

12-44-94

**CENTER FOR INSTITUTIONAL REFORM AND THE INFORMAL SECTOR**

University of Maryland at College Park

ISSN 393097

---

**Center Office:** IRIS Center, 2105 Morrill Hall, College Park, MD 20742  
Telephone (301) 405-3110 • Fax (301) 405-3020

**ON THE POLITICAL FOUNDATIONS OF THE  
LATE MEDIEVAL COMMERCIAL REVOLUTION:  
GENOA DURING THE TWELFTH  
AND THIRTEENTH CENTURIES**

**December, 1994**

**Avner Greif  
IRIS Reprint No. 50**

This publication was made possible through support provided by the U.S. Agency for International Development, under Cooperative Agreement No. DHR-0015-A-00-0031-00.

Reprinted from *Journal of Economic History*, vol. 54, pp. 271-287.

Author: Avner Greif, Stanford University

---

# *On the Political Foundations of the Late Medieval Commercial Revolution: Genoa During the Twelfth and Thirteenth Centuries*

AVNER GREIF

Although the late medieval Commercial Revolution is considered to be a watershed in the economic history of Europe, the analysis of the interrelationship between political and economic systems in bringing about this period of economic growth has been neglected. This article conducts such an analysis with respect to the city of Genoa during the twelfth and thirteenth centuries. Viewing political institutions as self-enforcing agreements rather than as exogenous rules, I present and analyze the nature and evolution of Genoa's political systems and the relations between these systems and economic growth.

**T**he economic growth of northern Italy's city-states during the late medieval Commercial Revolution had a lasting impact on the economic development of Europe.<sup>1</sup> Although the economic aspects of the Commercial Revolution have been examined by Robert Sabatino Lopez and others, the political foundations of this growth, by and large, have been ignored.<sup>2</sup> This article sheds light on the political foundations of the Commercial Revolution by examining the relations between economic incentives, political institutions, and economic growth in Genoa, one of the most important Italian city-states.

The extent of an Italian city-state's sea-bound trade was determined by its "possessions" around the Mediterranean. These overseas possessions were both tangible and intangible and included ports, houses, customs agreements, legal rights, and so on. Possessions facilitated the expansion of trade by substantially reducing the risk and cost of

*The Journal of Economic History*, Vol. 54, No. 2 (June 1994). © The Economic History Association. All rights reserved. ISSN 0022-05070.

The author is Assistant Professor of Economics at Stanford University, Stanford, CA 94305.

The support of National Science Foundation Grants 9009598-01 and 9223974 and research support provided by the Institutional Reform in the Informal Sector at the University of Maryland at College Park is gratefully acknowledged. Sachi Shimomura and Marco Di Rin provided most beneficial research assistance. I have benefitted from the comments of Yoram Barzel, Karen Clay, Ann Carlos, Alessandra Casella, Steven A. Epstein, Bentley W. MacLeod, Charles Miles, Ben Polak, Gavin Wright, a co-editor of this JOURNAL, and participants of seminars held at the American Economic Association 1992 Annual Meeting, Cornell University, the Economic History Association 1993 Annual Meeting, and the University of Maryland. This article was written while I was a Fellow at the Center for Advanced Studies in the Behavioral Sciences, Stanford, CA, whose kind hospitality greatly facilitated this study. The usual caveats apply.

<sup>1</sup> For example, Rosenberg and Birdzell (*How the West*, p. 35) have asserted that "[W]estern wealth began with the growth of European trade and commerce which started in the twelfth century in Italy."

<sup>2</sup> See, for example, Lopez, *Commercial Revolution*.

commerce.<sup>3</sup> For example, Genoa's trade in North Africa more than doubled after the city acquired possessions in that area in 1161.<sup>4</sup>

The acquisition of possessions by a city-state in turn depended on its potential naval and military forces. Hence in order to expand its trade, a city-state had to solve problems associated with mounting naval and military operations. Paramount among these were a collective-action problem, inducing individuals to supply private resources to form the necessary forces, and a problem of cooperation, motivating individuals to cooperate—or credibly commit to cooperate—in the forces' operations. Throughout history "states" have provided the institutional infrastructure needed to deal with such problems. In the early stages of the Commercial Revolution, however, there was no state to provide the residents of the north Italian coast with such an infrastructure. Clearly, in cases where a particular lineage dominated a city or when a city was small, social and economic incentives within the "natural group" could have mitigated the problems of collective action and cooperation. But by 1300, the richest maritime cities of Italy—Venice and Genoa—were among the largest cities in Latin Europe, each with a population of about 100,000.<sup>5</sup> Understanding economic growth in the maritime Italian city-states during the Commercial Revolution requires examining the emergence of political systems that facilitated the acquisition of possessions by mitigating collective-action problems and enabling people unrelated by blood or marriage to cooperate.

Economic historians have implicitly assumed that the city-states' political systems were a response to the gains to be attained from establishing them. Lopez asserted, for example, that "the Italian communes were essentially governments of the merchants, by the merchants, for the merchants—an ideal platform for the Commercial Revolution."<sup>6</sup> As recent theoretical and historical studies have shown, however, distributional conflicts and collective-action and free rider problems are likely to prevent the establishment of economically efficient political systems.<sup>7</sup> The emergence of an efficient political system cannot be taken for granted just because potential gains from cooperation exist.

In this article I analyze the relations between and coevolution of Genoa's political and economic systems during the Commercial Revolution. I examine the characteristics of political systems implemented by the Genoese, their economic implications, the political ramifications

<sup>3</sup> For discussion see, for example, Hicks, *Theory*, pp. 49–50.

<sup>4</sup> *Annali* (1161), vol. 1, p. 84; and *Giovanni Scriba*.

<sup>5</sup> *Bairoch et al., The Population*.

<sup>6</sup> Lopez, *Commercial Revolution*, p. 71.

<sup>7</sup> Olson, *Rise and Decline*; North, *Structure and Change*; and North and Weingast, "Constitutions and Commitment." For the relations between institutions and growth, see North, *Institutions*.

of economic change, and the reasons for a shift from one system to another.

#### OVERSEAS POSSESSIONS AND CONSULS' INCENTIVE SCHEME

Although the Holy Roman Empire, centered in Germany, claimed sovereignty over Genoa, it was not strong enough to gain de facto control over it during the eleventh century. During that time, the residents of Genoa organized themselves as a commune by taking an oath that bound them to mutual protection and assistance. After 1098, Genoa's political, administrative, and military leaders consisted of four to eight consuls who were elected yearly and were responsible, among other things, for devising and implementing Genoa's policy on the acquisition of possessions.<sup>8</sup> Consular services were costly to provide, as they entailed, for example, organizing defense, participating in military expeditions, and conducting negotiations abroad.<sup>9</sup> At most, a consul was officially compensated by a fixed pecuniary payment and a share in the commune's revenue during his year in office.<sup>10</sup>

In itself, this reward scheme would have been an inadequate solution to the collective-action problem that the Genoese faced, namely, motivating their consuls to devote resources to the acquisition of possessions. To acquire possessions, a consul had to devote much time, effort, and resources to devising and implementing a policy that would increase Genoa's trade and revenues mainly *after* his term expired. Therefore, a consul's compensation depended mainly on the possessions acquired by previous consuls rather than those he acquired himself. Hence he was ill motivated to acquire possessions.<sup>11</sup>

This is not to say, however, that Genoa's consuls were not pursuing a policy that enriched their city. The consuls' short-term reward scheme motivated them to devote resources to implementing economic policy

<sup>8</sup> De Negri, *Storia*; and Vitale, *Breviario*. The election process is unknown. In 1122 the yearly term was institutionalized.

<sup>9</sup> For example, *Annali* (1154), vol. I, p. 48; (1164), vol. II, p. 15; (1173), vol. II, p. 178; and (1192), vol. II, p. 227.

<sup>10</sup> Pertile, (*Storia* vol. I, pp. 44ff.), claims that such a reward scheme existed. *Codice Diplomatico*, vol. I, no. 128, which is a consul's oath, does not explicitly reflect the existence of such a reward. It mentions some unspecified *feudo*, that is, allowance or right of the consuls, and reflects concerns regarding the consuls' ability to expropriate the rent from Genoa's possessions and unlawfully gain from their post. Rent expropriation is sufficient for the following analysis to hold. Duby (*Early Growth*) has noted that in general during this period "urban administrators had a hidden tendency to mistake the funds entrusted to them for the contents of their own coffers and twist to their own advantage the economic regulations they were empowered to lay down. They were the real beneficiaries of the political conquests and fruits of urban vitality" (p. 247). For a similar observation regarding Genoa, see Lopez, *Storia Delle Colonie*, pp. 129-30.

<sup>11</sup> Note that this conclusion holds even if a consul had some "unofficial" reward *during* his term, such as taking bribes, because such reward was also likely to have been increasing in Genoa's revenues. (Unofficial reward is reflected, for example, in *Codice Diplomatico*, vol. I, no. 128. A consul's wife had to swear that she "will not accept service of anything that pertains to the consulate beyond the sum of three solidi.")

yielding revenues during their term. In particular, the consuls initiated military raids against the ships and ports of other political units, thereby generating, at times, immense spoil. The booty brought to Genoa after a raid against Pisa in 1129, for example, was reportedly worth 10,000 lire.<sup>12</sup> Yet, as history indicates, trade expansion based on overseas possessions and not piracy was the key to sustained long-term economic growth for the Italian maritime cities.

There is the possibility that the consuls' short-term remuneration was a part of a broader reward scheme sufficient to induce them to acquire possessions. For example, a consul might be motivated to acquire possessions if, by doing so, he would ensure his reelection. But the ample existing historical records do not provide evidence of such a wider reward scheme. During the first half of the twelfth century, from 1122 to 1153, members of 43 noble families shared the consulate, and the average number of times a family held a post was 2.98 (with a standard deviation of 2.65).<sup>13</sup> Moreover, as has been noted by the historian Gerald W. Day, "[T]he Genoese were unusually slow to develop" trade based on possessions.<sup>14</sup> Similarly, Caffaro, the author of Genoa's annals, reports that by 1154 "the city was asleep and was suffering from apathy and was like a ship wandering across the sea without a navigator."<sup>15</sup> The existing incentive scheme did not motivate consuls to acquire possessions. Economic growth was constrained by Genoa's political system.

#### ECONOMIC GROWTH IN THE SHADOW OF AUTOCRACY

The political and economic history of Genoa in the second half of the twelfth century differs remarkably from that of the first. The holding of consulate posts among families was much more concentrated: the average number of times a family held a post was 3.9 (with a standard deviation of 4.3).<sup>16</sup> One family, the della Volta, held consular posts 19 times (10.6 percent of the total), more than any other family. The political rise of this family coincided with marriages that linked it with other noble families, who together dominated the consulate.<sup>17</sup>

<sup>12</sup> *Annali* (1129), vol. I, pp. 32–33. (Around that time a ship (*cocii*) was worth 160 lire. See *Oberto Scriba* (1190), p. 663.) For other raids, see for example, *Annali* (1136), vol. I, p. 36; *Codice Diplomatico*, vol. I, no. 75; *Annali* (1137), vol. I, p. 38; and *Annali* (1143–1144), vol. I, pp. 41–42.

<sup>13</sup> *Annali*; and Olivieri, *Serie*. All information in this article regarding holding of posts is based on these sources.

<sup>14</sup> Day, *Genoa's Response*, p. 6. See also the relevant years in the *Annali*; and *Codice Diplomatico*, vol. I.

<sup>15</sup> *Annali* (1154), vol. I, p. 48.

<sup>16</sup> These figures are for the years 1154–1164 and 1172–1194. Reasons for examining these years are given in the following discussion.

<sup>17</sup> The della Voltas also gained control over the archbishopric. *Annali* (1153), vol. I, pp. 100–101. I do not elaborate on the families that were politically affiliated with the della Voltas because, as I will discuss further, these families changed over time, and the scope of this article precludes

After 1154, consuls were very active in acquiring possessions. Between 1155 and 1161, for example, Genoa gained possessions all over the Mediterranean. It reaffirmed its privileges in the Crusader States and acquired possessions in Spain, North Africa, Byzantium, Sicily, and in various cities on the French coast.<sup>18</sup> By and large, this increase in possessions can not be attributed to any major change in the political situation outside Genoa, as indicated by the fact that Pisa, although smaller than Genoa, was able to achieve similar possessions during the first half of the century.

Following the acquisition of possessions, Genoa's trade substantially expanded. Its profitable long-distance commerce, however, was concentrated at the hands of a few families, their business associates, and others under their patronage. The families that dominated this trade were those that married into the della Volta family and held most of the consulate posts.<sup>19</sup>

Internal strife replaced the peace that had prevailed until midcentury. The annals indicate two periods of civil war—from 1164 to 1169 and from 1189 to 1194. These conflicts exhibited a clear pattern: consuls and their "fellow men" were challenged militarily by other Genoese.<sup>20</sup> As a contemporary annalist reports, "civil discords and hateful conspiracies and divisions had arisen in the city on account of the mutual envy of the many men who greatly wished to hold office as consuls of the commune."<sup>21</sup>

Historians have noted some of the foregoing political phenomena and conjectured that they reflected broader struggles between the emperor and the Pope or rivalry between various Genoese clans. But each of these hypotheses can at best account for only some of the phenomena.<sup>22</sup> Examining the interactions between the economic and political spheres, however, reveals the rationale behind seemingly unrelated political and economic events. In the second half of the twelfth century, Genoa's political system shifted toward an autocracy, in which some families

---

detailed exposition of the issue. Important clans that supported the della Voltas at various times, were the Embriacos, Castros, Guertios, Peveres, Spinolas, and Ventos. The faction seems to have held 54.9 percent of the posts from 1154 to 1164 and 65.5 percent from 1172 to 1193.

<sup>18</sup> *Annali*; and *Codice Diplomatico*, vols. I, II.

<sup>19</sup> *Giovanni Scriba* and *Oberto Scriba* reflect the following trade investment (in lire): 1155: 949; 1156: 5,740; 1157: 7,217; 1158: 6,880; 1159: 1,852; 1160: 11,604; 1161: 8,587; 1162: 1,379; 1163: 2,830; 1164: 5,145 (regression with respect to time yields a positive and significant coefficient); 1182: 7,146; and 1186: 12,851. For the relative investment in trade, see Byrne, "Genoese Trade" (for the years 1155–1164); and Greif, "Institutional Foundations." Three unrelated sources indicate that these consular families alone invested at least 27 percent, 20 percent, and 32 percent. One source indicates that the amount invested by them and their business associates was 85 percent.

<sup>20</sup> *Annali* (1164–1169, 1189–1194), vol. II. For "fellow men" who fought together with the faction see, for example, *Annali* (1188–1189), vol. II, p. 213.

<sup>21</sup> *Annali* (1190), vol. II, pp. 219–20. For discussion, see Vitale, *Il Comune*.

<sup>22</sup> For these general assertions, see Waley, *Italian City-Republics*. For doubts regarding the validity of these assertions, see Vitale, *Il Comune*, p. 6; and Greif, "Institutional Foundations."

acquired de facto property rights over the consulate that enabled them to expropriate the rent from Genoa's possessions. The ability to expropriate motivated these consuls to acquire possessions, whereas at the same time other Genoese were discouraged from cooperating with them and even motivated to militarily challenge their control.

The marriage policy of the della Volta family and those related to it was what enabled them to gain control over the consulate. For a group of Genoa's nobles to control the consulate to the exclusion of other Genoese, their agreement regarding the division of the costs and benefits of control had to be self-enforcing. Marriages enhanced self-enforceability because they created an additional dimension to the interactions between these families that increased the cost of renegeing on the agreement.<sup>23</sup> Once the agreement's self-enforceability was assured, the della Volta faction turned to enhance its control over the consulate by altering the consuls' election process. Genoa's annals report that in 1154 these families changed the election process so that the "best citizens would be elected."<sup>24</sup> Although the annals do not provide details regarding this change, its nature is suggested by the fact that subsequent elections constantly brought members of the della Volta faction to power.

Whether the della Volta faction's desire to maintain political control reflected greed or love of power, the faction used its control to expropriate the rent from Genoa's possessions and to dominate trade.<sup>25</sup> For example, its dominance in the trade with the Crusader states seems to have resulted from its imposition of a discriminatory tariff.<sup>26</sup> The expropriated rent in turn was used to enhance the faction's political control by enabling it to establish a patronage network through which other Genoese provided it with political and military support in return for a preferred access to Genoa's possessions. In particular, families whose support was essential to the della Volta's control were rewarded by being provided de facto property rights, in some cases in the form of a lease, over Genoa's possessions.<sup>27</sup>

Because the della Volta faction expected to maintain long-term control over the consulate and because possessions were used to strengthen that control, the consuls were motivated to acquire posses-

<sup>23</sup> In other words, without marriages, the appropriate game does not have a coalition-proof NE. The sunk act of marriage increases the cost of deviating.

<sup>24</sup> *Annali* (1154), vol. I, p. 48. For recognition of the strategic value of political marriages, see *Annali* (1239), vol. IV, p. 153.

<sup>25</sup> The hypothesis that their commercial dominance provided the foundation for their political dominance is examined and rejected in Greif, "Institutional Foundations."

<sup>26</sup> Byrne, "Genoese Colonies," p. 153. The faction's control, however, may have been most profound in the Crusader states.

<sup>27</sup> See for example, Day, *Genoa's Response*, regarding Constantinople; and Byrne "Genoese Trade," regarding the Embriaco family in the Crusader states.

sions. In other words, the semiautocratic control of the della Volta faction mitigated the collective-action problem.

The acquisition of possessions gradually increased Genoa's trade and hence the potential return (either from official reward or rent expropriation) to any Genoese from being a consul. As long as the return was low, it may not have been profitable for nonfaction members to militarily confront the della Volta faction. After possessions were acquired, however, this was no longer the case, and the faction was militarily challenged by other Genoese who wished to profit from being consuls.<sup>28</sup>

This analysis not only illuminates the general interrelations between the economic and political histories of Genoa, but can be expanded to indicate the rationale behind the timing of the civil wars. Uncovering this rationale requires examining the limits on the autocratic rule of the della Volta faction, that is, the extent to which it could commit itself to future rewards for those under its patronage. The faction's ability to withstand its opposition was determined by the extent of its patronage, the number of those who provided it with political and military support. But how did the faction—the strongest military power in Genoa—commit to reward its supporters in the future?

To address this question, it is useful to sketch a simple model that captures the essence of this commitment problem.<sup>29</sup> When not challenged by its opposition, a faction's probability of survival (through the next period) and the total payment to its supporters increases with the current period's number of supporters, whereas the value of the marginal supporter (in terms of the probability that the faction would survive) decreases with the number of supporters. At the end of each period it survives, the faction receives gross income that it can either consume or use to reward supporters.<sup>30</sup> (Henceforth, the per-period gross expected income will be referred to as "rent.") For simplicity, assume that a potential supporter can and will commit to assist the faction if he is requested to do so and if the faction can commit to compensate him.

For any given rent, the faction has an optimal number of supporters that reflects the trade-off between consuming rent in the present or using it to reward supporters and thus to increase the probability of continuing to gain rent in the future. The optimal number of supporters increases with the size of the rent because a higher rent increases the present

<sup>28</sup> After 1164, leading families in the opposition were the *Avvocatos*, *Ususmaris*, *Grillos*, and *Pevere*. See the discussion in *Day, Genoa's Response*, p. 103, fn. 65.

<sup>29</sup> The analysis holds even if the faction derives utility directly from having control, as long as having control and wealth are substitutes in the "faction" 's utility function.

<sup>30</sup> In twelfth-century Genoa this trade-off resulted from the extent to which the faction enabled its supporters to invest in trade. It determined the value of the goods the members brought to Genoa.

value of future rents; hence the faction would find it optimal to spend more resources on recruiting supporters each period to increase the probability it would survive. The faction can commit itself to reward this optimal number of supporters in the future because it is known *ex ante* that having this number of supporters would be optimal in the future as well. But this number is also an upper bound on the number of supporters to whom the faction can commit.<sup>31</sup> It cannot commit *ex ante* to reward in the future more supporters than would be optimal *ex post*.<sup>32</sup>

A decline in rent, whether expected or not, decreases the number of supporters to whom the faction can commit. Hence a reduction in rent implies a "spin-off" of supporters who would now cease assisting the faction. Because such a spin-off reduces the military might of the faction, an opposition group may find it an appropriate time to challenge it.<sup>33</sup> Although there is less to gain from capturing the consulate, there is also a higher probability of gaining. When such a challenge takes place, the marginal value of supporters temporarily increases. Although the faction would like to extend the size of its patronage network, it is unable to do so because a larger number of supporters would not be optimal *ex post* if the faction survives. Hence theory predicts that a decline in rent will lead to loss of supporters and an attack by the faction's opposition.

These theoretical predictions are confirmed by the historical records. In 1162 the German emperor, Frederick I Barbarossa, defeated the city of Milan, which stood in the way of his reaffirming control over Italy. In return for the emperor's recognition of its autonomy, Genoa agreed to help him conquer Sicily. The hostile responses of Barbarossa's foes—the king of Sicily and the Byzantine emperor—forced the Genoese to forbid all trade with Sicily and the eastern Mediterranean.<sup>34</sup> Moreover, its bitter rival, Pisa, took advantage of this situation to wage war against Genoa.<sup>35</sup> These events diminished, most likely, the della Volta faction's rent, and theory predicts that this should have led to a loss of supporters, thereby increasing the profitability of an attack by the

<sup>31</sup> In reality, asymmetric information regarding this number is likely to prevail. The analysis presented below, however, is a comparative statics analysis. It requires only the recognition that the extent of rent limits patronage relations and that a decline in the magnitude of the faction's rent had occurred. As described in subsequent discussion, the reduction in the della Volta faction's rent resulted from observable political changes around the Mediterranean.

<sup>32</sup> In other words, there is a subgame perfect equilibrium in which the faction hires the optimal number of supporters, but there is no subgame perfect equilibrium in which the number of supporters is larger.

<sup>33</sup> The opposition strength is not likely to be negatively affected by the reduction in rent because it does not use expropriated rent to establish a patronage system in any case. Furthermore, its strength may be increasing as the controlling faction spins off supporters, if it is united simply by its common goal of overturning the faction.

<sup>34</sup> For example, see *Annali* (1162), vol. I, pp. 86–98; and Abulafia, *Two Italies*, pp. 127–33. The value of trade was, in 1162, 1,370 lire, the smallest amount since 1155.

<sup>35</sup> *Annali* (1164–1165), vol. II.

faction's opposition. Indeed, in 1162 fights occurred between members of the faction, and in 1164 these fights turned into a civil war between the della Volta faction and its opposition, which included some of the faction's previous supporters.<sup>36</sup>

In 1172, the della Volta faction rose to power again; not surprisingly, after additional possessions were acquired.<sup>37</sup> Yet the increase in the relative strength of the della Volta faction was not sufficient to eliminate its opposition. The military technology available during this period made defense superior to offense, and throughout the twelfth century Genoa's noble families pursued a policy aimed at having family members and supporters live in close proximity, well protected by defense towers.<sup>38</sup> Hence, although the della Volta faction regained its control over the consulate, it was unable or unwilling to bear the cost of completely rooting out its opposition.

Between 1182 and 1187, a series of events adversely affected Genoa's trade and hence the della Volta faction's control. In 1182, Genoa lost its privileges in Constantinople. In 1187 another war broke out with Pisa, and Saladin, who ruled Egypt, captured most of the Genoese possessions in the Kingdom of Jerusalem. At the same time, a war between Genoa and the king of Majorca probably damaged Genoese trade in the west. Finally, in 1191 Genoa's trade with Sicily suffered a severe blow as Genoa, once again, had to join a war between the German emperor and Sicily. The della Volta faction attempted to restore its fortune by facilitating and participating in the Third Crusade, but its opponents took advantage of the faction's relative weakness and strove to gain control over the city-state.<sup>39</sup> It is interesting to note that former faction members—in particular those unrelated by marriage or blood to the della Voltas—ceased their support of the faction. Genoa's annals explicitly report fighting between the della Volta faction and "part of their [former] adherents."<sup>40</sup>

The semiautocratic rule of the della Volta faction over Genoa from 1164 to 1193 provided a political foundation for economic growth. It mitigated the problem of collective action by skewing the distribution of rents from Genoa's possessions. This skewed distribution motivated the ruling faction to devote its human and financial resources to acquire more possessions. Yet the skewed distribution of rents, which was expected *ex post*, constrained the resources the consuls could use, *ex ante*, to acquire possessions and thus limited the extent of trade

<sup>36</sup> *Annali* (1162), vol. I, pp. 86ff. (in particular, *Annali* [1169], vol. II, p. 132). The Pevere and the Ususmaris families left the faction.

<sup>37</sup> From 1164 to 1171 the della Volta faction held only 41.3 percent of the total consular posts.

<sup>38</sup> Hughes, "Kinsmen and Neighbors."

<sup>39</sup> *Annali* (1189), vol. II, p. 215.

<sup>40</sup> *Annali* (1192), vol. II, p. 227 (the Vento family); *Annali*, vol. II, p. 230 (the Spinola family); and Day, *Genoa's Response*, pp. 127, 143–47 (the Guertio family).

expansion. To support the growth of trade, Genoa increasingly used the resources of only a subset of its residents and had to bear the cost of civil wars.<sup>41</sup>

#### THE *PODESTERIA* AND ITS ECONOMIC IMPLICATIONS

The semiautocratic rule of the della Volta faction entailed inefficient use of resources because the faction and its opposition devoted resources to gain a greater share of Genoa's wealth instead of acquiring possessions. The cost imposed by the system was particularly evident during the civil wars, when neither the della Volta faction nor its opposition could recruit enough supporters to ensure undisputed control. Neither side was strong enough to face its local rival and, at the same time, acquire possessions, thereby increasing its rent and securing its control. Clearly, both sides could have benefitted from instituting a political system able to bring an end to the civil war and facilitate cooperation in acquiring possessions.<sup>42</sup>

The length of the civil wars indicates that benefits from cooperation were not sufficient to bring about such a political system. For this to have happened, participants would have to have known that the allocations of gains agreed upon would be self-enforcing *ex post*. A partial and unsuccessful move toward establishing such a system was made in 1170, when Genoa faced a severe threat from a large Pisan army. This threat most likely reduced the expected return to each faction even if it won. Genoese not directly involved in the factional fights arranged to divide the consulate equally among the factions.<sup>43</sup> Instead of changing the political system, they in essence tried to alter the allocation associated with the existing system. Clearly, such a division was neither stable nor likely to yield much gain from cooperation. Factions were still motivated to devote resources to enhance their relative strength, and a faction able to increase the rent available to it was in a better position to expand its political control. Indeed, by 1172 the della Volta faction had regained its control over the consulate.

The civil war of 1187 to 1194 was very destructive, as each faction

<sup>41</sup> For example, 61 percent of the loan given in 1171 to the Byzantine emperor to finance his war with Venice, so that the Genoese could resume trading with Constantinople, was given by three faction members. Day, *Genoa's Response*, p. 123.

<sup>42</sup> Consider a game in which each faction decides how to allocate its resources between wealth-creating activities or activities aimed at distributing the wealth created by the actions of both factions. The payoff to each faction increases with the total resources devoted to wealth-creating activities and its relative allocation of resources to wealth-distributing activities. The equilibrium level of resources devoted to distributive activities is positive and increases with the marginal return to such activity, whereas total wealth and each faction's wealth decrease with this marginal return. A political system that reduces that marginal return, therefore, is Pareto improving.

<sup>43</sup> *Annali* (1170), vol. II, p. 132.

used siege machines to destroy the other's fortifications.<sup>44</sup> As in 1170, however, the Genoese endeavored to change their system only when they faced a severe external threat that decreased the economic rent that would be available to the winning faction. Presenting this threat and understanding the origin and nature of the new political system that resulted from the crisis—the *podesteria*—requires some elaboration of the relevant history.

During the twelfth century, several Italian communes experimented with political systems guided by a single executive administrator nominated by the commune. By establishing a similar system, the emperor Frederick I Barbarossa attempted to control the Italian cities he had defeated. He nominated an outside *podestà* (that is, a "power") as a single executive administrator in these cities.<sup>45</sup> The transition to the *podesteria* in Genoa was influenced by the attempts of Frederick's son, Henry VI, to use a similar system to control Italy.

In 1194, Henry organized an attack on Sicily, but Genoa, paralyzed by the civil war, could not give him naval support. Henry's seneschal advised the della Volta consuls to accept a *podestà* who would administer the city.<sup>46</sup> Given the deadlock in the fighting and the high cost of failing to provide naval support (losing future trade with Sicily and alienating the emperor), the della Volta faction conceded. Oberto de Olivano of Pavia was nominated *podestà* for one year, after which the consulate was to resume. Under his direction, the Genoese factions cooperated and supported the emperor, who conquered Sicily during 1194.<sup>47</sup>

During the Sicilian campaign, the Genoese had ample opportunities to learn the benefits of cooperation and to realize that continuing the existing political system could lead to de facto subjection to the emperor. In particular, cooperation enabled them to defeat the Pisans, who also fought on behalf of the emperor but waged a surprise attack on the Genoese. Hence, when their *podestà* died during the campaign, the Genoese replaced him with Otto di Carreto.<sup>48</sup> The emperor, who probably intended to control Genoa by having the city administered by a *podestà* nominated and motivated by him, refused to recognize Otto as a *podestà* and, probably hoping to force his own choice on Genoa, threatened to destroy the city if the Genoese dared to sail the sea.<sup>49</sup> The Genoese, however, responded by devising a new political system that

<sup>44</sup> *Annali* (1189–1193), vol. II. For discussion, see De Negri, *Storia*, pp. 299–308.

<sup>45</sup> Hyde, *Society and Politics*, pp. 100–101.

<sup>46</sup> For similar reasons a *podestà* was installed in 1190 when many members of the della Volta faction were still taking part in the Third Crusade. It was abolished upon their return. See the *Annali* (1190–1191), vol. II; and Vitale, *Breviario*.

<sup>47</sup> *Annali* (1194), vol. II, pp. 231–32, 234–35. For discussion, see Vitale, *Breviario*, pp. 51–55; Abulafia, *Two Italies*, pp. 204–12; and Day, *Genoa's Response*, pp. 147–49.

<sup>48</sup> *Annali* (1194), vol. II, p. 239.

<sup>49</sup> *Annali* (1194), vol. II, pp. 240–41.

enabled cooperation, mitigated the collective-action problem, and made Genoa more militarily powerful and economically prosperous than ever.<sup>50</sup>

At the center of Genoa's *podesteria* was a non-Genoese *podestà*, hired by the city to be its military leader, judge, and administrator and supported by soldiers and judges he had to bring with him. Political historians have noted that the administration of Genoa by the *podestà* pacified and unified the city. Yet the reasons for its success have remained elusive. Vito Vitale, Genoa's eminent historian, implicitly argued that gains from cooperation ensured the system's functioning. If this was so, however, why were these gains insufficient to guarantee cooperation under the consulate? It has also been claimed that the *podestà*'s military superiority enabled him to control the factions.<sup>51</sup> If this was so why didn't the *podestà* become a dictator? Understanding the success of the *podesteria* requires analyzing how the introduction of a new player, the *podestà*, altered the strategic interaction within the city.

The *podestà* was not militarily strong enough to become a dictator, and the number of soldiers he had to bring with him was specified in his contract. Yet (probably with the assistance of Genoese not affiliated with any of the factions) he enabled the factions to cooperate by creating a military balance among them. By the "threat" of assisting the other faction he deterred each faction from attempting to take control over the city or act "illegally." Moreover, because the *podestà* was to receive a high wage at the end of his term, this threat was credible. If one faction took control over the city, there was no reason for it to reward the *podestà*. Furthermore, this reward scheme made it in the *podestà*'s interest not to alter fundamentally the balance of power among the factions. Hence he could credibly be impartial and retaliate against people who broke the law rather than against a faction as a whole.<sup>52</sup>

If this hypothesis is correct, the functioning of the *podesteria* critically depended on each faction's *inability* to commit to reward a *podestà* who cooperated in the destruction of the other faction. Indeed, attempts to inhibit a faction's ability to commit are reflected in the *podesteria* regulations. The term of the *podestà* was limited to one year, after which he had to leave the city and not return for several years. During his deliberately short period in office, the *podestà* was restricted from socializing with Genoese, buying property, getting married, or managing any commercial transactions. Similar restrictions applied to his

<sup>50</sup> The following discussion is based on the *Annali*; Vitale, *Il Comune*; Vitale, *Breviario*; and Waley, *Italian City-Republics*. Vitale (*Breviario*, pp. 51–52) rejects previous hypotheses regarding the transition to the *podesteria* and concludes that it reflects a need to pacify the city. Day (*Genoa's Response*, p. 150), conjectures that the transition was masterminded by the della Voltas' opposition.

<sup>51</sup> Vitale, *Il Comune*, p. 9; and Heers, *Parties*, p. 206.

<sup>52</sup> On the equilibrium path, the *podestà* could act against certain people without provoking a factional response. This fact has led historians to conclude that he was militarily superior to the factions. For limited military action, see *Annali* (1190), vol. II, p. 220.

relatives up to the "third degree." The conscious attempt to keep the *podestà* from factional influence is also reflected in the identity of the rectors who assisted him and who were not, by and large, members of the families involved in the factional wars.<sup>53</sup>

To ensure that no faction would be able to extend its patronage in a destabilizing manner and to motivate the factions to participate in acquiring possessions, care was taken to prevent any family from establishing de facto property rights over Genoa's possessions and to provide all Genoese with access to them.<sup>54</sup> To restrict the ability to extract rent from Genoa's possessions, they were not leased for a prolonged period nor were specific families allowed to establish de facto property rights over them. Rather, Genoa's possessions were administered by a consul sent from Genoa for one year. At the end of his term, the consul had to return to Genoa as soon as his successor had arrived, on the very same ship. A consul deposited a bond to guarantee proper conduct and was prohibited from receiving donations worth more than half a lira or to undertake any commercial venture.

To mitigate the collective-action problem and to ensure a (relatively) impartial political system, policy setting was separated from policy implementing. A "Council" having at least eight representatives from each of Genoa's eight districts determined policy and legislation. Major policy decisions had to be approved by a gathering of all Genoese with "full rights." The *podestà*, who did not have legislative powers, was to follow the policy set by these bodies, and their structure made it difficult for any faction to manipulate Genoa's policy to its own advantage. Hence, Genoese who expected to benefit from the long-run increase in the volume of trade determined the city's policy, but a hired administrator governed its execution. To motivate the *podestà* to follow the set policy, he was offered a high, yet conditional, pecuniary reward. Before the end of the term his conduct was assessed, and misconduct implied a penalty to be paid before he was allowed to leave the town. At the same time, Genoa's obligations toward a particular *podestà* were honored, because otherwise the city's ability to hire another high-quality *podestà* would have been diminished.

The Genoese *podesteria* formally lasted about 150 years, during which it faced many challenges as a result of temporary imbalances between factions, the political rise of the *popolo* (that is, the non-noble element), and the conflict between the Pope and the emperor that affected Genoa during the thirteenth century. Yet the *podesteria* retained the same basic structure throughout this period, and by enabling cooperation, it brought about the "the golden age of Genoa."<sup>55</sup> In 1195,

<sup>53</sup> See Olivieri, *Serie*, for the years 1196, 1199, 1202, 1203, 1205, and 1206.

<sup>54</sup> For conscious attempts to forestall a family from achieving de facto property rights over possessions, see, for example, Day, *Genoa's Response*, pp. 111ff., 122-25, 166.

<sup>55</sup> Vitale, *Breviario*, p. 69.

Genoa began to reassert its control over smaller surrounding cities, and in the next hundred years the city completely freed itself from the rule of the Holy Roman Empire, destroyed Pisa—its rival in the western Mediterranean—successfully confronted Venice—its rival in the eastern Mediterranean—and acquired possessions all over the Mediterranean, the Black Sea, and beyond. Genoa's military and naval strength led to unparalleled economic growth.

Although each of the available measures for estimating this growth is imperfect, they uniformly indicate spectacular economic performance relative to Genoa's past and relative to Venice. A calculation of the yearly rate of growth of trade, although limited by data availability, indicates that from 1160 to 1191 the rate of growth was 4 percent, whereas from 1191 to 1214 it rose by 50 percent (to 6 percent). By 1314 Genoa's (nominal) trade was more than 46 times that of 1160.<sup>56</sup> Around this time, Genoa was estimated to be the richest of the Lombard cities, followed by Milan and Venice, each of which had less than three-quarters of Genoa's wealth.<sup>57</sup>

Rapid economic growth after the institutionalization of the *podesteria* is also suggested by Genoa's population growth, which doubled between 1050 and 1200 and then increased another 230 percent between 1200 and 1300. This trend is remarkably different from that of Venice, which experienced a rate of population growth of 50 percent in each of the corresponding periods. In 1300, Genoa was the second-largest city in Northern Italy.<sup>58</sup> Its economic vitality is also indicated by product specialization and organizational innovations. By and large, innovations appeared first in Genoa and later in the oligarchy of Venice. Examples include double-entry bookkeeping, insurance, winter navigation, marine charting, and minting of gold coins. The Genoese also dominated the direct trade between Europe and the Far East and were the first to advance toward the Far East via the Atlantic.

### CONCLUSIONS

The political system that supported Genoa's initial economic development was based on lineage, marriage, and patronage. Although the system successfully mitigated collective-action problems, its economic costs were high. To support its trade expansion, Genoa increasingly used the resources of only a subset of its residents and had to bear the cost of civil wars. Only when an outside threat made the cost of this system extremely high, did the Genoese take advantage of organizational innovations to implement a new political system. This system, the

<sup>56</sup> For details see Greif, "Institutional Foundations." The Genoese lira lost about 35 percent of its value between 1155 and 1255.

<sup>57</sup> Hyde, *Society and Politics*.

<sup>58</sup> Bairoch et al., *Population*.

*podesteria*, enabled additional economic expansion by altering the incentive structure that the Genoese factions faced. This alteration facilitated interlineage cooperation and mitigated the collective-action problem mainly by introducing a new player into Genoa's political game and by separating policy setting and policy implementing.

Each of Genoa's political systems had distinct economic ramifications, because each entailed a different trade-off between mitigating the collective-action problem and enabling cooperation. Before the rise of the della Volta faction, Genoa's trade expansion was restricted because the collective-action problem was not mitigated. The resulting relative lack of overseas possessions, however, enabled cooperation in economic endeavors such as pirate raids. By contrast, the dominance of the della Volta faction mitigated the collective-action problem and thereby fostered trade expansion but forestalled cooperation.<sup>59</sup>

At the same time, economic opportunities and development influenced political changes. The control of the della Volta faction was made possible by its ability to extract rent from overseas possessions. At the same time, the economic development brought about by this control increased the profitability of holding a consular post to other Genoese as well as eventually leading to the transition to the *podesteria* system.

History was important in Genoa's political and economic development. The historical process of experimenting with and learning about different institutional arrangements influenced political changes. More generally, Genoa's politics exhibited path-dependence in being incapable of evolving significantly away from the forms and functions shaped by its historical origins.<sup>60</sup> The *podesteria* was a practical political system because it built on the existing factional structure. Similarly, disregarding the question whether Genoa's relatively small hinterland was a product of history or of geography, it seems to have crucially shaped its political history. The della Volta faction had to rely on variable rent from overseas possessions to ensure its control, thereby making it vulnerable to external shocks. It may not be a coincidence that Venice also had a limited hinterland.

The insight provided by Genoa's political and economic histories substantially differs from that offered by other studies of the political foundation of economic growth. Previous studies have illuminated the economic implications of the need to constrain rulers from abusing rights and of political conflicts among factions whose boundaries were taken as given. Genoa's history indicates the importance of examining the institutional basis that determines the boundaries of political factions, the endogenous process through which the "ruler" emerges, the

<sup>59</sup> Olson, "Dictatorship," has noted the historical contribution of autocracy to economic growth.

<sup>60</sup> On the theory of path-dependence, see David, "Path-Dependence."

rulers' incentives to advance growth, and the incentives to cooperate with a ruler.

It is impossible to conjecture what the course of Genoa's economic development during the Commercial Revolution would have been had it had a different political system. Yet the study of this city's political and economic history exemplifies the importance of coanalyzing political and economic systems in understanding the actual process of economic growth. Such an analysis requires a microlevel study that takes into account the specific attributes of a historical episode, the strategic interaction among decision makers, and the trade-off between mitigating collective-action and cooperation problems. A better understanding of such processes throughout history is likely substantially to enhance our knowledge of both past economic development and the political impediments to economic growth in contemporary developing countries.

#### REFERENCES

- Abulafia, David, *The Two Italies* (Cambridge, MA, 1977).
- Annali Genovesi di Caffaro e dei suoi Continuatori, 1099–1240*, translated by Ceccardo Roccatagliata Ceccardi and Giovanni Monleone (Genoa, 1923–1929), vols. I–IV.
- Bairoch, Paul, Jean Batou, and Pierre Chèvre, eds., *The Population of European Cities from 800 to 1850* (Geneva, 1988).
- Byrne, Eugene H., "Genoese Trade with Syria in the Twelfth Century," *American Historical Review*, 25 (Feb. 1920), pp. 191–219.
- Byrne, Eugene H., "The Genoese Colonies in Syria," in L. J. Paetow, ed., *The Crusade and Other Historical Essays* (New York, 1928), pp. 139–82.
- Codice Diplomatico della Repubblica di Genova dal MCLXIII [sic] al MCLXXXX [sic]*, edited by Cesare Imperiale di Sant'Angelo (Rome, 1936, 1938), vols. I, II.
- David, Paul A., "Path-Dependence: Putting the Past into the Future of Economics" (Technical report no. 533, IMSSS, Stanford University, 1988).
- Day, Gerald W., *Genoa's Response to Byzantium, 1154–1204* (Urbana, IL, 1988).
- De Negri, Teofilo Ossian, *Storia di Genova* (Milan, 1974).
- Duby, George, *The Early Growth of the European Economy* (Ithaca, 1974).
- Giovanni Scriba, Cartolare di*, 1154–1164, edited by Mario Chiaudano (Turin, 1935), vols. I, II.
- Greif, Avner, "The Institutional Foundations of Genoa's Economic Growth During the Commercial Revolution" (Memorandum, Stanford University, 1993).
- Heers, Jacques, *Parties and Political Life in the Medieval West* (Oxford, 1977).
- Hicks, John, *A Theory of Economic History* (Oxford, 1969).
- Hughes, Diane Owen, "Kinsmen and Neighbors in Medieval Genoa," in H. A. Miskimin, D. Herlihy, and A. L. Udovitch, eds., *The Medieval City* (New Haven, 1977), pp. 95–111.
- Hyde, John K., *Society and Politics in Medieval Italy: the Evolution of Civil Life, 1000–1350* (London, 1973).
- Lopez, Robert Sabatino, *Storia Delle Colonie Genovesi Nel Mediterraneo* (Bologna, 1938).

- Lopez, Robert Sabatino. *The Commercial Revolution of the Middle Ages, 950–1350* (London, 1976).
- North, Douglass C., *Structure and Change in Economic History* (New York, 1981).
- North, Douglass C., *Institutions, Institutional Change and Economic Performance* (Cambridge, MA, 1990).
- North, Douglass C., and Barry R. Weingast, "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England," this JOURNAL, 49 (Dec. 1989), pp. 803–32.
- Oberto Scriba de Mercato, 1186, 1190, edited by Mario Chiaudano and R. Morozzo Della Rocca (Turin, 1940).
- Olivieri, Agostino, *Serie dei Consoli del Comune di Genova* (Genoa, 1861).
- Olson, Mancur, *The Rise and Decline of Nations* (New Haven, 1982).
- Olson, Mancur, "Dictatorship, Democracy, and Development," *American Political Science Review*, 87 (Sept. 1993), pp. 567–76.
- Pertile, Antonio, *Storia del Diritto Italiano Dalla Caduta dell' Impero Romano alla Codificazione*, 2 vols. (2nd ed., Bologna, 1966).
- Rosenberg, Nathan, and L. E. Birdzell, Jr., *How the West Grew Rich* (New York, 1986).
- Vitale, Vito, *Il Comune del Podestà Genova*, (Milan, 1951).
- Vitale, Vito, *Breviario della Storia di Genova*, 2 vols. (Genoa, 1955).
- Waley, Daniel, *The Italian City-Republics* (Reprint, New York, 1988).