15. Commerce, payments, and financing in China

China provided an environment far less hospitable to the development of commerce and finance than did Europe. Indeed, for much of China's history, they developed very little. Only during the Second Transformation, when the environment improved considerably, did commerce really develop, and even then finance lagged.

We begin by examining the organization of commerce and finance in the long period in which development was minimal. We then examine their more rapid development during the Second Transformation. We conclude with a comparison of the development of commerce and finance in China with their development in Europe, and by asking how well our theory explains the differences.

Commerce before the Second Transformation

Under the tribute state, the organization of commerce and finance was rudimentary. With the erosion of the tribute state during the First Transformation, the volume of long-distance trade increased considerably, but the organization and productivity of commerce changed relatively little.

We will look first at the difficulties that stood in the way of commercial development and then at how it organized itself in this environment. We will examine in turn merchant associations, organized markets, and merchant enterprises; we will also examine the arrangements for payments and financing.

A difficult environment for commerce

The reason for the inhospitable environment was government. Government left little space for commerce, harassed it with exaction, and made it difficult for merchants to engage in joint action—particularly necessary, as we have seen, to the organization of commerce. Government failed to provide adequate mechanisms of contract enforcement, and it prevented merchants from developing their own.

Government pre-emption of private commerce

We saw in Chapters 13 and 14 that government pre-emption of a large part of economic activity left little opportunity for commerce.[1] Under the tribute state, almost all

[1](Deng 1999) emphasizes this point.

production was either for the direct consumption of the producer or for the payment of tribute in kind. Only a fraction of output was therefore available for exchange, and most of this was exchanged directly in local markets. Very little found its way into long-distance trade mediated by merchants.

As the tribute state disintegrated during the First Transformation, commerce expanded significantly. However, whenever a particular branch of commerce became exceptionally profitable, the government took it over as a state monopoly. This happened with the trades in salt, wine, metal and weapons, tea, silk, and many imported goods. Such government encroachment on commerce reached its peak in the late eleventh century under the New Policies.

In addition to having to compete with the commercial activity of the state, private commerce had to compete too with that of the state's officials. We saw in Chapter 14 that officials possessed significant advantages over private merchants and that they frequently engaged in commerce on their own account.

Government exaction

Whatever private commerce did occur faced a constant threat of exaction. We have seen that as commerce expanded, governments came to see it as an important source of revenue. The resulting government tolls and taxes raised trading costs, which made many possible avenues of trade unprofitable.

The arbitrary and unpredictable nature of exaction, especially private exaction, greatly increased the risks of engaging in commerce. Property was never secure from arbitrary seizure by the state or by its officials. Large accumulations of wealth or of goods were particularly likely to attract their attention.

Obstacles to the organization of commerce

In commerce, as in production, there are substantial potential gains from the division of labor and from the combination of labor in joint action. As we saw in Chapter 6, capturing such gains requires the development of a complex organizational structure. Before the Second Transformation, government made the development of such a structure impossible.

The primary obstacle was the government's suppression of any form of voluntary association. There were in China in this period no self-governing commercial cities and, as we will see, only a very limited form of merchant association.

The absence of an adequate formal order

We saw in Chapters 6 and 7 that more complex commercial organization depends on the availability of mechanisms of contract enforcement—on the existence of a formal order. The general absence in China of an adequate system of formal order was another major obstacle to the organization of commerce.

The government did not itself provide a formal order suited to the needs of commerce. There existed no separate system of courts with specialized judges. Instead, justice was provided by ordinary local officials. These lacked any legal training, and they provided justice as part of keeping the peace; their primary purpose in doing so was to protect the interests of the state.[2] The legal code was essentially a list of crimes, together with the punishments prescribed for each—generally harsh.[3]

Magistrates had no interest in adjudicating commercial disputes—determining whether one party had kept his promise to another. Even when the failure to do so constituted a crime, magistrates thought in terms of punishment rather than of remedy for the injured party.[4] Moreover, with untrained judges and with no body of case law, decisions were highly unpredictable. And, in any case, the severity of punishment made litigation something to be avoided at almost any cost.[5]

The real problem, however, was not so much the government's failure to provide an adequate formal order as its preventing anyone else from doing so. We have seen that in Europe it was not necessary for a government to provide a formal order, because merchants had various alternatives—seigniorial, ecclesiastical, and commercial. But in China there were no seigniorial or ecclesiastical courts. And the government's repression of voluntary association prevented the development of commercial courts.

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[2](MacCormack 1990) Ch. 4

[3](Finer 1997) Part 2 Ch. 3

[4](Yang 1987) Ch. 2

[5](Gates 1996) Ch. 2.

There was one exception to this rather bleak picture. We saw in Chapter 14 that the government established Offices of Maritime Trade in a number of southern ports to regulate and tax foreign trade. As foreign trade became increasingly important as a source of revenue, the government instructed the OMTs to do all they could to facilitate it. One way they did so was by providing a reasonably effective formal order.[6] We will see that this made a great deal of difference.

Merchant associations

We saw in Chapter 6 that merchant associations in Europe provided merchants with a vehicle for joint action in addressing the various problems of commerce—problems of reliance, of predation, and of the rivalry for trade. Before the Second Transformation, governments in China did not allow merchants to form such associations.

The only merchant associations that did exist were those created by the government itself. As we saw in Chapter 14, the government set up a kind of merchant guild, the *hang*, as an instrument of indirect administration—mainly to facilitate the taxation of commerce.

However, once an association comes into being, it is hard to prevent it from taking on additional functions. While the *hang* started as a top-down creation of the government, it came to perform many of the same functions performed by merchant associations in Europe.[7]

The *hang* negotiated with officials over the level of taxes and requisitions; sometimes, it was even allowed to pay a fixed sum in place of a particularly harmful tax.[8] The head of the *hang* resolved disputes among its members, and the *hang* sometimes obtained government help in enforcing a monopoly. The *hang* also organized protection for the transportation and storage of its members goods: the 'Tea Merchants' Army' was formidable enough for the Song government to mobilize it during the Jurchen invasion.[9]

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[6](So 2000) Ch. 10

[7](Mann 1987) Ch. 3, (Balazs 1969),(von Glahn 2004)

[8]None of these negotiations, however, created 'rights'. Absent the rule of law, the government could revoke arbitrarily at any time any privilege that it granted. ((Balazs 1964) Ch. 6)

[9](Lorge 2005), (Smith 1991) Ch. 2

The *hang*, however, was much less able than European merchant associations to protect merchants from the government, because it lacked the backing of a powerful city.

The comparative weakness of merchant associations in China meant that the tasks they performed in Europe fell much more on individual enterprises. In particular, the individual enterprise was responsible to a far greater extent for its own protection against official and private exaction. It generally obtained such protection through connections with officials. Each enterprise also had to seek for itself whatever advantage it could in the rivalry for trade—usually in the same fashion.

Because Chinese merchants trading overseas were unable to organize themselves to protect their interests, the government stepped in to do so. It created a navy to protect merchants from pirates, and it sent diplomatic missions abroad to win trading rights from foreign governments. Both of these functions were performed in Europe by merchant associations and by the associational governments of commercial cities.

Organized markets

Organized markets, too, developed much more slowly. Under the tribute state, merchants were restricted to trading in official markets that the government established in its major cities. To control foreign trade, the government established fairs along China's land borders and regulated trading in its sea ports.[10] In all these official markets, traveling merchants were brought together with local wholesalers by licensed brokers—each generally specializing in a particular good or commodity.[11]

As we saw in Chapter 14, the system of official markets crumbled during the First Transformation. Thousands of new, unofficial markets and fairs sprang up, and, over time, some of these developed into commercial cities.[12] Even so, trading continued to be conducted much as before—traveling merchants trading with local wholesalers, assisted by a growing number of brokers, innkeepers, and warehousemen.[13]

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[10]Beginning with the establishment of the first Office of Maritime Trade in 714: see Chapter 14.

[11](Twitchett 1966)

[12](Skinner and Baker 1977) Introduction

[13]In the largest cities, specialized firms offered storage in huge warehouses with thousands of rooms, each surrounded by water and patrolled by guards ((Balazs 1964))

The Song government began to license brokers and came to rely on them, rather than on officials, to collect its taxes. In the ports, licensed brokers acted as agents of the Offices of Maritime Trade.[14] To ensure taxes were collected, trading in certain important goods required the use of a licensed broker, while trading in other goods continued to be mediated by unlicensed brokers.

The requirement to use licensed brokers gave these brokers considerable market power. They exploited this to trade on their own account, gradually taking over much of the wholesale trade.[15] Traveling merchants sold to them, sometimes on credit, and the licensed brokers resold the goods to local retailers. Licensed brokers similarly monopolized the sale of local goods to visiting merchants.[16] In major centers, most notoriously in Kaifeng, groups of licensed brokers formed cartels to fix wholesale prices.[17] It was in response to this that officials took over the wholesale trade of the capital under the New Policies.[18]

The role of the licensed brokers as intermediaries between state and commerce expanded even further under the Yuan.[19] And under the reconstructed tribute state of the early Ming, licensed brokers came to control commerce in every city and rural market.[20] Their control, however, was never complete, and unlicensed brokers continued to operate despite government attempts to suppress them.[21]

Payments and remittance

As we saw in Chapter 8, commerce requires means of transferring value from person to person and from place to place—means of payment and means of remittance. The need for both is particularly acute in organized markets, with their many large transactions,

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[14](Mann 1987) Ch. 3

[15]To consolidate their control, licensed brokers also took over many warehouses and inns.

[16](Shiba 1970)

[17](Mann 1987) Ch. 3

[18]See Chapter 14. Also (von Glahn 2004)

[19](von Glahn 2004)

[20](Liu 1988)

[21](Mann 1987) Ch. 3

often between strangers. An important function of organized markets, therefore, is to lower trading costs by facilitating payment and remittance.

As we have seen, a means of payment or remittance can be either an object of intrinsic value—for example, coin or bullion—or an IOU. The use of IOUs reduces costs considerably, because it avoids expensive processing, assaying, and transportation. IOUs can also be netted against one another to minimize the need for actual settlement. The problem with IOUs, of course, is the possible default of the debtor.

We saw that organized markets in Europe addressed this problem by using the IOUs of trusted intermediaries—deposits of deposit banks for payment and bills of exchange of merchant banks for remittance. These same intermediaries also facilitated payment and remittance by providing merchants with liquidity—in the form of short-term credit—to ensure they could settle on time. Deposit banks did this through overdraft lending; merchant banks, by lending in the exchange market.

Payments

In China, deposit banking appeared in the major cities during the Tang or even earlier, and it became quite common during the First Transformation.[22] It developed as a new function of 'money shops' that specialized in accepting cash, bullion, and other valuables for safekeeping and of silversmiths who provided the same service as a sideline. Such deposit banks honored written orders (checks) from their depositors to transfer ownership of their deposits to others—and presumably oral orders too. A Tang law prohibiting the lending of money taken on deposit suggests that the practice was not unknown.

Deposit banking suffered a major setback in the late eighth century, when the Tang government, during a military crisis, seized all the money held on deposit the capital, Chang'an, as a forced loan.[23] This precipitated a merchant strike that shut down the city's markets, which eventually caused the government to return the money. However, the fear

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[22](Yang 1952) Ch. 8: at one time, the financial district of Hangzhou boasted over one hundred deposit banks. See also (Twitchett 1966), (Peng 1994) Chs. 5 and 6.

[23](Peng 1994) Ch. 4.

of government expropriation had now been firmly planted. After this experience, the wealthy generally preferred to hoard their money—especially in times of fiscal crisis.

In the tenth century, deposit banks began to issue paper depository receipts and promissory notes that could be redeemed in cash.[24] Since these bank notes were transferable, they could be used directly themselves in payment. Paper money was particularly popular in Sichuan, where the use of iron coin made settlement in cash extremely cumbersome.[25]

In the early eleventh century, counterfeiting and overissue of paper money led to problems and to government licensing. In 1023, citing continuing problems, government officials in Sichuan banned the private issue of paper money completely and made its issue a government monopoly.[26] In Chapter 14, we traced the subsequent—unhappy—history of government paper money during the Crisis.

Deposit banking seems to have died out during the Crisis. No record of it has been found from the late Song through the early Ming.[27]

Remittance

While long-distance trade expanded rapidly during the First Transformation, its pattern was less favorable than the pattern of trade in Europe to the development of remittance. In Europe, long-distance trade was generally bilateral or multilateral: it therefore offered many opportunities for economizing on the cross-hauling of coin and bullion through the remittance and netting of IOUs.

In China, in contrast, most early long-distance trade was unilateral—from producing regions to consuming capital cities. There was, for example, a substantial trade in tea from south China to Chang'an in the north. Chang'an did not, however, pay for its imports by exporting goods of equal value in return: rather, it paid for them with tax revenue collected from all over the empire.

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[24](Yang 1952) Ch. 6

[25]It took almost 100lbs of iron to equal in value 1oz of silver. (von Glahn 2005)

[26](von Glahn 2005)

[27](Peng 1994) Chs. 5, 6, and 7.

This pattern did, however, present a different kind of opportunity for remittance—one that offset trade flows against flows of tax revenue.[28] Accordingly, the offices that provincial governments maintained in Chang'an began to accept cash from merchants who had sold their goods there; they then used the cash to pay their provinces' tax quotas to the central government. The merchants, in exchange for their cash, received bills payable in the provincial capitals.[29]

By the start of the ninth century, this arrangement—known as 'flying money'—was well established. In 812, however, it was banned by the central government, which set up in its place a similar arrangement of its own, utilizing its offices in the capital and in the provinces.[30] The Song, when they came to power, continued the service, establishing a special agency for the remittance of funds in 970.[31]

The Song also incorporated the idea into several other programs.[32] In one, merchants who delivered supplies to armies on the northern frontier could choose to be paid in vouchers rather than in cash; the vouchers were redeemable in the capital in cash or in monopoly commodities such as salt and tea. In another program, the government began to sell vouchers in the capital that were redeemable for monopoly commodities in the provinces where the commodities in question were produced.[33]

The government's version of 'flying money' continued to operate into the twelfth century, but it then disappeared from the historical record: there is no mention of it under the Jin or the Yuan. By then, paper money was in general use, and it provided an alternative means of remittance—less costly than transporting cash or bullion and more flexible than the government's system of flying cash.

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[28](Yang 1952) Ch. 6; (Twitchett 1970) Ch. 4.

[29]The instrument seems to have been quite similar to a single-currency, non-negotiable bill of exchange.

[30]This seems to have been part of a broader push to recover financial control that had been partly lost to the provincial governors in the struggle to put down the An Lushan rebellion ((Twitchett 1970) Ch. 4).

[31](Yang 1952) Ch. 6; (Peng 1994) Chs. 5 and 6

[32](Yang 1952) Ch. 6; (von Glahn 2005)

[33]Like European bills of exchange, the different vouchers were payable with a delay, so that they were also a way for the government to borrow.

Enterprises

We saw in Chapter 6 that the basic form of commercial enterprise in Europe was the merchant household. We saw, too, that the individual household was generally too small to capture the potential benefits of scale in commerce—for example, those of diversification and of reputation. As a result, merchant households frequently combined their resources and efforts in various forms of joint enterprise.

How the environment affected the nature of the enterprise

In China too the basic form of commercial enterprise was the merchant household.[34] But joint enterprise was much more difficult to organize. As we have seen, merchant associations were weak and organized markets rudimentary. And neither they nor the state provided much in the way of a formal order. The lack of an adequate formal order made contracts less effective in structuring relationships and so limited the possibilities of joint enterprise between different merchant households. In particular, there did not develop in China during this period any form of enterprise resembling the European *compania*.

The difficulty of forming joint enterprises made it hard for merchant to capture benefits of scale. Doing so by increasing the size of the enterprise of a single household was not appealing, because of the tendency of the state and its agents to plunder any large concentration of wealth. To stay safe, an enterprise needed to remain small—unworthy of the predators' attention. Indeed, the only large enterprises were those of the state itself, or connected with it in some way, or beyond its reach—for example, enterprises based offshore and engaged in maritime trade.

One consequence of merchant enterprises having to remain small was that they were not able to establish branches in distant markets. Moreover, as we saw in Chapter 6, the use of branches depended heavily on services provided by merchant associations and organized markets, and these were not available in China.

As a result, throughout this period, merchants or their representatives generally traveled with their goods.[35] An additional advantage of doing so, for a merchant with a

[34](Zelin 2004); (So 2000).

[35](Shiba 1970) Ch. II, (Lo 1970) and (So 2000).

position or connections that sheltered him from government predation, was that it enabled him to protect his goods en route from extortionate officials and, perhaps, from taxation.

The capital-labor partnership

There was, however, one type of joint enterprise, peculiar to China, that was particularly well suited to the circumstances—the 'capital-labor partnership'. Under this arrangement, a wealthy investor would provide the capital to set up an enterprise and would contract with a manager to run it for him; the manager received a salary plus a share in the profits of from 10-40%.[36]

The wealthy investor was generally an active or retired official or someone otherwise connected with the state.[37] The arrangement provided the investor with anonymity—important, since commercial activity by officials was generally prohibited.[38] The manager—the 'labor' part of the partnership—was a merchant. There existed an active market for recruiting such managers, probably organized by specialized brokers.[39]

From the merchant's point of view, the arrangement was a form of external financing that enabled him to operate on a larger scale. In addition, the investor's position or connections protected the enterprise from arbitrary seizure by the state and extortion by its officials. It also provided the enterprise with access to state business and to participation in state monopolies.

The venture partnership

Another type of joint enterprise, the venture partnership, appeared during the First Transformation, particularly in maritime trade—made possible the formal order provided by the OMTs. One of its most common forms resembled the share venture in Europe.[40] A group of merchants sailing together would lease or purchase a ship jointly, appointing one of their number as leader to manage the voyage; each, however, would trade

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[36](Chan 1982), (Shiba 1970), (Deng 1999).

[37]For example, a member of the imperial family, a noble, or a merchant involved in a state monopoly,

[38](Ma 1971) Ch. 5

[39](Elvin 1973) Ch. 12

[40]See Chapter 6.

separately.[41] Another form resembled the European *commenda*: an investor financed a merchant sailing with goods, and the two shared the profit.[42]

Financing

There was very little financial development before the Second Transformation.[43] In Europe, financial intermediaries and markets—in the form of deposit banks, merchant banks, and exchange markets—largely developed out of the system of payments and remittance. In China, as we have seen, payments and remittance followed a very different path, and therefore failed to provide a similar foundation.

Finance was further handicapped in China by the absence of a formal order—with one important exception, that provided by the OMTs. In general, however, external financing relied on informal rather than on formal order. It was direct rather than mediated. And to avoid the need to deal with default, it generally took the form of equity rather than debt financing. When it did take the form of debt, it was largely self-enforcing.

The predominance of direct, equity finance

We have seen that various forms of enterprise in China involved direct equity financing of one party by another. The capital-labor partnership was the most common and notable example.

Equity financing eliminated the problem of default, but it involved a different problem of its own—one of governance. In this case, however, the connection of the investor with the state mitigated the problem, since the investor's position made it easy for him to punish the 'labor' partner if the latter misbehaved. This made it possible for investors to employ managers who were not necessarily kin or members of the same group.

The same mechanism made it possible to expand the capital-labor partnership to include additional, purely financial investors. These smaller, subsidiary investors presumably relied on the primary investor to monitor the manager.

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[41](Deng 1997) Ch. 4; (Shiba 1970) Ch. I.

[42](Shiba 1970) Chs. I & II.

[43](Peng 1994), Chs 5, 6, & 7, finds little change between the Tang and the early Ming.

Pawn lending

The one type of debt financing that was common throughout the period, and beyond, was the pawn. As we saw in Chapter 8, this form of secured lending provides the creditor with particularly good protection, because the collateral remains in his possession until the loan is repaid. If anyone needs the protection of a formal order in this case, it is the debtor—to recover the collateral if the creditor unjustly refuses to return it.

Pawn intermediaries in China were most often themselves capital-labor partnerships.[44] A wealthy investor provided the funds to be lent out and hired a manager to make the loans and to deal with the borrowers. Most pawn lending was to peasants and was secured by land. Peasants frequently financed their working capital and consumption in this way in advance of selling their crops.[45]

Other forms of credit

In general, in the absence of a functioning formal order, trade credit was problematic.[46] Shopkeepers did extend credit to members of the community in local trade. However, in domestic long-distance trade, travelling merchants extended credit to local wholesalers only with the guarantee of a broker.

The government engaged in lending at various times—relying on its own ability to enforce repayment. Under the Song, local officials were expected to lend at interest any government funds they were holding—the resulting income being used to defray local expenses. As we saw in Chapter 14, the government established a number of lending programs as part of the New Policies.

Enforcement by the OMTs

The one exception to the general lack of a formal order was in maritime trade. There, the Office of Maritime Trade provided enforcement of trade-related contracts. It enforced three types of transaction in particular—the leasing of ships, the purchase of goods on credit, and the advance purchase of goods.[47]

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[44](Ma 1971) Ch. 5

[45](Deng 2008); (Myers 1982).

[46](Yang 1952) Ch. 1

[47](So 2000) Chs. 10

Enforcement of ship leases made direct investment in ships attractive to wealthy investors, because it meant they could then lease them out safely and easily. As we have seen, groups of traveling merchants leased these ships through joint share ventures.

Because of OMT enforcement, traveling merchants could easily purchase on credit the goods they took with them to trade.[48] And we will see in Chapter 16 that the support for advance purchase made it easier for merchants to finance the production of export goods.

The *commenda*-like partnership and the share partnership that were used to create joint enterprises in maritime trade were extended to include purely financial investors.[49] This was probably also supported by the formal order provided by the OMTs, although the informal order of family and community doubtless played a role too. And under the Yuan, the Office of Maritime Trade itself financed traveling merchants under *commenda*.[50]

COMMERCE DURING THE SECOND TRANSFORMATION

As the Crisis worsened, commerce became increasingly difficult, and it disappeared almost entirely with the reimposition of a tribute state under the early Ming. However, during the Second Transformation commerce recovered and then developed as never before.

A more favorable environment

From the mid-Ming through the Qing, as the state withdrew, it reduced its direct involvement in the economy significantly. Money taxes replaced tribute in kind, which greatly increased the share of output potentially available for long-distance trade.

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[48]To be enforced, a purchase on credit had to be made through a broker and there had to be at least one guarantor. Unlike the sea loan in Europe, repayment was unconditional: if the merchant and goods were lost, the guarantor was still expected to pay up. (So 2000) Chs 9 & 10

[49]Travelling merchants accepted funds from small investors under *commenda* ((Shiba 1970) Ch. II). Share ventures were sometimes extended to include investors who did not themselves participate in the voyage ((Lo 1970)).

[50]The merchants in question were mainly foreign Muslims—often Arabs. They would have been well acquainted with the *commenda*, which was widely used in Mediterranean commerce by Muslims as well as by Christians. See (Udovitch 1970).

Government monopolies continued to exist, but they encompassed a decreasing share of domestic commerce.

Government predation also became less of a problem—at least for some. As we saw in Chapter 14, the increase in private exaction probably more than offset the decrease in official exaction. However, the merging of the merchant and gentry classes largely protected commerce from the increase in private exaction.

Obstacles to the organization of commerce diminished too. The government was less inclined, and perhaps less able, to suppress voluntary association, and it allowed various new forms of merchant association to emerge.[51] And while cities did not gain formal autonomy, the general decentralization of government gave local merchants substantial control *de facto*.

Local officials became more willing to provide a formal order for commerce.[52] And the new forms of merchant association also provided a formal order of sorts. As a result, contracts of various kinds began to play a greater role in the organization of commerce.[53]

Even so, the formal order remained far from ideal, and it retained many of the deficiencies that we noted earlier. While merchants did sometimes register contracts with a magistrate, there is little evidence they actually engaged in commercial litigation.[54] Instead, they preferred to rely on the greatly improved informal order that merchant associations provided.

Merchant associations and networks

We saw in Chapter 14 that two new forms of association became important during the Second Transformation—the lineage and the merchant colony. They were sometimes combined into a third type of framework for joint action—the merchant network.

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[51](Myers and Chang 1978)

[52](Zelin 2004), (Rowe 1984) Ch. 5. In particular, they provided enforcement for various new types of debt contract.

[53](Rowe 1984) Ch. 2; (Ma 2011).

[54](Wong 2004)

Lineages

Lineages acted as a kind of associational government. As with associational government in general, one of their most important functions was to protect against predation. When war and piracy made maritime trade hazardous in the early part of the Second Transformation, members of lineages formed groups—sometimes of a hundred or more individual merchant enterprises—for mutual protection.[55] Such groups also worked together to circumvent restrictions on maritime trade (smuggling). Later, as we have seen, members who were officials or gentry were able to protect fellow members against government and private exaction. Lineages also supported their members in disputes with outsiders through litigation and, if necessary, with force.[56] Again, like associational governments in general, lineages provided public goods—establishing local markets and investing in transportation infrastructure.[57]

Lineages provided their members with financing.[58] Members who grew wealthy in commerce were expected to repay the support of the lineage by sending money home and by investing in local enterprises and in lineage infrastructure projects. Because membership in the lineage was so valuable, it was able to enforce an effective informal order among its members. This also made it possible for the lineage to guarantee the conduct of its members in their dealings with others.[59]

Merchant colonies

By the mid-Qing, merchant colonies based on common place of origin were to be found in commercial cities throughout China, as well as overseas.[60] These colonies performed functions much like those performed by merchant colonies in Europe.[61]

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[55](Deng 1997) Ch. 4; (Deng 1999)

[56](Gates 1996) Ch. 6

[57]As we saw in Chapter 14, they also invested in educating the sons of their members for entry into the bureaucracy.

[58](Shiba 1977); (Jones 1974)

[59]See Chapter 6.

[60](Moll-Murata 2008) Later, merchant colonies developed based on common participation in a particular branch of commerce, irrespective of geographic origin.

[61](Morse 1909); (Golas 1977); (Shiba 1977); (Mann 1987) Ch. 2; (Hamilton 2006) Chs. 2 & 4.

They provided a social framework for their members, facilitating the sharing of information. They protected their members against government and private predation. They set standards for such things as weights and measures, means of payment, terms of trade credit, and the quality and price of goods. As we will see, merchant colonies also provided their members with crucial support in the rivalry for trade within organized markets. They also tried to restrict price competition among their members.

Merchant colonies established a code of commercial conduct for their members, which they enforced through an informal and, later, a formal order.[62] This enabled them to guarantee the conduct of their members in their dealings with others and to adjudicate disputes with others when these arose.[63]

Merchant networks

The merchant colony and the lineage came together in the most potent form of merchant collaboration—the merchant network. While each merchant colony was independent and managed its own affairs, a colony in one city would be connected to colonies in others through their common place of origin. In this way, merchant colonies in different cities whose members had a common place of origin constituted a network. Lineages played an important role in this. Most of the most prominent networks originated in regions where lineage organization was particularly strong.

Long-distance trade, both within China and overseas, was largely mediated by such merchant networks.[64] There were many networks, but a few were particularly prominent.[65] Merchants from one small area in Shanxi province dominated the commerce of northern and northwestern China. Those from the Huizhou district of Anhui province dominated commerce in the lower and middle Yangzi valley. But their dominance there was challenged in the nineteenth century by a network of merchants from the city of

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[62]Members were required to bring disputes and violations, including criminal ones, for internal adjudication by the colony before any appeal to the authorities.

[63]A recurring theme in their constitutions was that their rules and regulations were intended "to secure the confidence of those with whom (they) deal, that all may like to trade with (them)" ((Hamilton 2006) Ch. 2).

[64](Skinner and Baker 1977)

[65](Wong 1999); (Skinner 1976); (Shiba 1977)

Ningbo. Merchants from southern Fujian dominated southern maritime commerce and commerce with Taiwan.[66]

The principle reason for the dominance of commerce by merchant networks was their success in addressing problems of reliance.[67] For example, a Fujianese firm in one city was able to export goods on credit to a Fujianese firm in another. Any merchant could, with confidence, remit funds from a Shanxi bank in one city to another in a different city. A Ningbo firm could rely on the representative it sent to purchase goods in another city, because he too was a Ningbo native. In all these cases, good behavior was assured by an informal order. It was motivated by the need to preserve the good name of family, lineage and native place. And it was motivated, too, by the certainty of punishment and even ostracism if one did not.[68]

Members of merchant networks grounded in local lineages were particularly trustworthy. In times of crisis, a member of the lineage in a distant city could rely on members back home to provide emergency support. So not only were there reputational reasons for lineage members to honor their commitments, but lineage support also increased their *ability* to honor their commitments.[69]

Being a member of a merchant network, therefore, provided an individual merchant with a significant competitive advantage over others who were not members of such a network.[70] There was, however, fierce competition among networks and even within networks. The network's loose structure—a group rather than a formal association—made it difficult for it to act as a cartel.

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[66]Huizhou, Fujian, and Ningbo were all areas in which lineages were strong. Shanxi, however, was not: presumably, local connections must have been strong there even without the benefit of lineage organization.

[67](Skinner and Baker 1977) p 271. See (Casson 1997) Ch. 4 on the economics of business networks in general.

[68](Skinner 1976), (Ma 2004). We saw in Chapter 6 that families and merchant associations provided an informal order in much the same way in Europe. See (Casson 1997) Ch. 4 on the continuing importance of business networks today.

[69]See Chapter 6 on reliance and trustworthiness.

[70](Hamilton 2006) Ch. 4

Organized markets

From the late Ming, the support of merchant colonies and merchant networks made it possible for merchants, or their representatives, to begin taking up residence in the distant cities in which they traded, rather than having to travel with their goods as they had in the past.[71] Merchant networks played an essential role in developing the services they needed to enable them to send to other cities, and to receive from them, goods, mail, and money.

Merchant networks established such services initially for their own members, but some developed them as commercial services available to all. For example, Ningbo merchants initially set up for their own use a messenger service between cities, but they then started carrying customers' letters together with their own. This eventually developed into a full-fledged commercial mail service throughout much of China and overseas. Some Ningbo merchants came to specialize as shipping agents, establishing their own specialized colonies in many cities. And, as we will see, Ningbo and Shanxi merchants provided payments services and remittance.[72]

The ability of outside merchants to reside in the cities in which they traded facilitated the growth of private trading, and this weakened the long-standing lock of licensed brokers on long-distance trade. We have seen that in the early Ming, licensed brokers exploited their official positions to dominate organized markets. They did this primarily by monopolizing the trade between commercial cities and their hinterlands, sending out representatives or established branches in the country to buy up local product; they then resold this to traveling merchants at a substantial markup.[73]

So long as outside merchants came to the city only temporarily, there was little they could do to crack this type of monopoly. Once they became local residents themselves, however, they were much less in need of mediation by local brokers. They could acquire for themselves the market information they needed and develop relations of mutual trust

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[71](Golas 1977). There continued, nonetheless, to be a large number of travelling merchants and representatives. For example, merchants in the coastal maritime trade continued to travel with their goods to protect them from predation by officials ((Ng 1983) Ch. IV).

[72](Shiba 1977) All of these services developed out of ordinary commerce by division of labor and specialization, just as they did in Europe—see Chapter 7.

[73](Hamilton 2006) Ch. 4

with local merchants.[74] In particular, they were able to connect directly to producers in the hinterland by sending out their own representatives. Some merchant colonies also established organized markets on their own premises, selling to local retailers directly out of their own warehouses.[75]

By the Qing, the growth of these forms of private trading, together with diminished enforcement of regulations requiring the use of licensed brokers, had greatly eroded the ability of the latter to monopolize long-distance trade.[76] Licensed brokers did, however, retain their hold on some branches of commerce—in particular, on maritime trade.[77]

The emergence of a private payments system

The revival of commerce during the Second Transformation and the accompanying growth and proliferation of organized markets created a renewed demand for means of payment and remittance. Merchant networks played a central role in meeting this demand.

Payments

We saw in Chapter 14 that following the collapse of government paper money in the early fifteenth century subsequent governments had given up any attempt to provide a means of payment. In the absence of government money, local exchange made use instead of private coin minted by money shops; commerce made use of unminted silver.[78]

However the many different kinds of private coin and the varying weights and purities of unminted silver increased the transactions costs of making payment. This led to the development of deposit banking—as it had earlier in Tang China, and as it had in Europe under similar circumstances. Money shops exchanged the different types of coin, and silver shops assayed and weighed silver and cast it into ingots.[79] Both types of

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[74](Moll-Murata 2008)

[75](Schottenhammer 2010), (Rowe 1984) Ch. 2.

[76](Hamilton 2006) Ch. 4, (Wong 2004)

[77](Shiba 1977), (Viraphol 1977), (Liu 1988), (Mazumdar 1998) Ch. 6. Unlicensed brokers continued to proliferate and prosper ((Rowe 1984) Ch. 2; (Wong 2004)).

[78](von Glahn 1996) Conclusion. Silver was the common unit of account.

[79](Peng 1994) Chs. 7 & 8; (Yang 1952) Ch. 8; (Deng 2008)

establishment accepted deposits for safekeeping against paper receipts, and these receipts too circulated locally as a means of payment.[80]

Banking was hampered initially, however, by a lack of confidence.[81] Money shops and silver shops were small and, as a result, frequently failed.[82] And there were no city governments in China that could have bolstered confidence, as they had in Europe, by regulating banking or by providing guarantees.[83]

The problem of confidence was largely solved, however, in the late eighteenth century when merchant networks started to enter banking.[84] As we have seen, membership in a network strengthened the credit of a merchant both for reputational reasons and because of the support he could count on in times of difficulty.

Ningbo merchants, in particular, began to accept deposits in addition to their normal commercial business, and some came eventually to specialize in banking. These 'native banks' spread to wherever the Ningbo merchant network was active; they dominated banking in Shanghai.

Ningbo banks adopted a system of clearing—the 'transfer tael' system—that made them particularly useful to wholesale merchants.[85] Under this system, each merchant would receive a passbook in which to record payments he made and received. At the end of a day's trading, merchants handed in their passbooks to their banks for reconciliation. Later the same day, representatives of all the banks came together to clear payments between them.[86]

Confidence in native banks was bolstered further when those in the major commercial centers began to organize their own guilds. These regulated the banking business, set

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[80] The notes were mostly payable to bearer, which facilitated their circulation ((Rowe 1984) Ch. 5).

[81] (Peng 1994) Ch. 7

[82] (Peng 1994) Ch. 8. On Europe, see Chapter 8.

[83] (Rowe 1984) Ch. 5

[84] (Jones 1972), (Jones 1974), (Shiba 1977)

[85] (Jones 1972), (Shiba 1977).

[86] Ningbo merchants may have learned this system in Japan, where something similar had been in use since the seventeenth century ((Jones 1972)).

standards, coordinated banking activities, and resolved disputes between banks.[87] It was the guilds that established clearinghouses for the 'transfer tail' system.

Remittance

The collapse of government paper money in the early Ming had another consequence: remittance again became costly and inefficient, since there was no longer any real alternative to the physical shipment of bullion.[88] As commerce developed, however, the volume of bilateral trade grew larger than it had been in earlier periods, and the consequent cross-hauling of bullion opened the way for the development of more efficient means of remittance.

Around 1800, a Shanxi merchant of Tianjin noticed the cross-hauling of silver between that city and Sichuan, where he regularly traded, and recognized a profit opportunity.[89] He began to offer drafts between the two places as a sideline. The sideline proved so lucrative that he refocused his business to specialize in remittance.

Other Shanxi merchants followed suit, and by mid-nineteenth century there were dozens of Shanxi remittance banks—several with multiple branches—that provided service between all the major cities of northern China.[90] The clearing center for the whole system was the remote city of Pingyao in Shanxi, in the small area from which the Shanxi merchants originated.[91]

This system of remittance depended on the confidence of the public, which derived from the strong reputation for honesty of the Shanxi merchant network and on its considerable wealth, which stood behind the individual banks. The same confidence in their absolute safety led the central and provincial governments to use the Shanxi banks

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[87](Rowe 1984), (Peng 1994) Ch. 8.

[88]In the last years of the Ming dynasty, the government took advantage of the situation to revive its system of 'flying cash' ((Peng 1994) Ch. 7).

[89](Peng 1994) Ch. 8.

[90]Their reach subsequently expanded to south China and overseas to Korea, Japan, Russia, and Singapore ((Elvin 1973) Ch. 17; (Ma 2004)). The Shanxi banks also accepted deposits and made loans ((Morck and Yang April 2010)).

[91](Ma 2004)

for remittance too. Governments also used them as cashiers—depositing funds with them to be disbursed according to their instructions. The quasi-official role of the Shanxi banks further enhanced their status and reinforced public confidence in them.[92]

Enterprises

The environment of the Second Transformation was a markedly more favorable one for the development of the enterprise. Because of the emergence of new frameworks for joint action—lineages, merchant colonies, and merchant networks—and because of improvement in the legal environment, it became easier to create new forms. And the rise of the gentry offered new protection against the predation of the state and its agents, making the creation of larger enterprises less hazardous.

The development of the capital-labor partnership

The capital-labor partnership continued to be important, but with significant extensions. The 'wealthy investor' was now no longer necessarily an official, but often a wealthy merchant: better protection from predation meant greater merchant fortunes.[93] Indeed, some merchants were wealthy enough to finance multiple enterprises. This was particularly common in the ownership and capitalization of native banks.[94]

Now, too, the 'wealthy investor' was often a group of investors, rather than a single individual. Both Ningbo and Shanxi banks frequently mobilized their capital from groups of investors in this way.[95] The informal order of lineage and merchant network made such collaboration possible.[96] Multiple investors meant more capital, making it possible to operate on a larger scale, which was particularly important for banks. The greater ease

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[92](Rowe 1984) Ch. 5; (Skinner 1976), (Jones 1972).

[93](Xu and Chengming 2000) Many of the greatest fortunes, however, still involved government connections. The merchants of Huizhou made their fortunes in the salt monopoly ((Xu and Chengming 2000)); those of Shanxi, from provisioning armies on the northern frontier in exchange for salt vouchers ((Wong 1999)).

[94](Jones 1972)

[95](Shiba 1977), (Skinner 1976)

[96](Myers 1974), (Xu and Chengming 2000)

of investing in multiple enterprises facilitated diversification and so increased the supply of capital to new enterprises.

The lineage trust

Sometimes the ‘wealthy investor’ was itself an enterprise in the form of a lineage trust. The lineage represented itself as a kinship organization, but it was often created *ad hoc* by a group of unrelated households with a particular economic enterprise in mind: a remote common ancestor could easily be ‘discovered’ for the purpose.

The structure of the lineage trust had much in common with that of the Western corporation.[97] It could legally hold and dispose of property and it could sue and be sued.[98] The investors engaged a professional manager, who reported to them at semi-annual meetings and who was monitored by a board of elders. The trust could be dissolved by consensus and the property divided. To some extent, ‘shares’ may even have been transferable.

Lineage trusts invested in all kinds of economic activity—in the ownership and leasing of land and urban real estate, in commerce and finance, and in industrial production. They also acted as venture capitalists. Of the sons of the lineage who were educated for the bureaucracy, only a few actually obtained a degree and even fewer, an actual position. The remainder were usually encouraged to enter commerce, with the lineage trust often providing them with startup capital.[99]

The development of partnerships

The ‘labor’ part of the capital-labor partnership evolved too. The recipient of financing was now itself sometimes a partnership rather than a single merchant.[100]

There was also a form of enterprise that was a partnership at both ends—with one group of partners investing and another managing the business. The profit shares of the two groups were set by contract and might differ. The two groups might differ too in their

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[97](Ruskola 2000), (Zelin 2004)

[98]It was not a ‘legal person’ so much as a ‘legal household’: in China, the household rather than the person was the basic legal unit ((Ruskola 2000)).

[99](Shiba 1977); (Jones 1974)

[100](Elvin 1973) Ch. 17 notes that this was common among Shanxi merchants.

liability for the enterprise's debts, with investing partners enjoying some degree of limited liability.[101]

This type of dual partnership was found in many lines of business, including native banking and maritime trade.[102] In maritime trade, one group of partners might finance the building and outfitting of a ship, while a second group undertook the actual voyage.[103]

Large merchant houses and business groups

As it became safer, at least for some, to accumulate large fortunes, individual merchant houses grew to a considerable size. For example, some individual merchants were now wealthy enough to finance the building of a ship on their own, without the need to partner with others. Indeed, some were wealthy enough to build and operate whole fleets of ships.[104] They might operate these themselves, hiring a captain-supercargo to manage each voyage, or they might lease them out to others.

Some merchant houses grew sufficiently large to become 'wealthy investors' themselves. A merchant house would typically begin small, usually trading only a single good, such as a local agricultural product. As the enterprise grew, it might begin to trade other, usually related, goods. Later, as it grew larger still, it might see opportunities in completely non-related lines of business. It would have the capital to invest, but not wish to spread its attention too widely. So it would set up a subsidiary and put a manager in charge.[105] Thus did the business group emerge.

Addressing the problem of reliance

As we have seen, it became increasingly common for a merchant to rely on representatives residing in distant markets instead of travelling himself. The increasing

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[101](Rowe 1984) Ch. 2. Of course, none of this was fixed in law, and the outcome in each case depended on the decision of the individual magistrate. This structure has more than a passing resemblance to the European limited partnership (*accomandita*)—see Chapter 7.

[102](Zelin 2004)

[103](Viraphol 1977).

[104](Ng 1983) Ch. IV

[105](Rowe 1984) Ch. 2. A similar pattern was observed in manufacturing ((Chan 1982)).

use of resident representatives, together with the growing size of enterprises, exacerbated the problem of reliance.

The basic solution was, as it always had been, to rely as much as possible on family. However, with the emergence of lineages, networks and merchant colonies, together with their associated informal orders, it now became relatively safe to employ non-kin agents from within the same group.[106]

The emergence of these new forms of merchant association also supported arrangements of mutual commission. Under such an arrangement, two merchants would act as commission agents for one another—each receiving goods from the other for sale and purchasing goods to send in return.[107] By offsetting debts, they were also able to greatly reduce the need for settlement or for remitting funds—thereby cutting trading costs. Mutual commission was particularly common among the Fujianese, organized in merchant colonies, who traded between Taiwan and the mainland.[108]

Financing

During the Second Transformation, the traditional forms of financing continued to predominate, but in the more favorable environment they evolved and changed. Most financing continued to be supported by informal rather than formal order. But because of the emergence of new forms of association, the informal order now extended to larger groups. And the formal order of the state was now more friendly and more useful to commerce.

In this environment, as we have seen, new financial intermediaries were able to emerge and evolve. However, the deficiencies of the formal order and the backwardness of organized markets continued to stand in the way of the development of financial markets.

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[106](Chan 1982), (Shiba 1977). Even so, it was quite common to take such agents into the family through marriage or adoption ((Gates 1996) Ch. 6).

[107]This practice was common, too, in preindustrial Europe—for example, among the merchants of the Hansa.

[108](Lin 2010) The offsetting of debts proved so efficient in the Taiwan trade that neither native banks nor remittance banks played any role in it.

Nonetheless, increasing financial development was reflected in falling interest rates. During the First Transformation, interest rates were in the range of 3-6% per month; by the early nineteenth century they had fallen to around 2% a month, and were as low as 1% per month in the more advanced regions along the coast.[109]

Direct equity

Direct equity continued to be the major source of external funding. However, as we have seen, its form evolved and became more complex. Officials continued to be a major source of funds, but they were now joined by wealthy merchants—individually and in groups—and by lineage trusts.[110] While officials relied on their connection with the state to address the problem of governance, private investors relied instead on the informal order of lineage or network.

Earlier, the assets of the wealthy had been dominated by land and real estate. But now financial assets—shares in enterprises and in lineage trusts—made up an increasing proportion. [111]

Pawn lending

Pawn lending, because of its self-enforcing nature, remained the most common form of debt financing. Pawn intermediaries proliferated: for example, in Beijing under the Qing there were some six hundred—more than one for every 2,000 inhabitants.[112] Some pawn intermediaries became quite large.[113] Those in major cities often employed agents in the small towns and villages to lend there locally.[114]

Their principal source of funds continued to be equity provided by wealthy investors. As earlier, these investors were often active or retired officials, but an increasing number

[109](Yang 1952)

[110]See (Rowe 1984) Ch. 6 on investment by officials.

[111](Zelin 2004)

[112](Deng 2008)

[113](Peng 1994) Ch. 8

[114](Yang 1952) Ch. 1

now were merchants.[115] For example, Ningbo merchants, in addition to establishing banks, set up many pawn intermediaries. These were quite bank-like—accepting deposits and making unsecured loans as well as pawns.[116]

Under the Qing, pawnshops were licensed and taxed, and in the major cities they often formed their own associations. The resulting increase in public confidence made it easier for them to attract both capital and deposits.[117]

Pawn intermediaries increasingly financed not only peasants—their traditional customers—but merchants too. One important way they did so was by lending to merchants against the silver bullion that most held as a reserve asset—providing them with a low-cost liquidity facility. Some estimates suggest that over half the silver in China at any time was in the hands of pawn intermediaries.[118] Pawn lending also financed merchants' speculative positions in commodities such as grain, raw silk, and cotton—very much like repo financing or margin lending today.[119]

Trade credit

Trade credit and advance purchase—previously quite rare except under the OMT—now became common.[120] As they had earlier, maritime merchants purchased the goods they traded on terms of half down and the other half on their return.[121] But now this extension of credit was supported by the informal order of the merchant network rather than by the formal order of the OMT.

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[115](Rowe 1984 Ch. 5); (Deng 2008). In some places, local governments provided the funds to establish pawnshops ((Peng 1994) Ch. 8).

[116](Shiba 1977); (Peng 1994) Ch. 8

[117](Yang 1952) Ch. 1; {Rowe, 1984 #3741 Ch. 5

[118]{Deng, 2008 #4313}

[119](Yang 1952) Ch. 1. This was called 'pawn hoarding'. Farmers, too, took speculative positions, sometimes pawning their crop at harvest-time rather than selling it at unfavorable prices.

[120](Elvin 1973) Ch. 11; (Rowe 1984) Ch. 5

[121](Ng 1983) Ch. IV

More generally, larger merchants funded smaller ones by advancing them funds against subsequent delivery.[122] We will see in Chapter 16, that this created a hierarchy of financing that extended all the way down to the individual producer.[123]

Bank lending

Merchants were now also able to borrow extensively from banks. Money shops and silver shops, native banks and remittance banks—all engaged in lending.[124] This lending generally took the form of overdraft.[125]

Merchants frequently borrowed from multiple banks; larger merchant enterprises might borrow simultaneously from banks in several different cities.[126] The largest merchants set up their own native bank subsidiaries to accept deposits and to provide them with loans.[127] And many merchants accepted deposits directly.[128]

As bank lending expanded, debt crises and bank failures became more frequent, particularly from the middle of the nineteenth century. Bank lending was not regulated by the state, and only lightly by the bank guilds.[129] The state did, however, prosecute defaulters, and local officials took a hand in resolving bank failures. Notoriously, one banker who repeatedly missed deadlines for repayment set by the magistrate was ordered beaten to death in front of the court.

CONCLUSION

How did the development of commerce, payments, and financing in China differ from their development in Europe? Does our theory help us understand why they developed differently, and does the Chinese evidence suggest any corrections of the theory or

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122(Rowe 1984) Ch. 2

123(Mazumdar 1998) Ch. 6

124(Peng 1994) Ch. 8. Shanxi remittance banks lent to merchants only in the south. In the north, they lent exclusively to other banks and to exam candidates (future officials) ((Jones 1972)).

125(Rowe 1984) Ch. 5

126(Rowe 1984) Ch. 5

127(Shiba 1977); (Rowe 1984) Ch. 5

128(Xu and Chengming 2000)

129(Rowe 1984) Ch. 5

refinements? And what were the consequences of the differences in commercial and financial development for economic progress?

The differences between China and Europe

Before the Second Transformation, commerce and financing developed little—except in the cities of the Southeast Coast. There were some promising advances in payments and remittance but they were not sustained. In contrast, during the Second Transformation, there was considerable development of commerce and financing. Even so, what emerged was very different from what emerged in preindustrial Europe.

Most notably, organized markets in China were far less advanced. Even in the nineteenth-century, organized markets there resembled those of fourteenth-century Bruges more than the bourse markets of Antwerp, Amsterdam or London. In those markets, merchants were able to trade with strangers indirectly through market intermediaries, with trust relying on the market reputation of the intermediaries. In nineteenth-century China—as in Bruges—merchants traded with strangers directly, with trust depending largely on affiliation.

More generally, while organized markets were at the center of commercial development in Europe, associations and groups—lineages and same-place networks—were central in China. For example, enterprises in Europe captured the advantages of scale in commerce through the services provided by organized markets—commission agents, transportation brokers, payments and remittance, information intermediaries. In China, enterprises obtained similar services from merchant networks. But merchant networks could not provide one important service that organized markets routinely offered—a formal order. But, to some extent, the informal order of the network served as a substitute.

Another major difference was that financial markets failed to develop in China. In Europe, financial markets were the core of the system of financing. Long-term markets provided financing for governments and for fixed capital in agriculture; short-term markets financed working capital for commerce, production, and government—either directly or through financial or commercial intermediaries. In addition, short-term markets provided liquidity to commerce and government.

Financial intermediaries did develop in China to provide payments and remittance services and short-term financing. However, in the absence of financial markets they were less able to mobilize funds to lend, and they were more vulnerable to liquidity problems of their own. Because of the absence of financial markets and of the modest scale of financial intermediaries, the direct provision of financing by individuals and enterprises was comparatively more important. This generally took the form of relationship financing and consisted mostly of equity rather than debt.

Explaining the differences

Our theory can readily explain these differences: they are all consequences, in one way or another, of differences in the government environment.

The lack of commercial development before the Second Transformation

We have seen that the development of commerce is a self-perpetuating process. The expanding volume of trade creates opportunities in commerce for productivity-increasing reorganization and technological progress. Competition ensures that these opportunities are exploited, and the need to address the internal challenges of commerce shapes how this is done. Also under the pressure of competition, higher productivity in commerce lowers trading costs. And lower trading costs lead to additional expansion of the market, which further increases the volume of trade.

In China before the Second Transformation, the positive feedback of this process was countered by the negative feedback of government action. As the market expanded, the government increased its exaction from commerce, raising trading costs. When particular lines of trade prospered, the government took them over as monopolies. These actions hindered the expansion of the volume of trade and reduced the pressure of competition; they also deprived commerce of the profits it needed to finance the expansion of trade and its own development.

Another important obstacle to the development of commerce was the government's suppression of voluntary association. We noted the impressive ability of commerce in Europe to organize itself.[130] However, such self-organization requires joint action, and

[130] See the conclusion to Chapter 6.

government suppression of voluntary association in China made joint action difficult or impossible.

In general, there was in this period in China a very different relationship between commerce and government. In Europe, the relationship was one of exchange and symbiosis: the government negotiated its exaction from commerce and provided commerce with services, especially those based on force; in return, commerce provided governments with administrative services and with financing. Moreover, the often contractual nature of the relationship promoted the rule of law. In China, a much more powerful and wealthy government had no need to negotiate and little interest in selling its services; it also felt no need for commerce's financial help. The relationship, as a result, was more one of predation and competition than of exchange and symbiosis.

The one important exception was China's Southeast Coast. The government took an increasing interest in foreign trade as a source of revenue, and it did perform there many of the functions performed by the associational governments of maritime cities in Europe. It provided a relatively effective formal order through the OMTs that allowed considerable commercial and financial development. It invested in transportation infrastructure. And it protected commercial shipping from piracy. Perhaps the reason for this difference in government behavior was that in maritime trade Chinese merchants competed with foreign merchants; had the government behaved in its usual fashion, it would have abdicated maritime trade entirely to the foreigners.[131]

Different development during the Second Transformation

During the Second Transformation, the gradual withdrawal of the state created space for commerce to develop. The growing connection between the merchant class and the gentry afforded it some protection against government predation. And the state no longer suppressed voluntary association, so that joint action now became possible. The relationship between government and commerce—or at least between the bureaucracy and commerce—moved more towards symbiosis, the negative feedback was muted, and the positive feedback of the self-perpetuating process could begin to take hold.

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[131]The relative geographical isolation of Fujian and so the relatively weak central government control helped too (((Gates 1996)). As the saying went, "The mountains are high and the emperor is far away."

Even so, the environment for commerce in China remained far from ideal. The greatest deficiency was the continued absence of self-governing commercial cities.[132] In Europe, these were important vehicles of joint action in commerce. In particular, cities were responsible for the creation of organized markets, and competition among the cities shaped their evolution.[133] The absence of self-governing commercial cities in China explains the arrested development of organized markets there.[134]

And the arrested development of organized markets explains why there was no formal order suited to the needs of commerce and financing. In Europe, it was the organized markets and the self-governing commercial cities that hosted those markets that created such a formal order: as we have seen, commercial courts were an essential part of the infrastructure of any organized market. In China, with no self-governing cities and without the sort of organized market they created, no such formal order developed. As a result, commerce and financing in China had to rely instead on the informal order of kinship and group affiliation.[135]

The much greater importance in China of kinship and group affiliation was not, therefore, the result of cultural predisposition.[136] Rather, it was an adaptation to the deficiencies of the government environment. Kinship and group affiliation had been important in Europe too during the Commercial Revolution. They declined in importance later, only when the development of bourse markets offered a more efficient alternative.[137]

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[132]We saw in Chapter 14 that forms of associational government were beginning to appear in some cities by the mid-nineteenth century.

[133](Gelderblom 2013)

[134]In another important form of joint action, cities in Europe represented merchant interests and mediated the relationship between commerce and government. In China, there was no explicit mediation, although the connection between bureaucracy, gentry, and the merchant class mediated the relationship implicitly.

[135](Wong 2004), (Hamilton 2006), (Ma 2011)

[136](McCorkle 1959)

[137]See Chapter 7. (Greif 2006) attributes the declining importance of kinship groups in Europe to the emergence of voluntary associations that could perform many of the same functions.

The lack of a suitable formal order in China accounts, in turn, for the failure of financial markets to develop there.[138] Financial markets, to function well, must be accessible to large numbers of borrowers and investors. This means that lending must be arm's-length and impersonal—in contrast to the personal, relationship lending of financial intermediaries.[139] Arm's-length lending requires an impersonal and impartial formal order to resolve disputes: informal order can sustain the relationship lending of intermediaries but not the impersonal, arm's length lending of financial markets. Moreover, the development of financing, and of commerce, requires considerable innovation in financial instruments and other contracts. This is possible only if there is available a formal order that is sufficiently flexible and responsive.[140]

The failure of financial markets to develop in China fed back to hinder the development of organized markets in general. In Europe, financial markets provided a template, and much of the infrastructure, for the subsequent development of bourse markets in commodities.

Implications for the theory

Our understanding of commerce—derived from the European evidence—has, in general, been confirmed. It has enabled us to make sense of the development of commerce in China—in particular, to understand its slow pace during the First Transformation and the specific path of its development in the Second.

In particular, the near absence of voluntary association in the First Transformation and its widespread presence in the Second confirms the importance of voluntary association in the early stages of commercial development. This is less clear from the

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[138]The absence of self-governing cities in China also hindered the development of financial markets in another way. In Europe, cities had been major borrowers—paving the way for others to follower, particularly rulers.

[139]See (Kohn 2003) Ch. 14. For example, securities that are traded must be easily transferable from one investor to another: that is, they must be free of the specificity of relationship.

[140]The absence of self-governing cities set back the development of financial markets in another way: in Europe, such cities were themselves major borrowers, and long-term financial markets developed initially largely to serve their needs.(Peng 1994) Ch. 6.

European evidence, since voluntary association was never absent in Europe.[141] Its absence in China made it impossible, for example, for merchants to employ resident representatives in distant markets. They therefore had no choice but to travel to those markets themselves or to send representatives. This raised trading costs in a number of ways and limited the potential scale and diversification of the merchant enterprise.

The Chinese evidence also confirms the importance of informal order. Indeed, it shows the extent to which informal order can serve as a substitute for formal order when the latter is deficient. However, it also demonstrates—through the non-development of financial markets—that this substitution has its limits.

The substitution of informal for formal order is a prime example of a more general lesson from commerce in China—the ability to find workarounds when the 'natural' (European) solution to a particular problem is blocked. Another example is the far greater reliance in China on relationship finance in the absence of arm's length finance through financial markets. Yet another is the reliance on the special status of the gentry class for protection against predation by the ruler and his officials—a function performed in Europe by associational governments and merchant associations.

Workarounds were not, however, always possible. The suppression of voluntary association was a show-stopper. And the absence of associational government and the formal order it could provide were fatal to the development of financial markets.

Moreover, the workarounds were not perfect. They may have addressed the problem in question less well—the inability of informal finance to support financial markets being an example. And the workarounds involved higher costs or had undesirable side-effects.[142] For example, the absence of financial markets as a source of financing and liquidity, the necessity of membership in a merchant network, and the necessity of a

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[141] The suppression of urban self-government in Sicily by Frederick II is an exception, and this has indeed been cited as a major factor in the subsequent economic decline of Sicily ((Mack Smith 1968) Ch. 5).

[142] (Ocko 2004) cites the costs of managing relationships within a community that provides an informal order. See Chapter 7 on the costs of membership.

gentry connection—all these made it harder for people to become merchants. This made commerce in China less competitive than it was in Europe.[143]

The consequences for economic progress

How important was the comparatively slow and incomplete development of commerce and financing in China? In earlier chapters, we studied the role of commerce in the self-perpetuating process of economic progress. We saw that commerce mediates the long-distance exchange that makes the process possible. By lowering trading costs, it contributes to market expansion, and it is integrally involved in the productivity-increasing reorganization of production and technological progress that are the responses to market expansion.

Beyond the general backwardness of commerce, the lack of financial markets was a drag on economic progress in China—not least because it kept interest rates comparatively high.[144] In Europe, financial markets gave borrowers access to a broad public of lender-investors—a major factor in bringing interest rates down. The lack of financial markets in China also raised trading costs by impairing liquidity. In Europe, the ability to borrow in financial markets greatly improved the liquidity of merchants and of merchant banks. This increased their efficiency and lowered their costs.

The absence of financial markets and the resulting high level of interest rates also hampered investment in production. As just one example, we saw in Chapter 5 that financial markets in Europe enabled merchant entrepreneurs in the Netherlands to finance, at reasonable rates, large-scale projects of land reclamation and colonization. In contrast, China largely failed to realize the agricultural potential of Manchuria because of the difficulty of raising the large sums needed for the necessary investment.[145]

However, the greatest harm that resulted from the absence of financial markets in China was its impact on the evolution of government. As we have seen, governments in Europe could meet their needs for liquidity by borrowing, either directly or indirectly, in financial markets. This greatly reduced the damage they inflicted on their economies

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[143](Hamilton 2006) Ch. 2.

[144](Brandt, Ma et al. 2014)

[145](Xue 2007)

during fiscal emergencies. Moreover, the need for governments to establish and to maintain their credit was a major factor in establishing and protecting the rule of law.

We would expect the backwardness of commerce and financing in China, especially before the Second Transformation, to result in higher trading costs and so less expansion of the market. This would slow economic progress and cause productivity and income to rise more slowly than it did in the more advanced parts of Europe. We would also expect that the process would move more rapidly during the Second Transformation. In Chapter 16, we will see that these expectations are indeed confirmed by the evidence.

REFERENCES

Balazs, E. (1964). Chinese civilization and bureaucracy; variations on a theme. New Haven, Yale University Press.

Balazs, É. (1969). Capitalism in Sung and Yuan China: A western interpretation. Change in Sung China; innovation or renovation? J. T. C. Liu and P. J. Golas. Lexington, Mass., Heath.

Brandt, L., D. Ma, et al. (2014). "From Divergence to Convergence: Re-evaluating the History Behind China's Economic Boom." Journal of Economic Literature **52**(1): 45-123.

Casson, M. (1997). Information and organization: a new perspective on the theory of the firm. New York, Clarendon Press.

Chan, W. K. K. (1982). "The Organizational Structure of the Traditional Chinese Firm and Its Modern Reform." The Business History Review **Vol. 56, No. 2 East Asian Business History**(Summer): 218-235.

Deng, G. (1997). Chinese maritime activities and socioeconomic development, c. 2100 B.C.-1900 A.D. Westport, Conn., Greenwood Press.

Deng, G. (1999). Maritime sector, institutions, and sea power of premodern China. Westport, Conn., Greenwood Press.

Deng, G. (1999). The premodern Chinese economy: structural equilibrium and capitalist sterility. London, Routledge.

Deng, K. G. (2008). "Miracle or Mirage? Foreign Silver, China's Economy and Globalisation from the Sixteenth to the Nineteenth Centuries." Pacific Economic Review **13**(3): 320-358.

Elvin, M. (1973). The pattern of the Chinese past : A social and economic interpretation. Stanford, Stanford University Press.

Finer, S. E. (1997). The history of government from the earliest times. Oxford, Oxford University Press.

Gates, H. (1996). China's motor : a thousand years of petty capitalism. Ithaca, Cornell University Press.

Gelderblom, O. (2013). Cities of commerce : the institutional foundations of international trade in the Low Countries, 1250-1650.

Golas, P. J. (1977). Early Ch'ing guilds. The City in late imperial China. G. W. Skinner and H. D. R. Baker. Stanford, Calif., Stanford University Press**:** xvii, 820 p.

Greif, A. (2006). "Family Structure, Institutions, and Growth: The Origins and Implications of Western Corporations." American Economic Review **96(2)**: 308–312.

Hamilton, G. G. (2006). Commerce and capitalism in Chinese societies. London ; New York, Routledge.

Jones, S. M. (1972). Finance in Ningpo: The 'Chi'en Chuang,' 1750-1880. Economic Organization in Chinese Society. W. E. Willmott. Stanford, Stanford University Press.

Jones, S. M. (1974). The Ningpo Pang and financial power at Shanghai. The Chinese city between two worlds. M. Elvin and G. W. Skinner. Stanford, Calif., Stanford University Press**:** xiii, 458 p.

Kohn, M. (2003). Financial Institutions and Markets, Second Edition. New York, Oxford University Press.
Lin, Y.-j. (2010). From supercargo to mutual commissioned trade: traditional junk trade between Lugang guild merchants and China proper during the Qing dynasty. Trading networks in early modern East Asia. A. Schottenhammer. Wiesbaden, Otto Harrassowitz Verlag.
Liu, K.-C. (1988). "Chinese merchant guilds: an historical inquiry." Pacific Historical Review **57**: 1-23.
Lo, J.-p. (1970). Chinese shipping and east-west trade from the tenth to the fourteenth century. Sociétés et compagnies de commerce en Orient et dans l'océan Indien; actes du huitième Colloque international d'histoire maritime (Beyrouth, 5-10 septembre 1966). M. Mollat. Paris,, S. E. V. P. E. N.**:** 731.
Lorge, P. A. (2005). War, politics, and society in early modern China, 900-1795 New York, Routledge.
Ma, D. (2004). "Growth, institutions and knowledge: a review and reflection on the historiography of 18th–20th century China." Australian Economic History Review **Vol. 44, No. 3**: 259-277.
Ma, D. (2011). Law and economy in traditional China: A 'legal origin' perspective on the Great Divergence, Dept. of Economic History, LSE.
Ma, L. J. C. (1971). Commercial development and urban change in Sung China (960-1279). Ann Arbor, Dept. of Geography, University of Michigan.
MacCormack, G. (1990). Traditional Chinese penal law. Edinburgh, Edinburgh University Press.
Mack Smith, D. (1968). A history of Sicily: Medieval Sicily, 800-1713. New York,, Viking Press.
Mann, S. (1987). Local merchants and the Chinese bureaucracy, 1750-1950. Stanford, Calif., Stanford University Press.
Mazumdar, S. (1998). Sugar and society in China : peasants, technology, and the world market. Cambridge MA, Harvard University Asia Center : Distributed by Harvard University Press.
McCorkle, T. (1959). "Review of 'The Moral Basis of a Backward Society' by Edward C. Banfield." American Anthropologist **New Series, Vol. 61, No. 1.**(Feb.): 133-134.
Moll-Murata, C. (2008). "Chinese Guilds from the Seventeenth to the Twentieth Centuries: An Overview." International Review of Social History **53**(Supplement): 213–247
Morck, R. and F. Yang (April 2010). The Shanxi Banks. NBER Working Paper No. 15884.
Morse, H. B. (1909). The gilds of China, with an account of the gild merchant or Co-hong of Canton. London, New York,, Longmans, Green,.
Myers, R. H. (1974). "Some issues on economic organization during the Ming and Ch'ing periods." Ch'ing-shih wen-t'i **Vol. 3 No. 2**: 77-97.
Myers, R. H. (1982). Customary law, markets, and resource transactions in Late Imperial China. Explorations in the new economic history : essays in honor of Douglass C. North. D. C. North, R. L. Ransom, R. Sutch and G. M. Walton. New York, Academic Press**:** xvi, 308 p.

Myers, R. H. and F.-m. Chang (1978). "Customary law and the economic growth of China during the Ch'ing period." Ch'ing-shih wen-t'i **Vol. 3 No. 10**: 4-27.
Ng, C.-K. (1983). Trade and society: the Amoy network on the China Coast 1683–1735. Singapore, Singapore University Press, National University of Singapore.
Ocko, J. (2004). The missing metaphor: applying Western legal scholarship to the study of contract and property in early modern China. Contract and property in early modern China. M. Zelin, J. K. Ocko and R. Gardella. Stanford, Calif., Stanford University Press.
Peng, X. (1994). A monetary history of China Bellingham, Wash., Western Washington.
Rowe, W. T. (1984). Hankow : commerce and society in a Chinese city, 1796-1889. Stanford, Calif., Stanford University Press.
Ruskola, T. (2000). "Conceptualizing Corporations and Kinship: Comparative Law and Development Theory in a
Chinese Perspective." Stanford Law Review **Vol. 52, No. 6**(Jul.): 1599-1729.
Schottenhammer, A. (2010). "Brokers and 'Guild' (huiguan 會館) Organizations in China's Maritime Trade with her Eastern Neighbours during the Ming and Qing Dynasties." Crossroads **1/2**(Sept.): 99-150.
Shiba, Y. (1970). Commerce and society in Sung China. Ann Arbor, Mich., The University of Michigan Center for Chinese Studies.
Shiba, Y. (1977). Ningpo and its hinterland. The City in late imperial China. G. W. Skinner and H. D. R. Baker. Stanford, Calif., Stanford University Press**:** xvii, 820 p.
Skinner, G. W. (1976). Mobility strategies in Late Imperial China: A regional systems analysis. Regional analysis. C. A. Smith. New York, Academic Press.
Skinner, G. W. and H. D. R. Baker (1977). The City in late imperial China. Stanford, Calif., Stanford University Press.
Smith, P. J. (1991). Taxing heaven's storehouse : horses, bureaucrats, and the destruction of the Sichuan tea industry, 1074-1224. Cambridge, Mass., Council on East Asian Studies Distributed by Harvard University Press.
So, B. K. L. (2000). Prosperity, region, and institutions in maritime China : the South Fukien pattern, 946-1368. Cambridge, Mass., Published by the Harvard University Asia Center : Distributed by Harvard University Press.
Twitchett, D. C. (1966). "The Tang Market System." Asia Major **vol.12, no.2**: 202-248.
Twitchett, D. C. (1970). Financial administration under the T'ang dynasty. Cambridge [Eng.], University Press.
Udovitch, A. L. (1970). Commercial techniques in early medieval Islamic trade. Islam and the Trade of Asia: A Colloquium. D. S. Richards. Philadelphia, Univerlity of Pennsylvania Press**:** 37-62.
Viraphol, S. (1977). Tribute and profit : Sino-Siamese trade, 1652-1853. Cambridge Mass., Council on East Asian Studies Harvard University : distributed by Harvard University Press.
von Glahn, R. (1996). Fountain of fortune : money and monetary policy in China, fourteenth to seventeenth centuries. Berkeley, Calif., University of California Press.

von Glahn, R. (2004). "Revisiting the Song monetary revolution: A review essay." International Journal of Asian Studies **1:1**: 159-178.
von Glahn, R. (2005). The origins of paper money in China. The origins of value : the financial innovations that created modern capital markets. W. N. Goetzmann and K. G. Rouwenhorst. Oxford ; New York, Oxford University Press**:** xii, 404 p.
Wong, R. B. (1999). The political economy of agrarian empire and its modern legacy. China and historical capitalism : genealogies of sinological knowledge. T. Brook and G. Blue. Cambridge, Cambridge University Press.
Wong, R. B. (2004). The role of the Chinese state in long-distance commerce. U. I. Department of History. May.
Xu, D. and W. Chengming (2000). Chinese capitalism, 1522-1840. New York, St. Martin's Press.
Xue, Y. (2007). "A "Fertilizer Revolution"? : A Critical Response to Pomeranz's Theory of "Geographic Luck"
Modern China." Modern China **Vol. 33 No. 2**(April): 195-229.
Yang, L. (1952). Money and credit in China, a short history. Cambridge,, Harvard University Press.
Yang, T.-S. (1987). Property rights and constitutional order in Imperial China Ph.D., Indiana University.
Zelin, M. (2004). A critique of property rights in prewar China. Contract and property in early modern China. M. Zelin, J. K. Ocko and R. Gardella. Stanford, Calif., Stanford University Press**:** vi, 398 p.
Zelin, M. (2004). Economic freedom in Late Imperial China. Realms of freedom in modern China. W. C. Kirby. Stanford, Calif., Stanford University Press**:** xii, 396 p.