

From *Proceedings of the Fourth Economic Symposium of Chinese Young Economists*,  
July 15-16, 1988, University of California at Berkeley.

## **TRUNCATED PROPERTY RIGHTS AND THE DIFFICULTY OF CHINA'S STATE-RUN ENTERPRISE REFORM**

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**ABSTRACT:** The notion of "truncated property rights" which implies the separation of the rights to manage some resources and the rights to be benefited or harmed from the resources is developed and used to understand the current structure of property rights in China's state-run enterprises and the resulting behaviors of workers, managers and the state supervisory organs. The paper supports the idea of changing the current regime of "truncated property rights" to a regime of "complete property rights" and letting the state hold the financial assets of the enterprises only.

**CONTENTS:** 1. A Representative State-run Enterprise. 2. Truncated Property Rights. 3. Separation of Ownership and Control? 4. Financial Assets and the State. 5. Managers and Workers. 6. Conclusion. References.

### **1. Introduction: A Representative State-run Enterprise**

In the literature on China's industrial reform, economists from both capitalist and communist countries have pointed out the problem of inefficient allocation of labor, capital, land and other factors. They also conclude that lack of markets for these factors of production is the source of the inefficiency. But the more relevant question is how to develop markets for labor, capital, land and other factors in today's Chinese economy. In answering this kind of question I find the study of property rights interesting, important and challenging.

In this paper I am trying to clarify some theoretical confusions related to the concepts and study of property rights in my mind and in the literature. Before discussing theoretical issues some descriptions about the state-run enterprises in China may be helpful.

Workers, managers, and supervisory organs are the primary actors in a representative state-run enterprise in China. Understanding the living of a worker and the activities of managers and supervisory organs is the key in understanding a representative state-run enterprise in China.

The wages of representative workers are low and have little difference across workers or between workers and managers. About 50% or more of the wages will spend on food. But the welfare of the workers is not limited to the wages and is also closely

related to the enterprise they work in. Workers are typically employed in the same enterprise for life and receive housing, medical care, and pension from the enterprise. Depending on the years they have been a state-run enterprise employee, the number of dependents they have, and their importance in the enterprise, most of the workers can get an apartment with some difference in quality and need to pay about 5% or less of their wages for the rents and utilities.

Medical care is free for workers and free or half price for the dependents. The cost for medical care is much lower than in United States. Although the standards of medical care are low the basic needs are covered. Large enterprises have their own hospitals and others have their own medical care teams which handle most of the basic medical care within the enterprise. If a worker needs to use the local hospital the enterprise will pay all the expense. Medical insurance company is absent in China.

When a worker retires he will receive about 70% or more of his regular wage as pension from the enterprise he was associated with just before his retirement. He can still live in the apartment he occupied before but can not exchange or sell the apartment. In the past few years one of the dependents of a worker can be employed by the enterprise or the collective set up by the enterprise upon the retirement of the worker. But now the government does not encourages this practice.

Other kind of benefits workers have including recreation facilities (movie theater, sports equipment), commuting buses, primary and high schools for the dependents, and even markets for daily consumption goods. These welfare functions are all established and controlled by the enterprises. To some extent the enterprises standing there like a big family try to provide everything they can possibly provide to workers. It is not unusual that the enterprises buy a lot of oranges, watermelons and even fishes from remote rural area and distribute equally to their employees. Sometimes their own products are distributed to the employees if they happen to be TV or bicycle, or some other kinds of consumption goods.

It is easy to describe and understand the living of workers because they are largely separated from the decision-making processes concerning production and distribution. When we discuss the activity of managers and supervisory organs, it becomes very difficult to separate the activities by managers and by supervisory organs. Instead I will try to organize a list of decisions (or activities) and indicate whether it is concerned with managers or with supervisory organs, or with both. (M) will indicate the decision concerning only with managers, (S) concerning only with supervisory organs, and (M & S) concerning with both. Following are an incomplete list of the decisions which have to be made in any kind of contemporary economy:

**TABLE 1. Economic Decisions or Activities**

Group I	
(M)	distributing apartment
(M)	building house
(S)	medical care plan
(M)	primary school & high school
(M)	recreation activities
(M)	consumption goods
(S)	pension
(M & S)	employment of dependent

(M)	commuting bus
<b>Group II</b>	
(S)	setup new enterprise
(S)	dismiss & appoint manager
(S)	enterprise bankruptcy
(none)	evaluate assets of enterprise
<b>Group III</b>	
(S)	wage setting
(M & S)	bonus setting
(M & S)	land use
(M)	production plan
(M)	product sale
(other)	R & D
(M & S)	develop new product
(S)	export & import
(S)	joint venture with foreign firm
(M & S)	use of profit
(S)	hire & fire worker
(M)	intermediary goods
(S)	fund for new project
(M)	small project
(MS)	enterprise finance
(S)	large capital investment

It is clear that in a capitalist market economy the first and second groups of activities will not be concerned with managers and will concern respectively with individual consumers and shareholders while the third group of activities will be concerned solely with the managers. And it is interesting to point out that there is nobody indicated in the table to evaluate the assets of the state-run enterprise.

With the above background knowledge about the state-run enterprise in China, the following sections try to understand it in a property rights framework.

## 2. Truncated Property Rights

"Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others. These expectations find expression in the laws, customs, and mores of a society. An owner of property rights possesses the consent of fellowmen to allow him to act in particular ways. An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights." (Demsetz 1967)

Under private ownership of property rights a bundle of rights is related to some specific resources and the owner can not only be benefited or harmed by the rights, but can also take any actions on the specific resources to change the effects of the bundle of rights on behalf of his interests.

Given some specific resources if the benefits originated from the resources and the control to the resources are both attributed to an individual by legislation or customary practice, then the individual has an complete property rights on the resources. When the benefits originated from some specific resources and the control to the resources are not attributed to the same individual, the property rights are truncated in the sense that no party involved will have an complete property rights. It is claimed that the individual has a truncated property rights if either he can benefit from but not control directly some specific resources or he can control but not benefit directly from the specific resources.

Under the current ownership structure in China individuals sometimes have various rights which they can use to benefit or harm others or themselves. Although these rights are also related to some specific resources, individuals can not always take direct actions on the resources on behalf of their interests. But indirect actions at higher costs are often visible in reality. On the other hand individuals who have the rights to manage the resources could not be benefited or harmed directly and proportionally from their actions. In other words there are externalities under the current ownership structure. There are some implicit costs which have not been taken into account by the individuals when they are benefited from their rights or make a decision using their rights.

A worker in a state-run enterprise has the right to receive wage for his labor. This is the same as in a private economy. But the worker also has the benefits of housing, medical care, pension and other welfare from the enterprise. The worker can have some influences on his wage (bonus) by change his performance in the workshop and this may be quite effective and efficient if the manager happens to be very good at monitoring. But he can have little direct influence on his housing, medical care, pension and other welfare benefits. He can not sell his apartment or exchange it with other individuals. He has no choice regarding the contents of his medical care or pension plan. The existing indirect actions taken to affect his benefits of housing, medical care, pension, and other welfare are likely to be and in fact were inefficient and incurring great costs. Things become much simpler if there are no changes in the regime. Chinese people in the state-run enterprises have developed quite sophisticated methods to acquire and distribute housing. Most of the workers and especially the managerial and administrative groups are happy with their situations given the limited resources. So the unclear specification of private property rights on houses seems not important at all and this issue indeed has not been called to attention until 1988 -- almost ten years after the beginning of the reform.

A worker of a state enterprise has not only the right to be employed by the enterprise until the age of retirement but also has the right (at least between 1978 and 1986) to let his dependent be employed either directly by the enterprise or by collectives set up by the state-run enterprise. Again the problem looks not so important if the regime is not going to change.

It is clear from the introduction and the above paragraphs that an individual worker in a state enterprise has a bundle of benefits: wages, bonus, housing, medical care, pension, recreational facility, employment for dependents, schools for children, some consumption goods, and etc. It is also clear that these benefits are related to his human resources. What I want to emphasize here is the relation of these benefits to the resources of the enterprise. Workers do not control the resources of enterprises

but benefit from them. So workers have some truncated property rights to their labor and the capital of their enterprise.

Managers and supervisory organs together control the resources of enterprise as indicated in the table 1 of the first section. But they are not benefited directly and proportionally from their management of those resources of the enterprises. Most members of the managerial group in China come from inside the enterprise and they have all the benefits the workers have. Their salaries and bonuses are not significantly higher than those of skilled workers. But they have the rights to manage the resources of the enterprise except for some actions that are prohibited by the state (supervisory organs). They can also influence to some extent the welfare of the workers. So managers have only truncated property rights too.

The state nominally owns the enterprises. But the real contents of its rights include claiming and redistributing some residual profits of the enterprises, monitoring the manager groups and direct management of the enterprises together with managers. The state claims and redistributes the residual profits, monitors the manager groups and participate in the management by administrative procedures. The administrative controls are however fragmented before and after reform because of the size and complexity of Chinese industry. And more importantly, these administrators can never use the claimed profits for their own personal consumption. They only receive fixed salaries and welfare benefits comparable to managers. But they can to some extent influence the production and distribution processes of the enterprises and the decisions of the manager groups. So the administrators in supervisory organs have also truncated property rights.

So far we have been trying to specify each bundle of truncated property rights among workers, managers and administrators in state supervisory organs. We have seen a very significant difference between the truncated property rights and the private property rights. Let me further elaborate these differences.

Private property rights allow individuals not only to be benefited or harmed exclusively from some specific resources (land, labor, stock, cash and etc.) but also to control (exchange, destroy, transform, hoard and etc.) these resources.

Truncated property rights often separate the rights to be benefited or harmed from the resources and the rights to control the resources. It is this separation that is responsible for the inefficiency of resource allocation. The separation brings about externalities. Internalization of these externalities requires the two rights to be combined as in private property rights. But will internalization happen? How can we influence the process of internalization? These are interesting questions.

Sometimes we see people describe the current ownership structure in China as a "public" or "common" ownership of property rights. These concepts are misleading. As long as individuals have differences in the rights to benefit and in the rights to control the terms "public" and "common" will have no economic meanings.

State ownership is a better term to describe the ownership of state-run enterprises but also suffers from the some deficiencies. The planning and administrative controls in china's industry are much weaker than in other socialist countries like the U.S.S.R. There are important limits for the state to mobilize resources located in each enterprise. Although funds for new projects are tightly controlled by the state, land and capital occupied by established enterprises can not easily be transferred by

administrative procedures. In practice these resources are exchanged under highly segmented informal markets at huge transaction costs. An example will illustrate the point. An enterprise acquiring a plot of land to expand production from a suburban commune had to commit itself to hiring large numbers of unskilled commune members as temporary workers in perpetuity.

These kinds of informal markets function quite well in China. Although the bargaining costs are surprisingly high compared to formal organized markets, both parties do have gains in the transactions. Theoretically it may be proved that informal markets are result of the truncated property rights.

Here I am interested in the fact that the truncated property rights do exist among workers, manager groups and the state supervisory organs whether they are established by explicit legislation or by customary practices developed in the past several decades. It is this ownership of truncated property rights that gives rise to the activities we observe in China's industrial life. We should be able to explain economic activities in current regimes based on these institutional arrangements and the self-interest assumption. Policies directed at changing these activities for some purposes should also concern themselves with changes of these institutional arrangements. It is here that the difficulty of China's industrial reform arises. And it is here more studies are needed for a solid reform.

### **3. Separation of Ownership and Control?**

The notion of truncated property rights may be helpful in clarifying some theoretical confusions around the concepts and theories of separation of ownership and control. In a well-known book published in 1932 titled *The Modern Corporation and Private Property* by Berle and Means, the authors popularized the concept of separation of ownership and control in the modern private corporation. They argued that the large corporations owned by many stockholders are controlled by a few corporate managers who own a very small fraction of the total stock of the corporation but have a widely different interest from that of stockholders. The stockholders lose the control of the corporation because everyone holds only a small fraction of the stock and so can not effectively influence the management. So the rights of control are given to managers and the rights of ownership are kept in the hands of stockholders. This line of concept and theory of separation of ownership and control is criticized by some well-known economists (Stigler 1983, Demsetz 1985) and is made unpopular nowadays in capitalist country.

However in a recent draft of "the law for public-owned industrial enterprises of the People's Republic of China" published in the official newspaper of the communist party *People's Daily* (overseas edition) on January 13, 1988, we find a statement, which may make the concept of separation of ownership and control popular in a socialist country, that " The property of enterprise belongs to the public. The state adopts the principle of the separation of ownership and Management to enterprises. Enterprises can occupy, use, and deal with the property, which has been given for management by the state, in accordance with the legislation."

The exact meaning of the separations (of ownership and control) discussed above are not very clear. But it is clear that they can not be the separation of the rights to benefit and the rights to control. If we think of the stock as a kind of resources in the same

sense as cash and machines are, doesn't a stockholder in America have both the right to be benefited or harmed from holding the stock (gain and lose when the stock price changes) and the right to manage the stock (buy and sell)? Are there any significant implicit costs or benefits he has not taken into account when he is dealing with his shares of the stock on behalf of his own interest? Then, why bother with the separation of ownership of stocks and control of corporations?

On the other hand as I have made clear in the previous sections the truncated property rights among the workers, managers and the state imply an incompatible distribution of the property rights that will generate dangerous externalities. This kind of separation of ownership (of the rights to benefit) and management (the rights to control enterprise) could never be a guideline for a successful state-run enterprise reform.

The confusions disappear if we interpret the separations discussed in both cases above as the separation of ownership of financial assets and ownership of real property. Shareholders have complete property rights of some specific assets and managers have complete property rights of some specific real property of firms. Here the complete property rights are defined as in previous section of this paper and have a little different meaning from the term "property rights" used in traditional economic literature. But the new notion of complete property rights may be more consistent with modern economic theory and with modern economic institution.

In this framework, it is obvious that attention should be given to the question: why there is such a rapid development of financial assets and financial markets which are somewhat separated in some respect from the development of real property and goods markets among private market economies. Why money is so important in the early development of private market economy? One of the plausible answer may be that valuable money and financial assets help to establish complete property rights of various resources because they reduce the amount of information and specialize the kind of information needed to control and benefit from various kind of resources. The limited rationality of human-beings may imply unlimited innovation of financial assets, which can be used to increase individual's utility as some real property can, and can have their paper values backed up by real resources and well functioning financial markets. In any case we could not overemphasize the fundamental role of complete property rights in forming financial assets and developing financial markets and so the efficiency of modern economy. With a truncated property rights regime it is not hard to understanding the low efficiency of Chinese industry.

#### **4. Financial Assets and the State**

When talking about ownership with ordinary people most think of the rights to be benefited and not the rights to manage the property because most of the property is so easy to manage that management becomes trivial. Think of a one-touch camera made in Japan or a \$1000.00 deposit in a checking account. Of course there are kinds of property not every one can easily handle, for example, a shoe company. But do you think a portfolio of stocks is easier to manage than a shoe company for the managers of the shoe company?

So it seems to me there exists a lot of forms of property in a commodity (market) economy and all forms of property are used ultimately to yield utility for some individuals or group of individuals. And the management technology used for different

forms of property are quite different. Different individuals tend to choose different forms of property to own. This may reflect some important differences related to the economic characteristics of each individual (comparative advantage) and related to each form of property (information characteristics). Everybody can own stocks. Only managers control firms. All workers own their labor services. Governments own money, foreign exchange and mostly other financial assets but not shoe companies. Obviously China and some other communist governments are the exceptions.

If the states has to hold some kind of resources for whatever purposes, which kind is best suited for them? It is my opinion that any kind of financial assets may be better than real property except military resources and some other public goods (dams, bridges, and roads). The state also has its comparative advantage and disadvantage.

The ongoing debate in China on whether to adopt the form of stock corporation or the form of contracted management to the state enterprises seems to me to be missing some important points. Aligning the truncated property rights (to combine the rights to be benefited or harmed from some resources and the rights to manage the resources) and arriving at a regime of complete property rights should be the most important guidelines if great efficiency is to be expected. On the other hand we need to be informed of different forms of resources or property and the differences in their management technology so that different parties can choose different forms of resource or property to own and to manage according to their comparative advantages.

The contracted management arrangement between enterprises and the states only specifies in great detail the contents of the truncated property rights among the state, the managers, and the workers. Nothing more. The state still holds truncated property rights of real property. The production and profits may increase or decrease depending on how well the contracts fit the specific enterprises in the sense that some externalities are internalized or not by a specific contract. But it is not easy for the state represented by the supervisory organs to find where the externalities are and how to make contracts to eliminate them. On the other hand, the contracted management arrangement may have some good effects on the overall economy in the short-run, but this arrangement may cause more troubles for future reforms trying to realign the property rights. Realignment of property rights has to involve specification and redistribution of expected wealth that may be derived from the property rights. The more the volume of the wealth needed to be divided and redistributed in a realignment, the more difficult for the realignment to happen. The expected benefits for workers, managers and even the state administrators under a contracted management arrangement will grow as the economy grows although in an inefficient way. So growth of the Chinese economy may increase the costs of transforming it to a higher efficient path with a higher growth rate.

The stock (shared) corporation is a hot topic in both academic and policy-making groups. It seems to me there are some agreements regarding stock corporations among Chinese scholars. It is said that the stock corporation is a good form for separation of ownership and management but is not suited at least in the short-run for Chinese state-run enterprises and contracted management is a better form for today's state enterprises in China. The confusions arise because the problems of truncated property rights have not been realized and studied in a reasonable theoretical framework. It is clear from previous arguments in this paper that the key point is to

combine the rights to benefit with the rights to control and so to eliminate the externalities induced by separation of the two rights.

In the case of complete property rights there is no exceptions for the state. The two rights should also be combined when the state holds some property rights if efficiency is preferred. To adopt this principle in a reasonable degree of completeness the state could only possibly hold some resources that is very easy to control. Management of thousands of enterprises could not be efficiently carried out by a relatively small number of groups of state bureaucrats. Money and foreign exchange are kinds of ideal resource for the state to own. Financial assets are probably the next candidates. The technical knowledge needed to control financial assets may be new to the bureaucrats but far less than those needed to control production and wage setting in the enterprises.

Of course there are a lot more new things we need to learn and to do to have well functioning financial markets so that the financial assets held by the state can be different from the real property held by the enterprises and have a value like money. But as long as the state holds some kind of truncated property rights on the enterprises' real property instead of complete property rights on enterprises' financial assets, the managers could not have full control of the real property of the enterprises, and the efficiency loss in real production could not be eliminated. There is a dilemma in the current truncated property right regime. When more controls are given to the managers by the state in expecting higher efficiency and so more profits for the state, the managers will use the strengthened power to increase bonuses and build more houses for workers and themselves instead of improving the profitability of the enterprises. To resolve the dilemma it is necessary on the one hand for the managers to have full control of the production and the distribution within the enterprises and on the other hand for the state to have full control of the capital value of the enterprises without interfering in the production and distribution within the enterprises. Letting the state own only financial assets may be the only solution.

Also we may have enormous gains apart from the gains from the efficiency of production and distribution in the enterprises. It is less likely to have strong monopoly power in the financial markets than in a goods markets if the government does not want to give these kinds of powers to its bureaucrats. It is much easier to note a 1 billion yuan loss or gain in the financial markets than the same value loss in the case of price control or quantity restriction on real production. The troubles of lack of instrument for macro-control in the economy is inevitable in a economy with truncated property rights, for the state can only check the enterprises through the micro-instruments of price control, quantity quota, and wage setting etc. But these troubles may be avoided to a large extent, when the state owns only the financial property of the enterprises. Interest rate (the price of capital) may then become an important signal and instrument to the policy-maker instead of being an ineffective signal and instrument in the truncated property rights regime.

Stock corporations are one form of arrangement which could let the state hold the financial assets and the enterprises hold the real property, but it may not be the easiest one, and probably the most difficult one. There may be theoretical reasons for this conjecture, but the casual empirical observations from the advanced private economies may give us some impressions. The United States and Japan have quite a big difference in the forms of enterprise organizations. Shared corporations are not

common in Japan while they dominate the industrial organizations in the United States. In Japan large parts of enterprise assets are controlled by business banks and financial institutions. And these banks and financial institutions are owned by large insurance companies or owned by other banks and financial institutions. Although the ownership structure of financial assets is quite complicated the separation of real property and financial assets is very clear. Real resources of Japanese firms are tightly controlled by the managers of various level in the sense that the relevant production and distribution decisions within the firm are made solely by relevant individuals and the rewards and promotions are closely related to their performances. Is there any implication of this for China's state-run enterprise reform?

It is not easy to convince people to accept the idea that we should let the state hold complete property rights on financial assets only. Lots of questions arise: how to ensure the managers not to take advantage of the states when the state gives up the direct control on real property? This is understandable. The truncated property rights concern with every major actors in the economy. Managers and workers should also hold some kind of complete property rights.

## **5. Managers and Workers**

There is no market for managerial talents in the current truncated property rights regime. Top managers sometimes shift from one enterprise to another not due to his superior performance but resulting from his mismanagement in the former enterprise. It is hard to blame the managers for the mismanagement if they have not full control of the enterprises. So turnover is low and the quality of the managers improves slowly.

To realign the truncated property rights we have to realize that the managers and workers have to hold quite different property rights. This implies that there should be a gap between the managers and workers, and even between different levels of managers in the rights to benefits and the rights to control. In the current regime, the managers' benefits are far less than the potential gains they can make through their proper managements of the enterprises.

The importance of the managers in a private firm is made clear by Alchian and Demsetz (1972), the team production in a firm requires a central party to meter the productivity of each member and to ensure the central party does a good job of monitoring they have to hold the rights to control other inputs and the rights to the residual claims. I am not sure that only the residual claims combined with the full power to control the inputs could ensure good monitoring, but I am convinced that the central party has to hold claims comparable to its rights to control.

It seems unfair to let the managers have such good property rights. This is only true when there is no market for managerial talents. When potential managers could compete with each others and with incumbent managers for the high incomes and corresponding challenges of management, it may be found that the good property rights are just worth the hard work.

Of course there is the problem of monitoring the managers. This is the most difficult and important task. It is almost impossible when there is only one party that is responsible for this task and the party often has incentives other than the profits of the enterprises. So it is essential for the party that is monitoring the managers to have an interest only in the profits (including future profits) of the enterprises. This may be

possible if the parties monitoring the managers are several independent business banks holding some of the financial assets of the enterprises and having no obligations other than increasing the value of the assets held by the banks. And then it may be much easier for the state to monitoring the banks.

There is a popular (dangerous?) opinion among some Chinese scholars that the workers should own the enterprises, not the managers or the state. The current truncated property rights regime encourages this idea. It is not clear to me how complete property rights can be specified if every employee is treated the same. Also important is the increase in the cost of negotiation when the management of an enterprise is not concentrated in a small group of authorities. Economies of scales require concentration of capital which is also opposed to the idea of dis-aggregating the resources to individual workers. It seems to me the solutions lie in giving back workers complete property rights of their labor and other property of personal use rather than in giving more benefits to workers.

In current regime it is very difficult to fire a worker in the state enterprises even if the managers are given the full power to do so. Workers depend on the enterprises not only for wages. The whole bundle of truncated property rights will be lost if the workers go away from the enterprises except for the wages which they may earn elsewhere too. But wages of a Chinese worker are too low to be significant in influencing the decision and the consequence of staying or not staying in the enterprises. So the main obstacles in preventing the mobility of labor are the truncated property rights for houses, medical care, pension and sometimes the employment of dependents. If the benefits in the state enterprises are wages only, managers will more easily fire unneeded workers. There may be more workers who quit and set up their own individual business than what China has now. The unemployment compensation will also be easier to design. The behaviors of the managers will also be much easier to monitor for the managers could no longer spend the retained profits on housing which could absorb almost unlimited profits and is not easy to be noted by outsiders. But on the other hand even if the truncated property rights of the workers are realigned and wages are the only incomes and benefits for the workers, it is still difficult to use piece rates or differential bonuses because the managers have no incentives to treat workers differently.

People in urban China are used to living under the truncated property rights regime. They have formed some obstinate expectations over the past several decades that are the main contents of the truncated property rights and are still supported by state policies. The state now wants to change people's expectations and encourage individuals to help themselves through various activities instead of depending on the state enterprises. But the difficulty lies in that it is not enough to realign only the truncated property rights of one party, say that of workers, although it may be the easiest to realign and should be realigned as soon as possible.

## **6. Conclusion**

The arguments of the paper are extremely straight forward. I am not arguing that the state should not own property or that workers should own more property. I am arguing that the property rights consist of essentially two parts, one is the rights to be benefited or harmed from some resources and the other is the rights to control the resources. If the two rights are not combined and owned by one independent party or

individual, there will be efficiency loss due to the self-interest activities which will always happen regardless of the time, the place, and the people. This principle is not discussed much by American people for it is hard to find these kinds of separation of two rights in America and is not discussed much by Chinese people too for the separation of the two rights can be found almost everywhere and people are used to it and have ignored it.

To look at the reform problem as a process of combining the two rights to gain efficiency may be helpful in understanding the complicated transition period from one regime to another. Development of market will follow the development of complete property rights. The efficiency of market exchange comes from the elimination of externalities present in the case of truncated property rights. The same is true for the development of specialization although the development of specialization is also closely related to the extent of market. In any case the question of property rights comes before them and could never be over emphasized.

To convince people of the essential arguments of this paper lots of further research needs to be done. Empirically to what extent can the separation of the two rights (or the truncated property rights structure) be measured formally? Theoretically and formally how to prove that it is less costly for the state to hold the financial assets than the real property? Are other theories explaining contemporary Chinese industry contradicting or consistent to the notion of truncated property rights? Are their policy recommendations the same as implied here? It seems to me the approach adopted in this paper may be quite fruitful for the study of China's industrial reform.

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