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Partially Reformed Developing Economy
Under a Semifederalist Government*

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Working Paper Number 31
March 1997

Comments Welcome

The authors thank Changzheng Gong, Timothy Kehoe, Ronald McKinnon, Dwight Perkins, Louis Putterman, Terry Roe, Wing Woo, Ruilin Zhou and the participants of the Symposium on Economic Development, University of Minnesota, October 21, 1994, for helpful comments. They also thank Melissa Gruys for research assistance and are most grateful to Professor Vernon Ruttan for his encouragement and many suggestions. Copyright 1997, Yijiang Wang and Chun Chang. Disseminated in 1997 by the William Davidson Institute with permission from the authors.

Towards a Model of China as a Partially Reformed Developing Economy under a Semifederalist Government

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Abstract: Based on the survey of the literature on China's recent reform experience, this paper proposes to see China as a four sector economy under a semifederalist government. The four sectors are the agriculture, the state industry, the semistate rural industry and the private industry. The four sectors are divided and grouped under the jurisdiction of the increasingly more autonomous local governments. The economy faces the challenges that, first, as a development problem, agriculture labor needs to be allocated to the industry. Second, as a reform problem, the efficiency of state-owned enterprises needs to be improved and the ownership in township and village enterprises needs to be restructured. Third, government power needs to be structured to ensure a check-and-balance between the central and the local governments to offer protection to property rights. China's experience suggests a model of development featured by multiple types of organizations under a modified nondemocratic government.

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1. Introduction

In the past 16 years, the Chinese economy grew at an average of 9 percent per annum. This rapid growth is a result of profound reforms. In this period, the share of the state sector in the industry declined from more than 78 percent to about 45 percent. The state control of the industrial products and the retail prices declined from 70 and 95 percent to 5 and 5.9 percent, respectively.¹ Foreign trade increased from 20 billion to nearly 200 billion US dollars a year. Foreign direct investment increased from a negligible amount to 37 billion US dollars. China is now the largest in-taker of foreign direct investment second only to the U.S. These figures show that the economy is no longer dominated by the state sector. These figures also show that the economy is much marketized and woven into the international economy.²

It is well known that China followed a gradualist strategy of reform, which in Figure 1 is compared with the big-bang strategy adopted by Eastern and Central European (ECE) former socialist countries. Briefly, while big-bang has a clear objective of becoming like the west, institutionally gradualism has no grand plan or clear objective except an idea that the performance of the economy should be improved. It proceeds on an trial-and-error basis, with local initiatives and experiments introduced to the nation only if they are proven successful. In terms of contents, big-bang carries out two essential tasks simultaneously and rapidly, massive privatization of the state-owned enterprises (SOEs) and macro-stabilization. Overnight, price liberalization changes state set prices for goods and services to market determined prices. This and measures like tight

¹People's Daily, Overseas Edition, September 30, 1994, p.2.

²The figures of foreign trade are from People's Daily, Overseas Edition, September 29, 1994, p.1. For the figures of the shares of industrial products allocated through markets and plan, see Rawski (1994, p.272).

money supply can rapidly eliminate the monetary overhang. In contrast, gradualism avoids doing too many things at a time and requires neither massive privatization nor rapid price liberalization. Agricultural reforms preceded those in the industry. In the industry, a contract system, instead of privatization, is used in an attempt to improve efficiency. Price liberalization is carried out step by step, first with some nonessentials, then staple foods, and finally commodities that are deemed essential for the national economy, like coal, oil and steel. For many commodities, including foreign exchanges, dual prices had been used for years before the regulated price converged to the market price. During the process, a set date for liberalizing some prices may be postponed due to the threat of inflation. Even already liberalized prices may be put back under government control, as has recently happened to the prices of some staple foods and cotton.

Figure 1: Big-bang and Gradualism

	Big-Bang	Gradualism
Objective	Western style market economy	No clear objective
Methodology	Grand plan, rapid & decisive action.	Experimental, trial-and- error.
Contents	1. Overnight price liberalization; 2. Massive privatization of the SOEs.	1. Gradual price liberalization; 2. Minimum privatization of the SOEs.

The success of the economy has led to increased interests in China's experience of reform and development. An incomplete list of the most recent work on the Chinese economy in the English literature include Dwight Perkins (1988, 1994), John McMillan and Barry Naughton (1992), Louis Putterman (1992), Wing Thyee Woo (1993), Alan Gelb, et al, (1993), Gary Jefferson

and Thomas Rawski (1993), Justin Yifu Lin, et al, (1994) and Barry Naughton (1994a) on the economy and gradualism; Justin Lin (1989a, 1992), Terry Sicular (1991) on the households farming and other reforms in agriculture; David Granick (1990), Qimiao Fan and Mark Schaffer (1991), Thomas Rawski (1991, 1993a, 1993b), Gary Jefferson and Inderjit Singh (1993), Gary Jefferson and Wenyi Xu (1991), Derek Morris and Guy Shaojia Liu (1993), Gary Jefferson and Thomas Rawski (1994), Wing Thye Woo, et al, (1993), Theodore Groves, et al, (1994, 1995), David Li (1994a, 1994b), Chong-en Bai and Yijiang Wang (1996) and Chong-en Bai, et al, (1996) on reforms of China's SOEs; Ronald McKinnon (1991, 1993a), Yijiang Wang (1991), Terry Sicular (1992), Lawrence J. Lau (1992), Gang Fan and Wing Thy Woo (1992), Gang Yi (1993), Geng Xiao and Haiyan Gao (1994) and Shahid Yusuf (1994) on the financial policy and macroeconomic stability; William Byrd and Alan Gelb (1990), Anthony Ody (1992), Shahid Yusuf (1993a, 1993b), Martin Weitzman and Chenggang Xu (1994), Chun Chang and Yijiang Wang (1994), David Li (1994c), Jiahua Che and Yinyi Qian (1994), Mark Pitt and Louis Putterman (1993), Louis Putterman (1994), Stephen Smith (1994), Aimin Chen (1994), Guoqiang Tian (1994), Yaohui Zhao (1994), Guanzhong James Wen (1994), Gene Hsin Chang and James Wen (1994) and Shuhe Li (1996) on the township and village enterprises (TVEs); Ronald McKinnon (1993), Yingyi Qian and Chenggang Xu (1993a, b), Yingyi Qian and Gerard Roland (1993), Gabriella Montinola, et al, (1993), and Yingyi Qian and Barry Weingast (1994) on market preserving federalism.

This paper surveys the literature to argue that the current state of the Chinese economy and the challenges it faces can be summarized by a model of four sectors under a semifederalist government. The survey does not intend to be complete, but rather, selective to serve the purpose of making the argument of the four sector model. The four sectors are the agriculture, the state

industry or SOEs, the rural semistate industry (the TVEs), and the nonstate (private) industry. The sectors are divided and grouped under the control of the local governments. Above the local governments there is an authoritarian central government that shares power with the local governments. This model reflects on China's agricultural and socialist past. It also reflects on the gradualist strategy of reforms and the impact of the political system on the economy. It suggests that future success of the economy depends on how effectively it can meet two economic challenges: allocating resources from the agriculture to the industry as a development problem, and privatizing the state sector as a reform problem. The future of the economy also depends on meeting the political challenge of maintaining power balance in the semifederalist government.

Although rudimentary, such a model serves at least two purposes. First, it helps us to better see works on a particular topic in relation with the larger picture and also help us to identify important and urgent research topics. Second, so far people have looked at China's experience largely from the perspective of transition from a centrally planned to a market-oriented economy. One might ask: What lesson does China's experience offer to economic development? The model is instrumental in discussing this question because it is explicit about how the reform and development problems coexist in the economy, and how the political system and economy interact.

Using a sectoral model to characterize an economy is not new. Lewis (1956) is one of the earlier examples. In the case of China, Louis Putterman (1992) proposed to understand China as a three sector economy, the sectors being staple agriculture, state industry, and nonstate-nonstaple. His model incorporates features of a socialist economy not considered in a Lewis model. Our model extends Putterman by dividing the nonstate-nonstaple sector into local semistate (TVEs) and truly

private. A more important difference is that the structure of the government and its implication to the economy is incorporated into the model.

The plan for the rest of the paper is as follows. Sections 2, 3 and 4 will survey the literature on the SOEs, the TVEs and market preserving federalism, respectively. These topics are emphasized because we feel they offer more useful lessons for other developing and transitional economies, whereas, in spite of their importance, the agriculture and the private industry are the two more familiar sectors. Section 5 presents a few statistics of the agricultural and private sector and then the model. Section 6 concludes the paper with a discussion of the model's implication for development. There it is speculated that China's experience represents a general model of development in which a properly modified nondemocratic government (NDG) offers some protection to property rights. Organizations of ambiguous property rights will first prosper under the incomplete protection of the NDG to start a development process. In a virtuous circle, both economic development and democracy can be achieved in the end.

2. Improving the Performance of the State-owned Enterprises.

2.1. The policy of improving the performance of the SOEs without privatization

The Chinese government attaches great strategic importance to improving the performance of the SOEs without privatization. The SOEs are important because, like in other former socialist economies, they count for a dominant share of the economy. Under the Stalinist industrialization policy, they were also where the capital accumulation, the best technology and the best educated people went.

However, given the experiences of the Hungarian, Soviet and other socialist governments' previous failed efforts, a stubborn question is: Can the performance of the SOEs be improved? If yes, to what extent?

McMillan and Naughton (1992) and Rawski (1994) have an affirmative answer to the question. What is crucial, they argue, is not privatization *per se*, but competition, which they note that the Chinese government has done many things to promote. First, a contract system is used to auction out management jobs. Under the system, the government signs a contract with the manager on the profitability and performance of the SOE in other dimensions. Since the position is open to many people, the person who offers the best contract deal to the government is more likely to get it. Competition for the job provides incentives for the manager to improve the performance of the SOE.

Second, the government has introduced policies that have led to a massive entry of new nonstate enterprises. One such policy is to allow the local governments to keep a portion of taxes collected in the local economy. This provides incentives for the local government to promote the growth of the local economy. With the support and enthusiasm of the local governments, TVEs have been able to mushroom and compete with the SOEs. Another policy is the dual price system that allowed the SOEs to maintain a relatively high price for their products, which in turn induced entry. Other factors that have contributed to increased competition include deregulation, the opening of the Chinese economy to foreign competition, and defense conversion which allows the defense industry to produce and compete in civilian product markets.

2.2. Empirical evidence

Cross-sectional evidence supports the view that competition contributes to improved performance of the SOEs. Using provincial data, Singh, Ratha and Xiao (1994) show that the scatterplot of the total factor productivity (TFP) of the state sector against the share of the nonstate sector in provincial economies has a fitted line with a positive slope. When three outliers, Beijing, Tianjin and Shanghai, are excluded from the sample, the share of the nonstate sector is found significant in determining the TFP of the state sector and explains more than 70% of the SOEs' TFP variations across provinces.

Studies of changes in SOEs' TFP overtime have had mixed results. The works of Chow (1985), Rawski (1986), Demberger (1988) and Perkins (1988) found that reforms did not have significant impact on the TFP of the SOEs. However, in a summary of 13 studies, Jefferson and Rawski (1994, p.56) note that "[n]ine studies report annual growth of total factor productivity within the range of 2-4 percent. Of the remaining four studies, two show higher rates and two obtain lower rates..."³ In a recent study, Woo, et al (1993) concentrated on the large and medium sized SOEs and found that reforms did little to improve their performance.

While there have been different findings as to how much the performance of the SOEs has improved, there is a consensus that the improvement is not satisfactory. Jan Svejnar (1990) found that from 1981-86 the TFP of the TVEs grew at an average of 13% per annum. Jefferson, Rawski and Zheng (1992) found that the TFP growth of the SOEs was only half that of the collectively

³Jefferson and Rawski (1994, p.56) also used the high growth rates of the SOEs' exports in the late 1980s argue that the reforms did improve the performance of the SOEs. One has to keep in mind, however, that the SOEs are under soft-budget constraint so that they are more able to "sell at a loss" in the international markets.

owned enterprises including the TVEs. This suggests that at least in relative dynamic terms, the SOEs have remained very inefficient.

2.3. Financial concerns and macroeconomic instability

While scholars debate about the performance of the SOEs in real terms, the financial performance of these SOEs continued to deteriorate. Since the mid-1980s, the number of money losing SOEs has increased. Officially more than one third of the SOEs now lose money. It is an open secret that many others do not lose money only because of government subsidies, e.g., low interest loans and tax breaks. When these subsidies are taken away, actually 70 percent of the SOEs now lose money.⁴ In industry, total loss increased from the low of 2.7 billion yuan in 1984 to 36.9 billion yuan in 1992, an increase of more than 12 times.⁵

Figure 2: SOEs' Under-Financing of Large and Medium Sized Projects

	1984-6	1987-9	1991	Aug., 1992
# of projects investigated	235 ^a	303 ^a	266 ^b	108 ^b
Total planned budget (bil. yuan.)	43.6	53.5	126.2	118.5
# of firms underfinanced / as % of total # of firms	206 / 87.7%	287 / 95%		
Actual total cost (bil. yuan.)	55.4	70.8	199.6 ^c	184.0 ^c
Cost exceeding planned budget by (bil. yuan) / %	11.8 / 27%	17.3 / 32.5%	73.4 / 58.2%	65.5 / 55.3%

Source: Almanac of China's Finance and Banking, 1993, p.267. a: finished projects. b: projects in construction. c: estimates.

⁴See *China's Reforms (Zhongguo Gaige)*, June 1994, p.19, and Woo, 1993, p.16.

⁵Almanac of China's Industry, 1993, p.1054.

There are different explanations as why so many SOEs are losing money. Singh et al (1994) and Naughton (1994a) point out that increased competition, which improves efficiency of the economy, contributes to the decline in SOEs' profit. However, the question is: Why in the same competitive markets the TVEs and private firms are often profitable? In a most recent article, Bai et al (1996) show that, because the state enterprises are not profit maximizers, technological improvement measured in total factor productivity can lead to deteriorated financial performance. The reason is that, when firms pursue objectives other than profit (e.g., output), improved technology induces more distorted behavior, which in more severe cases can more than offset efficiency gain in technology.

When interviewed, many SOEs managers like to point out that they do not have as much autonomy as their counterparts in the TVEs and private firms. They cannot, for example, hire and fire workers as easily. They suggest that if they are given greater autonomy they can be expected to do equally well as their competitors. It may be so. However, one cannot help asking the question: How responsibly will these managers use their increased decision power? Given the fact that the SOEs are financially very undisciplined and the managers have a strong empire-building tendency, which we explain below, one has to be very nervous about the idea of giving SOE managers more autonomy.

The lack of financial discipline is another obvious reason.⁶ Fan and Woo (1992) observe that SOEs' managers have little incentive to resist excessive wage increases. Analyzing a sample of

⁶Janos Kornai coined the term "soft budget constraint" to describe this problem. The term is now widely accepted. Matios Dewatripond and Eric Maskin's (1991) asymmetric information and dynamic optimization model was the first to provide a rationale for soft budget constraint. David Li (1994b) offers an explanation based on social and private costs of bankruptcy.

300 SOEs, they found that the ratio of direct cash income (wage plus bonus) to the net output value rose from 11.6 percent in 1980 to 15.9 percent in 1988. The lack of financial discipline also leads to unconstrained investment in long-term projects.⁷ In order to get more projects started, many SOEs deliberately underestimate the cost of the investment in the project proposal. Consequently, many of these projects start under-financed. Figure 2 is based on information from a study by the state-owned Construction Bank. It shows that the problem of underfinancing in large and medium sized projects has become increasingly severe in the years of reform.

Overexpanded and underfinanced project hurts the economy in many ways. First, many of these projects cannot be finished on time to become productive. Over-extended projects not finishing on time is a problem mentioned constantly by Chinese leaders. Second, the state banks are forced to increase investment loans to help finish these projects, because once the first investment is sunk, it is often *ex post* optimal to finance and finish a project. This increases the difficulty for the government to control money supply in the economy.

Third, as Wang (1991) points out that, when too much resource is used for long-term projects, too little is left for short-term working capital. This represents a resource misallocation that leads to a loss of output under full employment. To restore efficiency, the state banks are forced to increase loans for working capital. Data show that two thirds to four fifth of the annual credit increase in China's banking system in the 1980s and the 1990s is through working capital

⁷This problem, known as "investment hunger syndrome," is a classic problem for SOEs under central planning. Wang (1991) and Yusuf (1994) noted that, with increased autonomy and more resources under their direct control, the SOEs are now more capable of making long-term investment than before.

loans to the SOEs. Rapid increase of loans to the SOEs is the primary cause of inflation in China during the years of reforms.⁸

Weak financial conditions have left SOEs more heavily indebted than ever, as shown in Figure 3, which is from a study of 16 SOEs by the People's Bank, Hunan. The study indicates that the same trend is true for nearly 1,928 SOEs in Hunan with accounts at the Industrial and Commercial Bank.

The SOEs also provide commercial credits to each other. Without a serious disciplinary mechanism, they do not see why they have to honor a debt obligation. In 1991, the accumulated debt default reached 300 billion yuan, which is about one fifth of the total bank credit in the economy in that year. The chain effect of debt default, known as "triangle debt" in China, drains much liquidity in the economy. So many SOEs are now woven into a huge debt web that the only way for them to stay liquid is to continue to receive new loans from the banks. Premier Li Peng held "triangle debt as a major obstacle to the normal functioning of the economy and efficiency in the large and median sized key enterprises."⁹

Figure 3: Total Net Worth and Debt Liability of 16 SOEs, %

	1980	1984	1988	1990	1991	1992.9
Net Worth	82.7	76.7	54.6	41.5	41.1	38.0

⁸Xiao and Gao (1994, p.9.12) expressed a similar view: "[T]he failing state sector has been the root cause of China's macroeconomic instability."

⁹Li Peng, "Speech at the Second National Meeting on Defaulted Debt," September 4, 1991.

Debt Liability	17.3	23.3	45.4	58.5	58.9	62.0
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Source: Almanac of China's Finance and Banking, 1993, p.274.

2.4. A cost and benefit analysis of privatization

If China had been the only country trying to transform from a planned into a market economy, the problems of SOEs might have led people to believe that had China privatized them earlier, the economy would have done better. Ironically, it is the problems in the ECE countries that have made people better appreciate the merits of a more conservative policy of privatization, even though the policy has its own costs and in the end more rapid privatization may be desirable. Several costs of rapid privatization have been suggested.¹⁰

McMillan and Naughton (1992) point out a paradox of the big-bang strategy with massive privatization. If it is possible to devise a comprehensive reform strategy, then reform would be unnecessary, for it would be possible to run the economy efficiently by central plan. One cost of the big-bang and also planned massive privatization, like the planning system it intends to get rid of, is that it suffers from centralized and thus inefficient use of information.

Murrell and Wang (1993) argue that one of the legacies of communism is that managers of the SOEs lack the skills of managing large enterprises in market places. Another legacy of communism is the lack of institutions that support a market economy. Massive and rapid privatization may not represent an optimal path of learning by doing and gradual development of market supporting institutions. It is thus likely to lead to a loss of economic welfare.

¹⁰Before the discussions reviewed below were made, Kornai (1990) had warned of the problems that policies like rushed privatization would cause.

Wang (1993) argues that institutional development is a function of income level. He classifies institutions and economic activities into categories of different orders, with the lower and the higher order activity each supported by a corresponding institution. For example, two tribes can exchange of gatherings ("necessity") by bartering. Capitalist corporations producing automobiles ("luxury") need to be supported by a capital market, a labor market and a complicated accounting and legal system. If it is not worthwhile for an economy to produce much "luxury" because of low income, then it is not worthwhile to develop the higher order institution either. The relevance of this view to transitional economies is that with a relative low income level, the cost of developing institutions to support large privatized SOEs may be higher than that of continued state ownership and subsidy.

2.4. Summary

The SOEs still suffers from the soft-budget problem and continue to show investment hunger syndrome that Kornai (1980) first and extensively studied. If reforms have improved the efficiency of the SOEs, researchers agree that it has not been improved to a satisfactory level. The performance, especially the financial performance, of the SOEs remains poor compared with the other organizations in the economy. The problems of the SOEs are not confined to themselves. They are the primary cause of macroeconomic instability in the economy, hindering a healthy growth and development process of the economy.

3. The rise of the township and village enterprises

3.1. Achievement and the nature of the TVEs

Even under the commune system China had developed a small rural industry. (See Dwight Perkins et al, 1977, and Christine Wong, 1979.) Since the inception of the economic reforms, however, there has been an unprecedented rapid growth of China's rural industry, i.e., the TVEs. In the past 15 years, the total output of the TVEs grew at an average rate of 30 percent per annum. In 1993, the TVEs contributed to 40 percent of the nation's industrial output, one third of the export and provided employment to 112 million people. The contribution of the TVEs to the economy cannot be exaggerated. The success of the TVEs aroused much interest in two questions: What is the TVE? And, why is it so successful?

Officially, the TVE is a collective owned by all citizens of the local (typically rural) community. Practically, it is controlled by the local government, with rules set by the central government as how the profit should be distributed. Figure 4 illustrates the distribution of TVE's profit.

Local government control and the center's interference in distribution lead some people to suspect that the TVEs are simply another form of local SOEs. Song (1990) compared TVEs with local SOEs and found much similarity between the two in terms of personnel and other aspects of the decision making process.

Figure 4: Distribution Rule of the Post-tax Profit of the TVE

Post-Tax Profit

1. Retained profit, 60%	2. Bonus 10%	3. Fee to local Gov 30%
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Local Gov budget local Projects

Source: Adapted from Chang and Wang (1994).

There is another view that believes that the TVE is simply a private enterprise disguised under collective ownership. People holding this view notice that in many cases TVEs were started by private citizens. Knowing that the Chinese government's hostility toward private ownership, the citizen may negotiate with the local government for the enterprise to have a collective name, or a "red cap" as it is sometimes called. The citizen will compensate the local government in one form or another, but the enterprise also enjoys all the benefits that a collective enjoys, e.g., safety from government seizure, tax breaks, cheaper supplies, etc.

Gelb and Svejnar (1990) compared TVEs with a wide range of different firms including local public enterprises, PCs, company towns, and Japanese and Z-style firms. They tend to think that the TVE is more like collectives.

Starting with Weitzman and Xu (1994), works on the nature of the TVE moved away from fitting the TVE with one or another of the more familiar forms of organization, e.g., SOE, private firm or workers' cooperatives. Weitzman and Xu (1994) called the TVE a workers' cooperative with vaguely defined property rights. To explain the success of the TVE, they suggest that the traditional cooperative culture among Chinese villagers renders it not quite necessary as in the west for well defined property rights to be a prerequisite for efficiency.

Chang and Wang (1994) rationalize the ownership arrangement in the TVE from a mechanism design point of view. They consider an optimization problem for the Chinese

government in the context of China's political system. In the problem, the objective is to maximize the local citizens' welfare under two constraints. One constraint is that the current authoritarian political system not be changed. The other is the agency problem on the part of the local government. Under the first constraint, the dominant social, economic and political power in the hands of the government means that without the support of the government apparatus the TVE would have little chance to succeed. The local government is thus given the control. It is also allowed to share the benefit with the local citizens to provide incentives to them. To guarantee the citizens their share of benefit when the local government has the control right, rules are made by the center to restrict the discretionary power of the local government in distributing the benefit of the TVE.

David Li (1994c) has a similar view to that of Chang and Wang (1994). He constructs a formal model to demonstrate the idea that concerns about the safety of their property lead private entrepreneurs to surrender the control right to the local government. Che and Qian (1994) consider the advantages of the local government in providing loan collateral and monitoring. When these advantages outweigh the costs of less motivated entrepreneurs, they argue, the control of the local government is more beneficial. Otherwise, private ownership is preferred. Naughton (1994b) argues that the TVEs are a product of the sequence of the gradualist reforms. Because product markets are first established but factor market not, a local community cannot sell factors of production, e.g., land, to others for productive purposes and benefit from the transaction. TVE is a form through which a local community can utilize productive factors that would otherwise have to stay idle or be used for less productive purposes. More recently, based on the TVE experiences of the Pearl River Delta area, Li (1996) argued that long term relative performance of the TVEs can be

better explained by different incentive schemes together with effective check and coordination devices.

3.2. Recent changes in ownership arrangement in TVEs

A common implication Chang and Wang (1994), Li (1994) and Naughton (1994b) is that the TVEs are largely a transitional phenomenon. They predict that, as the political and economic conditions change, the aforementioned ownership arrangement in the TVE will lose much of its merit. For example, as reforms continue, private investors will feel safer and gain a better access to capital and product markets. The local government control then becomes more of a right of arbitrary intervention than a help.

This prediction is strongly supported by recent waves to "clarify" (redefine) property rights in the TVEs (*mingxi chanquan*), especially in places like Guangdong, Jiangsu, Zhejiang and Shandong provinces where TVEs are most developed. For example, Shandong province in 1992 transformed one sixth of the TVEs into joint stock companies. By the middle of 1994, nearly all TVEs in Zhejiang province had restructured the internal ownership arrangement, with the smaller ones auctioned out and the larger ones transformed into joint stock companies or sold out (or given back) to individuals. A major intended goal of these efforts to clarify property rights in the TVEs, in both cases of outright privatization (sellout) and forming joint stock companies, is to restrict the rights of the local government to largely dividends and voting by ownership share so that it can no longer arbitrarily interfere in the operation of the firm.

3.3. Summary and comment

Nothing is more spectacular in China's reform experience than the miracle of the TVEs. The experience of the TVEs shows that, for a transitional economy burdened with inefficient SOEs, a new sector need not be created through massive privatization. It can be created instead by policies that induce massive entry of new enterprises.¹¹ Because the new firms tend to start in small sizes and use labor intensive technologies, they have the benefits of providing more employment for a given capital stock and not needing a sophisticated legal and financial establishments to support their operations. Low capital intensity and small scales also mean low barriers to entry and thus high levels of competitions in this new sector. These benefits are most desirable in the early stages of transition toward a market system, since capital scarcity and institutional backwardness are two prominent features of most transitional economies.

4. Decentralization in Government

4.1. The theory of market preserving federalism

The political condition under which a transition is carried out matters in two senses. First, it affects what strategies are adopted. In ECE countries, the transition toward market economies started mostly after the fall of the communist regime. In this period of dramatic political changes the mood of the public towards the state ownership is "enough of it, and away it goes". In China, there is no such a dramatic political change and the reforms were started by the government whose intention was to improve the performance of socialism.

¹¹Putterman (1992), Gelb, Jefferson and Singh (1993), Lin, et al (1994), Naughton (1994a) and others also emphasized this point. Woo (1993) and Murrell and Wang (1993) noticed a rapid growth of small private enterprises in ECE countries, e.g., Poland.

The political condition also matters in a deeper sense. Most people believe that market functions best under protected property rights. It is also believed that a democratic government (DG) is better able to commit to citizens' rights in general and property rights in particular. Based on these beliefs, one would expect a DG to be better able to induce both private investment and the entry of new private firms that are essential for the success of an economy. In contrast, an NDG without a check on its power is expected to have a hard time winning the confidence of private investors. This should create additional difficulties for a transitional economy.

So far China's experience has contradicted this expectation. As was made clear earlier, the key to the success of China's reforms is the massive entry of the TVEs. This experience raises the question: Without a DG, what is the political condition that has enabled this to occur?

Scholars have noticed the critical role that political decentralization plays.¹² The burgeoning literature on market preserving federalism, prominently works of McKinnon (1993b), Montinola, et al, (1994), Qian and Weingast (1994) and Qian and Roland (1994), studies the conditions under which political decentralization offers a protection to citizens' property rights.

Market preserving federalism is a system of decentralized government with two critical elements. One element is a proper division of power between the central and the local governments. The local governments must be sufficiently autonomous and responsible for the development of the local economy. They must, however, not be independent from the central

¹²We refrain from citing from individual authors. Woo (1993) summarizes the opinion well: "This 'political decentralization' form of political liberalization has now become the major driving force behind continued economic reforms."

power to the degree that they are able to erect barriers around the local economy.¹³ The second critical element is that the local governments face hard budget constraint. The balance of power between the central and local governments induces competition among local governments. Such a system is capable of protecting property rights and thus preserving the market because those local governments that do not provide an amiable business environment drives investors away to other regions. Hard budget constraint is critical for local governments to behave right because, if they are not concerned with the tax basis, they would not care much about how well the local economy is doing. For two reasons, it is easier to impose hard budget on local governments than on the central government. One reason is their lack of power to print money. The other is that their tax bases is more restricted in the sense that business can move out any particular jurisdiction.

4.2. Chinese Experience

In the past fifteen years, the Chinese government has taken steps to decentralize decision making in the economy. As a result, the local governments now have a primary responsibility for economic development in their respective jurisdictions.¹⁴ Under the decentralized system, the local government has the authority to determine prices, set up new firms and make investment with "self-raised funds." The local government also has the authority to approve direct foreign investment

¹³As Putterman (1994, p.485) observes, one problem of local barriers is that they shield the TVEs from competition. The TVEs then behave more like the SOEs, "paying inflated wage and determining investment strategies without sufficient regard for profitability."

¹⁴As noticed by, for example, Granick (1990) and Qian and Xu (1993b), the decentralization in China is a multi-level phenomenon, with power shared between the central, provincial, municipal, county, township and village governments. In this paper, we discuss the issue in simplified terms between the "center" and "local governments".

projects up to a limit. In early 1980s, the four special economic zones, Shenzhen, Zhuhai, Shantou and Xiamen, were first granted the authority to approve foreign investment projects up to \$30 million each. This authority was later also granted to other parts of the country with differential limits. The State Planning Commission of the central government that used to approve most fixed assets investment now approves only "key projects."

To provide incentives for the local governments to develop the local economy, the tax system of the government is also decentralized. Under central planning, all revenues must be remitted to the center. The center will then decide about the budget of each local government. In 1980, a five year fiscal revenue sharing plan was introduced that allowed most provinces to retain a portion of the increased revenue income. The sharing plan was later renewed and continued through 1993, with modifications and extension to all provinces. In 1994, the government introduced a new tax system that is more similar to the one we see in the U.S.. Under the new system, the center and local governments will each have different sources of taxes instead of sharing all tax revenues from the same sources.

These measures have greatly increased the power of the local governments. One indicator noted by many is that the fiscal revenue/GNP ratio fell sharply since the inception of the reforms, from 32 percent in 1980 to 17 percent currently. However, if we take into account the extra-budget government income, which goes mostly to governments below the central level, the decline of government revenue is not nearly as dramatic. It fell from 32 percent in 1980 to 24 percent in 1990. (See Yusuf, 1994, p.84.) This means that the fall in revenue income has been born mostly by the center.

There has also been many anecdotal evidence suggesting a changed balance of power between the center and local governments. When China's conservative premier Li Peng wanted to recentralize investment decisions, for example, Guangdong and other provinces argued against it and the plan was aborted. (See Woo, 1993; Montinola, Qian and, and Weingast, 1994) Also in places like Guangdong, Hainan Provinces and the special economic zones, the local governments have gained a reputation of concentrating mostly on economic development and ignoring the political calls of the central government to wield off the ideological influence of the West. Such a reputation makes investors feel safer in these places than in other parts of China that are politically more conservative. This and other reasons, less price control, less regulation for market entry or exit, and self restraint from predatory taxes, make them favorite places for Chinese investors to locate.

Decentralization of the government power has provided strong incentives for local governments to provide an amiable environment for business in order to develop the local economy. One danger, however, is that expanded local power has the tendency of creating many dukedom economies. This will not only lead to poor national infrastructure, but also disintegrated markets, less interregional competition and soft budget constraint for the local governments. How to properly restructure the division of tax incomes between the central and the local governments, and also decision rights on and responsibility for other things, e.g., infrastructure constructions, is a task China now faces.

4.3. Comments

Market preserving federalism provides a nice framework in which we can discuss the interaction between politics and the economy. It suggests a solution to a fundamental dilemma that most developing countries face. In these countries, the lack of a democratic process in political life means there is no legal protection of citizens' property rights, which dampens incentives for private savings and investment and hence also the chance of development. At the same time, the lack of economic development leaves a large portion of the population in poverty and illiteracy. Hence these countries do not stand a good chance of obtaining a durable democracy because without a sizable and well educated middle class democracy does not have a solid social and economic foundation. Market preserving socialism suggests that, when democracy is not immediately achievable, a more favorable political environment for initial development can be created by modifying the existing political system. Such a modification should promote competition among local governments and introduce a check-and-balance between the central and the local governments, which in turn will provide a better protection to citizens' property rights.

In spite of its great promise, market preserving federalism can only become an established positive theory by addressing many fundamental questions. For example, what guarantees that the central government will not reverse power arrangement between governments of different levels, e.g., central and provincial? If the center does not want to lose power, why does it not decentralize power to the point such that power can be taken back when there is a danger of losing it permanently? If such a reversal is possible, how much credibility does a local government's liberal policy have? What are the dynamics of market preserving socialism resulting from the interaction among the center, local governments and citizens? Under what conditions will the center pass the point of permanently losing some power to the local governments? Under what conditions does

market preserving federalism lead to democracy? One difficulty in addressing these questions is that so far economists have not obtained a good understanding of government behavior.¹⁵

5. China as a Four Sector and semifederalist economy

5.1. The agricultural and nonstate industrial sector.

Like in every developing economy China has a traditional agricultural sector and a new nonstate industrial sector. In this paper we do not discuss these two sectors in detail because the organizational and institutional features in these sectors are relatively familiar. The well-known two sector model describes development as a problem of allocating resources from the agriculture, which has a low productivity, to the industry, which has a high productivity. Suffice to point out here a few statistics about these two sectors in China.

In 1978, about 80 percent of China's 1 billion population lived in the rural China. Of those living in Rural China, 300 million were in the agricultural labor force. This figure accounted for more than 75% of the total labor force of China. The registration system did not allow them to move freely to urban areas for employment. In early 1993, about 900 million people lived in the rural China, with a labor force of 420 million people. Of these 420 million people, 112 million worked in the TVEs. Another 90 million people migrated to the cities for non-agricultural employment. Some of them seemed to have settled down more permanently in the cities with a stable job. Others travel between the cities and their rural home. In spite of the huge absorption of

¹⁵Although, the works of Jean Tirole (1992) and Ed Green (1993) have given renewed hopes that a better understanding is within our reach.

the rural labor by the TVEs and urban industry, the government estimates that there is still about 100 million rural surplus labor in China. This surplus labor is expected to increase to 150 million people by the end of the century. To alleviate this problem of rural surplus labor, the move of labor from agriculture to industry is bound to continue, likely accelerate.

The nonstate industry, or the private sector, had long been a depressed sector by the ideologically biased government. Its scale was negligible even many years into the reforms. In 1985, the total product of the "individually owned" industrial firms was 18 billion yuan, which counted for 1.2 percent of the nearly 1000 billion yuan industrial output in that year. Since then, however, the reforms seem to have created a more favorable environment for the private sector to grow. In 1990, the total output of this sector reached nearly 130 billion yuan, which accounted for more than 5 percent of the total industrial output. Another major force in the nonstate industry is foreign direct investment, which now accounts for about 4 percent of the economy.

5.2. A four sector economy and the challenges it faces

The above discussion makes clear there are four major sectors in the current Chinese economy, a state sector which is the legacy of the communist past, a semistate rural industrial sector which is a product of the gradualist reform strategy, a traditional agricultural sector and a burgeoning genuine private sector. (See Figure 5.)

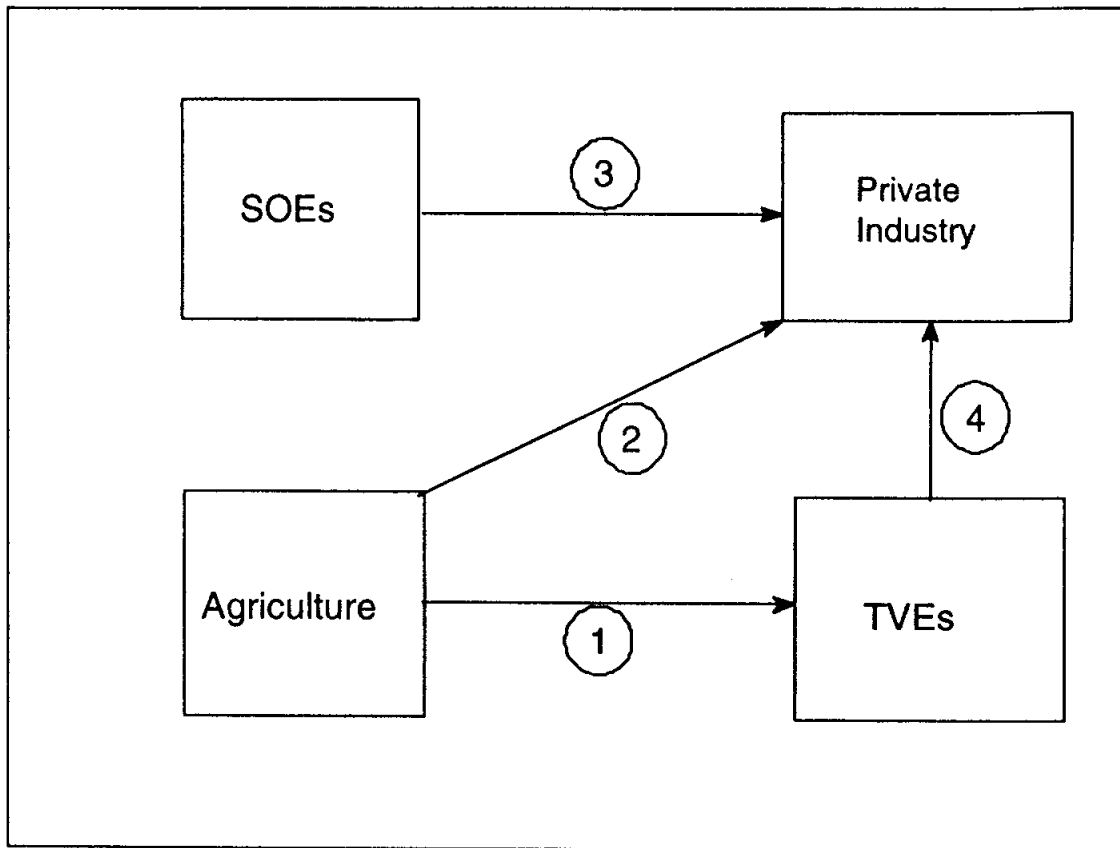
The state sector is very inefficient, at least in relative terms. In spite of various efforts, China has not found a way of improving the efficiency of the SOEs to a satisfactory level. Overtime, the government seems to have become more willing to privatize some of the SOEs. It

may be noted that, as reform and the growth of the economy create more ideal resource and institutional conditions for privatization, the reasons for delaying the it are being weakened.

The TVEs have been very successful. However, as economic conditions change, the original ownership arrangement in the TVEs seem to be losing its merit. An autonomous privatization process of the TVEs is already well underway. In the future, newly established rural enterprises will more likely be private firms from the very beginning.

This means that for the economy to continue to do well, there needs to be a simultaneous process of economic reforms and economic development characterized by factor movements in the economy. First, as a development problem, labor will move from the agriculture to the industrial sector. A continued reform process should direct labor moving out of the agriculture to the nonstate or semistate industries, and not to the state industry. These movements are represented by Arrows 1 and 2 in Figure 5. As reforms continue, the state industry itself will also shrink, not only in relative terms as has happened in the past 15 years, but also in absolute terms through privatization. Tens of millions people and capital currently employed in the state sector represent very inefficient use of resources in the economy. Privatizing SOEs will move resources from the state to the private sector as represented by Arrow 3. Finally, there is also a movement of labor from the semistate sector into the private sector represented by Arrow 4. Movements 1 and 4 will probably also represent an urbanization process as a result of two underlying trends. One trend is that as the political constraint weakens and factor market develops, new enterprises will be more likely to locate in the urban areas where they can better enjoy economies of scale. The other trend is that much of today's rural area will in the future become urbanized.

Figure 5: China as a Four Sector Economy



It may be noticed that in the case that an economy has only two sectors and the only factor movement is from agriculture to the industry, it becomes the familiar two sector model of Lewis. In another extreme case, if economic transition is from a highly industrialized socialist to a market economy, the main factor movement would be from the state to the private industry, represented by Arrow 3.¹⁶ Big-bang is to accomplish Arrow 3 rapidly without Arrows 1 and 4. What reforms and development have in common is that in the end the success of an economy depends on the development of a prosperous nonstate industrial sector.

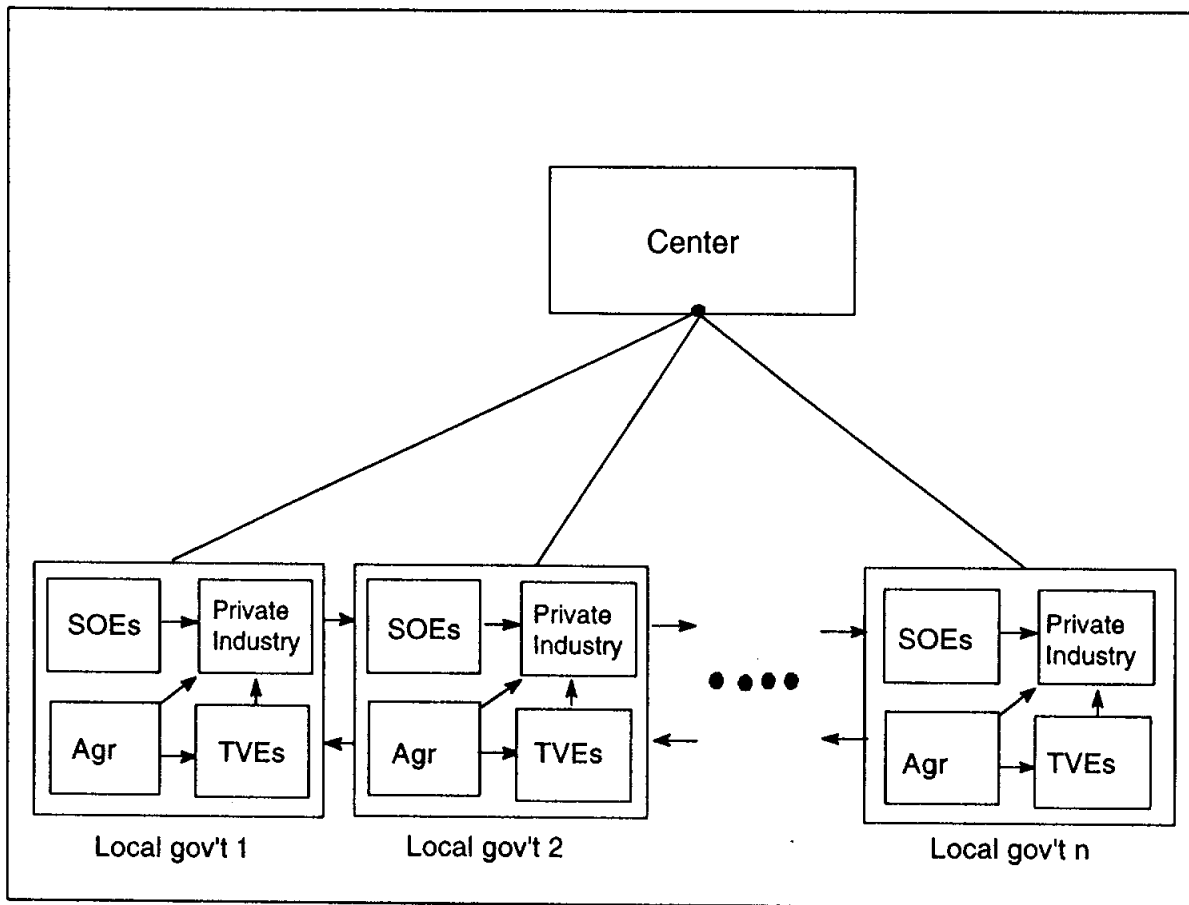
5.2. A Four Sector Economy under a semifederalist Government

As noted in Section 4, power sharing in the government has been critical for the success of the Chinese economy. Under this semifederalist arrangement, the local government is responsible for economic development in its jurisdiction. It also provides a buffer to the center's predatory behavior against business. The center is responsible for national infrastructures and

¹⁶Czech Republic may be considered such a case. See Woo, 1993, p.9.

counterbalancing the local government's tendency of establishing a dukedom economy protected from competition. Taking into account the political reality, the current Chinese economy should be viewed as an aggregate of many regional economies under a multilevel government with divided power and responsibilities among them. In Figure 6, the four sectors are divided and grouped into regional economies, each under a local government, to reflect this political reality. Above the local governments is the central government. Complete centralization means that local governments are simply the extension of the central government, and that the local economies are not independent units. We thus need not have the local governments and regional grouping in Figure 6. Complete decentralization means that each region becomes a completely independent economy and the center plays no role in the economy. The central government would then disappear from the picture.

Figure 6: Four Sector Economy Under a Semifederalist Government



5.3. Some research questions.

The rudimentary model is relatively clear about what needs to be done, but not about the constraints under which things can or will be done. Consequently, the model is incomplete in the sense that it does not explicitly say much about the constraints affecting factor mobility in the economy. The following are a few examples. We believe these are also important research issues for a good understanding of the Chinese economy and its future dynamics.

The discussion in Section 2 suggests that there is both costs and benefits of slow privatization of the SOEs. However, there has not been explicit modeling of the tradeoffs. We are thus left with little knowledge about the optimal timing of privatization, although we feel it has been a little too slow in China but a little too fast in many ECE countries.

Also in Section 2, we noted that different factors, e.g., the lack of autonomy and that of financial discipline, contribute to the SOEs' inefficiency. However, there has not been much systematic effort to investigate the relative importance of these factors. We are thus not able to answer questioned like: If we harden the SOEs' budget but continue to bar them from laying off workers, how much efficiency improvement can we expect? Note that this proposal mounts to a policy that the government punish the manager but not the workers if the SOE does not do well financially. The policy would make sense if choosing efficient projects is the key to turn the SOEs' performance around, and laying off workers have unacceptable socio-political consequences. Without further investigation, we do not know how confidently we can assume this is the case.

Theoretically, we have reached a fairly good understanding of the nature of the TVEs. Casual observations seems to support the view that the TVEs are largely a transitional phenomenon and there will be major changes in TVEs' ownership structure. However, the question of how various factors, e.g., culture, market perfection, politics, etc., contribute to changes in ownership arrangement in the TVEs has not been empirically studied. We thus do not have a reliable prediction of the speed of change and the new ownership forms that the TVEs are changing to.

As noted in Section 4, a positive theory of the semifederalist government is yet to be developed. Consequently, our understanding the dynamics of such a system and the interaction between the politics and the economy is quite limited.

There has been much study in development economics as what determines how rapidly surplus rural labor can be absorbed by the industry. The development of a financial institution that provides incentives for private citizens to save and channels citizens' savings to profit investment opportunities, or "financial deepening", is viewed as a critical factor. In the past 15 years, the savings rate has been high in China, as also true in other East Asian countries. (See McKinnon, 1993a.) A good portion of the savings, however, has been used to subsidize inefficient SOEs. Since the savings rate is unlikely to go much higher, but the financial problems of the SOEs seem to be ever worsening, future developments of China's financial market has to be a matter of serious concern. Studies in this regard have also been weak.

6. X-Sector and Y-Government as an Alternative Model of Development

Needless to say, institutions of a traditional society or socialism are ridden with features impeding economic development and need to be changed. The question raised by China's reform and development experience is: In a process of induced institutional change, how can elements in the existing institution be used to support and promote the growth of the new institution?¹⁷ In socialism, NDG and central planning are two of the most important institutions. While ECE countries destroyed them, China modified them to promote growth and use the momentum of growth to promote the destruction of these old institutions. In the past 16 years, the organizational capacity of the government, especially that of the local governments, was used to promote competition and economic growth. The government apparatus is also used to continue to manage

¹⁷Vernon Ruttan pioneered the study of induced institutional change. See Ruttan (1978) and Hayami and Ruttan (1984). Justin Lin (1989b) also studies this problem and provides a survey.

the SOEs when the cost of rapid privatization of the SOEs is high. Also, the planning capacity was used to gradually liberalize the prices in the process of marketizing the economy.

It is worth pointing out that China's experience of institutional change is not unique. Elements in the old institution are used to promote development of new institutions more favorable for development in other developing countries. Close social ties among villagers are often used to enforce credibility in rural finance. Family capitalism preceded modern cooperations with merit-based management. In the political front, industrialization in Korea, Taiwan, Singapore and Hong Kong was realized under NDG. Development in turn seems to have provided a solid social and economic foundation for democracy in South Korea and Taiwan.¹⁸

These experiences suggest a new model of development different from the familiar Anglo-American model. In the familiar Anglo-American model, democracy is established before industrialization, e.g., the Glorious Revolution and Industrial Revolution in England, and the constitutional government and industrialization in the US. Contemporarily, ECE countries, India and the Philippines seem to be following this model. Another feature of this model is that industrialization is accomplished by a process of resource flow from the traditional agriculture to the new industrial sector.

In the alternative model, which we refer as an X-sector and Y-government model,¹⁹ the early stages of development are accomplished under not a democratic, but a modified (feudal,

¹⁸See Bardhan (1993), Przeworski and Limongi (1993) and Huber, Rueschemeyer and Stephens (1993) for more extended discussions of democracy and development.

¹⁹Due to the lack of a better term, we refer to different interim forms of government that are nondemocratic but nonetheless provide a protection to the property rights to promote economic development as Y-government.

socialist or other forms of) NDG. While the market preserving federalism we see in China is a prominent example, it is not the only one. South Korea and Taiwan are two earlier examples in which the authoritarian government under proper conditions provided protection to citizens' property rights. For decades, both governments faced the threat of a strong communist rivalry. An essential element in the government's strategy to defend against the communist threat is economic prosperity. At the same time, the governments have been under strong foreign, especially U.S., influence to reform and to have more respect for citizens' basic rights. The dependence of these governments on U.S. support for survival makes it hard for them to completely ignore American requests. These international conditions forced the two authoritarian government to provide some basic protection to citizens' rights, especially economic rights. With the protection, the economy was able to achieve the initial development. The economic development in turn prepared for a democratic system by providing better education and more information to the people who now also have a stronger demand for democracy. Eventually, the virtuous circle between the political system and the economy led to a prosperous economy and also a democratic government in both countries.²⁰

Without a democratic government, a legal protection of property rights, and a revolution to break the traditional institutions, ambiguous organizations emerge, e.g., TVEs in China, besides

²⁰The experience of Hong Kong is one of initial development achieved under a colonial government. As Britain extended its legal system to the colony, the nondemocratic colonial government protected citizens' property rights for economic development. Economic development again prepared the colony for democracy. Although the Chinese government sees the scheduled first popular election of the legislature as a move of the hypocritical colonialists to make trouble there before they leave in 1997, it is in any case doubtful that the citizens of an economically prosperous Hong Kong would be willing to live with "taxation without representation" under the British rule forever.

those with well defined property rights, e.g., household farming in agriculture and private firms in the industry. Since these organizations of ambiguous property rights may arise in either the industry or the agriculture, or both, early development under a Y-government may see multiple sectors, or X-sectors, cross classified by ownership and products.

Thus the alternative model is one in which the journey to economic development and political democracy is less revolutionary than the Anglo-American model. The journey is accomplished instead by taking first a small step that moves the economy into a stage in which there are X-sectors under a Y-government, and then another step to a strong private sector under a democratic government. In a sense, we can view these two models of development as the analog to big-bang and gradualism in the problem of economic transition. A task of development economics is to develop a positive theory that can predict which country will follow which of the two models for development. A theory is also needed to tell us, for developing economies following an X-sector and Y-government model, when a virtuous circle can be expected such that the interaction between politics and economy leads to economic success and democracy, and when it does not.

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