The Great Wall of Chinese Economy: Capital Controls

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1. Introduction

The Great Wall of China originated as a defensive fortification to protect the Chinese Empire from atrocious raids by nomadic tribes on the northern frontiers. The Wall was modified and rebuilt throughout history by each reigning Chinese dynasty in an attempt to ward off brutal invaders. Indeed, the Wall served as an efficient military defense for centuries. However, it was only when a dynasty had weakened from within that intrusion from outside was able to advance and succeed. In the 13th century A.D., even the ferocious Mongol warriors took two years to break through the Wall. Both the Mongolians (Yuan Dynasty) and the Manchurians (Qing Dynasty) were able to take power in China because of its government's corruption and the resulting poverty of its people but never due to weakness of the Wall. When the Manchurians took control of the country, the Wall ceased to have strategic significance since the Empire extended well north of the Wall. Today, the Wall with no military role to play has become a national symbol of China and a great wonder of the world.

But now a new, insidious intruder – the electronic army of currency and security traders, is coming from a different direction – across the sea. They are launching a new, sinister attack on China, not on its territory but on its currency – RMB. These speculators are trying very hard to break up China's capital controls which have functioned as the Great Wall of its fast growing economy. Capital controls, closely related to exchange controls, take the form of price mechanisms or quantity restrictions on international transactions in financial or real assets. China was compelled to give up its long held dollar pegging in July 2005 and the RMB has since appreciated continually and rapidly, with an adverse long-run impact starting to manifest itself. Prominent American economist, McKinnon (2005), drew a vivid parallel between the 1839 British Opium War against China and the ongoing American "Currency War" on the Chinese economy. China gave in in 1858 to legalize foreign drug trafficking in the country, and did so once again in 2005 to permit some "flexibility" of the RMB exchange rate; will it give in more later on? While insatiably pushing for a complete disarmament of the talismanic shield of Chinese enterprises – the fixed exchange rate regime, foreign powers have been mobilizing a huge amount of hot money for speculative attacks by circumventing the Great Wall of China's economy – capital controls, which actually became increasingly leaky before they are under siege now. It seems that the leaks are becoming a flood when China's financial officials are being pushed around by foreign pressure or demagogy that tries to make them lose their heads.

The recent crises attributable to financial deregulation and market liberalization have rekindled interest in the use and study of capital controls. Debates on the topic get intense when associated with exchange-rate policy. Especially, no topic in international monetary economics has been more hotly debated over the past 5 years than China's foreign exchange (forex) policy (Goldstein, 2005). All those debates really boil down to the relationship between financial markets and national governments to determine just who should control the world economy that directly affects economic interests of all nations. The

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economic orthodoxy asserts that markets are good for economic growth and efficiency under financial integration and market globalization. World agencies such as the IMF and the US Treasury have impatiently pushed developing countries headlong into financial liberalization by making capital controls a taboo subject for use and study. However, some of economics profession, such as Nobel Laureate Joseph Stiglitz (2010), has stood up to these market-obsessed assertions by raising questions about the dangerous risk of premature liberalization. Many have come to realize that flighty markets could be bad for economic safety and stability, given the weak financial systems of developing countries. Staggering reform of China's forex policy also has to do with its fragile banking sector and infant capital market, but its difficult reform is being disturbed and attacked by heavy unreasonable outside pressure.

This paper intends to tackle issues in relation to capital flows and market integration. We will encroach on the politics as well as the economics of those issues or problems, and on theoretical modeling as well as policy analysis. The rest of the paper is structured as follows. Section 2 builds a simple game model of capital mobility that challenges the orthodoxy. Section 3 questions arguments for capital market liberalization. Section 4 argues the bankruptcy of market myth. Section 5 concludes the paper.

2. The Model

Speculators like Gorge Soros moving capital in and out abruptly intend to seek out arbitrage profits, so that their brain, though unconnected with economic fundamentals, is very good at taking advantage of policy inconsistencies. Now that, understandably, they need capital markets to be liberalized without restrictions on their selfish and erratic actions, why then many economists are so enthusiastic about market liberalization? One cannot assume that market hardliners among economists are all professionally immoral or scientifically irresponsible, wanting to benefit themselves or their own nations at the cost of developing countries through promoting market liberalization. Most of them must be academically honest and intellectually respectful. The problem is that the economics models they have used may be wrong, given so many market failings and their resulting economic crises. The mainstream economics of capital liberalization rules out capital controls as a rational policy option, because the existing theory is ignorant of the decisive impacts on policy-making of a country's strategic reactions to possible financial risk arising from capital flows. It is worthwhile to clarify this issue theoretically. Consider a simplified game-theoretic model involving two identical nations: A and B, with two options available for the capital-account regime: open or closed.

Table 1 Payoff Matrix for Two Nations with Two Capital-Account Options

		Nation B	
		No Control	Controls
Nation A	No Control	(a, a)	(b, c)
	Controls	(c, b)	(d, d)

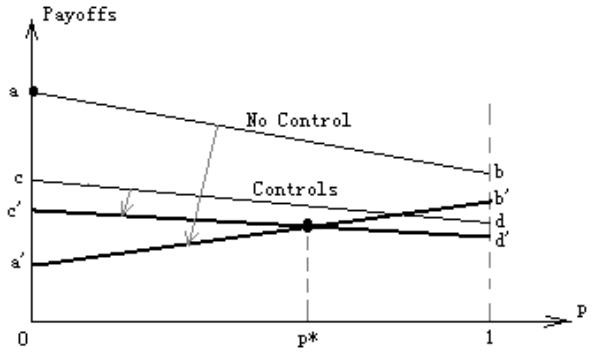
Assuming for the moment that there is no financial crisis, the payoffs are specified in Table 1 where the 1st (/2nd) payoff in each pair of brackets goes to Nation A (/B). The payoff to Nation A with no control should be greater when confronting Nation B with no control either, than when Nation B imposes controls so as to obstruct Nation A from acquiring capital-flow benefits, i.e., $a > b$, since on the latter occasion Nation A cannot invest in or receive investment from Nation B. The payoff to Nation A, if controlling its capital account, is supposed to be larger when dealing with Nation B with no control, than when Nation B also closes its capital account, i.e., $c > d$, because Nation B with no control benefits from capital flows with other nations than Nation A and may thus have an ability to import more from Nation A, but this spillover effect will vanish if Nation B imposes controls. If the game is symmetric without a third nation involved in the background, there should then be: $b = c$; otherwise, we may have: $b > c$ because Nation A, if opening up, can capture capital-flow benefits from other nations than Nation B which keeps up controls, but Nation A will lose such benefit if closing its own capital account to any nations. As will be seen, nevertheless, it is not important to our result whether $b = c$ or $b > c$.

Obviously, assuming away the possibility of crises, it is easy to find that there is a dominant strategy as the

equilibrium outcome of the above game. This is a pure-strategy solution: (a, a), i.e., each nation chooses to open its capital account. This result is, however, too naive to be realistic since a country is capable of learning from past crises or other countries' ex post experience so will incorporate its perceived likelihood of crises into its ex ante policy-making about whether to open its capital account. South Africa terminated its financial liberalization in 1996, Malaysia re-imposed capital controls in 1998, and China postponed its forex reform after the Asian crisis, for example. As is urged by Stiglitz (2010), economists have to take into account the impact of risk learning on a country's decision-making.

The expected loss from potential crises is reflected in the altered payoff matrix of the game. Payoffs will drop substantially for nation A with no control and hence no immunity against the crisis, no matter what the other nation does; i.e., a' << a and b' << b, where a' and b' denote the payoffs to Nation A when Nation B opens and closes its capital account, respectively, and "<<" means "much less than". The decline in a is even greater than that in b due to the contagion effect. In contrast, payoffs may fall by only a little for Nation A which imposes controls and thus reduces the risk of crises. Nation A will suffer small payoff reductions from c to c' and from d to d', respectively, when Nation B liberalizes and restricts capital flows. In this case, one needs to investigate a mixed-strategy game by assuming that a nation, say B, may choose capital controls with probability p. The Nash equilibrium strategy for Nation B (also for A) in this game, denoted by p*, is depicted in Figure 1 below.

Figure 1 Strategic Interactions between Two Nations Facing Financial Risk



One thus far has understood that a country's optimal choice of the capital account regime is not so simple as in the pure-strategy equilibrium, but should be a mixed-strategy equilibrium p* (> 0) after considering the risk of crises. This is an inexorable outcome from strategic interactions among rational countries when facing volatile capital flows. Furthermore, it can be (but is not to be) illustrated in Figure 2 that a country has a stronger incentive to use capital controls the higher the risk of crises gets. The solution p* can be interpreted either as the optimal probability of a typical country choosing controls or as the equilibrium percentage of countries that adopt controls.

3. Questioning Arguments for Capital Market Liberalization

In spite of the prevailing ideology for financial liberalization held and spread by the IMF and the G7 countries, not all economists agree that all countries should liberalize their capital controls. It is noteworthy that even Krugman (1998) can get "radical" by admitting that currency controls are a risky, stopgap measure, but some gaps desperately need to be stopped in a despairing case like the Asian financial crisis. As a matter of fact, the problem actually began with free capital mobility. Stiglitz (2010), among other IMF critics, has ever launched a series of attacks on capital market liberalization. We raise the following questionings about the liberal doctrine by using observed evidence.

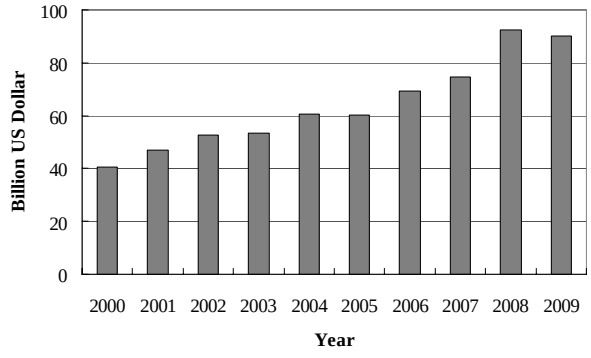
(1) The argument for capital liberalization in getting access to much-needed foreign financing for real investment is largely fallible. In the case of East Asia, the savings rate usually ranges from 25% to 40%, and some countries like Singapore are actually trying to shift money out since it is difficult for domestic investment to absorb these domestic savings. Take China. With an extremely high rate of savings close to 50%, it has a hard time already investing all these savings inside its economy. While having purchased a huge amount of the US government bonds, China is now encouraging domestic firms to invest abroad. For years, China does not need outside funds, but they are managing to squeeze in for

easy and quick profits from strong growth while making trouble by creating excess liquidity, market distortions and economic bubbles. In this case, one can hardly expect this short-term kind of foreign capital to bring in advanced technology and healthy competition that will promote economic efficiency.

(2) The argument for capital liberalization in diversifying the source of funding, encouraging risk-sharing and enhancing economic stability is obviously fallacious. As we have seen over and over again, short-term capital flows are pro-cyclical rather than counter-cyclical. When economic performance is good, foreign capital rushes in to cash in on the opportunity. However, as soon as the economy is in bad shape and urgently in need of finance, they pull their money out drastically for fear of defaulting as happened in Indonesia, Korea and Thailand, thereby exacerbating the economic downturn. When exiting, they always blamed your economic policy to have been unsound to justify their damaging actions. The very pro-cyclical nature of these capital flows reinforces boom-bust cycles, and even causes financial turbulence giving rise to an economic crisis.

(3) The argument that you will not attract foreign investment unless you liberalize your capital account is so wrong-headed that it is almost embarrassing to discuss it. One typical counterexample against this argument is China, which has yet to liberalize fully its capital account but has been most successful in attracting FDI whose amount has even surpassed that of the US that enjoys perfect capital mobility. It is China's steady growth or sustainable prosperity that attracts inward FDI, and its capital controls have no adverse effect on it at all.

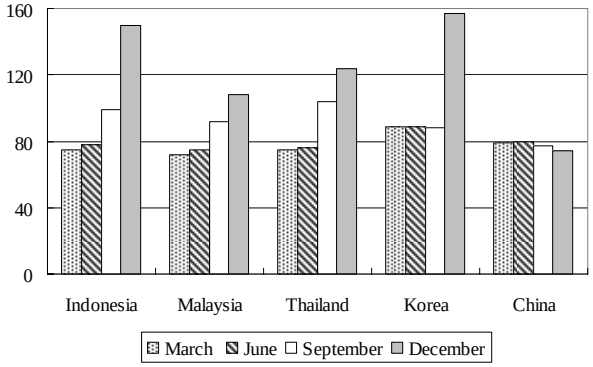
Figure 2 Growing FDI in China



Source: *China Statistics Yearbook* (1991-2007)

(4) The argument that capital liberalization can promote economic growth is utterly groundless. There is no documented causal link between liberalization and growth but there is plenty of evidence that financial liberalization brings about economic instability. With capital account restricted, East Asia had maintained a remarkable history of relative economic stability before the 1997-1998 financial crisis. Two countries involved in the crisis had not seen a single economic downturn three decades before the crisis and the other two had experienced only a one-year downturn in that period. These economies grew faster and developed more steadily than any OECD or industrial countries. After being pushed into premature capital market liberalization, they turned very vulnerable to financial volatility and were plunged into a chaotic recession following the crisis. Capital controls, many believe, saved China, India and Vietnam from this disastrous consequence. When all affected Asian countries devalued their currencies, China kept its exchange rate fixed while adopting a fiscal expansion to maintain its strong growth and ability to import from these economies, thus helping them to recover and grow again.

Figure 3 Exchange Rates of 4 East Asian Countries in 1997



Source: Radelet and Sachs (1998)

(5) The argument that capital liberalization leads to more policy transparency which reduces uncertainty and to market discipline which raises policy prudence is completely pointless. Although transparency is surely a good thing, it certainly does not inoculate an economy against destructive volatility if its currency is attacked by occult speculators who abuse the freedom of capital flows. The recent crises that took place in Scandinavia involved

countries such as Finland, Norway and Sweden, all of which were known as having the most transparent political and economic systems in the world. Also, the discipline of capital markets provides no protection against a financial crisis and makes no sense at all to policy soundness.

4. Bankruptcy of the Market Myth

Orthodox economics, with certain fundamental errors in its theory going unnoticed, deifies the market as the Omnipotent which can establish equilibrium and so achieve efficiency, and hence there is no need for any government intervention such as capital controls. Some market fundamentalists have blind faith in the market as a versatile ‘invisible hand’ which can restore long-run equilibrium via short-run adjustment to various shocks or distortions, but none of them can tell how long the ‘long-run’ is and how short the ‘short-run’ is. Their doctrine is that as a magic cure, market discipline can kick in to solve all problems in the case of international imbalances, so that forex intervention, international policy coordination or capital controls are, if not ineffective, unnecessary or inefficient. However, the convincing truth is that equilibrium is ideal but imaginary or transitory while disequilibrium is real and persistent or permanent. The hard fact is that the market, though working in some aspects (with good effects widely exaggerated), did not work its magic in others, for certain problems have remained unsolved without government efforts. Moreover, it is the market which has created many problems and made them more serious and persistent.

Under no capital control, markets indulge governments in reckless borrowing and the public in profligate spending in rich countries, thus depressing the saving rate, creating large budget and current-account (twin) deficits. Markets not only encourage imprudent policies but also make the resultant imbalances worse and sustainable indefinitely. At times, markets exercise discipline fickly and then correct themselves abruptly with painful consequences. Under the Bretton Woods system, trade deficits had to be financed out of official reserves, making it impossible to run big deficits. Fiscal policy had to be tightened to bring current account back to balance before reserves were exhausted. Yet increased capital mobility, removing this constraint, has permitted twin deficits to be bigger and sustained for longer. Current-account imbalances as a proportion of GDP in industrial countries have thus increased sharply over the past two decades. If capital account is closed, higher interest rates have to be paid to persuade domestic investors to hold more bonds. But greater capital mobility gives governments more freedom to borrow more easily since even a small rise in interest rates will quickly attract unlimited overseas funds.

Liberalized markets for short term liquid capital behave badly as irrational casinos engaged in an orgy of speculation, and often depress economic growth by disturbing long-term real investment. Markets, manipulated by selfish speculators interested only in making huge fortunes, are largely divorced from economic fundamentals and indifferent to broader socio-economic concerns. Since financial liberalization or deregulation actually gives the green light to speculative capital, it can enter quickly to chase profits and also can exit swiftly to avoid losses so that such financial volatility inevitably causes economic instability. It is then no coincidence that such instability has increased enormously over the past three decades, in which period approximately 100 countries have experienced an economic crisis. Firms cannot invest in an economy that may go up and down overnight, or otherwise will require a higher risk-premium on their long term real investment as compensation for greater instability. Investment will decline and growth must slowdown if the country is unable to provide high enough returns to cover this fattened premium. Since wider financial liberalization has brought about more frequent crises since the 1990s, ordinary people have suffered more from the resulting economic recessions.

Global capital market not only weakens a national government’s ability to steer its economy in terms of policy choices available and the effectiveness of policies conducted, but also unnecessarily complicates policy efforts so as to create uncertainty about stabilization effects and to increase the scope for mistakes. The market has no ability to smooth cross-country differences in productivity growth, so that international imbalances will remain and even deteriorate as the difference gets larger.

In the case of the Asian financial crisis, the policy dilemma caused by freed capital markets was apparently painful. The swift capital withdrawal led to currency collapse and to steep reductions in investment and growth. Interest rates were raised very high in some countries, as recommended by the IMF, in order to stabilize currencies and reassure investors, but the higher rates sharply dampened economic activity and forced many firms into bankruptcy, thus leading to further depreciation, more outflows and deeper recession. Other countries aggressively lowered interest rates to stimulate activity under no capital control, but the resulting depreciation scared investors away and caused financial meltdown or massive bankruptcies of firms which had borrowed in foreign currency without hedging currency exposure. Restrictions on capital markets, however, made China and Vietnam largely insulated from such policy dilemma and economic disaster.

It is seen from Japan's experience that after floating the exchange rate and removing capital controls, Japan's fiscal and monetary policy becomes a powerless hostage of forex policy which is hijacked by the global capital market which in turn is controlled by the dominant world superpower. The right logic is that forex, fiscal and monetary policies can be related in their use to each other so that foreign manipulated market attacks on the exchange rate entail domestic government interventions and the use of fiscal and monetary policy. Given that the government's ability to fine-tune economic cycles is limited by markets with the near-impossibility of getting the timing and size of policy efforts right, it is probable even inevitable to make serious policy errors; it is then the market not the government which is to blame. Japan's long depression was seemingly caused by its policy mistake, which actually was an America problem transmitted via market integration to Japan. The source of the problem does not lie with the undervalued yen reflected by large Japan trade surpluses, but with the US saving deficiency and reckless foreign borrowing which manifested unbalanced competitiveness between the US and Japan. America shifted off the loss of its foreign competitiveness under the Bretton Woods system to Japan at the latter's cost by making use of markets. The natural relative-wage mechanism for international adjustment to productivity differences was thus destroyed; as a result, Japan was thrown into a long deflationary slump from the 1990s to the present day, with a zero interest liquidity trap making monetary policy powerless to revive the economy.

5. Concluding Remarks: Merits of Capital Controls in Correcting Problems of Capital Flows

We thus have understood that the arguments for capital market liberalization are economically unscientific. We also have seen that market forces have been misused by foreign manipulators to benefit themselves while hurting national economic interests. So, it is time for governments to take over power from markets in order to bring order out of chaos. Also, it is important to fully recognize the merits of capital control summarized below and treat it as a serious policy option.

(1) Capital controls preserve domestic savings for domestic use, facilitate the taxation of investment income, and block capital flight during economic recessions, political turbulence or social turmoil. Without controls, savings of domestic source might invest disproportionately overseas to seek out higher returns or escape from taxes, and corrupt officials or economic criminals could easily smuggle public money out of the country.

(2) Capital controls protect domestic underdeveloped industries from foreign competition before they grow to an efficient scale to compete in world markets. This protection is inevitable for many developing or emerging economies since their infant sectors are much less efficient than their foreign counterparts so will be unable to compete on an equal basis. If capital mobility is allowed in a laissez-faire manner, a nation's finance can be easily controlled by foreign moneyed interests that are better at manipulating massive capital flows. With the national economy dominated by international capital, the financial system cannot be utilized to support the country's favored industries, and domestic employment and national welfare will be adversely affected. With the increased concentration of market power in the hands of international financiers, the interests of domestic labor will

be undermined and inequality of income or wealth distribution could be deteriorating.

(3) Capital controls provide the least disadvantageous solution to the destabilizing effect of capital flows on poorly regulated financial systems. In the case of the declining demand for domestic goods and assets coupled with a capital outflow under a fixed exchange rate, the country may raise interest rates to make its assets more attractive or devalue the currency to lower the prices of its goods and assets. But, this can provoke a fear of economic slowdown and policy inconsistency that may lead to a greater capital outflow and an unavoidable recession. Also, the banking sector will be badly hurt for three reasons. First, the higher interest rate increases the cost of funds for banks and the economic slowdown reduces loan demand to create more nonperforming loans. Second, banks are burdened by the devalued currency with heavier debts if having borrowed in foreign currency. Third, capital flows exacerbate banks' inherent problem of moral hazard (distortions) that can put the whole banking system in danger esp. when deposit insurance is badly administered. Moral hazard arises when banks have a perverse incentive to make risky loans because their losses are limited only to owner equity (very small relative to assets) but potential profits are unlimited.

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