Incentive Contracting versus Ownership Reforms: Evidence from China's Township and Village Enterprises

By: Chun Chang, Brian McCall, and Yijiang Wang

Working Paper No. 365
November 2000

Incentive Contracting versus Ownership Reforms:

Evidence from China's Township and Village Enterprises

Chun Chang[*], Brian McCall[**] and Yijiang Wang[***]

Carlson School of Management, University of Minnesota

Minneapolis, MN 55455 USA

Revised, November 28, 2000

Abstract

We use a unique data set to study the implications of introducing managerial incentives and, in addition to incentives, better defined ownership for a firm's financial performance. The data set traces the ten-year history of 80 Chinese rural enterprises, known as township and village enterprises. During this period, these originally (mostly) community owned, local government controlled socialist collective firms were first allowed to introduce managerial incentive contracts and then to change to ownership forms of more clearly defined income and control rights. The study finds that introducing managerial incentives had a positive but statistically insignificant effect on these firms' performance measured by accounting return on assets or return on equity. It also finds that the performance is significantly better under ownership forms of better-defined rights than under community ownership even when the latter is supplemented with managerial incentive contracts. The findings shed lights on some important theoretical and policy issues.

Executive Summary

A central issue in economic theory and policy making is: by how much can economic efficiency be improved through introducing incentive schemes without changing public ownership? Can better defined ownership bring about additional efficiency gains? In this article, we use a unique data set to study the implications of introducing managerial incentives and, in addition to incentives, better defined ownership for a firm's financial performance. The data set traces the ten-year history of 80 Chinese rural enterprises, known as township and village enterprises. During this period, these originally (mostly) community owned, local government controlled socialist collective firms were first allowed to introduce managerial incentive contracts and then to change to ownership forms of more clearly defined income and control rights. These reforms can be largely viewed as exogenous, avoiding the endogeneity problem often faced in studies using data from a free market economy. Our study finds that introducing managerial incentives had a positive but statistically insignificant effect on these firms' performance measured by accounting return on assets or return on equity. It also finds that the performance is significantly better under ownership forms of better-defined rights than under community ownership even when the latter is supplemented with managerial incentive contracts. These results are not affected even when we allow for the possibility of "cherry picking" in selecting which firms to be reformed first. Our findings shed lights on some important theoretical and policy issues.

1. Introduction

In this paper, we use a unique data set to study the implications of introducing incentive contracts to and ownership change in community owned enterprises for performance. The data trace the ten year history of 80 Chinese rural enterprises, known in China as township and village enterprises (TVEs). During this period, these originally community owned, local government controlled socialist collective firms with vaguely defined property rights and hardly any explicit incentives for individuals were first allowed to introduce managerial incentive contracts and then to change to ownership forms of more clearly defined property rights.[1] Having the data on progressive strengthening of incentives in firms enables us to study two questions of central importance to economists. First, does incentive contract matter to a firm? Second, is incentive contract adequate or can more clearly defining ownership deliver an additional gain in efficiency?

The importance of incentives to economic efficiency is highly emphasized in the modern economic theory of the firm, with contractual and ownership arrangements as two focal points of the theory (see Coase 1937, Alchian and Demsetz 1972, Jensen and Meckling 1976, Williamson 1985, Grossman and Hart 1986, and Hart and Moore 1990). Economists, however, differ in their views on which one of these two arrangements is more important. Bardhan and Roemer (1992), among others, believe that contracts can provide sufficient incentives for socialist firms to become as efficient as their capitalist counterparts. Referring to problems such as the lack of responsibility in socialist state-owned enterprises (SOEs), they argue that "this only means that the key incentive and agency problems in the management of a public firm have to be addressed; we claim that

---

[1] The two main features of this change from community collective ownership to joint stock ownership are: quantifying employees and community's equity stakes; and reallocating control rights to the board of director from the local government. See more discussion later.

privatization is not the only or even a better way of handling those problems." (p.102.)[2] Others argue that ownership allocation has significant efficiency implications because control rights matter when contract is incomplete (Grossman and Hart 1986 and Hart and Moore 1990). Empirical research has yet to address whether and by how much defining ownership can improve upon what can be achieved through contracting.

Using data in a market economy to test the efficiency implications of incentive contracts and ownership faces a fundamental difficulty. In a free market economy, optimal contracts and optimal ownership allocation have the tendency to prevail. The sample truncation problem, i.e., the lack of observations of firms with suboptimal contracts and ownership, makes it difficult to test the effects of a "deviation" on efficiency. The data we use overcome this difficulty of truncated observations. They are more like data from a controlled experiment: a time period in which incentives and ownership in firms were initially arranged largely according to orthodox Marxist principles but later changed as the ideological and economic control were gradually relaxed, and political and legal environment changed. The whole reform process in China during the past twenty years is indeed viewed by many as an experiment by the Chinese government.

The contract-versus-ownership debate is of not only great academic interest, but also great policy significance with many practical implications. The work by Bardham and Romer (1992) mentioned above, for example, is intended to provide a micro foundation for market socialism as an alternative to both capitalism and socialism as most people know it. Also, a hotly debated and thorny question in the ongoing transition in many countries from central planning to market is: should privatization in socialist firms be emphasized, or governance restructuring without privatization? Advocates of the big-bang strategy see immediate privatization of SOEs as a key

[2] Perkins (1994) is also sympathetic of this view.

element for a successful transition. Their policy prescription was followed in many former socialist countries. An empirical literature on the effectiveness of privatization has emerged in recent years (see Megginson and Netter 2000 for a survey). It has mostly provided evidence of positive efficiency effects of privatization in Central and Eastern European transition economies. The evidence from former Soviet Republics, however, has been quite mixed and even negative.

A country that did not embrace privatization is China, where reform started ten years before that of European former socialist countries in 1979. As announced by the Chinese government, the objective of China's economic reform is to establish a "socialist market economy" with a strong state sector as the backbone of it. The objective led to the policy of strengthening the state sector with two key measures. One of the measures is to continue to allocate most of the nation's available investment funds into state enterprises. This led to the continued growth of the state sector (in absolute terms) during the reform period instead of a contraction as in European transition economies. The other measure is to introduce effective managerial incentives to improve the performance of the SOEs (see Grove et al, 1994 and Li 1997). Not incidentally, many studies find evidence of improved performance of China's SOEs during the reform period (see Jefferson and Rawski (1994) for a survey).

The inconclusive findings of the effect of privatization in some former Soviet economies and the favorable findings of the effectiveness of incentive contracts in Chinese SOEs led many authors to voice their doubt on the importance of ownership change for the performance of individual firms. The sharp contrast of the dramatic declines of the aggregate output in the former Soviet economies and the two decades' long sustained and rapid growth of China's economy further strengthened the skepticism. Lin et al (1996) argue that with widespread market imperfection in a transitional economy, an ownership change "need not result in…the improvement of enterprise efficiency" (p.218). Jefferson and Rawski (1994) after their survey of the studies of the performance of China's SOEs conclude that China's experience of industrial reform suggests that "economists tend to overstate the importance of early privatization during the transition process. The strength of government efforts to force enterprises toward financial independence may count for more than the locus of ownership." (p.64.)[3]

Our study contributes to the aforementioned theoretic and policy debate with two major findings. First, we find that introducing managerial incentive contracts do indeed have a positive effect, i.e., incentive contracts have the right sign as predicted by the theory, on TVEs' financial performance as measured by return on asset or that on equity. Although the positive sign of incentive contracts in our study is not statistically significant, it is qualitatively consistent with the findings of Grove et al (1994), Jefferson and Rawski (1994), Li (1997) and those surveyed by them.[4]

Second, we find that, after adopting an incentive contract, a further change in ownership arrangement to more clearly define various parties' rights have an additional and positive effect on performance. This positive effect is economically significant for both the return to assets and that on equity. It is statistically significant for the return on assets. This finding suggests that introducing incentive contracts, albeit helpful, is not a perfect substitute for a better ownership arrangement; efficiency can be further enhanced by a better ownership arrangement. This is the only direct empirical evidence we know of on the inadequacy of incentive contracts without

[3] It is worth noting that Bardhan and Romer's (1992) claim is that, with properly structured incentives, public (as against private) ownership can be as efficient as private ownership. Jefferson and Rawski's (1994) question is instead about the timing of privatization.

ownership changes. In light of this finding, it seems that, although it is reasonable to believe that institutional imperfections during the transition will limit the positive effect of ownership change on efficiency as Lin et al (1996) argued, the argument applies to other incentive schemes as well. In particular, institutional imperfections seem to be at least as detrimental to the effectiveness of managerial incentive contracts.

The conventional view holds that China's rapid growth during the reform is achieved through restructuring incentives while leaving ownership issue intact. Our study casts doubt on this view and calls for a reinterpretation of China's reform experience. Most authors agree that the rapid growth of the TVE sector is one of the, if not *the*, most important reasons for the rapid growth China enjoyed in the past two decades. Our findings suggest that continuous improvement of incentives in the TVEs especially that obtained through ownership change contributed significantly to improved efficiency in them. In light of the finding, it is questionable if China's reform experience can still be characterized as rapid growth achieved without ownership reform, despite the apparent lack of privatization in the state sector during much of the transition.

The plan for the rest of the paper is as follows. Section 2 contains a brief review of the history of the contractual and ownership changes in the TVEs. Section 3 explains the data and the contractual and ownership arrangements of TVEs. Section 4 presents the empirical results and Section 5 concludes the paper.

2. History of Incentives and Ownership in the TVEs

---

[4] This weaker effect may be attributed to the fact that TVEs, unlike SOEs, face relatively harder budget constraints. This point will be discussed further in next section.

TVEs are enterprises that grew up in rural China. Their origins can be traced back to the 1960s and the 1970s when China was still an orthodox Marxist-Maoist country. During that time, the Chinese government launched a campaign to mechanize farming. As part of the campaign, it instructed collective farming units, i.e., People's Communes and their subordinate brigades and production teams, to set up workshops for the needs of maintaining and repairing farm machines such as tractors and water pumps. (Perkins, 1977.)

In the late 1970s and the early 1980s, in the freer and more amiable environment created by the economic reform, many existing rural industrial workshops started to produce marketable products to sell for revenue. Tens of thousands of new production facilities were also set up for the same purpose. The development led to a rapid growth of industry in rural China. From 1980 through 1995, the TVE sector grew at an average annual rate of more than 30 percent in terms of its output. In 1995, the sector produced 30 percent of China's total GDP, 44 percent of the total value added by the industry, one quarter of the tax revenue, one third of the total exports and employed 28 percent of China's total rural labor force or 128 million workers. (MOA, 1997.) These figures highlight the significant contribution that the TVE sector made to China's economy.

The rapid growth was accompanied by changes in incentive and ownership arrangements in TVEs. Before the economic reform was incepted in 1979, the TVEs, known then as commune and brigade enterprises, were completely subordinated to and an indivisible part of the People's Commune system in rural China. At that time, the TVEs were physical entities but not recognizable economic units. They did not have their own accounting, e.g., a balance sheet to reflect asset allocation. With the assets of a TVE being moved in or out of the TVE or even in or out of the community in which it resides at the will of the community or government authority, no one was sure who owned what in a TVE.[5] TVE managers and workers were not paid directly for their services at the TVE because anyone assigned to any work in the People's Commune must be treated the same way. So, instead, all the revenue earned by a TVE would be handed into the community to be lumped with all other community incomes for distribution. After the collective accumulation was deducted, the incomes of the individuals in the community were determined according to the "work points" each individual accumulated during the year with no particular reference made to the type of work an individual was assigned to (see Hongyi Chen, 2000, pp.84-5).[6]

1979 was the year in which economic reform was started in China. In that year, the Chinese government took the first step to make TVEs economically recognizable production units by stating in a government document that the ownership of a TVE belongs to the community establishing it. The government document also permitted a TVE to pay its workers wages (Jianbo Chen, 1997, p.7). Later, the central government issued a series of documents to regulate the distribution of TVE revenues and profits to prevent the township and village government (TVG) officials from taking

[5] When a piece of a TVE's property was physically moved out of it but stayed within the community, with or without a record, it would be considered quite normal. If it is moved out of the community, it was called *ping diao* (uncompensated move, or takeaway, of an asset) and considered inappropriate by the Party at times when its policy was more pragmatic. But Ping Diao was hardly ever stopped even when the Party sometimes had a tone not quite in favor of it.

[6] The work point system records each and every community member's labor contribution to the collective in a year. The points of an individual are mostly based on the individual's age, sex and length of time worked, but not sensitive to the task performed in the community. A middle aged and healthy male worker, for example, would typically have the highest points for a day's service, say 10 points. A middle aged and healthy female worker would typically have 80 percent of that. Senior and children labor would rank further lower. See the 1978 Chinese government document, Regulations on the Work of Rural People's Communes.

excessive benefits.[7] For example, it required that certain percentages of net profit be used for community welfare and public projects and reinvestment in itself for expansion (Chang and Wang, 1994). The essence of the central government regulations is that the benefit of the TVE should be shared among the stakeholders, including TVE employees and managers, TVG officials and the community members. However, these regulations were apparently too general to be very restrictive to the TVG officials' control over TVEs and TVE benefit distribution, leaving strong incentives for TVG officials to continue to interfere in TVEs' operation and personnel affairs.[8] Mirroring TVG officials' arbitrary interference was the low managerial autonomy in TVEs and the lack of explicit sharing rules for managers and other employees, e.g., what the manager should get if the TVE performed well.[9] Under this arrangement, a TVE manager "played the role at most like a floor production foreperson" (Hongyi Chen, 2000, p.84.).

From 1979 to 1983, the Chinese economy went though a consolidation and adjustment period. Towards the end of this period, the government again sought to reform the governance structure in the TVE, hoping that improved performance of TVE sector would make a significant contribution to national economic growth and employment. Various managerial responsibility and incentive contracts were introduced in many TVEs. Under the contracting system, the responsibility of a TVE would be contracted to an individual or a group of managers. A main feature of the contracting system is that there are explicit rules specifying how the manager and key employees would be financially rewarded or punished according to the performance of the TVE.

[7] The People's Commune system was abolished in 1983, with the communes changed back to townships and production brigades and teams to villages as they had been historically before the People Commune system was established in 1958.

[8] Weak enforcement was also a problem. In many cases the shares of profit for government regulated and designated purposes were also left ignored.

Accompanying the increased financial stake for managers, the contracting system also increased managers' control authority, including their authority to contract for individual worker's service. (Chen Jianbo, 1997, p.9. Hongyi Chen, 2000, pp.88-96.) These managerial contracts are very similar to those adopted by China's SOEs around the same time.

Further steps were taken in the next few years to improve ownership structure in the TVEs. In 1984, the government legalized two forms of noncollective TVEs, i.e., individual ownership (proprietorship) and partnership among different households.[10] A 1985 document further encouraged the development of noncollective TVEs. It says that "to encourage farmers to start TVEs, the person who contributes financially and/or managerially to a TVE must be guaranteed to benefit from it." In 1987, the government legalized private ownership in the TVE sector, giving another impetus to noncollective TVE development.

It is important to note that, in the past twenty years, the government does not typically initiate a new reform measure or explicitly at the beginning specify the content of a new measure. It would instead choose to be passive and implicit before it could obtain a better idea what kind of risk would be involved with a particular measure and how large a step forward it can handle without a major backlash.[11] In the case of TVE ownership, noncollective TVEs had actually emerged as early as the early and mid-1980s, long before the government officially legalized and allowed them to exist, some of them more openly and others under the disguise of collectives.

---

[9] See Weitzman and Xu (1994), Chang and Wang (1994), Li (1996), Naughton (1996), Che and Qian (1998) and Zhu, (1997).

[10] This document does not legalize private ownership. In Chinese government terminology, a business is of individual ownership if the owner uses only the labor services of the family and that of close relatives. If such a business hires outside labor, it falls into the category of private ownership.

[11] McMillan and Naughton (1991), Perkins (1994) and Naughton (1995) have more detailed and very insightful discussions of China's reform experiences and their logic.

Before granting them the official and legal recognition, the government had given a tacit sanction of these noncollective TVEs and had overtime become more and more tolerant of them. But it remained vague in what kind of ownership it would allow, letting more venturous individual owners and local governments to experiment. The government would in time accept an ownership form that was proven acceptable largely by political and ideological criteria.

In the years following the legalization of noncollective TVEs, a process of ownership change was implemented. Some collective TVEs were (usually the smaller ones) sold outright to private owners and others (the larger ones) transformed to joint stock companies.[12] By the mid-1990s, noncollective ownership had become a very important force in the TVE sector. In 1993, the noncollective TVEs employed 65.8 million workers to produce 111.8 billion yuan of goods and services, which were, respectively, over 53 percent of the total employment and over 35 percent of the total output produced by the sector (State Statistical Bureau, 1996, p.388-9.)[13]

3. Description of Data and Ownership Arrangements

[12] When a collective TVE was transformed into a joint stock ownership, previous stakeholders in the TVE, i.e., the TVG, the top managers and workers in the TVE, were given shares according to their financial and other contributions to the success of the TVE.

[13] The accelerated process of ownership change in the TVE sector received another major government approval in 1996, when the Congress of the People's Representatives passed the TVE Law. The law (Clause 12) states that "[n]o organizations or individuals shall illegally and administratively interfere with the production and operation of a TVE, including changing the individuals responsible for the firm, or illegally take or use the property of a TVE without compensating for it." The law (Clause 4) extends its protection of TVEs to TVEs of all different ownership forms by stating the principle of simultaneous development of different forms of ownership in the sector. This legal position of the government regarding TVE ownership was later reiterated in other government documents, e.g., the 1997 document on TVE development (MOA, 1997).

The data set contains the financial and employment information on 80 firms in Wuxi City, Jiangsu Province from 1984 to 1993. The data were collected through the Policy Research Department of the Wuxi City Government, which has access to the information (local TVEs are required to report the information to the government). At the time of the data collection in 1995, there were about 600 TVEs under the jurisdiction of Wuxi City. We have asked for a random sample of these firms and we were told that the sample was random. However, we cannot be certain of this because the actual collection was done by the personnel of the Policy Research Department. Judged by the variations in many of the firms' characteristics, we believe that the 80 firms are a good cross-sectional representation of those firms in Wuxi. One of the firms went out of business in 1991, missing three years of data.

For each firm, we ask our collaborators in Wuxi to fill a table which includes the following items: total assets, total liabilities, sales, net profit, taxes paid, number of workers, and contracting/ownership type. We have also visited Wuxi and discussed the collection procedure.

In the data collected, there are seven types of contracting/ownership arrangements. They are: responsibility (*fu ze zhi*); contracting (*cheng bao zhi*); leasing (*zu lin*); privately owned (*si ying*); partnership (*he zuo zhi*); auction off (*pai mai*), joint stock ownership (*gu fen zhi*).

3.1. The Responsibility Arrangement

Under the responsibility arrangement, the firm is collectively owned by the citizens of a community (town or village). The firm's manager is appointed by the township-village government. The manager runs the firm and reports to the local government.

3.2. The Contracting Arrangement

In the early 1980s, many firms in China started experimenting with the contracting arrangement. Under that arrangement, the manager (or managers) of a firm signs a contract (often 1 to 3 years) with the township-village government. The contract explicitly links the managers' compensation to the firm's performance. The performance is usually measured in the following dimensions: the firm's accounting value, profit, taxes paid, and employees' wage. The contracts are often very detailed and explicit. After signing the contract with the local government, the manager usually contracts further with his/her subordinates. Therefore, there could be several layers of contracts within a firm. The arrangement is meant to give managers and employees financial incentives for better performance.

The leasing arrangement is similar to the contracting arrangement except that the manager makes predetermined lease payments to the township-village government. It should be viewed as a specific type of contracting. The contracting arrangement can be viewed as introducing incentive compensation contracts without explicitly delineating the collectively owned property rights.

3.3. The Stock Ownership Arrangement

During the 1980s, the inadequacy of the contracting arrangement gradually became apparent. Local governments and firms started experimenting with the joint stock ownership arrangement. The equity owners and their holdings in a firm were to be explicitly specified and quantified. They would become the ones who have the legal rights to choose managers through the board of directors. It is generally understood that the allocation of equity stakes is done in a way that will provide key contributors to the firm with economic incentives.

Under the stock ownership, the equity of a TVE is typically divided into three parts. First, the citizen of the town of village is given a collective equity stake (*xiang zhen ji ti gu*). This represents initial or subsequent financial investments or support made in the TVE by the local community and their accumulated returns. The local government is usually the representative of this collective stake. Second, the employees is given a collective equity stake (*zhi gong ji ti gu*). This represents the collective contributions or sacrifices made by all employees through their lower wages over the life of the TVE. The Employee Representative Meeting exercises the control of this collective stake. Third, each employee is given a stake (*zhi gong ge ren gu*) in accordance with his/her contribution, responsibility, and seniority. Generally, the employees would have to purchase the stake, albeit at a discounted price.[14]

Due to the sensitivity of the subject at the time, we were not able to obtain detailed breakdown of equity ownership. From the information we have, there is much variation in the sizes of these three parts of equity. In some cases, the sum of the last two parts, the parts belonging to employees, is greater than the first part. This would give the employees a majority in board election. In other cases, the first part exceeds 50%, giving the local government an effective control of the board.[15] The third part, the total of the individually owned shares, is said to be in the range between 10% to 40% of total equity. It is important to note that equity

---

[14] Besides these three parts, shares were sometimes sold to outside institutional investors (*she hui fa ren gu*).

[15] Due to relatively large initial investment by the local communities, equity stakes held by the local governments in Wuxi are large compared with those found in Zhejiang province.

ownership is now divided in a way that will give the most important contributor (employees, local government or another investor) a majority control.[16]

The governance structure is specified in the company's charter. Generally, the board of directors elected by shareholders will be responsible for making major decisions for the firm. To protect minority shareholders' interests, some decisions require a simple majority of the board and others (issuing new shares or mergers for examples) require super majority.

The key differences between the contracting arrangement and the stock ownership arrangement can be understood in terms of the monetary and control aspects of ownership (Grossman and Hart 1986). First, while contracting can provide monetary incentives to key stakeholders (mainly employees and potential investors including foreign investors) of the firm during the contract duration, it cannot provide the long term financial security of having equity stakes because of recontracting and contract renegotiation.

Second and more importantly, when a TVE is under the collective community ownership (whether it is under responsibility or contracting arrangements), as the representative of local community, the local government *by default* has all the residual control rights of a TVE. In contrast, stock ownership arrangement and its accompanied governance structure such as the board of directors reallocate the control rights to the TVE's most important contributor. When the local government is not the most important contributor, this will limit if not eliminate its power in interfering the affairs of a TVE.[17]

[16] Chang and Wang (1994) provide reasons why the local government can sometimes be a key contributor to TVEs' success and therefore should be given the control rights.

[17] It should emphasized that due to incomplete legal institutions and power of communist party, the local government still had significant power over a TVE even after it changed to stock ownership. The important point is that the power was now limited. We want to see whether this had an effect on efficiency.

3.4. Proprietorship, Partnership and Action-off Arrangements

As discussed in previous section, the proprietorship and partnership involve a small number of workers working together. In early 1980s, these arrangements were permitted within certain size restrictions. The auction-off arrangement refers to the fact that the firm is sold to an independent investor. The investor can be an original employee or another investor. It should therefore be viewed as having a well-defined ownership structure.

In Table 1, we group the seven arrangements into three incentive structures in order to focus on the main differences between these arrangements. The responsibility is one category. Since the leasing arrangement can be viewed as a special case of the contracting arrangement, we will put them in the same category: Contracting Arrangement. Similarly, we will view the arrangements of joint stock company, auction-off, partnership, and private ownership as having delineated the property (ownership) rights clearly. They will be put in the same category: Stock Ownership.

Table 1

All Contracting and Ownership Arrangements in the Sample	**Classification into Incentive Structures**
Responsibility	Responsibility
Contracting, Leasing	Contracting
Joint Stock Company, Proprietorship, Partnership, Auction-off	Stock

4. Empirical Results

The data consist of a ten-year panel (1984-1993) of 80 firms. One of the firms went out of the business in the last three years of the sample period. Therefore, we have only 797 observations. During the sample period there was considerable change in the three types of incentive structures as exhibited in Figure 1. In 1984, most firms' incentive structure was responsibility-based (69%) while16% percent of firms' incentive structure was stock-based (mainly small proprietorships and partnerships). By 1993, however, the situation had reversed itself, 61.3% of firms had a stock-based incentive structure while only 5% had a responsibility-based incentive structure. This represents a gradual process of permitting and experimenting ownership changes.

Since the central government's policies towards the new reform measures such as the contracting and stock ownership arrangements were ambiguous and "two steps forward one step back", braver local governments started the experiment early while others waited. Even in towns where the local governments were bold enough to experiment, they typically proceeded gradually: first started with a small number of firms and then to more firms. We will test later whether they have a tendency to systematically picked either better or worse performing firms first.

We now use linear regression models to estimate the effects of contractual and ownership changes. Since China's stock market was in infancy, none of our sampled firms were listed. Therefore, we have to use two accounting measures of profit: ROA (return on assets) and ROE (return on equity), as the dependent variables to measure the effects of changing incentive structures. Table 2 presents summary statistics for ownership type, return on equity (ROE) and return on assets (ROA). As can be seen from Table 2, ROE averaged 24.5% while ROA averaged 18.9%. The standard deviations, however, for both ROE and ROA exceed the means (42.0% and 27.7% for ROE and ROA, respectively).

Table 2
Summary Statistics
(n=797)

	Mean	St. Dev.
Return on Equity (ROE)	0.245	0.420
Return on Assets (ROA)	0.189	0.277
Incentive Structure of the Whole Sample		
Responsibility	0.368	-
Contracting	0.302	-
Stock	0.330	-

For independent variables, we use two dummy variables to represent two incentive structures: contracting, and stock ownership. The responsibility arrangement is the base case. To control for many other factors, we not only introduce a dummy variable for every year, but also introduce a dummy variable for each firm in our sample. The firm dummies could control for many firm specific factors such as industry effects or anything unique that makes a firm more profitable.

We also have a dummy variable for each year to control for changing business environment all TVEs face. In particular, the year dummy variables should be able to pick up intensity of market competition that has been increasing steadily during those years. In fact, the estimated coefficients for the year dummy variables are all negative except for the first two years of the period, reflecting the increasingly competitive environment as China's economic reforms deepened over the years.

The regression results when dependent variable is ROA are presented in the first column of Table 3. As we can see the two incentive structure dummy variables both have positive signs, representing the improvements over the responsibility arrangement. However, the coefficient for the contracting dummy is small (2.5%) and statistically insignificant. The coefficient for the stock ownership dummy is 10.6% and significant at the 1% level. This means that adopting stock ownership improves ROA by 10.6 over the responsibility arrangement and an additional 8.1% over the contracting arrangement. In our view, the additional effect of stock ownership is economically quite significant.

Table 3

Return on Assets (ROA) and Incentive Structure

	(1)	(2)	(3)
Intercept	0.272***	0.268***	0.257***
	(0.029)	(0.030)	(0.032)
Contracting Dummy	0.025	0.044	0.078*
	(0.032)	(0.036)	(0.042)
Stock Dummy	0.106***	0.115**	0.141***
	(0.039)	(0.045)	(0.054)
Changed Incentive Structure in Next Year Dummy	-	0.021	-
		(0.032)	
Changed Incentive Structure in Next Two Years Dummy	-	-	0.038
			(0.029)
Year Effects	yes**	yes**	Yes**
Firm Effects	yes **	yes**	yes**

Notes: Standard errors are in parentheses. One, two and three asterisks denote significance at the 10, 5 and 1 percent levels, respectively.

One methodological issue one has to face is the possibility of the “cherry picking” problem: firms that with below (or above) average performance in a given year may be more likely to be picked to change their incentive structures in the future. Thus, future changes may be predicted by past performance. To account for this possibility, columns (2) and (3) present regression results which add indicator variables that indicate whether a firm switched incentive structure in the next year and next two years, respectively. In neither case, however, were these variables statistically significant and the results are similar to those presented in column (1), indicating the absence of systematically picking either good or bad performing firms to start the reforms.

In Table 4 the regression results for ROE are presented. As before, the estimated coefficient for contracting dummy is positive and not statistically significant. However, the coefficient for the stock ownership dummy is only statistically significant at 10% level. Again, there does not appear to be "cherry picking". However, the coefficient for the stock ownership dummy becomes insignificant in this case.[18]

[18]The F-test for joint significance of the ownership variables had p-values of 0.19 and 0.0116 for the ROE and ROA regressions, respectively.

Table 4
Incentive Structure and Return on Equity (ROE)

	(1)	(2)	(3)
Intercept	0.256***	0.249***	0.246***
	(0.047)	(0.049)	(0.052)
Contracting Dummy	0.040	0.075	0.107
	(0.052)	(0.059)	(0.068)
Stock Dummy	0.110*	0.119	0.108
	(0.063)	(0.073)	(0.088)
Changed Incentive Structure in Next Year Dummy	-	0.024	-
		(0.053)	
Changed Incentive Structure in Next Two Years Dummy	-	-	-0.001
			(0.047)
Year Effects	yes**	yes**	yes**
Firm Effects	yes **	yes**	yes**

Notes: Standard errors are in parentheses. One, two and three asterisks denote significance at the 10, 5 and 1 percent levels, respectively.

What account for our results? The positive and insignificant effect of contracting on efficiency is consistent with the results of Grove el al (1994) and Li (1997). Their results are from SOEs which were much less efficient than the TVEs to start with mainly because SOEs face a soft budget constraint whereas TVEs face relatively a harder budget constraint. It is therefore not surprising to see that introducing managerial contracts does not have as a strong effect on efficiency for TVEs.

To account for the possibility that the effects of incentive structure changes do not take place immediately, we have run the regressions by lagging the incentive structure dummy variables by one year. We found similar, but a little bit weaker, results.

Since we have grouped four ownership arrangements in the stock incentive structure, it is desirable to know that the results we obtain are not due to a single arrangement in that group.

We have run tests to determine if the effects were equal across the four arrangements within the Stock incentive structure. We cannot reject that hypothesis at the 10% significance level.[19]

5. Conclusion

This paper has two main contributions. First, it provides direct empirical evidence on how much more efficiency gain stock-based ownership can bring about than what can be achieved through contracting under collective ownership. This will shed lights on the long debate since the 1930s on the feasibility of contractual arrangements under public ownership to achieve efficiency. Our results show that introducing managerial incentive contracts has a relatively weak effect on efficiency. The efficiency improvement due to a change from collective ownership to stock-based ownership is more significant. The main reason appears to be better defined and better allocated control rights under the stock ownership.

Second, in the literature the evidence on the effects of ownership changes comes mostly from former socialist countries in Eastern Europe where SOEs were privatized within a very short period. The speed of these privatization programs does not allow one to see the separate effects if privatization was done in several stages. The failure of some of these programs has promped many to argue that ownership reforms in general should wait until market-supporting institutions are well established. In contrast, our findings show that one important step of ownership reforms, changing from collective ownership to stock-based ownership, could bring about significant efficiency gains even during the economic transition period when a country's market-supporting institutions were not well established.

[19] These results will be provided upon request.

References

Alchian, A. and H. Demsetz, 1972, "Production, Information Costs, and Economic Organization." *American Economic Review* 62, 777-95.

Bardhan, Prenab, and John E. Roemer, 1992. "Market Socialism: A case for Rejuvenation." *Journal of Economic Perspectives*, 6(3): 101-116.

Chang, Chun and Yijiang Wang, 1994. "The Nature of Township-Village Enterprises", Journal of Comparative Economics 19, 434-452.

Che, Jiahua and Qian Yingyi, 1998. "Institutional Environment, Community Government, and Corporate Governance: Understanding China's Township-Village Enterprises," *Journal of Law, Economics, and Organization*, 14, pp1-23.

Chen, Hongyi, 2000. *The Institutional Transition of China's Township and Village Enterprises: Market Liberatlization, Contractual Form Innovation and Privatization.* Ashgate Publishing Company.

Coase, R. 1937. "The Nature of the Firm." Economica, 4, 386-405.

Grossman, S. and Hart, O. 1986. "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration." *Journal of Political Economy*, vol.94, 4, 691-719.

Groves, T., Yongmiao Hong, John McMillan and Barry Naughton, 1994. "Autonomy and Incentives in Chinese State Enterprises." *Quarterly Journal of Economics*, 109(1):1-27.

Hart, O. and J. Moore, 1990, "Property Rights and the Nature of the Firm." *Journal of Political Economy* 98, 1119-1158.

Jensen, M. and Meckling, W. 1976. "Theory of the Firm: Management Behavior, Agency Costs and Ownership Structure." Journal of Financial Economics 3, 305-60.

Lin, Justin Yifu, Fang Cai and Zhou Li, 1996, *The China Miracle: Development Strategy and Economic Reform*. Hong Kong: The Chinese University Press.

Li David, 1996. "A Theory of Ambiguous Property Rights: the Case of the Chinese Non-State Sector." *Journal of Comparative Economics*, v.23, n.1, pp.1-19, August.

Li, Wei, 1997. "The Impact of Economic Reform on the Performance of Chinese State Enterprises, 1980-1989," *Journal of Political Economy* 105, pp 1080-1160.

Jefferson, H. Gary, and Thomas G. Rawski, 1994. "Enterprise Reform in Chinese Industry." *Journal of Economic Perspectives*, 8(2):47-70.

McMillan, John, and Barry Naughton, 1991. “How to Reform a Planned Economy: Lessons from China.” *Oxford Review of Economics*, 8(1):130-44.

Megginson W. and J. Netter, 2000. " From State to Market: A Survey of Empirical Studies on Privatization." Working paper, University of Georgia.

MOA (Ministry of Agriculture), 1997, *The Report on the Conditions of the TVEs in Our Country and the Opinions on Their Future Reform and Development*.

Naughton, Barry, 1995. *Growing out of the Plan: Chinese Economic Reform: 1978-1993*. Cambridge University Press, New York.

The People’s Republic’s Law of Township and Village Enterprises, 1996.

Perkins, Dwight, 1977, *Rural Small-Scale Industry in the People’s Public of China*. Berkeley: University of California Press.

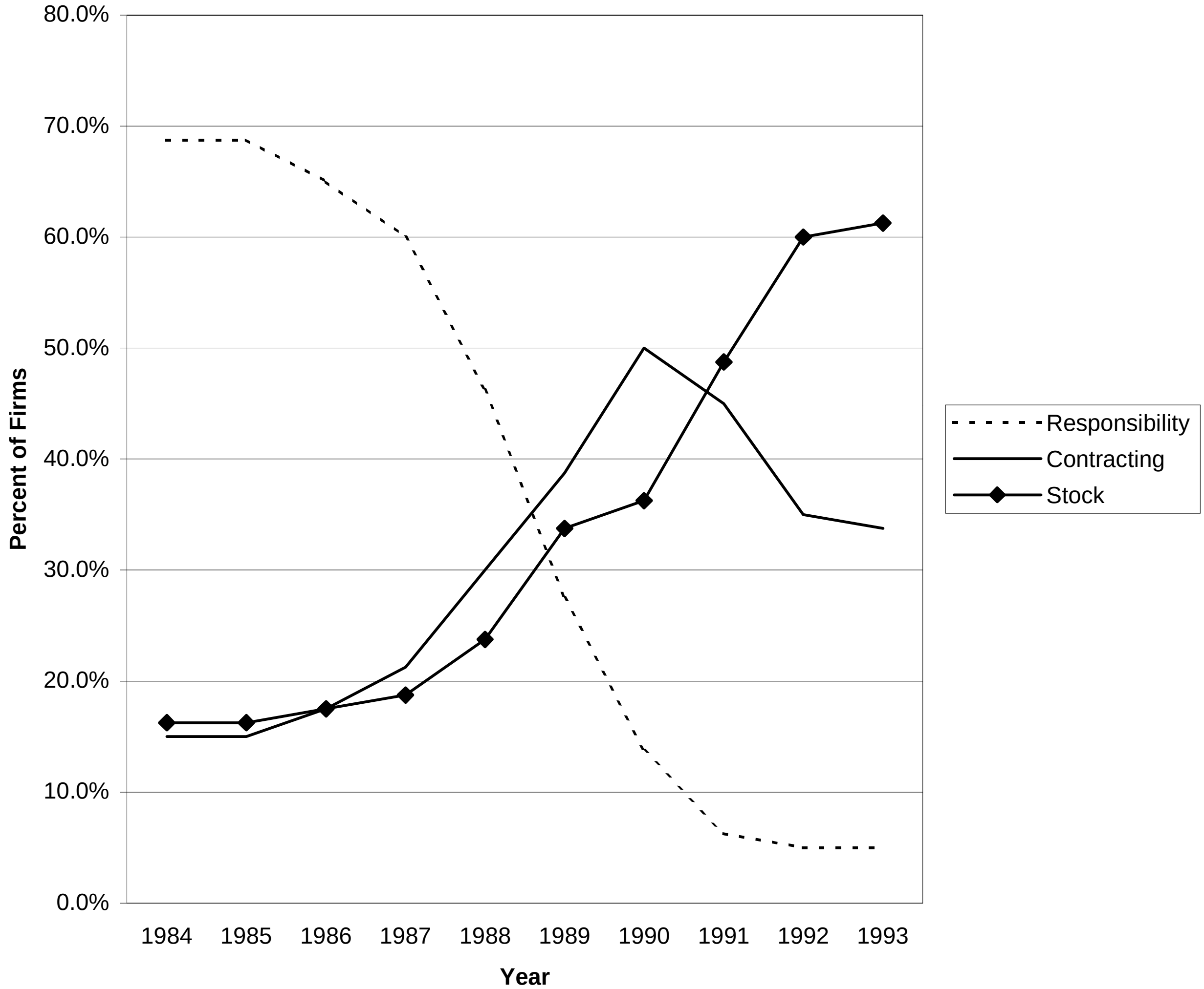
--, 1994, “Completing China’s Move to the Market.” *Journal of Economic Perspectives*, 8(2):23-46.

State Statistical Bureau, People’s Republic of China. *China’s Statistic Yearbook, 1996*.

Weitzman, M. and C. Xu, 1994. “"Chinese Township Village Enterprises as Vaguely Defined Cooperatives." *Journal of Comparative Economics* 18: 121-145, April 1994.

Williamson, O., 1979. "Transaction-Cost Economics: The Governance of Contractual Relations." *Journal of Law and Economics* 22, 233-61.

Figure 1
Ownership Structure: 1984-1993



DAVIDSON INSTITUTE WORKING PAPER SERIES - Most Recent Papers

The entire Working Paper Series is available at: www.wdi.bus.umich.edu

CURRENT AS OF 4/4/01

Publication	Authors	Date
No. 365 Incentive Contracting versus Ownership Reforms: Evidence from China's Township and Village Enterprises	Chun Chang, Brian McCall, and Yijang Wang	Nov. 2000
No. 364 Individual Pay and Outside Options: Evidence from the Polish Labour Force Survey	Fiona Duffy and Patrick Paul Walsh	Mar. 2001
No. 363 Investment, Credit Rationing and the Soft Budget Constraint: Evidence from Czech Panel Data (revised Davidson Institute Working Paper No. 60a)	Lubomír Lízal and Jan Svejnar	Feb. 2001
No. 362 A Network Perspective on Inter-Organizational Transfer of R&D Capabilities: A Study of International Joint Ventures in Chinese Automobile Industry	Zheng Zhao, Jaideep Anand and Will Mitchell	Feb. 2001
No. 361 Network Restructuring and Firm Creation in East-Central Europe: A Public-Private Venture	Gerald A. McDermott	Dec. 2000
No. 360 Responses of Private and Public Schools to Voucher Funding: The Czech and Hungarian Experience	Randall K. Filer and Daniel Münich	Oct. 2000
No. 359 Labor Market Uncertainty and Private Sector Labor Supply in Russia	Steven Stillman	Sept. 2000
No. 358 Russian Roulette-Expenditure Inequality and Instability in Russia, 1994-1998	Branko Jovanovic	Sept. 2000
No. 357 Dealing with the Bad Loans of the Chinese Banks	John P. Bonin and Yiping Huang	Jan. 2001
No. 356 Retail Banking in Hungary: A Foreign Affair?	John P. Bonin and István Ábel	Dec. 2000
No. 355 Optimal Speed of Transition: Micro Evidence from the Czech Republic	Stepan Jurajda and Katherine Terrell	Dec. 2000
No. 354 Political Instability and Growth in Dictatorships	Jody Overland, Kenneth L. Simons and Michael Spagat	Nov. 2000
No. 353 Disintegration and Trade	Jarko Fidrmuc and Jan Fidrmuc	Nov. 2000
No. 352 Social Capital and Entrepreneurial Performance in Russia: A Panel Study	Bat Batjargal	Dec. 2000
No. 351 Entrepreneurial Versatility, Resources and Firm Performance in Russia: A Panel Study	Bat Batjargal	Dec. 2000
No. 350 The Dynamics of Entrepreneurial Networks in a Transitional Economy: The Case of Russia	Bat Batjargal	Dec. 2000
No. 349 R&D and Technology Spillovers via FDI: Innovation and Absorptive Capacity	Yuko Kinoshita	Nov. 2000
No. 348 Microeconomic aspects of Economic Growth in Eastern Europe and the Former Soviet Union, 1950-2000	Sergei Guriev and Barry W. Ickes	Nov. 2000
No. 347 Effective versus Statutory Taxation: Measuring Effective Tax Administration in Transition Economies	Mark E. Schaffer and Gerard Turley	Nov. 2000
No. 346 Objectives and Constraints of Entrepreneurs: Evidence from Small and Medium Size Enterprises in Russia and Bulgaria	Francesca Pissarides, Miroslav Singer and Jan Svejnar	Oct. 2000
No. 345 Corruption and Anticorruption in the Czech Republic	Lubomír Lízal and Evžen Kočenda	Oct. 2000

The entire Working Paper Series is available at: www.wdi.bus.umich.edu

No. 344 The Effects of Direct Foreign Investment on Domestic Firms	Jozef Konings	Oct. 2000
No. 343 On the Identification of Relative Wage Rigidity Dynamics	Patrick A. Puhani	Oct. 2000
No. 342 The Determinants of Foreign Direct Investment in Transition Economies	Alan A. Bevan and Saul Estrin	Oct. 2000
No. 341 The Global Spread of Stock Exchanges, 1980-1998	Klaus Weber and Gerald F. Davis	Nov. 2000
No. 340 The Costs and Benefits of Euro-isation in Central-Eastern Europe Before or Instead of EMU Membership	D. Mario Nuti	Oct. 2000
No. 339 Debt Overhang and Barter in Russia	Sergei Guriev, Igor Makarov and Mathilde Maurel	Sept. 2000
No. 338 Firm Performance and the Political Economy of Corporate Governance: Survey Evidence for Bulgaria, Hungary, Slovakia and Slovenia	Patrick Paul Walsh and Ciara Whela	July 2000
No. 337 Investment and Instability	Nauro F. Campos and Jeffrey B. Nugent	May 2000
No. 336 The Evolution of the Insurance Sector in Central and Eastern Europe and the former Soviet Union	Robert B.K. Pye	Aug. 2000
No. 335 Institutional Technology and the Chains of Trust: Capital Markets and Privatization in Russia and the Czech Republic	Bruce Kogut and Andrew Spicer	Aug. 2000
No. 334 The Evolution of Market Integration in Russia	Daniel Berkowitz and David N. DeJong	Aug. 2000
No. 333 Efficiency and Market Share in Hungarian Corporate Sector	László Halpern and Gábor Kőrösi	July 2000
No. 332 Search-Money-and-Barter Models of Financial Stabilization	S.I. Boyarchenko and S.Z. Levendorskii	July 2000
No. 331 Worker Training in a Restructuring Economy: Evidence from the Russian Transition	Mark C. Berger, John S. Earle and Klara Z. Sabirianova	Aug. 2000
No. 330 Economic Development in Palanpur 1957-1993: A Sort of Growth	Peter Lanjouw	Aug. 2000
No. 329 Trust, Organizational Controls, Knowledge Acquisition from the Foreign Parents, and Performance in Vietnamese International Joint Ventures	Marjorie A. Lyles, Le Dang Doanh, and Jeffrey Q. Barden	June 2000
No. 328 Comparative Advertising in the Global Marketplace: The Effects of Cultural Orientation on Communication	Zeynep Gürhan-Canli and Durairaj Maheswaran	Aug. 2000
No. 327 Post Privatization Enterprise Restructuring	Morris Bornstein	July 2000
No. 326 Who is Afraid of Political Instability?	Nauro F. Campos and Jeffrey B. Nugent	July 2000
No. 325 Business Groups, the Financial Market and Modernization	Raja Kali	June 2000
No. 324 Restructuring with What Success? A Case Study of Russian Firms	Susan Linz	July 2000
No. 323 Priorities and Sequencing in Privatization: Theory and Evidence from the Czech Republic	Nandini Gupta, John C. Ham and Jan Svejnar	May 2000
No. 322 Liquidity, Volatility, and Equity Trading Costs Across Countries and Over Time	Ian Domowitz, Jack Glen and Ananth Madhavan	Mar. 2000
No. 321 Equilibrium Wage Arrears: A Theoretical and Empirical Analysis of Institutional Lock-In	John S. Earle and Klara Z. Sabirianova	Oct. 2000
No. 320 Rethinking Marketing Programs for Emerging Markets	Niraj Dawar and Amitava Chattopadhyay	June 2000
No. 319 Public Finance and Low Equilibria in Transition Economies: the Role of Institutions	Daniel Daianu and Radu Vranceanu	June 2000
No. 318 Some Econometric Evidence on the Effectiveness of Active Labour Market Programmes in East Germany	Martin Eichler and Michael Lechner	June 2000
No. 317 A Model of Russia's "Virtual Economy"	R.E Ericson and B.W Ickes	May 2000
No. 316 Financial Institutions, Financial Contagion, and Financial Crises	Haizhou Huang and Chenggang Xu	Mar. 2000
No. 315 Privatization versus Regulation in Developing Economies: The Case of West African Banks	Jean Paul Azam, Bruno Biais, and Magueye Dia	Feb. 2000

The entire Working Paper Series is available at: www.wdi.bus.umich.edu

No. 314 Is Life More Risky in the Open? Household Risk-Coping and the Opening of China's Labor Markets	John Giles	Apr. 2000
No. 313 Networks, Migration and Investment: Insiders and Outsiders in Tirupur's Production Cluster	Abhijit Banerjee and Kaivan Munshi	Mar. 2000
No. 312 Computational Analysis of the Impact on India of the Uruguay Round and the Forthcoming WTO Trade Negotiations	Rajesh Chadha, Drusilla K. Brown, Alan V. Deardorff and Robert M. Stern	Mar. 2000
No. 311 Subsidized Jobs for Unemployed Workers in Slovakia	Jan. C. van Ours	May 2000
No. 310 Determinants of Managerial Pay in the Czech Republic	Tor Eriksson, Jaromir Gottvald and Pavel Mrazek	May 2000
No. 309 The Great Human Capital Reallocation: An Empirical Analysis of Occupational Mobility in Transitional Russia	Klara Z. Sabirianova	Oct. 2000
No. 308 Economic Development, Legality, and the Transplant Effect	Daniel Berkowitz, Katharina Pistor, and Jean-Francois Richard	Feb. 2000
No. 307 Community Participation, Teacher Effort, and Educational Outcome: The Case of El Salvador's EDUCO Program	Yasuyuki Sawada	Nov. 1999
No. 306 Gender Wage Gap and Segregation in Late Transition	Stepan Jurajda	May 2000
No. 305 The Gender Pay Gap in the Transition from Communism: Some Empirical Evidence	Andrew Newell and Barry Reilly	May 2000
No. 304 Post-Unification Wage Growth in East Germany	Jennifer Hunt	Nov. 1998
No. 303 How Does Privatization Affect Workers? The Case of the Russian Mass Privatization Program	Elizabeth Brainerd	May 2000
No. 302 Liability for Past Environmental Contamination and Privatization	Dietrich Earnhart	Mar. 2000
No. 301 Varieties, Jobs and EU Enlargement	Tito Boeri and Joaquim Oliveira Martins	May 2000
No. 300 Employer Size Effects in Russia	Todd Idson	Apr. 2000
No. 299 Information Complements, Substitutes, and Strategic Product Design	Geoffrey G. Parker and Marshall W. Van Alstyne	Mar. 2000
No. 298 Markets, Human Capital, and Inequality: Evidence from Rural China	Dwayne Benjamin, Loren Brandt, Paul Glewwe, and Li Guo	May 2000
No. 297 Corporate Governance in the Asian Financial Crisis	Simon Johnson, Peter Boone, Alasdair Breach, and Eric Friedman	Nov. 1999
No. 296 Competition and Firm Performance: Lessons from Russia	J. David Brown and John S. Earle	Mar. 2000
No. 295 Wage Determination in Russia: An Econometric Investigation	Peter J. Luke and Mark E. Schaffer	Mar. 2000
No. 294 Can Banks Promote Enterprise Restructuring?: Evidence From a Polish Bank's Experience	John P. Bonin and Bozena Leven	Mar. 2000
No. 293 Why do Governments Sell Privatised Companies Abroad?	Bernardo Bortolotti, Marcella Fantini and Carlo Scarpa	Mar. 2000
No. 292 Going Public in Poland: Case-by-Case Privatizations, Mass Privatization and Private Sector Initial Public Offerings	Wolfgang Aussenegg	Dec. 1999
No. 291a Institutional Technology and the Chains of Trust: Capital Markets and Privatization in Russia and the Czech Republic	Bruce Kogut and Andrew Spicer	Feb. 2001
No. 291 Institutional Technology and the Chains of Trust: Capital Markets and Privatization in Russia and the Czech Republic	Bruce Kogut and Andrew Spicer	Mar. 1999
No. 290 Banking Crises and Bank Rescues: The Effect of Reputation	Jenny Corbett and Janet Mitchell	Jan. 2000
No. 289 Do Active Labor Market Policies Help Unemployed Workers to Find and Keep Regular Jobs?	Jan C. van Ours	Feb. 2000
No. 288 Consumption Patterns of the New Elite in Zimbabwe	Russell Belk	Feb. 2000
No. 287 Barter in Transition Economies: Competing Explanations Confront Ukranian Data	Dalia Marin, Daniel Kaufmann and Bogdan Gorochowskij	Jan. 2000
No. 286 The Quest for Pension Reform: Poland's Security through Diversity	Marek Góra and Michael Rutkowski	Jan. 2000

The entire Working Paper Series is available at: www.wdi.bus.umich.edu

No. 285 Disorganization and Financial Collapse	Dalia Marin and Monika Schnitzer	Oct. 1999
No. 284 Coordinating Changes in M-form and U-form Organizations	Yingyi Qian, Gérard Roland and Chenggang Xu	May 1999
No. 283 Why Russian Workers Do Not Move: Attachment of Workers Through In-Kind Payments	Guido Friebel and Sergei Guriev	Oct. 1999
No. 282 Lessons From Fiascos in Russian Corporate Governance	Merritt B. Fox and Michael A. Heller	Oct. 1999
No. 281 Income Distribution and Price Controls: Targeting a Social Safety Net During Economic Transition	Michael Alexeev and James Leitzel	Mar. 1999
No. 280: Starting Positions, Reform Speed, and Economic Outcomes in Transitioning Economies	William Hallagan and Zhang Jun	Jan. 2000
No. 279 : The Value of Prominent Directors	Yoshiro Miwa & J. Mark Ramseyer	Oct. 1999
No. 278: The System Paradigm	János Kornai	Apr. 1998
No. 277: The Developmental Consequences of Foreign Direct Investment in the Transition from Socialism to Capitalism: The Performance of Foreign Owned Firms in Hungary	Lawrence Peter King	Sept. 1999
No. 276: Stability and Disorder: An Evolutionary Analysis of Russia's Virtual Economy	Clifford Gaddy and Barry W. Ickes	Nov. 1999
No. 275: Limiting Government Predation Through Anonymous Banking: A Theory with Evidence from China.	Chong-En Bai, David D. Li, Yingyi Qian and Yijiang Wang	July 1999
No. 274: Transition with Labour Supply	Tito Boeri	Dec. 1999
No. 273: Sectoral Restructuring and Labor Mobility: A Comparative Look at the Czech Republic	Vit Sorm and Katherine Terrell	Nov. 1999
No. 272: Published in: *Journal of Comparative Economics* "Returns to Human Capital Under the Communist Wage Grid and During the Transition to a Market Economy" Vol. 27, pp. 33-60 1999.	Daniel Munich, Jan Svejnar and Katherine Terrell	Oct. 1999
No. 271: Barter in Russia: Liquidity Shortage Versus Lack of Restructuring	Sophie Brana and Mathilde Maurel	June 1999
No. 270: Tests for Efficient Financial Intermediation with Application to China	Albert Park and Kaja Sehrt	Mar. 1999
No. 269a: Russian Privatization and Corporate Governance: What Went Wrong?	Bernard Black, Reinier Kraakman and Anna Tarassova	May 2000
No. 269: Russian Privatization and Corporate Governance: What Went Wrong?	Bernard Black, Reinier Kraakman and Anna Tarassova	Sept. 1999
No. 268: Are Russians Really Ready for Capitalism?	Susan Linz	Sept. 1999
No. 267: Do Stock Markets Promote Economic Growth?	Randall K. Filer, Jan Hanousek and Nauro Campos	Sept. 1999
No. 266: Objectivity, Proximity and Adaptability in Corporate Governance	Arnoud W.A Boot and Jonathan R. Macey	Sept. 1999
No. 265: When the Future is not What it Used to Be: Lessons from the Western European Experience to Forecasting Education and Training in Transitional Economies	Nauro F. Campos, Gerard Hughes, Stepan Jurajda, and Daniel Munich	Sept. 1999
No. 264: The Institutional Foundation of Foreign-Invested Enterprises (FIEs) in China	Yasheng Huang	Sept. 1999
No. 263: The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries	Erik Berglof and Ernst-Ludwig von Thadden	June 1999
No. 262: Law Enforcement and Transition	Gerard Roland and Thierry Verdier	May 1999
No. 261: Soft Budget Constraints, Pecuniary Externality, and the Dual Track System	Jiahua Che	June 2000
No. 260: Missing Market in Labor Quality: The Role of Quality Markets in Transition	Gary H. Jefferson	July 1999
No. 259: Do Corporate Global Environmental Standards in Emerging Markets Create or Destroy Market Value	Glen Dowell, Stuart Hart and Bernard Yeung	June 1999