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Institutions and International Trade: Lessons from the Commercial Revolution

By AVNER GREIF*

International trade theory distances itself from an examination of the institutions that govern trade. To it, trade is determined by endowments, technology, preferences, and the nature of the competition in international markets. Historical institutional analysis indicates, however, that understanding the determination of actual, rather than potential, trade requires institutional analysis. Following the approach advanced by Oliver E. Williamson (1985), it views trade across political and economic entities as based on and composed of a series of political and economic exchange relations. Since institutions "determine...costs and hence the profitability and feasibility of...economic activity" (Douglas C. North, 1991 p. 97), the nature of the institutions that govern these exchange relations affect trade's magnitude and direction. At each point in time, the combined impact of institutions, endowments, technology, and preferences determines actual trade.

The relationship between institutions and trade is well reflected in the history of the Commercial Revolution (11th–14th centuries), during which Mediterranean and European long-distance trade reemerged after a long period of decline (see e.g., R. S. Lopez, 1976). This reemergence was not a response to changes in endowments or technology. Rather, institutional changes caused by political and social events provided the impetus required to initiate trade and a complementary process of institutional evolution and trade expansion. Before the emergence of appropriate institutions, the presence of gains from trade was insufficient either to initiate trade or to generate the required institutions.

While the emerging institutions reflected an attempt to gain from trade, they were a product of social and political processes. Social and political factors affected institutions by, for example, coordinating actions and expectations, determining the availability of information, the ability to initiate collective action, and the ability to use coercive power in the pursuit of economic ends. As a result of the interrelations between social and political factors and institutions that facilitated trade, these institutions were not even "second best." That is, they did not maximize gains from trade given the (navigation, information, and contract enforcement) technology of the period. This paper comes to substantiate these points by examining the origins, complexity, and implications of institutions that governed exchange relations that constituted or enabled trade during the Commercial Revolution.

I. Institutions that Governed the Relations between Rulers and Alien Merchants

Having monopoly over coercive power, a medieval ruler faced the temptation to abuse the rights of alien merchants who frequented his realm. Without an institution that enabled the ruler *ex ante* to commit to secure their rights, alien merchants were

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not likely to frequent that ruler's territory, thereby forgoing efficient trade. This point was clear to the English king, Edward I, who in 1283 noted that "many merchants [fearing lack of protection] are put off from coming to this land with their merchandise to the detriment of merchants and of the whole kingdom." (*English Historical Documents*, 1975 p. 420).

Since trade relationships were expected to repeat, one may conjecture that a *bilateral reputation mechanism* in which a merchant whose rights were abused ceased trading, or an uncoordinated *multilateral reputation mechanism* in which a subgroup larger than the one that was abused ceased trading, could surmount this commitment problem. Under such mechanisms, conditioning future trade on past conduct may enable the ruler to commit. It is shown in Greif et al. (1991), however, that although each mechanism can support some level of trade, neither can support the *efficient level of trade*. The bilateral reputation mechanism fails because the value of the future trade of the "marginal" traders to the ruler is zero, and hence the ruler is tempted to abuse these traders' rights. In a world characterized by information asymmetries, slow communication, and different plausible interpretations of facts, the multilateral reputation mechanism fails for a similar reason.

To overcome the ruler's commitment problem at the efficient level of trade, there is a need for an organization that coordinates traders' responses. When this need is fulfilled, there exists an equilibrium in which the threat of all the merchants to cease trading if any merchant's rights are abused enables the ruler to commit. This equilibrium, however, is not reasonable since it entails a complete boycott during which trade shrinks to below the point at which (for example) a bilateral reputation mechanism is effective, and hence some traders will renegotiate to resume trading. This impedes the organization's ability to surmount the commitment problem by reducing the penalty it can impose on the ruler. Thus, to support the efficient level of trade, a multilateral reputation mechanism must be supplemented by an organization with the ability to coordinate responses and to ensure traders' compliance to boycott decisions.

Historical evidence provided by Greif et al. (1991) indicates that during the Commercial Revolution an institution with the above attributes, the *merchant guild*, supported trade expansion. While a merchant guild was a precondition for trade expansion, its rise in various places was not caused by the appearance of new gains from trade. Rather, the timing of its rise and hence of trade expansion was determined by social and political factors.

Consider, for example, the differences between guilds in southern and northern Europe. The major Italian city-states grew large because of social and political events around the Mediterranean. Italian trade expanded, since each city functioned as a merchant guild, and its size implied that its traders were not "marginal." Although the potential gains from trade in the Baltic Sea were substantial as well, that region's settlement process led to small towns which could not assure the safety of their traders abroad. Only after a long process of institutional evolution were these towns incorporated into an intercity merchant guild, the German Hansa, which enabled Baltic trade to prosper (Philippe Dollinger, 1970). As the emergence and evolution of these merchant guilds were determined by social and political factors, there is no reason to believe that they were second best. This claim is substantiated by the observation concerning the slow institutional evolution of the German Hansa. This evolution does not reflect technical changes, indicating that at each point in time the existing institution was not second best.

II. Institutions that Governed the Relations between Merchants and Overseas Agents

During the Commercial Revolution trade expansion was facilitated by the employment of *overseas agents* who enabled merchants to reduce the cost of trade by saving the time and risk of traveling, diversifying sales, and so forth. To reduce cost, however, overseas agents had to have control over a

merchant's capital abroad, enabling them to act opportunistically and expropriate that capital. Hence, in the absence of institutions limiting opportunism, merchants were not likely to hire agents. What were the institutions that governed agency relations and enabled trade expansion? Did their emergence reflect changes in technology or endowments? Did these institutions reduce the cost of trade to its lowest feasible level?

In previous work (Greif (1989, 1990a), I have examined the institution that governed agency relations among Maghribi traders who operated in the Muslim Mediterranean during the 11th century. The Maghribis were the descendants of Jewish traders who left the increasingly politically insecure surroundings of Baghdad and emigrated to North Africa during the 10th century. By coordinating expectations and providing a social network for information transmission, this emigration process enabled the Maghribis to organize agency relations within a coalition based on a multilateral reputation mechanism. The Maghribis employed each other as agents, and all retaliated against any agent who had cheated a coalition member. Their social and commercial network provided the information required to detect and announce cheating, and the multilateral punishment was self-enforcing, since the value of future relations with all the Maghribis kept an agent honest. An agent who was not expected to be hired by the Maghribis did not stand to lose the value of future relations with them if he were caught cheating. Therefore, a Maghribi merchant who nevertheless hired him had to pay more to keep that agent honest. Hence, each merchant was induced to hire only agents who were expected to be hired by others.

Furthermore, if an agent who had cheated employed other Maghribis as agents, these were free to cheat him without being punished. Hence, by serving as a bond, one's trade investment enhanced his ability to commit. Thus, merchants were motivated to hire other merchants who also invested in trade as agents, thereby determining the social identity of the Maghribis as a group of middle-class merchants. The operation of the coalition was supported by a set of cultural rules of behavior that obviated the need for comprehensive contracts and coordinated responses by indicating what constituted "cheating."

Multilateral punishment enabled the employment of agents even when the relations between a specific merchant and agent were not expected to repeat. The resulting additional gains from cooperation, the value of the information flows, and the expectations concerning future hiring ensured the "closeness" of the coalition. Maghribis were motivated to hire and to be hired only by other Maghribis, while non-Maghribis were discouraged from hiring Maghribis.

Institutions that governed agency relations also emerged among the Italian traders, although a different political and social history led to the emergence of institutions based on political control and bilateral reputation. I have argued (Greif, 1990b) that around the middle of the 12th century, agency relations between Genoese merchants and their overseas agents were governed by a "political coalition." The political faction that controlled Genoa held a monopoly over the city's lucrative overseas trade. This monopoly was utilized to provide agents with the stream of rents required to keep them honest by conditioning agents' future trade investment on past conduct.

Political events in Genoa during the last decade of the 12th century eliminated this political monopoly, opening the lucrative overseas trade to all Genoese. The city itself grew rapidly (despite a high mortality rate) with immigration. These social and political events led to unstable social networks and hindered the emergence of a coalition based on multilateral reputation. Instead, the *patron system*, based on a bilateral reputation mechanism, evolved to govern agency relations. Each merchant, by conditioning future employment on past actions and by paying a sufficiently high wage, motivated his agents to be honest.

The Maghribis' coalition, the political coalition, and the patron system were different institutions linked to specific historical, political, and social processes of which

they were integral parts. These processes determined the nature of these institutions and the timing of their emergence and disappearance. By defining feasible agency relations, these institutions determined the cost of various agency relations and hence affected the magnitude and direction of trade.

Furthermore, the evolution of these institutions and the details of their operation suggest that they were not second best. Among the Maghribis, the volume of trade was limited by the coalition's size, which had been determined by an immigration process and not by the needs of trade. Although this deficiency could have been remedied by an appropriate coordinating organization, such an organization did not emerge. Further, the multilateral reputation mechanism led the Maghribis to forgo efficient relations with non-Maghribis in favor of more profitable but less efficient agency relations among themselves.

Neither the political coalition nor the patron system could support agency relations that were not expected to repeat. Under the former system, however, trade magnitude was politically determined, while under the latter system free entry enabled trade to expand further. On the other hand, the operation of the patron system required a wealth differential between merchants and agents that restricted agency relations. Although this deficiency could have been remedied by an appropriate organization, such an organization did not emerge until a century later (Greif, 1992).

The limitation on the size of a coalition implies that an economy in which agency relations are governed by coalitions will capture few new trade opportunities, compared to an economy based on the patron system. Indeed, the Italian traders did not have a technology superior to those of traders from the Muslim world. Nevertheless, they came to dominate the frontiers of trade in the Far East during this period, suggesting that their institutional structure made them the exporters of trade services.

The above institutions also influenced the process of institutional evolution by providing distinct inducements. For example, when agency relations are governed by the patron system, merchants are motivated to establish "family firms" which employ agents and whose essence is preserving wealth under common ownership. Indeed, the Genoese who used the patron system during the 12th century organized agency relations during the 13th century within family firms. A family firm, whose lifespan is "infinite" and which is less likely to go bankrupt than an individual merchant, reduces the wage that has to be paid to keep agents honest. Within a coalition based on multilateral punishment, however, a family firm does not reduce wages, since the wage required to keep an agent honest is independent of the expected length of the relations with any particular merchant. The rise of the family firm in Italy led to the development of a market in family firms' shares and bonds which enabled an expansion of trade investment. Hence, different initial institutions led to the evolution of diverse institutions that further affected trade (Greif, 1992).

III. Institutions that Governed Relations among Merchants with Limited Information

During the 12th and the 13th centuries much of the trade between northern and southern Europe was conducted at the Champagne fairs where merchants from different localities entered into contracts that required enforcement through time, such as contracts for future delivery. How could a merchant from one community commit to honor contractual obligations toward a member of another? What were the efficiency implications of the institution that governed this exchange?

Paul R. Milgrom et al. (1990) suggest that in the large merchants' community that frequented the fairs, a reputation mechanism could not surmount this commitment problem. Large communities lack the social networks required to make past actions known to all. Milgrom et al. suggest that contract enforceability at the Champagne fairs was achieved by the *law merchant* system, in which the court was used to supplement a multilateral reputation mechanism.

Suppose that each pair of traders is matched only once and each trader knows only his own experience. Since the fairs' court lacked the ability to enforce judgment once a trader left the fairs, assume that the court is capable only of verifying past actions and keeping records of traders who cheated in the past. Acquiring information and appealing to the court is costly for each merchant. Despite these costs, there exists a (symmetric sequential) equilibrium in which cheating does not occur and merchants are induced to provide the court with the information required to support cooperation. It is the court's ability to activate a multilateral reputation mechanism by controlling information that provides the appropriate incentives.

This analysis suggests that the centrality of the Champagne fairs in European trade reflects economies of scale in the operation of a multilateral reputation mechanism supported by the court. If this is the case, the geographical distribution of much of the European trade of the period reflects the historical process that led to the emergence of that specific institution at that specific time and place. As theoretical studies of path dependence indicate, this process need not be optimal (see e.g., A. Paul David, 1988).

IV. Conclusions

This paper examines some institutions that surmounted commitment problems and thereby supported trade expansion during the Commercial Revolution. While these institutions facilitated trade, they were byproducts of (and interwoven into) the social, political, economic, and technological fabric of the period. As such, there is no reason to believe that they were second best. Rather, the evidence suggests that they were self-enforcing stable systems that were not prone to respond to welfare-enhancing opportunities. This claim is supported by the micro-level examination of these institutions and by the macro-level phenomena, that is, the Commercial Revolution itself, as it was not a response to new gains from trade.

Institutions during the Commercial Revolution constrained decision-makers and determined the relations between profitability and efficiency in the exchange relations that constituted or enabled trade. Hence, they determined the efficiency, magnitude, and geographical distribution of trade flows and influenced the social, political, and institutional evolution that further affected trade. Current international trade is also influenced by institutions that govern, for example, commodity futures markets, the international accumulation and diffusion of knowledge, the relations between foreign investors and governments, and the relations between producers and overseas suppliers and distributors. A comprehensive understanding of the factors that determine actual, rather than potential, international trade in the past, present, and future requires a detailed analysis of the institutions that govern the exchange relations that constitute or enable international commerce.

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