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Economics of China's Joint-Stock Co-operatives

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Abstract

In the 1990s, a new ownership form called 'joint-stock co-operative' (*gufen hezuozhi*) became widely adopted in China's township and village enterprise sector. The promising dynamics and high adaptive ability of the new ownership form is in contradiction with the conclusions suggested by the existing literature on industrial co-operatives and other types of employee ownership. To show the adaptive efficiency feature of the new form, this paper identifies and analyses the mechanisms that are developed by China's joint-stock co-operatives to avoid excessive costs of collective decision making, to check insider control, to mobilize internal and external finances, to diversify risk, and to facilitate further evolving. By this way, the paper also sheds light on the roles that an alternative form of ownership and governance can play in an alternative institutional environment.

Keywords: joint-stock co-operatives; ownership and governance; China

JEL classification: D21, P13, P32

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It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change — Darwinian proverb

1. Introduction

Since 1992, China's township and village enterprises (TVEs) have conducted radical ownership restructuring on a large scale.[1] The dominant new ownership form adopted is 'joint-stock co-operative' (*gufen hezuozhi*). Other supplementary forms include selling, leasing, takeovers, mergers, and restructuring through Sino-foreign joint venture and corporatization. Joint-stock co-operatives (JSCs) are not only emerging in the TVE sector, but also in the state-owned enterprise (SOE) and private sectors.[2]

While the performance of JSCs may widely differ across individual enterprises. Their average performance in the TVE sector has been outstanding. First, the adoption of JSCs well meets the urgent need for TVE capitalization. In those provinces such as Zhejiang, Jiangsu, and Anhui, where have been the leading areas for TVE development, this adoption leads to an intermediate reduction of the debt/asset ratio by 10 per centage points at average. Second and more importantly, it is widely reported that those TVEs which have transformed themselves into JSCs have typically shown a significant improvement in performance, exhibited more dynamic features, and played the leading role in maintaining the TVE miracle (*TVE yearbook*, 1997: 299-306, 1998: 271-80; 1999: 4; Han and Zhang, 1993; Wang *et al.*, 1997).[3] According to a recent survey of TVEs in 16 townships conducted by Beijing Municipal Government (Beijing Survey Group, 2000), among all

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1 In this paper, TVEs refer to those rural enterprises with dominant community ownership, which include the traditional collective TVEs and those transforming themselves from collective ownership to the joint-stock co-operative form. In a similar vein, those private and household firms which adopted the JSC form are still put in the category of the private sector; and those state-owned enterprises (SOEs) which adopted the JSC form in the category of the SOE sector. By this categorization, we can relatively easily figure out the difference between those JSCs emerging in these three different sectors.

2 There is no official statistical data on the pace of adoption and distribution of new ownership forms across regions and years. However, some official surveys and research reports show us the scale and pace. By the end of 1996, of all TVEs, about 42 per cent in Shandong Province, 33 per cent in Jiangsu Province, 26 per cent in Zhejiang Province and 20 per cent in Guangdong Province had been transformed into JSCs (*TVE Yearbook*, 1997: 299). At the national level, a survey conducted by the Ministry of Agriculture indicates that about 33.5 per cent of TVEs had conducted various forms of ownership restructuring by the end of 1997; and 63.4 per cent of the restructured TVEs adopted the JSC form (*TVE Yearbook*, 1998: 271). Of small SOEs, about 50 per cent in Shandong, 60 per cent in Jiangsu, 40 per cent in Jilin and 30 per cent in Henan had been transformed into JSCs (Institute of Economic System Reform, 1997; You and Wang, 1997). The ownership restructuring process is led by the coastal provinces and TVEs are largely concentrated in these provinces as well.

3 During 1992-8, the TVE sector continued its growth miracle. TVE value added increased from 299 billion yuan in 1992 to 997 billion yuan in 1998, implying a real growth rate of 13.6 per cent per annum. In 1999, the growth rates of TVE value-added were still around 9 per cent although many small TVEs being transformed into private ownership and there continuously being the negative impact of deflation and export difficulties caused by East Asian economic crisis. Since 1995, industrial TVEs have produced more than 30 per cent of the national totals of industrial value-added, profits, and output; the TVE sector as a whole has created more than 15 per cent of China's GDP (Ministry of Agriculture, 1997; *Statistical Yearbook of China*, 1999: Table 9.2; *TVE Yearbook*, 1996: 102-8, 1999: 3; Xinhua Monthly, 6, 2000: 84).

restructured TVEs in the sample, those adopted JSCs have clearly over-performed all others including thoroughly privatized ones.

The property rights arrangements across JSCs are not uniform [4] as well, with variations across regions, industries, and the SOE, TVE and private sectors. In China's official statistics, the various forms of JSCs have not yet been clearly brought together in a single category. However, the stylized features of JSCs in the TVE sector can be spelled out as follows:

(a) managers and employees own a majority of the total share of the firm and shareholdings among them differ on the basis of paid subscriptions;

(b) the firm is closely held, implying that ownership shares are typically not freely marketable, although subscribed shares can be transferred within the community;

(c) the local government may hold a large part of shares in the name of community citizens;

(d) in addition to the shares held by the insiders and local government, there usually exist some (or even large) shares of outside equity which carry one vote per share;

(e) a representative form of governance is usually employed based on 'one-person-one-vote' or 'one-share-one-vote' or a combination of both voting principles;

(f) laying off co-operative members is common, and laidoff workers may continue to hold their shares or may sell their shares back to the co-operatives;

(g) the firm is small or medium-sized.

There are typically different types of shares. One of them, for example, may be similar to a trust fund for employee pensions, the fund is owned by employees as a whole and benefits from the fund are distributed mainly according to seniority. Shares that confer the greatest ownership rights are those that have been subscribed by employees as individuals, which we call the most *active shares*. However, because of the smallness of the firms, these most active shares are not freely marketable. This makes these individually subscribed shares much closer to a venture capital investment with a simple profit sharing scheme than to the shares of western public companies. The profit sharing scheme is typically that: a fixed proportion of total profits (after taxes) is earmarked as the shareholding fund for the distribution of dividends.

The local government has continued to be involved in the governance of the restructured enterprises via its state or collective assets administration body and financial bureau instead of the original industrial bureaux. Its role in governance has been increasingly transformed from sole owner and supervisor of the firm to one more similar to that of a major venture capitalist. A typical venture capitalist often serves on the board of directors,

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[4] Note that a large number of these JSCs were still controlled by their community governments in one way or another, particularly in those whose majority of the total shares was continuously held by their community governments. Although having adopted the name of JSC, they did not fit into the stylized facts listed in the introduction section.

provides help in recruiting and compensating key individuals, works with suppliers and customers, gets involved in establishing business strategies, and most importantly plays a major role in raising additional capital (Admati and Pfleiderer, 1994; Dasgupta and Tao, 1998; Hellmann and Puri, 1999). At present, however, the local government seems to play a stronger role than a pure venture capitalist even in situations where the only capital provided by the government is the land. While this slow pace of local government withdrawal might hinder the further evolving of JSCs, more evidence suggests that this involvement remains to be mutually beneficial in the current stage of the transition when well-functioning market intermediaries and dispute-settling institutions are still in their infancy.

The fact that managers and employees hold a majority of the shares makes the JSC quite similar to those firms with employee ownership. The performance characteristics of employee owned firms have been hotly debated and an enormous literature has developed. For the co-operative type of employee ownership and closely held employee stock ownership in developed economies, the theoretical and empirical literature suggests that while these arrangements may bring both advantages and disadvantages for the performance of the firm, on balance in most circumstance the disadvantages seem to outweigh the advantages (Bonin *et al.*, 1993). The recent literature dealing with employee ownership in the former Soviet Union and Eastern Europe seems to further alter the balance toward the disadvantages (Earle and Estrin, 1996).

The western literature indicates that the relative scarcity of worker co-operatives in the industrial sector lies in their disadvantages in collective decision making and capital financing (Bonin *et al.*, 1993; Craig and Pencavel, 1995; Hansmann, 1996). The transition literature shows that the employee-owned firms have paid more attention to rents or other firm-specific surpluses in one way or another due to the lack of fair competition and contract enforcement mechanism. It is relatively easy to argue that China's JSCs have little political power to maintain some kind of firm-specific rents simply because the market within a township or village community is both too small and limited. Whereas what deserve special attention are the mechanisms that are developed by China's JSCs to avoid high costs of collective decision making, to check insider control, to mobilize internal and external finances, to diversify risk, and to facilitate further evolving.

Because of the sharp contrast between the promising dynamics of China's JSCs and the conclusions suggested by the existing literature, a better understanding of how these JSCs actually work will bring new insights into the ongoing debate over the advantages and disadvantages of employee ownership, and into the discussion on the possible evolving paths of JSCs in the future. It will also reveal the roles that an alternative form of ownership and governance can play in an alternative institutional environment.

When a new ownership arrangement emerges, much attention is often given to the question whether it is transitory or endurable. This paper puts emphasis on the nature of the ownership evolving process and raises a more important and relevant question: Whether this arrangement is able to facilitate both institutional transition and socioeconomic development, or not? While we have already had so many lessons on the huge development costs of institutional transition, a new ownership arrangement that is capable of simultaneously facilitating smooth transition and creating impressive growth certainly deserves attention and investigation. The rest of the paper is organized as follows. Section 2 reports three stylized groups of JSCs emerging in the TVE sector. Section 3 analyses the major functioning mechanisms of JSCs. Section 4 discusses the remaining challenges to JSC development and ongoing TVE reform. Finally, Section 5 concludes the paper with an emphasis on the notion of adaptive efficiency.

2. The emergence of joint stock co-operatives in the TVE sector

Although the ownership restructuring of TVEs has taken diverse forms, the dominant one is the JSC. According to a survey conducted by Ministry of Agriculture, by the end of 1997, nationwide 33.5 per cent of TVEs with dominant community ownership had restructured their ownership form. Of these restructured TVEs, 63.37 per cent adopted the form of JSC;[5] 12.15 per cent, mainly small ones, were sold to private investors; 4.66 per cent were transformed into limited liability companies with management- or outside investor-ownership; 3.82 per cent were merged or organized into corporate groups; 1.58 per cent were restructured into joint-stock companies and part of them became openly held companies; 0.66 per cent went into bankruptcy; finally, 13.91 per cent were leased or re-registered back to private ownership. After a further consolidation and standardization, by the end of 1998 there were about 167,000 JSCs and 23,000 joint-stock companies in the TVE sector, with JSCs accounting for 15.7 per cent of the total number of TVEs (*TVE Yearbook*, 1998: 271, 1999: 4).

Among the restructuring forms listed above, the form of JSC is both new and dominant, and is thus the one that holds the greatest research interest. Many local varieties of the JSC form have evolved path-dependently and adapted to local political and institutional conditions. In order to sketch out the major features of the ownership and governance structures emerging in different local models, we classify them into three stylized groups: community-based, enterprise-based, and those in the broad agricultural sector.[6]

2.1 Community-based JSCs

Community-based JSCs emerged in the late 1980s in those wealthy villages with significant collective capital accumulation and located on the outskirts of rapidly expanding cities like Guangzhou and Shenzhen. The direct driving forces for establishment of community-based JSCs include: (a) releasing the lasting tension and increasingly sharp conflicts between village government officials and villagers; (b) a large number of villagers having to leave the community following the state requisition of their lands; and (c) meeting the high equity capital demand of the village economy.

The tension and conflicts resulted from the increasing bureaucratization of community governments and corrupt behaviour of community officials. Community officials enjoyed complete control over collective assets but did not need to bear the downside risks. Their corrupt business dealings, repeated loss-making decisions and assets stripping behaviours

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[5] Note that a large part of these JSCs were still controlled by their community governments in one way or another, particularly in those whose majority of the total shares was continuously held by their community governments. Although having adopted the name of JSC, they did not fit into the stylized facts listed in the introduction section.

[6] The broad agricultural sector includes farming, forestry, animal husbandry, and fishery.

finally induced open conflicts and forced the higher level governments to look for solutions. In those villages that suffered from open conflicts, the JSC form was firstly regarded as a way to establish economic democracy by the corresponding higher level governments (Huang, 1993: 165).

Letting every adult villager become shareholder and setting up the governance structure similar to one in a shareholding company have in fact brought both economic and political democracy into these communities. Each household selects its share holder representative. Within the assemblies of shareholder representatives, the ‘one-person-one-vote’ principle is adopted. By this arrangement, the significant benefits from both membership and subscribed shares generate an incentive for households to participate in the equity democracy. The framework of shareholder representative assemblies monitoring board of directors and board of directors monitoring TVE managers provides a mechanism for villagers to exercise democracy more regularly and effectively. Although community collective shares continue to exist, the control rights over them are equally shared across community households, rather than simply being exercised by community leaders. This makes community collective shares quite different from state shares in restructured SOEs, where the state shares are continuously held by local governments (Gu, 1999: 40-5).

In the coastal areas, many cities have been expanding rapidly. For many villages on the outskirts of rapidly expanding cities, city governments may requisition a large proportion or even most of their collective lands for city expansion. Although farmers who lose their contracted lands can change their social status to that of an urban one and get a formal job in the urban sector assigned by the city government, they have full rights to claim their shares of community capital accumulation left to the village. In order to resolve these types of claims and smooth the process of land requisition, the form of JSC became desirable for all governments from village to city levels. It was likened as ‘returning the shares to their original creators’ (*huan gu yu min*) (Huang and Zheng, 1993). In these villages, those original villagers who have jobs outside the village have only the rights to get dividends from their shareholdings and have no voting rights. Voting rights are held by the representatives from each household and the voting principle in these assemblies of shareholder representatives is also ‘one-person-one-vote’.

In these rich villages, most households had large amounts of savings deposited in state banks, while at the same time the village on its own account had to borrow from state banks, SOEs, and other institutions. Both villagers and village leaders have had an incentive to look for a mechanism to directly link their own household savings with the investment demand of their own village TVEs. Although this motivation may not have directly initiated community-based JSCs, it has significantly contributed to their development and improvement (Huang 1993). Subscribed shares based on cash payment have been the most active shares and become increasingly important both as a proportion of total equity and in their influence on the improvement of governance structure.

These community-based JSCs typically hold shares in joint-venture companies with foreign or domestic companies, in their own subordinate companies, and in other communities. In all these kinds of shareholdings, the community-based JSCs act just like a typical institutional shareholder or venture capitalist. Their internal ownership and governance structures seems to have brought competitive advantages in their practice of establishing joint ventures and of functioning as parent companies, as indicated by some comparative evidence (Huang and Zheng, 1993: 117-9; *TVE Yearbook*, 1997: 305).

2.2 Enterprise-based JSCs

The overwhelming majority of JSCs are enterprise-based. The shareholders of an enterprise-based JSC typically include its own employees, individual citizens of the community, the community government in the name of all community citizens, and other institutional shareholders outside the community. The presence of community collective shares has been hotly debated in China. The major points made by the opponents include: (a) collective shares continuously provide grounds for political intervention by the community government; and (b) the mechanism to monitor community government is far from well established and this mechanism is bound to be different from the one that monitors enterprises (see, e.g., Wang *et al.*, 1997; Tan, 1998; Han and Zhang, 1993).

The proponents indicate that at the village level at least, the existence of village collective shares is crucial for the balanced development of the village economy and is particularly important for supporting agricultural and infrastructure development. They insist that the village should be basically an enterprise organization and that the committee of villagers or villagers' representatives is an autonomous organization of the villagers rather than a government body, according to the Organic Law of Villager's Committee of the People's Republic of China. They suggest that emphasis on the separation of government and enterprises at village level would artificially bureaucratize the village organization and induce organizational conflicts within the village (Policy Research Office of Yichang County, 1997). It seems that both the opponents and proponents of community collective shares bring insights into the discussion and the practical issues. At village level, the proponents' opinion may be more relevant. In fact village-based JSCs have appeared to be socially and economically effective (*TVE Yearbook* 1997: 3.5; Han and Zhang 1993: 141). The existence of village collective shares would not be a problem in a village-based JSC as we discussed in the previous subsection. In other villages with enterprise-based JSCs only, the presence of village collective shares may be a problem in practice but may also facilitate the emergence of village-based JSCs.

At the township level and above, the problems highlighted by the opponents may be more relevant. Here too, the solutions to these problems may take a variety of forms. For example, in Zhucheng City in Shandong Province, the city government sold all shares to enterprise employees and managers and leased the land to the restructured JSCs (Sun, 1997: 20-2). In Henggang Town of Shenzhen City, the township collective shares are held by the Henggang Joint-Stock Investment Company, which is in turn directly monitored by the Assembly of Shareholder Representatives from the subordinate villages rather than the town government (Henggang Town, 1993).

2.3 JSCs in the broad agricultural sector

According to China's official definition, the broad agricultural sector includes crop farming, livestock, forestry, and fishery. JSCs in the broad agricultural sector emerge mainly in the forms of forest farm, orchard, aquatic farm, irrigation system, and marketing co-operative (*Almanac of China's Economy*, 1994: 672-3; Han and Zhang, 1993: 212-8, 253-320). The economic rationality behind these organizational forms is to a certain extent similar to that behind farmer-owned co-operatives in the west, which specialize in processing and marketing agricultural products (Hansmann, 1996: Chapter 7). In these JSCs, producer-owners have highly homogeneous interests, their products are relatively homogeneous as well, and the requirement of economy of scale goes beyond the capability of individual households. Moreover, due to the great scarcity of capital and job opportunity in rural China and serious market imperfections in all markets, farmers need to accumulate capital, to create more jobs using their own capital, and to increase their production scale and marketing power collectively, in the form of JSC. As a consequence, these JSCs typically match capital shares with job opportunities (*yizi dailao*). There is division of labour within the co-operatives and the co-operatives are not only in charge of processing and marketing, but also producing. This feature makes China's JSCs in the agricultural sector different in major ways from their counterpart in the west.

One China-specific form of farmer-owned co-operative is so-called 'land-share co-operatives' (*tudi gufen hezushe*). This form has emerged in some of the most developed coastal areas. The basic feature of this form is to convert the land contract right of each member household in the village into shares, which is named 'capitalization of land contract right'. Thus the villagers who are not working as farmers can enjoy their land contract rights in terms of shares, becoming shareholders in a larger farm managed by a specialized farming family. The specialized farm household managing the land pays a proportion of its revenues as dividends to the families holding shares of the farm, in addition to paying agricultural taxes to the state and land-use fees to the village government. The share value is usually determined in discussions and negotiations in the village assembly, where the voting and other features of JSC obtains (*Almanac of China's Economy*, 1994: 672, Chen and Han, 1994).

One might expect that China's JSCs in the agricultural sector converge, sooner or later, to the west form of farmer-owned co-operatives and specialize in processing and marketing of agricultural products and in provision of certain services to producers. However, such a convergence would be seriously constrained by the factor endowment of China's agriculture. This structure is characterized by the highest land scarcity, high capital scarcity, and serious labour abundance and may persist in the future for generations. It is this structure that vests more responsibilities in China's farmer-owned co-operatives than in their counterpart in the west.

3. JSCs' functioning mechanisms

3.1 Mechanisms to restrain insider control

In order to highlight the restraint mechanisms to insider control in China's JSCs, we present a sharp comparison among the JSCs, China's SOEs with autonomy in the transition, and large public companies in USA (Table 1). As well documented in the literature, SOEs under the contract responsibility system obtain effective *usus fructus* – the rights to control state assets and to enjoy the incomes so generated, but do not carry the downside risk borne by state assets. In order to restrain opportunistic behaviour and self-dealing of the SOE insiders, the government agencies have reasons to intervene in SOE operations and party organizations have reasons as well to control personnel; but this in turn brings high bureaucratic and political costs. This dilemma results in the inefficiency of the state sector as a whole (Jefferson, 1998; Perotti, *et al.*, 1999; Qian, 1996).

Table 1. Comparative models of insiders' control: understanding the features of joint stock co-operatives

Insiders control whose assets	Model identification and performance	Restrain mechanisms
State assets	• SOEs in the transition • Privatize profits and socialize losses	Government inspection and intervention
Assets of outside shareholders	• Large corporations in USA • Competitively strong	a) competitive markets of capital, products, and managerial labour • performance comparison and managerial reputation • threats of take-over, bankruptcy, and exit b) shareholders' votes (by hands or by feet) c) Legal and institutional constraints • rigorous accounting standards • extensive mandated disclosure • prohibitions on insider dealing • procedural rules facilitating shareholder litigation • a well-developed financial press
Insiders' assets plus outsiders (insiders hold a majority of the total shares)	• Joint stock co-operatives in China • Competitively strong	a) competitive product markets: continue or exit b) hard budget constraint: threats of liquidation, bankruptcy, and exit c) shareholders vote by hands (both inside and outside shareholders) d) benefits from smallness: information problems are largely internalized e) local government acts as a major venture capitalist f) revaluation of share is based on book value, profitability, and collective discussion g) portfolio risks are diversified by shareholdings in other community firms and by holding contracting rights over farmland

Source: author's illustration.

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In American publicly held corporations, insiders, particularly managers have effective rights to control the assets of outside shareholders. Because of the dispersion of shareholdings in US, the managers of many large public companies have long been essentially self-appointing and self-policing. The mechanisms which function in keeping the accountability of the managers to their company's owners are mainly competitive capital, product, and managerial labour markets and well-established legal and institutional constraints as listed in Table 1. Although shareholders have a chance to vote in the shareholders conference, a more effective and less expensive way for them to exercise ownership rights is to sell or keep their holdings, or buy new shares in the market.

Compared with both SOEs operating under 'transitional' conditions and normal times in large American public corporations, insider control in China's JSCs is less problematic. Highly competitive product markets and hard budget constraints have constantly put the 'survival urge' before them and forced them to reduce various costs and improve their efficiency. Both groups of inside and outside shareholders have had long-term co-operative relations and geographic proximity. Their interests in the firm have now become measurable and clearly defined in terms of shares. When facing tough market competition, the better strategy for them is to acknowledge, safeguard and promote their common interests and to choose co-operation rather than conflict. The community government by acting as a major venture capitalist may become more helpful, because it acts now in a less predatory manner while continuing to mediate market transactions and to resolve disputes among parties involved, particularly between insiders and outsiders.

For China's JSCs, the most challenging issue is deciding who will monitor the monitors in general and the community government in particular. The community government has typically held a large stake in most JSCs in terms of either financial capital, land or both. In the ownership restructuring process, the government often plays triple roles of 'coach', 'referee', and 'athlete'. In raising equity capital and mediating credits the role of community government seems irreplaceable at least in the near future. In most townships and villages with JSCs, the community government has acted as the *de facto* representative agency of local shareholders in the exercise of shareholders' residual control rights over the local JSCs. Together these patterns indicate that the proper behaviour of community governments has been and will continue to be crucial for the success of the local firms. Although interjurisdictional and market competition can function as an alternative governance mechanism to discipline local officials through putting pressure on and placing survival urge before the community, it cannot replace the internal governance structure within the community. In order to directly promote the most competent persons to the key positions and to prevent some officials from opportunism and corruption, political democratization within the community becomes equally, if not more, important than the equity democratization promoted by JSCs.

3.2 Structures to avoid excessive costs of collective decision making

In comparison with the state ownership of SOEs and collective ownership of TVEs before the restructuring, the ownership form of JSCs reduces the costs of both monitoring and collective decision making. Investing part of personal savings in the firm in exchange for getting some control rights will certainly increase employee commitment to the firm. This may encourage self-monitoring and peer group monitoring. Since employees now have a measurable and larger personal stake in the fortunes of the firm from which most of their income is derived, they can be more easily assembled for consolidated collective actions when facing market competition. Employees already know a great deal about the firm simply as a by-product of their employment and moreover they now have a stronger incentive to acquire information about the effectiveness of management. The improved flow of information and communication between workers and mangers may avoid some needless conflict. They can appoint and hold accountable representatives who in turn act to monitor management accountability for the fortunes of the firm. This will reduce the costs of managerial opportunism. The reduction of government intervention will enable the firm to focus on its business criteria, which will contribute to the reduction of the costs induced by conflicted criteria.

However, because workers act as both equity owners and employees in exercising their control rights over the JSCs, the interest differences induced by the dual role may bring high costs of collective decision making if desired mechanisms for resolving interest conflicts are not put in place. Generally speaking, employees may disagree about their relative wages. They may have quite different opinions about the distribution of the firm's earning between capital and labour because they may differ substantially in the amount of equity capital they have invested in the firm. They may fail to reach agreement on the firm's investment decisions due to their different stakes in the investment projects. There may be different attitudes toward technical updating between unskilled, skilled, and white-collar workers, and between younger and older workers. In order to avoid some of these conflicts appearing in the decision making processes and limit other costs to a tolerable level, some institutional and social mechanisms need to be put in place.

The institutional and social mechanisms which facilitate avoidance or limitation of the costs of interest conflicts that are emerging in China's JSCs include representative form of governance, formal charter limitations on voting procedures and voting outcomes, review by outside agencies, and the shared norms and survival urge imposed by competition.

The representative form of governance is analogous to that employed in large corporations with dispersed shareholdings and also in large co-operatives such as Mondragon in Spain (Cheney, 2000; Hansmann, 1996: 98-103). Under this form both inside and outside owners elect representatives to a board of directors. The board, in turn, is responsible for appointing, overseeing and dismissing the firm's managers. The direct employee participation in governance is largely confined to annual meetings and to major 'constitutional' changes such as mergers or splits of the firm, changing the firm's statutes (e.g., to a limited liability company), issuance of bonds, and increasing or decreasing the number of shares. The members on the board of directors and the managers serve for a minimum of three to five years. The members on the board of directors cannot be removed during their term except for cause. This arrangement would serve to secure professional management and to avoid inefficiently biased decisions and high costs induced by a highly participatory governance form.

Formal charter limitations on voting procedures and voting outcomes means that there are formalized limitations on the substantive decisions that may be vulnerable to the conflicts of heterogeneous interests. For example, the distribution of profits is largely defined by the firm's charter that is based on government regulations. According to the regulations issued by the Ministry of Agriculture on 12 January 1990 (Article 15), the rural JSCs should retain 60 per cent of their profits after taxes for investment and capital accumulation. The remaining 40 per cent can be used for dividends, bonuses, and employee welfare funds, and the distribution of dividends is suggested to be no more than 20 per cent of the total profits after taxes.[7] Relative wages are largely determined by piece-rate, contracting (for managers) and sub-contracting (for teams in workshops). The wage level is subject to the firm's performance in the previous year and local government approval, and is flexible in order to accommodate the needs of market competition. The strong delegation of decision making power to management and the charter attenuation of employee's rights to earnings and control have appeared to effectively mute the play of political forces among the firm's employees, pre-empting opportunities for costly conflicts. In fact, criticisms in China have focused on the weak role of employees in controlling management. While agreeing that employees should play a more active role in the exercise of the equity democracy, our analysis suggests that it is better to let employees play more politics in the process of community democratization rather than in the firm.

At present the outside review function is still performed by the agencies of local government, mainly, state asset administration bodies, financial bureaux, and the local branches of state banks at county level and above, and community government itself at township and village levels. Although there continue to be certain bureaucratic and political costs, their review and oversight seem to bring more benefits and less cost than before. In addition to the roles of venture capitalists, market intermediaries, and dispute arbitrators analysed above, another role they play is quite similar to that of the 'social council' in Spanish Mondragon. The members of the social council are elected by local constituencies and the council serves as a major venue for discussion and negotiation which smooth the relations between employees and management.

The effectiveness of above listed mechanisms is subject to a hard budget constraint and the extent of market and interjurisdictional competition. Without competitive pressure and a hard budget constraint, they may not function in a positive way. Competition and the hard budget constraint make profits sensitive to the performance of the firm and put the same survival urge before all of the inside and outside owners and managers. As a consequence, profitability and the survival urge may become the shared norms among stakeholders. This competition also disciplines local government agencies to promote and secure better ownership arrangements and to function as a 'helping hand' rather than a 'grabbing hand'.

3.3 Channels to raise capital and to diversify risk and the flexibility to evolve

Apart from the costs of collective decision making, theoretical worries over employee ownership include also the concentration of risks and difficulty of raising capital. The risk concentration argument indicates that when employees invest a significant portion of their wealth in the firm that employs them, they will bear much more risk than that born by pure employees. They not only reduce the diversification of their investment portfolio, but also reduce the diversification between their financial portfolio and their human capital, the source of earning income. If the firm fails, they will lose not only their jobs but their savings as well (Hansmann, 1995: 76; Putterman, 1993). The argument about the difficulty of raising capital indicates that because of the asymmetric information and interest differences between employee-owners and outside investors, predominantly employee-

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7 In August 1997, This same norm for profit distribution was adopted for urban JSCs by the State Commission for Restructuring the Economic System, which issued the 'guiding suggestions' (*Zhidao yijian*) for urban JSCs (*Economic Daily*, 7 August 1997).

owned firms may be less attractive to the outside investors, resulting in undercapitalization (Craig and Pencavel, 1995; Earle and Estrin, 1996).

However, as pointed out by Earle and Estrin (1996: 12), the risk concentration argument ignores the point that human capital risk may be reduced due to reduction in layoff risks and in loss of firm-specific investment or rents, once it becomes clear that investing personal savings in the firm also brings employees some control rights. This point is much more relevant for SOEs in transition economies, where capital markets are severely underdeveloped and the highest risk for employees is being laid off and for society large scale layoffs. In addition, if outside funds are rarely available, employee ownership may help to form a modest pool of savings for the firm’s survival and capitalization.

For JSCs in the TVE sector, there is a mechanism for risk diversification that has existed since the time of the TVE takeoff. From the very beginning, the township and village communities were diversified producers. They engaged in manufacturing, agriculture, commerce, construction, and transportation activities, whether intentionally or not diversifying risk (Sun 1997: Section 4).[8] Some of the JSCs are directly based on the community conglomerate, meaning that households and employees hold the shares of the community conglomerate rather than in a single firm. For firm-based JSCs, local employees and their households typically hold shares in other community firms as well and in addition they continue to possess contracting rights to use farm land (Table 1).

As documented in Gu (1999) and Sun (2000), the establishment of JSCs in both rural and urban China has greatly strengthened capitalization of the firms rather than the opposite. For small and medium-sized firms, even in an economy with well developed capital markets, the possibility of raising equity capital from markets is usually very low and the cost is often unbearably high. For them, a feasible and efficient way of raising equity capital is to issue shares to the employees of the firm, community members and their relatives and to attract venture capital through the assistance of community governments.

Compared with JSCs in the TVE sector, those emerging from the SOE and private sectors may have disadvantages in terms of risk diversification. To the extent that these disadvantages become a serious obstacle for the firm’s development, they may more urgently need to transform their ownership structure to the limited liability form with management ownership or outside investor-ownership. The flexibility of the JSC ownership form may facilitate this type of transformation well, as has already confirmed by the experiences in Wenzhou (Sun, 2000).

The above analysis seems to suggest that for numerous small and medium-sized enterprises in the TVE sector at least, there is no *ex ante* reason to assume that the ownership form of JSC will be a transitory arrangement. Some may grow into limited liability and openly held companies, and some may close down due to business failure. However, many of them will continue to enjoy the advantages of this ownership arrangement and many new firms will adopt this ownership arrangement due to its cost-benefit advantages. In fact, by the end of

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8 At the end of 1996, China had 45,500 townships and 740,100 villages. On average, each township, with a population of about 24,000, possessed 9 township-run non-agricultural firms; and each village, with a population of about 1,200, had 1.54 village-run non-agricultural enterprises.

1998, 28,000 start-up firms directly employed JSC form and 41,000 JSCs were formed by the co-operation of household and private firms (*TVE Yearbook*, 1999: 4, 293).

It should be highlighted that the mixed role of the community government could be transitory. In the near future, the role of venture capitalist could be separated from the role of administration and regulator. In the long run, the role of venture capitalist could be transferred to real financial institutions or intermediaries once they become functional and mature.

4. Remaining challenges to JSC development and TVE reform

Although TVE ownership restructuring in general and the emergence of JSCs in particular has been effective in curing TVE mechanism degeneration and in improving TVE capitalization, the restructuring is still mid way.[9] The development is uneven, and in particular there are great difficulties at present stage to make consistent, unified, and rigorous legal provisions for standardizing the establishment and operation of JSCs. Apart from these remaining challenges to TVE reform, many other problems which are closely linked with the features of development in a developing economy like rural China have surfaced and constrained the further development of TVEs. The four major development challenges can be summarized as follows.

First, enterprise management is in general still far from professional and proficient. The major managers are typically from the local community and have a relatively quite poor educational background. They have strong incentives to develop their business but lack of management skills to deal with market competition and to improve internal efficiency. The development of tools for market-based economic decision making has lagged behind the general growth of the TVE sector. For example, the enterprise accountant usually functions as a bookkeeper rather than an integral part of management mainly due to the severe shortage of professional accountants. As a consequence, many TVE managers have no access to the information flows generated by modern accounting practices, which in turn hinders them from making rational and timely business decisions (*China Daily*, 26 October 1995). The shortage of competent engineers and technicians has also undermined the improvement of TVE technological management.

Second, there is an obvious conflict between risk diversification, which implies small scale, and existing technical economies of scale in production. TVEs are typically locally initiated and locally based. In order to diversify business risks, it is rational for a township or village to set up several small-scale TVEs that diversify into different sectors. However, on the other hand, in many industries, small-scale production has no profitable potential at all in the medium- or long-term. This conflict casts a shadow over the long-term prospects of many small-scale TVEs.

9 TVE mechanism degeneration refers mainly to increasing bureaucratization in communities with successful TVEs, softening budget constraints across TVEs in the same community, and other trends towards SOE-similar mechanisms.

Third, the entry of TVEs in many cases is local resource-driven rather than market demand-driven. In the past they had no marketing problems due to the widespread supply-shortages. From the mid 1990s onwards, the demand constraint appears to have become dominant in Chinese economy. Confronted with the increasing demand constraint, they have to adjust their product structure and update their products so as to meet market demand and maintain their market shares. How to conduct such adjustment and updating has become an urgent challenge to many local resource-based TVEs.

Fourth, almost all TVEs have been initiated by township governments, village governments, households, and joint households (so-called 'fourwheel-driven'), and based on local resources and conditions. The comparative benefits include very low TVE entry costs into non-agricultural sectors and sufficient exploitation of local resources and comparative advantages. However, the comparative costs are significant as well. Rural industrialization has not yet induced meaningful urbanization. As a consequence, TVEs in general will continue to miss the great benefits created by urbanization for a long period. In other words, the further development of TVEs will be increasingly restricted by the lack of infrastructure, market information and strategic services and by poor transportation and communication networks. Furthermore, human capital development of TVEs will be increasingly constrained by localized and kinship-based vested interests and by the dual role of their employees as both workers and peasants.

At the macroeconomic level, the widespread pattern of TVE distribution suggests three negative consequences: (a) the uses of scarce land and existing infrastructure are inefficient; (b) the development of the service industry is restricted by the absence of demand for its products, meaning that the strong job-creating capability of the service industry, which is urgently needed in China, would not be sufficiently exploited; and (c) there is the risk that environmental pollution may go unchecked in certain localities.

In order to tackle these problems the Chinese government has started to pay greater attention to the establishment of industrialized small cities and towns since early 1990s. Some experiments have been conducted and some supporting policies have been issued. The role of both central and local governments in this area is certainly critical.

The challenges linked with the general development problems cannot be solved by ownership reform alone, though ownership reform will create a sound institutional environment for tackling these development problems. Ownership restructuring is only one of the major subjects in the process of TVE development. Management modernization, creation of forms of urbanization which are compatible with TVE growth, human capital development, and catching up modernized corporations are all critical challenges faced by TVEs and Chinese government. The challenges from both reform and development dimensions will continue to place pressure on all of the players in this competition field, providing them with strong incentives and stimulating them to look for innovative and adaptive solutions one after another.

5. Concluding remarks

In this paper we have presented the stylized features of China's joint-stock co-operatives, which have been widely adopted in China's TVE sector. Three different models of JSCs, including the community-based, the enterprise-based, and those emerging in the broad agricultural sector, are distinguished and the rationales underlying these three models are highlighted. To show the distinguishing features of China's JSCs from those of industrial co-operatives and closely held employee stock ownership in the west and various employee-owned firms in transitional economies in Europe, we have identified and investigated the core mechanisms that developed by China's JSCs. They include those mechanisms that have facilitated to avoid excessive costs of collective decision making, to check inside control, to mobilize internal and external financial resources, to diversify risks, and to provide flexibility for the further evolving of JSCs.

The most striking feature of the JSC mode is that it intends to combine the incentive of individual ownership on internal capital accumulation with the strength of the existing institutional and social capitals embedded in the township or village community. In a comparative perspective, the JSC can be regarded as a hybrid mode between the closely held joint-stock firm and the preceding collective TVE, and it represents both development continuity and dynamic adaptation. The JSC mode could be transitional in the case where a JSC firm grows out of the community and becomes an openly held company. However, the realization that the closely held firm is and will continue to be the dominant form in China's rural economy suggests that the institutional and social capitals embedded in a rural community would continue to be valuable in the future for most community enterprises. When the firm is closely held, its corporate governance problem is fundamentally different from one in the openly held firm. For the closely held firms, the paradigm of the competitive stock market has little to do with them, and their governance problems typically involve the use of mutual class shares and managerial networks, re-designing ownership and control via multilateral negotiations, and influence-seeking among different stakeholders. In all these interactive fields, the vesting of social and institutional capital within the community would provide information advantages and cost-saving potentials (Aoki, 2000).

While it has become widely acknowledged that the transition is not an immediate replacement of the old institutional structures by the new ones and that the transition process might be quite long, it is highly desirable to search for transitional ownership and governance mechanisms that are adaptively efficient. Adaptively efficient mechanisms are characterized by their capability to provide economic and political flexibility for people and organizations to adopt to new opportunities. They accommodate to the sequences of progressive levels in know-how and provide incentives for the acquisition of knowledge and learning. They encourage risk-taking and creative activities. They also encourage trials and eliminate errors in a world of uncertainty. If one path does not work, they are able to initiate organizational responses to try new paths until successful outcomes are achieved. Judged by these criteria, this paper suggests that the ownership and governance mechanisms of China's JSCs can be qualified to be adaptively efficient. They might be transitional but also have good chance to go beyond the transition. What is certain is that they will continue to pursue adaptive efficiency and catch advantages from more than one institutional and social channel so as to strengthen their competence and to meet new challenges. Pursuing adaptive efficiency via hybrid mode may be the most instructive lesson China's JSCs has offered to decision-makers and entrepreneurs in transition and developing economies.

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