns Hopkins University Press.

LANE, F. C. (1967). *Andrea Barbarigo, Merchant of Venice, 1418–1449*. New York: Octagon Books Inc.

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LANE, F. C. (1973). *Venice. A Maritime Republic*. Baltimore: Johns Hopkins University Press.
LANE, F. C. (1977). Double entry bookkeeping and resident merchants. *Journal of European Economic History* **6**, pp. 177–91.
LANE, F. C. (1979). *Profits from Power: Readings in Protection Rent and Violence-Controlling Enterprises*. Albany: State University of New York Press.
LATTES, A. (1880). *Il fallimento nel diritto commune e nella legislazione bancaria della Reppubblica di Venezia*. Venice: Tip. del commercio di M. Visentini.
LA PORTA, R., LOPEZ-DE-SILANES, F. and SHLEIFER, A. (2006). What works in securities laws. *The Journal of Finance* **61**, 1, pp. 1–32.
LOPEZ, R. S. (1938). *Storia delle colonie genovesi nel Mediterraneo*. Bologna: Zanichelli.
LOPEZ, R. S. (1976). *The Commercial Revolution of the Middle Ages, 959–1350*. Cambridge: Cambridge University Press.
LOPEZ, R. S. (1982). Il commercio dell'Europa medievale: il Sud. In M. M. Postan and E. E. Rich (eds.), *Storia economica Cambridge II: commercio e inustria nel Medioevo*. Turin: Einaudi.
LUZZATTO, G. (1929). *I prestiti della Reppubblica di Venezia*. Padua: Libreria editrice A. Draghi.
LUZZATTO, G. (1952). *Studi di storia economica veneziana*. Padua: Cedam.
LUZZATTO, G. (1962). *Storia economica di Venezia dall'XI all'XVI secolo*. Venice: Centro Internazionale delle Arti e del Costume.
MARRELLA, F. and MOZZATO, A. (2002). *Alle origini dell'arbitrato commerciale internazionale. L'arbitrato a Venezia tra medioevo ed età moderna* (vol. 53 of Studi e pubblicazioni della *Rivista di diritto internazionale privato e processuale*). Padua: CEDAM.
MILGROM, P. l., NORTH, D. C. and WEINGAST, B. R. (1990). The role of institutions in the revival of trade: the medieval law merchant, private judges, and the Champagne fairs. *Economics and Politics* **1**, 2, pp. 1–23.
MORIGUCHI, C. (2003). Implicit contracts, the great depression, and institutional change: a comparative analysis of US and Japanese employment relations, 1920–1940. *The Journal of Economic History* **63**, pp. 625–65.
MOROZZO DELLA ROCCA, R. and LOMBARDO, A. (1940). *Documenti del commercio veneziano nei secoli XI–XIII* (2 vols.). Turin: Editrice Libraria Italiana.
MOROZZO DELLA ROCCA, R. and LOMBARDO, A. (1953). *Nuovi documenti del commercio veneziano nei secoli XI–XIII*. Treviso: Deputazione di Storia Patria per le Venezie, n.s. 7.
MUELLER, R. C. (1997). *The Venetian Money Market: Banks, Panics, and the Public Debt, 1200–1500*. Baltimore and London: Johns Hopkins University Press.
NORTH, D. C. (1981). *Structure and Change in Economic History*. New York: Norton.
NORTH, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
NORWICH, J. J. (1989). *A History of Venice*. New York: Vintage Books.
POSNER, R. (1973). *Economic Analysis of Law*. Boston, MA: Little, Brown, and Co.
POZZA, M. (1995). I propietari fondiari in terraferma. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.). *Storia di Venezia*, vol. 2, pp. 81–130. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

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PRAWER, J. (1973). I veneziani e le colonie veneziane nel Regno di Gerusalemme. In A. Pertusi (ed.), *Venezia e il Levante fino al secolo XV*. Florence: Olschki.

PREDELLI, R. and SACERDOTI, A. (eds.) (1902–3). Gli statuti maritimi veneziani fino al 1255. *Nuovo archivio veneto*, n.s. 2, **4** and **5**.

PRYOR, J. H. (1983). Mediterranean commerce in the Middle Ages: a voyage under commenda. *Viator. Medieval and Renaissance Studies* **14**, pp. 132–94.

PRYOR, J. H. (1984). Commenda: the operation of the contract in long distance commerce at Marseilles during the thirteenth century. *Journal of European Economic History* **13**, pp. 397–440.

RAUCH, J. E. (2001). Business and social networks in international trade. *Journal of Economic Literature* **39**, pp. 1177–1203.

RAVEGNANI, G. (1995a). La Romania veneziana. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 2, pp. 183–232. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

RAVEGNANI, G. (1995b). Tra i due imperi. L'affirmazione politica nel XII secolo. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.). *Storia di Venezia*, vol. 2, pp. 33–80. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

ROBBERT, L. B. (1983). Twelfth-century Italian prices. *Social Science History* **7**, pp. 381–403.

ROBBERT, L. B. (1994). Money and prices in thirteenth-century Venice. *Journal of Medieval History* **20**, pp. 373–90.

ROBBERT, L. B. (1999). Domenico Gradenigo: a thirteenth-century Venetian Merchant. In E. E. Kittel and T. F. Madden (eds.), *Medieval and Renaissance Venice*. Urbana: University of Illinois Press.

ROBERTI, M. (1906). *Le magistrature giudizirie veneziane e i loro capitolari fino al 1300*. Padua: R. Deputazione Veneta di Storia Patria.

RÖSCH, G. (1989). *Der Venezianische Adel bis zur Schließung des Großen Rats. Zur Genese einer Führungsschicht* (Kieler Historische Studien, 33). Sigmaringen: Thorbecke.

RÖSCH, G. (1995a). Lo sviluppo mercantile. In L. C. Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 2, pp. 131–51. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

RÖSCH, G. (1995b). Il gran guadagno. In L. C Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 2, pp. 183–232. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

RÖSCH, G. (1995c). Le strutture commerciali. In L. C Ruggini, M. Pavan, G. Cracco and G. Ortalli (eds.), *Storia di Venezia*, vol. 2, pp. 437–60. Rome: Ist. dell'Encicl. Ital. fondata da G. Treccani.

SACERDOTI, A. (1899–1900). Le colleganze nella pratica degli affari e nella legislazione veneta. *Atti del Reale Istituto Veneto di scienze, lettere ed arti* **59**, pp. 1–45.

SANUDO, M. (1900). *Le vite dei Dogi*, ed. Giovanni Monticolo. In L. A. Muratori, *Rerum Italicarum Scriptores*, vol. XXII, part IV. Città di Castello: S. Lapi.

SHAVELL, S. (1984). A model of the optimal use of liability and safety regulation. *Rand Journal of Economics* **15**, 2, pp. 271–80.

SHLEIFER, A. and VISHNY, R. W. (1998). *The Grabbing Hand: Government Pathologies and their Cures*. Cambridge, MA: Harvard University Press.

Downloaded from https://academic.oup.com/ereh/article/12/3/247/389740 by OUP-USA Mirror user on 30 September 2024

STONE, A. (2007). Manuel I Comnenus. In *De Imperatoribus Romanis: An Online Encyclopedia of Roman Emperors*. www.roman-emperors.org/mannycom.htm

TAKADA, K. (1995). Aspetti della vita parentale della nobilità venezianane l duecento. L'esempio della famiglia Viaro del ramo di San Maurizio. *Archivio veneto*, ser. 5, **180**, pp. 5–29.

WILLIAMSON, D. V. (2002). Transparency and contract selection: evidence from the financing of trade in Venetian Crete, 1303–1351. Mimeo.

WILLIAMSON, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications.* New York: Free Press.

WILLIAMSON, O. E. (2000). The new Institutional economics: taking stock, looking ahead. *Journal of Economic Literature* **38**, pp. 595–613.

YANG, MU. (2000). Transacting with the emperor: public finance in imperial China. Mimeo, Stanford University.

ZORDAN, G. (1966). I vari aspetti della comunione familiare di beni nella Venezia dei secoli XI-XII. *Studi veneziani* **8**, pp. 127–94.

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