



LUND UNIVERSITY
School of Economics and Management

From Tradition to Transition

Entrepreneurship, competition, and marketization
in China's early reform process

Bachelor's Thesis
Fredrik Uddenfeldt

Supervisor:
Professor Sonja Opper

ABSTRACT

Economic theory predicts a positive relationship between competition and innovation. Competition both forces and enables firms to be innovative. Firms are forced to innovate to avoid shrinking profit margins. At the same time competition also helps them to innovate: On competitive markets information is dispersed among decentralized economic agents through price signals. This information can be used to identify opportunities for economic profit. Lack of competition—leading to a lack of reliable price signals—therefore reduces both the need for innovation and the possibilities for innovation. This thesis applies this strand of theory on China’s early transition from socialism. Data from 295 prefecture-level cities, from 1984 and 1987, are used to test the effects of marketization and market transition on the level of entrepreneurship, here measured as the number of household trade firms per capita. The empirical findings suggest that marketization and market transition were important determinants of entrepreneurship during China’s early transition period, and that local industrial output was an insignificant factor in determining local levels of entrepreneurship.

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1 INTRODUCTION

1.1 Background and Research Question

Why do humans innovate? Why do they sometimes not? Innovation, the discovery and development of opportunities for economic profit, is a more prominent feature of some societies than other. In the eyes of economists like Schumpeter, von Mises, and F.A. Hayek, the chief determinant of innovation is competition. On competitive markets firms either innovate or die. But competition not only forces firms to innovate, it also enables them to do so: On competitive markets entrepreneurs can use the information contained in prices to discover profitable opportunities; and since the price mechanism only functions properly under conditions of reasonable competition, lack of competition greatly reduces both the need for innovation and the possibilities for innovation.

This thesis formulates a theory that attempts to explain the determinants of innovative activity. The theory takes its fundament from F.A. Hayek's theories on competition and entrepreneurship. Hayek's theories, as well as other economists' later contributions, explain the role of markets in transmitting information on economic opportunities. The theory put forth in this thesis emphasizes the importance of price signals in competitive markets as an inexpensive source of otherwise unobtainable information. Second, this theoretical fundament is combined with institutional theory to explain how the market can be embodied in institutional arrangements.

These propositions can be tested in the context of transitioning socialist economies. If one believes that competition is a necessary precondition for innovative activity, then one would also expect that the level of innovative activity increased with the introduction of market forces in socialist economies.

China's early reform period witnessed a vast entrepreneurial boom, led by millions of small-scale household firms. Before reforms started private household enterprises were virtually non-existent across the whole county. Yet only a few years into reform several million private enterprises had emerged. But this development was not evenly spread across the country: A few years into reforms a number of regions had already produced a higher amount of entrepreneurs per capita than the average. This regional divergence provides an opportunity to test theories on the determinants of entrepreneurship.

1.2 Limitations

In the empirical testing I use official Chinese data for the years of 1984 and 1987. As for the empirical testing this thesis is thus exclusively concerned with China's early reform period. All data are taken from two issues of *China Cities Statistical Yearbook* (1985 and 1988), published by the National Statistics Bureau (NSB) of China. A few remarks can be made on the quality of official Chinese data. Statistical gathering in China has been a highly politicized matter ever since 1949 and official data should therefore be used with caution. But after 1978 the statistical bureaucracy was gradually depoliticized and began to recover after the statistically disastrous Cultural Revolution. However, the quality of data from the 1980s is probably subject to regional variation: Statistical authorities of the richer eastern parts were probably better equipped to gather data than the authorities of poorer inland provinces.

Nonetheless, even though the data used for testing in this thesis is most likely unreliable in many respects, this does not necessarily affect the reliability of the empirical results. If we assume that the data are biased according to a geographically even pattern, and that the bias is of the same direction and size in all areas, the results will be unaffected. For example, it is likely that the number of private entrepreneurs is underreported, since many private firms operated without license. But as long as all cities underreport in a reasonably even manner this will not affect the results. Provincial dummy variables are also used in the regression analysis to limit the effect of sample bias at the provincial level.

Finally, this thesis is exclusively concerned with household firms (*getihu*) engaged in retail trade (*lingshou shangye*). No distinction is made between rural and urban *getihu*. The data available does not make a clear distinction between rural and urban, making separate testing impossible.

1.3 Structure

The thesis is structured as follows. Section 2 develops a theoretical framework explaining the determinants and conditions of entrepreneurial activity. This section is concluded by the formulation of two testable hypotheses regarding the determinants of entrepreneurial activity. Next, in Section 3, the case of China's transition from socialism is introduced. In Section 4, the two hypotheses are tested by using data from China's early reform period. Section 5 concludes the thesis.

2 THEORY

The driving force of the market process is provided neither by the consumers nor by the owners of the means of production—land, capital goods, and labor—but by the promoting and speculating entrepreneurs. These are people intent upon profiting by taking advantage of differences in prices.

Ludwig von Mises (1949 [1998]), p. 325.

2.1 Competition and Innovation

To begin with, the terms "production" and "innovation" are used in a Schumpeterian sense: Production does not mean "creating" something new in the physical sense: It is merely a matter of employing and combining existing resources and forces.¹ Following this line of reasoning, innovation is defined as the process of discovering and employing new, and profitable combinations.

The basic assumption of this thesis is that competitive markets reward innovation. Products in competitive markets are priced according to their observable characteristics.² The term "characteristics" covers the concepts of product, model, brand, design or a solution.³ A "market" is defined as a market for identical goods or services. Consumers choose from a spectrum of products with different characteristics. Two products with the same properties fetch the same price in a competitive market; consumers can opt for the cheaper alternative if two producers sell the same product but offer different prices.⁴

Altering the characteristics of a product requires innovation, which in turn requires resources such as time and capital. The potential benefit of altering products is that it enables producers to "escape" competitive markets in which profit margins are low. Whether the effort to alter the product pays off (that is, if the increased profit exceeds the costs of innovation) depends on the demand for goods with the new characteristics. Demand depends on consumer preferences, which are assumed to be unique for every consumer.⁵

By altering its product a firm can "create" a new market (or a niche market, in other words). Following Schumpeter, F.A. Hayek, Ludwig von Mises and Kenneth Arrow, I assume

¹ Joseph A. Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the*

² Sherwin Rosen, "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition," in *The Journal of Political Economy*, Vol. 82, No. 1 (Jan.- Feb., 1974), pp. 34-55.

³ *Ibid.*, p. 36.

⁴ *Ibid.*, p. 37.

⁵ Victor Nee, Jeong-han Kang and Sonja Opper, "A Theory of Innovation: Market Transition, Property Rights, and Innovative Activity," in *Journal of Institutional and Theoretical Economics*, Vol. 166, No. 3 (September 2010), pp. 399-400.

that consumers and producers are *not* price-takers and that the actions of economic agents contribute to the formation of prices.⁶ As pointed out by Kenneth Arrow, if every prices are exogenous and taken as a given by every economic agent, then “there is no one left to make a decision on price.”⁷

A firm can increase its market power by “creating” a new market through innovation. In a limited sense, producers gain monopoly power in the newly created market – at least until other producers enter the market.⁸ Producers in competitive markets therefore have strong incentives to innovate.⁹

The returns to innovation increase with market expansion, defined here as a growth in the number of interacting consumers and producers. Market expansion can, for example, be achieved through the linking of geographically isolated markets for similar products, or – as in the case with reforming socialist economies – through liberalization of the exchange of goods previously controlled by the state.

Market expansion gives producers access to a greater number of consumers. A larger market means higher stakes: With more consumers a successful innovation can lead to higher profits. Market expansion also enables producers to cater to a broader spectrum of consumer preferences (each consumer has a unique set of preferences), making it easier to “leap” out of competitive markets by creating new niche markets. The incentives for innovation therefore grow with market expansion.

Discovery of opportunities

The picture outlined above only explains the most fundamental relationship between competition and innovation. In a broader sense, innovation can be defined as the discovery of opportunities for economic profit. The entrepreneur needs information in order to discover profitable opportunities. As argued by F.A. Hayek, the main role of competition is its role in facilitating the transmission of information; the flow of information is most fluid when competition reigns. On a competitive market information is dispersed among decentralized

⁶ Ludwig von Mises, *Human Action: A Treatise on Economics* (Auburn: Ludwig von Mises Institute, 1998), p. 328.

⁷ Kenneth Arrow, *Toward a Theory of Price Adjustment*, in *The allocation of economic resources*, eds. Moses Abramowitz et al. (Stanford: Stanford University Press, 1959), p. 43.

⁸ It must be noted that markets for differentiated products are highly interrelated and that the increased market power of producers in newly created markets is limited in reality. See Rosen, p. 42.

⁹ This argument has been developed at greater length in Schumpeter, *The Theory of Economic Development*, pp. 128-156.

economic agents through price signals.¹⁰ In the words of Hayek, the “attention [of individuals] will be directed by the prices the market offers for various goods and services.”¹¹

The quality of the information contained in price signals increases with the size of the market. Market growth occurs when an additional individual gets access to a market. After obtaining access to a market the individual will know the value (price) of the particular good traded on that particular market. Using this information the individual can decide whether or not to participate in the market by selling or buying the product in question. This decision depends on the agent’s preferences and his subjective valuation of the good.

If the individual decides to participate this will affect the price of the good and thereby make an informational imprint on the market. The individual’s action affects the price and therefore makes other participating agents aware that the value of the good has changed, forcing them to make a new decision based on the new price. In this way, information on the relative scarcity of goods is transmitted between economic agents, enabling them to coordinate their actions without having to communicate with each other (or even being aware of each other).¹² As an increasing number of agents participate in the market, the accumulated amount of information grows and the information contained in prices gets more reliable. To function properly the price mechanism needs input through the participation of economic agents.

The above picture regards only the case of one single market for one product. If the discussion is broadened to include the whole economy instead of individual markets, there are some additional points that can be made.

Human needs are diverse and people usually participate in more than one market. The average level of participation in the marketplace of individuals can be called the *level of marketization* in society. This can be measured by comparing the amount of goods that are traded on markets with the total amount of goods that are consumed. If only a fraction of consumed goods (total demand) is traded on markets, market activity (or the level of marketization) is low.

The level of marketization differs between societies and can range from total market independence (self-sufficiency) to total market dependence. The level of marketization can depend on (a) individuals’ decisions on the extent to which they participate in the marketplace

¹⁰ F.A. Hayek, “The Use of Knowledge in Society,” in *The American Economic Review*, Vol. 35, No. 4 (Sept. 1945), p. 526.

¹¹ F.A. Hayek, “Competition as a Discovery Procedure,” in *The Quarterly Journal of Austrian Economics*, Vol. 5, No. 3 (Fall 2002), p. 13.

¹² Hayek, “The Use of Knowledge in Society,” p. 526.

and (b) the extent of state-led economic redistribution. Self-sufficient agricultural households produce everything that they consume and do not participate in any markets. In redistributive socialist economies producers are forced to sell the fruits of the work to the state, which in turn redistributes these goods to end-consumers with regard only to administrative orders and not market forces. In the case of self-sufficient agricultural communities individuals *choose* to not participate in the market; in the case of redistributive socialist economies individuals are *forced* to not participate. For analytical purposes the outcome of both cases are the same: Zero market activity and no competition.

Under both circumstances the returns to innovation are low. In the absence of a competitive market economy individuals can only gain *convenience* from innovative activity, not profit. If an individual chooses to participate in the marketplace he will obtain information on the economic needs of others through price signals. The information can reveal previously unknown economic opportunities to the individual. According to Hayek, competition is a “procedure for discovering facts which, if the procedure did not exist, would remain unknown or at least would not be used.”¹³ The usefulness of such information is transitory and opportunities for profitable exchange are always a result of particular circumstances of time and place.¹⁴ Profitable opportunities do not last forever and market saturation occurs when all opportunities in a certain market have been exploited.

Under conditions of competition, the potential gains from innovation are no longer a matter of private convenience, but economic profit. On the marketplace the individual can package and sell his innovation to other economic agents and thereby gain a profit. In the event of zero market activity the individual cannot use price signals to obtain information. Obtaining information on opportunities by other means (investigation) is time-consuming and costly. And even *if* the individual becomes aware of an opportunity for profitable exchange through investigation, it would be difficult to finalize the transaction in the absence of established prices, leaving the two transacting parties only with the option of barter.

The entrepreneur can exploit the information transmitted through markets to identify economic opportunities, and also use the information to guide his decision on whether or not to develop the opportunity. Innovating is costly and requires time and resources. The entrepreneur needs reliable information on demand to gain enough confidence to make a decision on whether or not to develop an opportunity. Price signals are a cheap source of such information.

¹³ F.A. Hayek, “Competition as a Discovery Procedure, p. 9.

¹⁴ *Ibid.*, p. 10.

As the size of an integrated market increases (with more interacting economic agents), an increasing amount of information is shared among the actors on the market. The market can be seen as an information vector and “competition is a medium of interaction between individual agents”¹⁵. Increased market size increases the amount of information that is available to every individual.

Nevertheless, it should be noted that prices contain only a limited amount of information.¹⁶ To make a final decision the entrepreneur most likely needs information of a more qualitative kind (gathered, for example, through social networks). After discovering an opportunity, the entrepreneur needs to develop the opportunity into a finished product or solution. This requires time and resources. Ultimately, the entrepreneur will assess the opportunity cost of developing the opportunity: Is the future pay-off for developing this opportunity worth more than the income that is forgone by developing it? To answer this question the entrepreneur needs reliable information.

2.2 Time Lag and Institutional Uncertainty

“Opportunities are made, not found.”¹⁷ Anyone can recognize an economic opportunity but only those who actually develop an opportunity can be called entrepreneurs. There is always a time lag between (a) the recognition of an opportunity for economic profit, (b) the decision to pursue the opportunity, and (c) the actual realization of the opportunity. The length of this time lag depends of a number of factors. Apart from individual-specific factors (alertness, personality), it also depends on environmental factors such as access to capital and information, social networks and the type of opportunity.¹⁸ Therefore market reform and increased market access does not lead to immediate effects on entrepreneurial activity.

The entrepreneur also needs to assess the institutional environment to know whether or not exploiting the opportunity in question is compatible with the prevailing institutions (such as laws). To solve this problem the entrepreneur again needs information – obtained through lawyers, social networks, from the government, or other sources of information. Political

¹⁵ Oliver Budzinski, “Cognitive Rules, Institutions, and Competition,” in *Constitutional Political Economy*, 14 (2003), p. 226.

¹⁶ For example, prices do not convey information about markets that do not exist yet, or about previously failed attempts to utilize opportunities. See Eckhardt and Shane, “Opportunities and Entrepreneurship,” in *Journal of Management*, 29(3) (2003), p. 336.

¹⁷ Ardichvili, Cardozo, and Ray, “A theory of entrepreneurial opportunity identification and development,” in *Journal of Business Venturing* 18 (2003), p. 106.

¹⁸ *Ibid.*, p. 106.

uncertainty – impending regime change, a volatile political environment, etc. – will complicate the entrepreneur’s decision.

Embedded social institutions, such as norms, will also affect individuals’ propensity to innovate. Most critically, different institutions will promote different types of innovative activity. As shown by William Baumol, innovation can be productive, unproductive, and even destructive. The social institutions of ancient Rome did not encourage productive innovation: An ambitious entrepreneurial individual would be more likely to engage in unproductive rent-seeking than commerce.¹⁹ If every society is assumed to have a constant “pool” of talent, the allocation of this talent determines the level of (productive) entrepreneurial activity.²⁰

Signals from the government also affect entrepreneurial behavior. First and foremost, the entrepreneur must be assured that his product will not be confiscated by the state or stolen by the buyer.²¹ The entrepreneur’s propensity to innovate is therefore partly a function of the strength of property rights. The strength of property rights will determine whether the entrepreneur judges that his investment will pay off in the long run.

From the theoretical foundation outlined above it is possible to derive two hypotheses regarding the emergence of entrepreneurialism in a transition economy.

Hypothesis 1

The level of marketization in society, measured as the average value of market transactions per capita, is positively associated with entrepreneurship in later periods.

Hypothesis 2

The proportion of private entrepreneurs in a reforming socialist economy is positively associated with the extent of market transition in earlier periods.

¹⁹ William Baumol, “Entrepreneurship: Productive, Unproductive, and Destructive, in *The Journal of Political Economy*, Vol. 98, No. 5, Part 1 (Oct., 1990), pp. 893-921.

²⁰ Kevin M. Murphy, Andrei Shleifer, and Robert W. Vishny, “The Allocation of Talent: Implications for Growth,” in *The Quarterly Journal of Economics* (1991), Vol. 106, No. 2, pp. 503-530.

²¹ See Douglass C. North, *Institutions, Institutional Change and Economic Performance* (New York: Cambridge University Press, 1990), pp. 32-35.

3 THE CASE OF CHINA'S TRANSITION TO A MARKET ECONOMY

The case of China's transition from socialism lends itself nicely to the testing of the hypotheses formulated above. In 1978, the year when reforms started, private entrepreneurship was illegal and virtually non-existent. Yet only a few years later a vibrant and entrepreneurial private economy had emerged.

Before 1978 the Chinese state dominated the realm of commerce. The state acted as buyer or seller of goods, or even both. Private consumers obtained a majority of products from the state and also sold the fruits of their work to the state – be they peasants working for collective farms or employees of state-owned enterprises.²²

This changed after 1978, when the central government gradually scaled down its direct involvement in commerce. The centralized command economy was gradually replaced by a more decentralized system of commerce. The emergence of private traders was an important part of this process. Soon after 1978, millions of small family businesses mushroomed all over China, driving both economic growth and structural change. The absolute majority of these were small-scale family firms.²³ By 1985 at least 6,7 million such household firms employed 15 million people; by 1990, 12.8 million firms employed 33.8 million people.²⁴ Most of these firms engaged in retail trade, buying and selling everything from light industrial products to vegetables on the fledgling markets that emerged after 1978. This represented the first sign of private entrepreneurialism since the socialization of the Chinese economy in the mid-1950s.

At the same time traditional markets began to grow rapidly, measured both in the number of markets and trade volumes. These traditional markets had for centuries been an integral part of China's commercial landscape. Before the socialization of the Chinese economy in the mid-1950s, the vast majority of people in both rural and urban areas had access to at least one such market. Beginning in the mid-1950s, however, private commerce was replaced by a

²² For an overview of the pre- and post-1978 systems of commerce, see Andrew Watson, "The Reform of Agricultural Marketing in since 1978," in *The China Quarterly*, No. 113 (Mar., 1988), pp 1-28.

²³ In official data, non-state owned enterprises are divided into three ownership categories: Collective (*jiti*), large private (*siying*) and household-run (*geti*).²³ While the control rights of collective firms in many cases are unclear (some were purely collective, others were collective in name but run like private enterprises), the latter two – private and household firms – were private in both name and reality. The only difference between "private" and "household" firms is in size: Firms with seven or fewer employees were called "household firms" (*getihu*) while those with more than seven were called "private firms" (*siying qiye*).²³ Also, large private firms were not legal during the early reform process. This thesis is exclusively concerned with the smaller *getihu* – a term that I will translate into "household business" or "individual firm". I will use these terms interchangeably. See Yasheng Huang, *Capitalism with Chinese Characteristics* (New York: Cambridge University Press, 2008), p. 22.

²⁴ Township and Village Enterprise Bureau, Ministry of Agriculture 农业部乡镇企业局, Township and Village Enterprise Statistical Material 1978-2002 *Zhongguo Xiangzhen Qiye Tongji Ziliao 1978-2002 乡镇企业统计资料 1978—2002 年* (Beijing: Zhongguo Nongye, 2003), pp. 110-112. [Henceforth as TVE Statistics]

system of centralized economic planning. Traditional markets were subjected to strict regulations and restrictions, and were in some areas banned during a few periods. After 1978, when restrictions on markets began to be lifted, the number of markets quickly recovered and eventually reached unprecedented levels.

The relationship between household entrepreneurship and traditional markets is explained in the sections below. First, in Section 3.1 provides an overview of the boom in household enterprises that took place after 1978. After that Section 3.2 elaborates the role of traditional markets in the Chinese economy. The description of markets is divided into three time periods: the pre-socialist, socialist, and reform periods. The purpose of this is to explain not only the immediate institutional environment that existed in 1978, but also the historical background against which reforms were taking place. As will be shown below, the development that took place after 1978 in many ways resembled the way in which China's economy functioned before the mid-1950s. It is therefore important to understand the institutions of pre-socialist China in order to fully grasp the institutional context of the reform period.

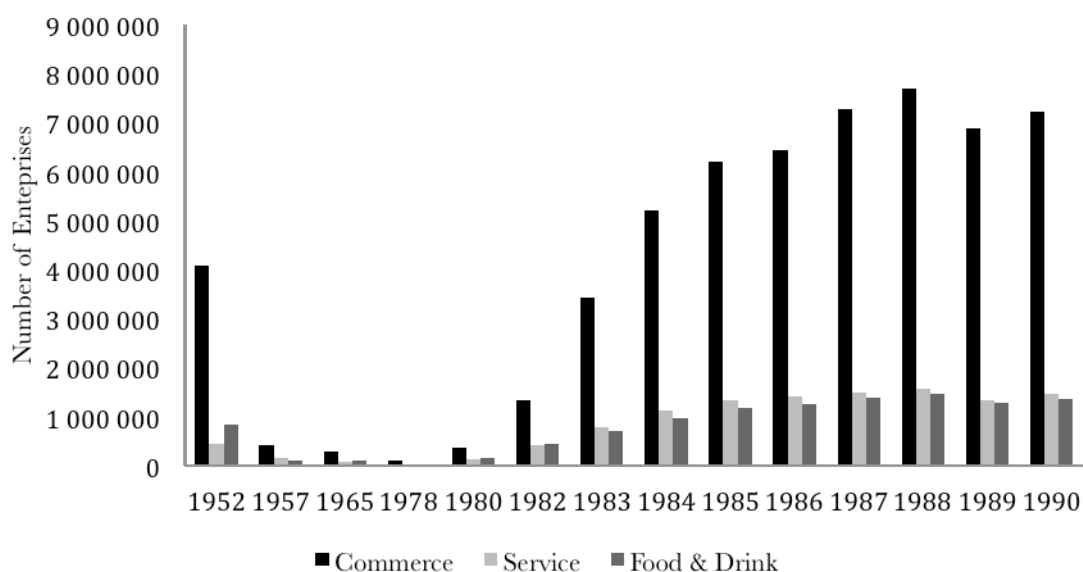
3.1 Household Business after 1978

China enjoyed a sustained entrepreneurial boom during the 1980s. With the lifting of many economic restrictions after 1978, millions of small family businesses entered the marketplace during the early reform period.

What was the mainstay of these firms? The data in *China Statistical Yearbook* (CSY) for various years paint a clear picture: the absolute majority of household firms (*getihu*) were during the first decade of reforms engaged in retail trade (see Figure 3.1.1 below). In 1952, before the Chinese state began to make large-scale interventions in the economy, there were more than 5.2 million individual enterprises in the sectors of commerce, service, and food and drink. The majority of these – 4.2 million – were engaged in retail trade. During the subsequent decades of harsh anti-commercial policies, all three sectors shrunk to near non-existence: In 1978, only 108,000 household firms were engaged in commerce – a precipitous drop from the 4.2 million in 1952. Nonetheless, the household sector recovered quickly as soon as reforms started. From the all-time low in 1978, the number of household firms engaging in commerce had by 1984 recovered completely and surpassed the 1952 figure. As before socialization, most entrant firms were engaged in commerce.

Figure 3.1.1. Number of Individual Enterprises (getihu) in Three Key Sectors, 1952-1990

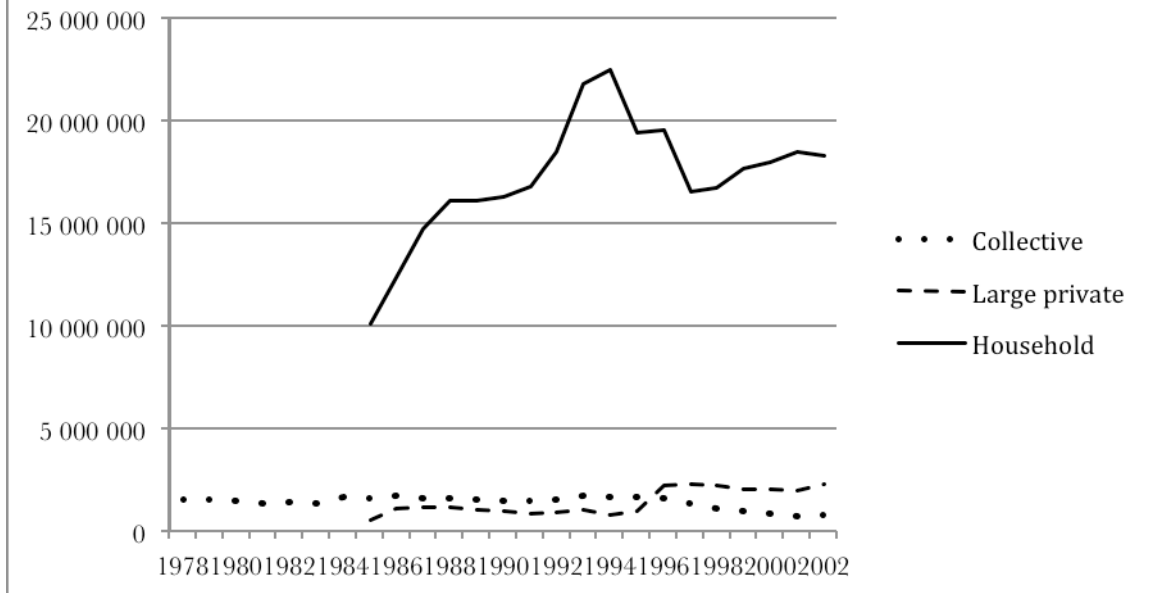
Sources: 1952-78 & 1983-84: China Statistical Yearbook (CSY) 1985, p. 487; 1980, 1987-1990: CSY 1993, p. 590; 1982: CSY 1984, p. 376; 1985-86: CSY 87, p. 524.



Furthermore, as is shown in Table 3.1.2, the absolute majority of entrant firms during the early reform period were household-run. During the 1980s household firms could only employ seven people, while “private firms” – a category that was added in 1985 – were free to employ more people. Both “private” and “household” firms were private and the only difference was in size.

Figure 3.1.2. Number of Non-State Run Enterprises of Different Ownership Categories, 1978-2002

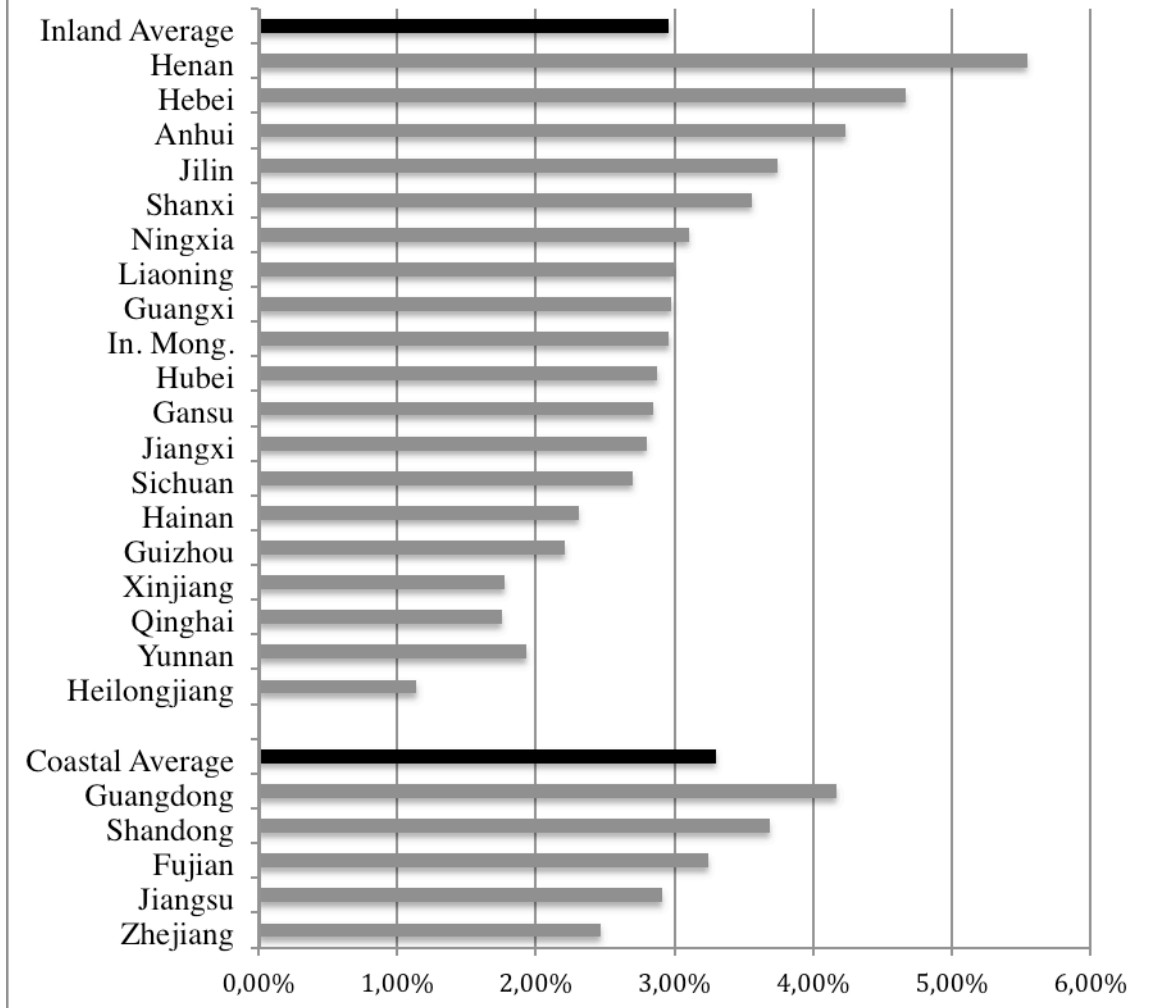
Source: TVE Statistics, p. 4



In Figure 3.1.3 the number of household firms per capita in all provinces is shown. The average value for the five coastal provinces (3,3 percent) is slightly higher than the inland average (2,95 percent). What is most striking, however, is the difference within the inland sample: The average value of Xinjiang, Qinghai, Yunnan, and Heilongjiang – four remote provinces on the border of China – is 1,65 percent. The average value for the four provinces with the highest values, Henan, Hebei, Anhui, and Jilin – all located in central China, is 4,55 percent, far higher than the coastal average. Thus, while there seems to be no strong coastal bias, it is possible to identify a greater difference between central and peripheral provinces.

Figure 3.1.3. Number of Household Entrepreneurs per capita 1990,
Coastal vs. Inland provinces

Source: TVE Statistics, pp. 110-112



3.2 Markets Before and After 1978

Markets and market exchange have a long history in China. Traditional China (before 1949) had a well-developed system of rural and urban markets that allowed farmers to market both agricultural products (such as grains) and sideline products like handicrafts. These traditional markets had for centuries been an integral part of China's commercial landscape. According to William Skinner, agricultural China supported 58,000 markets in 1949.²⁵ Virtually every peasant lived within a half-day's walking distance from at least one market.

²⁵ William Skinner, "Marketing and Social Structure in Rural China: Part II," in *The Journal of Asian Studies*, Vol. 24, No. 2 (Feb. 1965), p. 228.

This institution suffered after the socialization of the economy in the mid-1950s. As a result of restrictive and anti-commercial policies the number of markets plummeted to 33,000 in the mid-1960s, while the markets that remained in operation were strictly regulated. Nonetheless, the institution of traditional markets – although severely weakened – never disappeared completely, and after 1978, when restrictions on markets began to be lifted, the number of markets quickly recovered and eventually reached unprecedented levels. Understanding the institution of traditional markets is crucial to understanding the nature of private commerce and entrepreneurship in traditional China.

3.2.1 MARKETS IN TRADITIONAL CHINA

The economy of traditional China was heavily rural in nature, with the absolute majority of people living in the countryside. But the rural economy was not entirely agrarian. The bulk of total output originated from agriculture, but the majority of *non-agricultural* production was also conducted in rural areas. Aside from *agriculture*, sericulture, aquaculture, cotton culture, and many other economic activities were widespread in rural areas. Historian Madeleine Zelin writes that the “overwhelming majority of all production, processing, and manufacture during the first half of the Qing took place in rural areas”²⁶ and that “one of the main characteristics of Qing market economy was the integration of manufacture and agriculture and the degree to which that economy was driven by individual producers participating in the marketplace on their own behalf, exchanging small amounts of agricultural and handicraft goods.”²⁷

Does this apply to the economy of the early 1950s? When the Communist Party took power in 1949, agriculture still contributed to almost half of China’s GDP and a significant portion of manufacturing, which in total made up 26 percent of GDP, also took place in the countryside.²⁸

The integration of manufacturing and agriculture was facilitated by a system of periodic and permanent markets. These traditional markets, called *jishi* in Chinese, functioned both as a vehicle of *horizontal* exchange between peasants and as a vehicle of *vertical* exchange between regions. At the market peasants could sell what they didn’t need and buy what they didn’t

²⁶ Madeleine Zelin, “The Structure of the Chinese Economy During the Qing Period: Some Thoughts on the 150th Anniversary of the Opium War,” in Kenneth Lieberthal et al. (eds.), *Perspectives on Modern China: Four Anniversaries* (Armonk, NY: M.E. Sharpe, 1991), p. 42.

²⁷ *Ibid.*, p. 38.

²⁸ Dwight Perkins estimates that 47,9 percent of China’s GDP came from agriculture in 1952. The share of manufacturing was 26,2 percent, of which 35 % was “traditional.” Dwight H. Perkins, “Growth and Changing Structure of China’s Twentieth-Century Economy,” in Dwight H. Perkins (ed.), *China’s Modern Economy in Historical Perspective* (Stanford: Stanford University Press, 1975), p. 117.

have. Markets allowed peasants to specialize and thereby increase incomes.²⁹ Through vertical exchange between markets at different levels and in different areas, whole areas could also specialize in certain products.

A traditional market is typically a physical space in a small town with a small permanent population, where thousands of peasants and traders gather on a regular basis (in most cases once every few days) to exchange goods. Market towns could be administratively defined as either villages or towns. Many towns and smaller cities were entirely dependent on their markets. To denote this kind of market I will use the terms *traditional market*, *periodic market* and *jishi* interchangeably.

Because of a low density of demand, most markets were only open once every few days. These basic markets did in turn support a system of higher-level markets. Some goods were not in enough demand to be sold at basic markets and were only sold at these higher-level markets. Market days were scheduled so as to minimize friction between basic-level markets and higher-level markets. This is visualized in Figures 4.2.1 and 4.2.2 below; in Figure 3.1.1, all the peasants of villages A1 to A5 all go to Basic Market A. In Figure 3.1.2, markets A to E all belong to the same Intermediate Market. Thus, the villagers of villages A1-A5 would for their daily needs only visit Basic Market A, and would for special occasions (or for goods unavailable at the basic market) venture to Intermediate Market X. Also, on any given day only *one* of Basic Market A-E are open. Thus, an itinerant merchant operating within Intermediate Marketing System X can visit every basic market during a market cycle, as well as the intermediate market.

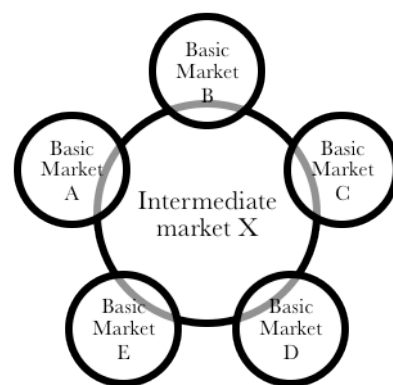
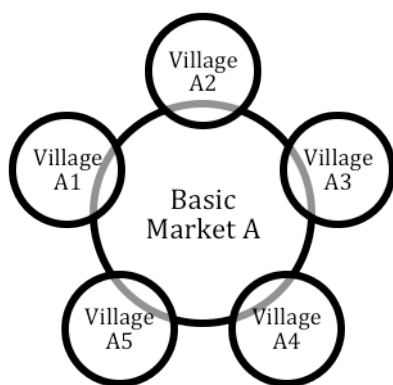


Figure 4.2.1. Basic Marketing System A. Figure 4.2.2. Intermediate Marketing System X.

Most markets were scheduled around the *xun* (旬), a period of ten days. Periodic markets opened between one to ten days every *xun*. For example, the marketing system in depicted in Figure 4.1.2. could be scheduled as in Table 4.2.1. below. The numbers (1-5, 2-6 etc.) denote

²⁹ Perkins, *Agricultural Development in China 1368-1968* (Edinburg: Edinburg University Press, 1969), p. 112.

which day in the *xun* the market opens. This means that Basic Market B opens on the second and sixth day every *xun* but is closed on other days.

In this example, Markets A, C, and E are smaller due to lower demand and thus only opens one day every *xun*. Intermediate Market X, being the largest market, opens three days every *xun*. In this fashion, an itinerant trader operating in this marketing system can visit every market during any given marketing cycle.

Market name	Schedule
Basic Market A	1
Basic Market B	2-6
Basic Market C	3
Basic Market D	4-8
Basic Market E	9
Intermediate Market X	5-7-10

Densely populated provinces could support thousands of markets - Shandong province had in the Republican era more than 4,000 markets - while the mountainous and more sparsely populated Shanxi province only had 800 markets.³⁰

The institution of periodic marketing has a long history – many places have markets that date back more than 1000 years³¹ – but they did not become widespread across the whole nation until the Ming (1368-1644) Qing (1644-1911) dynasties, finally peaking during the Republican era before the war with the Japanese broke out (1911-37).³² At that point at least one market was within walking distance to nearly every peasant in agricultural China.³³ The growth in market activity is reflected both in the growing number of markets and changes in markets schedules (i.e. more market days per *xun*). In most places, the basic structure of market schedules was formed during the Ming and Qing periods and does in many cases remains intact today.³⁴

Regional differences in market arrangements were big. While periodic markets remained an important feature of the North China countryside well into the 20th century, marketing patterns in East China had developed along a slightly different path. In Jiangnan – the

³⁰ Gong Guan 龚关, *Mingqing zhi minguo shiqi huabei jishi de jiqi fenxi* 明清至民国时期华北集市的集期分析 [An Analysis of Market Schedules at Traditional Markets in Northern China During the Ming, Qing, and Republican Periods], in *Zhongguo shehui jingjishi yanjiu* 中国社会经济史研究, No. 3, 2002, p. 43.

³¹ Fan Shuzhi 樊树志, *Mingdai jishi leixing yu jiqi fenxi* 明代集市类型与集期分析 [An Analysis of Ming Dynasty Market Types and Market Schedules], in *Zhongguo jingjishi yanjiu* 中国经济史研究, No. 1, 1992, p. 65.

³² Gong Guan, *Mingqing zhi minguo shiqi huabei jishi de jiqi fenxi*, p. 42.

³³ Skinner, “Marketing and Social Structure in Rural China: Part I,” in *The Journal of Asian Studies*, Vol. 24, No. 1 (Nov. 1964), p. 6.

³⁴ Gong Guan, *Mingqing zhi Minguo shiqi huabei jishi de jiqi fenxi*, p. 43.

triangular area south of the lower reaches of the Yangzi River, today constituted by southern Jiangsu, eastern Anhui, and north Zhejiang – many periodic markets had by the 19th century evolved into permanent markets due to the high density of demand and the high degree of economic specialization.³⁵ This also occurred to some extent in a few areas in Shandong, where towns and villages that were located along the Great Canal evolved into permanent market towns.³⁶

In North China the use of cash crops – such as soybeans, cotton, and peanuts – increased markedly during the first half of the 20th century. In Hebei 3.91 percent of the total acreage was devoted to cotton in 1914, and by the mid-1920s this share had increased to 7 percent. The acreage devoted to soybeans increased to 18 percent from 4 percent during the same period. Similar changes took place in Shandong and Henan, two other northern provinces.³⁷ Some areas with convenient water transportation and good soils specialized to a remarkable degree, devoting as much of 50 to 80 percent of total acreage to cotton.³⁸

Since these areas grew much more cotton than there was local demand for, producers were dependent on specialized “cotton markets” to sell their products to other areas. In terms of market schedules these specialized markets functioned as regular periodic markets with interlocking market days, enabling cotton merchants to visit every market in every 10-day period (*xun*) in a given area.³⁹

Cash crop production means reliance on markets. In many parts of China whole villages and large areas engaged in intensive cash cropping, evidencing the maturity of markets for cash crops and cereals. Whole areas south of the lower reaches of the Yangzi River (Jiangnan) were dependent on trade with other areas for food supply. Periodic markets promoted intra- and inter-regional trade and economic specialization during the last centuries before 1949.

³⁵ Gong Guan 龚关, *Mingqing zhi Mingguo shiqi Huabei jishi de bijiao fenxi – yu Jiangnan, Huanan dengdi de bijiao* 明清至民国时期华北集市的比较分析—与江南、华南等地的比较 [A Comparative Analysis of Traditional Markets in North China, Jiangnan and South China], in *Zhongguo shehui jingjishi yanjiu* 中国社会经济史研究, No. 3, 2000, p. 31.

³⁶ Xu Tan 许檀, *The Development of Commodity Economy in Shandong Province during Ming and Qing Dynasties* 明清时期山东商品经济的发展, pp. 110-183.

³⁷ Cong Hanxiang 从翰香, *Cong quyue jingji de jiaodu kan qingmo minchu Huabei pingyuan jiluyu sansheng de nongcun* 从区域经济的角度看清末民初华北平原冀鲁豫三省的农村 [Viewing the countryside of Hebei, Shandong, and Henan from a regional-economic perspective], in *Zhongguo jingjishi yanjiu* 中国经济史研究, Vol. 2 (1988), p. 114.

³⁸ *Ibid.*, pp. 114-115.

³⁹ Xu Tan, *The Development of Commodity Economy...*, pp. 210-213.

3.2.2 MARKETS UNDER SOCIALISM

Traditional markets were during the Maoist period (1949-1978) variously seen as a necessary evil or an abomination that should be eliminated at any price. The most dramatic anti-commercial measures were taken during the Cultural Revolution (1966-76). Called “the tail of capitalism” and “a hotbed of capitalism,” the institution of periodic marketing was deemed a relic of the “feudal” past that China could do without.⁴⁰ The Communist Party carried out policies to restrict private commerce and traditional marketing. As a result the number of markets dropped to an all-time low in 1977 (see Figure 3.3.1 below). One example of the anti-commercial environment of the time is a 1975 stipulation made by the Revolutionary Committee of Guoxiang People’s Commune, Suzhou, which stated that:

*Commune members may only produce and market in their private capacity. Collective enterprises are absolutely forbidden to market agricultural sideline products. Products that are sold on the market may only be sold at the reference price set by the state; it is forbidden to drive up prices. Trade may only be conducted at designated places; private trade at other places is forbidden.*⁴¹

Some areas went as far as forbidding peasants to go to the market altogether. In 1976 provincial authorities in Shanxi tried to eliminate and replace traditional markets, calling them a “capitalist monstrosity”. Local authorities set up sentry points to prevent peasants from going to markets and peasants that were caught with sideline products on their way to the market could be reprimanded, fined or even get their products confiscated. This was euphemistically called “replacement” (*qudai*).⁴²

In 1977, the year before reforms started, China had 29,882 marketplaces,⁴³ almost 30,000 thousand less than in 1949.⁴⁴ This decline in the number of markets may understate the true extent of the decline in rural commerce, since the markets that remained in operation were put under strict regulation and witnessed declining trade volumes.⁴⁵

⁴⁰ Zhang Wufeng 张务锋 and Wang Chuanxin 王传新, “Shandong sheng jishi maoyi zhuangkuang de diaocha yu sikao 山东省集市贸易状况的调查与思考 [Thoughts on a Survey of *Jishi* Trade in Shandong Province],” in *Shangye jingji yu guanli* 商业经济与管理, No. 6, 1991, pp. 27-30.

⁴¹ Wu County Gazetteer, in Suzhou Gazetteer [*Suzhou difangzhi*], (Entry for Dec. 15th 1975), available at <http://www.dfzb.suzhou.gov.cn/zsbl/1539227.htm>

⁴² Niu Bingzhi 牛秉智 and Chu Gaofeng 褚高峰, *Jishi maoyi zhan xinmao – Pingyao liu xianshi jishi maoyi qingkuang diaocha* 集市贸易展新貌—平遥六县市集市贸易情况调查 [The New Face of *Jishi* – A Survey of the Situation in the Markets of Six Counties and Cities in Shanxi], in *Shanxi Caijing Xueyuan Xuebao* 山西财经学院学报, No. 0, 1979, p. 75.

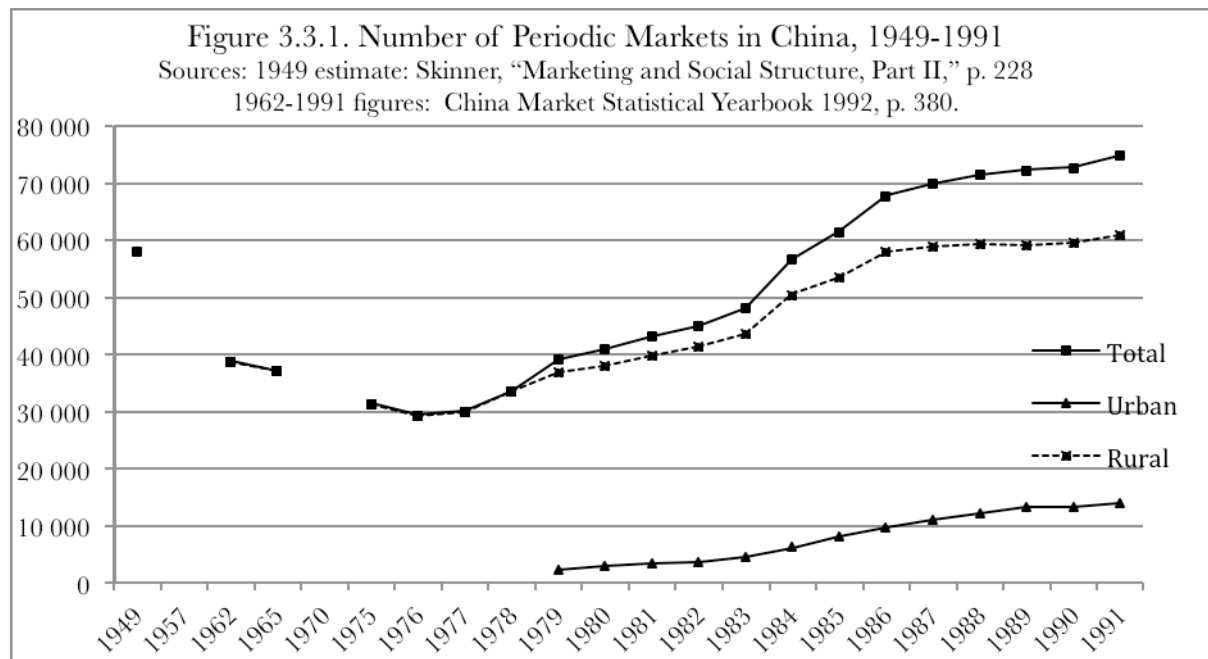
⁴³ China Market Statistical Yearbook 1992, p. 380.

⁴⁴ Based on Skinner’s estimate of 58,000 market towns in 1949, see William Skinner, *Marketing and Social Structure in Rural China: Part II*, p. 228.

⁴⁵ See William Skinner, “Rural Marketing in China: Repression and Revival,” in *The China Quarterly*, No. 103 (Sep., 1985), pp. 404-5.

3.2.3 TRADITIONAL MARKETS AFTER 1978

Marketing activity began to recover immediately after reforms commenced in 1978 and by 1985 the number of markets had already reached 61,337. Many urban markets had also emerged: From a mere 2,226 in 1979 to 8,013 in 1985.⁴⁶ This pattern is shown in Figure 3.3.1 below.



Private trade was liberalized only gradually. During the four years after 1978, private trade took place without full official sanction. Long-distance trade using tractors, trucks or boats was still illegal and the number of goods that could be traded legally was limited. In 1983 the State Council issued Document 1, which called for deepened market liberalization and less market control. Many activities that were sanctioned in Document 1 had already been widespread for several years. Markets had already grown for several years and in 1982 “70-80 per cent of goods traded were being resold after having been purchased elsewhere. For small cities and rural areas the estimates were 50-60 per cent and 20-30 per cent.”⁴⁷ Traditional markets were no longer simply a vehicle for horizontal exchange between peasants, but had evolved into a complex system of vertically integrated markets. According to Andrew Watson, “To a

⁴⁶ All of these figures are from China Market Statistical Yearbook 1992, p. 380.

⁴⁷ Andrew Watson, “The Reform of Agricultural Marketing since 1978,” in *The China Quarterly*, No. 113 (Mar., 1988), p. 16.

significant extent this represented the gradual re-emergence of the interlocking hierarchy of marketing areas that were a feature of the pre-modern Chinese economy.”⁴⁸

In February 1983 the State Council adopted new regulations for the management of markets. This document defined markets as a “component part of the unified socialist market.” The new regulations allowed individuals, collectives and state units to participate in the market. They also allowed private individuals to engage in long-distance trade using tractors, trucks, and boats.⁴⁹

The revival of *jishi* is treated in many Chinese academic articles of the late 1970s and early 1980s. The overwhelmingly positive tone of these articles – written only a few years after the Cultural Revolution ended – constitutes a major shift from the critical and hostile tone just a few years earlier. A 1983 article in *Dangdai Caijing* (Contemporary Finance and Economics) discusses the markets of Nanchang, the capital of the southern province of Jiangxi. It concludes that more than 90 percent of market transactions (measured in value) were in agricultural sideline products (*nongfu chanpin*), of which many were traditional handicrafts such as rainwear made of straw and bamboo crafts. According to the author, “the opening of markets has increased the income of the peasants. Nanchang’s commune members now get around forty percent of their income from selling privately produced sideline products at the market.”⁵⁰

Another article, from 1980, describes the situation in Yuncheng County, Shanxi province:

*In 1979, only 3 percent of consumer goods [measured in value] were traded on markets [jishi]; one year later this figure had already reached 8 percent. [...] The facts tell us, state-owned firms, collective enterprises, and trade at traditional markets are like the blood vessels of a human body; big and small, they are all intimately connected, made to match each other.*⁵¹

Another article, from 1982, describes in detail the level of specialization at *jishi* markets: “At present, there are markets for products from the agricultural, forestry, husbandry, fishery, and industrial sectors. Handicrafts, secondhand clothes and goods, flowers, birds, fish, and insects etc. are also sold at markets.” These specialized markets are strikingly similar to those

⁴⁸ Watson, p. 17. See also Skinner, “Repression and Revival,” pp. 393-413.

⁴⁹ Watson, pp. 13-14.

⁵⁰ Cai Xu 蔡旭, Guan er bu si, Huo er bu luan – Nanchang xian jishi maoyi de diaocha baogao 管而不死 活而不乱—南昌县集市贸易的调查报告 [Exercise Moderate Control to Achieve a Dynamic and Orderly Market: A Survey of *Jishi* Trade in Nanchang County], in *Dangdai Caijing* 当代财经 [Contemporary Economics and Finance] (No. 1, 1983), pp. 119-20.

⁵¹ Wang Zhangbao 王彰宝, Zhao Zhanguo 赵瞻国, Yao Sanguan 姚三管, Zhang Heng 张恒, Yuncheng nongcun jishi maoyi diaocha 运城县农村集市贸易调查 [A Survey of Rural *Jishi* Trade in Yuncheng County], in *Shanxi Caijing Xueyuan Xuebao* 山西财经学院学报, No. 3, 1980, p. 34.

of late traditional China. It further explains that, in the whole country, approximately 70 percent of marketed goods originate from the private plots of peasants (as opposed to collective farm land).⁵² The author also describes the price movements at rural markets, with prices for many goods peaking around every Chinese New Year and falling shortly thereafter,⁵³ indicating that state intervention in prices was limited.

All articles written after 1978 refer to the restrictive policies of the socialist period as wrong and “misguided.” Official policy documents and statements by top leaders also reflect the softened attitude toward traditional markets. For example, the reformist vice-premier Wan Li stated in 1982 that “peasants are allowed to engage in trade in their private capacity. They can enter the cities, leave their counties and provinces.”⁵⁴ In February 1983 the State Council issued “Regulations on the management of rural and urban markets,” which allowed collective, private and household enterprises to directly sell their goods at markets.⁵⁵ Documents like these, and many other, set the tone of the 1980s and marked a sharp difference from the anti-commercial attitude of Maoist period. In essence the central leadership signaled to local authorities that traditional markets were ideologically acceptable; that local leaders need not fear repercussions for supporting the development of local markets.

3.3 Conclusion: The Institutional Environment of China’s Early Reform Period

Barry Naughton has written about that traditional Chinese economy that “Dense population and transport networks supported a highly commercialized pre-modern economy, including sophisticated institutions, competitive markets, and a small-scale “bottom-heavy” economy.”⁵⁶

To a significant extent the same can be said about the economy after 1978. Commercial activity was once again – after 30 years of state-led commerce – centered on small market towns, linking different parts of the country into integrated product markets. Although many restrictions were still in place – large private firms illegal until 1985 – peasant households were after 1983 free to engage in long-distance trade. All in all, the economic and institutional environment in the 1980s was in many ways reminiscent of the competitive environment of the Chinese countryside in pre-socialist times.

⁵² Wu Shizhong 鄂时钟, *Jishi maoyi ying jianchi xieshang yijia* 集市贸易应坚持协商议价 [The Price Mechanism Should be Upheld at *Jishi*], in *Beijing Gongshang Daxue Xuebao (Shehui Kexueban)* 北京工业大学学报 (社会科学版), No. 3 (1982), p. 49.

⁵³ *Ibid.*, p. 50.

⁵⁴ Wan Li (Nov. 5, 1982) *Jin yi bu fazhan yijing kaichuang de nongye xinjunian* [Further Develop the New Situation in Agriculture].

⁵⁵ See State Council, *Guowuyuan guanyu fabu “Chengxiang jishi maoyi guanli banfa” de tongzhi* [国务院关于发布《城乡集市贸易管理办法》的通知] (February 5, 1983)

⁵⁶ Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: MIT Press, 2007), p. 36.

4 EMPIRICS

4.1 Data and Method

To test the hypotheses above I will use data from *China City Statistical Yearbook* (CCSY) 1985 (with data for 1984) and 1988 (data for 1987). CCSY covers 295 prefecture-level cities in 28 provinces of China.⁵⁷ Prefecture-level cities are one administrative level below provinces. A prefecture-level city is an administrative area rather than a “city” in the sense of an urban settlement: A prefecture-level city usually consists of an urban area *and* a large rural area (which in turn may contain several smaller cities and towns). For example, Hefei Prefecture, which is the capital of Anhui Province, has three “urban areas” and 154 towns and townships (typically rural areas).⁵⁸ As Table 5.1 shows, the 295 prefecture-level areas in *China City Statistical Yearbook 1985* contain 15,974 towns and townships, most of which would be defined rural areas.

Prefecture-level city	Urban area (<i>chengqu</i>)	Suburb (<i>jiaoku</i>)	City-administered county (<i>shixiaxian</i>)	County-administered towns- and townships (<i>xianxiaxiang, zhen</i>)
295	594	406	544	15,974

4.1.1 Method

Ordinary least squares (OLS) are used to test the two hypotheses. The models is specified as follows:

$$y_i = X_i\beta + v_p + e_i$$

in which,

y_i denotes the level of entrepreneurship in prefecture-level city i ,

X_i is a set of independent variables in prefecture-level city i ,

v_p is a regional dummy variable for province p and e_i denotes residuals.

⁵⁷ The number of prefecture-level areas covered differs from year to year. The 1985 CCSY covers 295 prefecture-level areas.

⁵⁸ China City Statistical Yearbook 1985, p. 29.

4.2 Variables

4.2.1 Dependent Variables

The dependent variable used to assess the level of entrepreneurship in a given prefecture-level city is:

*Number of household firms engaging in retail trade per capita 1987.*⁵⁹ Private traders, registered as household firms, embodied the entrepreneurial spirit that emerged after 1978. Household firms were engaged in other kinds of economic activity as well, but as is shown in Table 4.1.2 above, the absolute majority of household entrepreneurs were retail traders. This simple fact makes it suitable use retail traders as a proxy for entrepreneurial activity.

4.2.2 Independent Variables

The independent variables can be divided into *variables of interest* and *control variables*. The former are used to test the two hypotheses, while the latter are used to control for other factors that potentially affect the level of entrepreneurship.

Variables of interest:

*Trade turnover at traditional markets (yuan per capita) 1984.*⁶⁰ This variable is a broad measure of the level of market activity. It captures both the notion of marketization and competition. Areas with a higher amount of per-capita trade are likely to have more well-developed markets (with more reliable price signals), as well as more intense economic competition.

*Squared trade turnover at traditional markets (yuan per capita) 1984.*⁶¹ This variable tests for market saturation. Opportunities are limited in number and markets become saturated when the number of profitable opportunities becomes increasingly scarce and competition intensifies. If the coefficient of this variable is negative it means the relationship between marketization and entrepreneurship is non-linear, and that the *rate of growth* in the number of entrepreneurs decreases as marketization continues.

⁵⁹ CCSY 1988, pp. 383-391.

⁶⁰ CCSY 1985, pp. 286-293.

⁶¹ CCSY 1985, pp. 286-293.

*Market transition index for 1984.*⁶² This index is constructed by dividing trade turnover at traditional markets (*chengxiang jishi chengjiao*) by the total amount of retail sales (*shehui shangpin lingshou zong'e* – “social retail”). Since the majority of *non-market trade* consists of goods provided through state redistribution, this index captures the extent of the state’s involvement in retail sales in a given area.

Control variables:

*Number of household firms engaging in retail trade per capita 1984.*⁶³ The number of entrepreneurs per capita in 1987 (the dependent variable) is likely to be affected by the number of entrepreneurs per capita in 1984.

*Industrial output (yuan per capita) 1984.*⁶⁴ Household firms are likely to benefit from a strong local industry, both because of spillover effects (higher demand for certain products or production inputs) and higher incomes of local residents.

*Paved roads (km per capita) 1984.*⁶⁵ Commerce activity is closely connected to transportation and is likely to increase with better roads.

27 Provincial dummy variables. Geographical conditions vary across provinces, something that is likely to affect commercial activity. Furthermore, it is possible that statistical bureaus at provincial level gathered the data in CCSY 1985, and since different statistical authorities may have different methods of collecting data this may have resulted in a geographical sampling bias. The data in CCSY 1985 are from 28 different provinces (one dummy variable excluded).

Population is a key variable that certainly affects the *total amount* of commercial activity. Places with more people are more likely to have bigger markets and more household firms. However, since population is highly correlated with all independent variables (market turnover, industrial output, and paved roads), including *population* as a separate control variable would lead to unacceptable levels of multicollinearity.⁶⁶ Therefore I only use *per capita*

⁶² CCSY 1985, pp. 286-293.

⁶³ CCSY 1985, pp. 301-308.

⁶⁴ CCSY 1985, pp. 83-90.

⁶⁵ CCSY 1985, pp. 263-270.

⁶⁶ For example, the correlation coefficient between population and trade volumes is 0.87; for paved roads 0.60; industrial output 0.63.

variables (for both dependent and independent variables) and exclude population as an independent variable from the model.

Thus, what the regression model is testing is the relationship between the number (or employees) of household firms *per capita* and the *per capita* equivalent of market turnover, industrial output, and paved roads.⁶⁷ In other words, the model answers the question “Do areas with a higher traditional market turnover per capita also have more household firms active in commerce (per capita)?”

Variables	Mean	Std. dev.	Min	Max
Household firms engaging in retail trade per capita 1987	0.00733	0.0031	0.0019	0.0247
Household firms engaging in retail trade per capita 1984	0.00517	0.00226	0.00082	0.0187
Trade volumes at traditional markets (yuan per capita) 1984	59.11	43.30	7.40	326.56
Market transition index 1984	12.8	7.31	1.4	41.9
Industrial output (yuan per capita) 1984	1222	1153	92.5	9932
Paved roads (km per capita) 1984	125.9	226.5	4	2656

4.3 Results

The regression results are reported in Table 4.3.1 and 4.3.2 below. The two models have high explanatory powers, with R-squared values of 0.62 and 0.60. In both models the main variables of interest (1984 market turnover per capita and the 1984 market transition index) are significant ($p \approx 0$ and $p = 0.021$) with positive coefficients. The first model is divided into Model 1.1 and 1.2. In Model 1.2 the squared value of market turnover is used to test for market saturation. But since the coefficient of the squared variable is positive no evidence for market saturation is found.⁶⁸ In the discussion below I refer only to the results of Model 1.1.

The results of the first regression model (1.1) imply that, *ceteris paribus*, market turnover per capita in 1984 has a positive effect on the number of entrepreneurs active in trade three years later (1987). The result of the second model imply that, *ceteris paribus*, the extent of market transition (measured as the share of market trade in total retail trade) in 1984 has a positive effect on number of entrepreneurs per capita in 1987.

The size of the coefficients is positive but small. In the first model the coefficient for market turnover is 0.0000173, meaning that for every extra yuan of market turnover per capita, the

⁶⁷ Population figures for 1984 are from CCSY 1985, pp. 35-42.

⁶⁸ Since the correlation between the squared and non-squared values is too high (0.928) I am unable to test both variables simultaneously.

number of household firms per capita on average increases by 0.0000173. To judge the significance of this value it is helpful to revisit the descriptive statistics on the variables (taken from Table 4.3 above):

Variables	Mean	Std. dev.	Min	Max
Household firms engaging in retail trade per capita 1987	0.00733	0.0031	0.0019	0.0247
Trade volumes at traditional markets (yuan per capita) 1984	59.11	43.30	7.40	326.56
Market transition index 1984	12.8	7.31	1.4	41.9

The city with the lowest share of such firms had 1.9 firms per 1000 people, while the city with the largest share had 24.7 per 1000 people. According to the regression results, one extra yuan of market turnover would add 0.0000173 firms per capita, or 0.0173 firms per 1000 people. But one yuan is a small value: As is shown by the descriptive statistics above, the average turnover per capita in 1984 was 59 yuan, with a standard deviation of 43.3 yuan. The difference between the two cities with the highest and lowest market turnover is 319.16 yuan per capita. According to the regression results the difference in turnover between these two cities translates into 5.52 extra firms per 1000 people (0.0173 times 319.16), a real and tangible difference. The standard deviation of 43.3 yuan per capita translates into 0.75 firms per 1000 people.

In the second regression model the coefficient of the marketization index is 0.0000538. One extra percent in the marketization index (measured as the share of market trade of total retail trade in 1984) translates into 0.0000538 more firms per capita, or 0.0538 more firms per 1000 people. The standard deviation for the market transition index is 7.31, translating into 0.00039 firms per capita or 0.39 firms per 1000 people. The difference between the cities with the lowest and highest core is 40.5 percent, implying a difference of 0.00218 firms per capita, or 2.18 firms per 1000 people. However, with a p-value of 0.021 this variable is not as convincingly significant as market turnover.

The first control variable, firms per capita in 1984, is highly significant in both models, meaning that cities with more firms per capita in 1984 also had more firms per capita – *ceteris paribus* – in 1987. Industrial output per capita and the length of paved roads per capita are conclusively insignificant in both models. No direct conclusions can be drawn from the geographical dummy variables (not reported in the output tables). In both models only five provincial dummies are (weakly) significant. All of the significant dummy variables represent relatively poor inland provinces (Shaanxi, Yunnan, Ningxia, Jiangxi and Hubei) and have

negative coefficients. Although this may mean that inland provinces tend to have lower commercial activity it can also be due to sampling bias. Furthermore, since most provinces are (highly) insignificant, these results provide no conclusive evidence of geographical trends.

Both hypotheses are confirmed by the results. Holding other variables constant, areas with more market trade per capita do on average have more household firms engaging in retail trade, and areas with a larger share of market transactions in total retail trade also have more household retail trade firms per capita.

Table 4.3.1		
Regression Results for Hypothesis 1		
	(1.1)	(1.2)
Number of commercial household firms per capita 1987		
Traditional market turnover per capita 1984	0.0000173*** (0.000)	
Squared value of market turnover 1984		5.15e-08*** (0.000)
Number of individual commercial firms per capita 1984	0.745*** (0.000)	0.795*** (0.000)
Industrial output per capita 1984	-3.79e-08 (0.774)	6.17e-10 (0.996)
Kilometers of paved road per capita 1984	-0.000148 (0.256)	-0.000138 (0.295)
Province	YES	YES
Constant	0.00349*** (0.000)	0.00382*** (0.000)
Observations	276	276
R-squared	0.624	0.614
Adj. R-squared	0.576	0.565

p-values in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4.3.2		
Regression Results for Hypothesis 2		
Number of commercial household firms per capita 1987		
Market transition index 1984	0.0000538** (0.0214)	
Number of individual commercial enterprises per capita 1984	0.857*** (0.000)	
Industrial output per capita 1984	1.22e-07 (0.372)	
Kilometers of paved road per capita 1984	-0.0000176 (0.895)	
Province	YES	
Constant	0.00286*** (0.000213)	
Observations	276	
R-squared	0.598	
Adj. R-squared	0.5475	

p-values in parentheses
*** p<0.01, ** p<0.05, * p<0.1

5 CONCLUSION

Retail trade, or commerce, played a crucial role in the development of the private sector in the early stages of China's reform process. Can this development be linked to the concurrent development of markets and the increased competitive pressure?

The results of the two regression models seem to confirm both hypotheses posed above. Prefecture-level cities with a higher market activity in 1984 had more private traders per capita in 1987, and cities in which a larger share of products were traded on markets (the extent of market transition) in 1984 did also have more private traders in 1987.

The economy of the Chinese countryside before the mid-1950s was both competitive and commercialized. The liberalization of markets after 1978 was in large parts a return to traditional patterns of commerce and competition. In 1952 there were at least 4,2 million household firms engaging in retail trade. While this figure dropped precipitously during the socialist period, the number of traders recovered rapidly after 1978 and by 1985 the number of traders had already reached unprecedented levels.

The empirical results presented here suggest that the boom in retail trade after 1978 was connected to the concurrent growth in traditional markets. In 1978 a *historically* well-developed system of markets was already in place, making the transition from state-led to private commerce smoother. The geographical layout of markets, evenly spread across the country with at least one market in reach of every person, also meant that the absolute majority of people – even in remote rural areas – had the *choice*, or *possibility* to participate in markets once given the opportunity after de-regulation. If individuals chose to participate in markets, they would be competing against other individuals in remote areas – thanks to the vertical integration of the traditional marketing system.

The results also suggest that the extent of a city's market transition – measured as the relative importance of market transactions – also affected number of commercial entrepreneurs.

Both results are in line with existing theories on entrepreneurship. The level of marketization in society increases when an increasing number of consumers and producers exchange an increasing number of goods on markets. When markets growth price signals will become increasingly reliable, providing entrepreneurs with inexpensive yet valuable information on economic opportunities.

The same is true for the relationship between the extent of market transition and the level of entrepreneurship in society. In a centrally planned economy there is no room for private entrepreneurship. Private trade was seen as a threat to the command economy and most forms of private trade were banned during the socialist period in China. With the gradual liberalization after 1978 – private long distance trade was made legal in 1983 – the leeway for private entrepreneurs to engage in trade was broadened.

The relationship between markets and entrepreneurship in China can also be discussed from a policy perspective. How could the Chinese government tolerate that millions of peasants started their own businesses outside of the command economy during the very first years of reform? Here the system of traditional markets may have played a crucial role. Since the periodic market was an institution *native to China*, it was an ideologically defensible alternative when compared to the “Western” concept of “free markets.” This is evident in the academic writings from the 1980s, quoted in the historical description in Section 4.2.3. Promoting a free market was in the late 1970s and early 1980s still ideologically unacceptable, but apparently scholars and governments officials were free to praise the virtues of *traditional* markets. Periodic marketing was even held forth as a *socialist way of commerce*. Apparently, supporting “socialist commerce” was ideologically safe.

Also, many Chinese-language academic articles from the 1980s argue that periodic markets enabled government authorities to protect consumers from “profiteers.” One article argued that “it is obvious that those who suspect periodic markets of being ‘capitalistic’ have no evidence for this standpoints.”⁶⁹ Furthermore, while the article describes the virtues of the periodic market – products of good quality at fair prices, a balance between supply and demand, no need to stand in line, an abundance of choices – without once using the word “capitalism” or mentioning the market mechanism that apparently was at work.⁷⁰

Official policy documents of 1980s stress the importance of ensuring a competitive but “organized” rural market; peddlers without a license were not allowed to conduct business. The post-1978 leadership disliked “chaotic” (*luan*) forms of private business but could accept forms of commerce that were at least under the supervision of the Party (such as the requirement for business licenses and that business should be conducted at designated places, conditions that were already inherent to the institution of periodic marketing).

All in all it is plausible to conclude that the boom in private commerce after 1978 would have been handicapped without the existence of the institution of periodic marketing. The

⁶⁹ Niu Bingzhi, *Jishi maoyi zhan xinmao*, p. 76.

⁷⁰ *Ibid.*, p. 76.

development in markets and commerce after 1978 was largely – it seems – a return to traditional patterns.

With respect to the empirical findings it is also plausible to conclude that the small-scale entrepreneurial boom of the early reform period was a result of China's transition toward a market economy, seen both as a withdrawal of the state's involvement in commerce and the growth of average market transactions.

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