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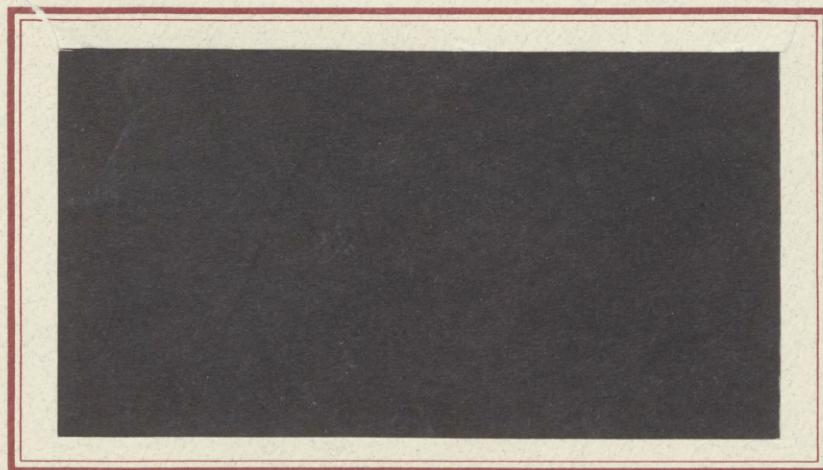
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The author would like to thank Clive Gray for his editing assistance.

Priority of Privatization in Economic Reforms: China and Taiwan compared with Russia

Abstract

Dr. Tianlun Jian

This paper studies one aspect of economic reforms -- privatization. By comparing privatization experiences and the degree of urgency in Mainland China, Taiwan (China) and Russia, I argue that privatization is necessary and inevitable, but not a precondition for economic reforms. Due to different economic structures and initial conditions, China and Taiwan (China) chose to restructure their economies without emphasizing privatization, and their reforms have been very successful. The rapid growth of Mainland China and Taiwan (China) has mainly come from resource reallocation, namely, industrialization -- cheap rural labor moving from a low productivity agricultural sector to the industrial sector. Russia, on the other hand, faces a very different problem: At the time of its reorientation to a market economy, Russia was already highly industrialized, with a very small proportion of rural labor, but a large number of inefficient public enterprises. Therefore, promoting efficiency and restructuring the industrial sector are the key to Russia's economic reform. Theoretically it may have been more appropriate for Russia to go through privatization at an earlier stage than China and Taiwan due to the fact that Russia had a much larger percentage of public enterprises, but it was unable to accomplish this efficiently.

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Priority of Privatization in Economic Reforms Defers across Countries

Section 1: The Timing of Privatization Depends on a Country's Economic Structure

In the last two decades, economic reform has been the most important topic around the world. By now, roughly one-half to two-thirds of the world's population are experiencing economic reform: transformation from planned to market economies, deregulation to stimulate competition, opening up to the world economy, and strengthening of property rights. There have been success stories such as China, but others are not so lucky. The question is why? Some argue that privatization is the key to economic reform, but others give counter examples such as P.R. China and Taiwan (P.R. China)¹, saying that the private sector should grow spontaneously. We think there is no universal answer to this question. The proper approach to economic reform depends very much on a country's economic and social situation. The relevant question may be what aspect of the reform should go first, second, and so on. Again this depends on a country's social, economic and political situation. More often than not, governments face a second-best choice, with many constraints varying across countries and over the course of economic growth. At any particular time, a government has to concentrate on one or two aspects of reform due to constraints in terms of resources, time, and political and social conditions, to mention just a few. Experience shows that economic reform will benefit a country in the long term only if social and macroeconomic stability are preserved in the reform process. This is because reform, especially transition from a planned economy to a market one, is a process of changes in people's ideology, one in which relative interests change among groups, and opposing interests become more pronounced. So without

¹ For convenience, I will abbreviate "China and Taiwan" below.

stability, good plans or reform strategies cannot be implemented (Jiang, 1995). A good reform target is to make a significantly higher marginal contribution to economic growth while keeping the cost of transition as low as possible.² This kind of reform is more likely to be accepted socially and politically. When “majority rule” is satisfied, reform will proceed more smoothly. The success of the initial reform will increase popular support and point to new directions. Economic reform needs social participation, and the process of reform is one of education. Without support from the majority of the population no profound reform is likely to succeed.

In this paper, I concentrate on one aspect of economic reform --- privatization, comparing the experience and degree of urgency of privatization in China, Taiwan, and Russia. Note that I will not discuss the merits of privatization. Most would agree that it is inevitable. Instead, I want to show that the priority of privatization in the process of economic reform depends on a country's economic structure. The objective of privatization is to improve efficiency through transfer of asset ownership from the public to the private sector. It is well known in the economic literature that assets are used most efficiently when both the control of their use and resulting income flows vest in the same party. The inefficiency arising from separation of property rights and cash flow can be reduced through contract, as the Coase theorem suggests. However, property will be used efficiently only if property rights are protected and enforcement of contracts is insured. On the one hand, state enterprises are inefficient due to separation of property and cash flow rights, and the principal agency problem. Hence a need for privatization. On the other hand, the success of

² Since no one knows the results of the reform *ex ante*, reform is risky to everyone in the economy. Only risk lovers would be willing to proceed with reform if the transition cost is very high. And during the reform process, those who are hurt will cry more loudly than those who benefit.

privatization presupposes an appropriate institutional structure to protect property rights³, notably the police. In addition, since privatization usually entails unemployment of workers of the enterprises concerned, it has a major impact on society at large. If the market environment for privatization is weak, and labor surplus is a potential problem, privatization need not be the top priority in economic reform, as it was not in China and earlier years in Taiwan. The problems faced by reformers in China and Taiwan are more of resource allocation ---- reallocating surplus labor from agriculture to industry and service, while the issues facing reformers in Russia concern productivity and efficiency ---- depoliticization of production and transfer of ownership from the public to the private sector. In this paper we show that due to differences in economic structure, the successful experience of China and Taiwan cannot be copied in Russia. In the next section I analyze the linkage between economic structure and approaches to economic reform. Section 3 shows how comparative economic structure in terms of ownership makes economic reform more difficult in Russia than in China and - in earlier years - Taiwan. Section 4 gives reasons why promotion of industrial reform has failed or succeeded. Section 5 summarizes the main results of the paper: competition, deregulation, and privatization along with macroeconomic stability ensure the success of economic reforms.

Section 2: Sectoral Distribution of the Economies

Stages of economic development are often related to sectoral composition. A larger share of agriculture is generally associated with backwardness, while advanced countries have very small

³ Boycko, Shleifer, and Vishny (1995), page 25.

agricultural sectors. Countries undergoing industrialization experience much higher economic growth than they did before and after.

Table 1: Sectoral Distribution of Employment (per cent)

	China			Taiwan			Russia			USSR				
	1978	1984	1993	1952	1965	1977	1993	1980	1985	1987	1992	1940	1970	1988
Primary	70.5	64.0	56.4	56.1	46.5	26.7	11.5	15.0	14.0	13.8	14.4	9	11	10
Secondary	17.4	20.0	22.4	16.9	22.3	37.6	39.1	42.1	42.0	41.8	40.6	44	45	43
Tertiary	12.1	16.0	21.2	27.0	31.2	35.7	49.4	42.9	44.0	44.5	45.1	47	44	47

Source: 1994 Statistical Yearbook of China; 1994 Taiwan Statistical Data Book; World Bank, Statistical Handbook 1994, States of the Former Soviet Union; for Russia in 1985 Sachs 1995, Table 2; USSR Facts & Figures Annual, Vols 1 & 15.

The choice of economic reform strategy must take into account a country's relative stage of development. In the case of China, Taiwan, and Russia, major differences in sectoral composition impose different initial targets for reform. Taiwan started its reforms in the 1950s, China in 1979, and Russia in 1985. Table 1 shows China and Taiwan starting with primary sector employment of 70.5% and 56.1%, respectively, while the corresponding share in Russia and the former Soviet Union are below 15%, very close to today's level in Taiwan. Similarly, when reform got underway, much more of China's and Taiwan's output originated in the primary sector than did that of Russia and the former Soviet Union. (see Table 2)

Both China and Taiwan, one a planned and the other a market economy, experienced strong growth as they moved from primary to secondary and tertiary sector output. This already suggests

that industrialization accounts for the major part of their growth.⁴ Tables 1 and 2 also show China's sectoral distribution in 1993 to be quite similar to Taiwan's in 1965.

Table 2: Distribution of GDP/GNP by Sector (per cent)

	China			Taiwan				Russia		USSR		
	1978	1984	1993	1952	1965	1977	1993	1989	1992	1960	1970	1987
Primary	28.4	33.1	21.2	33.2	23.6	10.6	3.5	16.8	9.9	34	29	19
Secondary	48.6	44.8	51.8	19.7	32.2	44.0	40.6	50.2	56.7	33	37	42
Tertiary	23.0	22.0	27.0	48.1	46.2	45.4	55.9	33.0	33.4	33	36	38

Source: 1994 Statistical Yearbook of China; 1994 Taiwan Statistical Data Book; World Bank, Statistical Handbook, States of Former Soviet Union, 1993 & 1994; USSR Facts & Figures Annual, Vol 14, 1990.

Between 1965 and 1993 Taiwan grew at an average annual rate of 8.8% in real terms⁵. Since China and Taiwan share the same culture as well as many social and economical characteristics, it is probably safe to predict that China will enjoy at least fifteen more years of high economic growth through industrialization. Why could not Russia have achieved similar growth rates after its reform? Some economists argue that Russia should have dispensed with privatization. According to Clark and Lam (1995), Russia should follow the successful reform experience of Taiwan and China by not privatizing its public enterprises. Would that work? We do not know. Russia's different economic structure means that it faces different problems from Taiwan and China.

⁴ Jian, Sachs, & Warner (1995) shows that provinces with a higher share of GDP in agriculture had much higher growth between 1978 and 1993 mainly due to high growth of township and village enterprises.

⁵ Taiwan Statistical Data Book 1995, page 28.

In the cases of Taiwan (previously) and China, the main problem is a large surplus of rural labor and low level of industrialization. Given that productivity and income in rural areas are much lower, any transfer of labor from agriculture to an expanding industrial sector will promote growth. The result will be Pareto efficient in that when industry grows very fast, few people, if any, are hurt, while a large part of the population benefits. Would Taiwan and China be better off had they privatized public enterprises at the outset of their reform? The answer is, surely not. The reasons are threefold. a) At the initial stage of reform, industrialization gives both economies a major impetus for development. Privatization would not only divert the course of such development, but possibly also cause social problems and economic instability. Workers discharged from the privatized public enterprises incur welfare losses, compete with the surplus labor from agriculture, and if they find new employment, are likely to earn lower wages than before. b) When prices are distorted,⁶ competition is weak and social wealth is low, the net welfare effect of privatization is unknown. Weak competition means high information costs and makes privatization risky. Given few buyers, privatization is likely to benefit the buyer, who can acquire assets below market value. When public enterprises are bought by foreigners, the country incurs a net welfare loss.⁷ c) Under these conditions, in choosing a policy strategy, government officials seek the one that will make the highest marginal contribution to economic growth. And what conditions ensure such growth? The answer: maintaining social and macroeconomic stability while promoting industrialization and competition. Indeed this is what mainland China and Taiwan did in their early stages of economic reform.

⁶ Price distortions in China during the early years of the reforms are due to the state plan.

⁷ See next section.

Table 3: Distribution of Light and Heavy Industry (per cent)

Year	Soviet Union		China		Taiwan			
	Heavy	Light	Year	Heavy	Light	Year	Heavy	Light
1970	75.3	24.7	1952	35.5	64.5	1976	40.3	59.7
1975	78.0	22.0	1978	56.9	43.1	1980	45.6	54.4
1980	79.4	20.6	1980	52.8	47.2	1985	47.4	52.6
1985	79.6	20.4	1985	52.9	47.1	1990	55.5	44.5
1988	80.1	19.9	1993	56.0	44.0	1993	61.8	38.2

Source: USSR Facts & Figures Annual Vol. 15, p 134 and 1992 & 1994 Statistical Yearbook of China. p 25 & p 27; Fengxiong Xiao (1995), Free China's Industry, p 53.

Note: USSR data is based on value-added at factor cost while China's data is based on current value of gross industrial output. Taiwan's data relates to manufacturing industry.

Russia's story is quite different. It started its industrialization over a century ago, around 1880. As early as 1940 only 9% for the Soviet labor force was employed in the primary sector, even less than China's share in 1993.⁸ This left little scope for satisfying industry's labor needs by shifting the cheap labor out of agriculture. In addition, the Soviet Union stressed full employment to such an extent that the industry and service sectors suffered from over-employment. This made low productivity in industry and services one of the key issues for ex-Soviet bloc reformers. Moreover, for nearly eight decades the economy was distorted by state planning. Production was biased towards military⁹ as against civilian goods, favoring heavy over light industry. Table 3 shows the former Soviet Union had a much smaller proportion of light industry than China and Taiwan. In 1980, this was only 21%, compared with comparable shares of 47% and 54%, for China and Taiwan, respectively. Again, this provides evidence of economic distortion through long-

⁸ Cold weather in the former Soviet Union may account partially for the smaller share of agriculture.

⁹ In 1988, Soviet military output was several times that of the U.S., while U.S. per capita GDP was about ten times the USSR's. For example, the USSR produced 3500 tanks against 775 for the U.S.

standing government policy: state-directed investment in heavy industry at the expense of private consumption.¹⁰ Production under state plans simply ignored market demands, causing unwanted goods to pile up while daily necessities were scarce. So as reform got underway, the key challenges for the former Soviet bloc were to reallocate resources from military to civilian industry and from heavy to light industry, and to improve efficiency in production. The adjustment within industry requires some industries to contract or even cease production. Thus, initial reform in industry is bound to be associated with a reduction in national output. Indeed all ex-Soviet economies saw GDP decline for two to five years. Improving efficiency in production is a much more difficult task. It can be done in any of three ways: a) By improving internal management. However, the impact of this in the course of a huge shift in production and in a chaotic economic environment is not clear. b) By establishing new enterprises that absorb surplus labor from existing ones. The problem here is that at the time of the reform, the Soviet regime already faced an enormous budget deficit.¹¹ c) By privatizing those that are more appropriate for privatization while stabilizing the economy and promoting competition. In the case of Russia, privatization seems to be the right direction for reform.¹² Under Russian conditions, privatization addresses production in three ways. 1) Russian reformers point to politicization as the major source of inefficiency in their economy. Privatization

¹⁰ Direct data on consumption are not available for cross-country comparison, but light industry output is positively correlated with production of consumer goods.

¹¹ Gradual reform through incentive schemes is no longer feasible in the former Soviet Union, because after years of such reform, initiated by Gorbachev, the people no longer trust the government. Gorbachev tried to reform via decentralization, reallocating control rights from politicians to managers. This failed because decentralization did not extend to giving managers rights to cash flow. However, with the demise of the Communist Party, the government lost control over managers, who then used their control power to profit personally from public assets. See Boycko, Shleifer, and Vishny (1995), p 39.

¹² I do not mean at all to say that privatization has been successful in Russia. In fact, it could have been done better. Please see Section 4.

is the best way to depoliticize. 2) By seeking to maximize profit, private owners will operate more efficiently. 3) Privatization alleviates the fiscal burden of subsidies while generating revenue from sale of assets.

Section 3: Distribution of Ownership

The main objective of economic reform is to achieve and maintain rapid economic growth in the long run. Privatization, one component of economic reform, is believed to make enterprises operate more efficiently through transfer of ownership, thus promoting growth. The rationale for privatization is based on agency theory, namely that given asymmetric information, a manager will act in his own interest at the expense of the owner. Since privatization targets public enterprises, the larger the share of public enterprise in an economy, the more urgent it is to privatize. Among public enterprises, the lower the level of production efficiency, the greater the need for privatization. Comparing productivity over time across countries such as China and Russia is difficult, if not impossible, due to data problems. However, cross-country comparison of changes of ownership over time is possible. Table 4 contrasts the small share of the state-owned sector (government plus state-owned enterprises) in China and Taiwan as against Russia's large public sector. Russia's public sector accounted for 99% of employment in 1980. This decreased gradually following the reform, but it was still 92% in 1991. In contrast, for the last sixteen years following economic reform, China, also a planned economy, has had a large private sector, or more accurately, non-state

sector¹³, accounting for 82% of employment. Taiwan has the most detailed ownership data. The public sector's share of employment has remained almost constant around 12% during the last forty years. The Taiwanese public sector's share of GDP has also stayed low and relatively constant at 25% over the past forty years.

Table 4: Distribution of Employment by Ownership (per cent)

	China			Taiwan*				Russia			
	1978	1984	1993	1952	1965	1977	1993	1980	1987	1990	1991
State Sector	18.6	17.9	18.1	12.7	14.6	12.5	11.8	98.9	98.8	94.6	92.4
Non-state Sector	81.4	82.1	81.9	87.3	85.4	87.5	88.2	1.1	1.2	5.4	7.6

Source: 1994 Statistical Yearbook of China; Yearbook of Manpower Survey Statistics, Taiwan Area, Republic of China 1993; World Bank, Statistical Handbook 1994, States of Former Soviet Union.

Note: For Taiwan, state sector data refer to public sector or government sector plus public enterprises, non-state sector refers to private sector. For China, state sector means state-owned units, while non-state sector comprises of collectively-owned units, joint management economic units, stock ownership economic units, joint ventures, private enterprises, individuals, and others. For Russia, state sector means state sector, leased enterprises, economic associations, social organizations, collective farms; and non-state sector comprises of joint-stock companies, joint ventures, cooperatives, individual labor, private subsidiary agriculture and private agriculture.

Table 5 shows the public enterprise share in GDP decreasing by four percentage points during 1977-1993, with the private sector picking up the difference. No breakdown of GDP by ownership

¹³ In this paper the non-state sector refers to enterprises that are not solely owned by the government, comprising both the private sector and enterprises partially owned by the government. In China, the non-state sector includes collective enterprises whose ownership status in which government often participates, is difficult to define by western standards. Prior to reform, most collective enterprises were more like state-owned enterprises. But in the wake of reform they act more and more like private enterprises. The fact that ownership rights have never been clearly defined poses major problems.

is available for China¹⁴ or Russia. However, according to the U.S. Central Intelligence Agency, what they call emerging private enterprises (privately owned enterprises plus leased state-owned enterprises) accounted for roughly 20% of industrial output in Russia in 1992.¹⁵

Table 5: Distribution of GDP by Ownership in Taiwan (per cent)

	1952	1965	1977	1993
Public Sector	24.31	26.24	26.08	22.59
Government	9.63	10.17	9.70	10.78
Public Enterprises	14.68	16.07	16.38	11.81
Private Sector	75.69	73.76	73.92	77.41

Source: National Income in Taiwan Area of ROC 1989 & 1994.

If we accept Section 1 thesis that private ownership is generally more efficient, then differences in ownership structure clearly have direct implications for economic reform strategy. The smaller the private sector in an economy, the less dynamic its markets, and hence the lesser degree of competition. Less competition means less efficiency. Hence, the inefficiency of Russia's huge public sector makes privatization an urgent matter for that country. Our data indirectly show Russian productivity to be much lower than Taiwan's. Tables 1 and 2 already show the sectoral distribution of Taiwan's economy to be similar to Russia's. However, Taiwan's 1993 per capita GNP was \$11,000, five times higher than Russia's. This indicates enormous scope for

¹⁴ The only breakdown of output by ownership available for China is gross industrial product. This introduces an element of double counting. Moreover estimates of ownership within industry based on gross industrial product almost certainly overestimate the share of non-state enterprise, due to their small size. In addition, comparison over time is even more misleading since many collective enterprises change their ownership status from one near to the public sector to one resembling more closely the private sector.

¹⁵ This calculation is also based on gross industrial product, but double counting is less of a problem because of the small number of private enterprises, and the large size of state-owned enterprises.

improvement in Russian efficiency, which in turn highlights the importance of privatization for Russia's reform process.

Another issue that makes privatization more relevant for Russia is that it helps the country get rid of the huge fiscal burden represented by subsidies to public or state-owned enterprises (SOEs). Wages of public enterprise employees represent only a small proportion of their real income because in planned economies, such as Russia and China, SOEs have major social responsibilities in addition to their directly productive functions. SOEs provide housing, health care, education, baby-sitting, pensions, and other benefits. So when SOEs are not profitable, enormous subsidies must be provided. In Russia, subsidies to SOEs had by the late 1980's, created unsustainable budget deficits, leading to rampant high inflation. As a result Russia had no alternative but to privatize.

Section 4. Success and Failure of Industry Reform

Given SOEs' wide-ranging social responsibilities, privatization effects all levels of society. Stability is a prerequisite of successful reform. Poorly conceived privatization may lead to social problems and macroeconomy instability. Many economists have stressed that "there is a social premium to be achieved by lowering the uncertainty and raising the credibility of a stabilization program" (Sachs, 1995). Stability and growth enable reform process to continue.

In planned economies such as China and Russia, as reform gets underway and the market environment is still weak, privatization may be better carried out in several steps. 1. Stimulate competition by exposing public enterprises to the market mechanism. China's dual track is a good example of this as well as weaning enterprises from the state plan. 2. Formalize the legal framework, which includes establishing rules for competition, privatization, merger, acquisition,

etc. 3. Vest property ownership to a government institution before any privatization takes place.¹⁶

China and Russia have a problem of poorly defined SOE ownership, although in principle they are owned by the entire population.

Neither China nor Russia privatized SOEs at the outset of their reform, but both were moving in that direction. In fact, both countries started with contract responsibility schemes in their SOEs.¹⁷ The difference is that China achieved economic growth along with stable macroeconomic stability, while Russia encountered a fiscal crisis after decentralizing decision making power from government officials to SOE managers. Given that the Party had lost control over the managers, the latter abused their control rights and diverted firm assets to personal use. In addition, coordination of production collapsed and more and more firms ceased operation. Large fiscal deficits then disrupted the economy.

China's reforms originated in rural areas and their success gave momentum to further reforms. Rural reforms, especially strong growth of TVEs, have given the major impetus for economic growth, while keeping the economy on an even keel. And apart from China's macroeconomic stability, her industrial reform is pragmatic and gradual. The process is one of education and learning by doing. Industrial reform passed through three stages:

a) Introduction of production responsibilities, which started as a vague concept, with production units being rewarded as a function of their output. Typically, entire units rather than individual workers are rewarded. Meanwhile, state grants to enterprises are replaced with bank

¹⁶ There are numerous examples of huge losses caused by privatization without clarifying ownership. Han (1995) presents an excellent case study in which a Chinese enterprise, sold for only 16.8 million yuan to a foreign firm, soon turned out to have a net worth in excess of hundred million yuan.

¹⁷ China started the so called system of production responsibility in SOEs around 1979, and Russia started to lease SOEs around 1985.

loans which must be repaid with interest. Moreover a dual-track system was utilized to introduce the market mechanism. The dual-track system means coexistence of state planning and the market. It covers a wide range of activity: material inputs, marketing, price determination, and even exchange rates, depending on the industry in question as well as other factors. Exposure of part of their activity to market forces gives managers and workers a taste of the market economy, leading to a gradual change in behavior. To some extent the planners also receive feedback.

b) Production contracts are widely practiced at all levels, between government and senior managers, senior and lower managers, and so on. Rewards for production or sales in excess of quota are no longer subject to a ceiling, but at the same time subsidies are no longer guaranteed to loss-making firms.¹⁸ Meantime, China has given managers more freedom to make decisions about production, sales, and management, and has separated government administrative functions from enterprise management. It thus sought to increase efficiency by depoliticizing production and management.¹⁹

c) In 1992 China's State Council promulgated "Regulations on Transition of Management of State-owned Enterprises." These emphasize enterprise autonomy and encourage enterprises to have recourse to the capital market. By 1992, some 3400 enterprises had issued stock, 86% of it being issued to their employees.²⁰ From that time dozens of laws have been passed, regulating such fields as corporations and banking. In the writer's opinion, even though privatization has not made significant strides in China, the government has been preparing for it and moving the country closer

¹⁸ As a result, though government subsidies are still increasing in nominal terms, enterprises can no longer rely on them. Moreover their share in SOE financing has fallen considerably.

¹⁹ About half the losses of China's SOEs are associated with production ordered by the government. Among urban collective enterprises, political control accounts for about one quarter of losses, while TVEs are free of this burden. See Xiaoxuan Liu, 1995, Economic Research. Page 16.

²⁰ Shujin Yang, 1994, in Modern China Studies, p 14.

and closer to that target. At the moment China is trying to reform her social welfare system, establishing a version of pension funds. In our view, that is a major reform, designed to prepare China for privatization. In fact, the Chinese government recently tried to encourage foreign investment of any kind in large and medium-sized state-owned enterprises. In selected cities, foreign investors are encouraged to form joint ventures, involving partial or complete buyout of SOEs.

The public share in Taiwan's economy has remained low and stable over the last forty years. Nonetheless, government policy has played a major role in promoting development. In the 1950s, unlike in Russia and China, the government encouraged light industrial enterprises that required less capital and simpler technology, took less time to establish, and employed more labor. In this way Taiwan was able to make better use of her labor in order to economize. Along with light industry, Taiwan's population of skilled labor and engineers also grew rapidly as a result of "learning by doing." While maintaining high employment, Taiwan has also limited income disparities. Public enterprises were established to ensure that key inputs were available domestically for downstream private producers and to secure economies of scale in certain branches of output. Prior to the 1970s, Taiwan's private firms, mainly small and medium-sized, were unable to secure the loans needed to build up large factories. The government established large enterprises such as the Taiwan Power Company and China Petroleum Corporation. By exploiting economies of scale these enterprises reduce input costs and support private firms. (Tzong-shian Yu, 1995, *Industry of Free China*, p 56) Rodrik (1995) also emphasizes the linkages provided by Taiwanese public enterprises in the development process. The government took the lead in investing in upstream industries and then sold them either to the private sector or to other public enterprises.

To summarize, differences in the distribution of ownership, as well as in the fiscal burden of welfare and subsidies, mitigate against copying the Chinese and Taiwanese approaches directly in Russia, and vice versa.

Section 5. Promotion of Competition, Deregulation, and Privatization Along with Macro Stability Ensure the Success of Economic Reforms.

Competition is the key to economic development. Deregulation, decentralization of decision-making power, and privatization are the best way to promote competition and thereby transform planned economies into market economies. In the process of reforms, the timing of privatization may vary simply due to differences in economic structure. In other words, privatization is inevitable, but it is not a precondition for economic reform. On the other hand, the fact that China and Taiwan are succeeding without massive privatization does not mean they will never privatize. It would be also wrong to conclude that other countries should not privatize. In many situations, endlessly delaying privatization obstructs economic development, results in social waste, and creates vested interests. Managers of state-owned enterprises are likely to exploit state assets for personal profit. In the writer's view, China's recent policy of more intensive reforms in state-owned enterprises is aimed at solving these problems. On the other hand, one must also realize that a public sector of a certain size is justified to provide government services and control natural monopolies. Moreover, when private enterprises are not large enough to exploit economies of scale, as in today's China and Taiwan in earlier years, or when a country is too small, some public enterprises in capital-intensive and large-scale industries may be necessary to correct market inefficiency. This may help explain why the share of employment in Taiwan's public sector has decreased only slightly over for the last forty years.

List of References

Boycko, M., A. Shleifer, and R. Vishny, *Privatizing Russia* (Cambridge, Mass: The MIT Press, 1995): 25, 39.

Clark, Cal and Lam, Danny Kin-Kong, "Taiwan's with Privatization and Its Implications for the Former Soviet Bloc", *Business & The Contemporary World*, Vol. VII, no. 1 (1995) 107-123.

Council for Economic Planning and Development, Republic of China, *Taiwan Statistical Data Book* (1994) & (1995).

Director-General of Budget, Accounting and Statistics, Executive Yuan, Republic of China, *National Income in Taiwan Area of the Republic of China 1994* (1994).

-----, *Yearbook of Manpower Survey Statistics Taiwan Area, Republic of China 1993* (1993).

Han, Chaohua, "Agency Problem in the Management System of State-owned Enterprises," *Economic Research (Jinji Yanjiu)*, no. 5 (1995): 34-43.

Jian, Tianlun, Sachs, Jeffrey, & Warner Andrew, "Trends in Regional Inequality in China," (1995).

Jiang, Zhemin, "Correctly Deal with the Several Relations in the Construction of Socialist Modernization," *People's Daily Overseas Edition (Renmin Ri Bao Haiwai Ban)*, (October 9, 1995): 1.

Liu, Xiaoxuan, "Structures of Property Rights in State and Non-state Owned Enterprises and their Impacts on Efficiency," *Economic Research (Jinji Yanjiu)*, no. 7 (1995): 11-20.

Pollard, Alan P., *USSR Facts & Figures Annual 15* (Academic International Press: 1991).

-----, *USSR Facts & Figures Annual* 14, (Academic International Press: 1990).

-----, *USSR Facts & Figures Annual* 1, (Academic International Press: 1977).

Rodrik, Dani, "Getting Interventions Right: How South Korea and Taiwan Grew Rich," *Economic Policy*, (April, 1995): 55-107.

Sachs and Woo, "Structural Factors in the Economic Reforms of China, Eastern Europe, and the Former Soviet Union," *Economic Policy*, no. 18 (April, 1994): 101-145.

Sachs, Jeffrey, D., "Reforms in Eastern Europe and the former Soviet Union in Light of the East Asian Experience." Presented at the NBER-TCER CEPR Conference on Transition from Socialist Economies, January 6-7, 1995, Tokyo.

State Statistical Bureau, People's Republic of China, *Statistical Yearbook of China*, (1992), (1993) & (1994).

World Bank, *Statistical Handbook, States of the Former Soviet Union*, (1993) & (1994).

-----, *The World Bank World Tables 1995*, (Baltimore, The Johns Hopkins University Press: 1995).

-----, *Trends in Developing Economies 1995*, (Washington, D.C., The World Bank: 1995).

Yang, Shujin, "The Formation of 'China's Socialist Market Economic System' and its Key Issues," *Modern China Studies (Dangdai Zhongguo Yanjiu)*, no. 5, (1994): 4-25.

Yu, Tzong-shian, "Industrial Development Policies of the Republic of China on Taiwan: Review and Evaluation" *Industry of Free China*, (June, 1995): 49-59.

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