

THE STRAWBERRY GROWTH UNDERNEATH THE NETTLE: THE EMERGENCE OF ENTREPRENEURS IN CHINA

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The Strawberry Growth Underneath the Nettle: The Emergence of Entrepreneurs in China*

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ABSTRACT

Chinese entrepreneurs innovatively manage organisations in the absence of strong economic institutions, under conditions of high environmental and technological uncertainty. This paper presents the findings of an empirical study designed to investigate how Chinese entrepreneurs can be successful in such an environment. We found that Chinese entrepreneurial activity relies on *social* institutions rather than on *economic* institutions. We offer a sociological theory which explains why the reliance on social institutions leads to such an unprecedented success. We conclude that the strong rule-enforcement mechanisms generate reliable behavioral patterns, and that these in turn efficiently reduce uncertainty to tolerable levels.

*The strawberry grows underneath the nettle,
and wholesome berries thrive and ripen best
Neighbour'd by fruit of baser quality.*

(Shakespeare. King Henry V)

INTRODUCTION

The success of China's economic reforms was and is undoubtedly the success of Chinese entrepreneurship. The number of firms outside the state-planned sector grew rapidly in the last twenty years. These firms - and not the state enterprises - supplied Chinese consumers with much needed goods. They also became the locomotive for growth by searching for new production techniques and creating new workplaces outside the agricultural sector. Today, the central state finds it hard to dismiss the new industrial- and service sectors. After all, these two sectors generate forty per cent of state revenue and forty per cent of export earnings (Qian 2000). And yet China is still a country where State-owned Enterprises (SOEs) dominate the industrial sector; the state controls scarce resources while institutions that facilitate the functioning of markets are still missing. Worse, the co-existence of a socialist and a market sector, of a strong bureaucracy and decentralisation in the economy, as well as the co-existence of honest rule-complying Party cadres and dealing-and-wheeling state agencies adds to the confusion anybody must feel who wants to do business in China (Nee and Matthews 1996: Nee 2000). Nevertheless, a new type of entrepreneur emerged in such an adverse environment. If the potential of China's new entrepreneurs and the private business sector is to be tapped then it is worthwhile to ask: How did Chinese entrepreneurs do it? How did they start a firm, how did they managed to organise supply and sales; did they expand? And how did they learn to work in a competitive environment?

Insert Table I about here

To take up these questions extensive fieldwork was organised in one (Northern) Chinese province (Shanxi) in the years 1993 to 1999 (Table I). Businessmen, entrepreneurs and local politicians were interviewed first in an unstructured way and later (1999) with the help of a standardised questionnaire. The paper is organised as follows: First, the organisation of the

empirical study and the findings of the interviews are described (Sect. I and II). Sect. III gives an analysis of the business environment, namely one characterised by uncertainty and weak institutions, which can help to show that the Chinese entrepreneurs responded to the environmental constraints in a rather systematic way. Sec. IV shortly introduces organisation theory showing why Chinese entrepreneurs established a distinctive form of private entrepreneurship. Sec. V will offer some conclusions with respect to the theoretical considerations and empirical findings. Both suggest that it cannot be expected that there should be one form of entrepreneurship in China, and that therefore a comparative analysis of entrepreneurship within China is needed before embarking on a comparative study of all transition economies.

I. THE FIELDWORK

The empirical data used in the following consists of two sets: Data set 1 is based on all interviews undertaken within the research project of David S.G. Goodman in the years 1993, 1996, 1997, and 1999 in Shanxi¹. Out of over two hundred interviews, one hundred and four business units were identified as *firms* according to the following definition: (Non-State) firms are those business units which are (1) exposed to competition at least in one factor or product market, and (2) can claim at least part of residual profit. When profit went to one person or one family, the firm was regarded as a private firm in the sense of microeconomic textbooks. When profit was divided among individuals and/or institutional owners, the firm was regarded as a partnership or corporation. When profit was divided according to a sharecropping contract, between individual, the manager, the village, and the village leadership, the model would be a common, i.e. a jointly owned resource (JOR) in the Ostrom (Ostrom 1990) sense,

¹The reason for choosing Shanxi is that the province represents the hinterland: At the beginning of the reform half of Shanxi's counties had standards of living below the poverty line, and the water problem is acute. Though more industrialised than other provinces in the same situation its industry was almost completely controlled by coal mining. In 1995 Shanxi had a population of 30.77 million (2.5% of the national population). GDP p.c. was only 73% of the national average. Throughout the eighties and till 1994 Shanxi's rate of growth was consistently below the national average. The individual sector was small, joint ventures rare, foreign trade adds up (1995) to only 10% of provincial GDP (compared to the national figure of over 40%). And yet all at sudden in 1995, 1996 and presumably in 1997 also, Shanxi's growth rates outstripped China as a whole. Something must have happened. We know from other studies that what had happened was that the provincial Party-state machinery got their act together and facilitated growth either by state investment, property rights change, or industrial policy. For example, Shanxi no longer exports coal but electricity, thus having created workplaces with a higher added value within its own boundaries. Another change is that the state assisted by establishing companies which work in coal-mine related business, thus promoting diversification. In a further move the government facilitated private entrepreneurship. Unlike some coastal provinces, Shanxi could not rely on foreign direct investment or on overseas communities whose background can be located within the province. In short Shanxi had to rely on "endogenous growth" strategies: Both resources and business strategies had to be built up without the help of foreigners or Overseas Chinese. For a complete description see Goodman 1999c; 2000a; 2000b.

yet not a state company. When profit was divided according to registered capital, or in other words, paid dividends, the firm was regarded as a "shareholding" company following the expression Gufen-company². In other words, the idea that property rights are a useful way for defining firms remained at the basis of the study, as the property right structure is a good indicator for risk and risk diversification. Likewise, those persons who crucially contributed to the building up and/or running of the firm were regarded as entrepreneurs, irrespective of whether they were Party cadres, or state officials, or whether entrepreneurship was based on an individual activity of the decision of a group of people, or state agency.

Data set 2 is based on a standard questionnaire. It includes those twenty seven entrepreneurs who filled out the questionnaires in 1999. Aside from the format the main difference in the two data sets is that in the first case the main focus was on the business environment while the questionnaires focused on private exchange, the emergence of long-term business relations, the ways how to enforce business relations, and the ways how to learn new business practices.

II. PRIVATE ENTREPRENEURSHIP IN SHANXI PROVINCE

The overall picture which emerges from the formal interviews and the informal talks reveal that it was neither "The Market" nor central political decisions which unleashed private entrepreneurship. On the contrary, as will be discussed in Sec. IV the co-existence of both made private entrepreneurship in China an as risky, uncertain venture as in other economies in transition. The interviews reveal, rather, that private entrepreneurship was self-organised in villages rather than in urban agglomerations, and in co-operation with local cadres and state agencies rather than by waiting for or complying with national legislation (Goodman 1997a; 1999b). Most strikingly the lack of resources, such as electricity, transport lines, supplies etc., was dismissed as a factor in the establishment of a firm. Thus, 24 of the 27 respondents found the availability of roads and railways, and - surprisingly - communication (Internet, fax, telephone) adequate. 19 (in the case of energy) and 20 (in the case of land) were satisfied with energy and land, however stressing their individual access to the small real estate market, and the need to improve the water situation in the province. 15 out of 27 found the availability

²Why any attempt to translate Gufen-companies with shareholding, let alone stocklisted companies is misleading will become clear throughout the text.

of local supply sufficient, and 8 more stressed that they did not have to worry as they had long term contracts with big (foreign) firms and SOEs which ensured enough input³. Instead, lack of organisation and institutions was mentioned: lack of managerial skill, and availability of financial services which only 12 and 15 found adequate. Looking at all the interviews, one cannot but see that the success in Shanxi relied on three devices, elaborated on presently:

1. Reviving old economic Institutions
2. Hijacking social Institutions
3. Building up new business practices.

One could argue that these findings are nothing but *ad hoc* solutions, representing "chance" or a Shanxi-specific solution. The last argument cannot be taken up till the fieldwork is taken to another province⁴. However, the Shanxi data sets can help to investigate whether these three devices implicate that *tradition* is behind the re-building of China's economic institution, or whether there is another (economic) *rationale* that is employed by economic actors.

1. REVIVING OLD INSTITUTIONS

The advantage of using past economic institutions is that their economic use and value is known or remembered (for China: Goodman 1995; 1997c. In general: Frank 1988). Two of such institutions were found in Shanxi, sharecropping and the use of contracts.

The Use of Contracts

Although the Chinese law tradition concentrated mostly on what would be called today administrative law and punitive law, commercial contracts were by no means unknown (Chen 1979, 3-40, Huang 1981, Cheng and Rosett 1991). Nevertheless it came as a surprise that 18

³Those companies processing output of SOEs, which often are a management buy-out within the conglomerate of state firms may face an unpleasant surprise when the SOE will be forced look for profitable ways of production as the ongoing reforms intend.

⁴In October 2000 the interviews will be repeated in Zhejiang province.

out of the 27 respondents interviewed in 1999 used contracts in their business dealings⁵. The contracts were more than written letters of intent. Thus, for example the contracts specified length of business arrangement, price, quantity, product specification, quality, exceptional circumstances under which *force majeure* would apply, and the procedure to be adopted in the event of a dispute or non-compliance to the contract⁶. Items not always specified in the otherwise comprehensive agreements were the "right to inspect the production site of the business partner (in 5 cases), and procedural provisions in case something goes wrong (in 4 cases). Only in 2 cases did respondents insist on the tradition of oral agreements.

When asked how the contracts were enforced the following picture emerged: out of the 22 respondents only three would automatically take recourse to the law⁷, 19 started with bilateral negotiations, sometimes relying on a friend or external arbitrator (14 cases). If this procedure should fail 6 would finish the business relationship, while 7 would go to court. When asked informally what the courts are good for if they are not used, the following explanation was given by two Chinese colleagues: A court might be needed to identify of the harming party and its "wealth position" but would be a "too expensive" way to negotiate compensation⁸.

Unfortunately, it was only after these answers pointed to a more general pattern of behaviour that the obvious question was asked, namely what use contracting offers if not litigation.

Despite the fact that the answers were not included in the questionnaires, they give a clear picture: Contracts are used predominantly in order to avoid ambiguity. As one respondent put it, not knowing much about the business, and not knowing much about business practices in other parts of China or other sectors to write down the precise terms of a business relation is

⁵This finding is however supported by a study on Chinese legal culture executed in Shanghai. In the latter case for example "ninety one per cent of the respondents agreed to the statement that an agreement to purchase an automobile would be more effective if it were in writing." (Potter 1994, 63).

⁶The respondents were asked whether there was a written, verbal or no agreement on the following items: price per unit, other price formula, date at which payment to be made, length of business arrangement, precise quantity of goods to be supplied over fixed period, minimum quantity to be supplied over fixed period, length of interval between order and delivery, specification of the product, right to change specification, compensation for changes in specification, quality of goods to be supplied, rights to inspect the other's production site/process, promise to do one's best, exceptional circumstances under which *force majeure* will apply, circumstances under which negotiation can take place, procedure to be adopted in the event that one sides fails to fulfill the agreement, procedure to be adopted in the event of a dispute.

⁷Five respondents gave either non-sensical or no answer to the respective questions.

⁸Once more the Shanghai field study mentioned earlier supports this finding (Potter 1994, 64).

seen as a useful device to avoid "trouble" (respondent 014) (For the importance of local culture in Shanxi see Goodman 2000 a; 2000 b).

A comparison with the former (imperial) legal tradition shows to which extent an old institutions such as contracts got aptly modified to fit today's purpose. The change is rather drastic: While in the past private contracting outside the tenancy system and foreign trade was met with suspicion as it seemed to indicate that both partners did not know the "appropriate way" to deal with each other (Cheng and Rosett 1991), if it were not seen as an indicator for personal character deficiencies, today's contracting acknowledges and insists on the ambiguity in relation, might these be based on different local cultures or the uncertainty a new business environment creates. It could be argued that the institution that got revived is the contract system that existed before Ming-dynasty (before the 14th century) since the Ming-reforms aimed at weakening the private dispute settlement notion by their insistence to enforce moral law (Huang 1981, 141-145). Yet, this does not change the overall picture, namely that one old institution was selected and revived.

That contracts are powerful devices to enhance predictability and accountability is not hard to see. Economists would argue that they are powerful transaction cost saving devices as they allow effective monitoring and enforcement of the performance of both contractual partners. The Shanxi entrepreneurs, as seen above, do not use contracting for this purpose. When asked why they use contracts without using the accompanying enforcement agencies like in the West, the respondents said that they knew better devices for enforcing agreements. One, most commonly used, way is that they would enter a contract only with somebody they would trust. In other words, trust and contracting are not seen as substitutes, let alone mutually exclusive. Instead they re-enforce each other: Without trust no contract, and without ambiguity-reducing contract no trust.

Sharecropping

Sharecropping was known in China for more than one thousand years. It is a lease contract where the owner of a resource expects a certain fixed sum and a share on net return. The higher the share the resource owner asks the higher the risk he personally takes, but simultaneously the higher his share on the innovation rent. If, for example the resource owner

asks for thirty per cent of net return, this means s/he bears only thirty per cent of total loss/profit. Yet, her/his share of any productivity increasing measure is also only thirty per cent. If, on the other hand, s/he asks for sixty per cent, s/he accepts the major share in case of a loss/profit while expecting to profit most from innovation and productivity increases (Cheung 1969a; Stiglitz 1974).

A look at data set 1 reveals that most of the companies visited started with assets transferred from either State-owned companies or the village leadership (70 out of 104). In 44 cases sharecropping contracts were used to transfer resources to the managerial control of the lesser. It is worth noticing, that some of these managers were able to buy these assets after a couple of years, and by doing so turned a state firm into a private enterprise (12 cases). That managers quickly could accumulate enough capital for such a Management-buy-out might be explained by the agreed upon sharing parameter in the original contract. As data set 2 shows, the majority of the sharecropping arrangements left fifty or more per cent in the hands of the manager. Apparently, pessimistic cadres shied away from taking on more than half of the loss in case of a business failure, not trusting that the manager would come up with organisational changes and innovation which would turn the firm into a profitable venture. Subsequently, whenever innovation occurred the manager then could claim the greater share. S/he became rich, or, at least rich enough to buy out assets step by step (see also Goodman 1999a).

To conclude from the widespread use of sharecropping that China's tradition offered a blueprint for privatisation and economic success is however short-sighted. Sharecropping arrangements were not copied but adapted to fit present conditions. While such arrangement in the past were used in land deals only and constituted the specific Chinese form of share tenancy (Cheung 1969b), today such an arrangement is used for leasing out industrial assets and land for industrial sites. Moreover, the lesser is no longer a private person (landowner) but a collective agent, such as the village or State-owned enterprise. As the literature shows sharecropping arrangements are efficient devices for risk sharing and the sharing of the innovation rent (Cheung 1969a, Stiglitz 1974). Moreover they help to establish predictability in particular with respect to what is expected from the lesser, how profit is shared, and how individual investment and innovation gets remunerated. They help to streamline behaviour as well as stabilise expectations. Finally, they provide an effective way for re-allocating resources to private actors in a situation where private property rights were unknown. Unlike what was attempted in some European socialist economies where privatisation asked for enough private

savings to buy assets, China found a way that allowed entrepreneurs with ideas but not enough capital to gain control over assets to start a business (Krug 1997a; 1997b).

2. HIJACKING SOCIAL ORGANISATIONS FOR FOSTERING BUSINESS RELATIONS

It seems to be common knowledge that both the family and the village were the cause of China's rapidly developing private sector. The field study in Shanxi suggests a modified view, namely that both institutions were hijacked for entrepreneurial purposes. As economists would argue, the advantage of such a practice is that these institutions allow the employment of social routines in behaviour and social sanctioning mechanisms for economic transactions in an environment of ill-functioning markets and ill-functioning law (Coleman 1981, Greif 1989). Another result is that the Shanxi-data warns against taking the notion of the family or the village too literally. As will be seen presently, the family plays no role when it comes to starting a business.

The family

That the family is at the core of Chinese entrepreneurship seems to be common knowledge. The business administration literature claims so (Redding 1990; 1996; Whitley 1995), the dominance of family controlled Chinese multinationals in Hong Kong seem to confirm this, and economic theory points into this direction too: the family functions as a capital pooling institutions, where information is freely shared, and where proximity keeps opportunistic behaviour at bay. Sinologists, anthropologists and sociologists doing research on the notion of the family (Fried 1953, 27-88, Freedman 1970, Kiong 1991) were not so sure. For example they stressed the fact that "lineage", i.e. extended families (in Chinese: zu), is concentrated mainly and predominantly in southern China (Eastman 1988, 19). The empirical evidence in Shanxi, i.e. a province in the North of China, shows that the notion of an extended family does not exist⁹. The Shanxi-data sets show that the family did not play any role when it came to establishing a firm, i.e. as a capital and skill pooling institution. A general answer to the

⁹These finding should be taken seriously. They indicate cultural heterogeneity within China, and that the geographical spread of values and institutions needs to be taken into account before far-reaching conclusion are drawn.

question why the family as an institution is not more often employed in Shanxi was that "if one person was poor, most probably his family is poor too". As economists would claim, this interpretation misses the advantage of the "extended family", namely that the greater size of the extended family allows relative poor family members to engage in entrepreneurship since they can mobilise capital and skill from a larger pool (Fukuyama 1995; Redding 1996). Another general reason heard in Shanxi is that a poor family does not want to "put all the eggs in one basket". Instead the family would insist on risk-diversification, expecting different family members to try out different business ventures. In this case economists would also agree, since it is known that the family functions as a risk-mitigating institution (Rosenzweig, M.R. 1998; Rosenzweig, M.R. and O. Stark. 1989). Thus, it is interesting to know whether the Shanxi-family is a resource pooling or a risk-mitigating institutions - or both¹⁰. This distinction could provide a useful starting point for a comparative study of entrepreneurship within China. It would be interesting to learn whether the extended family serving as a resource pooling institution exists, and in which part of China.

The answers to three questions in data set 1 can illustrate the fact of the "missing family":

- (1) Only 20 out of the 104 visited entrepreneurs were a private business in the sense that all assets were in private hands. Yet, only in 3 cases did the family provide the start-up capital in form of a repayable loan. This is in sharp contrast to "friends" who, mentioned 34 times, offered money if they did not form a (temporary) partnership with entrepreneur for a specific business venture, which was dissolved the moment the initiator could afford to buy out the partners.
- (2) The family was mentioned only twice as being consulted when financial losses asked for bankruptcy procedures¹¹. This confirms that even if somebody claims a firm to be a family business, in most cases, such a firm knows one owner only.
- (3) The family was mentioned only once when asked to whom the respondent would turn to in case of an emergency, in the form of illiquidity or insolvency. This is in striking contrast to friends (mentioned nine times), commercial partners (mentioned 5 times), state agencies (mentioned 5 times) and capital owners (mentioned twice). The fact that banks were mentioned 19 times does not necessarily indicate a "crowding out" of traditional ways of doing things. Here, sequencing matters: a firm would first turn to a bank, and if this should fail, then

¹⁰ This distinction could provide a useful starting point for a comparative study of entrepreneurship within China. It would be interesting to learn whether the extended family serving as a resource pooling institutions exist, and in which part of China.

¹¹ Which in the Chinese context means merely to dissolve the firm. It is worth mentioning that in twelve cases (out of 27) the respondents did not know any answer to the question of bankruptcy, indicating that they cannot go bankrupt. This is a topic taken up in Sec. V)

they would turn to friends and business partners who are regarded as the *creditor of last resort*. The entrepreneur would, however, not turn to the family.

As seen from the answers, "friends" are important. Further inquiries revealed that three social groups formed the focus for friendship in the business environment of Shanxi-entrepreneurs: childhood friends, friends with whom one passed the military service together and classmates from institutions of higher education. The People's Liberation Army and "alumni-clubs with Chinese characteristics" deserve some attention. They certainly represent another example of how aptly the Chinese entrepreneurs modified inherited social custom to present day's use. While the family is concentrated in one (geographical) area, both the PLA and the universities are institutions where people from all over China meet. To the extent that comrades in the army and classmates go back to their native county after graduation, friendship allows for establishing business relations across "China" (and by doing so contribute to the establishment of an integrated national market).

In short, networks which offer access to the national market are seen as of higher economic value than the locally concentrated family. The Shanxi entrepreneurs did not see a problem with respect to loyalty, norms of reciprocity, and emotionally-based caring for each other when it came to friends. Trust, reliability, and accountability are expected to be dominant features in these networks, which subsequently should be interpreted as close substitutes for families. There might be less affection, which in a family would limit opportunistic behaviour, but on the other hand, friends are less inhibited when it comes to sanctioning misdemeanour (Yamagishi and Takahashi 1994). Somebody who shirks obligations or plays foul is known quickly to all other members and, in the extreme, will be excluded from future information sharing or business deals. As was shown above, one way to enforce a contract was not to renew it but switch to another partner. By doing so, one business partners signals his mistrust to the other members of the network. In this sense a social institution, such as a network of friends, serves admirably well to the purpose of establishing predictable and accountable behaviour, as well as establishing certain business practices shared by many.

Does this mean that the family is completely discarded as an institution in the business sector in Shanxi? The following example (Graph 2) indicates a modified answer, namely that the family is not (or no longer) used as a resource-pooling institution. Instead the family offers a pool of reliable managers for supervising different branches of a well-established branch of the business.

Insert Graph 2 about here

In 1989 Mr. Wang¹² used RMB 5.000 he had saved from trading cloths (an occupation he had taken up in 1986) to open a workshop for household appliances. It was a friend who had suggested this business. In the workshop Mr. Wang repaired and sold electric fans, air conditionings and lamps. By doing so he acquired some experience in electronics which made him confident enough to start negotiation with Robert Bosch Car Electronics a firm to which he was introduced in 1991. In the end he got a contract as one of the official Bosch Car Electronic garages. It quickly turned out that he did not have a workforce skilled enough to fulfil the contract. He turned to a friend from his time in the army for help, who in turn managed to hire some railway engineers from a PLA engineering brigade. These technicians were crucial for the success of the garage, which turned into such a profitable business that in the course of four years (1992-1996) Mr. Wang further invested in an International Club, i.e. a posh restaurant, built up the largest catering firm in North China, opened more recreational facilities, let's say clubs, and started two construction companies in Australia. The different branches of his business in China are managed by his son and son-in-law, while one daughter is in charge of the Australian companies.

Aside from the "familial" governance structure, what is remarkable in this firm is that instead of expanding the profitable core business, i.e. car electronics, Mr. Wang invested in other sectors and other countries. It is not hard to see the advantage of investing in different sectors and countries as long as the "confiscation risk" in China remains high. The speed by which Mr. Wang diversified his business, let alone what made him change the line of business asks for an explanation. In all cases friends were decisive. This turns part of the common sense knowledge about the role of the family and the role of networks around. While (in the West) the family is seen as a resource pooling institution while networks help to monitor and enforce business relations, Mr. Wang did the opposite. He used the network as a resource, in particular knowledge and information pooling institutions, while the family provided the service for monitoring business relations. This feature was also found in the companies of other Shanxi entrepreneurs (for example respondent 019). In how far that is a coincidence or a systematic factor within Shanxi or China needs to be analysed further. It is however worth

¹²Mr. Wang is a fictitious name referring for respondent No. 014.

emphasising that Hong Kong conglomerates do also employ family members for supervising different branches of the business.

The Village

Ever since Ming-dynasty (1368-1644) villages and rural communities became the natural owner of natural resources (except land), the agency of last resort for civil and moral law, the basic unit of defence, and the primary collective actor in the political and social arena. Despite some attempts by Chairman Mao, this did not change much during the Mao Zedong-era. The constitution of 1982 reconfirmed this role however with major changes. Thus, for example the village became responsible for tax revenues and for generating work places (Krug 1997b). So far, it could be argued the village went "back" to the institutional design of the pre-socialist era, were it not that the village provides another example for the remarkable adaptation. Certainly one of the most exciting feature of institution building in China is that starting in the middle of the eighties, and unnoticed, let alone approved, by the central government, villages began to design so-called *village compacts*. These village constitutions established an electoral system that might not fit Western notions of democracy but which is a big step forward to the establishment of *accountable government* (Krug 1997a; Li 1999). An analysis of these constitutions shows that protection of assets, contracts and transactions, dominate the constitution¹³. At the same time so-called *ethic committees* were established which come close to law enforcement agencies and "courts" with a jury system not unlike the Anglo-Saxon tradition to which members are elected by the village community. It took the national government in Beijing something like five to seven years to notice that some remarkable institution-building from below had occurred¹⁴. An intrinsic motivation to build up democratic institutions is not behind this development as the open interviews in data set 1 reveal. (see also Nee and Matthews 1996; Putterman 1995; Oi 1995; Krug 1996; 1997b; Li 1999; for a general analysis of villages in Shanxi see Goodman 1995;1999 d).

The village's crucial role not only with respect to the establishment of firms, but also to the development of property rights can be seen in the following example (respondent 019). A

¹³The notable exception is the One-Child-policy which forms an article in many village constitution.

¹⁴In 1998 sixty per cent of the villages had already held their second round of elections.

aluminium processing plant started as a dilapidated Township and Village enterprises (TVE) employing not more than thirty people (Graph 1).

Insert Graph 1 about here

In order to turn the workshop around and to generate workplaces (and revenues) the village needed

- somebody with a good idea
- a complementary infrastructure, such as roads, water, electricity
- investment
- a mixture of regulation and taxation that facilitates private entrepreneurship.

In the first stage, the village established a construction company whose demand for unskilled labour allowed the securement of workplaces for excess labour in agriculture. At the same time friends of individual village leaders explored further opportunities. One (SOE) which had spun-off a construction company expressed interest in village land on the condition that it would be first converted into an industrial site. The village was expected to invest in roads and ensure connection to the main power lines and water. Subsequently, negotiations with the electricity company of the province started in which the electricity provider promised the necessary investment and steady supply in return for a share on net return. So far, the village had converted land into an attractive industrial site for manufacturing in which both the SOE and the province would invest. At this stage how to use the industrial site, let alone what to produce, was not yet decided upon. Later a private entrepreneur was introduced who had connection with the largest aluminium factory in Asia, but neither the financial capital nor the land necessary for building a factory himself. He promised to broker a long-term supplier contract with the aluminium factory and further financial capital, again in return for a share on net returns. Finally, the village "economic negotiation committee" put all these different stakes together, organised trips to other provinces in order to hire the necessary skilled (and unskilled) workforce, and "designed" a set of licences, regulation, and taxation which promised that not only the start-up costs but also the running costs would remain low. In return for these services, this negotiation committee also asked for a part of the returns. In the end the ownership and governance looks as follows (graph 1): The providers of electricity and scarce financial capital own 67% of the shares, the village as provider of land and partly workers gets

6% plus 27% for its economic negotiation committee¹⁵. Three features in this elaborate ownership and governance structure deserve attention:

1. The village facing claims on net returns prefers an official registration of the claimants as "owners". By doing so, risk is shared, limiting ex post opportunism by one of the parties, while the claims on profit are linked to the initial registered capital. Subsequently, the claims become predictable, allowing better calculation and safer accumulation of capital in the firm.
2. By converting claims on returns into registered capital the village and the other participants establish property rights on physical, financial and social capital, something national policy still shies away from.
3. The formation of property rights in this case acknowledges the value of the village economic committee; more precisely the social capital such an institution can provide.

The role the village in China played in the transformation process deserves more attention in the literature on transition economies: The Chinese example shows that a more decentralised approach which opens ways to experiment with different forms of institutions has its merits. It allows economic actors to innovate, to adapt and to choose organisations or institutions according to specific conditions. The way property rights were introduced first with respect to land and later with respect to industrial assets as shown above provide an excellent example for organisational and/or institutional innovation (for land rights see Rozelle and Li 1998; Putterman 1995; Unger and Chan 1999).

3. HOW TO INVEST IN INSTITUTIONS

So far the analysis suggests that entrepreneurship is the result of organisational change and the re-building of institutions rather than technical innovation or the "marketization" of the economy. On the individual level this means that Shanxi entrepreneurs respond to signals from friends and networks, the way (Western) entrepreneurs respond to market signals. As the matter of fact, they do both: Data set 2 shows that although 10 and 14 respondents (out of 27) found price and quality "very important" in "choosing to enter a business relation with X, 10 and 12 found "the respectability and influence of X within the local community" and "the reputation of X for reliability" very important. If this result is representative than the way

¹⁵It might be a coincidence that the village keeps one third of the shares. On the other hand a third of the shares might be as crucial in actual decision making as in the West.

resources are allocated within networks, and how networks emerge and survive, becomes as crucial for economic development as the emergence and stability of markets.

Organisational change goes beyond individual choice and activities that can be captured with the help of interviews. Instead good theory is needed. Before the approaches from economics and organisational theory are introduced, some generalisations from the Shanxi-sample can be summarised:

(1) The revival of old economic institutions or the hijacking of social institutions lies somewhere between *random choice* and imitation. It is worth stressing that Shanxi entrepreneurs do not assume there is one set of alternatives from which to choose the one which promises the highest return, as neo-classical economics would suggest. There is obviously a kind of selection going on. Not all institutions known from the past and/or know to be effective in other areas of social life are picked out. Furthermore, the selected institution is modified to fit contemporary condition, such as the example of contracting and the village. The first, and very simple, criterion for selection of an institution is *past performance*. They are assumed to have been functioning well in the past. Second, which institution is selected and what kind of modification is needed is the result of interactive choice, in the sense that local political leaders, potential entrepreneurs, suppliers, customers, and the village workforce jointly search for institutional devices that would "stabilise subjective expectations" and by doing so contribute to the establishment of predictable and stable business relations.

(2) The individualisation of the business sector is seen as the necessary requirement for entrepreneurship. This is certainly a remarkable break with the system of socialist planning but cannot satisfy economics which stress the efficiency of anonymous markets. In Shanxi a friend, or somebody introduced by a friend, is the starting point for establishing firms and establishing business relations. As the Shanxi-data sets showed friends, or if this should be preferred, networks fulfil many tasks. They

- offer access to resources
- broker business deals
- share information and knowledge. Most importantly, they
- supply any entrepreneur with reliable partners for re-establishing business practices and institutions.

The open interviews from data set 1 revealed that the underlying assumption in Shanxi is that if one "interactively" agrees on certain practices with friends, i.e. people who are trustworthy and reliable, then these practices and institutions must be ones that facilitate "honest trading" while rewarding individual performance¹⁶.

¹⁶ The argument was also used for the contrary case, namely that if one deals with doubtful characters, or "Party crooks", then the ensuing institutions must be ones that neither reward personal performance (and effort) nor "fairness".

The Shanxi data suggest two other aspects of networks rarely found in the literature. First, there is no fixed number of networks, defined by family, place of origin, shared educational experience, etc. Instead each individual entrepreneur will use different networks for different purposes. As said before, the PLA dominates the market for skilled labour, while former class mates function as middle-men to take the business to another province or into another sector, while a *comrade* helps to get access to export licences. In other words, while what all networks have in common is that they offer a pool of reliable business partners and information, different networks offer different services. Second, in order to fully employ networks one entrepreneur does not need to be a member of each of them. The introduction of a friend is enough¹⁷. It is the diversification of output the different networks offer plus the manageable entry and exit costs which allow individual entrepreneurs to fully exploit each network's comparative advantage (see also Menkhoff 1992; Krug 1991). This also explains why for a great deal of Shanxi networks of entrepreneur are not patron-client relation, let alone the Mafia-kind of relation, both of which are based on local monopolies.

To employ a multi-layered system of networks instead of relying on bilateral personal relations offers other advantages. The pool of resources, reliable business partners, knowledge, and information is larger, while scale economies can be expected when a larger group of business partners subscribe to the same business practice. Monitoring costs are lower to the extent that not each contract needs to be monitored. Instead, reputation and the sanctioning mechanism of networks serve as enforcement devices.

As in the case of choosing the right institution, the selection of individual business partners and networks does also reflect neither random choice nor blind imitation. Once more past performance is taken as a useful predictor of future behaviour, which as Institutional economics has shown is a useful in situations of high uncertainty (Krug 1999; Frank 1998).

To sum up, the data suggest that any theory that attempts to explain the behaviour of individual entrepreneurs as well as the emergence of institutions and business practices needs to address the following aspects:

¹⁷Chinese tradition makes the middleman responsible for those whom s/he introduced. In how far this device is used today was unfortunately not further investigated.

(1) *The question of uniqueness of the data set.* The picture one data set offers, taken from one locality in China cannot easily be expected to represent the whole of China. As was shown above, the emergence of institutions is the result of interactive choice, where partners from the same locality, i.e. friends, play a major role. Likewise, different people in different parts of China might remember different economic institutions from the past or they may have kept different social institutions alive. Finally, economic circumstances to which organisations and institutions attempt to find a solution differ¹⁸. The same arguments need to be taken into account before one tries to integrate the outcome of the China-analysis in the general literature on transitions economies.

(2) *The question of uniqueness in investment behaviour.* Shanxi-entrepreneurs invest in networks; they do so by spending time and effort for finding useful partners or friends. To build up trust by enlarging the pool of reliable and trustworthy business partners is seen as a business activity, the jointly spent evenings and incessant phone calls are not regarded as consumption but a necessary activity for learning about market chances, and ways to better co-ordinate business activities. Investment in physical assets around a core business in contrast is seen as less crucial. Both start-up investment and expansion of a firm follow the organisational/network investment. Shanxi entrepreneur invest first in a stable and reliable business investment, while investment in physical assets follows the comparative advantage and knowledge the different networks provide. This is in striking contrast to "Western" forms of entrepreneurship where investment in physical assets and a core business mark the beginning of a firm, while the design and governance of inter-firm relations follow only later (Nelson 1996). Again, the question needs to be addressed, in how far this behaviour is Chinese (or reflects a special Shanxi-mentality), or whether this kind of behaviour reflects a systematic response to economic/social circumstances.

(3) *The uniqueness of the institutional frame.* Both aspects described above indicate that once entrepreneurs in a specific place have settled for institutions, governance structures around the firm and business practices it will be hard to transform them again. A path-dependency can be expected in the sense that anonymous markets will find it hard to compete with the allocation mechanism and incentives employed within network. To assume therefore that the network-institutions will disappear the quicker the private business sector expands is not conclusive. As can be seen from the Shanxi-data sets but also from China's economic development in general, the institutional frame around entrepreneurship contributed to the economic development, which on a daily basis reconfirms to each economic actor that the institutions are well chosen, and that further investment in these institutions are profitable. The use of markets, on the other hand, is unknown, and would imply sunk costs, i.e. the investment in social capital gets lost, while the returns from market co-ordination are far from predictable.

In short, theory must reconcile the outcomes of the Shanxi-data sets and Chinese experience with our general knowledge about entrepreneurship, the functioning of organisations, and in particular the conditions for survival, if the Shanxi-experience should not remain a nice story, but something more.

¹⁸ As the many field studies executed in China in the last years confirm. See Unger and Chan 1999, and the references in footnote 29.

III. EXPLAINING CHINESE ENTREPRENEURSHIP: THE THEORY

How can these findings be explained or, more specifically, to which extent can we reconcile the findings with existing theories, which then in turn might help to shed further insights into the process of entrepreneurship in emerging market. With respect to China two theories dominate in the literature:

1. Growth theory - "old" or "new" where economic development is linked to international trade, in particular the inflow of Foreign Direct Investment, knowledge, and access to new markets. These theories concentrate on the "immediate determinants" of growth, such as factor productivity or investment in human capital, without acknowledging that factors such as the organisation and governance of firms, the functioning of financial institutions or the functioning of universities might be crucial when it comes to exploiting resources, market chances and technical advances (Nelson 1997; 1996). As was pointed out lately "studies that link firms' behaviour to uncertainty in the policy regime and macro environment are scarce, given the importance that LDC (Less Developed Countries) entrepreneurs attach to these phenomena" (Tybout 2000, 39). As was seen above Chinese entrepreneurs are no different. The following therefore concentrates on the possibilities for employing theories that allow the bridging of the gap between organisation theory of the firm and economic development.

2 The cultural perspective as presented in the more popular press which claims that it is the *Chineseness* of the Chinese which allows them to turn entrepreneurial (Fukuyama 1995, Huntington 1993, Redding 1990, 1996. For a critique see Rozman 1993, Krug 1997c). Such a claim implies that first all Chinese have something they share and which distinguishes them from the rest of the world, and second, that what they have in common steers their individual behaviour as well as the way they interact with each other. Such a perspective depends crucially on the assumption that there is one and only one homogenous Chinese culture (a notion most Chinese would contradict) and that there is a clear set of personal attributes or institutions which can be linked to individual and inter-active behaviour. The cultural perspective is certainly welcomed, however it empty unless

- it operationalises what Chineseness means,
- demonstrates that all (or most) Chinese firms share these features
- proves that the combination of these factors determine the firms' success.

For this reason starting with an economic approach might help to clarify when and where culture comes in. Differences in observed behaviour caused by different situational constraints do not point to cultural difference. If however, firms in the same situation show different reactions than other factors must shape behaviour as for example the collective memory of specific institutions that worked in the past. Moreover, if there were different institutions across China, then such an analysis would suggest that different forms of entrepreneurship will re-emerge.

1. THE SITUATIONAL CONSTRAINT

Two different theoretical frameworks can be used for modelling Chinese entrepreneurial activity:

1. We may assume that Chinese entrepreneurs, i.e. individual agents, respond to the business environment in a systematic way: Trying to make the best out of it causes them to move towards those activities that promise positive returns (profit) while avoiding those which prove to be costly. They will do so unilaterally or, if this should be too expansive or impossible, they will join forces with others.
2. Alternatively it can be argued that the observed behaviour is a result of lengthy evolution, whereby a powerful selection mechanism wipes out such entrepreneurial activity that does not conform to contemporary situational constraints. In what follows we build up a theoretical model based on the second type of assumption¹⁹.

Uncertainty

Transition economies can be best characterised by two features: *Higher than normal level of uncertainty and weak institutions* (Whitley *et.al* 1996, Nee 2000). Uncertainty may come from the environment, but may also be generated internally by technology (Thompson 1967). Environmental uncertainties are due to the (at least partly) unpredictable behaviour of business

¹⁹ An analysis based on the first assumption can be found in Qian 2000, Krug 1997b.

partners, opportunism, bankruptcy, or sudden major re-organisations. Subsequently, demand seems serendipitous, supply is accidental.

Technology creates uncertainty if the available technology specific knowledge is not sufficient, if primary processes are not (yet) routinized, if the operation of technology is mainly based on tacit knowledge, or if dominant designs in the organization are not established. In these circumstances and entrepreneur faces the following problems (Nooteboom 1999b):

1. First, s/he faces a low general level of expertise in the society at large. There is nobody to imitate, no procedure to copy, expertise cannot be easily learned with the help of formal or informal education, neither can expertise be bought. In short: *It is the newness of an organisational form that poses the challenge for entrepreneurs.*
2. Second, there is no collective memory about what can go wrong as there is no past experience on which to rely upon.
3. Third, there is no general knowledge about (excess) demand, price- or income elasticity of demand, let alone systematic research that would help an entrepreneur to calculate the risk of his venture.
4. Finally, there is no routine of business practice upon which an economic agent can rely. The effect of this high level of uncertainty is then that each individual entrepreneur faces a high variety of responses to each of his actions. (Stinchcombe 1964)

If the typical firms are young organisations, and they are exposed to the liability of newness, they will certainly experience a (relatively) high level of mortality hazard. That in turn means that firms generate uncertainty for each other. This uncertainty generates a specific risk which is covered by the notion of (un-)reliability, and (un-)accountability in behavioural patterns. This finding allows to narrow down the necessary requirement of what makes a Chinese entrepreneur an entrepreneur:

- (1) S/he is someone with the ability to detect, establish and contribute to the development of regular behavioural patterns which allow interacting and transacting commercial activities (Macaulay 1963, Nooteboom *et.al.* 1997).
- (2) Notwithstanding the need to acquire (foreign) capital or other resources, the need to organise, manage and create business practices - or institutions is the crucial factor (Powell 1990; Nee and Su 1990; Furubotn and Richter 1997, 404-412). In the long run the value of each resource, may that be land, Western machinery, the Internet, or a skilled workforce depends on the ability to *innovatively* design the business relations with each business partner. Private property rights *cum* standard contracts are of limited help only since both rely on the

assumption that all future outcomes can be captured and transacted in present days contracts (Williamson 1993). This is already difficult in a world of well-established business practices the more so in a world of high uncertainty.

Weak economic institutions.

The usual way economies and societies deal with behavioural uncertainty, might this be caused by natural or moral hazard, by external shocks, *value changes*, or innovation is to create institutions and/or organisations for the purpose of "streamlining" behaviour, for monitoring a certain kind of behaviour and for sanctioning behaviour. In the Western market economies business practices for example depend on contracts, private property rights, laws, the notion of liability and compensation as well as the consensus that innovation should be rewarded. In short: "Institutional environments that provide general purpose safeguards relieve the need for added transaction-specific support. Accordingly, transactions that are viable in an institutional environment that provides strong safeguards may be nonviable in institutional environments that are weak - because it is not cost-effective for parties to craft transaction-specific governance in the latter circumstances." (Williamson 1993, 476). Subsequently, the weaker the institution, the greater the variety of possible response and the higher the uncertainty with respect to expected outcomes (Whitley 1998). As uncertainty translates into risk for which an appropriate premium needs to be calculated, economic agents have a strong incentive to search for (institutional) solutions which are more advantageous for at least some of them (with the loser being compensated). While changing the overall frame of institutions might be outside the control of individual agents and rather depend on the functioning of the political market, the governance of individual transactions (private exchange) is not. It is worth mentioning that the problem of China and her entrepreneurs is not that there are still socialist institutions working; it is rather that both the remains of the socialist past and the newly introduced market mechanism are weak (Nee 2000, Qian 2000). In order to function institutions should not conflict, and they should offer a "code" whose violation is connected to a specific sanctioning mechanism that does not tolerate observed code violations. They are effective if the costs of code violations works as a deterrent (Carroll and Hannan 2000) The less economic agents violate the code and/or the less codes get violated the higher the level of regularity and predictability.

In China, however, as in most emerging market economies, codes work as occasional blueprints only as they are rarely sanctioned effectively enough. Monitoring is infrequent and irregular so that economic agents and firms can easily afford not to pay attention to social codes if they are not convenient for them. The result then is that behaviour can easily deviate from what is expected, i.e. their default behaviour (Stark 1996)

Weak economic institutions, in other words, do not contribute much to the problem of reducing high uncertainty. On the contrary, if, as it is the case, such institutional weaknesses lead to the (oligopolistic) competitions between few producers of institutions, such as the Communist Party, local government or strong social network then the costs for "acquiring" a predictable and accountable business environment can increase rapidly. In this case bribing oneself into a useful business network is the cost one has to pay for securing a relatively more predictable business environment (Gambetta 1993, Smart 1993, Flap 1990).

4. ORGANISATION THEORY AND CHINESE ENTREPRENEURSHIP

Social Capital or firm-specific capital

Any organisation needs to be established. This can be done unilaterally by one actor or by several. Organisations can also evolve as an unintended outcome of interactive action. As all the interviews in the field study show the Chinese firm clearly reflects the determination of its owner or manager to become rich, create workplaces and/or become a "Western" style manager. The motive of the manager, or owner can however not explain the governance structure that evolves. A governance structure which helps to fight off situational constraints will be selected. As described above, it is the newness of the private business sector with its high level of uncertainty for which the economic institutional setting cannot yet offer remedies. Successful entrepreneurs must start by looking for ways to shape the behaviour of others.

Organisational ecology (Hannan and Freeman 1984; 1989) and evolutionary economics claim that in order to survive as an entrepreneur, i.e. being able to build up long term business relations, s/he has to invest in *social capital*. Such social capital might be generic or idiosyncratic. Investment in generic social capital offers higher returns than investment in

organisation-specific (technical) investment, at least in the period within which organisations are exposed to the liability of newness. In what follows generic social capital refers to all attempts to find business partners, establish social relations, or group formation and collective action for which material resources and time are needed. In other words, we talk about networks and alliances as a crucial organisational device around a production unit (Granovetter 1985, Nooteboom 1999a).

As Institutional and transaction costs economics have shown such groups offer the following advantage: They allow the pooling of resources, the sharing of information, the generation of trust amongst their members, and they allow innovation whereby risk can be shared by all, thus keeping the individual risk low. Finally, networks function as a collective memory where the knowledge about probable failures is stored. Thus, being part of a network and contributing to its functioning is of economic value. On the other hand, the value of networks (as opposed to anonymous markets) is limited by the size of a network, i.e. the number of members and the returns that can be expected from investment in organisation-specific knowledge. While in established market economies social capital quickly approaches the point where organisation-specific investment becomes more profitable, the case of emerging markets looks differently. Uncertainty and weak institutions make it paramount to build up a network of reliable business partners. (Polos and Hannan 2000)

The reason why investment in social capital promises higher returns than organisation-specific investment is the difference in sunk costs. While uncertainty due to quickly changing market situations provides incentives to quickly switch production across sectors, lack of experience can also lead to an early death of the firm. In both cases firm specific investment is lost, while social capital is not. On the contrary, each failure, let alone bankruptcy leads to a better knowledge about a private business sector and thus helps to build a collective memory that helps to guide future business dealings.

Thus, it can be assumed that the building up of social capital is seen as an urgent and crucial investment for new firms. Indeed, all respondents in Shanxi agreed to this. They also confirmed that the building up of *personal relations* is more crucial for the survival of a firm than direct access to resources. If this is the case then we can expect a specific feature of the

Chinese new private firm, namely one with a *weak organisational identity supported by a strong reputation of the surrounding net of personal relations*²⁰.

Organisational ecology has long argued that selection favours reliability and accountability in the world of organisations, as indeed did Max Weber (Polos, Hannan and Carroll 2000). Moreover, organisational ecology has also proven that the older a population of organisations, such as firms, the higher their reliability is expected to be²¹. As was shown above, a firm in the Chinese economy changes production, sectors and location frequently instead of trying to use resources for securing a market place for the first agreed upon line of production. In a Western economy a firm that deliberately changes its core is in Western economies would be perceived as neither reliable nor predictable. Yet, in China such firms survive and flourish. This observation can be interpreted in two different ways:

- Selection in the world of Chinese organisations follows different principles: Reliability and accountability are not favoured features there.
- The principle that selection favours reliable and accountable economic activity is universal. Reliability and accountability in China is not linked to firms or other organisations, but to the entrepreneur or other individual agents.

As was indicated in the empirical part, while enforcement at the organisational level is weak in China, network based social enforcement of individual behavioural patterns seems to be institutionalised. Despite Chairman Mao's attempts to change behaviour patterns (in the Cultural Revolution, for example) these behavioural patterns survived, safely stored in the collective memory so that they could be revived later. Today they play an important role in securing predictable behaviour, in the form of reliable and accountable performance. Since, as was pointed out above, these networks are vital resources for any entrepreneurial activity, the behavioural patterns of network members need to be reliable, predictable, and stable. It is up to future research to investigate in how far changing networks will imply stigmatisation, or expulsion.

Social networks are rather powerful tools, and in the Chinese economy they function as effective uncertainty reducing devices. What makes these networks different from the well-studied organisational networks in Western economies is the fact that social networks in China

²⁰ Graph 1 and 2 provide illustrative examples.

²¹ There is an exception though: Several empirical studies show that structural reorganisation resets organisational clocks. Their reliability and accountability falls during reorganisation.

enforce individual behaviour to the effect that they need not be concerned with organisational identity. In contrast, (organisational) networks in the West enforce organisational, i.e. a firm's, reliability and accountability. One consequence of the concentration on organisational reliability is that those firms who want (or need to) change core features face a substantially higher mortality hazard than those reluctant to change. To put it polemically, organisational networks reward inertia. Individual networks in the Chinese style do not have such effects; they reward flexibility of firms as long as the entrepreneur of her/his network remains reliable. Since flexibility is needed in a situation of high uncertainty these social networks are crucial. It is their predictability and accountability which makes the entrepreneur a reliable and sought after business partner while offering ways to flexibly switch the line of production, the ownership structure or location according to opportunities, profit chances, and risk-diversification.

There is an interesting similarity between the ways in which venture capital operates in United States and how individual networks function in the Chinese economy. In both cases we deal with a device that allows to "fish" for opportunities. For this reason both devices allow occasional failure as long as it can be expected that finally one big fish can be caught. The difference between the two devices is the following. While venture capital gets lost in a failure, social capital that Chinese networks accumulate is recyclable, and indeed gets recycled.

IV. CONCLUSION

The analysis attempted to identify factors which explain the remarkable success of Chinese entrepreneurs. Not satisfied with the popular explanations and conventional economic analysis, other approaches were sought, such as organisational ecology, evolutionary economics and transaction cost economics. The above shows that the approaches chosen can explain the stories, motivations and inspirations the interviewed entrepreneurs revealed in the course of the numerous interviews. We found that the major entrepreneurial challenge within the Chinese economy is to set up organisations, which are able to cope with high uncertainty, while at the same time creating reliable and accountable business partners.

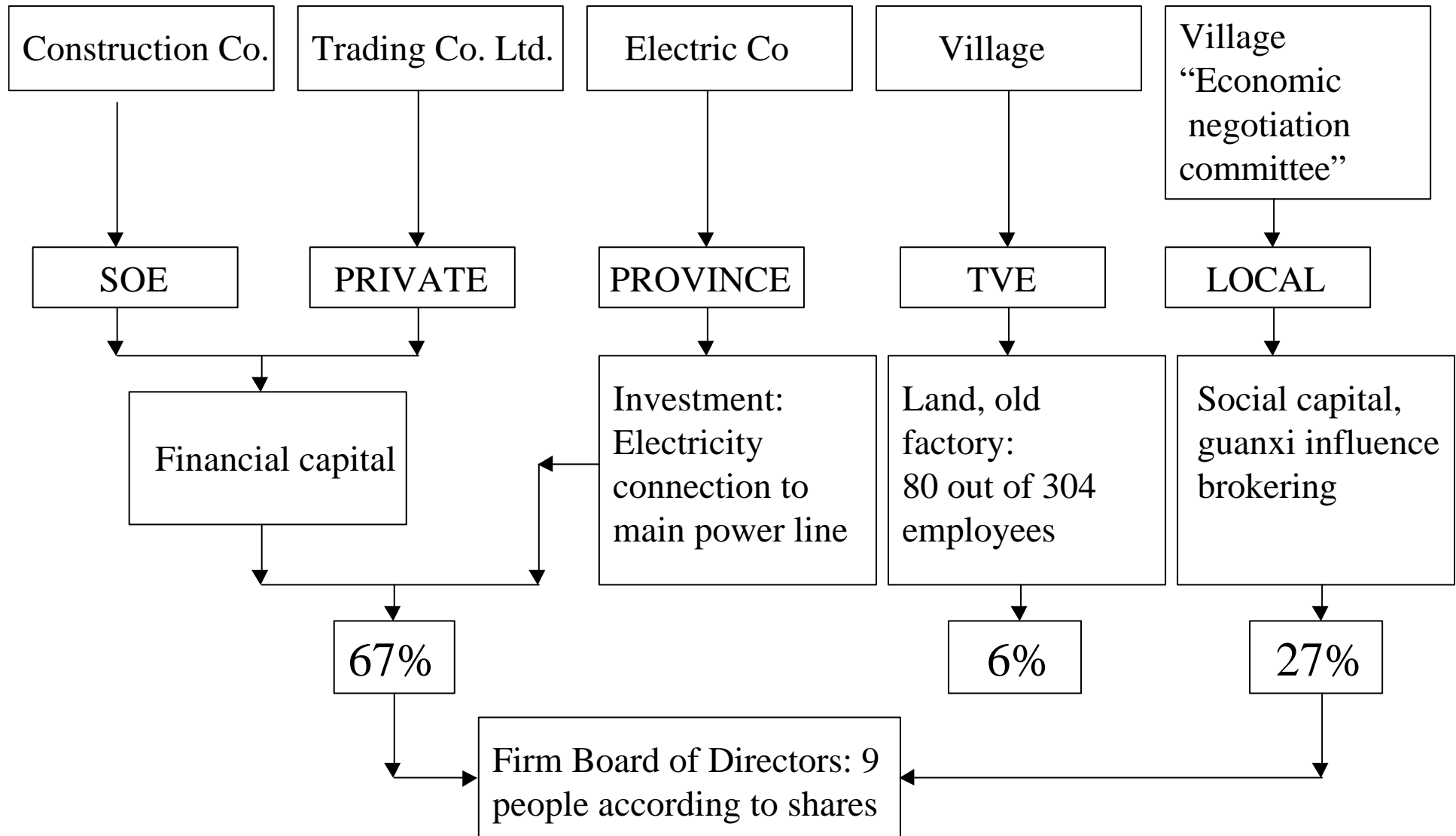
Another result of the analysis is, that the weakness of economic institutions makes it unlikely that organisations reveal any kind of code obeying behaviour, whether this be the “code” of the old socialist economy or the new “code” of a market economy. In the absence of systematic monitoring and enforcement of certain patterns of behaviour uncertainty prevails, ruining the possibility of rational economic activity. Under these circumstances those communities and groups, which exploit other social institutions to get an acceptable level of reliability and accountability must flourish.

Individual networks, which cover the national market are powerful mechanisms not only for providing vital resources for entrepreneurs, but also for enforcing desirable behaviour patterns. In contrast to Western organisational networks these individual networks allow for more flexibility as far as the core features of organisations are concerned; this reduces inertial pressure on organisations. The extra freedom allows for strategies that can be characterised as “fishing for success”. The networks in which the entrepreneur is embedded offer a safe haven in case of organisational failure, i.e. bankruptcy, while the entrepreneur can go for another try by employing the social capital acquired in the past. In other words the social capital of the networks gets recycled from one start-up firm to the next.

Table I : Firms: Number, age, and sector

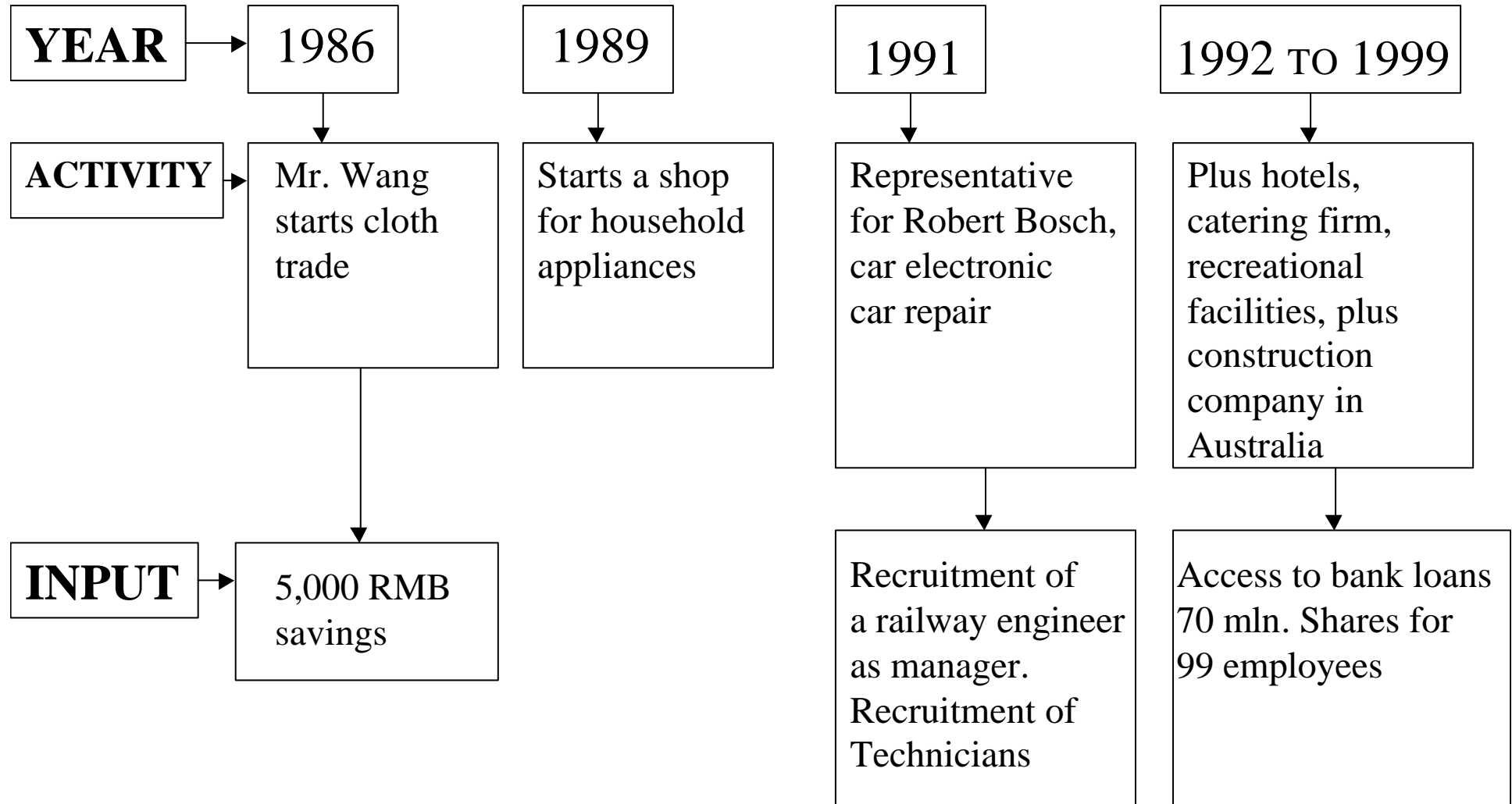
Interviewed in:	1993	1996	1997	1999	Total	Percent
Firms:						
Total	12	37	28	27	104	
Per cent	11.5	35.6	27	26	100	
Year of registration						
Before 1982	1	14	5	0	20	19.2
1983 - 1991	7	16	13	9	45	43.2
1992 - 1999	4	7	10	18	39	37.6
Average age of firm at the time	4	18	11 ³/₄	5 ¹/₂	10	
Interviewed						
Sector:						
Primary sector	2	14	3	8	27	26.0
- Coal and -processing	1	7	2	1	11	
- Food processing	1	5	--	5	11	
Manufacturing	--	14	7	4	25	24.0
Service	10	9	18	15	52	50.0
- Old service	3	6	8	9	26	
- New service	7	3	10	6	26	
Ownership registration:						
SOE	1	18	10	3	32	30.7
TVE	--	5	4	--	9	8.6
Collective	6	2	4	4	16	15.4
Gufen	--	3	4	7	14	13.5
Private	4	6	6	13	29	27.8
Joint venture	1	3	--	--	4	3.8

A TVE “NEW STYLE”



The first 3 shareholders nominate 6, the village 1 and the village government’s “Economic negotiation committee” 2 members to the board of directors.

DEVELOPMENT OF A TYPICAL CHINESE PRIVATE COMPANY



References

- Carroll, G. R. and Hannan, M.T. 2000. *The Demography of Corporations and Industries*. Princeton: Princeton University Press
- Chen, P. 1979. *Chinese Legal Tradition under the Mongols*. Princeton, NJ: Princeton University Press.
- Cheng, L. and Rosett, A. 1991. Contract with a Chinese Face: Socially Embedded Factors in the Transformation from Hierarchy to Markets, 1978-1989. *Journal of Chinese Law* **5(2)**: 143-244.
- Cheung, S. 1969a. Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements. *Journal of Law and Economics* **12**: 23-42.
- Cheung, S. 1969b. *The Theory of Share Tenancy*. Chicago, IL: University of Chicago Press.
- Coleman, J.S. 1990. *Foundations of Social Theory*. Cambridge, MA. Harvard University Press.
- Eastman, L.E. 1988. *Family, Fields, and Ancestors*. Oxford: Oxford University Press.
- Flap, H.D. 1990. Patronage: an Institution in its Own Right. In M. Hechter, K.D. Opp, and R. Wipler. (eds) *Social Institutions: Their Emergence, Maintenance, and Effect*, pp. 225-243 New York: Aldine de Gruyter.
- Frank, R.H. 1988. *Passion within Reason: the Strategic Role of Emotions*. New York: Norton
- Frey, B.S. 1992. Tertium Datur: Pricing, Regulating and Intrinsic Motivation. *Kyklos* **45**: 161-185.
- Freedman, M. 1970. *Family and Kinship in Chinese Society*. Stanford, CA: Stanford University Press.
- Fried, M.H. 1953. *The Fabric of Chinese Society. A Study of Social Life of a Chinese County Seat*. New York: Praeger.
- Fukuyama, F. 1995. *Trust. The Social Virtues and the Creation of Prosperity*. London: Penguin
- Furubotn, E. and Pejovich, S. 1974. Eds. *The Economics of Property Rights*. Cambridge, MA. Balinger.
- Furubotn, E.G. and Richter, R. 1997. *Institutions and Economic Theory. The Contribution of the new Institutional Economics*. Ann Arbor: University of Michigan Press.
- Gambetta, D. 1993. *The Sicilian Mafia: The Business of Protection*. Cambridge, MA: Harvard University Press.
- Goodman, D.S.G. 1994. The People's Republic of China: The Party-State, Capitalist Revolution and New Entrepreneurs. In D.S.G. Goodman and R. Robinson. (eds) *The New Rich in Asia: Mobile Phones, McDonalds and Middle Class Revolution*, pp. 225-242.. London: Routledge.
- Goodman, D.S.G. 1995. Collectives and Connectives, Capitalism and Corporatism: Structural Change in China. *The Journal of Communist Studies and Transition Politics* **11**: 12-32.
- Goodman, D.S.G. 1997c. Chengjiao nongcun yu gaige zhiyou: chengshihua yu jiegouxing bianhua. [Suburban Villages and the Roots of Reform: urbanisation and structural change.] In Jiang Pei. (ed) *Ershi shiji de Zhongguo nongcun shehui*. [China's Rural Society in the Twentieth Century.] pp. 354-363 Beijing: Zhongguo dangan chubanshe.
- Goodman, D.S.G. 1997a. China in reform: the view from the provinces. In: D.S.G. Goodman (ed) *China's Provinces in Reform: Class, Community and Political Culture*, pp. 1-15 London: Routledge.

- Goodman, D.S.G. 1997 b How open is Chinese society? In D.S.G. Goodman and G. Segal (eds) *China Rising: nationalism and interdependence*, pp 127-52 London: Routledge.
- Goodman, D.S.G. 1998a. In Search of China's New Middle Classes: the Creation of Wealth and Diversity in Shanxi during the 1990's. *Asian Studies Review* **22**: 39-62.
- Goodman, D.S.G., 1998c. *The Localism of Local Leadership: Cadres in Reform Shanxi*. Script, Institute for International Studies, UTS, Sydney.
- Goodman, D.S.G. 1999a. The New Middle Class. In M. Goldman and R. MacFarquhar (eds) *The Paradox of China's Post-Mao Reforms*, pp. 241-261 Cambridge, MA: Harvard University Press.
- Goodman, D.S.G. 1999b. King Coal and Secretary Hu: Shanxi's Third Modernisation. In H. Hendrichke and Feng Chongyi.(eds.) *The Political Economy of China's Provinces: comparative and competitive advantage*, pp. 211-244 London: Routledge.
- Goodman, D.S.G. 1999c. Zhongguode xin zhongchan jieji. [China's New Middle Class.] In: Zhang Mingjie. (ed) *Wei Zhongguo jingji zhenduan. [A Diagnosis of China's Economy.]* pp. 186-212. Changchun chubanshe.
- Goodman, D.S.G. 1999d. State-Society Relations in Reform Shanxi: elite interdependence and accommodation. *Provincial China* **6**: 37-65, forthcoming in: B. Dickson. (ed) *Twenty Years of Reform in China*. New York: M.E. Sharpe.
- Goodman, D.S.G. 2000a. Cadres in Reform Shanxi: The localism of local leadership. *Journal of Contemporary China*. forthcoming
- Goodman, D.S.G. 2000b.
- Greif, A. 1989. Reputation and Coalition in medieval Trade: Evidence on the Maghrabi Trades. *Journal of Economic History* **69** (4): 857-883.
- Granovetter, M., 1985. Economic Action and Social Structure: The problem of Embeddedness. *American Journal of Sociology* **91**: 481-510.
- Ho, D. and Chiu Chi-Yue. 1995. Component Ideas of Individualism, Collectivism, and Social organization. An Application in the Study of Chinese Culture. In: Kim, u. *et.al.* (eds.) *Individualism and Collectivism. Theory, Method, and Applications*. London: Sage. 137-156.
- Huang, R. 1981. *1587. A Year of No Significance. The Ming Dynasty in Decline*. New Haven and London: Yale University Press.
- Hannan. M.T. and Freeman, J. 1984 . Structural Inertia and Organizational Change. *American Sociological Review* **49**: 149-164
- Hannan. M.T. and Freeman, J. 1989. *Organization Ecology* Cambridge University Press Cambridge
- Huntington, S.P. 1993. The Clash of Civilizations? *Foreign Affairs* **72**: 22-49.
- Kiong, T.C. 1991. Centripetal Authority, Differentiated Networks: The Social Organization of Chinese Firms in Singapore. In G.Hamilton (ed) *Business Networks and Economic Development in East and Southeast Asia*. Hong Kong: Centre of Asian Studies Occasional papers and Monographs, No. **99**: 176-200.
- Krug, B. 1997a. Moving the Mountains: Transformation as Institution Building from Below. In J. Backhaus and G. Krause. (eds) *The Political Economy of Transformation: Country Studies*, pp. 127-152 Marburg: Metropolis

- Krug, B. 1997b. Privatisation in China: Something to learn from? In: H. Giersch. Ed. Privatisation at the Turn of the Century. Berlin: Springer.
- Krug, B. and Buitendam, A. 1998. Chinese Ondernemers tussen Markt en Partij. Tijdschrift voor Bedrijfsadministratie **102**: 1210. 89-94;
- Krug, B. 1999. On Customs in Economics: The Case of Humanism and Trade Regimes. Journal of Institutional and Theoretical Economics. **155 (3)**: 405-428.
- Krug, B. 2000. Comment to Qian Yingyi. Journal of Institutional and Theoretical Economics. **156 (1)**: 175-179
- Lardy, N.R. 1995. The Role of Foreign Trade and Investment in China's Economic Transformation. The China Quarterly **144**: 1065-1982.
- Li, Lianjiang. 1999. The Two-Ballot System in Shanxi Province: Subjecting Village Party Secretaries to a Popular Vote. The China Journal **42**: 103-118.
- Macaulay, St. 1963. Non-Contractual Relations in Business: A Preliminary Study. American Sociological Review **28**: 55-67.
- Menkhoff, Th. 1992. Yinyong or How to Trust Trust: Chinese non-contractual business relations and social structure. Internationales Asienforum **23**: 262-288
- Nee, V. 1989. Peasant Entrepreneurship and the Politics of Regulation in China. In V. Nee and D. Stark (eds) Remaking the Economic Institutions of Socialism, pp. 169-207 Stanford, CA: Stanford University Press.
- Nee, V. and Matthews, R. 1996. Market Transition and Societal Transformation in Reforming State Socialism. Annual Review of Sociology. **22**: 401-435.
- Nee, V. and Su, S. 1990. Institutional Change and Economic Growth in China. Journal of Asian Studies **40**: 3-25.
- Nee, V. 2000. The Role of the State in Making a Market Economy. Journal of Institutional and Theoretical Economics. **156 (1)**: 64-88.
- Nelson, R.R. 1996. The Sources of Economic Growth. Cambridge, MA: Harvard University Press.
- Nelson, R.R. 1997. How New is New Growth Theory? Challenge **40**: 5. 29-58.
- Nooteboom, B., Berger, H. and Noorderhaven, N.G. 1997. Effects of Trust and Governance on Relational Risk. Academy of Management Journal **40(2)**: 308-332.
- Nooteboom, B. 1999. The Triangle: Roles of the Go-Between In R.Th.A.J. Leenders and S.M. Gabbay (eds) Corporate Social Capital and Liability, pp.341-355. Dordrecht: Kluwer.
- Oi, J.C. 1995. The Role of the Local State in China's Transitional Economy. The China Quarterly **144**: 1132-1149.
- Pólos, L., Hannan, M.T., and Carroll, G.R. 2000. Forms and Populations In Carroll, G. R. and M. T. Hannan The demography of Corporations and Industries, pp. 59-81. Princeton: Princeton University Press
- Pólos, L. and Hannan, M.T. 2000. Nonmonotonicity in Theory Building. In A.Lomi A and E. Larsen (eds) Simulating Organizational Worlds. Cambridge MIT Press, in press

- Porter, M. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York, NY: Free Press.
- Potter, P.B. 1994. Socialist Legality and Legal Culture in Shanghai: A Survey of Getihu. *Canadian Journal of Law and Society* **9(2)**: 41-72.
- Powel, W.W. 1990. Neither Market Nor Hierarchy: Network Forms of Organization. *Research in Organizational Behaviour*. **12**: 295-336.
- Pratten, St. 1997. The Nature of Transaction Cost Economics. *Journal of Economic Issues* **31(3)**: 781-803.
- Putterman, L., 1995. The Role of Ownership and Property Rights in China's Economic Transition. *The China Quarterly* **144**: 1047-1064.
- Ostrom, E. 1990 *Governing the Commons*. Cambridge: Cambridge University Press.
- Qian, Yingyi. 2000. The Process of China's Market Transition (1978-98): The Evolutionary, Historical, and Comparative Perspectives. *Journal of Institutional and Theoretical Economics*. **156(1)**: 151-171.
- Redding, S.G. 1990. *The Spirit of Chinese Capitalism*. Berlin and New York: de Gruyter.
- Redding S.G. 1996. The Distinct Nature of Chinese Capitalism. *The Pacific Review* **9**. 3.
- Rosenzweig, M.R. 1998. Risk, Implicit Contracts and the Family in Rural Areas of Low Income Countries. *The Economic Journal* **98**: 1148-1170.
- Rosenzweig, M.R. and Stark, O. 1989. Consumption Smoothing, Migration and Marriage: Evidence from Rural India. *Journal of Political Economy* **97**: 905-926.
- Rozelle, S. and Li, G. 1998. Village Leaders and Land-Rights Formation in China. *American Economic Review (papers and proceedings)* **82(2)**: 433-438
- Rozman, G. Ed. 1993. *Confucian Heritage and its Modern Adaptation*. Princeton, NJ: Princeton University Press.
- Smart, A. 1993. Gifts, Bribes, and Guanxi: A Reconsideration of Bourdieu's Social Capital. *Cultural Anthropology* **8**: 388-408.
- Stark, D. 1996 Recombinant Property in East European Capitalism *American Journal of Sociology* **101**: 993-1027
- Stigler, J.E. 1989. Markets, Market Failures, and Development. *American Economic Review* **79**: (papers and proceedings). 197-203.
- Stiglitz, J.E. 1974. Incentives and risk sharing in sharecropping. *Review of Economic Studies*. April. 219-255.
- Stinchcombe, A. L. 1965 Social Structure of Organization s. In J.G. March (ed) *Handbook of Organizations* pp. 142-193 Rand McNally Chicago
- Thompson, J. 1967. *Organisations in Action*. McGraw-Hill New York
- Tybout, J.R. 2000. Manufacturing Firms in Developing Countries: How Well Do They Do, and Why? *Journal of Economic Literature* **38(1)**: 11-44.

- Unger, J. and Chan, A. 1999. Inheritors of the boom: Private Enterprise and the Role of Local Government in a Rural South China Township. *The China Journal* **42**: 45-74.
- Whitley, R. 1995. Eastern Asian Enterprise Structure and the Comparative Analysis of Forms of Business Organization. In P.N. Ghauri and S.B. Prasad (eds.) *International Management*, pp. 191-212. London: Dryden Press.
- Whitley, R., Henderson, J., Czaban, L., and Lengyel, G. 1996. Trust and Contractual Relations in an Emerging Capitalist Economy: The Changing Trading Relationships of Ten Large Hungarian Enterprises. *Organisation Studies* **17(3)**: 397-420.
- Williamson, O. 1993. The Evolving Science of Organization. *Journal of Institutional and Theoretical Economics*. **149**: 36-63.
- Yamagishi, T. and Takahashi, N. 1994. Evolution of Norms without Metanorms . In U.Schulz, W .Albers, U. Mueller (eds) *Social Dilemmas and Cooperation*. pp. . 311-326. Berlin: Springer

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