

Social Capital, Social Networks, and History

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1. Introduction

The concepts of “social capital” and “social network” have enjoyed increasing vogue now for more than a decade. History has been mobilized to support these concepts in various ways. Past societies are often portrayed as having had more and better social capital than modern ones. History is mined for examples of the closely-knit and multi-stranded social networks thought to generate particularly rich stocks of social capital.¹ Those modern societies that retain more vestiges of such beneficent institutions from their past are regarded as better off than those that depend exclusively on markets and states.² Certain cultures are supposed to have evolved historically so as to foster the shared norms and atmosphere of “trust” which both favour and are favoured by social capital and social networks.³ Yet while many studies adduce historical examples of social networks in passing, few examine them rigorously, to identify which of their features generated social capital and what other effects they had on their economies.⁴ This article seeks to fill this gap, by examining two types of social network most frequently adduced as generating social capital for past economies: local communities and merchant associations.

Despite their rapid diaspora (or perhaps because of it), the concepts of “social capital” and “social network” are so popular and so immature that they have fallen prey to a horde of competing definitions.⁵ To be clear about the object of discussion, this article adopts the following definition, which is consistent with classic discussions by Coleman and Putnam.⁶ “Social capital” is a form of value generated when a group of individuals invest resources in

¹ Coleman (1989), pp. S117-S119.

² Arrow (2000), pp. 5; Putnam (1993), pp. 121, 162.

³ Fukuyama (1995).

⁴ Putnam, Leonardi and Nanetti (1993).

⁵ Arrow (2000); Solow (2000).

⁶ Coleman (1989); Putnam (1993).

fostering a body of relationships with each other (a “social network”), which then generates net benefits in later periods.⁷ The resources invested in social capital reside in relationships within a group of people rather than in physical objects, financial instruments, or single individuals (as with human capital).⁸

The returns to social capital are many, but all fall into one of three categories.⁹ First, social networks improve information flow, thereby solving market failures caused by incomplete or asymmetric information.¹⁰ Second, social networks foster shared norms through sanctions on deviance, creating expectations of trustworthiness which reduce the transaction and enforcement costs associated with violation of agreements.¹¹ Third, social networks overcome obstacles to beneficial collective action, whether to penalize deviance, manage common resources, or monitor government.¹² That is, social capital is created when social networks correct failures of markets with respect to information, contract enforcement, and collective action, thereby making economies work better.

All three forms of value created by social networks (information flow, norm fostering, and collective action) have strong public good characteristics: individual investors in social networks enjoy only part of the benefits, so they may under-invest.¹³ This has policy implications: social capital is created not through individual maximization in markets but through group relationships in non-market “social networks”; hence, to the extent that social capital exists and is a public good, there is a case for public action to create, subsidize or privilege social networks, whether to substitute for states or markets or to make them work

⁷ Scepticism has been expressed about formalizing the “capital” analogy, see Arrow (2000), p. 4; Solow (2000), pp. 7-8.

⁸ Coleman (1989), pp. S97-S101.

⁹ Coleman (1989), pp. S100-S101.

¹⁰ Coleman (1989), pp. S101-S102.

¹¹ Coleman (1989).

¹² Putnam (1993); Coleman (1989); Narayan and Pritchett (2000).

¹³ Coleman (1989), pp. S115-S119.

better.¹⁴ Increasingly, investing in social capital and social networks – rather than, for instance, effective states and efficient markets – is being recommended as a solution to problems of social exclusion and regional disparities in the rich West, economic transition in post-communist Eastern Europe, and development challenges in the Third World.¹⁵

These policy implications mean it is important to look closely at the sources of social capital. One approach has been to emphasize inward factors: values, preferences, attitudes, expectations, norms, and – especially – “trust”.¹⁶ The other approach, adopted here, is to examine external social arrangements which are thought to generate social capital – i.e., on what have been termed “social networks”.¹⁷ Some authors note that all social arrangements generate some social capital, and evoke a rich menu of positive externalities created by a vast array of human social constellations.¹⁸ Others seek to delineate more rigorously those features of a social arrangement likely to generate rich stocks of “interesting” social capital, i.e. the sort that fosters information transmission, shared norms, and collective action. James Coleman postulated that “interesting” social capital is likely to be generated by social arrangements possessing two key features: “closure” and “appropriability”. “Closure” means that network membership is clearly defined, so that all members can combine forces to punish harmful action and reward beneficial action by other members. “Appropriability” means that an organization, “once brought into existence for one set of purposes, can also aid others”. A better term for this is “multi-strandedness”: many social networks (especially those with long historical roots) were not deliberately “brought into existence for one set of purposes”, but actors in the network do engage in repeated transactions with one another, which generally encompass different spheres of activity (e.g., economic, social, political, religious). This generates “multi-stranded” relationships which endow members with multiple means of

¹⁴ Coleman (1989), pp. S118-S119; Szreter (2000), pp. ms. 1, 31.

¹⁵ Coleman (1989); Putnam (1993); on modern LDCs, see many of the essays in Dasgupta and Serageldin (2000).

¹⁶ Dasgupta (1988); Gambetta (1988); Fukuyama (1995); Seabright (1997).

¹⁷ As urged by Dasgupta (2000), p. 327.

¹⁸ Szreter (2000).

getting information about, punishing deviance in, and urging collective action on one another.¹⁹ Coleman's insights are significant, yet in the spate of publications on social capital and social networks since 1989 they have hardly been pursued.

This article has two aims. The first is to identify generalizable characteristics of those social networks that effectively foster information transmission, shared norms, and collective action (i.e. that generate economically significant social capital), through a rigorous analysis of historical examples of such networks. The second is to investigate the general equilibrium effects of these characteristics – not just whether social networks generate the postulated sorts of social capital, but what other effects they have on their own members, non-members, and the wider economy. It pursues these aims by examining two types of historical social network often mentioned by theorists of social capital: local communities and merchant associations.

It finds that historical experience of social networks holds important lessons. Those social networks that were most effective in fostering information transmission, shared norms, and collective action, were indeed characterized by closure and “multi-strandedness”. But most social networks in history were not deliberately set up to generate the benefits identified by modern theorists, and their success in doing so was variable. Furthermore, historical social networks typically gave rise to a wide variety of individual transactions and collective actions, many with negative effects on non-members and the wider economy. This was not coincidental, but generated by precisely the closure and “multi-strandedness” that also generated the positive externalities we term “social capital”. Finally, history suggests that a social network that generates net benefits in a given state of technology, costs and incomes, cannot be relied upon to do so when these change, and hence a crucial characteristic of any social network is the degree to which it can adjust to changing constraints – an important consideration in a rapidly changing global economy.

¹⁹ Coleman (1989), pp. S104-S110.

2. Communities as social networks

One institution frequently identified as generating social capital is the local community, a network created not just by residential proximity but by shared membership in a juridical entity, with associated decision-making powers and resource access. Closely-knit communities are regarded as characteristic of historical societies and as generating all three of the classic returns to social capital. Putnam argues that since medieval times Northern Italy's tightly-knit urban communities facilitated information transmission, norm enforcement, and collective action, in turn ensuring that government was monitored; by contrast, Southern Italy's lack of such urban communities led to governmental and economic failure.²⁰ Others argue that tightly-knit *rural* communities, historical and modern, have generated social capital for managing common resources, facilitating diffusion of new techniques, reducing information asymmetries and enforcement costs in local lending markets, and creating informal insurance mechanisms encouraging agents to undertake risky innovations.²¹ Historical examples of Italian city-states and Swiss villages are frequently adduced as successful instances of local communities generating significant social capital.²² It is therefore important to investigate the characteristics of such communities and how they affected the economies in which they were embedded.

First, did strong urban and rural communities in history exhibit any generalizable characteristics that helped them generate social capital? The answer is yes: both the North Italian cities and the Swiss and German village communities of preindustrial Europe strikingly manifested Coleman's characteristics of "closure" and "appropriability" or "multistrandedness". These in turn were crucial to their exceptional effectiveness in

²⁰ Putnam (1993), pp. 163-185.

²¹ Narayan and Pritchett (2000), pp. 283-284; Coleman (1989), pp. S101-S103; Putnam (1993), pp. 167-171; Dasgupta (2000), pp. 337-338; Wade (1988); Netting (1981); McKean (1992).

facilitating information transmission, enforcing shared norms, and mobilizing collective action.

Medieval urban communities carefully defined membership through legal “citizenship”, acquired through either inheritance or selective admission according to required socio-economic characteristics. Outsiders were allowed to visit and sometimes settle, but not to participate in civic life: they were restricted to particular occupations, sometimes to particular spaces, their access to common resources was limited, and they had no political voice (the exception being the “guilds” representing foreign merchants, discussed in the next section). That is, the urban community showed “closure”. Insiders were connected by interlocking networks of marriage, kinship, apprenticeship, trade, debt, artistic patronage, membership in religious confraternities, and political interaction – that is, the urban community also showed “multi-strandedness”. These characteristics were shared by all urban communities in the medieval period, and were sustained into the modern era (after 1500) precisely by those urban communities generally portrayed as enjoying the most vibrant civic life and generating the richest stocks of social capital – those of Northern Italy and German-speaking Central Europe.²³

Closure and “multi-strandedness” also characterized effective *rural* communities, those in which most economic activity occurred in preindustrial Europe. The corporate village communities of Alpine Switzerland (paralleled in hardly weaker form throughout many parts of the continent) have become legendary for their ability to manage communal resources, coordinate agricultural practice, balance demography with ecology, spread risks, sustain reciprocity, foster shared norms, and mobilize collective action. To achieve this, they restricted membership in the community through imposing a *numerus clausus*, demanding

²² Putnam (1993), pp. 163-185; Narayan/Pritchett (2000), pp. 283-284. See also, among many others, pp. Coleman (1989), pp. S101-S103; Putnam (1993), pp. 167-171; Dasgupta (2000), pp. 337-338; Wade (1988); Netting (1981); McKean (1992).

high entry fees and satisfaction of other requirements from incomers, and restricting expansionary activities (e.g. marriage, building, industrial activity) by existing members – that is, they demonstrated “closure”. They also showed “multi-strandedness”: village members were closely knit together by legal and customary rights, obligations and servitudes, cooperative organization of the common-field cultivation system, regulation of common pastures, inter-marriage, kinship ties, indebtedness, charitable assistance, sociability and festivity, religious affiliation, and everyday interaction. This created a dense network of multi-stranded relationships which facilitated information transmission, the formation of reputations and norms, the punishment of deviance, and the mobilization of collective action toward bandits, other villages, towns, and the state.²⁴ More open, mobile and anonymous urban and rural communities did develop in societies such as England and the Low Countries after about 1500, as we shall see below. But these are explicitly described as having lost their ability to monitor and punish individual deviance, sustain reciprocity and shared norms, or mobilize collective action.²⁵ Those local communities that are regarded as having generated significant quantities of social capital in preindustrial Europe were those characterized, as Coleman predicted, by closure and multi-stranded relationships.

But what was the net effect of all this social capital generated by strong local communities? This question can be broken down into two components. The first is how important the benefits were: how significant was it for the functioning of the preindustrial economy that information transfer be facilitated, shared norms be sustained by punishing deviance, and collective community action be encouraged? The second question is about the costs: what other effects did strong urban and rural communities have on the economy which might have countervailed against the benefits?

²³ Le Goff (1972), pp. 76-77, 79, 82-83, 90-91; Walker (1971), pp. 26-72; Ogilvie (1997), pp. 42-72, 412-418.

²⁴ Netting (1981); Braun (1978), pp. 296-300, 310-311; Ogilvie (1997), pp. 42-72.

The answer appears to be that in earlier periods, remote areas, and difficult ecological niches, strong community institutions may have generated important net benefits, not only for community members but beyond the town or village walls. Historians cannot know for sure, since empirical evidence for such early periods is extremely scarce and unreliable; all we can say is that the poor evidence we do possess does not refute such a hypothesis. However, from 1500 onward, the evidence improves dramatically, and it shows that many parts of Europe saw the emergence of larger-scale market and state institutions that could offer the same benefits as those deriving from the social capital in strong communities. Nevertheless, in many areas of the continent strong communities survived despite these alternatives, and here their net effect was negative, principally because of their ability to engage in collective rent-seeking, in which they often successfully manipulated the new markets and states to their own advantage.

Most would agree that the Italian North has enjoyed economic and political advantages over the South. But, as the vigorous debate about Putnam's view of Italian development shows, there is no consensus that this was caused by the strength of urban communities in the North. The historical legacy of the Italian South included more exploitative feudal landlords, subjection to absentee (Spanish) government, differences in the justice system, and ecological and geographical disadvantages, as well as a lack of vibrant civic communities. Moreover, the South possessed closely-knit and multi-stranded *rural* communities dominated by networks of Mafia families, which certainly facilitated information transmission, norm enforcement, and collective action, but whose negative externalities probably outweighed the positive.²⁶

Furthermore, although Northern Italy fared better than Southern Italy, it fared much worse than the Low Countries or England, where after about 1500 urban communities lost their closure, their multi-strandedness, and thereby most of their social capital, transforming

²⁵ Ogilvie (1997), pp. 401-404; De Vries (1976), pp. 71, 75-76, 79-81; Wrightson (1984), pp. 40-65, 133-135, 146, 155-180, 222-227.

themselves into the open, mobile, anonymous cities suited to the optimal allocation of physical, financial and human capital – i.e., to commercial and industrial growth. This is vividly illustrated by the quite opposite ways Italian and Dutch cities dealt with agriculture and rural industry. Increasingly confronted after 1500 by rising food prices and competition from rural craft workers, the cities of Northern Italy (and their counterparts in Spain, Germany, Austria, and Scandinavia) responded by forcing peasants in the surrounding countryside to sell their output to urban markets at fixed prices, and by forbidding industrial work by non-citizens and non-guild members. Their formidable stores of social capital enabled them to detect violators easily, punish them efficiently, and mobilize collective action swiftly. But the consequences were disastrous: peasants were deprived of the incentive and capital to introduce innovations or increase output, agriculture failed to grow so as to nourish industrial and commercial growth, and existing industrial and commercial markets were lost to urban centres elsewhere that were more loosely-knit and anonymous. The most striking examples of such loosely-knit urban centres were those of the Low Countries and, a bit later, England. It was precisely the Dutch and English cities' lack of social capital that gave them no option but to respond to food shortages by offering higher prices to surrounding farmers, stimulating the first agricultural revolutions in Europe; and to respond to low-cost rural industries by letting them flourish while they themselves sought out a new comparative advantage in quality goods, commercial sophistication, and financial expertise. This in turn transformed England and the Low Countries into the agricultural, industrial and commercial powerhouses of Europe for centuries to come.²⁷ To sum up: not only were urban communities not self-evidently responsible for Northern Italy's economic advantage over the South, but the strength of their civic social capital contributed to Northern Italy's stagnation relative to societies where urban communities were being transformed into the open and anonymous market-places required for agricultural growth, commercial expansion, and industrialization.

²⁶ Gambetta (1988).

Rural communities over the past five centuries of European history show a similar mixed record. Although the historical evidence is not good, it does not exclude the possibility that before 1500, closely-knit and multi-stranded rural communities did generate social capital which helped deal with ecological risks, technological limitations, human predators, missing markets, and arbitrary or non-existent states.²⁸ But these capabilities appear to have been important for managing stagnation, not for developing out of it. As early as the fifteenth or sixteenth century, closely-knit and multi-stranded rural communities ceased to be associated with flourishing rural economies – if, indeed, they ever had been. Switzerland, Austria and southern Germany, the classic societies with strong village communities, were not the poorest in Europe, and it may be that their community-generated social capital helped them to resist the feudal exploitation that impoverished many parts of Southern and Eastern Europe – although it may also be that it was the exogenous weakness of feudal exploitation that permitted their strong communities to thrive. But they were far from the most vibrant economies in Europe, either, and this was because they were resistant to innovation.

Around 1500, new agricultural techniques arose, involving new crops, new field rotations, flexible alternation between arable and pastoral, stall-feeding of livestock, careful breeding of animals, intensification of human labour, investment in constructions such as water-meadows, increased specialization, and greater production for market sale. These required massive changes in factor and product markets, which made them hard to accommodate within a communal regulation of agricultural techniques, land transfers, debt relations, settlement and remuneration of labour, and markets for agricultural output. Furthermore, most village communities contained a substantial constituency that feared the risks, redistribution, or loss of rents threatened by such changes: as late as the 1790s, communal resistance to the “new husbandry” in France was still so strong that the Marquise de Marbeuf was sentenced to death by a revolutionary tribunal for having taken land away from cereal-growing to sow the new

²⁷ De Vries (1984), pp. 254; Merrington (1975); De Vries (1976), pp. 37, 52-55, 70-74, 154-164; Ogilvie (2000), pp. 100-102, 106-108, 127-128.

fodder crops.²⁹ The first European societies in which the new agricultural practices were widely adopted were the Low Countries and England, and one reason was precisely that their village communities were relatively weak by European standards, and lacked the social capital necessary to penalize insiders who deviated from agreed norms by adopting disruptive innovations, or to mobilize collective action against innovative outsiders.³⁰

The period after 1500 also saw the rise of rural industries – the same ones the North Italian cities had mobilized their social capital to quash. Here, too, community social capital blocked innovation. “Closed” villages with strong institutional structures and rich stores of social capital often successfully resisted the marriage or settlement of rural industrial producers, on the grounds that they lacked land or a recognized “livelihood” and risked burdening communal lands and welfare systems. Such risky new activities as rural industry were only permitted (or at least not prevented) in “open” villages characterized by weak community institutions, few membership controls, and much lower stores of social capital to enforce existing norms.³¹ Even where strong villages did not entirely prohibit the rise of such “proto-industries”, they regulated them severely enough to stifle growth.³² Sometimes “closed” and “open” villages co-existed side-by-side in the same society, but on the whole even the “closed” villages in societies such as England or the Netherlands were less restrictive than in other parts of Europe. Those societies where more village communities lacked the social capital to resist the risks of agricultural innovation and rural industries – particularly the societies of North-West Europe – in turn became the ones in which the rural economy released the labour, capital, and food supplies, and provided the consumer demand, necessary for later factory industrialization.

²⁸ Netting (1981); Braun (1978), pp. 296-300, 310-311; Ogilvie (1997), pp. 42-72.

²⁹ Ogilvie (2000), 103-107.

³⁰ De Vries (1976), pp. 38-43, 47-82; Braun (1978), pp. 296-300; Ogilvie (2000), pp. 94-108; Wrightson (1982), pp. 33-34, 133-135, 175-176.

³¹ Braun (1978); Levine (1977).

³² Ogilvie (1997), pp. 42-72, 409-411, 448-455; Pfister (1989).

It might be argued that we are adopting an inappropriate maximand: efficiency rather than equity, quantity of material output rather than quality of human life. Even if strong communities were efficient only in managing stagnation, and either disappeared or entrenched themselves in inefficient rent-seeking in the face of change, efficiency is not the sole possible aim. What of equity or, more generally, the quality of life offered by a closely-knit local community in which reputations are maintained, norms are shared, reciprocity is customary, trustworthiness is expected, and all members have an equal voice? For full members of the North Italian city or South German village, their local community probably did offer such advantages. But this had its price. To sustain this quality of interaction among insiders, as we have seen, the boundaries of the social network have to be delimited: otherwise reputation, sanctions, and collective action cannot work. Every social network by definition creates outsiders. Full membership in South German village communities, as my own research has shown, was denied to women, Jews, gypsies, serfs, “untouchables”, bastards, members of other Christian confessions, and those who failed to marry; unless you were born in the community, you could find it hard to obtain admission unless you proved minimum property ownership, held a guild license, practised an occupation that did not threaten existing citizens, could afford an entry-fee and a deposit, could provide a reputation testimonial, did not have too many children, and did not threaten or offend existing members in any other way.³³ Every strong community in preindustrial Europe capable of generating significant social capital for its members simultaneously created entire strata of outsiders whose gender, religion, ethnicity, marital status, age, wealth, occupation, nationality, reputation, or “dishonourable” cultural status disqualified them from full membership, although it might permit them to scrape a poor living on the margins of the community as servants, labourers, spinners, knackers, or herdsmen.³⁴ In America, too, as Michael Schudson has shown, behind the “mythic town meeting” of colonial New England lay an exclusive network of adult, male, property-owning citizens who dominated decision-making, imposed sanctions on the less

³³ Ogilvie (1997), pp. 42-72.

advantaged to sustain order, and opposed any form of democratic representation that threatened their own dominance.³⁵ Social networks thus enhanced quality of life for the elites that managed them, but often by redistributing rents away from outsiders and the less advantaged.

A vivid illustration of the ambivalent effects of community social capital can be seen in its effect on transatlantic migration. It is widely recognized that social networks are important for migrants, conveying information about destinations, assisting in finding employment, and mobilizing collective action in hostile environments. But as Georg Fertig has recently shown, community networks in eighteenth-century Baden (in south-west Germany) constituted an important part of the hostile social environment emigrants were seeking to escape. Loosely organized networks of recent migrants from the same village or region did create social capital that reduced insecurity in migrant destinations, increasing well-being for both migrants and the destination economy. But closely-knit village communities at home in Baden became ever more exclusionary in the course of the eighteenth century, with an oligarchy of interrelated families enjoying increased dominance over community resources and decisions, individual villagers finding their opportunities depending more and more on membership in this network, and outsiders to the network experiencing “increased insecurity, thereby making departure easier”. Social networks thus created both positive and negative externalities for migrants: loosely-organized networks generated social capital for migrants once they left, but tightly-knit community networks created strong incentives to leave in the first place.³⁶ Given these findings, it is not surprising that south-west Germany, long renowned for its powerful and effective rural and urban communities with their rich stores of social capital for insiders,

³⁴ See Le Goff (1972); Braun (1978), pp. 296-300; Netting (1982); Schudson (1998), pp. 16-18; Fertig (1998), pp. 437-438.

³⁵ Schudson (1998), pp. 16-18.

³⁶ Fertig (1998), pp. 437-438.

became equally renowned in the eighteenth and nineteenth centuries as the greatest source of transatlantic migration by outsiders.³⁷

What does history have to tell us about communities as social networks? Strong local communities in preindustrial Europe did create externalities that correspond to the characteristics of what has been termed “social capital”: bodies of relationships that eased information transmission, norm enforcement, and collective action. The communities best at generating social capital displayed two distinctive features: clearly defined membership, and multi-stranded internal relationships. Before 1500, historical evidence is poor, and hence does not clearly either confirm or refute speculations that closely-knit and multi-stranded local communities generated positive externalities. After 1500, however, the evidence is much better, and it shows that outside a few remote, marginal or insecure areas, market and state institutions began to foster information transmission, norm enforcement, and collective action more efficiently than community institutions could. New agricultural and industrial practices became possible, too, which were incompatible with community decision-making and threatened the groups that dominated it. The closely-knit communities whose social capital may have been an efficient response to economic stagnation adapted poorly to change. In specific niches such as Alpine ecosystems they continued to manage stagnation optimally, some to the present day. In the emerging commercial economies of the north Atlantic seaboard they dissolved soon after 1500 into open, mobile and anonymous settlements suited to the growth of lively markets and regulatory states. But in many other European societies, local communities used their social capital to block new developments altogether, or to appropriate them for insiders. Information flow within community networks could as easily be used for harmful as beneficial purposes: to inform the collectivity when an individual was trying out a new crop, enclosing a plot on the commons, setting up a forbidden loom, setting up house without permission. Mechanisms for enforcing shared norms could as readily be manipulated to resist beneficial innovation as to penalize harmful deviance. Collective action

³⁷ Ehmer (1991); Ogilvie (1997), pp. 473-475.

could as easily be mobilized for rent-seeking as for solving the Prisoner's Dilemma. In terms of lessons for the future, arguably the most worrying general equilibrium effect of community networks over the past five centuries is their evident ability to hinder the emergence of allocation mechanisms such as efficient markets and impartial states, which are – at least in principle – open to all economic agents, not just to insiders to a particular network.³⁸

3. Merchant associations as social networks

A second institution frequently identified as a beneficial social network generating social capital is the merchant association. Almost as soon as long-distance trade arose in early medieval Europe, the merchants of particular cities, ethnic groups, or religions formed associations which coordinated members' commercial decisions and their responses to competitors and rulers. These "merchant guilds" or "merchant companies" survived in many European societies from the twelfth to the nineteenth century. The rise of new forms of "proto-industrial" and overseas trade after 1500 saw the rise of new merchant associations, and some sectors (such as the diamond trade) still have them.³⁹

Merchant associations have been widely portrayed as generating all three types of return from social capital. Avner Greif argues that an exclusive "coalition" enabled eleventh-century Maghribi traders to solve agency problems with overseas agents.⁴⁰ Merchant guilds, he postulates, enabled twelfth-century Europeans to engage in impersonal long-distance trade through the "community responsibility system" whereby the guild was held liable for default by a single member.⁴¹ Furthermore, he theorizes, such guilds increased trade volume by enabling merchants to make credible threats against rulers who provided inadequate

³⁸ It is possible for elites to subvert markets and states, as well; but they are often assisted in doing so by their "social networks" (e.g., the De Beers diamond cartel).

³⁹ Coleman (1989), pp. S97-S99.

⁴⁰ Greif (1989).

⁴¹ Greif (1997).

commercial security.⁴² Others claim that between 1500 and 1800 “proto-industrial” merchant associations facilitated transmission of information between scattered rural producers and international customers, fostered shared norms by punishing fraud, default, embezzlement, and sub-standard work, and mobilizing collective action by merchants towards employees, suppliers, competitors, and governments.⁴³ Ann Carlos and Stephen Nicholas argue that the great chartered colonial merchant “companies” which flourished between 1500 and 1800 were the optimal organizational form for conducting long-distance trade, yielding “an enormous advantage over the market” because, as social networks, they solved problems of asymmetric information between owners and managers, fostered cooperative norms, and facilitated collective action such as fort-building and garrisoning.⁴⁴ In the present day, James Coleman identified the association of Amsterdam diamond merchants as a prime example of a social network whose exclusive and multi-stranded relationships transmit information, foster norms of “trustworthiness”, and mobilize collective action against violators; without this social capital, expensive insurance would be needed or exchanges would not take place.⁴⁵ Given that merchant associations have existed in various sectors of commerce for the past eight centuries, and that they are widely portrayed as generating social capital, it is important to examine their characteristics and their economic effects.

Two salient features of merchant associations were “closure” and “multi-strandedness”. Membership in the twelfth-century Maghribi traders’ coalition was restricted to a particular religious and ethnic sub-group.⁴⁶ Admission to medieval merchant guilds, proto-industrial merchant associations, and chartered overseas merchant companies was restricted according to some or all of the following criteria: citizenship in particular cities, kinship links with existing members, gender (women were almost always excluded), religious affiliation (Jews were often excluded), ethnicity (Slavs were excluded from many German merchant guilds

⁴² Greif, Milgrom and Weingast (1994).

⁴³ Troeltsch (1897), pp. 56, 133-135; Gorißen (1997), pp. 403-404.

⁴⁴ Carlos and Nicholas (1990).

⁴⁵ Coleman (1989), pp. S97-S99.

from 1309 onwards), occupation (craftsmen and small shopkeepers were often excluded), and wealth (either through property guarantees or license fees). Such restrictions effectively limited entry to most merchant associations to a trickle, creating an “informal” penumbra of outsiders, women, Jews, foreigners, gypsies, bastards, and occupational migrants scraping a miserable living by peddling in the black market – not only lacking the social capital enjoyed by the merchant association, but often finding themselves targets of its collective sanctions.⁴⁷

In turn, this “closure” was the precise characteristic that enabled merchant associations to transmit reliable information about credit ratings, reliable agents and product quality, to foster shared norms ensuring swift sanctions against deviant members, and to ensure that collective action could be mobilized against opportunistic employees, black-market competitors, and exploitative rulers.

Merchant associations also manifested “appropriability” or “multi-strandedness”.

Relationships between members extended beyond commercial or financial links into an interlocking network of multi-stranded interactions encompassing marriage, kinship, charitable activity, religious worship, cultural patronage, political lobbying, and many other non-economic activities. In turn, these multi-stranded internal relationships ensured a high degree of mutual information, shared norms, coordinated responses, and a multitude of ways of mobilizing collective action.

But what were the general equilibrium consequences of all this social capital generated by merchant associations? The first component of any answer relates to the magnitude of the benefits. What role did the social capital generated by merchant associations play in European commerce over the past eight centuries? In the medieval period (1100-1500), merchant guilds

⁴⁶ Greif (1989), pp. 877-879.

⁴⁷ Gross (1890); Postan (1973)), pp. 189, (198-9; Clune (1947), pp. 23ff, 137ff; Smith (1940), pp. 26-8, 38-43, 51-6, 61-4, 76-7, 86; Dollinger (1970)), pp. 132, 137, 161; Coornaert (1941), p. 69 and *passim*; Coornaert (1947), pp. 48-55, 221-3; De Roover (1963), pp. 113, 118; Hibbert (1963), pp. 169-74, 186, (194-202; Ogilvie (1997), pp. 74-79, 95-111, 431-437; Troeltsch (1897), pp. 61, 66-68.

are held to have performed three functions: resolving principal-agent problems, ensuring impersonal contract enforcement, and preventing rulers from expropriating traders. But there is considerable evidence that superior institutional mechanisms for carrying out all three functions arose quite soon. Greif himself points out that institutions for monitoring agents superior to the mechanisms of the Maghribi traders' coalition arose soon after the twelfth century.⁴⁸ Better enforcement for long-distance contracts than the merchants guilds' "community responsibility system", he acknowledges, was provided by royal law-courts from the thirteenth century on.⁴⁹ Hence, while merchant guilds may have been important for these two purposes before 1300, they were rapidly overtaken by superior mechanisms supplied by emerging market and state institutions.

The only benefit generated by merchant guilds that may have lasted as late as 1500 was their coordination to penalize rulers who provided inadequate security. But how important was this empirically? There was plenty of commercial insecurity in medieval Europe, but only a minority was caused (or controllable) by rulers and hence subject to the credible threats posed by merchant guilds. Ironically, much commercial insecurity in medieval Europe was actually caused by conflicts between rival merchant guilds over commercial privileges granted by rulers. Many cases in which merchants operating in a foreign city were attacked by mobs, failed to obtain fair legal treatment, or suffered from acts of piracy, occurred precisely because of rivalry between their merchant guild and the local merchant guild over legal monopolies over different forms of commerce. That is, merchant organizations themselves, and the privileges granted to them by rulers, were the source of – not the solution to – a non-trivial share of the commercial insecurity of the period.⁵⁰ By 1500, even Greif admits that emerging states had rendered this final function of merchant guilds obsolete.

⁴⁸ Greif (1989), pp. 877-882.

⁴⁹ Greif (1997), pp. 23-33.

This has not deterred other scholars from claiming that merchant associations between 1500 and 1800 generated beneficial social capital in the European proto-industrial and colonial trades which solved information asymmetries, fostered norms of product quality, and coordinated collective action. But the empirical record casts even greater doubt on these claims. Scattered rural producers successfully reached international markets for generations before their sector was monopolized by a privileged merchant company. Many of the most vibrant proto-industrial regions in Europe (particularly in the Low Countries and England) were served by a heterogeneous and mobile array of competitive traders, ceaselessly seeking out new products and better quality-to-price ratios to please their customers.⁵¹ Likewise, detailed analysis of a wide range of chartered colonial merchant companies by S. R. H. Jones and Simon P. Ville has unearthed no evidence that their social capital generated benefits that markets and states could not. On most of the trade routes these companies legally monopolized, sophisticated markets operated with lower-cost (although illegal) competitors. The companies themselves suffered from serious principal-agent problems, persistent opportunism, and little effective sanctioning of violations. They fostered norms, but of brutality toward their workforce rather than a cooperative corporate ethos. Even the provision of forts, garrisons and other public goods overseas was well within the capabilities of eighteenth-century states; merchant companies only did so as part of their rent-seeking strategy, to maintain state favour and keep out more efficient competitors.⁵² For all major examples of merchant associations in history, there is a remarkable lack of hard evidence that their social capital created the positive externalities that have been postulated theoretically.

On the other hand, there is considerable evidence that merchant associations used their social capital to pursue other activities which generated negative externalities. The very closure and

⁵⁰ Bahr (1911), pp. 21-22; Greif, Milgrom & Weingast (1994), p. 750; De Roover (1963), pp. 61-62; Smith (1940), pp. 68-9; Postan (1973)), pp. 239-240, 251-252; Lloyd (1991), pp. 22, 30; Dollinger (1970)), p. 48-50. See the detailed discussion of this issue in Ogilvie (1995).

⁵¹ Ogilvie (1997), pp. 95-112, 431-437; Ogilvie (2000), pp. 111-112, 114-115, 120-121, 127-128.

⁵² Jones and Ville (1996).

“multi-strandedness” that enabled them to generate social capital were open to exploitation for less beneficial ends, particularly cartellistic distortion of markets and rent-seeking from rulers. Greif, Milgrom and Weingast argue that medieval merchant guilds cannot have acted as cartels, since if they had done so it would have increased merchant bargaining power and shifted gains from trade from rulers to merchants, and hence rulers would not have cooperated in establishing merchant guilds.⁵³ But there is copious evidence that medieval merchant guilds engaged in activities which generated rents for their members, and invested a share of these rents to obtain support from rulers. Merchant guilds represented members’ interests against other guilds (particularly of craftsmen) within the home city, opposed the foundation of merchant guilds in their city by alien merchants, resisted interference in trade by other institutions such as the church, excluded competitors from trade, restricted entry to their own ranks, fixed prices and freight rates, obtained tariffs disadvantaging foreign merchants, lobbied against tariffs imposed by others against them, controlled the trading operations of members and non-members, operated privileged mercantile law-courts, forced alien merchants operating in the city to use only native ships, obtained insurance statutes discriminating against foreign merchants and shippers, inflicted embargos on foreign ports and merchants, and levied tolls and duties on their own members and others.⁵⁴ Any or all of these activities could generate a stream of rents great enough to provide payments to rulers to induce them to support the merchant guild’s establishment and enforce its subsequent operations. Rulers in both medieval and early modern Europe were evidently willing to support the foundation of cartellistic merchant guilds and sustain their privileges for centuries, in return for a share of those rents in the form of bribes, loans, higher or more regular customs duties, and so on.⁵⁵ By engaging in these cartellistic activities, medieval merchant associations decreased the ability

⁵³ Greif, Milgrom, and Weingast (1994), pp. 749, 772-773.

⁵⁴ Postan (1973)), pp. 189 (on Europe as a whole), (198-9 (on the German Hanseatic cities); Gross 1890 (on England); Clune (1947), pp. 23ff (on England), 137ff (on Ireland); Smith (1940), pp. 26-8, 38-43, 51-6, 61-4, 76-7, 86 (on Spain); Dollinger (1970)), pp. 132, 137, 161 (on Germany); Coornaert (1941), p. 69 and passim, Coornaert (1947), pp. 48-55, 221-3 (on France); De Roover (1963), pp. 113, 118 (on German and English merchant guilds); Hibbert (1963), pp. 169-74, 186, 194-202 (on Europe as a whole).

of non-members to trade, increased commercial insecurity, and decreased the overall volume of trade – i.e., caused negative externalities for outsiders to their social network and for the economy at large.

Between 1500 and 1800, too, merchant associations secured wide-ranging privileges from rulers enabling them to manipulate markets to their advantage, particularly in the proto-industrial and colonial trades. Proto-industrial merchant associations regulated the volume of production and trade, restricted competition among merchants for employees and suppliers, imposed rigorous entry restrictions, exercised monopsony power in factor markets, opposed the introduction of new techniques and practices, obtained legislation protecting them from imports and giving them first claim on raw materials, levied license fees, restricted internal competition, spent vast sums lobbying rulers, and obtained monopsony privileges prohibiting producers from selling to anyone except members of the association. Even where these privileges were violated, the violators were compelled to operate “informally” in the black market, where their costs and risks were increased by lack of contract enforcement, with predictable effects on development potential.⁵⁶

On almost all every colonial trade-route, a merchant company secured exclusive trading rights by means of a state charter. As Jones and Ville show, these associations used their state privileges (backed up by military and naval force) to coerce overseas rulers into monopsonistic agreements, manipulate the terms of trade to their own advantage, set purchasing prices abroad, fix selling prices at home, and restrict movement of competitors’ cargoes. Protected from competition, they flourished despite failing to introduce well-known commercial innovations that made other traders more flexible. Although they rarely achieved a complete monopoly, their legal dominance enable them to restrict release of goods onto the market and raise prices considerably. So valuable were their trading privileges that would-be

⁵⁵ Kedar (1976), pp. 54-5; Lloyd (1991), pp. 23-4, 50, 369; Dollinger (1970)), pp. 56-8; Smith (1940), pp. 5, 37, 64-65, 68-69, 85.

competitors spent huge resources attacking them, and the companies themselves correspondingly huge resources lobbying the ruler and excluding competition.⁵⁷ These associations distorted markets and sought rents in such a way as to inflict harm on outsiders and deadweight losses on the economy at large.

One argument advanced against this, at least for the medieval period, is that the formation of an effective merchant guild was followed by an expansion of trade, and hence the benefits of merchant guilds must have outweighed the costs. But there are two serious weaknesses in this reasoning. For one thing, international trade is influenced by a plethora of variables, and the danger of concluding that association implies causation is apparent from many contributions to the long and inconclusive debate on the effect of trade policy in less-developed economies today, in which a much wider range of empirical data is deployed than for medieval Europe. Other, underlying characteristics of the international economy, of the cities concerned, or of the particular group of merchants involved, could lie behind any upward trend in trade. Merchant associations may even have formed precisely because an upward trend in trade (caused by exogenous factors) was beginning to generate a stream of rents worth capturing, as with the formation of merchant guilds in Spain or the German Hanseatic League in the eras after commercial upswings in Spain and northern Germany.⁵⁸ The second problem is that we possess no quantitative estimates of how much trade was increased by merchant guilds at any period, nor any systematic comparisons of trade between societies and periods possessing and those lacking merchant associations. The claim by Greif, Milgrom and Weingast, for instance, that merchant guild formation was always followed by an upswing in trade is supported by only five examples, and at least that many examples can be found suggesting the opposite.⁵⁹ Anecdotal evidence concerning trade trends cannot be used to confirm or refute any theory of the net effect of merchant guilds in medieval economies. Furthermore, as we shall see below,

⁵⁶ Ogilvie (1997), pp. 431-436; Ogilvie (1996), pp. 30-33, 234.

⁵⁷ Jones and Ville (1996), pp. 908-912.

⁵⁸ Smith (1940), pp. 4-6; Postan (1973), p. 192; Dollinger (1970), pp. xviii-xix.

⁵⁹ Smith (1940), p. 71.

this argument fails altogether for the period after 1500, when the most successful economies in Europe, the Low Countries and England, were conspicuous for their lack of merchant associations except for the politicized colonial trades.

A final characteristic of social networks in history, which we already observed with communities, is that they may constitute an obstacle to the rise of more efficient allocation mechanisms. This applies to merchant associations even more than to local communities. Greif, for instance, concludes that the Maghribi traders' coalition "seems not to have been an optimal institution. The same factors which ensured its sustainability prevented the coalition from expanding in response to welfare-enhancing opportunities ... within a coalition, agents are more concerned about the interpretations of their actions by other members than about the outcomes of their actions. Hence, their actions, while aiming at maximizing their expected utility, do not necessarily maximize total profit."⁶⁰ Likewise, the "community responsibility system" of the European merchant guilds proved unable to respond flexibly to changes in guild size, intra-community heterogeneity, or inter-community mobility, and was replaced by state enforcement mechanisms after the twelfth century.⁶¹ Finally, after the fifteenth century, "as the state system evolved, the need for the merchant guilds to secure merchants' rights declined".⁶² The implication is that as merchant associations were overtaken by more efficient institutional mechanisms, they simply withered away.

The subsequent historical record, however, does not bear this out. In most parts of Europe, merchant associations continued to survive and be newly formed, to distort markets in local, regional and long-distance trade, and to enjoy state support in their rent-seeking activities, until 1800 or even later – centuries after superior allocation mechanisms began to be offered

⁶⁰ Greif (1993), pp. 544-545.

⁶¹ Greif (1997), pp. 23-35.

⁶² Greif, Milgrom, and Weingast (1994), p. 773.

by markets and states.⁶³ In many European economies, proto-industrial merchant companies resisted efforts even by their own members, let alone by outsiders, to introduce machines, factories, new commercial practices, new products (such as cotton), or new employment practices, into the nineteenth century.⁶⁴ The great chartered overseas trading companies, too, were often “inflexible in response to changing economic and political conditions”, recruiting low-quality European agents rather than skilled members of indigenous cultures, resisting commercial innovations, making sub-optimal decisions on public goods such as fortifications, and requiring government subsidies to stay afloat as soon as their legal monopolies were removed.⁶⁵ It was those societies that rid themselves of their merchant associations earliest that emerged as the economic powerhouse of the continent. In the Netherlands, Flanders, and England, urban merchant guilds declined after the late fifteenth century, rural proto-industries arose in the sixteenth and seventeenth centuries without merchant associations at all, and liberal criticisms finally prevailed against the chartered overseas trading companies in the later eighteenth century. It was these economies that first experienced the series of “commercial revolutions” which massively increased human well-being on the European continent between 1500 and 1800.

In certain commercial contexts – particularly at the very start of the medieval period – merchant associations may have generated positive externalities, although the evidence is so poor and sparse for this period that it is unlikely to refute almost any hypothesis an economist might advance about social networks. But after 1300 these contexts were the exception, and after 1500 they were all but non-existent. In almost all European economies for the past five centuries, the absence of merchant associations was crucial for the emergence of alternative allocation mechanisms – particularly competitive markets and strong regulatory states. More frequently than not, the history of European merchant guilds bears out Greif’s judgement on

⁶³ Ogilvie (1993), pp. 169-70, 173; Ogilvie (1994), pp. 43-5; and Ogilvie (1995). Smith (1940), pp. 16-18.

⁶⁴ Kisch (1972); Ogilvie (1997), pp. 431-436; Ogilvie (1996), pp. 30-33, 234.

⁶⁵ Jones and Ville, pp. 907-908, 910-912.

the Magribi traders' coalition: "once a specific institution emerges, it may become a part of a self-enforcing stable system which is not prone to change in response to welfare-enhancing opportunities."⁶⁶ This is a lesson worth remembering about social networks in an age in which all economies need to react swiftly to changing global conditions.

4. Conclusion

The concepts of social capital and social networks can potentially help us think more systematically about the economic importance of institutions facilitating information transfer, norms and sanctions, and collective action. Existing literature agrees almost unanimously that modern societies lack social arrangements likely to generate social capital, and that historical examples of social networks have important lessons to convey.⁶⁷ This article has sought to identify the salient features of social networks and explore their general equilibrium effects by examining two types of historical social arrangement often adduced as generating social capital: local communities and merchant associations. Several general principles do emerge from this historical inquiry, but the light they cast on social networks is bleak.

Historical social networks confirm Coleman's view that those social arrangements likely to generate interesting social capital will be characterized by "closure" and "appropriability" or "multi-strandedness".⁶⁸ The urban communities of Northern Italy regulated membership stringently: non-citizens were allowed to reside, but only as a flexible labour-force, not as effective nodes in the civic network. Rural communities, too, regulated membership through citizenship, settlement and marriage restrictions, and those that were most successful in generating "social capital" were those that regulated membership most effectively. Merchant associations limited membership according to sex, ethnicity, religion, community citizenship, kinship with existing members, and ability to pay license fees. Local communities and

⁶⁶ Greif (1993), pp. 544-545.

⁶⁷ Coleman (1989), pp. S115-S119.

merchant associations were not wholly closed to new members, but they limited their quantity and selected their qualities: many members of the wider economy had a high (or total) probability of never being admitted to full membership in these networks. Communities and merchant associations were also highly “appropriable” or “multi-stranded”, in the sense that their members were linked not just through activities deliberately aimed at fostering information transmission, norms, or collective action, but through multi-stranded relationships extending into work, play, sociability, worship, politics, charity, and kinship. History confirms that effective social networks have relationships that are closed toward the outside and multi-stranded on the inside.

Historical social networks were not deliberately established to generate the benefits identified by modern theorists, and their success in doing so was variable. Local communities may have generated positive externalities in earlier periods, but documentary evidence is poor. After 1500, much better evidence suggests that these benefits were lacking, outside a few remot, marginal, and insecure areas. Merchant associations may have generated net benefits at the very beginning of medieval European trade, although again the evidence is inadequate to test such hypotheses rigorously. After 1300, however, emerging markets and states offered superior mechanisms for achieving the same ends, and after 1500 the efficiency rationale for merchant associations disappeared completely. Even for these early periods, problems of documentation means that there is little hard empirical evidence of the benefits local communities and merchant associations are supposed to have generated; the most one can say is that efficiency models of communities and merchant associations are not refuted, as they are for later and better-documented periods.

Historical social networks also show disquieting evidence of having generated negative externalities. “Appropriability” or “multistrandedness” means that network members typically engage in a wide variety of activities, not just in those enhancing information transmission,

⁶⁸ Coleman (1989), pp. S104-S110.

norms and sanctions, and collective action. This is analytically important. Social scientists must look not just at the partial equilibrium effects of those activities of social networks associated with beneficial social capital, but at the general equilibrium effects of all transactions and activities implied by the network's existence.⁶⁹ "Closure" means that many of these activities are open to abuse.⁷⁰ Within local communities and merchant associations, information was conveyed to insiders but denied to outsiders. Network membership became a signal ensuring the long-term exclusion of deserving economic agents, a device contributing to an equilibrium of "rational discrimination" on grounds of gender, ethnicity, religion, legitimate birth, and many other economically irrelevant grounds. Shared norms meant the sanctioning of beneficial as well as harmful deviants, stifling innovation in agriculture, industry and commerce. The ability to mobilize collective action enabled local communities and merchant associations to engage in rent-seeking and distort markets, benefiting members but harming outsiders and the wider society.⁷¹ Historical examples of local communities and merchant associations suggest that to obtain "social capital" out of social networks, one needs to have institutional arrangements in place that are open to abuse by insiders.⁷²

The final lesson from history is at once the most important and most disquieting, especially for modern transitional and developing economies. A social network that generates net benefits in a given state of technology, costs and incomes, may cease to do so when constraints change. But precisely the commitment devices that generate its social capital may also foster conservatism.⁷³ North Italian cities conveyed information, fostered norms, punished deviants, and organized collective action in a way superior to many other social arrangements in medieval Europe (particularly the feudalism of Southern Italy). But faced with the rapid institutional, commercial and demographic changes of the sixteenth century, they lost out to the market-oriented civic culture of Amsterdam and London. The closely-knit

⁶⁹ Arrow (2000), p. 3; Dasgupta (2000), p. 325.

⁷⁰ Coleman (1989), pp. S104-S108; Dasgupta (2000), p. 386.

⁷¹ Dasgupta (2000), p. 367.

⁷² Coleman (1989), pp. S97-S98.

and multi-stranded corporate villages of Switzerland and southern Germany conveyed information, fostered norms, punished deviants, and organized collective action in an environment in which agricultural technology was stagnant, there was no scope for non-agricultural growth, and carrying capacity was fixed. But with the coming of agricultural revolution, proto-industrialization, and commercial expansion, they were overtaken by the open, market-oriented rural settlements of north-west Europe, where common lands could be used differently, communal crop rotations could be abandoned, rural weavers and spinners were allowed to settle, and marriage and household formation was permitted even to the landless. Merchant associations may have solved principal-agent problems, penalized defaulters, and penalized exploitative rulers when communications were costly, legal remedy difficult, and alternative commitment devices unavailable – although problems of documentation mean that there is little hard evidence to support these hypotheses. But as communications improved, state enforcement spread, and rulers learned that they could benefit more by offering justice to all than by granting privileges to selected groups, merchant associations declined in the dynamic, market-oriented commercial centres of the north Atlantic, and survived only as rent-seeking interest-groups in the stagnant backwaters of Central, Eastern and Southern Europe, and contributed to the first German “economic miracle” when they were abolished in the nineteenth century.⁷⁴ This cannot be regarded as an accident: it was implied by the very characteristics that made social capital possible. In order to generate benefits, social networks need to have commitment devices and penalties; once these are in place, it is hard to prevent them from being used to maintain rents and resist change.

Even in the European past, when constraints changed so much more slowly than today, the entrenched privileges of social networks could prove a long-term economic problem, as shown by the fact that it was in the northwest corner of Europe where close-knit communities

⁷³ Coleman (1989), pp. S105-S106; Dasgupta (2000), pp. 327, 388.

⁷⁴ Tipton (1976).

opened up and merchant associations broke down in the sixteenth century, that the agricultural, commercial and industrial revolutions were fomented after 1500. Nowadays, constraints change immeasurably faster. In such a world, one must question the extent to which even the poorest economies can afford the inflexibility of entrenched social networks. It is precisely the strengths of social networks – their favouring of a particular set of social relationships over any other and the fostering of internal commitment devices – that may prove to be their greatest weakness, not merely for outsiders to the social network (although these are often the poorest in society), but also for the economy at large. For social capital and social networks, the lessons of history are bleak.

References

Arrow, Kenneth J. "Observations on Social Capital". In Social Capital: A Multifaceted Perspective, edited by Partha Dasgupta and Ismail Serageldin. Washington: World Bank, 2000.

Bahr, Konrad. Handel und Verkehr der Deutschen Hanse in Flandern während des vierzehnten Jahrhunderts. Leipzig: Duncker & Humblot, 1911.

Braun, Rudolf. "Early Industrialization and Demographic Change in the Canton of Zürich." Historical Studies of Changing Fertility, edited by Charles Tilly. Princeton: Princeton Univ. Press, 1978.

Carlos, Ann M.; Nicholas, Stephen. "Agency Problems in Early Chartered Companies: The Case of the Hudson's Bay Company," Journal of Economic History 50 (1990): 853-875.

Clune, Georg. The Medieval Gild System. Dublin: Browne & Nolan, 1943.

Coleman, James S. "Social Capital in the Creation of Human Capital," American Journal of Sociology 94 (1989) Supplement: S95-S120.

Coornaert, Emile. "Les Ghildes Médiévaux (Ve-XIVe Siècles): Définition - Évolution," Revue Historique 199 (1947): 22-55, 208-43.

Coornaert, Emile. Le Corporations en France avant 1789. Paris: Gallimard, 1941.

Dasgupta, Partha. "Trust as a Commodity". In Trust: Making and Breaking Cooperative Relations, edited by Diego Gambetta. Oxford: Basil Blackwell, 1988.

Dasgupta, Partha. "Economic Progress and the Idea of Social Capital". In Social Capital: A Multifaceted Perspective, edited by Partha Dasgupta and Ismail Serageldin. Washington: World Bank, 2000.

De Roover, R. "The Organization of Trade." In The Cambridge Economic History of Europe vol. 3, Economic Organization and Policies in the Middle Ages, edited by M. Michael Postan, E. E. Rich, and Edward Miller. Cambridge: Cambridge Univ. Press, 1963.

De Vries, Jan. The Economy of Europe in an Age of Crisis. Cambridge: Cambridge Univ. Press, 1976.

De Vries, Jan. European Urbanization 1500-1800. Cambridge, Mass.: Harvard Univ. Press, 1984.

Dietrich, Michael. Transaction Cost Economics and Beyond: Towards a New Economics of the Firm. London: Routledge, 1994.

Dollinger, Philippe. The German Hansa. Stanford, Calif.: Stanford Univ. Press, 1970.

Ehmer, Josef. 1991. Heiratsverhalten, Sozialstruktur, ökonomischer Wandel. England und Mitteleuropa in der Formationsperiode des Kapitalismus. Göttingen: Vandenhoeck & Ruprecht, 1991.

Fertig, Georg. "Balancing, Networking and the Causes of Emigration: Early German Transatlantic Migration in a Local Perspective, 1700-1756," Continuity and Change 13 (1998): 419-442.

Fukuyama, Francis. Trust: The Social Virtues and the Creation of Prosperity. New York: The Free Press, 1995.

Gambetta, Diego. “Can We Trust Trust?”. In Trust: Making and Breaking Cooperative Relations, edited by Diego Gambetta. Oxford: Basil Blackwell, 1988.

Gorißen, Stefan. “Korporation und Konkurrenz. Die protoindustriellen Eisengewerbe des Bergischen Landes und der Grafschaft Mark (1650 bis 1820)”. In Protoindustrie in der Region. Europäische Gewerbelandschaften vom 16. bis zum 19. Jahrhundert, edited by Dietrich Ebeling and Wolfgang Mager. Bielefeld: Verlag für Regionalgeschichte, 1997.

Greif, Avner. “Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders,” Journal of Economic History 49 (1989): 857-882.

Greif, Avner. “Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders’ Coalition,” American Economic Review 83 (1993): 525-548.

Greif, Avner. “On the Social Foundations and Historical Development of Institutions that Facilitate Impersonal Exchange: From the Community Responsibility to Individual Legal Responsibility in Pre-Modern Europe”. Processed, Department of Economics, Stanford Univ., 1997.

Greif, Avner; Milgrom, Paul; Weingast, Barry R. “Coordination, Commitment, and Enforcement: The Case of the Merchant Guild.” Journal of Political Economy 102 (1994): 745-76.

Gross, Charles. The Gild Merchant: A Contribution to British Municipal History. Oxford: Clarendon, 1890.

Hibbert, A. B. "The Economic Policies of Towns." In The Cambridge Economic History of Europe vol. 3, Economic Organization and Policies in the Middle Ages, edited by M. Michael Postan, E. E. Rich, and Edward Miller. Cambridge: Cambridge Univ. Press, 1963.

Jones, S. R. H.; Ville, Simon, P. "Efficient Transactors or Rent-Seeking Monopolists? The Rationale for Early Chartered Trading Companies." Journal of Economic History 56 (1996): 898-915.

Kisch, Herbert. "From Monopoly to Laissez-Faire: The Early Growth of the Wupper Valley Textile Trades", Journal of European Economic History 1 (1972): 298-407.

Krishna, Anirudh. "Creating and Harnessing Social Capital". In Social Capital: A Multifaceted Perspective, edited by Partha Dasgupta and Ismail Serageldin. Washington: World Bank, 2000.

Le Goff, Jacques. "The Town as an Agent of Civilisation 1200-1500". In The Fontana Economic History of Europe, Vol. I: The Middle Ages, edited by Carlo M. Cipolla. London: Fontana, 1972.

Levine, David. Family Formation in an Age of Nascent Capitalism. New York/London: Academic Press, 1977.

Merrington, John. "Town and Country in the Transition to Capitalism", New Left Review 93 (1975), 71-92.

Narayan, Deepa; Lant Pritchett, "Social Capital: Evidence and Implications". In Social Capital: A Multifaceted Perspective, edited by Partha Dasgupta and Ismail Serageldin. Washington: World Bank, 2000.

Ogilvie, Sheilagh. "Were Merchant Guilds Really Beneficial?". Processed, Faculty of Economics, Univ. of Cambridge, 1995. [<http://www.econ.cam.ac.uk/faculty/ogilvie/gmw-comment.pdf>]

Ogilvie, Sheilagh. "Social Institutions and Proto-Industrialization", in European Proto-Industrialization, edited by Sheilagh Ogilvie and Markus Cerman. Cambridge: Cambridge Univ. Press, 1996.

Ogilvie, Sheilagh. State Corporatism and Proto-Industry: The Württemberg Black Forest, 1590-1797. Cambridge: Cambridge Univ. Press, 1997.

Ogilvie, Sheilagh. "The European Economy in the Eighteenth Century", in T. C. W. Blanning (ed.), The Short Oxford History of Europe, vol. VIII: The Eighteenth Century. Oxford: Oxford Univ. Press, 2000.

Pfister, Ulrich. "Proto-Industrialization and Demographic Change. The Canton of Zürich Revisited". Journal of European Economic History 18 (1989): 629-662.

Postan, M. Michael. Medieval Trade and Finance. Cambridge: Cambridge Univ. Press, 1973.

Putnam, Robert D. (with Leonardi, Robert; Nanetti, Rafaella Y.). Making Democracy Work: Civic Traditions in Modern Italy. Princeton, New Jersey: Princeton Univ. Press, 1993.

Seabright, Paul. "Is Cooperation Habit-Forming?". In The Environment and Emerging Development Issues, edited by P. Dasgupta and K.-G. Mäler. 2 vols. Oxford: Clarendon Press, 1997.

Smith, Robert Sidney. The Spanish Guild Merchant: A History of the Consulado, 1250-1700. Durham, North Carolina: Duke Univ. Press, 1940.

Solow, Robert M. "Notes on Social Capital and Economic Performance". In Social Capital: A Multifaceted Perspective, edited by Partha Dasgupta and Ismail Serageldin. Washington: World Bank, 2000.

Szreter, Simon. "Social Capital, the Economy and Education in Historical Perspective", in Social Capital: Critical Perspectives, edited by Stephen Baron, John Field, and Tom Schuller. Oxford: Oxford Univ. Press, 2000.

Tipton, Frank B. Regional Variations in the Economic Development of Germany During the Nineteenth Century. Middletown (Connecticut): Wesleyan Univ. Press, 1976.

Troeltsch, Walter. Die Calwer Zeughandlungskompagnie und ihre Arbeiter: Studien zur Gewerbe- und Sozialgeschichte Altwürtembergs. Jena: Universitätsverlag [??], 1897.

Walker, Mack. German Home Towns: Community, State, and General Estate 1648-1871. Ithaca/London: Cornell Univ. Press, 1971.

Wrightson, Keith. English Society, 1580-1680. New Brunswick, NJ: Rutgers Univ. Press, 1982.