"China's Encounter with Market Socialism": Preface for the Conference in Honor of John Roemer, May 6-7, 2005

Dear conference participants and cyberspace visitors,

Several years have passed since I've devoted much thought to market socialism, a topic on which I wrote some papers a decade ago inspired mainly by writings of John Roemer. The paper I've chosen to present at this conference returns to the theme of market socialism, but in a specific context. It was written for a conference and volume titled "Market and Socialism in the Light of the Chinese and Vietnamese Experiences" organized by Yingyi Qian and others for the International Economic Association. Inevitably, the paper is addressed mainly to China specialists, who were the principal attendees of that conference. Things being as they are, it was safe to assume that there is little interest in market socialist proposals within that group (the vast majority of those from China who've received training in economics since 1979 are strong believers in free market economics). Alternative forms of market socialism, and the maximum potential of a system that could be described as market socialist, receive a little attention in my paper, but not nearly so much as they would have had I written it with an audience such as the present one in mind.

Between the time I encountered John's early formal treatment of the Lange model (with Ignacio Ortuno-Ortin and Joaquim Silvestre), in 1992, and the time that Joaquim, John and I together wrote a paper dealing broadly with markets and socialism, which was published in 1998, I had the good fortune to engage in several exchanges of ideas with John and others that contributed a lot to my thinking on these matters. I took a quick look at some of that work in preparation for this meeting, but I'm largely ignorant of any discussion on those issues which has occurred since that time, and I come to this meeting ready to learn from anyone willing to teach as lost a soul as I must seem to be.

For now, let me confess to still thinking that some of the ideas we tossed around then were potentially useful ones. I continue to feel that a fully centralized market socialism in which the state owns society's capital stock and allocates it by a bureaucratic process would suffer from serious inefficiencies because it would be difficult to provide the managers of the social capital portfolio with incentives to allocate it efficiently, and equally difficult to provide the enterprise managers to whom capital was allocated with strong incentives to use it efficiently. The basic reason is that the ultimate principals, the citizens, would have every incentive to free ride on the task of monitoring and disciplining the portfolio managers. Of course, the voters could throw out a government that employed inefficient capital managers, but this would be a blunt instrument given that their performance would tend to be evaluated at quite aggregated levels, without benefit of counterfactuals, and because citizens might throw out a government that handled investment well because it disliked other aspects of its policies or performance, or might retain a government that handled investment poorly because it liked its approach to other issues. The main problem I tried to raise in my 1993 papers on the topic is that with centralized investment, each citizen would hold a portion of the same portfolio as every other citizen. The incentive to monitor individual companies, which in a capitalist

economy derives from the ability of individuals to shed bad investment holdings and replace them with better performing companies, or in other words the ability to trade on the information obtained by monitoring, would be absent. All that you could do with your information would be lamely—as one of millions of citizens—to urge the capital management authority to dump the companies your research convinced you were being poorly managed. It wouldn't be worth your trouble.

But what about a more decentralized market socialism? One model would give each adult citizen a piece of the social capital stock to allocate as he or she sees fit, with differential material rewards realizable for smart choices, and thus real incentives to monitor performance and to allocate money to more promising enterprises or mutual funds which would in turn compete by doing the same. Another model, partly inspired by proposals by Leland Stauber and closer to the Chinese experience of the early 1980s to the early 1990s, would permit competition in the allocation and management of public capital by having multiple, local public owners, including township, municipal and provincial governments and public pension and insurance funds. A third model would assign a more central role to worker ownership while addressing risk issues and coming closer to public ownership by investing workers' funds in portfolios of other firms' assets. Combinations of the second and third models, that is of worker and local government ownership, are also possible, and all models could be combined with various degrees of worker participation or control at the enterprise level.

There are potential problems with all of these models that I will not try to discuss in detail here. I mainly want to point out that while I believe there to have been a serious flaw in the specific 'coupon socialism' proposal sketched out in John's *Future for Socialism* book, about which I wrote in my contribution to the commentary volume *Equal Shares*, this is not the same as saying that all such ideas ought to be dismissed as unworkable. It was my opinion at the time, and one I've had no reason to reconsider since then, that a modification of the coupon proposal which would empower people to buy shares of newly issued stock in a way that would give real equity to the firms in question would overcome the main problem I had seen with it. More generally, I see no reason to conclude that we could not use our insights into the incentive and agency issues that also challenge capitalist finance and management to design more egalitarian systems that might perform quite well from the standpoint of efficiency. And if, in the end, we encounter trade-offs between allocative or technical efficiency, equality, justice, and participation, we will be in territory that is already familiar to democratic industrial societies, territory we navigate also with respect to trade offs between productive efficiency and the preservation of our physical environment, quality of life, and other matters.

Let me turn briefly to China, a country that crops up in Western discourse in so many different guises. In the 1960s and '70s, many in the left saw China as the great hope for a socialism rooted in the power of the masses rather than the bureaucrats. In the 1980s and '90s, China was reborn as the democratic left's favorite response to property rights fundamentalism. Both were projections built on grains, only, of reality. The Cultural Revolution was less of a genuine mass movement than a ploy by Mao and co-

conspirators to regain power from the Communist Party pragmatists who had taken charge when the Great Leap Forward led to millions of famine deaths and to general economic chaos. Similarly, the market socialist elements of China's economic system in the first fifteen to twenty years of the country's transition to a market economy was (my current paper argues) a reflection of pragmatic constraints on the reformist leadership, not a sign of attraction to an alternative economic model. The fundamental fact to understand about China is that it is a fiercely proud, ancient civilization, and hence a country in which ideologies other than national revival have been of secondary importance to the great majority of political and intellectual leaders since the early 20th Century. Just as Communism was tried on as a seemingly logical framework for a struggle to throw off colonial influences and to return to first rate economic status, so private property, the marketplace, and the goal of exporting to the industrialized world were adopted as successor ideals after Hong Kong, Taiwan and South Korea proved these to be more dynamic ways to reach the world economic frontier than was the by-then stodgy Soviet model.

China remains of great interest as a large slice of mankind that has experimented with a wider range of economic institutions and ideas than has any other country in modern times. Soviet style central planning, charismatic millenarian striving for pure communism, a pragmatic mix of socialism and capitalism similar to Lenin's N.E.P., decentralized public and collective ownership with markets, and export-oriented industrialization with a large role for foreign private investment, have all played parts in China's economic history since 1949. My paper tries to shed some light on the role that market socialist elements played in this interesting history, mainly during the 1980s and early 1990s.

Yours,

Louis Putterman

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China's Encounter with Market Socialism: Approaching Managed Capitalism by Indirect Means*

Louis Putterman**

0. Introduction

In this paper, I'll argue that although the Chinese Communist Party officially adopted the phrase "socialist market economy" (*shehuizhuyi shichang jingji*) to describe China's economic model in 1993, China had actually completed its closest rendezvous with "market socialism" by that year and taking off in the direction of a predominantly capitalist economy. The years since 1992 have seen China deepen not market socialism, but a managed market capitalism with only dwindling remnants of the socialist past.

For China's brush with market socialism, I propose the image of a "fly by," a close encounter on the path to a very different destination. A metaphor from space exploration may make the idea more vivid. In July of 2004, the world was thrilled by images beamed back from the rings and moons of Saturn by the European-built, American launched Cassini spacecraft. To put Cassini into orbit around Saturn, the U.S. National Aeronautic and Space Administration (NASA) launched it atop a Titan IV rocket in October 1997 on a trajectory that early on included two "gravity-assist" fly-bys of our "sister" planet, Venus. I'll argue that China's fly-by of "market socialism" was of a similar character: in order to put its once Soviet-style planned economy on a path toward a managed form of market capitalism[1] during an early reform period in which the Communist Party leadership still contained diverse elements that made socialism's gravity hard to escape, China's reformers first put the economy on what seemed to be a course towards planned socialism's sister economic system, "market socialism." Only later, with the help of the momentum gained during the market socialism fly-by, was the economy able to begin escaping socialism's pull more completely.

By "market socialism," I mean a hypothetical economic system that adheres to two of the three core tenets in the orthodox conception of socialism to which the Communist parties of the Soviet Union and allied states once adhered, namely(a) state or social ownership of the means of production (factories, equipment, natural resources), (b) incomes determined by work (that is, no private returns to non-labor factors of production, but rejection of the egalitarianism of "distribution according to needs") and (c) coordination (which is required by any complex modern economy) provided primarily by planning on the basis of physical quantities. By "market socialism," I have in mind a system that retains elements (a) (social ownership) and (b) ("distribution according to

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[1] By "managed capitalism" I mean an economic system, such as that of post-War Japan, in which the means of production are mostly privately owned, the preponderance of economic coordination is by market forces, and government attempts to guide the economy using discretionary taxes, interventions in credit markets, and other tools.

work") from the above list, but that drops element (c) in favor of the use, or at least simulation, of markets.

The modifications of (c) sufficient to shift the system from conventional planned socialism to market socialism vary. One variant of "market socialism" might continue to give considerable power to planners, who would still attempt to coordinate the economy, as in orthodox socialism, but who instead of directing enterprise managers to carry out plans specified in physical terms, would direct managers to maximize profits—or to achieve some other criterion, like Lange's MC = price condition—subject to administratively set prices. The planners' job, then, would be to set prices rather than quantities. In a far more "planless" version of "market socialism," state or social ownership (feature (a)) and earnings based on labor (feature (b)) would be retained, but market forces would be allowed to govern resource allocation, working through the normal paths of an unregulated price system. The academic model of market socialism proposed by Lange, Lerner, and Taylor lay in between these extremes, in that planners would have attempted to influence the economy on a large scale by determining (perhaps through setting different interest rates) how investment funds would be allocated among major sectors of the economy and perhaps certain priority goods, but would have left details on the combinations and varieties of final goods to be determined by ordinary market forces, with planners making no attempt to influence consumer goods prices.

How we think of market socialism has been muddied in practice by the presence of a quite different dimension of variation, that of the degree to which privately-owned enterprises are tolerated alongside publicly-owned ones. When an economy with a substantial state sector allows private enterprises a substantial role as well, it aids clarity, in my view, to call the resulting system a *mixed economy*—that is, a mixture of socialist and capitalist systems—but not to use the term market socialism. An example of a mixed economy with a prominent socialist element is Russia under the New Economic Policy of Lenin. The economies of China and Vietnam are clearly mixed ones today.

For better or for worse, there have been no real-world examples of a market socialist economy in the pure sense. Every country that has experimented with a major dose of market socialism—most notably Yugoslavia from the mid-1950s to the late 1980s, Hungary between 1968 and 1989, and China from 1979 to the early 1990s—also introduced a mixed economy element, allowing private ownership of small enterprises.

Still, it serves clarity to keep the notions of 'mixed economy' and 'market socialism' distinct in our minds. An economy consisting entirely of state owned enterprises that goes through a process of gradual privatization will exhibit different admixtures of private and publicly owned enterprises along the way, with the proportion of enterprises that are privately owned growing monotonically as the process proceeds (see the dashed line in Figure 1). This is not, however, market socialism. The latter has been conceived of as a destination in its own right—from which springs its fascination to the economic systems theorist. Figure 1 provides a visual representation of how the four systems—capitalism, planned socialism, a mixture of capitalism and socialism, and market socialism—are related, according to the view that I've sketched. The solid line

represents China's reform path which, while even from the first making the economy more mixed in character, swung close by a version of market socialism during the first reform decade rather than follow a more direct path to capitalism by way of a simple mixed economy.

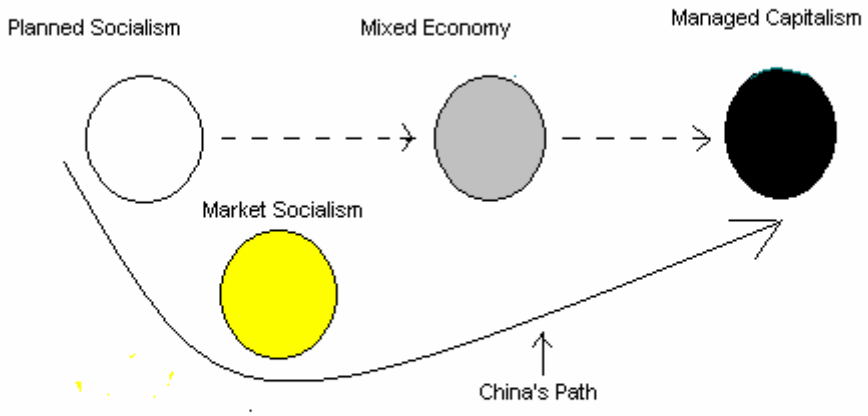

Figure 1. China's Path toward Managed Capitalism

1. China as a Market Socialist Economy: the Mid-1980s Approach

In 1984, urban privately-owned enterprises accounted for little more than 1% of China's industrial output. State-owned enterprises still accounted for 69% of industrial output, urban collectively-owned enterprises for another 18%, and a large majority of that 12% of industrial output that China's statistics associated with "township and village enterprises" was still being produced by enterprises officially belonging to those two levels of rural local administration. Thanks to the de-collectivization process of 1979 to 1983, agricultural production was overwhelmingly in the hands of households, but farming was still a private-public hybrid in which land belonged to the rural collectives, the provision of most credit and other farm inputs was also by public entities, and the government still set crop targets and procured a substantial part of the harvest. Only in small-scale rural trade and transportation, rural construction, other rural sidelines, and urban petty trade was fully private enterprise prevalent. China's economy was showing some admixture of private enterprise by the mid-1980s, therefore, but a large part of its systemic change thus far—and this was so at least to the end of that decade—had been the introduction of market pricing and the profit motive to an economy of public ownership in which earnings were overwhelmingly attributable to labor. The case could be made that China was building a market socialist economy.

How might market socialism have functioned in China? Imagine that China, like Yugoslavia before it, had embraced a full-blown ideology of market socialism—the idea

that social ownership of the means of production should be married to market coordination of economic activity. The buildings, equipment, and land used by industrial and other enterprises could have belonged to central, provincial, municipal, county, township and village governments, which would have retained the power to hire and fire their managers. Managers would have been expected not to meet physical plan targets but rather to make their enterprises profitable, and they would have been rewarded for achieving profitability by being able to pay themselves and their workers bonuses from some of those profits, and being able to expand their enterprises by investing the remainder. Other investment funding would have come not from government allocations but from bank loans and enterprise bonds. Market forces would have guided managers' decisions, but non-labor resources would have remained socially owned, so that incomes would be returns on labor contributions only. These conditions were in fact approximated in the mid- to late-1980s in the still large SOE, township, village, and urban collective sectors of China's economy.

China's leaders could have and did justify the system roughly as follows. "Socialism" would continue to mean that individuals could not enrich themselves by extracting private returns from the society's scarce resources. A socialist society would reward the effort of the individual both as a matter of fairness and as a necessary incentive. Markets would be allowed to play a coordinating role because physical planning had proven too difficult to do in adequate detail, and top-down control squelched initiative from below. The state would retain the power to intervene and steer the economy when and where markets failed, but it would otherwise leave them to do their job (Zhao Ziyang's formulation was "the government controls the market and the market controls the economy"). Some state guidance with respect to the allocation of investment among broadly defined sectors would remain, as in the Lange-Lerner model, but by and large the system would be more thoroughly market-driven than what those economists appear to have had in mind.

China's rapid rate of economic growth between 1979 and 1992 makes it reasonable to argue that its experience in that period was the most impressive instance of market socialism ever observed. Indeed, many did argue from China's example that Western property rights fundamentalists had been proven wrong by China's example (Weitzman and Xu, 1994, Stiglitz, 1996, Ellerman and Stiglitz, 2001). Hungary's approach to market socialism had improved Hungarians' access to better food and more consumer goods, but had not distinguished Hungary's economic growth rate from those of more orthodox East European neighbors. Yugoslavia had its "economic miracle" in the 1960s, but long before ethnic implosion made that country more famous for civil war than for economic growth, the luster had already worn off due to chronic inflation and unemployment.

It's not clear how much of China's economic growth in the 1980s can be attributed to market socialism. Township and village owned enterprises surely displayed dynamism, suggesting that ownership by local government does not rule out entrepreneurial drive and productive efficiency (see Putterman, 1997 as well as Weitzman and Xu, 1994, Chun and Wang, 1994, and Che and Qian, 1998). SOEs also

increased their efficiency when exposed to market forces and when invited to seek profits (Jefferson and Singh, eds., 1999). But SOEs might not have experienced as much increase in productive efficiency had they been competing *only* with other SOEs and with collectively-owned TVEs. Even in the 1980s, some dynamic rural enterprises were privately owned, others were private enterprises disguised as collective, and after 1992, private enterprises grew far more rapidly than public ones in both the rural and urban sectors, despite severe discrimination in access to bank financing. A dynamic small-scale private rural non-farm sector existed from 1978 onwards. Although one can't rule out that China's economy might have achieved fairly impressive growth even if its market socialist components had been unaccompanied by a private enterprise sector, there is no way to prove this.

I judge China's experience in the 1980s as suggestive of the possibility that socially-owned enterprises operating in a market environment might well form an effective core of a viable economy. However, China's experience also demonstrates that market socialism has little chance of long-run viability unless strong barriers to the growth of private enterprise are erected, for example rules requiring that enterprises convert to cooperative or public ownership after achieving a certain scale. As barriers to large scale private ownership fell by the wayside, it became inevitable that China would leave the orbit of market socialism and travel on toward a more capitalist style economy.

2. Why was Market Socialism a Way Station rather than a Destination?

In this section, I want to argue a simple thesis: that market socialism cannot survive unless legal, political, and social constraints prevent a transition to market capitalism. Because these constraints were present in China to a limited degree only, during the 1980s, and because they were largely removed by the mid-1990s, China orbited market socialism only as a voyager on a path to a managed version of market capitalism.

China's market socialism was unstable for two reasons, one general, and one historically specific. The general reason is that the combination of natural human acquisitiveness or self-interest and natural human variability with respect to intelligence, drive, intensity of self-interest, and other characteristics, means that a market economy will fairly quickly become a capitalist economy unless there are policy or constitutional barriers to capitalist forms of property. The historically specific reason is that late-20th century China was subject to powerful internal and external influences that made real commitment to market socialism extremely unlikely.

That most human beings are driven by a strong interest in the material well-being of themselves and their families is an idea at the heart of economics. Most humans also have socially-reinforced yet naturally conditioned social preferences—desires to look good in the eyes of other people, tendencies to judge one another according to social criteria, receptivity toward pro-social value orientations including reciprocity, loyalty, trust, and the desire to punish those who opportunistically exploit pro-social rules (Rabin, 1998; Bowles, 2003). Different mixtures of self-interest and pro-social behavior are

observed at different times and exhibited by different individuals, but self-interest is part of the make-up of every individual, and strongly so for a great many.

It's equally clear that people vary over a wide range in terms of intelligence, mental and physical energy, willingness to bear risk, and other characteristics conducive to success in a market economy. In a relatively unconstrained market economy, the most intelligent, energetic, innovative, self-interested, risk-taking and fortunate individuals can earn far higher rewards than their less intelligent, energetic, innovative, self-interested, risk-taking and fortunate counterparts. Some quite intelligent, energetic, and innovative individuals may be more drawn to the pursuit of social approval and of intrinsic rewards from serving the good of a community or group than to the amassing of personal wealth. But when the magnitude of the rewards that can accrue to using their gifts self-interestedly is unconstrained and readily visible, most of a society's potential economic dynamos are attracted away from the disinterested service of others. In open competition, private enterprise grows at the expense of social at least partly because it concentrates more rewards in the hands of the more able and driven. Less driven or capable types who form the rank-and-file workforce of an industrial society will in turn accept employment in firms formed by for-profit entrepreneurs unless the cooperative and social sectors offer equal or better conditions of employment, which it is ever harder for them to do as talented leadership is drawn to the private sector (Putterman, 1982).

Capital is also drawn towards private enterprise. As wealth becomes differentiated and individuals begin to have resources to invest, entrepreneurial individuals who identify prospects for high returns will establish enterprises under their own control, rather than set up cooperatives, lend to banks, or buy the bonds of social sector enterprises. Cooperative and social enterprises can be financed in part by borrowing from banks and other intermediaries, but some internal finance is necessary in a market economy, because lenders become reluctant to lend or demand exorbitant rates of interest at very high debt/equity ratios. Undercapitalization of workers' cooperatives, attributable mainly to worker liquidity contraints and risk aversion, is widely observed (Bonin, Jones and Putterman, 1993, Pencavel, 2001 , Dow, 2003). If property rights in worker-run firms are collective or social, as they were in Yugoslavia, this problem would be exacerbated unless banks were directed by the government to funnel credit into the sector, a phenomenon that fueled inflation in that country (Pejovich, 1973, Bonin and Putterman, 1987). State owned enterprises can have an advantage in accessing credit markets if the government is believed to guarantee repayment, but such guarantees also give rise to "soft budget constraints" which make SOEs less efficient than private firms (Kornai, 1980).

Apart from these general reasons why entrepreneurial talent and capital are drawn to private rather than social and cooperative enterprises in the absence of constraints, there were historical factors pointing China towards private enterprise in the1980s and '90s. The combined wealth of the overseas Chinese communities of Southeast Asia and elsewhere has been estimated to be of comparable magnitude to that of the Chinese state and citizenry. Overseas Chinese accounted for more than half of all direct foreign investment into China during the 1990s. The practice and ethos of capitalism animated

the overseas Chinese community, be it in Hong Kong, Taiwan, Singapore, or further afield, and Chinese leaders eager to entice more investment could readily see that investment volumes would grow most rapidly if constraints on private ownership within China itself were relaxed.

Intellectual currents also militated against restricting China's way forward to a market socialist path. The concept of market socialism was on the agendas of only a handful of intellectuals, mainly in the West. In China as much as in the former Soviet Union and Eastern Europe, policy-makers and intellectuals anxious to see their country emulate the economic dynamism of Taiwan, South Korea, Singapore, Japan, and the West, were naturally averse to "experiments" with some "third way." Reformers like Zhao Ziyang were anxious to receive policy advice from overseas Chinese and Westerners. Students sent to study economics in the West with the memory of the Cultural Revolution still fresh in their minds were attracted to the already dominant and, in the early 1980s, increasingly influential free market approaches within Western academic economics. Many returned to China eagerly advocating a faster pace of reform.

3. The SOEs: Service and Demise

It's widely accepted that in most industries, state owned enterprises tend to use resources less efficiently than do privately owned ones. But conceivably the efficiency difference between private and state owned enterprises might be relatively small in an environment of market competition and budgetary discipline (Vickers and Yarrow, 1991). In this section, I argue that in the China of the 1980s and 1990s SOEs operated below their hypothetical efficiency potential due to the particulars of policy. In brief, the state used the SOEs as a vehicle for maintaining urban social stability while promoting rapid economic growth. Making the SOEs a cushion for reform contributed to the inevitability of their demise (Putterman, 1992; Dong and Putterman, 2000).

SOEs were the backbone of Chinese industry into the early 1990s, and output could not have grown as rapidly without their sustained production. But SOEs performed at least as important a function for China's leaders in the social and political domain: they were the backbone of urban social stability, supplying what grew to be more than a hundred million employees with stable wages and benefits. A test of the efficiency *potential* of state ownership in a market setting could not be carried out under such conditions.

Until the early 1990s, state employment was by far the best deal available to Chinese workers, and a deal which could never have been maintained in a competitive labor market. Econometric estimates suggest that a large majority of SOE workers were not overpaid relative to the value of their marginal products (Parker, 1999, Dong and Putterman, 2002). They were, however, paid more than their opportunity cost to the economy, implying that a market equilibrium would have seen both lower wages and more jobs (Zhuang, 1996).

In order to assure SOEs' abilities to maintain employment and benefits to workers even as state-state and state-non-state competition eroded SOE profits (Naughton, 1992), China's government kept SOE budgets soft and funneled capital to them through a banking system still directed by the state. Although the government finally began to withdraw its financial largesse from the SOEs after 1992, it did not withdraw quickly enough its demand that they maintain employment, wages, funding of pensions, housing subsidies, and large tax payments (Dong and Putterman, 2002). The consequent financial losses made local governments anxious to transfer small and medium SOEs to private owners.

Returning to figure 1, the somewhat more autonomous, more profit-oriented SOEs of the 1980s can be conceived of as major components of the "market socialism" with which China's economy rendezvoused on its way to a more radically reformed economy. But in retrospect, they might also be visualized as one of the engines of the rocket that propelled China out of the orbit of both socialisms. Having spent their fuel to maintain urban social stability and to keep production on a course of steady growth, most of the SOEs were jettisoned from the social sector in the late 1990s as China's economy sped onward toward its destination, a market economy composed mainly of privately owned enterprises.

4. Can Market Socialism Work: What Evidence from China?

How might a market socialist system have performed in China if the SOEs had *not* been kept on "life support" to fulfill social and political functions, if banks had been allowed to make loans according to financial criteria only, and if the government had maintained a strict policy of barring the existence of large scale firms having mainly private ownership? China's experience seems to provide evidence of the potential adequacy, if not optimality, of local public ownership in a market environment. I've argued elsewhere that large numbers of township and village cadres responded to the disequilibrium opportunities existing in China at the end of the 1970s in genuinely entrepreneurial fashion (Putterman, 1997; see also Walder, 1994). Many studies found SOEs to be increasing their technical efficiency under the influence of profit retention incentives, increased managerial autonomy, and manager contract systems (Rawski, 1994; Groves, Hong, McMillan and Naughton, 1994, 1995; Jefferson and Singh, eds., 1999).

Were these only marginal improvements, possible only for as long as China was taking its first steps away from the still less efficient system of public ownership without markets? Not necessarily. China's experience offers support for the argument that the competitiveness of the environment is as important as who owns the firm. One can't rule out that efficiency would have increased further had China proceeded to harden budget constraints and make banking too a market driven sector, while inviting into its markets only the smallest fully private firms and requiring large firms to operate under forms of collective or local public ownership. Property rights could have been further "clarified," as the phrase went, without assigning them to individuals. For example, township enterprises could have become genuinely collective by increasing the effectiveness of

local democratic control over township governments and requiring those governments to compensate residents for their contributions to collective capital accumulation if they moved to a city. SOEs could have transitioned to a shareholding system in which various public entities, including municipal and provincial governments and publicly owned banks and insurance companies, owned clear numbers of shares, and had proportionate control in electing board members. Under ideal conditions, these owners might have demanded a focus on value maximization from the board members whom they elected.[2]

The ideological and cultural environment was probably wrong in a China still emerging from pre-reform excesses, under a government with no history of democracy, and at an historical juncture at which the desire to overcome poverty and catch up with more advanced economies took precedence over everything else (except perhaps the Party's continued rule, not a conflicting goal in the short to medium run in any case). In the final analysis, to be sure, there may well be limits to the strengthening of entrepreneurial and managerial incentives when collectivities of citizens are the ultimate principals in the agency relationships central to a modern financial system.[3] But future citizens of more prosperous societies who, for whatever reason, might wish to limit private ownership of productive resources while preserving the beneficial qualities of market competition, need see nothing in China's experience to demonstrate that such a system cannot work tolerably well.

5. Why has China's Economy Grown so Rapidly?

If a successful experiment with market socialism isn't the main explanation for China's rapid growth since 1979, what is? For some economists, the explanation for China's rapid growth lies in liberalization and opening quite generally, including the creation of a space for private enterprises. But surely liberalization by itself is not enough to explain China's success. Most of the countries of sub-Saharan Africa, Latin America, and the Middle East never had centrally planned economies, and most have been reducing state ownership of industry, government marketing monopolies, tariffs, and overvalued exchange rates, since the mid-1980s. Yet almost none can match China's record of economic growth in the past quarter century.

I suggest that liberalization is one of *four* main engines that have boosted China's economy onto its high growth path. The other three, all of roughly equal importance, are (a) the proximity and the blood and cultural ties of many of the other high growth economies of the world; (b) the strong societal capabilities inherited from centuries of civilization, an inheritance partly shared with those neighbors; and (c) favorable

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[2] Whether public owners can be effective monitors of firm performance is an open question. In a careful study of U.S. corporate governance, Qiu (2003) found that public pension funds such as California's CALPERS seemed in fact to be more effective than any other group of shareholders in preventing firms whose shares they owned from engaging in value reducing merger and acquisition activity. There is a small literature on public ownership in market socialism touching on governance issues, including Bardhan and Roemer (1993) and Wright (1996).

[3] In Putterman (1993), I argue that public owners are unlikely to match the efficiency of private ones as long as polities are large, because the financial system then consists of principal-agent relationships in which the ultimate principal is a citizenry whose individual members have strong incentives to free ride.

adjustments made to China's pre-1949 "initial conditions" during the thirty years *before* market-oriented reform. Factor (a) is familiar to most readers, and I wish to concentrate my discussion on factors (c) and (b), which are less commonly considered.

A key finding of the economic growth literature of the past fifteen years has been that poorer countries grow faster than richer ones, as predicted by economic theory, only after controlling for certain institutional and other factors. But which factors are the most important ones to control for? A nice way to introduce the factors I wish to emphasize is to cite Moses Abromovitz's remark that "a country's potential for rapid growth is strong not when it is backward without qualification, but rather when it is technologically backward but socially advanced" (Abramovitz, 1986).

In a series of papers, various co-authors and I have argued that an empirically important determinant of the societal capacity for modern growth is the timing of the transition from the pre-agricultural band to the agrarian state form of social organization, and the subsequent progress of development prior to the era of modern industry. The transition to agriculture took place at very different points over the past four thousand years in different parts of the world, with Eurasian societies around the Mediterranean, the Near East, South Asia and China completing it earlier than most of sub-Saharan Africa, the Americas, and Oceania. Regions also differed in their subsequent histories, with parts of Northern Europe emerging as centers of civilization toward the end of the Medieval era, lands with small or decimated aboriginal populations such as the U.S. and Australia giving rise to transplanted Northern European societies after 1600, and areas such as Egypt, Persia and India manifesting relative stagnation or retrogression as modern times approached.

Burkett, Humblet and Putterman (1999), Bockstette, Chanda and Putterman (2002) and Chanda and Putterman (2004) estimated cross country regression models explaining the rate of growth of per capita output during 1960 to 2000 as a function of initial income, investment, education, population growth rate, and assorted indicators of pre-industrial development. These indicators—population density in 1500 and 1960, cultivated land per farmer, the share of agricultural land irrigated, an index of government above the level of the tribe covering the years 1 to 1500 or 1 to 1950 C.E., and the estimated date of the transition to agriculture from food gathering and hunting—were all found to be good predictors of the late 20th century rate of economic growth. For non-European countries, the rate of growth between 1500 and 1960—the era of European colonialism—was *inversely* related to early development (Acemoglu, Johnson and Robinson, 2002, Chanda and Putterman, 2004). But once European colonial domination receded in the post-War era, countries that had had an earlier start on technological, economic and social development again grew more rapidly, so that by the end of the second millennium, early starters (those that made the transition to agriculture and the state earlier) were once again in the lead in terms of per capita income (Hibbs and Olsson, 2004) and especially rate of economic growth (Chanda and Putterman, 2004).[4]

[4] Somewhat parallel to these findings is Temple and Johnson's (1998) discovery that developing countries with higher indices of modernization as of the early 1960s achieved higher rates of economic growth during 1960 to 1985.

The application to China is straightforward. Existing research suggests that agriculture began in China by or before 7,000 B.C.E., possibly the earliest of the independent appearances of crop production outside the Fertile Crescent.[5] From that time to the beginning of the Common Era, China went through a classic progression from crop cultivation to formation of settled villages to development of writing and metallurgy and growth of first small and eventually large scale states. Over the centuries, the successful Yellow River civilization spread to absorb or push aside the numerous non-Han ethnic groups inhabiting the vast expanses to that river's south, also influencing the development of civilizations in Korea, Japan, and Southeast Asia. By the time that Europeans such as Marco Polo made contact with China in the 13th century, the country was arguably the most advanced in the world in terms of agricultural and other scientific techniques, use of currency, printing, and complexity of urban life, and it was among the world's leaders in knowledge of astronomy and mathematics. China was a pioneer in establishing principles of public administration including a system of meritocratic recruitment of officials based on tests of literary knowledge. In Marco Polo's day, by contrast, many peoples of the Americas, sub-Saharan Africa, Australia, New Guinea, the Philippines, and Oceania, had no written language, no government above the level of the tribe, no man-made currency, no use of plows and draught animals (Diamond, 1998).

Although China did not become a European colony after 1500, it did experience a "reversal of fortune" much like those of the other densely populated, relatively urbanized non-European societies studied by Acemoglu, Johnson and Robinson (2002). But like other such countries, including South Korea, Malaysia, Thailand, and most recently India, China has experienced relatively rapid economic growth in recent decades.

From the 1950s until recent years, China also enjoyed relatively modest levels of inequality and of conflict among socioeconomic classes, factors that were associated with retarded growth in much of Latin America. The hacienda and plantation systems associated with economic inequality in that region and in the Philippines never existed in China, and much of the economic inequality that existed among Chinese prior to 1949 was suppressed until the 1980s by the policies of China's Communist government. China enjoyed a modicum of social stability and a government interested in broad-based economic development rather than in protecting the position of a small property-owning class.

Other aspects of China's experience from the 1950s to the 1980s contributed to rapid growth in the reform era. While it's common to see statements to the effect that the first thirty years of Communist rule in China were nothing but an economic and human disaster, such statements are inconsistent with the actual record. One may justify a negative view of the C.C.P., at whose doorstep lies the blame for the massive Great Leap famine, the persecution of those with the "wrong" class background or political leanings, and the repression of intellectuals and free thought. And one may be critical of the heavy industry centered industrialization strategy of the Mao era. Yet during the first decades

[5] Agriculture is thought to have reached Egypt, Europe, and possibly Persia and India from the Fertile Crescent, while its independent origins in the New World were considerably later than those in China.

of Communist rule, China's rate of capital formation was raised from below 10 to over 25% of GDP, the foundations of many industries were established, basic sanitation, access to health care, and primary education were expanded, and a century or more of net stagnation of per capita income gave way to modest growth. Along the way, China accrued some assets that bore still more fruit after the start of market-oriented reforms.

However lopsided China's industrialization strategy was, it did put in place capacities for producing steel, chemicals, and machinery that could continue to be built upon in the reform era. While China was establishing producer goods industries in the pre-reform decades, most other developing countries were trying to foster industrialization by substituting home production for imported light manufactures, a strategy (known as import substitute industrialization) that usually left them indebted and dependent on capital goods from abroad. The sustaining of investment at levels of more than 25% of GDP in virtually every year since the mid-1950s was originally, at least, a centerpiece of China's forced-draught industrialization strategy, and undoubtedly one of the lynch-pins of China's growth.[6] Advances in the basic education status of China's population, however much higher education and free thought were neglected or suppressed, made easier the subsequent training of large numbers of Chinese in both applied and scientific fields. And for all the political instabilities of the first thirty years of Communist rule, China built up administrative capabilities that, in the reform era, gave it an efficacy matched by only a few "developmental states." China's anti-natalist policies helped to check population growth and to raise the rate of growth of per capita income. And China's government was arguably the most successful in the Communist and ex-Communist worlds in managing a transition to a market economy without a major decline in incomes and with only modest levels of inflation.

China's fast growing rural industry is an example of a leading sector in the reform era that owed much of its existence to pre-reform era policies. The early township and village enterprises were continuations of commune and brigade enterprises whose output value had already been growing at a rate of almost 26% a year between 1970 and 1976 (Byrd and Lin, 1990). The commune system gave commune and brigade leaderships in better-positioned localities the ability to direct into industrial investment substantial amounts of capital that would most likely have ended up in some combination of consumption and petty enterprise had it been paid out to households. The very imbalance of China's pre-reform economy, with the disproportionate utilization of capital in large scale heavy industry and the relative neglect of consumer goods, meant that in the 1980s there were large unfilled niches that rural industries could fill, whether as independent producers, as subcontractors to state enterprises, or as partners of foreign firms wanting to carry out labor-intensive production for export (Putterman, 1997).

6. Conclusion

[6] Note the large literature beginning with Alwyn Young (1995), who found that high rates of formation of capital, rather than high rates of technological change, bear most of the responsibility for high growth in east Asia.

During the first decade and a half of market oriented reforms, China's economy was simultaneously becoming more market socialist in character but also more of a mixed economy, with an increasing role for private ownership. By the mid-1990s, China was leaving its rendezvous with market socialism behind as it headed onwards towards a more fully capitalist economy, albeit one with a heavy dose of state management and lingering vestiges of previous institutions. Some remnants of market socialism, including what remains of the state sector and considerable state ownership of former SOEs converted to shareholding firms, are still present in 2005, but change continues and its direction is clear.

What lessons about market socialism can be extracted from the Chinese experience? China's encounter with market socialism was severely compromised by the role assigned to the state sector as a social and political buffer for reform. Even so, forms of public ownership showed considerable dynamism during China's first fifteen years of market-oriented reforms. The Chinese experience suggests that market socialism cannot be established as a lasting institutional framework without legal and constitutional constraints. How well market socialism might perform under the best of circumstances remains a matter of conjecture, but China's experience falls short of demonstrating such a system's impossibility.

A few enthusiasts of the market socialist concept have looked to China's impressive economic growth during the period in which it approximated such a system most closely for evidence of its efficacy. But much of China's growth since 1979 is attributable to the private side of an increasingly mixed economy, and other key factors explaining China's growth since 1979 are independent of the particular institutions of the post-1979 period. Importantly, China has exemplified Abramovitz's assertion that a lagging economy is most likely to catch up when it has strong social capabilities to draw upon. While investments in physical, human, and organizational capital in the Mao era have also played their parts, a large part of the reason why China has grown more rapidly than Congo, New Guinea, Nicaragua, or many other poor countries, can be found in factors that differentiated their respective societies well over a century before Deng Xiaoping set free his famous black cat.

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