

**The Experimentalist-Convergence Debate
on Interpreting China's Economic Growth:
A Cross -Country Perspective**

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Abstract

There are two schools of thoughts in explaining China's rapid economic growth since 1978: the experimentalist school and the convergence school. The experimentalist school attributes China's successes to the evolutionary, experimental, and incremental nature of China's reforms that have allowed the emergence of new dynamic non-capitalist economic growth mechanisms. The convergence school, on the other hand, holds that China's successes are the consequences of its institutions being allowed to converge with those of non-socialist market economies, and that China's large amount of surplus labour is a major explanation for the rapid growth. The convergence school also holds that China's gradualism results primarily from a lack of consensus over the proper course, with power still divided between market reformers and old-style socialists; and that the "innovative" non-capitalist economic mechanisms are responses to China's political circumstances and not to its economic circumstances.

China's recent WTO membership marks a watershed in public recognition about the primary source of its impressive growth in the last two decades. The WTO is an international economic organization that specifies and enforces broadly similar economic policy regimes on its membership. China's willingness to join such an institution reflects the realization that continued high growth requires continued convergence of its economic institutions with the economic institutions of modern capitalist economies, particularly of East Asian capitalist economies, as well as closer integration of its economy with the world economy through trade and finance. More importantly, China's leaders know that explicit embrace of capitalist institutions under WTO auspices would be welcome by the general Chinese public as a step forward in the reform process rather than as surrender of China's sovereignty in economic experimentation.

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1.0: Two Approaches to Understanding China's Growth

The study of China's impressive growth in the post-1978 period is littered with terms like "miracle", "institutional innovations", "virtuous cycle", "bottom-up reform versus top-down reform", and "evolutionary." These terms have been conjured by the many creative attempts to understand the large difference in growth rates between post-1978 China and post-1990 Eastern Europe. Why is it that a country that espouses socialist practices is among the fastest growing countries in the world, when virtually all other socialist economies have collapsed? Is China's gradualism the source of success, and if so what are the mechanisms behind this outcome? Are the non-market aspects of China's economy, such as the large state ownership that persists till today, a source of potential destabilization in the years ahead?

Broadly speaking, two schools of thought have emerged to interpret the Chinese experience. One school of thought gives great credit to the *evolutionary*, *experimental*, and *incremental* nature of China's reforms. In this view, China has been groping, with considerable success, towards a unique Chinese economic model. A faster approach to reforms, according to the experimentalist school, would have led to more social conflict, instability, and poorer

economic policies (because of less experimentation). Barry Naughton (1995) is a clear proponent of the experimentalist view:

"Reforms have been gradual and evolutionary ... Reforming without a blueprint, neither the process nor the ultimate objective was clearly envisaged beforehand ... It can be seen, ex post, that there is substantial coherence to these different elements. Reduction of the state's monopoly led to rapid entry of new firms. Entry of new firms, combined with adoption of market prices on the margin, led to enhanced competition, and began to get state-sector managers accustomed to responding to the marketplace. Gradual price decontrol was essential. Competition eroded initially high profit margins for state firms, and induced the government, as owner of the firms, to become more concerned with profitability. The government experimented with better incentive and monitoring devices, and this improved state-sector performance..." (pp. 5-13)¹

The other school of thought holds that Chinese institutions are in fact gradually converging with those of non-socialist market economies, especially those in East Asia. We therefore use the term “convergence school” to characterize this point of view. This convergence, it is argued, is occurring despite official pronouncements to the contrary (including the stated intention to build a “socialist market economy”), as well as despite inconsistencies of many reforms in the short term. In this view, the faster the convergence, the better will be the outcomes. Gradualism, in this view, has not been a strategy so much as a result of continuing political conflict and other difficulties inherent in setting a policy course in a country of some 1.2 billion people. According to the convergence school of thought, China has achieved the greatest success in precisely the areas (e.g. agriculture and coastal provinces) where market reforms have gone the furthest.² Table 1 sums up the key differences between the two schools in how they interpret China’s achievements.

¹ Naughton thus concluded that: “Big bang transitions thus sacrifice most aspects of the virtuous cycle that characterized the Chinese reforms” (pp.320). Other distinguished members of the experimentalist school include Thomas Rawski (1994), Peter Nolan and Robert Ash (1995), Qian (2000), and Justin Lin, Fang Cai and Zhou Li (1994).

² Members of the convergence school includes Michael Bruno (1994), Gang Fan (1990), Sachs, Woo and Yang (2000), Geng Xiao (1997).

In an early appraisal of economic transition, the 1996 World Development Report had concluded that:

"Despite the industrialization efforts of the 1950s and 1960s, China was very poor and largely rural at the start of its reforms. Agriculture employed 71 percent of the work force and was heavily taxed to support industry. Social safety nets extended only to the state sector -- about 20 percent of the population. Poor infrastructure and an emphasis on local self-sufficiency led to low regional specialization and large numbers of small and medium-sized firms. The economy was far less centrally planned and administered than the Soviet economy. Local governments had greater power and developed considerable management capacity, preparing them for a more decentralized economy. Chinese industry also received subsidies, but cross-subsidization was less pervasive [than in the Soviet Union]."

"Because the agricultural sector had been so heavily repressed, freeing it up had immediate payoffs. Between 1981 and 1984 agriculture grew on average by 10 percent a year, largely because the shift to family farming improved incentives. This allowed for the reallocation of surplus agricultural labor to new rural industries, which generated 100 million new jobs between 1978 and 1994 and encouraged further reform. China thus started transition largely as a peasant agrarian economy and with far greater scope for reallocating labor than Russia."

However, the above conclusions were rejected just three years later by Joseph Stiglitz (1999a, 1999b), then Vice-President and Chief Economist of the World Bank. He claimed that the economic reform programs in Central and Eastern Europe and the former Soviet Union (CEEFSU) were wrong and had caused unnecessary suffering. In particular, Stiglitz rejected the conclusion of the World Development Report 1996 that 'countries that liberalise rapidly and extensively turn around more quickly [than those who do not]' (Stiglitz, 1999b, pp.3).

Stiglitz is not alone in his complaints. A number of recent papers have also claimed that the transformational recession was unnecessary (for example, Lau, Yingyi Qian and Roland, 2000) and that gradual experimentation with the forms of economic institutions was superior to rapid wholesale adoption of the economic institutions of the market economies (for example, Rawski, 1999). The implication of these recent papers is that Central and Eastern Europe, and the former Soviet Union (CEEFSU) should have imitated the Chinese reform strategy which has

not produced a transformational recession. More relevantly, the experimentalist school would recommend that North Korea and Cuba trust the "induced innovations" mechanism to spawn country-specific virtuous cycles that would cumulate into the type of economic system that best suits each country's circumstances.

2.0: Clearing the Terminological Thicket

Before discussing the relative merits of these two schools, it is first necessary to comment on the obfuscating terminology that the debate over transition strategies has generated. A wealth of oxymora has appeared because protagonists have sought to attach undeserved positive connotations to their viewpoints. A number of authors have labeled rapid, comprehensive reforms (big bang reforms) as top-down reforms, and slow, partial reforms (incremental reforms) as bottom-up reform. Big bang reforms were hence associated with a reform style that is reminiscent of central planning coercion, and incremental reforms with a democratic trial-and-error market-learning process. These two associations are largely false and self-contradictory as suggested by the following two considerations.

First, the reliance on markets to allocate resources represents decentralized economic management achieved by empowering individual initiatives. Markets are naturally occurring phenomenon because they render both buyers and sellers better off. The only time when markets are absent is when they are suppressed by the central plan of the state. Marketization means allowing the bottom-up process to run its natural course. Second, reform of a centrally-planned economy means the marketisation of economic transactions and the deep entrenchment of market-supporting institutions such as the criminal justice system to maintain law and order, commercial courts to enforce contracts, bankruptcy courts to encourage prudent lending and

enable fresh starts for entrepreneurs, and social safety nets to lower the costs of resource reallocation. By its nature, marketization can be accomplished fairly quickly if desired, but the firm entrenchment of market-supporting institutions cannot be achieved quickly even if desired.

In short, big bang reforms (quick marketisation) means the unleashing of the bottom-up process of individual initiatives on a grand scale, while incremental reforms (slow marketisation) means incremental legalization of the bottom-up process. The amazing semantic sleight of hand that has happened is that the advocates of gradual reform have identified themselves as advocates of the bottom-up approach to economic management! It is time to drop the misleading terms of “top-down reform” and “bottom-up reform” from the transition strategy debate.

The two words “evolutionary” and “path-dependent” are often encountered in the transition literature, and while they are always accurate, they are not always useful. In the strictest sense, rational policymaking is evolutionary and path-dependent by necessity. Policymaking has to be evolutionary because new exogenous shocks are always appearing, and it is nearly always path-dependent because reversals can be expensive, if not impossible. For example, China’s tariff policy is contingent on whether China is already a WTO member or not.

There is one important sense in which the term “evolutionary” is analytically useful. Take the case of bankruptcy procedures. They were not needed during the planning period, and so they were non-existent prior to 1990. With the transition to a market economy, the state faces two policy choices. The first policy is to adopt the bankruptcy procedures of another country after modifying them to accommodate relevant differences in national circumstances, and then to continue to modify them in light of experience. The second policy is to rely on the bottom-up process in the most fundamental sense by encouraging its citizens to come up with private contractual arrangements that would cover the contingency of financial difficulties that the

borrowers might encounter. Comparing these two policies, we see that the first promotes institutional evolution in the local sense, and the second choice promotes institutional evolution in the global sense.

In practice, institutional evolution in the local sense entails a pro-active state in the sphere of institution building where the usual operational principle is to adopt a foreign prototype and then modify it through practice.³ Institutional evolution in the global sense, on the other hand, requires a state that is agnostic and passive about institution building because of its unbridled faith that the demand for institutions will inevitably induce the appropriate institutional innovations. This first approach is “the convergence school of institution building”, and the second approach is the “experimentalist school of institution building”.

The misunderstanding over these two approaches to institution building has caused the biggest obfuscation in the debate over transition strategies *for China*. The transition debate *for China* has primarily been a debate over the origins of institutions and the desired direction for institutional evolution and only very secondarily been a debate over the speed of implementing the reform program, even though the debate did focus on speed in the beginning. The real question in the transition debate on China still remains whether a third way exists between socialist planning and capitalist markets.

In sharp contrast, the fundamental academic issue in the post-mortem debate on transition strategies *for CEEFSU* is the desired speed for institutional changes because leading CEEFSU economists (such as Janos Kornai, 1992) take it for granted that there is no third way. There is clearly no simple answer to the speed issue because "the transition from socialism to capitalism... is a curious amalgam of revolution and evolution" (Kornai, 2000, pp.25). Some reforms, such as

³ The earliest country in the industrial age to implement this operational principle successfully and hence attain first world status is Japan.

macroeconomic stabilization, have to be done very quickly, and some reforms, such as privatization, have to be done much slower; and in all cases, the decision on speed has to take into account the administrative capacity of the state and the political situation in the country.

It is clear that most of CEEFSU have embraced the convergence school of institution building (albeit with different speeds in implementation), but would it be accurate to say that China has followed the experimentalist school of institution building, since many of the critics of quick marketization have explained the gradual pace of Chinese reform as being due to the time-consuming process of experimentation to discover policies and institutions that are optimal for China's economic situation? If the experimentalist interpretation of China's phenomenal growth is correct, then China's recent WTO membership is a negative development. This is because WTO, being an organisation for private market economies, defines the broad institutional features of a prototype market economy and requires its members to possess these institutional features. In short, China's WTO membership would drastically constrain China's scope for experimentation. This means that if the experimentalist interpretation is correct, then China's WTO membership would have deleterious effects on China's economic performance in the future. On the other hand, if the convergence school is correct, then WTO membership is a positive development that will lock China on to the path of deepening economic reform and openness.

3.0: Reform without Losers? A Comparative Perspective

Lau, Qian and Roland (2000) have attributed the absence of a transformational recession in China to the dual-track price system (DTPS) that was implemented in the 1984-90 period. They interpret the DTPS as a Pareto-improving way of introducing price flexibility that

encourages growth without arousing political opposition from entrenched interest groups. We find their claim of gain-without-pain to be either factually wrong or politically implausible. We will make our case against the Lau, Qian, and Roland interpretation by:

- examining the analytics of the DTPS in both the partial equilibrium context and the general equilibrium context;
- comparing the predictions of the model against the data;
- explaining why the political economy of the DTPS made its demise in China inevitable;
- pointing out the failure of the DTPS in the Soviet Union; and
- pointing out the impressive sustained growth in Laos and Vietnam beginning in 1989 despite the absence of the DTPS.

3.1: The Partial Equilibrium Analysis (PEA) of Dual Track Pricing

The analytics can be summarized by the following example when there is a light industrial good, and a heavy industrial good, with the following supply and demand relationships in a free market setting.

For the light industrial good, we assume

supply curve (marginal cost curve): $P = 2 + Q$

demand curve: $P = 12 - Q$ where Q is in units of millions.

For the heavy industrial good, we assume

supply curve (marginal cost curve): $P = 3 + 2Q$

demand curve: $P = 12 - Q$ where Q is in units of millions

Under the free market, see Diagrams 1 and 2, in the light industrial good market: $P = 7$ and $Q = 5$; and in the heavy industrial good market: $P = 9$ and $Q = 3$

For the Central Plan Situation, assume the modus operandi to be where the planner picks the output level in each industry and sets the plan price to equate revenue with production costs of the output quota. Furthermore, assume that the planner creates the typical Stalinist outcome where the light industrial good is under-produced vis-a-vis the free market situation, and the heavy industrial good is over-produced vis-a-vis the free market situation.⁴

Say, for light industrial goods, the planner picks $Q = 2$, and hence sets $P = 3$. The result is a black market price of 10 with the marginal cost being 4. And, say, for heavy industrial goods, the planner picks $Q = 4$, and hence sets $P = 7$. The result is a black market price of 8 with the marginal cost of 11.

The Dual-Track Price System (DTPS) is the situation where the producer is allowed to sell his above-quota output at a freely determined price. Then for the light industrial good, we have:

market price = 7

market quantity = 3

plan price = 3

plan quantity = 2.

⁴ As will be documented later, in 1988, the Soviet Union produced 15 times more crude steel per dollar of GDP than the United States, and 8 times more than West Germany and Japan. The Soviet Union also produced five times more refined copper per dollar of GDP than the United States, West Germany and Japan.

The total quantity of 5 represents an increase in the output of the light industrial good, with no decrease in quantities sold at the lower plan price to the privileged buyers, this is a Pareto-improving situation.

For the heavy industrial good, we have:

market price = 8

market quantity = 0 because the marginal cost exceeds the market price,

plan price = 7

plan quantity = 4.

The total quantity produced remains at 4 with no losers and no winners. So the overall situation from the DTPS is a Pareto-improving situation.

Complete Price Liberalisation (big bang reform), as is clear from Diagrams 1 and 2, is not Pareto-improving because the privileged buyers of both goods under rationing will now have to pay higher prices, there will be laid-off workers in the heavy industrial goods sector. A big bang will cause a collapse in the production of heavy industrial goods, and the resulting disorganisation (*a la* Blanchard and Kremer, 1997) could cause a temporary drop in the production of light industrial goods as well – a situation that is reminiscent of Poland and Russia upon the marketisation of their economies in January 1990 and January 1992 respectively.

The key lesson from the partial equilibrium analysis (PEA) is that partial price flexibility is superior to total price flexibility.

3.2: The General Equilibrium Analysis (GEA) of Dual Track Pricing

The inadequacy of PEA is obvious if these two goods comprise the entire production structure, and if there were full-employment and maximum production efficiency under the original central planning situation. In this context, the introduction of dual-track pricing cannot cause an increase in the output of the light industrial good unless there is a decrease in the output of the heavy industrial good – and how could the occurrence of the latter still make the DTSPS Pareto-improving?

Lau, Qian and Roland (2000) answered this question by claiming that the light industrial good supplier will execute the following sequence of actions:

1. go into the market for the heavy industrial good and buy (at the free market price) the rights to some of the planned output that was allocated to privileged consumers (at the free market price). Say that he bought the rights to X units of the heavy industrial good.
2. tell the heavy industrial good producer to reduce his production by X units and send the released workers to work in the light industrial good sector
3. hire the newly released workers from the heavy industrial sector and expand the production of the light industrial good by Y units.

The heavy industrial good producer is happy to cooperate because he now makes a positive profit from his costs having decreased more than his revenue. One of the possible outcomes is that $X=1$ and $Y = 3$, which makes the dual tracking outcome the same as the free market outcome. The important prediction is that the DTSPS, in a general equilibrium setting, will cause one sector to expand and the other sector to shrink as in complete price liberalisation, and this DTSPS-induced adjustment is contractual and mutually beneficial in nature.

For policy purposes, both PEA and GEA offer the same advice: limited price deregulation is better than complete price deregulation. Complete price deregulation might

produce the same input allocation and output composition as the DTPS, but the former definitely generates resentment against the government while the latter does not.

3.3: Critique of the Preceding Two Analyses of the Dual Track Price System

It is ironic that the supposedly flawed PEA is factually more correct than the theoretically coherent GEA. Table 2 shows that the output of both the light and heavy industrial sectors went up every year following the introduction of the DTPS in 1985.⁵ Light industrial output increased 64 percent in the 1984-87 period, and heavy industrial output increased 55 percent. The Lau, Qian and Roland's prediction of a (voluntary) contraction in heavy industrial output upon marketization of the economy is contradicted by the data, suggesting that their elaborate general equilibrium analysis could be an exercise in false precision. Clearly, we need an explanation other than the DTPS to explain why China grew so fast upon marketization.

Table 2 shows two interesting facts that suggest an alternative explanation for what really happened in China. First, output from industrial SOEs increased every year in the reform era, but the state sector's share of total industrial output declined secularly from 78 percent in 1978 to 28 percent in 1998. This means that the bulk of the increase in industrial output came from the non-state sector. Hence, fast growth of industrial output should not be attributed entirely to the incentive effect of dual-track pricing. Most of the credit, in our judgement, should be given to the legalization of the dual-track ownership system in the industrial sector in 1984. The legalization of non-state firms allowed non-state industrial enterprises to be established in the rural areas, the famous township and village enterprises (TVEs).

⁵ The rise of the light industrial component of the industrial sector from 39 percent of total industrial output in 1978 to 48 percent in 1988 and 51 percent in 1998 reflected, in part, its suppression under central planning.

Second, the non-state sector did not grow by obtaining their labor from the state sector through contractual agreements, the key mechanism behind the Lau, Qian and Roland's assertion of "gain without pain". State employment was 17.9 percent of the labor force in 1984 (the eve of the introduction of the DTPS to the industrial sector) and it rose to 18.3 percent in 1989 (the eve of the replacement of the DTPS with almost complete price decontrol). The state sector in 1989 employed 14.7 million workers more than in 1984, and 26.6 million more than in 1978. In employment terms, China was certainly not growing out of the plan either in absolute or in relative terms.⁶

The labor that fuelled the fast expansion of the non-state industrial sector came out from agriculture, a sector that was not identified by Lau, Qian and Roland as an important contributor to China's high growth rates after 1984. Part A of Table 3 shows that employment in the primary sector declined from 71 percent in 1978 to 50 percent in 1998.⁷ Therein, we have the *deus ex machina* of China's growth. The marketization and internationalization of economic activities generated substantial productivity increases, not only by enlivening the agricultural sector in the 1979-84 period and by creating a dynamic non-state sector from 1984 onward, but also by moving low-productivity agricultural workers into higher-productivity jobs in the secondary and tertiary sectors. Chow (1993) found the marginal value product of labor in China in 1978, measured in 1952 prices, to be 63 yuan in agriculture, 1027 yuan in industry, 452 yuan in construction, 739 yuan in transportation and 1809 yuan in commerce; and Woo (1998) estimated that the reallocation of Chinese agricultural labor into industries and services added 1.3 percentage points annually to the GDP growth rate over the 1985-93 period. In short, China's marketization and internationalization policies initiated the non-zero sum process of economic

⁶ State employment was 109.5 million in 1996 compared with 74.5 million in 1978.

⁷ This decline in agricultural employment is likely to be understated because it does not take illegal migration into account.

development, moving China away from a subsistence peasant economy and causing agriculture to drop from 41 percent of GDP in 1978 to 18 percent in 1998. This is the true source of the Pareto-improving outcome in China's economic reform, not the dual pricing system.

3.4: The Political Economy of the DTPS in China

One of the biggest claims of virtue for the DTPS is that by avoiding the creation of losers, it does not generate political opposition to economic reform (except, of course, from central planning ideologues). We find such a claim to be dubious because dual track pricing creates opportunities for corruption; and serious corruption can undermine the political legitimacy of the government, if not also, the political stability of the country. In our understanding of the history of Chinese reforms, the DTPS was an unsustainable economic mechanism, not only from the management viewpoint of extreme difficulties in administration, but also from the political viewpoint of maintaining the cohesion of the ruling coalition.

To see this point, it is important to first note that the DTPS was only one component of the serious attempt (beginning in 1984) to improve the rationality of the state-owned enterprise (SOE) system, the other component was the devolution of decision-making power to the SOEs. The political cost of the DTPS, as we will point out, came from its interaction with the operational autonomy of the SOEs in an unexpected way.

The plan track for inputs conferred instant profits upon the favored purchaser upon reselling quota inputs in the free market. Many children of top leaders were able to make purchases of inputs at plan prices, and re-sell them at large profits. The general public was not happy with this widespread corrupt practice. The devolution of operational autonomy to SOEs in a soft budget situation caused demand for investment credit to soar, and the accommodation

by the state banks of this demand enabled inflation in 1985-89 to reach levels not seen since 1949; see Fan and Woo (1998). It was therefore natural that the general public linked the large illegal profits of the dual pricing system with the high inflation, and perceived the inflation to be the result of price gouging by corrupt officials. This general perception brought public unhappiness with the corruption to new heights, which led to demonstrations against corruption and inflation in quite a number of large cities at the end of 1985 and 1986.

To address this social unrest, Hu Yaobang, then head of the Chinese Communist Party (CCP), started arresting corrupt officials, and the sons of several top conservative leaders were apprehended. This crackdown was interpreted by some conservative leaders as an excuse by the liberal faction to depose them, and this intensified the opposition to the continued leadership of Hu Yaobang on the grounds of administrative incompetence (look at the high inflation) and ideological revisionism (look at his introduction of material incentives). By aggravating the infighting inside the ruling coalition, the plan track contributed to the dismissal of Hu Yaobang as general secretary of the CPC in January 1987.

It is worthwhile to quote two accounts of this matter at length. According to Richard Baum (1994, p.176-177):

"...[In 1986] Hu Yaobang raised the ire of Hu Qiaomu [Politburo member] by proposing to formally charge the latter's son, Hu Shiying, with criminal corruption ... [The] incident provoked an immediate reaction among powerful party elders..a campaign to oust Hu Yaobang quickly took shape. At the same time, Hu Qiaomu reportedly threw himself at Deng Xiaoping's mercy, tearfully imploring the paramount leader to show mercy toward his errant offspring.."

"The highest level *gaogan zidi* [offspring of a high-ranking cadre] to be judicially punished was the daughter of General Ye Fei, the former commander of the Chinese Navy .. In 1982 the general..had sharply criticized Hu Yaobang for failing to halt the spread of bourgeois liberalization."

"Other *gaogan zidi* who came under criminal investigation in this period included the prodigal offspring of conservative party elders Peng Zhen and Wang Zhen [both

Politburo members]. Like Ye Fei and Hu Qiaomu, Peng and Wang had been vocal critics of bourgeois liberalization, and the raising of allegations of corruption against their children thus carried a strong hint of political retaliation."

According to Joseph Fewsmith (1994, p.177):

"In January 1986, Hu Yaobang presided over a huge rally of 8,000 cadres..called to address the issue of corruption... A special committee headed by Hu Yaobang's associate Qiao Shi was established within the Central Committee to root out corruption. In February, ..three sons of high-level cadres were executed. There were soon reports that the children of a number of conservative party leaders, including Peng Zhen, Hu Qiaomu, and Ye Fei, were under investigation, suggesting that Hu Yaobang was targeting his critics. Moreover, the decision to set up a special committee within the Central Committee to tackle this issue appeared to be a challenge to the CDIC [Central Discipline Inspection Commission], headed by Chen Yun [leader of the conservative faction], as the agency of discipline within the party."

Deng Xiaoping's solution to the growing unrest within society and within the ruling coalition was not to arrest the profiteers but to end the dual-track price system that fostered such conflicts within the ruling coalition as a byproduct. This is why, in the middle of unprecedented (since 1949) inflation, in May 1988 Deng Xiaoping publicly urged that comprehensive price reform be finished within three to five years. The memorable slogan for this campaign was *zhuang jiage guan* (crash through the price obstacle).

The reality was that the working of the dual-track price system generated great social pressures to punish the profiteers but such acts threatened the viability of the ruling coalition. The choice facing the CCP elite was to either maintain the political coalition or maintain the dual track price system. For the Chinese politicians, the choice was a no-brainer. This is why price liberalization was brought to virtual completion in the 1990-91 period even though this was the time that the pro-plan conservative faction had the upper hand in policymaking (in the aftermath of the June 1989 Tiananmen incident). Political reality is the reason why the plan track was reduced steadily even though this act was not Pareto-improving, and even though this contradicted the ideological position of the conservative faction.

3.5: The Soviet Experience with Dual-Track Reform

Market reforms in Russia did not start only in 1992 with the Boris Yeltsin government. The gross inefficiency of the Soviet economy and its slide into technological stagnation during the *nomenklatura* communism of Leonid Brezhnev in the 1970s had fermented much reformist thinking among Soviet economists. By the time Mikhail Gorbachev assumed political power in May 1985, there were already many established influential economists urging market-oriented reforms, e.g. Boris Kurashvili argued for Hungarian-style market socialism, and Oleg Bogomolov for Chinese-style incremental liberalization.

Gorbachev was not a quick convert to market reforms, however. The first two years of his rule were spent trying to propel the economy out of its doldrums by accelerating the technological level of Soviet industries through large investments in the machine tool industry. The acceleration strategy failed, leading Gorbachev to seek “radical reforms” of the economy. The influence of China’s reform strategy is clearly seen in Gorbachev’s arguments in August 1987 “in favor of family contract, family teams and ... leasehold” (Aslund, 1991, pp103) to be introduced in Soviet agriculture. Gorbachev’s radical reform program was unveiled in June 1987 at the Soviet economic plenum, which passed the Law on State Enterprises and Basic Provisions for Fundamental Perestroika of Economic Management to devolve decision-making power from the ministries to the SOEs. Just like in China, Soviet SOEs were given more freedom in their output choices, and freedom to enter into long-term contractual agreements for purchases and sales; and were allowed to retain part of their profits to use at their discretion e.g. for technological upgrading, and as incentive bonuses. In return, the SOEs were required to do “full economic accounting”, the euphemism for SOEs to be responsible for their losses. As in China,

deliveries to the state would still be required (state orders), for which subsidized inputs would be made available to the SOEs, but state orders would be reduced over time to cover only 40-60 percent of all production.⁸

The explosive growth China's non-state industrial sector had made a deep impression on the Russian reformers and inspired them to push for a double track on ownership as well. Academician Leonid Abalkin, a prominent leader in reform thinking, predicted in 1986 that the radical reforms of Gorbachev would, within a decade, enable cooperatives to account for 10 percent of GDP, and private enterprises for 4 percent of GDP; (Aslund, 1991, pp168). Various decrees had been issued earlier to stimulate the cooperative sector, and they were greatly expanded with the adoption of the Law on Cooperatives in May 1988.

The Law on Cooperatives was categorical in making the formation of cooperatives an easy task: "A cooperative is organized at the desire of citizens, exclusively on a voluntary basis. The creation of a cooperative is not conditional upon any special permission whatsoever by Soviet, economic or other bodies" (quoted in Aslund, 1991, pp169). There was no ceiling set on the number of members, and there was no limit on the number of non-members that could be hired on contract. Furthermore, cooperatives could set their prices according to market conditions. In the words of Yevgenii Yasin, a senior member of the State Commission on Economic Reform:

"The 1987 reform was in many ways an attempt to implement the Chinese model in Russia. It envisioned enterprises, and joint ventures would constitute the free sector, existing alongside the state sector, with its mandatory state orders, fixed prices, and centralized allocation of inputs." (Ellman and Kontorovich, 1998, pp.169)

The outcome of these market-oriented reforms of the dual-track variety was the disintegration of the Soviet economy from 1989 onward.⁹ Part B of Table 3 explains why

⁸ Ellman and Kontorovich (1998, pp103); but Aslund (1991, pp. 127) reported the intended range to be 50-70 percent.

Russia's GDP fell upon marketization of its economy. The Russian industrial sector, especially the heavy industrial component, was much bigger than what a market economy would require. Lipton and Sachs (1992) made this point very well when they showed the production of the following metals expressed in thousands of metric tons per US billion dollars of GDP for the following countries in 1988:

| | Soviet Union | United States | West Germany | Japan |
|------------------|---------------------------------------|------------------|-----------------|-------|
| | (metric tons per US\$ billion of GDP) | | | |
| Crude Steel | 280.0 | 18.49 | 34.35 | 36.47 |
| Refined Copper | 1.71 | 0.38 | 0.36 | 0.33 |
| Primary aluminum | 4.28 | 0.80 | 0.62 | 0.01 |

Industrial output accounted for 49 percent of Russia's GDP in 1988 compared to 24 percent of U.S. GDP in 1986. Given the relatively small proportion of labor in Russian agriculture compared to China, 19 percent versus 71 percent, a substantial amount of the labor needed for the growth of new light industries and new service activities had to come from the heavy industrial sector. The collapse of Russia's heavy industries was necessary in order to release the labor put there by the central plan.¹⁰ The salient point is that the marketization of the over-industrialised Russian economy triggered the almost zero-sum (certainly so, in the short run) process of economic restructuring. The existing heavy industrial sector had to shrink because its value added at market prices was negative.¹¹

3.6: No Transformational Recessions in Laos and Vietnam Despite Absence of DTSP

⁹ For contemporary accounts, see Central Intelligence Agency and Defense Intelligence Agency (1989 and 1990). Malia (1994) gives an excellent analysis of the politics of the period.

¹⁰ Sachs and Woo (1994) pointed out that there had to be a big cut in welfare subsidies provide by the government through the state enterprises before workers could be induced to seek employment in the new non-subsidized private sector.

¹¹ Berg, Borensztein, Sahay and Zettelmeyer's (1999) thorough econometric investigation of CEEFSU economies support this value-subtracting view of the Soviet-type industrial sector.

Under prodding by Gorbachev, Vietnam and Laos implemented partial reforms, inspired by Oskar Lange-type of market socialism, near the end of 1986. There was, however, not a marked improvement in Vietnam's growth rates to these partial decentralisation reforms, see Table 4. The average annual GDP growth rate was 4.5 percent in the 1984-1985 period versus 4.8 percent in the 1987-88 period. The really big response to the partial reform was in Vietnam's inflation rate. The decentralized reforms of SOEs unleashed an investment hunger that caused inflation to explode. The average annual rise in the consumer price index went from 178 percent in 1984-85 to 373 percent in 1987-88.

The growth performance of Laos actually worsened after the introduction of the partial reforms. The GDP growth rate was 6.5 percent in 1985, 9.5 percent in 1986, -5.2 percent in 1987, and 0.9 percent in 1988.

It was with this background of lackluster reform performance that Laos and Vietnam launched big-bang reforms in March 1989, a development that was much against the expectations of most external observers. This new round of reforms consisted of:

1. drastic macrostabilisation achieved by immediate slashing of budget deficits and bank credits to SOEs,
2. overnight comprehensive price liberalization,
3. discrete devaluation of currency to black-market level, and
4. relaxation of control on private ownership and acceleration of agricultural decollectivisation.

The output response to the big bang reforms was stunning in both countries. GDP growth in Vietnam jumped from 5.9 percent in 1988 to 8.0 percent in 1989, and GDP growth in Laos jumped from -0.9 percent in 1988 to 14.5 percent in 1989. These two cases clearly refute the

notion that big bang reforms necessarily cause output to fall. In fact, when we consider the experiences of China, Laos and Vietnam together, we will conclude that all the three East Asian Communist countries experienced growth regardless of the speed of reform, and regardless of the existence of dual-track reform. These three countries grew because they were largely agricultural economies with vast amounts of underemployed peasants. Once agricultural prices were raised, and land tenure made more secure, their agricultural sectors boomed. Furthermore, in coastal China, and coastal Vietnam, export-oriented industries blossomed once trade and investment restrictions were relaxed.

To summarise, the 1985-1991 Soviet reform experience reported in Section 3.5 showed that dual-track reform did not guarantee reform without losers. The 1985-1996 reform experiences of Vietnam and Laos in this section showed that the absence of dual track reform did not guarantee transformational recessions either. The key determinant behind the outcome of reform without losers was the existence of surplus agricultural labor and not the existence of a dual track reform approach.

4.0: The Debate on State Enterprise Reform in China

The debate on state enterprise reform in China is marked surrealism. The experimentalist school sees China, unlike anywhere else in the world, as having succeeded in reforming its SOE sector, even though Chinese officialdom is not aware of it. This paradoxical stance of the experimentalist school is seen in the following thesis, antithesis and suggested synthesis.

THESIS: “This review leads to the conclusion that reform has pushed China’s state-owned enterprises in the direction of “intensive” growth based on higher productivity rather than expanded resource consumption ..., we observe a consistent picture of improved results - higher output, growing exports, rising total factor productivity, and increased innovative effort - against a background of gains in static and dynamic

efficiency that reflect the growing impact of market forces.” (Jefferson and Rawski, 1994, pp.58)

ANTITHESIS: “The current problems of SOEs are: excessive investments in fixed assets with very low return rates, resulting in the sinking of large amounts of capital; and a low sales-to-production ratio, giving rise to mounting inventories. The end result is that the state has to inject an increasing amount of working capital through the banking sector into the state enterprises.” (Vice-Premier Zhu Rongji, 1996)¹²

SUGGESTED SYNTHESIS: "Focusing on profitability, [state bureaucrats] see the erosion in state sector profits as a profound crisis of the state sector. Without good measures of total factor productivity, they conclude that state sector performance is deteriorating. Foreign observers, hearing the cries of alarm from the state planners, shake their heads knowingly as they perceive still further evidence that state ownership is intrinsically inefficient. Neither party sees that the difficulties are the result of an ultimately beneficial transition to a different type of economy, and are entirely compatible with gradually improving efficiency." (Naughton, 1995, pp.314)

We find Naughton's synthesis implausible because it sees top Chinese officials as ignorant of elementary economic theory (“competition from new non-SOEs erodes SOE profits”), and ignorant of the technically sophisticated literature on total factor productivity (TFP) estimations. In any case, the government had by 1993 decided to clarify the property rights of SOEs in order to salvage its SOE reform program. The CPC publicly committed itself in July 1997 to convert most of the SOEs to publicly traded shareholding corporations. This convergence to a form of industrial organisation that originated in capitalist economies was possibly motivated more by a concern over the soaring loss of the SOE sector than by its continued inefficiency. The losses at the beginning of the 1990s were so severe that it was common for even government officials to say that "one-third of the country's state enterprises were in the red, and another one-third were in a latent loss-making state."¹³ This financial situation has worsened over time. A national audit of 100 SOEs in 1999 found that eighty-one

¹² "Guo you qiye sheng hua gaige ke burong huan," (No time shall be lost in further reforming state owned enterprises), speech at the 4th meeting of the 8th People's Congress, People's Daily, Overseas Edition, March 11, 1996.

¹³ Lin, Cai and Li (1996, pp. 215).

falsified their books, and sixty-nine reported profits that did not exist; and an audit of the Industrial and Commercial Bank of China and the China Construction Bank found that accounting abuses involving RMB 400 billion, of which RMB 200 billion was overstatement of assets.¹⁴

The difference between the experimentalist and convergence interpretations of the sharp collapse in SOE profit rates lies in the different weights that they put on each of the three factors that the literature has identified: increased competition from the non-state enterprises, failure of the SOEs to improve their efficiency, and over-compensation of SOE personnel. The experimentalist school tended to emphasize only the first and second factors, and to downplay the empirical validity of the second factor on the basis of the empirical work done by its members. The problem with the competition explanation is that the profit rates of SOEs in the sectors of industry that experienced little entry by non-SOEs showed the same dramatic drop as the profit rates of SOEs in sectors with heavy penetration by non-SOEs, see Fan and Woo (1996). Profits in SOEs fell regardless of whether they faced competition from non-SOEs.

The convergence school has emphasized continued inefficiency, and *de facto* asset-stripping and embezzlement of firm profits by managers and workers as the primary causes for the general decline in SOE profits, with the latter being the more important. The devolution of financial decision-making power to the SOEs, and the steady reduction in discrimination against the private sector have made it increasingly easy for the managers to transfer state assets to themselves.¹⁵ The Chinese leadership recognizes clearly the increasingly serious economic and political problems created by the agency problem innate in the decentralizing reforms of market

¹⁴ "China: Finance ministry reveals widespread accounting fraud," Financial Times, December 24, 1999. In January 2000, auditors in Hebei caught 67 SOEs covering up losses of RMB 600 million ("Beijing moving to improve quality of statistics," South China Morning Post, February 29, 2000).

¹⁵ "State asset drain must end," China Daily, December 13, 1995.

socialism. This is why the debate between the conservative reformers and the liberal reformers has progressed from whether privatization is necessary to the question of the optimal form and amount of privatization.

Even then the state's decision in 1997 to accelerate diversification of the ownership structure of the SOEs has to be recognised to be a bold move because the experiences with mass privatization in Central and Eastern Europe, and the former Soviet Union (CEEFSU) show that the task is an extremely difficult one and that the outcomes have consistently fallen below initial expectations. For example, in Russia, the “loans-for-shares” privatization transferred the country's enormous mineral wealth to a group of oligarchs, and the weak administrative and legal structures allowed many managers to take effective control of the privatized firms and loot them instead of improving their operations. Furthermore, the CEEFSU experiences warn that *mass* privatization is an exceedingly dangerous business politically, no matter how it is done, be it outsider privatization or insider privatization. This is because the mass privatization of SOEs generates so much rent that massive corruption has not been avoided, and the resulting corruption inevitably delegitimises the government, e.g. Vaclav Klaus in the Czech Republic and Boris Yeltsin in Russia.

Despite the mediocre to poor privatisation outcomes in CEEFSU, we still deem privatisation to be inevitable and desirable for China for two main reasons. The first reason comes from John Nellis (1999) who points out that “governments that botch privatization are equally likely to botch the management of state-owned firms”. The answer is not to avoid privatizations but to implement more careful privatizations: governments in transition economies should “push ahead, more slowly, with case-by-case and tender privatizations, in cooperation with the international assistance community, in hopes of producing some success stories that will

lead by example.” The second reason lies in that the delay of privatization can be costly to China's government politically. Stealing by managers does occur during privatization and creates a social backlash against the government, but the maintenance of the status quo has become increasingly difficult because SOE managers in China know from the CEEFSU experience that they are in an endgame situation. The widespread spontaneous privatization by SOE managers could create grave social instability.

To be accurate, we believe that the solution to the SOE problem in China is not privatisation *per se*, but a transparent, legal privatisation process that society at large can accept, at the minimum, as tolerably equitable. Because an adequate privatisation program must compensate the retired and layoff workers, permit takeover by core investors, and respect the rights of minority shareholders, it is important that legal reforms be carried out simultaneously. Only with a transparent, equitable privatisation process that is overseen by an adequate legal framework, would China be likely to avoid a state-created Russian-style *kleptoklatura* that would fuel social dissatisfaction.

Recently, there has been some questioning on whether the case for privatisation has been overstated; e.g. Nolan and Wang (1999). When Zhu Rongji was designated the new premier in 1997, he announced that he would solve the SOE problem in three years. In 2000, he declared victory on the SOE front when the profits of the industrial SOEs leaped from 53 billion yuan in 1998 to 241 billion in 2000. This is indeed favorable news, but should be put in context. This improvement in SOE profitability was actually part of a general phenomenon, the profits of the industrial non-SOEs increased from 93 billion in 1998 to 199 billion in 2000 for a variety of macroeconomic reasons.¹⁶ While the rise in profits surely gives some breathing space, the

¹⁶ The non-SOE data exclude small non-SOEs with sales at or below 5 million yuan. Data in this paragraph are from Zhou and Wang (2002).

capacity of SOEs to “dissipate rents” through high payments to managers and workers, if not illegal transfer of assets, should remain clearly in the policy makers' minds. Thus, any gains could well be squandered, if not reversed, in a relatively short period of time.

Table 5 summarises a study by Zhou and Wang (2002) who quantified the sources of the financial turnaround. They found that:

- the lower interest rate in 2000 increased profits by 52 billion yuan (28 percent of the increase in SOE profits);
- the higher oil prices boosted overall SOE profits by 79 billion yuan because almost all oil companies are state-owned (42 percent of the increase);¹⁷ and
- the conversion of the bank loans of SOEs into equities held by state asset management companies raised profits by 10 billion yuan (5 percent of the increase).

About 75 percent of the increase in the profits of industrial SOEs in the 1998-2000 period was not due to actions taken within these enterprises but to external factors. When Zhou and Wang (2002) calculated the profit rate after deducting the profits from the more favorable external environment, they found that it had increased from 0.7 percent in 1998 to 1.2 percent in 2000 for the SOE sector, and from 2.8 percent to 4.8 percent for the non-SOE sector. Despite the recent good news on SOE profitability, the fact remains that the SOE sector still lags considerably behind the non-SOE sector in efficiency.

5.0: Is Localised Socialism the Viable Form of Socialism?

The single largest contributor to China's economic growth in the 1985-1993 period was the collectively-owned sector, which consisted mostly of rural industrial enterprises that were

¹⁷ This estimate has taken into account the additional production cost of the non-oil SOEs.

registered as owned by villages, townships, or counties collectively, and hence were known as township and village enterprises (TVEs). According to the experimentalist school, TVEs represent localised socialism just as SOEs represent centralised socialism, that is, ownership by the local community instead of ownership by the national community:

"China's 'collectively' owned enterprises are not cooperatives ... All members of the local community are *de jure* owners of 'collectively' owned enterprises." (Nolan, 1993, pp. 297)

"The surprising thing about TVE's is not that they function without clearly specified property rights, but rather the fact that local government ownership turns out to be a fairly robust ownership form ..." (Naughton, 1994, pp. 268, emphasis added)

"An elaborate vocabulary of denial obscures the uncomfortable reality that these firms, widely described as collectives, TVEs, non-state, quasi-private or even private enterprises, are typically owned and controlled by local governments." (Rawski, 1995, pp. 1172, emphasis added)

The experimentalist school has argued that collective ownership is an effective way to raise capital funds for rural enterprises and to reduce the principal-agent problem by shortening the distance of supervision. For example, Naughton (1994) has interpreted the TVE ownership structure as a good adaptation to market failures caused by China's underdeveloped markets for factors of production:

"Banks are ill-equipped in the early stages of transition to process small-scale lending applications and assess risks. Local government ownership in China played a crucial role in financial intermediation. Local governments could better assess the risks of start-up businesses under their control ... and serve as guarantors of loans to individual TVEs."

In contrast, the convergence school holds that the TVE label serves mainly the useful political function of sheltering from view the occurrence of economic convergence in rural industries. It sees three main types of TVEs (1) genuine collectively-owned enterprises, (2) partnerships between local officials and private entrepreneurs, and (3) privately-financed and

privately-operated enterprises seeking political shelter and avoiding legal discrimination¹⁸; and predicts that over time, and if political circumstances permit, the genuine collectively-owned enterprises would evolve toward the other two types of ownership structure.¹⁹ The convergence school is skeptical of the experimentalist school's functionalist explanation of the TVE ownership form, especially its emphasis on the state's superiority in financial intermediation. Taiwan's small and medium-size private enterprises exhibited dynamic growth in the 1960-1985 period even though they were heavily discriminated against by Taiwan's wholly state-owned banking system. They thrived because informal financial markets (curb markets) emerged to cater to their needs. The power of market forces, when tolerated by the local authorities, to induce financial institutional innovations was also seen in Wenzhou city when economic liberalization began in 1979. Yia-Ling Liu (1992) reported that "Ninety-five per cent of the total capital needed by the local private sector has been supplied by 'underground' private financial organizations, such as money clubs, specialized financial households and money shops ..."

In our opinion, the TVE ownership structure is the product of political and not economic circumstances. First, private ownership is heavily discriminated against in many areas until recently, and thus collective ownership of rural industry arose as the primary response to the profitable niches created by central planning. Many private enterprises evaded discrimination by

¹⁸ The China Daily, November 4, 1994, reported that: "hundreds of thousands of private companies have registered as branches of publicly-owned units on the condition that they pay money to their so-called owners ... [because private companies face] complicated registration procedures, heavy levies and less preferential treatment than State firms [in fund raising and fund use. For example, one] private company had to write 46 receipts of 10,000 yuan each for goods worth 460,000 yuan because non-state firms were only allowed to issue bills under 10,000 yuan" ("Private firms jump to take 'red caps' off").

This third type of TVE is not rare, its number may be greater than the number of registered private enterprises in many places. This is certainly true for Wenzhou: "In the 1980s, almost all private business people ... described their enterprises as *collective*, which indicated that they *belong* to local governments, or to a State enterprise," China Daily, October 31, 1996. A 1993 survey found that in one county in Hebei province where there were "at least 1000 private businesses, the official number was eight." ("Enterprises shake protection cover," China Daily, March 31, 1995).

¹⁹ In fieldwork in southern Jiangsu, Wenzhou, Pearl River delta, and Zhengzhou, Jieh-Min Wu (1998, pp. 355) found "that most of the rural enterprises were private in disguise."

registering themselves as collectively-owned, a charade that Chinese observers have called "wearing the red cap". Second, the collective ownership of TVEs is rendered more manageable by the low labor mobility in the countryside, which, in turn, is the result of the system of political control known as the household registration system (*hukou*) that tied the peasants to the land. Community ownership was hence workable because the community members expected to remain in the same place indefinitely, and there was also no complicating factor of inward migration.

To us, the most salient point about the TVE ownership structure is that it highly unusual by international standards. In most East Asian countries with rural industry, such as Indonesia and Thailand, ownership of small enterprises is private, often within a family. By contrast, TVE ownership is collective, at least officially. Some scholars have argued that collective ownership reflects deep Chinese cultural patterns, Weitzman and Xu (1994). However, this "cooperative culture" hypothesis would appear to be called into question by the dominance of small private enterprises in rural Taiwan, as well as by the prevalence of small, Chinese-owned private firms throughout East Asia. If there is any cultural affinity regarding small business, it would seem to be for private, family-owned businesses rather than collectively owned businesses. Since the cross-country experiences suggest that the reason for collective ownership in China is neither economic nor cultural in origin, our identification of political ideology as the reason seems very plausible.

It is hence not surprising that with the steady reduction in discrimination against private ownership since early 1992 (partly, in response to the change in ideological climate after Deng's *nanxun*, and, partly, to ameliorate the rural unemployment), many TVEs have been taking off their "red hats" - albeit with difficulties in many cases:

As China heads toward a market economy, an increasing number of private companies are no longer feeling the need as register as "red cap," or collectively-owned ventures ... [because the] difference in preferential treatment between private and public units has been narrowed ... But there is a problem. The collective units are now arguing that private firms could not have developed without their help. As the so-called "owners" of the companies, ..[they] usually ask for high compensation for the "divorce" or ask the companies to merge with them. ("Private firms jump to take 'red caps' off," China Daily, November 4, 1994.)

By December 1997, the privatisation of TVEs had gathered enough momentum that the state came out supporting it. Wan Baorui, Vice-Minister for Agriculture:

"called for carrying out ownership reforms on rural collective enterprises .. All organisational forms, such as joint-stock partnerships, joint-stock cooperatives, enterprise groups, leasing and mergers, should be utilised boldly."²⁰

An important reason for why the central leadership started supporting the earnest privatisation of TVEs was because the corruption of local officials was fomenting rural unrest. The depiction of rural industrialisation as local corporatism by the experimentalist school is just too harmonious an image to be true. According to Jieh-Min Wu (1998, pp. 356-357), since a large part of rural industrialisation has been undertaken under cadre leadership, the:

"Chinese village seems to have stratified into two groups: the coalition of cadre-entrepreneurs and powerful clans, and the powerless villagers deprived in the process of industrialization ... [The informal approach of privatisation has sowed the seeds of distributional conflict in the village, creating the possibility that a] massive peasant protest movement may erupt at a time of weakened authoritarian control."

The fact is that TVEs are not optimal adaptations to China's economic circumstances, they are adaptations only to China's political circumstances. With the increasing recognition within China's leadership that it is to China's benefit to move quickly to a normal market economy, the great decline in state and collective forms of ownership was inevitable and desirable. As pointed earlier in our discussion of SOE privatisation, the maintenance of social

²⁰ China Daily, "Rural ownership reforms to move forward," December 4, 1997.

stability requires that the privatisation of collectively-owned enterprises be a transparent, equitable process undertaken within an adequate legal framework.

6.0: Final Remarks

Gradualism in China is not so much the result of a particular theory of reform, as it is the result of political deadlock and compromises within the Chinese Communist Party (CCP) between the conservative reformers and the liberal reformers, and a general lack of consensus in the society at large. The conservative reformers enunciated what Chen Yun has labeled the doctrine of a "bird cage economy": the central plan is the cage and the bird is the economy. The premise is that without central planning, production would be in chaos; i.e., without the cage, the bird will fly away. The amount of market activity that is to be tolerated to keep the economy working is analogous to the amount that the cage needs to be swung to create the illusion of greater space that is required to keep the bird happy.

The liberal reformers, on the other hand, reject the bird-cage ideal as a bird-brain idea because they recognize that the capitalist market economies have been more successful than the socialist planned economies. The East Asian developmental experience convinced the liberal reformers that only a market economy that is open to the outside world could promote long-term economic development.

With these basic differences in economic strategy, it is not surprising that partial reform was the compromise solution - both conservative reformers and liberal reformers were able to implement part of their programs, e.g. all the Special Economic Zones were located in southern China, far away from the important political centers. This repeated factional struggle and compromise is the primary reason why the CCP has continually altered its stated goals for

economic reform, which has progressed from the 1999 ideal of "a planned economy supplemented by market regulations" to the 1992 ideal of "a socialist market economy with Chinese characteristics."

The experimentalist-convergence debate has unfortunately been often miscast as a slow-fast debate. The key question in the debate about China's economic growth is whether the growth was generated by the appearance of new, non-capitalist economic institutions or by the convergence to a private market economy. The slow-fast characterization of the debate has to be seen in this context. For example, the relevant question in the present policy debate in Vietnam over the strategy of rural industrialisation is "collectively-owned enterprises versus private enterprises" and not "slow development of collectively-owned enterprises versus fast development of collectively-owned enterprises." The important issue is not speed but the direction of reform.

The slow-fast depiction of transition strategy also misses the fact that instant convergence to all the institutions of a private market economy is not technically achievable. It is possible to implement big-bang macrostabilisation, and big-bang price and trade liberalisation in a grossly policy-distorted economy, but it is technically impossible to conjure up instantly a legal infrastructure that could ensure a transparent, equitable privatisation process.²¹ An immediate commitment to mass privatisation at the start of reforms is desirable, but immediate privatisation that results in *nomenklatura* privatisation is not. This is the primary difference between the Polish and Russian privatisation programs, and this difference explains a large part of their different economic performances.

²¹ The debate is therefore trivialized when big-bang advocates are unfairly depicted as proposing something that is technically infeasible.

China's accession to WTO constitutes a watershed in the debate between the convergence school and the experimentalist school. To appreciate this point fully, the WTO membership must be viewed in the context of the comprehensive transformation of China's economy and society that began with the 12th Party Congress in 1992, and accelerated after the 17th Party Congress in 1997. Most of the small and medium SOEs in the rich coastal provinces have been privatised, and the government is now exploring ways to sell the state shares of the large SOEs that are listed on the domestic stock markets. The constitution has been amended to accord legal protection to private property; and the latest ideological breakthrough, The Three Represents, allows the admission of capitalists into the Party. The rural landscape has also changed greatly by the ongoing privatisation (since 1993) of the collectively-owned TVEs. The extension of land leases from 15 years to 30 years will be recognised as a landmark on the way to private land ownership in the countryside. WTO membership is, hence, only one of the many policy actions led by the state to promote the continued convergence of China's economy to the norms of its East Asian neighbors and integration with the world's major economies so that economic growth would be sustained. More importantly, China's leaders know that explicit embrace of capitalist institutions under WTO auspices would be welcome by the general Chinese public as a step forward in the reform process rather than as surrender of China's sovereignty in economic experimentation.

We end the paper by pointing out the experimentalist viewpoint and the convergence viewpoint are themselves converging to some extent, especially under the glare of real events. On the one side, almost all of the experimentalists now concede that China will become a “normal” capitalist economy, with private ownership, the corporate form of organization in large organizations, and adherence to international rules of the game in trade and finance. The

accession to the WTO has put “facts on the ground,” as it were. At the same time, the convergence school now emphasizes more strongly that because there is considerable variation in actual practices among the U.S., Western Europe, and Japan, not to mention smaller economies such as Korea and Singapore, there is no model worthy of blind adherence. In many critical areas, moreover – social policy, social insurance, science and technology policy, regional development – some experimentation is surely needed, since even the market economies have settled on no clear recipes.

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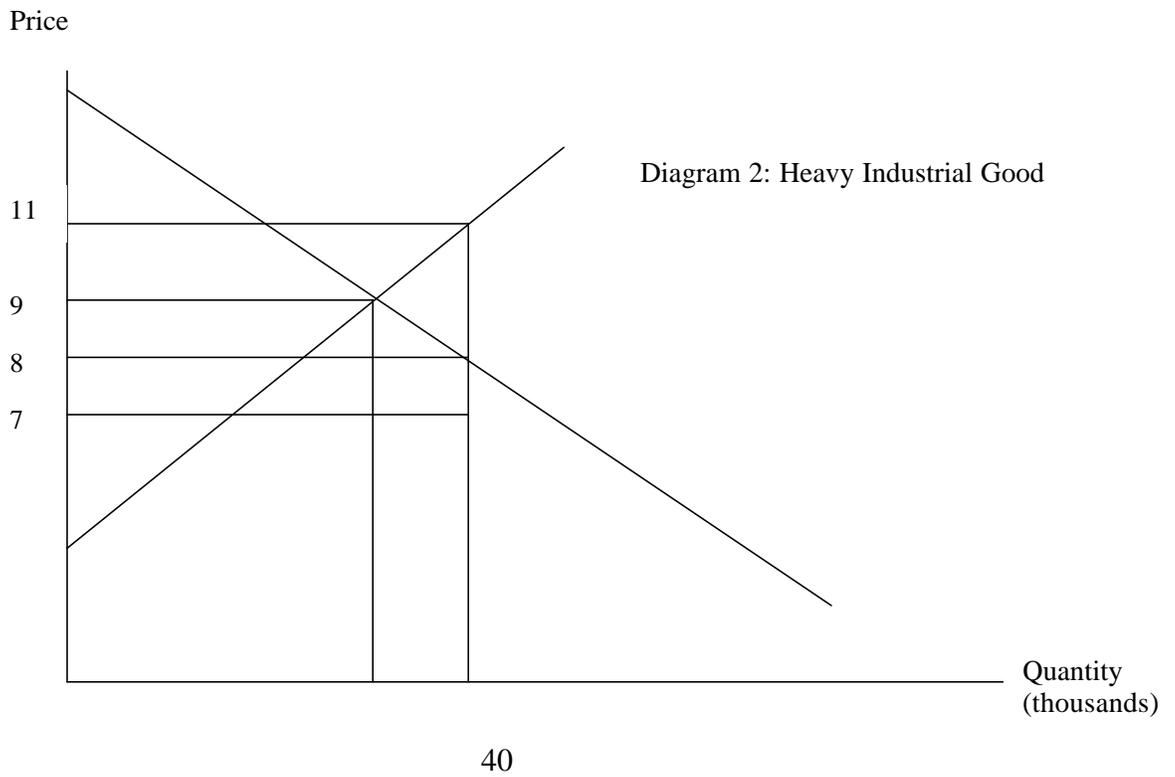
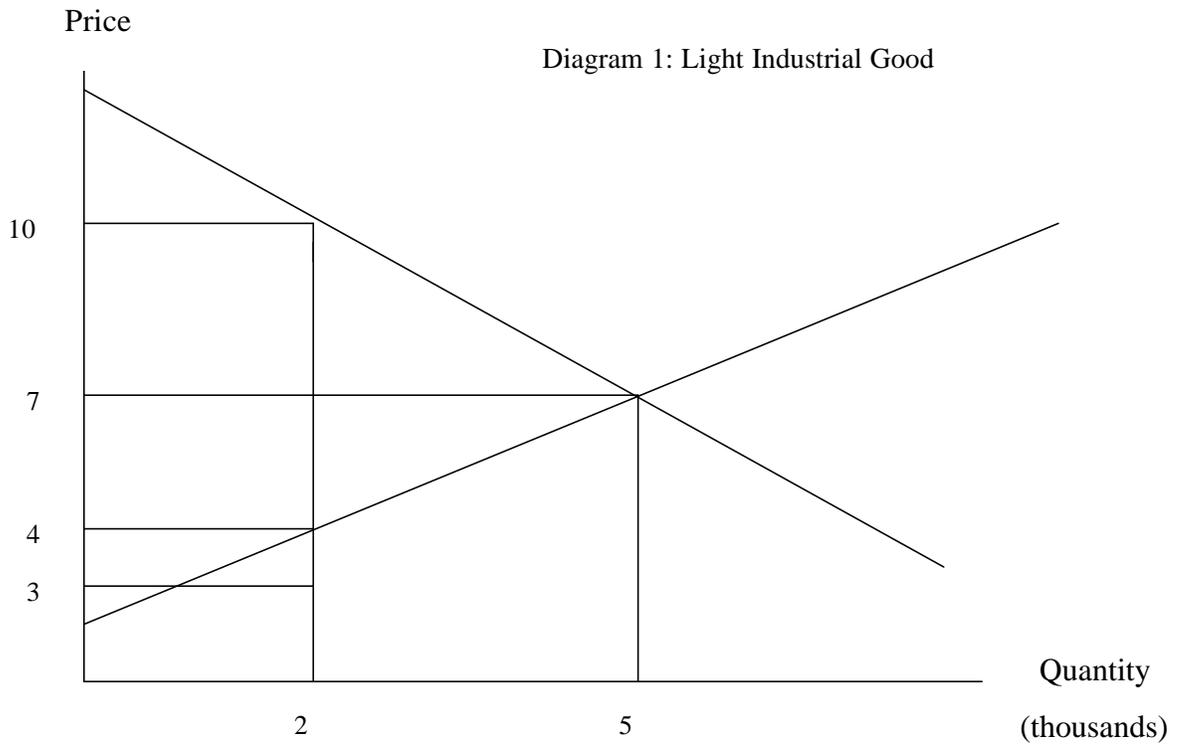


Table 1: Experimentalism versus Convergence

| | E-school | C-school |
|---|--|--|
| Speed of reform | Sequential trial-and-error | Rapid and comprehensive liberalization of agriculture, and of international trade in coastal provinces; slow deregulation of SOEs and of international trade in interior provinces |
| Reasons for gradualism (incrementalism) | Economic experimentation | Political compromise; ideological commitment to state ownership |
| Sources of rapid growth | Unintended virtuous cycle, and few dislocations from large shifts in policies | Existence of surplus agriculture labor; East Asia pattern of labor-intensive export-led growth |
| Outcomes in the SOEs | Substantial improvements in production efficiency | Little technical progress; and over-compensation of SOE personnel and over-investment that weaken the fiscal situation |
| Interpretation of the TVEs | Adaptations to China's economic conditions of still-developing markets | Continuing legal restrictions on private ownership |
| Future directions and pace of reform | Policies will change to reflect evolution in material conditions and lessons from continuing experiments | Policies will push China toward a normal private market economy with characteristics similar to other East Asian economies |

Table 2: Production of Light and Heavy Industrial Goods, and State Sector Employment, 1978-1998

| | <u>Index of Gross Industrial Output, 1978=100</u> | | <u>Composition of Gross Industrial Output, in 1995 prices, %</u> | | <u>Proportion of Labor Force in State-Owned Units, %</u> | <u>Proportion of Gross Industrial Production by State-Owned Units, current prices,%</u> |
|------|---|----------------|--|----------------|--|---|
| | Light Industry | Heavy Industry | Light Industry | Heavy Industry | | |
| 1978 | 100.0 | 100.0 | 38.9 | 61.1 | 18.6 | 77.6 |
| 1979 | 110.0 | 108.0 | 39.3 | 60.7 | 18.8 | 78.5 |
| 1980 | 130.8 | 110.1 | 43.1 | 56.9 | 18.9 | 76.0 |
| 1981 | 149.5 | 105.1 | 47.5 | 52.5 | 19.1 | 74.8 |
| 1982 | 158.2 | 115.5 | 46.6 | 53.4 | 19.1 | 74.4 |
| 1983 | 172.9 | 130.6 | 45.7 | 54.3 | 18.9 | 73.4 |
| 1984 | 200.7 | 152.2 | 45.6 | 54.4 | 17.9 | 69.1 |
| 1985 | 246.3 | 182.9 | 46.1 | 53.9 | 18.0 | 64.9 |
| 1986 | 278.5 | 201.6 | 46.8 | 53.2 | 18.2 | 62.3 |
| 1987 | 330.3 | 235.3 | 47.2 | 52.8 | 18.3 | 59.7 |
| 1988 | 403.3 | 280.9 | 47.7 | 52.3 | 18.4 | 56.8 |
| 1989 | 436.4 | 305.9 | 47.6 | 52.4 | 18.3 | 56.1 |
| 1990 | 476.6 | 324.9 | 48.3 | 51.7 | 16.2 | 54.6 |
| 1991 | 548.0 | 372.0 | 48.4 | 51.6 | 16.5 | 56.2 |
| 1992 | 657.7 | 479.8 | 46.6 | 53.4 | 16.6 | 51.5 |
| 1993 | 835.2 | 611.8 | 46.5 | 53.5 | 16.5 | 57.3 |
| 1994 | 1,032.3 | 762.3 | 46.3 | 53.7 | 16.2 | 37.3 |
| 1995 | 1,268.7 | 899.5 | 47.3 | 52.7 | 16.1 | 34.0 |
| 1996 | 1,573.2 | 1,013.7 | 49.7 | 50.3 | 15.9 | 36.3 |
| 1997 | 1,801.3 | 1,132.4 | 50.3 | 49.7 | 15.5 | 31.6 |
| 1998 | 2,013.9 | 1,242.2 | 50.8 | 49.2 | 12.6 | 28.2 |

Data calculated from State Statistics Bureau (1999)

Table 3: Production in Employment Structure in China, Soviet Union and United States

Part A: China: Change in Production and Employment, 1978-1998

| | <u>Composition of GDP, 1995 prices, %</u> | | | <u>Composition of Employment, %</u> | | |
|------|---|-----------|----------|-------------------------------------|-----------|----------|
| | Primary | Secondary | Tertiary | Primary | Secondary | Tertiary |
| 1978 | 41.2 | 34.0 | 24.7 | 70.5 | 17.3 | 12.2 |
| 1979 | 40.9 | 34.2 | 24.9 | 69.8 | 17.6 | 12.6 |
| 1980 | 38.0 | 37.0 | 24.9 | 68.7 | 18.2 | 13.1 |
| 1981 | 38.4 | 35.6 | 26.0 | 68.1 | 18.3 | 13.6 |
| 1982 | 39.0 | 34.2 | 26.7 | 68.1 | 18.4 | 13.4 |
| 1983 | 38.1 | 34.2 | 27.8 | 67.1 | 18.7 | 14.2 |
| 1984 | 37.3 | 33.9 | 28.8 | 64.0 | 19.9 | 16.1 |
| 1985 | 33.8 | 35.9 | 30.3 | 62.4 | 20.8 | 16.8 |
| 1986 | 32.2 | 36.5 | 31.3 | 60.9 | 21.9 | 17.2 |
| 1987 | 30.3 | 37.5 | 32.2 | 60.0 | 22.2 | 17.8 |
| 1988 | 28.2 | 38.8 | 33.0 | 59.4 | 22.4 | 18.3 |
| 1989 | 28.0 | 38.4 | 33.6 | 60.0 | 21.6 | 18.3 |
| 1990 | 28.9 | 38.0 | 33.0 | 60.1 | 21.4 | 18.5 |
| 1991 | 27.2 | 39.7 | 33.0 | 59.7 | 21.4 | 18.9 |
| 1992 | 25.1 | 42.3 | 32.6 | 58.5 | 21.7 | 19.8 |
| 1993 | 23.2 | 44.8 | 31.9 | 56.4 | 22.4 | 21.2 |
| 1994 | 21.5 | 47.3 | 31.2 | 54.3 | 22.7 | 23.0 |
| 1995 | 20.5 | 48.8 | 30.7 | 52.2 | 23.0 | 24.8 |
| 1996 | 19.7 | 50.0 | 30.3 | 50.5 | 23.5 | 26.0 |
| 1997 | 18.8 | 50.7 | 30.5 | 49.9 | 23.7 | 26.4 |
| 1998 | 18.1 | 51.5 | 30.4 | 49.8 | 23.5 | 26.7 |

Part B: Cross-Country Comparison of Production and Employment Structure

| | <u>Composition of GDP, 1995 prices, %</u> | | | <u>Composition of Employment, %</u> | | |
|--------------|---|----------------------|---------------|-------------------------------------|----------------------|---------------|
| | United States 1986 | Soviet Union 1988 | China 1978 | United States 1986 | Soviet Union 1988 | China 1978 |
| Agriculture | 1.9 | 9.3 | 41.2 | 2.7 | 19.3 | 70.5 |
| Industry | 23.5 | 48.9 | 28.9 | 17.6 | 28.9 | 17.3* |
| Construction | 6.1 | 10.7 | 5.1 | 4.6 | 11.5 | ** |
| Services | 68.5 | 31.1 | 24.7 | 75.1 | 40.3 | 12.2 |

China data from State Statistic Bureau (1999). Statistics for United States and Soviet Union are from Lipton and Sachs (1992).

* = data includes construction, ** = data included in industry category

TABLE 4: OUTPUT AND PRICE PERFORMANCE IN VIETNAM AND LAOS

| | -----Output Growth----- | | | | ----Inflation ---- | |
|-------------------------------|-------------------------|-------------|----------|----------|--------------------|--------------|
| | GDP | agriculture | industry | services | GDP Deflator | Retail Price |
| <u>Part a: Vietnam</u> | | | | | | |
| 1984 | 3.3 | 4.2 | 12.0 | NA | NA | 164.9 |
| 1985 | 5.7 | 4.5 | 12.0 | -1.0 | 102.315 | 191.6 |
| 1986 | 3.4 | 1.9 | 4.1 | 6.3 | 506.9 | 487.3 |
| 1987 | 3.7 | -0.6 | 8.8 | 5.5 | 362.2 | 371.6 |
| 1988 | 5.9 | 3.9 | 5.3 | 9.2 | 407.3 | 374.2 |
| 1989 | 8.0 | 6.9 | -2.6 | 18.3 | 68.7 | 95.8 |
| 1990 | 5.1 | 4.6 | -2.4 | 10.8 | 42.1 | 36.4 |
| 1991 | 6.0 | 2.2 | 9.0 | 8.3 | 72.5 | 82.7 |
| 1992 | 8.6 | 7.1 | 14.0 | 7.0 | 32.6 | 37.7 |
| 1993 | 8.1 | 3.8 | 13.1 | 9.2 | 14.3 | 8.4 |
| 1994 | 8.8 | 3.9 | 14.0 | 10.2 | 14.5 | 9.3 |
| 1995 | 9.5 | 4.7 | 13.9 | 10.9 | 19.5 | 16.8 |
| 1996 | 9.3 | 4.8 | 15.6 | 8.9 | 6.1 | 5.6 |
| <u>Part b: Lao</u> | | | | | | |
| 1985 | 6.5 | NA | NA | NA | NA | |
| 1986 | 9.5 | 9.4 | 6.6 | 11.6 | 44.6 | |
| 1987 | -5.2 | -8.5 | -16.4 | 9.4 | 31.0 | |
| 1988 | 0.9 | 2.1 | 5.6 | -3.6 | 33.7 | |
| 1989 | 14.5 | 10.8 | 35.0 | 14.5 | 59.0 | |
| 1990 | 7.3 | 8.7 | 16.2 | -0.5 | 34.6 | |
| 1991 | 3.4 | -1.7 | 19.9 | 6.5 | 13.3 | |
| 1992 | 7.0 | 8.3 | 13.0 | 9.1 | 9.3 | |
| 1993 | 5.2 | 2.7 | 10.3 | 7.7 | 6.4 | |
| 1994 | 8.0 | 8.3 | 10.6 | 5.6 | 7.7 | |
| 1995 | 6.7 | 3.1 | 13.1 | 10.2 | 19.7 | |
| 1996 | 6.7 | 2.2 | 17.3 | 8.7 | 13.9 | |
| 1997 | 7.6 | 7.5 | 8.1 | 7.3 | 17.7 | |

Source: Vietnam: 1984 data refers to (Soviet-definition) National Income

Lao: 1985 GDP growth based on 1988 prices, the rest on 1990 prices

Table 5. Analyzing sources of profit growth in SOEs and Non-SOEs (1998-2000)

Units: 100 million Yuan

| | SOE | | | | Non-SOE | | | |
|-------------------------|------|------|--------|---------|---------|------|--------|----------|
| | 1998 | 2000 | Change | Exp | 1998 | 2000 | Change | Exp |
| Total profit | 525 | 2408 | 1883 | (100%) | 933 | 1985 | 1052 | (100%) |
| From | | | | | | | | |
| Interest rate reduction | | | 523 | (27.8%) | | | 300 | (28.5%) |
| Higher oil price | | | 791 | (42.0%) | | | -341 | (-32.4%) |
| Loan-equity swap | | | 101 | (5.4%) | | | | |
| Residual = Own Effort | | | 468 | (24.8%) | | | 1093 | (103.9%) |
| Real return rate | 0.7% | 1.2% | 0.5% | | 2.8% | 4.8% | 2.0% | |

Note: Data in parentheses under “Exp” are share of contribution by different factors to total profit changes.

“Real return rate” for 2000 is calculated as the ratio of total profit, excluding profits that resulted from the three external factors, to total assets. The estimate on the effect of higher oil prices has taken into account the additional production cost of the non-oil SOEs.

Source: Zhou and Wang (2002). Some terms used here differ from the source.