Corruption and China's Economic Reform in the Early 21st Century

by

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CEPS Working Paper No. 116 October 2005

Acknowledgement: I would like to thank Steven Kou of Columbia University and Yan Shen of Peking University for helpful comments and the Center for Economic Policy Studies at Princeton University for financial support in the preparation of this paper.

Abstract

Past economic reform of the state sector in China consisted mainly of privatization, of agriculture and of small and medium-size state enterprises, leaving large state enterprises in the control of the state. Current reform consists of making state-owned enterprises and banks more efficient and functioning like private enterprises, and gradual privatization of some large state enterprises. Bureaucrats managing state assets and the selling of assets take advantage of such power to benefit themselves, including embezzlement of public funds and taking bribes from citizens needing their help, as can be found in state enterprises, state-owned commercial banks and in government projects. Reducing the size of the government sector is a basic solution to the corruption problem in China while attention should be paid in the privatization process which can involve corruption.

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1. Introduction

Reform of China's economic institutions since 1978 has been a gradual process. A major theme of this paper is that corruption, while not a major hindrance to economic reform in the past, has become a major hindrance to further reform at the beginning of the 21st century. The subject of this paper is the role of corruption in further economic reform in China, and not the economics of corruption per se. Svensson (2005) is a recent paper dealing with the subject of corruption and includes a number of references but the current paper is self-contained in discussing our own topic.

I begin by reviewing China's economic reform and growth since 1978 and pointing out the main characteristics of reform, the fundamental factors accounting for rapid growth and the current shortcomings of China's economic institutions (section 2). With this survey as the background I go on to examine the problems facing further reform of different institutions, including the state-owned enterprises (section 3), the banking and financial system (section 4), the disparity among regions (section 5), the legal system (section 6). I then offer a theoretical explanation of one importance hindrance to further reform, namely bureaucratic behavior and corruption on the part of government officials and managers and staff of state-owned economic institutions (section 7). A recommendation to reduce bureaucratic behavior is offered in section 8.

At the outset I would like to point out that the methodology of this paper is different from the standard approach to empirical economic research, namely, formulation of a hypothesis followed by empirical testing. We do advance the hypothesis that corruption is an important hindrance to further economic reform, but do not formulate it in econometric terms for statistical testing. Many applied economic theorists also formulate hypothesis to explain economic phenomena without statistical testing. We differ from the applied theorists in that we do not have a formal mathematical model in the formulation of our hypothesis and do not use mathematics to deduce implications from the hypothesis since it is so simple. Given the fact that law enforcement is ineffective when the benefit of violation is high or when there is a culture of law violation, in China and elsewhere, we can immediately deduce the implication that the introduction of corporate governance to state-owned institutions where the officials involved can benefit greatly from violation or are accustomed to violation will have limited effect. Hence further reform of stateowned enterprises will proceed only slowly. How useful this paper is depends on the relevance of the above proposition that corruption is difficult to stop and is a major hindrance to further economic reform, the importance of the cases in economic reform affected by corruption that the paper has assembled and the ability to provide a unified explanation of these cases. A major reason why corruption is now a serious problem for reform and not before is that much of previous reform of the state sector consisted of privatization while the current reform consists of changing the performance of the remaining large state-owned institutions which are controlled and operated by bureaucrats who could profit from their economic power through corruption.

2. Review of Past Reform Measures and Current Problems

Since economic reform began in 1978, China has become a more market-oriented economy and its real GDP has increased at an annual rate of about 9.4 percent per year. The Chinese government deserves credit in guiding economic reform but the rapid growth is due to three fundamental economic factors. Given the existence of political stability, these factors are the abundance of high-quality human capital, including both the skilled and hard-working labor force and the resourcefulness of the entrepreneurs, the market institutions established even if they are imperfect and the availability of modern technology and method of management which China can adopt as a new comer. The same three economic fundamentals had accounted for the rapid economic growth in Japan before and after the Second World War, Hong Kong, Singapore, Taiwan and South Korea about two decades before China. In this sense, the Chinese success in rapid economic growth is not a miracle but consistent with the experience of economic development of other countries. When we examine the failure of a politically stable developing country in achieving rapid economic growth I suggest that we look closely at the first two factors for that county and see which it may be lacking.

Many observers have pointed out the major difference between China's reform process which is gradual and pragmatic (based on experimentation rather than ideology) and reform in the former Soviet Union and some other Eastern European countries which

adopted rapid changes in economic institutions (such as rapid privatization of state-owned enterprises) as a form of "shock therapy." I will not comment further on this point. Rather I will characterize China's strategy for economic reform by the following three main principles.

First is the use of the principle of "leasing" for the operation of state-owned assets. This idea is called the "responsibility system" in China since the management is given the responsibility to operate the enterprise and the right to all the residual claims to the earnings after delivering a fixed rent to the government. The first application of this principle is the "household responsibility system" in agriculture introduced in 1978 when farm households were assigned publicly owned land to produce for their own benefits after paying a fixed amount of the product as rent. Since all the output produced by extra efforts belongs to the producer, the incentive for the producer under this leasing arrangement is high. The same principle was applied to the leasing of state retail stores, small factories and in 1987 to large state enterprises under the "contract responsibility system" where the management received all residual profits for use by the enterprise after paying a fixed tax to the government. Even public schools have been leased out to be operated by private educators.

For the principle of leasing to yield efficient allocation of resources prices have to be set by the forces of demand and supply. Before price reform was completed in the 1980s and early 1990s, a supplementary principle to the first is the use of a dual price system, with the below-market fixed prices applied to the purchase of fixed amounts of scarce resources allocated by the state while the remaining quantities of output were sold at market prices. A fixed subsidy does not affect economic allocation if market prices are used for marginal decisions on the use of inputs and the production of outputs.

The second principle to promote efficiency for state-owned enterprises is to introduce competition, from other state-owned enterprises, collectively, privately and foreign owned enterprises. The third principle is to allow and even encourage the development of a non-state sector which became dominant and accounted for much of the total output and its rapid growth in China.

It is easy to answer the question whether China's economy will continue to grow from 2006 on. The answer is yes, because the three economic fundamentals will continue to operate except that the third factor will gradually be weakened as China's technology gap will gradually be closed. A counter argument is to point to the shortcomings of China's market institutions, including in particular the state-owned enterprises, the banking and financial system and the legal system, which may inhibit growth. Observe first that the Chinese economy has grown so rapidly in the past despite such shortcomings, suggesting that these shortcomings do not necessarily prevent rapid growth. Those who disagree need to provide reasons for the difference in the current circumstances that will make the shortcomings more damaging for China's economic growth and development. After all, most economic institutions in the world's market economies have their shortcomings also.

The major factor that will hinder further economic reform in China, in my opinion, is the bureaucratic behavior and corruption of government officials. In Chow (2002) I have called China's economy a "bureaucratic market economy." It is the main purpose of this paper to develop that theme further and examine the effect of bureaucratic behavior on further economic reform and development.

I can easily predict that further reform is gradual and slow, as in the past, mainly because there is inertia due to vested interests of the bureaucracy and because culture (including the nature of human capital) is difficult and slow to change. However, slow reform will not inhibit rapid growth in the future as it did not in the past. While confident about the future growth I am trying to examine in this paper the slow reform process in the future as a result of bureaucracy. Reform of economic institutions can be effective only when the people are ready for it.

Besides slow economic reform which some, though not the present author, will consider detrimental to further development, there are the following two concerns that further development may be derailed. Let me first comment briefly on these concerns before proceeding to the main body of this paper. First, China's economic development may not be "sustainable." The word "sustainable" applies to the limit of energy supply and the damage to the environment during economic growth that will make further growth impossible or difficult. Most economists do not share this view. While economists pay serious attention to the problems of the environmental degradation and resource supply limitation they believe that the problems are soluble. On the environment, a developing economy eager to enjoy a higher standard of living would be willing to pay the cost of some environmental degradation, such as unclear air, provided that the damage is not permanent.

On the limit of exhaustible resources, economists have suggested that new technology will likely be develop, as in the case of using electricity instead of gasoline for automobiles, to satisfy the need for energy. Hence the role of natural resources in economic development is limited. For example, the amount of land is not a severe limit to agricultural output. Notice the dramatic increase in output per acre after the introduction of hybrid corn in the United States in the 1930s. Mathis' prediction that population growth would make future food supply insufficient has turned out to be wrong because the per capita food consumption in the world has been increasing in the last century. For the case of China, there should be no concern that the Chinese population will create shortage for future food supply or oil supply. Furthermore, the Chinese government has paid serious attention to the protection of the environment in its development strategy in recent years and wants to make sure that economic growth in China is sustainable.

The second concern is that income inequality and related problems may cause population discontent and lead to political instability and thus affect economic growth adversely. I will not discuss the possible causes of political inequality and the likelihood of their occurrence as this topic is beyond the scope of the present paper which deals with the role of bureaucracy as a factor in slowing down further economic reform.

The major problems and issues in the current stage of China's economic reform and development to be discussed in this paper include (a) corruption, (b) inefficient state-owned enterprises, (c) ineffective banking and financial system, (d) income inequality and (e) problems in reforming the legal system. I believe discuss problems (b), (c), (d), and (e) in relation to (a), namely, corruption and bureaucratic behavior. Thus the purpose of this paper is to examine the current state of economic reform in these areas as it is affected by corruption.

Our discussion of corruption is based on the following ideas: (1) Corruption is a major hindrance to further economic reform as explained in the last paragraph. (2) The frequency distribution of corruption in a given society is affected by its culture and by the opportunities available for corruption. (3) The frequency distribution of corruption can be changed by changing the opportunities available for corruption. (4) In the long run changes in corruption behavior will lead to changes in habit and norms of behavior that is a part of the culture of the society. (5) The Chinese culture in terms of norms of behavior related to corruption has been influenced by its history, including the history of the PRC where the government requires a large bureaucracy in managing many aspects of the lives of the Chinese people as never before and where the people have experienced the hunger during the Great Leap Forward Movement of 1958-61, the lawlessness and the associated survival instinct to 'beat the system' resulting from the experience of the Cultural revolution, the material deprivation during the period of central economic planning and the eagerness to get rich fast since economic reform started. These ideas provide a background for our discussion. Understanding them will facilitate understanding the following discussion of corruption.

3. Enterprise reform hindered by bureaucratic behavior

In the late 1990s restructuring of state-owned enterprises followed the Party slogan, "Retain control the large and let loose the small." Small and medium-sized state-owned enterprises were transformed into share-holding companies and the shares were sold to the management, staff, and workers of the enterprise. The selling of shares helped to increase capital for the enterprise and raise incentive on the part of its employees. This transformation was considered successful in improving the efficiency of the enterprises. Successful cases that are well-known and widely publicized include enterprises in the city Zhu Cheng of Shandong Province. The shares were not allowed to be traded publicly but only among the employees. Public ownership was transformed to private ownership since the number of publicly owned shares was reduced to a small fraction of the total number of shares in most cases. This restructuring in fact privatized these formerly state-owned enterprises. Privatization has also taking the form of allowing many former government officials who operated a small state-owned enterprise under a leasing arrangement to take over the enterprise and make it his own.

Large state enterprises were also transformed into share-holding companies in the late 1990s but the shares are mostly held by government organizations and thus the restructured enterprises were still controlled by government administrators and

bureaucrats, although small fractions of the shares of some of them are traded in the Shenzhen, Shanghai, Hong Kong or the even New York Stock Exchange. The above transformation did not help change substantially the bureaucratic behavior of the managers and staff of the enterprises. A change in form to shareholding companies itself does not help improve management behavior and efficiency. The government still owns the shares and thus controls the enterprises. Members of the board of directors are appointed by the government. The former government or Party official in charge is now chairman of the Board. Many large enterprises continued to have monopoly power, including those in public utilities, transportation and the manufacturing of products that are considered to be strategically important by the government such as oil, steal and cement. Competition is weak. Managers are often politically appointed. There was no privatization for these large state enterprises under the slogan, "Retain control of the large."

In Chow (2004, p. 265) I suggest that state-owned enterprises can be efficient if (a) management cannot reap economic gain without working hard for the enterprise and (b) a manager will be appropriately rewarded if he does work hard for the benefit of the enterprise. In the case the large state enterprises, conditions (a) and (b) for efficiency not met after restructuring. One might consider using (a) and (b) as a basis to design a corporate governance for state enterprises, but this design will not work if the managers and staff can violate the rules. These conditions are met for some state-owned enterprises for which the supervisory government administration has a great interest in its economic performance and is able to keep a close watch on its performance and there is also competition from other enterprises. My favorite example is the state-owned Dongfang Hotel in Guangzhou in the late 1980s which was under close watch by the city government interested in its profit and was subject to competition from a privately owned China Hotel right next door.

For many large state-owned enterprises today we find corruption of the following forms: (1) managers and staff taking bribes from those who need to do business with them, and (2) managers and staff taking resources from enterprise for their own benefit. Both (1) and (2) will affect economic efficiency, (1) by not making the best deal for the company in maximizing profit or carrying out optimal investment decisions and (2) by taking away resources which should be used to benefit the enterprise.

Thus the change to corporate form or share-holding companies by itself does not work. To the extent that modern corporations in Western developed economies are thought to work better, one might be tempted to trace the difference to defective "corporate governance" in the Chinese case. Can we change the "corporate governance" of the large state-owned Chinese corporations to improve their operation? This is a question worthy of much research. One pessimistic answer, before further research is completed, is that change in corporate governance may not help much because the managers and staff do not follow the rule of the game.

Corporate governance specifies a set of rules that the managers and staff have to follow or a set of relationships between management and share-holders or a set of contractual

relations between two corporations. It may be good on paper, but it may not govern actual behavior. Even in the US, the Enron case illustrates that smart managers and accountants can cook the books. Chinese managers can do more devious things and many more are doing them than in the United States. If they have political backing it is even harder to force them to follow the rules. This is a special case of the point made in Chow (2002, p. 342) that "economic behavior is not changed by legislation alone." Here "legislation" is a set of rules defined in the corporate governance scheme. Rules on renegotiation can be a part of corporate governance but the agreement after renegotiation may not be respected. Rules and regulations cannot easily change the behavior of the bureaucrats in state-owned enterprises, just as the central government cannot effectively enforce its rules to local government officials who exploit the peasants by levying illegal fees or who exploit the workers in government construction projects by not paying their wages on time. Enforcement is more important than setting up rules on paper.

Let me elaborate on the limited role of corporate governance in the context of a specific set of three guidelines for enterprise reform as put forward in the OECD Corporate Governance Policy for SOE's (OECD, 2005) and discussed in Detter and Tay (2005). The three guidelines are clear objectives, transparency and political insulation. "Clear objectives" means that the supervisory government agency should make clear the objective function for the enterprise. Transparency means publishing an open set of important financial statements. Political insulation means freedom from political influence. These guidelines were modeled after the successful experience in restructuring state-owned enterprises in Sweden from 1998 to 2001. None of the three guidelines can be of much help if the managers and staff of Chinese state enterprises do not follow the rule of the game. In fact many Chinese managers have been given a clear set of objectives. Publicly available financial reports are required for large state enterprises. Managers are advised officially not to make decisions according to political pressure or influence. None has helped solve the problem of bureaucratic behavior and corruption in China. Perhaps Sweden has a different, and probably less, bureaucratic culture to enable its restructuring of state enterprises to be successful.

In the spring of 2005, China's stock prices were at a seven-year low. One possible explanation offered is that, given the large percentage of shares owned by the state, the policy to sell state shares rapidly in 2003 increased the supply of stocks, created expectations for further large-scale selling and thus led to falling prices of shares that were publicly traded. A second explanation, relevant to this paper if true, is that the Chinese people learned from reports in newspapers and other sources that managers of the parent companies of many of the publicly traded companies diverted funds from the latter directly to accounts accessible by them, or indirectly through the transfer of funds first to the parent companies under their control.

Besides changing the rule of the game (as specified in a corporate governance), one may consider increasing regulation. Corruption is precisely behavior that regulators fail to regulate. Regulators try to set and enforce a set of rules for the behavior of managers and staff of state enterprises, but corruption means that regulation or law-enforcement fails, as

the Chinese central government has failed to control wide-spread corruption in China in general.

The major point of this section is that reform of state-owned enterprises through the use of regulation and possible change in corporate governance may be of limited value in changing the behavior of managers and staff of state-owned enterprises in China and thus in improving the economic performance the enterprises adversely affected by corruption.

4. Reform of banking and financial system hindered by corruption

China's banking system has two related major problems. The first is institutional and more basic. Commercial banks owned by the state do not behave like privately owned commercial banks in a developed Western economy. The problem is partly due to the lack of training and education of the staff who do not know the practice of modern banking. There are not enough Harvard MBA's working in China's banks so to speak. Although the Chinese government has made serious efforts to provide training to Chinese bankers there are so many of them in such a large country and the improvement of human capital is a slow process. The problem is also due to the working habit inherited from banking practice beginning in the period of central planning where there were no modern commercial banks, but only branch banks of the central mono-bank and with responsibilities only to accept deposits and provide loans to state enterprises passively and little need to exercise judgment in the granting of loans. After economic reform that allowed more autonomy to the branch banks, renamed commercial banks, there were opportunities for corruption on the part of the banking officials since they have discretion in the spending and the lending of money.

The second is the problem of non-performing loans extended to the state-owned enterprises. Some observers consider this a serious problem. Since I do not, I would like to dispel it as a serious problem before going on to discuss the first and more serious institutional problem. In Chow (2002, p. 229) I suggested that the Chinese government had sufficient financial resources to solve the bad loan problem. In the period 1995-2000, the ratio of bank loans to GDP was about 1.1. The four large commercial banks (Agriculture, Construction, Commercial and Industrial and Bank of China) had about 70 percent of the total banking assets. If the bad loans were 20 percent of their assets they amounted to 14 percent of GDP. In 1998, 14 percent of GDP (7970 billion yuan) was 1116 billion. Problem 7 of Chapter 13 of Chow (2002) explains why, given an income elasticity of demand for money (currency) of 1.2 and an increase in national income of 8 percent per year, the Chinese government can solve the bad loan problem in 5 years beginning in 1998 simply by printing money without causing inflation, provided that the extra money is not used for other purposes. Since 1998 government revenue has increased much more rapidly than GDP. There is no question that the Chinese government has enough financial resources to solve the bad loan problem if it so wishes.

On the other hand, the bureaucratic behavior of banking officials cannot be easily solved by legislation or regulation. I can make this point simply by copying the relevant paragraphs from the last section on reform of state enterprises and changing "state-owned enterprises" to "state-owned commercial banks." The People's Bank had the responsibility to supervise commercial banks but since 2001 this responsibility was given to a Banking Regulatory Commission probably because the task was too difficult for the People's Bank to perform in addition to its other function to exercise macro-control by setting interest rates, the reserve ratio and other policy instruments, including administrative means such as imposing quotas to bank loans. The Banking Regulatory Commission has had some, but only limited, success in reducing corruption in the banking sector, as I have learned from talking to numerous Chinese citizens in position to know, including those who seek loans from banks.

Possibly and hopefully bureaucratic behavior and corruption (including well-known cases of the embezzlement of large sums of money belonging to the banks) will be reduced by the competition from foreign banks under the terms of the WTO, but the effectiveness of reform through regulation of the banking sector may be limited under the principle that economic behavior is not changed easily by legislation (see p. 342, third paragraph of Chow (2002)) or by regulation.

Although China's formal banking system may be inefficient in providing financial intermediation for economic growth, the informal sector has served this role fairly effectively as discussed in Allen, Qian and Qian (2005).

An important part of the financial sector consists of the stock markets in Shanghai, Shenzhen and Hong Kong. The fraction of total wealth in China invested in these markets in the form of stocks of Chinese companies is very small. There is a set of laws governing the stock market that are modern in form and a Commission for Regulation of the Stock Market. We need to investigate further how well the stock markets function. Chow (2002, Chapter 14) suggests that Chinese investors behave "rationally" according to one econometric version of the present value model of stock prices in spite of the fact they began to invest in stocks only since 1991. That version assumes that the present value of a stock depends on the expected level of dividend in the coming period and its rate of growth where expectations are formed by adaptive expectations. Data on stock prices at the end of the year of 47 companies traded in the Shanghai Stock Market from 1992 to 1998 were used to test the model and the result supports the above formulation of the present-value model of stock prices. I am in the process of using Chinese data to test another formulation of the present value model presented in Chow (1989) which was capable of explaining stock prices in the United States.

It is one thing to find that stock prices in China can be explained by some model of rational economic behavior. It is another to claim that the market functions well. The Chinese stock markets are said to be influenced by trading based on inside information and corruption in the form of bureaucrats taking money when stocks are first traded or are sold to enrich banking officials. Corruption can affect the order of the financial market even though time statistical data on stock prices may follow some laws of rational economic behavior. On the reform of the stock markets and financial institutions in general the reader may refer to Allen, Qian and Qian (2005). The authors (on p. 3)

suggest improving the regulatory environment by stating that "corporate and trading laws and legal protection of investors, as well as institutions governing the enforcement of contracts should be further developed." Again, these recommendations may be of limited value if the Chinese people and government officials are not law-abiding.

The financial system in the process of reform includes the foreign exchange system and the current managed floating of the RMB. Economists differ on whether China should adopt a fixed exchange rate system in relation to the dollar. The majority seem to think that China should raise the exchange rate of the RMB as of August 2005. The People's Bank of China did increase the exchange rate by about two percent in July 2005. A minority of economists would prefer a fixed exchange rate in order for the Chinese to anchor its price level and as a means to provide discipline in the conduct of monetary and fiscal policies. I agree with the majority for reason discussed in Chow and Shen (2004). This topic is beyond the scope of this paper dealing with corruption.

Is it likely for China to have a financial crisis? I think it is not likely because of the apparent stability (not efficiency) of the Chinese financial markets now subject to control, but the likelihood may be somewhat larger now than before because financial crises and bubbles are a phenomenon of a market economy and China's economy is closer to a market economy now than before. The topic of financial crisis is also outside the scope of this paper.

5. East-West income inequality and Western development hindered by corruption.

One major problem facing China is the income disparity between different segments of the population and particularly between the rich coastal provinces and the poor interior western provinces. Recognizing this problem, the Chinese government has adopted a Western Development Strategy to develop the eleven provinces in the Western region where 23 percent of the population lives. The Western Development Strategy (see Chow (2002), chapter 10) consists of the building economic infrastructure, including physical infrastructure like railways, highways and electric power generation by the Yangtze River Dams, and social infrastructure such as education. A main objective of Western development is to help the poor people in the Western region to improve their economic conditions. The government spent a large amount of money on Western development. An interesting question is how much of the government expenditure for this project is lost by corruption or otherwise inefficiently used as compared with allowing the non-state sector to engage in Western development based on profit motives. One form of corruption associated with this Strategy is the unpaid wages owed local workers who worked on projects such as road construction.

A related example, aside from the Western Development Strategy, is the illegal levies on the farmers by local bureaucrats against the rule set by the central government. This led the Central government to abolish all taxes to farmers as of 2005. This policy seemed to be a good move if one compares the costs and benefits of taxing the farmers. The benefits are small since such taxes accounted for only about just over one percent of total

government revenue (check data). The costs of taxing farmers are much larger, including the generation of discontent on the part of the farmers and of opportunities for local government officials to impose illegal levies. Although local officials might still impose levies the policy of no tax to farmers makes it much more difficult for them to do so. We have just provided two examples of corruption that hurt the workers and the farmers and adversely affect the Western Development Strategy in solving the problem of income inequality in China.

The two examples of bureaucrats exploiting the workers and farmers are only illustrations of a more general phenomena of Chinese bureaucrats exploiting the people in all walks of life who have less power and are at their mercy. For example, an owner of a massage parlor may have to appease members of the public security department for protection and local tax officials by providing service free of charge to them and to their friends. In China, taxes are paid according to the amount of revenue estimated by the business owner; a dissatisfied tax official can always harass the owner by claiming that the reported revenue is understated. An American can appreciate this by imagining restaurants having to provide free meals to local policemen and their friends and income tax payers being submitted to close scrutiny by officials of the Internal Revenue Service unless they appease these officials. In the Chinese case many such officials are exploiting their power as a rule.

6. Reform of the Legal system

If all Chinese are inclined to follow the rules as specified by law, much of the behavior of corruption will disappear. Corruption is one example of illegal behavior which also includes the violation of intellectual property right, patent laws, tax evasion by tax payers and harassment by tax and other officials. How much corruption exists in a society depends partly on the availability of opportunities to do so and partly on its culture. Corruption can affect not only the Chinese people who need to deal with state-owned institutions but also foreign investors as well as foreign donors who wish to build schools or hospitals or engage in other charitable activities but need the help of bureaucrats. A bureaucrat who grants building permits or is in a position to approve charitable activities can easily take bribes from the well-intentioned donors, unless the bureaucrats themselves want to build the schools or hospitals in the first place and need financial help from the donors.

To reduce corruption is one aspect of legal reform in China. Legal reform applies to all people, government bureaucrats and ordinary people. My observation in Chow (2002, p. 342) that legal behavior is not easily changed by legislation alone applies here, but legislation and continued attempt to enforce the laws can affect behavior gradually. Legal behavior is determined mainly by culture rather than by formal legislation but culture itself can be changed gradually by law enforcement and by the change of economic environment. The main purpose of this short section is to place the problem of corruption in the context of reform of the legal system without discussing the latter topic in detail as this topic is discussed in Chow (2002, chapter 20).

To the extent that legislation works, one can think of laws to reduce corruption even if the effectiveness is limited. For example in the sale of government assets, a law may require certain transparency in the form of public announcements of auctions to take place, as in the case of public auctions of land sales in Hong Kong – strictly speaking only the right of a long-term lease is for sale. Chinese citizens can be given more legal rights to sue government officials although such rights already exist. Attention should be given to corruption in the military and in the police departments. The main remedy to be suggested in this paper, however, is to reduce the activities of the government in which corruption can take place.

7. A Theory to explain bureaucratic behavior and corruption

Bureaucratic behavior refers to the abuse of power by a bureaucrat, and "corruption" is one type of behavior of a bureaucrat in his abuse of power. What accounts for the abuse of power? The position of a bureaucrat gives him control of assets. Such assets include a government owned automobile, a state-owned enterprise or a bank or a part thereof, a piece of land which can be assigned to developers for the construction of apartment buildings or a shopping mall, the authority to issue a license or permit to produce a pharmaceutical product or to export certain commodities. It is reasonable to assume, as an economic hypothesis, that the person or bureaucrat having control of such an asset will take advantage of his control to maximize his gain, possibly illegally subject to the consideration of the risk of punishment. The theory of economic behavior based on this hypothesis can be stated formally as a special case of utilization maximization subject to a constraint, as it is done in Chow (1992 and 2002, chapter 19).

Chow (2002, chapter 19) illustrates the theory mainly by examples from the era before the mid-1980s. For example, a driver operating a publicly owned car would use it to take his girl friend for a picnic or take other people for transportation in exchange for favor in return. A doctor working for a public hospital would be willing to treat a patient at his home if that person can give piano lessons to his daughter. State-controlled assets (in the second case the human person of the doctor himself who is supposed to provide services for the public) are used optimally for personal gains by the bureaucrats who actually control them. A corollary is that if the person receiving the service or the right to use the asset from the bureaucrat is in no position to return the favor, she will not receive goodquality service. Travelers to China in the early 1980s could still experience the poor service of sales clerks in publicly owned department stores. The Chinese people tried to "get even" when they were in a position of authority by treating others poorly. When a Chinese had economic power, in selling train or theatre tickets or in checking the tickets of travelers boarding a plane, he seemed to behave with the thought, "now is my chance to exploit my privilege to get even!" Today the same attitude of exploiting one's chance applies to a Chinese bureaucrat who takes bribes for providing services. The bureaucrat can also embezzle state assets and state funds under this control.

Why is the problem of corruption as a hindrance to economic reform more serious now than before? First, the environment has changed. Second, the Chinese culture has changed.

A major first step of economic reform in the past is leasing, from the introduction of the "responsibility system" into agriculture, retail stores, small factories and later to larger enterprises. There can be no corruption if a farmer or a manager of a small store or a small factory gets all the output after paying a fixed amount of tax. In a leasing arrangement there is no need to solve the problem of principle-agent as the agent who reaps the return from his own effort will have as much incentive to work hard as the manager of a private firm. For a large state enterprise under the "contract responsibility system" introduced in 1987 the enterprise retained all the profits after paying the government a fixed levy but the management was obliged to distribute a fair share of the profits to the staff and workers who kept a close watch on his behavior because they were entitled to a part of the profits. A second step was privatization of small and medium sized state-owned enterprises through the transfer of ownership to the managers and workers in the restructured share-holding companies or simply through the transfer of ownership to the former government employees who had operated state enterprise by a leasing arrangement. By definition, a manager of a private enterprise cannot be called corrupt if he takes his own money.

In the current stage of reform for large state enterprises or state-owned commercial banks, the situation is different. We need to reform these large state-owned corporations and require the bureaucratic managers and staff who exercise economic power in the name of the state not to use it for their own personal benefit. In a large corporation owned by non-government shareholders there is also the problem to make sure that the managers and staff do not embezzle resources from the corporation but such embezzlement is not corruption.

When the state-owned banks extended loans to state enterprises, the staff of state enterprises would not personally pay the bankers for the loans since he has no personal financial interest in it. Now more loans are extended to private enterprises and borrowers are willing to bribe to obtain the loans. The bankers have more discretion in extending loans. For the bureaucrats in control of state funds for large construction projects there is now more money under their control as the government budget has increased, and the government is spending more on projects under the very costly Western Development Strategy and on the rapidly expanding universities. More money going through the bureaucrats' hands means more corruption.

The theory of misuse of assets under state ownership applies in all stages of reform but now the opportunities available to the bureaucrats are different, or the environment is different. In contrast with the former leasing arrangement or reform by privatization the current reform requires the bureaucrats in state-owned banks to behave like private bankers, in state-owned enterprises to behave like businessmen in the private sector and bureaucrats in charge of large development projects not to take any money going through them.

The second part of our answer to the reason why corruption is a more serious problem is historical-cultural. The practice of corruption is now more widespread because more people have been doing it; desire for money grows as one sees others having more of it. Since economic reform in the early 1980s there are more and more rich people in China, some very rich by American standards. This is a good sign indicating the success of a market economy which allows for relatively free entry, since the rich people are by and large able, hard-working and resourceful. Of course there are also those who got rich as bureaucrats mainly through their control of state-owned economic resources and exploited the economic power for personal gains. It now appears that the Chinese, rich and poor, seeing that there is much money around and that many others have made a lot of it would want to get his share if an opportunity comes.

The Chinese culture is influenced by the desire and practice of money making as a legitimate activity, with every one watching for opportunity coming his way. If the opportunity takes the form of occupying an administrative position in the government or government-owned enterprise or bank, the person can take bribes and embezzle public funds as much as the prevailing practice allows and as the person's own conscience dictates. Many Chinese still uphold the old cultural standard of honesty and integrity but the instances of violation in practice have increased and it is partly up to the individual to decide, subject to the effectiveness of law enforcement. The Chinese culture as evolved through the economic deprivation under central planning and the failure of the Great Leap, the lawlessness of the Cultural Revolution, the `getting rich is glorious` attitude after market reform and during a period of rapid increase in real income has retained an attitude and a mode of behavior conducive to corruption. Of course other societies have also gone through historical experience that is conductive to corruption and some of them are more corrupt than China but this paper deals only with the Chinese case.

In summary, the problem of corruption existed before but its effect on economic reform is now more serious because the nature of reform has changed and because culture has changed as reform and growth have occurred.

8. Policy recommendation

Is corruption in state-owned institutions or in government organizations such a bad thing? Some economists have suggested that corruption of government officials extracting bribes for service is a part of the cost of doing business for those who seek their service. Others may say that corrupt managers and staff in state-owned enterprises and banks do not affect the economic functioning of these institutions since the amounts that they extract, though very large in absolute terms, are only a very small fraction of the total costs of these enterprises. Corruption is widespread in many other countries as well. Svensson (2005, p. 25) cites countries with the highest "Corruption Perception Index" in 2003 with Zimbabwe on top of the list, having the highest value of 5.8, while China, Gabon, Indonesia, Iraq, Lebanon, Myanmar, Niger, Nigeria, Russia, Sudan, Somalia, Dem. Rep. of Congo and Serbia and Montenegro all had 5 – note the existence of other

possibly more corrupt countries which are measured by another corruption index not available for many of the countries listed above. One important issue is the effect of corruption on the economic efficiency of government corporations and government administration. Without a lengthy and perhaps inconclusive discussion on the negative effects of corruption, let me just point out that corruption, including the exploitation of workers, farmers and the public at large as I have discussed, can create public discontent and political instability and thus slow down economic progress. Corruption in stateowned economic institutions can seriously affect the morale of the workers and staff and thus their economic performance.

Given the above analysis of corruption which affects economic reform, how can we change the corruption behavior of the Chinese bureaucrats? The Chinese Communist Party has taken the corruption problem very seriously. It has waged repeated campaigns to stop it by punishment. So far party discipline has had only limited success. A few people involved in certain well-known cases of corruption have been severely punished and the cases are publicized in newspapers. Several millions Party members were expelled from membership in 2005 partly because of corruption but much corruption remains.

An obvious solution is to reduce the role of the government and thus the economic power of the bureaucrats that is the source of corruption. If corruption occurs only when bureaucrats are given economic power, obviously having fewer bureaucrats working in fewer government agencies and state-owned enterprises means less corruption. State-owned enterprises, banks and publicly owned land, and the authority to grant government permits and licenses are all sources of bureaucratic power which need to be removed as much as possible except for those that are essential for the functioning of the government.

Public ownership of land is an important source of corruption. Whenever land is assigned by bureaucrats to developers, as in the cases of the recent urban development of the city of Dong Guan in Guangdong Province and the building of shopping malls along Changan Street in Beijing, some form of corruption is likely to occur. Land development has been speeded up because the bureaucrat in charge has only a finite term of office that he can exploited while it lasts. By reducing the role of the state, including the sizes and number of state-owned enterprises and banks, the amount of publicly owned land (to be sold by auctions for example as in the case of Hong Kong), and number of government bureaus having authority to grant permit and licenses (some of which are necessary and desirable) we can hope to reduce the amount of corruption substantially. We should understand that, in the process of privatization, corruption can occur also, as in the selling or even auction of land and perhaps in the selling of corporate assets during the privatization of the former Soviet Union.

In the process of reducing corruption by limiting the economic power of the government the economic environment facing the bureaucrats and Chinese culture are inter-related. Since the 1980s the economic environment that provided many opportunities to get rich has affected the Chinese culture in giving legitimacy and high respect to money making, even by illegal means. Now I am suggesting a change of the economic environment by

reducing the economic opportunities for corruption and hope that the Chinese culture will gradually be improved by the reduced practice of corruption. As suggested in the last section on the theory of corruption, changing circumstances will change behavior which will in term leads to change in habit and social norm, i.e., change in culture.

Is the above policy recommendation politically feasible? Some Chinese Communist Party leaders and government officials already understand that corruption is derived from the opportunities available. The Chinese government has already reduced the size of the state sector and has attempted to privatize many state enterprises in recent years. Shares of state-owned banks are being sold in the New York Stock Market. The question of adopting the above recommendation is a matter of degree of privatization allowed and the speed for privatization to take place. There still remain the two basic principles of Chinese socialism: "holding on the large" and public ownership of land.

A proposal to further reduce the state-owned sector of the economy or the power of the government administration may be objectionable from the viewpoint of many members of the Chinese Communist Party either for ideological reasons as imbedded in the above two basic principles or for the protection of their own vested interests. Any significant change requires a resolution by the leadership of the Party and the Chinese government. If the Party leaders understand the roots of corruption and its harmful effects not only on many aspects of economic reform but also on the maintenance of the leadership of the Communist Party itself they can more intelligently weigh the advantages and disadvantages of reducing the size of the state sector and the size of the government bureaucracy, something that the former Premier Zhu Rongji attempted to achieve and succeeded to some extent at the very beginning of the 21st century. Furthermore in trying to reduce the role and the size of the government, the central government may encounter resistance from local government officials and face the problem of enforcement as it has faced in trying to control corruption practiced by officials of provincial and local governments. One can only hope that there are enough enlightened and determined leaders of the Chinese Communist Party and in the Chinese government to treat the problem of corruption seriously enough to reexamine their ideas about the role of public ownership.

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