11 Policy traps and the linkage between China’s financial and foreign exchange systems

Thomas F. Cargill, Federico Guerrero, and Elliott Parker

Introduction

In the past quarter of a century, China has made rapid and significant progress towards becoming an important part of the world economy. With a quarter of the world’s population, China now produces at least 3.5 percent of the world’s GDP, which makes it the world’s sixth largest economy. In its drive for growth, China has followed a development strategy that was previously charted by some of its Asian neighbors, particularly Japan and South Korea. Like South Korea (hereafter, Korea) before the 1990s, China exhibits many of the features of the early postwar Japanese financial regime (Cargill and Parker, 2001), and China shares an export orientation that is helped by a fixed and, many perceive, undervalued exchange rate. As a result, China now accounts for almost 5 percent of the world’s exports. China’s recent admission to the World Trade Organization (WTO) and its rapid growth record suggest its economic importance will only continue to increase.

One manifestation of China’s development strategy is the increasing conflict over trade imbalances between China and the US, reminiscent of the conflicts in the past with Korea and Japan. Though China purchases less than 4 percent of US exports, it provides 11 percent of US imports and accounts for 20 percent of the US trade deficit. As Figure 11.1 demonstrates, the US bilateral trade deficit with China has been steadily growing as a share of GDP. In the past year, China has overtaken Japan to become the third largest exporter to the US, behind Canada and Mexico, and together these three economies account for over half of US imports. In some specific labor-intensive sectors such as toys and textiles, China is a dominant player, and China has even begun to make inroads into some high-tech sectors and in services.

China is thus increasingly blamed for the rising US current account deficit, which reached $500 billion in 2002 and is currently projected to exceed that amount in 2003 (though economists tend to argue that this deficit may be better explained by the rising fiscal deficits of the US federal government and a falling rate of domestic private savings).
is also being blamed for the decline of 2.5 million jobs (or 16 percent) in the US manufacturing sector between 2000 and 2003. Of course, Japan, France, Norway, Switzerland, and Canada, among other nations, continue to run equal or larger overall current account surpluses than China; yet China is also a net recipient of capital inflows and was the largest accumulator of foreign reserve assets in the world in both 2001 ($47 billion) and 2002 ($75 billion).

In this chapter, we argue that China’s financial structure and its export orientation are both connected to its gradual transition from a reliance on socialist institutions and state-owned enterprises, but that its experience also mirrors some of the past experiences of Japan and Korea. China is a financially repressed economy with a high savings rate, and like Japan’s keiretsu and Korea’s chaebol, China’s large firms have had privileged access to bank lending, which has in turn created a vicious policy trap of forgiveness, forbearance, inefficient investment, and bad debt. Like Japan before the 1970s and Korea before the 1990s, China has a fixed and undervalued exchange rate regime with a largely closed capital account, resulting in current account surpluses, rapid growth, and the accumulation of foreign exchange reserves. We argue in this chapter that this development strategy creates policy traps which make it difficult for the government to change policies; the financial system creates a vicious trap, while the exchange rate regime creates a virtuous trap that provides the government

**Figure 11.1** US current account balance (relative to bilateral trade balance with China and the federal budget deficit) (source: US Bureau of Economic Analysis; data for 2003 is estimated).
with both the opportunity to address the problems of the financial system as well as a means of delaying meaningful reform.

This chapter consists of five sections. In the next section we review the experiences of Japan and South Korea to draw lessons for economic policy in China. That is, we show how their financial and trade strategies created policy traps, and how this led to an “accident waiting to happen” scenario, particularly once they began financial liberalization. Then we review China’s economic reforms that commenced in the early 1970s and focus on the problems created by the relationship between the state-owned enterprises and the banking sector. The next section reviews China’s exchange rate regime and consider the implications of an undervalued yuan, and we argue that undervaluation combined with other export-led policies has created a virtuous policy trap that makes significant change unlikely in the near future. We then discuss general principles of shifting to a regime of capital account convertibility and apply those principles to China. We argue that if China is to avoid the “accident waiting to happen,” in the best interest of both China and the world economy, then external liberalization is not desirable until the non-performing loan and state-owned enterprise problems are resolved, both of which will require significant changes in China’s corporate governance structure and a transitional increase in unemployment. The final section closes the chapter by drawing together the main points on both the policy dilemma faced by Chinese policy makers and specific policy recommendations to prevent the type of economic and financial distress experienced by other Asian economies in the 1990s.

Lessons from Japan and Korea

China’s emphasis on export-led growth and an exchange rate regime that intentionally or unintentionally encourages exports while limiting capital flows is a strategy that follows a well-established development pattern of other Asian economies. This strategy was considered successful through the early 1990s. In both Japan and Korea, for example, this development strategy was supported by a rigidly regulated and administratively controlled financial sector and central bank policy focused on exchange rate objectives. Both of these countries eventually embarked on a path of financial liberalization and exchange rate liberalization, to varying degrees, at different points in time, for different reasons, and with different policy outcomes. During the periods where one could reasonably regard the won and yen as undervalued because of either fixed exchange rates and or heavy intervention (Korea, 1960s to early 1990s and Japan, 1949 to 1973), Korea and Japan exhibited impressive growth, as Figure 11.2 demonstrates. Japan was regarded as “Asia’s Giant” and Korea was “Asia’s Next Giant.” China appears to be following the same strategy. In the first 25 years after their rapid growth began, both Japan and Korea
increased their per-capita GDP six fold; China’s growth, however impressive, has only increased per-capita GDP four fold.

Significant differences exist. Neither Korea nor Japan were concerned with the particular problems of maintaining the legitimacy and political power of the Communist Party. While Korea lagged in democratic reforms, both countries now possess functioning democratic governments. In contrast, China’s development agenda is as much political as it is economic, and the economic objectives are themselves a means to a political end that is something less than a functioning democracy. Both Korea and Japan were also able to sustain economic growth for several decades without significant unemployment; in contrast, despite China’s rapid real GDP growth, there is a serious unemployment problem because the more efficient and dynamic urban centers cannot absorb the increasing number of workers leaving the agricultural sector and because of the decline in employment in the state-owned enterprises (SOEs).

The differences, though important, do not reduce the lessons that China can learn from the experiences of Korea and Japan with export-led economic growth development strategies. Korea and Japan show that under-valued exchange rates and other export-led strategies are beneficial to developing economies only to the extent they utilize the time to establish a transparent and competitive domestic financial system, establish a regulatory framework that limits deposit guarantees and deals with any existing non-performing loans (NPLs), non-performing borrowers, and insolvent
financial institutions. This is the virtuous aspect of the policy. Only until these conditions are satisfied can a country seriously consider allowing its currency to become market sensitive. Unfortunately, there is a temptation to postpone these reforms and either postpone external liberalization or permit external liberalization in the context of a weak domestic financial structure. This is the vicious phase of the policy.

**Lessons from Japan**

In 1949, the Dodge Line established the exchange rate of 360 yen to the dollar, which Japan adhered to until 1971 when the Bretton Woods fixed-exchange rate regime began to unravel. By the 1960s, this yen rate was generally regarded as significantly undervalued because of Japanese productivity growth and the completion of the reindustrialization process, and there is little doubt that it played a major role in Japan’s reindustrialization success and emergence by 1975 as the world’s second largest economy. These achievements, however, had a price. The rapid growth of the Japanese economy from 1950 to the early 1970s permitted Japan to maintain an inherently inefficient financial system with pervasive deposit guarantees unsuitable for a more liberated external environment.

Japan thus had good reason to resist revaluation of the yen against the dollar, even after President Nixon’s 1971 announcement that the “gold window” was closed. Dunn (1973) argues that both Japan and Germany, another country at the time with an undervalued currency and persistent current account surpluses, had powerful political coalitions supporting the exchange rate regime, and significant capital investments in export sectors. Japan also had accumulated significant foreign exchange reserves, mostly in dollars, which presaged a significant fiscal loss once the dollar was devalued. Though Japan was the last major country to admit that the Bretton Woods system had failed, by 1973 the yen appreciated to 260 per dollar, which many analysts consider to have been its parity value at the time.

After the yen floated, financial liberalization became official policy in Japan, and financial liberalization from 1976 to 1989 was gradual, incremental, and administratively directed. By 1989, Japan had achieved progress when judged against the pre-liberalization structure and the absence of the type of financial disruptions exhibited by the US and Scandinavian countries. Loan rates and large deposit interest rates were liberalized, with complete liberalization achieved by 1994. Short- and long-term capital flows were relaxed and foreign financial institutions were permitted a small, but significant, presence in the domestic system, mainly in the securities market. Corporate flow of fund patterns reflected enhanced reliance on money and capital markets, both domestic and international, and reduced reliance on bank finance. Short and long-term capital flows became increasingly liberalized until 1997, when the yen was completely...
liberalized. These changes initiated the unraveling in the keiretsu relationship between large businesses and banks or main bank system. Households had greater access to consumer and mortgage credit, and there was generally more competition between markets and securities companies.

These changes, however, paled in comparison to the reforms that would be required to render Japan’s financial system compatible with the new economic, technological, and political environment that favored more open and competitive financial regimes. Japan’s macroeconomic performance and growing export sector masked the underlying problems through the mid-1980s. The macroeconomic environment, however, began to unravel in the second half of the 1980s. In 1986, Japan entered into a period now referred to as the “bubble economy.” Real GDP grew around 4–6 percent per year, inflation was low and steady, and Japan appeared to have achieved financial liberalization progress without any of the disruptions experienced by many other industrial countries. At the same time, equity and land prices increased beyond underlying economic fundamentals. The increase in asset prices in 1985 and 1986 could be justified by fundamentals, but after 1986, asset price inflation took on all of the characteristics of a speculative bubble. The asset inflation can be traced to two factors: an easy Bank of Japan policy after 1985 and structural characteristics of the banking system rooted in the pre-liberalization financial regime.

The collapse in equity and land prices in 1991 and 1992 was initiated by the Bank of Japan in May 1989 and brought an end to Japan’s impressive postwar economic and financial performance. Japan’s “burst of the bubble economy” period commenced. Japan permitted banks to accumulate NPLs, resisted closing large banks, and resisted policies that would increase the number of bankruptcies in the real sector. As a result, the economic and financial distress continued to accumulate after 1990 which the result that in 1998, Japan came close to collapse manifested by negative real GDP growth and deflation, and continues to struggle through an extended “lost decade.”

The basic lesson from Japan is that rapid export-led GDP growth can mask serious financial distress, provide a basis for forgiveness and forbearance policies in dealing with the financial distress, and provide a false sense of security to regulatory authorities and foreign investors about the stability of the financial system. As time passes, the system becomes more susceptible to a shock, which in Japan’s case came in the form of a sudden collapse of asset prices. Japan did not, however, experience a sharp fall in the yen due to the large accumulation of international reserve assets, the larger role the yen played as an international reserve and transactions asset, the less-intense political problems of a hostile country just 30 miles away from the country’s capital, and the lack of external debt. Unlike Korea, Japan had neither a significant external debt nor a large NPL problem at the start of the collapse. These factors have made it possible
for Japan to postpone reform and engage in a forgiveness and forbearance policy. Yet Japan’s economic and financial distress continues through 2003, while Korea recovered from its economic collapse in late 1997 in less than two years. Indeed, Japan’s economy appears to have begun a recovery in the second half of 2003 and while recovery continues as of mid-2004, the recovery is narrowly based on exports and dependent on China’s growth.

Lessons from Korea

Like China and Japan, Korea followed an export-oriented development strategy that relied for several decades on a currency that was thought to be undervalued in real terms, and Korea also created a state-owned banking system that devoted its lending to large, government-favored firms. Korea thus illustrates the case where a troubled financial system was permitted to remain in place for over two decades, but rapid GDP growth led by exports masked the financial distress until the 1990s. Despite a growing NPL problem starting in the early 1970s, Korea was able to procure considerable external lending. Rapid GDP growth, and projections that Korea would be Asia’s next giant after Japan, supported confidence among foreign investors that Korea would be able to generate the income to service the debt.

Korean economic and financial development from the end of the Korean War through the 1970s was uneven and unstable at times, but overall, Korea’s growth was impressive. Korea’s financial reforms started in the early 1980s in response to poor macroeconomic performance attributed to inefficient government influence over the allocation of resources in both the real and financial sectors, especially in the chemical and heavy industrial sectors. Liberalization proceeded in two stages: first, policy from 1981 to 1988 focused on improving macroeconomic performance, and second, once macroeconomic performance improved, policy was directed towards liberalization of the real and financial sectors.

Though financial liberalization became official policy and some changes were enacted, the pace of reform prior to 1997 was slow and often more rhetoric than substance. What achievements were made were often in response to outside pressure from the US, the World Bank, and the OECD as the price of reducing tensions over trade imbalances and/or to gain admittance to the OECD in 1995. Despite a number of institutional changes, such as denationalization of the banking system in the early 1980s, initiation of interest deregulation in 1988, and further interest rate deregulation policies in 1991–1992 designed to completely phase out interest rate ceilings by 1997, the pace of liberalization was incomplete and flawed. Denationalization was incomplete, for example, because the Ministry of Finance and Economy continued to play a heavy role in bank decisions and liberalization was flawed because the implicit deposit guar-
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1. antees and no-failure policy of large institutions remained in place thus
enhancing moral hazard incentives. The most serious flaw was pursuing
liberalization without addressing the NPL problem estimated at 10 to 20
percent of total loans that had been embedded in the banking system since
the early 1970s.7 Despite denationalization, the Ministry of Finance and
Economy continued to influence bank operations ranging from credit allo-
cation policies to management promotions with predictable results. The
banking system for all practical purposes was regarded as a guaranteed
and passive source of low cost funds to the chaebol.

By the early 1990s, however, many observers warned that Korea’s
financial structure was weak and the won susceptible to rapid depreciation
if foreign investors changed their views on Korea’s ability to service its
debt. Any sharp depreciation would exacerbate the external loan problem.
The shock came from internal and external sources. In 1996 and 1997,
Korea’s macroeconomic performance slowed. GDP growth slowed from
8.9 to 7.1 percent in 1996 and to 5.5 percent in 1997. Regulatory authori-
ties paid insufficient attention to the degree banks and non-bank institu-
tions were dependent on foreign borrowing and to the increasing financial
weakness of major chaebol. The economic and financial distress intensified
as the Asian financial crisis (AFC) spread and uncertainty surrounded
both the presidential election of Kim Dae-jung in late 1997 and the sub-
sequent lame duck period of his predecessor. The won depreciated rapidly
in the face of increasing capital flight and recognition that the Bank of
Korea’s international reserve assets were insufficient to prevent a major
depreciation. Korea came close to a complete economic and financial col-
lapse by the end of 1997 and was forced to seek the assistance of the IMF
with the promise of an austerity program to prevent further won deprecia-
tion and a promise to accelerate reform in the financial system, corporate
governance, and the chaebol.

The new reform process has proceeded on a broad front and macroeco-
nomic activity recovered after 1999. Korea moved aggressively to deal
with the weak banking system by essentially nationalizing many banks,
however, reform of corporate governance and labor union activity has
been much slower. In addition, the political situation with North Korea
has worsened adding a new dimension to the reform of the Korean
economy.

The basic lesson from Korea is that rapid export-led GDP growth can
mask serious financial distress in the form of large amounts of NPLs,
provide a basis for forgiveness and forbearance policies in dealing with the
financial distress, and provide a false sense of security to regulatory
authorities and foreign investors about the stability of the financial system.
As time passes, the system becomes more susceptible to a shock and in the
case of Korea, increasingly an “accident waiting to happen.”
When Nixon went to China in 1972, China was a closed, mostly rural society run by a Chinese Communist Party (CCP) obsessed with socialist ideology. Industrial output was generally produced by SOEs, and was growing rapidly due to high investment rates of 30 percent or more channeled through investment grants from the state-owned banking system and directed by a centralized planning system that never quite achieved the degree of control seen in the Soviet Union. Outside of the state banking system, the economy was largely non-monetized, as rural areas were self-sufficient (other than providing cheap food for urban workers), markets were absent, rationing was widespread, and state-owned firms tended to be large and autarkic.

After the death of Chairman Mao Zedong in 1976, and the ascendancy of Deng Xiaoping as the paramount leader of the CCP by the end of 1978, China began to slowly reform its economy. The reforms initiated a process of significant transition for China’s economic institutions, often in directions that were not always anticipated. In the following discussion, we focus on four aspects of the transition: (i) the changing objectives of economic reform; (ii) the emerging problems of the SOEs and the state banking system; (iii) the emergence of unemployment, NPL problems, and conflicts for central bank policy; and (iv) the monetization of transactions in the context of relatively undeveloped money and capital markets.

Economic reform and changing objectives

Naughton (1995) divides China’s reform process into three distinct stages. The first “bird in the cage” stage, to cite Chen Yun’s famous axiom, began with an effort to shift from ideological to practical economic thinking, decollectivization of the agricultural sector, permitting rural markets in agricultural products, and a small degree of internationalization. The policy of rapprochement with the west encouraged participation in international organizations, study abroad, and tourism as well as international trade and investment. Special economic zones and policies allowing minority foreign ownership in joint ventures were implemented to attract foreign direct investment (FDI), technology, and management.

The second stage of reform followed in the mid-1980s under the direction of Zhao Ziyang, and attempted to extend these reforms to the SOEs, including the state-owned banking sector. A major objective was to force both the state-owned banks and their state-owned borrowers to rely on bank loans rather than government grants in order to generate a more efficient allocation of resources. Despite these reforms, the CCP continued to view economic reform as a temporary stage on the road to socialism and full communism. The Tian’anmen demonstrations of 1989 put a halt to the reform process and forced Zhao from power, and conservatives in the
CCP began a three-year period of retrenchment. Efforts to scale back reform created more problems for the CCP leadership than it solved, and the leadership eventually chose to abandon the socialist goals through the traditional route of control and state planning. In 1993, the CCP instead announced a new objective of creating a “Socialist Market Economy.” That is, the goals of socialism could be achieved with market forces and internationalization. Parker (1995) argued that the party thus came to rely on its economic management and the nation’s economic performance for its legitimacy, rather than its adherence to the thought of Marx, Engels, Lenin, and Mao. The success indicators of this new policy included high growth, low inflation, low unemployment, and social stability.

Among the many reforms that followed in this third stage, the official exchange rate was unified and devalued to match the black market rate and further efforts were made to improve the performance of SOEs. Exports became increasingly important to the government as a means to achieve this performance, particularly in light of the export-driven growth of Japan, South Korea, Taiwan, and other countries in the region. Because the banking sector remained inefficient and largely tied to propping up the declining and inefficient SOEs, China came to rely on FDI for funding the production of a large portion of these exports.

**State enterprises and the state banks**

Initial reforms in the foreign trade sector were targeted at improving the incentive to export in SOEs (Lardy, 2002), however, by the end of the 1980s it was clear that these reforms were not very successful, and SOEs were beginning to face real competition. Most of China’s rapid export growth was in the non-state sector, from new rural township and village enterprises often funded with overseas Chinese funds, and from joint ventures between Chinese and foreign enterprises. By the early 1990s, private enterprises and firms fully funded with foreign investment were legal and increasingly common. The non-state-owned enterprises continue to account for most of Chinese exports.

Not only were the traditional SOEs not responsible for China’s export growth, but they were declining in profitability and market share. In 1978, SOEs accounted for almost 80 percent of Chinese industrial output (the remainder was produced by small quasi-state firms called urban collectively-owned enterprises). By 2002, the non-state sector accounted for 75 percent of industrial output and half of industrial employment.

The reasons for this decline are still under debate, but considerable evidence has accumulated that SOEs are significantly less efficient than non-state-owned enterprises (Zhang, Zhang and Zhao, 2003). In the 1980s, state firms improved their average total factor productivity at very respectable rates, but the non-state sector improved faster. The Chinese economy became increasingly competitive, but for state-owned firms this
meant a loss of monopoly power along with falling relative output prices and rising wages. State-owned firms were more likely to bear a high social cost burden in providing housing, schools, medical care, and retirement to their workers, while non-state firms typically employed younger employees and lacked the historical obligations to provide support beyond wages. State-owned firms had less incentive to be efficient since they had soft budget constraints and the lack of effective bankruptcy policies until the 1990s which led in turn to the accumulation over time of vast disparities in performance and significant inefficiencies.

However, SOEs continued to receive the major share of capital investment. Prior to economic reforms in the 1980s, the primary source of investment for state firms was in the form of grants from the state budget, and in return, profits were delivered to the state as the primary source of government revenue. In the industrial reforms that followed the strategy of the agricultural sector’s household responsibility system, firms were allowed to keep an increasing share of their own profits for self-investment and bonuses, and investment grants were gradually replaced by loans from the state-owned banking sector. As the Chinese savings rate grew in response to the opportunities now afforded by economic reform, the relative size of the government’s budget declined. The result, however, was rapidly rising borrowing, high investment rates, and falling rates of return. In one sample of large state-owned industrial firms, Parker (1999) estimated that the marginal product of capital declined steeply throughout the 1980s, and became negative by 1992. Other studies have found similar results. The state-banking system played an important support role by providing credit to these inefficient state-owed enterprises. Jefferson (2001) suggested that banks served as an unsupervised “commons” for state enterprises, with predictably “tragic” results.

Efforts were made to reform the banking system to address the lending problems. In the 1980s, China’s monobank was divided into four large banks: the Bank of China, the Agricultural Bank of China, the Industrial and Commercial Bank of China, and the Construction Bank of China. These four banks were given different missions and placed under the administration of the People’s Bank of China, which in turn became China’s central bank and chief banking regulator. In the 1994 reforms which followed the Party’s announcement of the Socialist Market Economy, the state banking sector was divided into commercial and policy banks, with the goal of having the commercial operations become market-driven and financially sound.

Despite these institutional changes, the state banking sector continued to focus its lending on the older SOEs, many of which were relatively inefficient, increasingly unprofitable, and often insolvent. Brandt and Li (2003) find evidence that this discrimination against non-SOEs forced the growing private sector into more expensive forms of credit. By the early 1990s, the investment hunger of state firms led the government to look for new sources of funding outside of the banking sector.
The creation of the Shanghai and Shenzhen stock markets coincided with the early plans to create a Socialist Market Economy. Government restrictions on which firms could offer stock, however, effectively prevented non-state firms from entering the market. Instead, larger and more successful traditional SOEs recreated themselves as holding companies and spun off the relatively profitable portions of their operations using corporate structures with limited liability but continued to maintain effective state control through majority ownership. Though non-state firms have now been allowed to participate in the stock markets, 95 percent of all firms listed on the two stock exchanges continue to be majority controlled by the state and its sanctioned agencies.

**Emerging problems in the financial sector**

These and many other efforts at reform attempted to improve the incentives of state enterprises and force harder budget constraints on them. Time and again, these efforts were frustrated, and by the end of the presidency of Jiang Zemin, the government announced a policy of jua da, fang xiao (release the small, retain the large), pushing for the creation of a relatively small number of large, chaebol-like state firms and the elimination or privatization of most of the remainder. Between 1997 and 1998 alone, the number of state-owned firms dropped by over 40 percent, while the number of foreign-invested, private, and joint-venture firms rose dramatically (Jefferson, 2001). As the smaller state firms were gradually dismantled or converted into new forms of ownership, it was hoped the new, mostly export-oriented firms would take up the slack in the labor force. Estimates of the number of workers in SOEs who lost their jobs by 1999 ranged from 30 to 50 million. China’s official urban unemployment rate has generally remained below 5 percent – about seven million people – though official sources also said that up to 24 million urban job seekers would be disappointed in 2003. Of course, this figure excludes the many millions of rural workers who migrate to urban areas in search of jobs; one source noted that the government expected the number of surplus rural workers to reach 100 million people (CIIC, 2002).

The inefficient SOEs and the lack of effective credit evaluation and monitoring by the state-banking system have generated an enormous bad debt problem that shows no signs of being resolved in the near future. While official reports place the NPL ratio at an enormous figure of around 25 percent of loans, other estimates suggest that it may be closer to 40 percent. In the absence of the implicit state guarantee, the four major state banks are insolvent under any reasonable independent accounting system. The problem has serious implications for monetary policy. In the mid-1990s, monetary policy was required to restrain bank lending to reduce inflationary pressures, while simultaneously providing funds to prevent a
worsening of bad debt problems. This generates a conflict between the central bank and the state banks, which find they can improve the bad debt ratio in the short run through new lending, even if that new lending may eventually lead to more bad debts.

Yet the state banking sector has continued to benefit from rising money demand, which has led to rapidly rising deposits due to the state’s implicit guarantees and the lack of real alternatives to the state banks. Economic development has led to an increasing monetization of transactions between firms, high savings rates to finance large consumer purchases and self-investment, and the development of new financial assets and services. At the end of the Maoist period of self-reliance and limited markets, currency in circulation was about 6 percent of GDP. By 1984, after the first stage of reform, this ratio almost doubled as more goods became available, bank savings became less politically risky, rural markets expanded, and the absence of consumer credit led to a rapidly rising personal savings rate. China began reporting its M2 money stock in 1984, which at the time added up to about half of its GDP. As China’s economy increasingly relied on market processes, real money demand continued to grow, primarily in the form of bank deposits. While currency in circulation has stabilized at about 16 percent of GDP, M2 grew rapidly with China’s market development: by 1993, it was equal to GDP, and by 2002 it rose to a ratio of 174 percent of GDP. In the 17 years from 1984 to 2002, the total nominal Chinese M2 money stock grew 50-fold, an annual growth rate of over 25 percent. This is demonstrated in Figure 11.3, which also includes the ratios

![Figure 11.3 China’s money ratios (source: People’s Bank of China; data for 2003 is as of September).](image-url)
for M1 (currency and demand deposits) and M0 (currency) as well as the M2/M0 ratio (since the monetary base is unavailable). This rapid increase in money demand made it possible for China’s government to use the banking sector to finance both its own budget deficit and the credit demand of its own enterprises without a corresponding increase in the rate of price inflation. Yet while M2 monetization has been significant, other financial instruments are still underdeveloped.

**China’s exports and its exchange rate regime**

Chinese exports in the last decade appear to have had a significant effect on economic growth, not only through aggregate demand and comparative advantage, but also through technology transfer and spillovers (Liu, 2002; Tseng and Zebregs, 2002). Zhang (1999) provides evidence that FDI inflows in China (and several other Asian economies) were significantly correlated with long-run growth. By the early 1990s, the export sector was relying primarily on FDI for funding rather than the domestic state-owned commercial banks (Huang, 1995), in spite of a domestic savings rate of almost 40 percent primarily channeled into the banking system, and foreign affiliates produced almost half of China’s exports (Zhang and Song, 2000). Zhang and Felmingham (2001) find evidence of bidirectional causality between exports and inward FDI in China, particularly in provinces that receive relatively more, while Liu, Wang, and Wei (2001) find evidence of a virtuous cycle in which more imports lead to inward FDI, which leads to more exports, which leads to more imports.

As a result, Chinese leaders have come to see the export sector as the solution to China’s looming unemployment problems, as millions of urban workers are released from inefficient SOEs. This export sector has come to rely heavily on FDI, particularly from the economies of the “greater China” sphere, e.g. Taiwan and Hong Kong. While FDI from the US and Western Europe is larger, Lardy (2003) points out that it is focused primarily on supplying the Chinese domestic market, a fact that helps explain why the bilateral trade deficit overstates the bilateral current account balance.

**China’s exchange rate regime**

China’s foreign exchange regime in the 1980s used what the World Bank called an “airlock” system and exports were not very responsive to changes in the real exchange rate. This situation began to change by the 1990s. Export quotas were dismantled, trade decisions were decentralized, exporters were allowed to retain increasing shares of their foreign exchange earnings, and exchange rates were unified (Lardy, 2002: 55). As a soft currency, the Chinese currency was considered significantly overvalued, and as foreign trade and tourism grew the black market increased.
In 1980, the official exchange rate was 1.5 yuan (Renminbi) per US dollar, as Figure 11.4 shows. The yuan was gradually devalued until by 1993 the official rate fluctuated around 5.5 yuan per dollar. The real exchange rate did not fall at the same rate, since China’s inflation rate exceeded that of the major economies by a significant margin by the early 1990s. In 1993 the black market rate for converting the Renminbi (RMB), the “People’s money,” into convertible Foreign Exchange Certificates (FEC) was roughly 1.5:1, for an equivalent rate of 8.3 RMB per dollar.

In 1994, the official exchange rate was set for all transactions to roughly 8.6 yuan (RMB) per dollar, and the FEC and other such instruments were eliminated. Overnight, the black market in changing money was virtually eliminated, though the nominal exchange rate was allowed to appreciate back to around 8.28 yuan per dollar, and rapid inflation in the mid-1990s quickly eroded some of the effects on the real exchange rate, as Figure 11.5 shows.

By 1996, the current account achieved full convertibility, though the government continued to restrict foreign exchange transactions for capital account. China’s equity markets have been largely closed to foreign investors, except in the foreign-currency-denominated B-share exchanges in Shanghai and Shenzhen, though the government is now considering changing this through Qualified Foreign Institutional Investor (QFII) rules. Foreign direct investors were given promises that they could repatriate their profits, though some firms insured against this by relying on debt rather than equity to finance their investments. Throughout the 1990s,
illicit capital flight by Chinese firms was achieved through underinvoicing exports and overinvoicing imports, among other methods (Gunter, 1996). The omissions and errors in China’s balance of payments have been significant and negative, indicating a continued and significant outflow of funds into other major currencies in spite of official prohibitions and the lower exchange rate. By the late 1990s, there were reports of a resurging black market in currency transactions.

As Lin and Schramm (2003) discuss, the main goal pursued by the Chinese authorities when they devalued the yuan in 1994 was not to undervalue the domestic currency, but rather to eliminate (or at least substantially mitigate) the allocative inefficiencies stemming from both overvaluation and widespread black market activity in foreign exchange. While markets regarded the devaluation as a move towards market-clearing, the lack of convertibility for capital transactions led to relatively less demand for the yuan than purchasing-power parity would indicate. In 1997, when many other Asian exporters devalued their currencies in response to their balance of payments crises, China’s government stood firm in maintaining its dollar peg, much to the relief of the rest of Asia since many feared that a further competitive devaluation would set off a race to the bottom. The fact that China did not devalue their currency amid such pressures not only increased political goodwill towards China in the rest of the region, it also increased the credibility of its dollar peg for foreign and domestic investors.
The desirability of the yuan changed after 1997. A policy of disinflation by the People’s Bank of China combined with increased competition led to price deflation after the AFC (Cargill and Parker, 2004). Direct foreign investments in the early 1990s began to pay off and led to rapidly expanding exports, while China’s WTO accession led to improved confidence in the future for both domestic and international investors. The deflation in China led to a falling real exchange rate against the dollar, but the effects were initially disguised as the dollar rose against other currencies. Recently, however, lower interest rates in the US have helped to set off a significant drop in the US dollar against other major currencies, and the yuan fell with it; though the dollar did not depreciate against the yuan, as US exporters would have hoped, the yuan has depreciated against the euro and the yen. Firms in US import-competing sectors are frustrated that the dollar’s decline is not helping them with the Chinese competition, while Japan and the Euro countries are concerned about their export sectors.

Is China beggaring its neighbors?

When President Bush met China’s president Hu Jintao at the APEC summit in Bangkok during the last week of October of 2003, he was under intense pressure from manufacturers and politicians back home to persuade China to revalue its currency. Critics claimed that by keeping an undervalued yuan, China’s firms are increasing their share of the world market, increasing unemployment in the US and causing a record US trade deficit. China-bashing is also popular in Japan where China is not only facing the same charges made by the US, but in addition, is blamed for causing deflation, as cheap imports of Chinese origin are said to push down prices. In the euro area, politicians and businessmen have complained that because of China’s undervalued currency, the euro suffers an unfair share of the burden of dollar depreciation. This has only been exacerbated in the past months as the yuan has accompanied the dollar’s slide.

Is the yuan undervalued? Undervaluation was clearly not the objective of the official exchange rate adjustment in 1994, when the exchange rate was set essentially at the black market rate. But has a policy of unintended undervaluation emerged almost ten years later? From the US perspective, of course, the growing bilateral trade deficit with China is evidence of a distorted exchange rate. Figure 11.6 demonstrates that from China’s perspective this bilateral surplus has grown to over 4 percent of GDP, and now exceeds China’s overall current account surplus (both because China has a current account deficit with the rest of the world and because it has a deficit in bilateral trade in services and factors with the US).

FDI has also been high for the past decade, though Wei (2000) argues that this is still low given the size of China’s economy. China is now the largest recipient of FDI among the developing nations; in 2001 it received
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$47 billion in inward FDI, over 6 percent of the world total, and in 2002 inward FDI increased to $49 billion.

Since China has borrowed relatively little from abroad and has yet to allow for significant international equity flows, China’s balance of payments remains in surplus, and by the end of 2003 its holdings of foreign exchange reserves exceeded $400 billion, roughly a third of its GDP at current exchange rates. Most of this was held in US securities. This has provided a non-trivial downward pressure on short-run interest rates in the US in spite of the growing US federal budget deficit. While the interest rate spread between US securities and China’s long-term borrowing (which contains a risk premium) generates a large opportunity cost for China (Kwan, 2003), the fact that China is long in dollars provides a significant disincentive for the Chinese to allow the dollar to depreciate.

The answer to the question of undervaluation also seems clear if we use the purchasing-power parity (PPP) approach. At official exchange rates China’s per-capita GDP is currently almost $1,000, but if we use the World Bank’s reported PPP estimates, China’s per-capita GDP is almost $5,000. If accurate, this would suggest a significant undervaluation relative to the dollar, though most scholars believe that these PPP estimates are significantly overestimated, and there are many good reasons why price levels tend to be significantly lower in less developed economies (e.g. Balassa, 1964; Samuelson, 1964; Bhagwati, 1984; Kravis and Lipsey, 1983).

Figure 11.6 China’s international transactions (sources: IMF International Financial Statistics; US Bureau of Economic Analysis; 2003 data, where available, is estimated).
This argument is problematic for three reasons. First, China’s currency is not fully convertible, its financial system is weak, and its banking system is essentially insolvent, so it is not clear how desirable the currency would be at PPP given the risk premium. Second, while China is running large trade surpluses with the US it is also running deficits with other Asian economies. As a result, China’s overall current account surpluses are not so large, and are expected to be heading towards an overall deficit soon. Third, Zhang (1998) and others have noted that the Chinese exports are not very sensitive to changes in the real exchange rate, so it is not clear that a revaluation would reduce any remaining trade surplus.

It should also be noted that in the last five years China’s imports have grown even faster than exports, so China’s net demand for the goods and services of the industrial economies has increased. This pattern has accelerated recently: for example, in the period January–September 2003 exports increased by 32 percent and imports by 41 percent, a gap that when compounded over five years exceeds that prevailing in the period 1998–2003 (a period in which imports multiplied by three and exports by 2.3).

John Snow, the US Secretary of the Treasury, has suggested the Chinese currency may be undervalued by as much as 40–50 percent, but this amount can really only be supported by considering the bilateral trade relationship in isolation, and not the other elements of the current account nor China’s trade with other countries. A report by the Federal Reserve Bank of Cleveland (2003) suggests skepticism of the claim that the yuan is undervalued to such a significant extent.

Lardy (2003) estimated that a 20 percent revaluation would be appropriate, while the general manager of Goldman Sachs Asia was quoted as saying the yuan was undervalued by only 10–15 percent (Interfax, 2003). According to Lardy’s estimates, a revaluation of this magnitude would probably reduce China’s current account surplus by $40 billion but reduce the US current account deficit by only a quarter of that, an amount so small relative to the overall US current account that it would only reduce its rate of growth. In testimony before the US Senate, Lardy even raised the possibility that if it floated the value of the yuan might even depreciate once it floats (SCMP, 2003).

What of the oft-used claim that China’s artificially undervalued yuan has exported deflation to Japan? This charge can be dismissed by noting that imports from China represent only 1.5 percent of Japan’s GDP; even with complete pass-through to other goods and services traded in Japan, it is implausible to suggest that Chinese imports are significantly responsible for deflation in Japan. This is not to deny that some prices have clearly fallen in Japan due to cheaper imports, but the effect is far too small to be the source of Japan’s overall price deflation. The allegation can only be interpreted as an effort to divert attention away from the position that deflation is a monetary phenomenon and that the Bank of Japan tight
monetary policy is the main suspect, not China. A similar line of reasoning applies to explaining the low level of economic activity in Europe. The blame should not be placed on China, but rather on the European Central Bank for not being more aggressive in cutting interest rates.

Even in the absence of upcoming elections, blaming external sources is an argument deficit countries often allege to avoid discussing domestic factors that contribute to external imbalances. China is not the real issue, since it is not yet big enough to explain what has happened to the US economy anymore than China is responsible for Japanese deflation. The US and other industrial countries have made their own policy tradeoffs and decisions that generate external deficits. It is easier to blame China rather than to recognize US trade and current account imbalances are the result of a low overall saving rate (a fact that has recently been aggravated in the US by an overly expansionary fiscal policy that transformed a budget surplus of 1.5 percent of GDP into a budget deficit of more than 4 percent in just three years). Similarly, Japan and the European countries would be better advised to reform their own domestic systems rather than focus on China as an excuse to postpone those much needed reforms.

Vicious and virtuous policy traps

In Figure 11.7, we diagram two policy traps for the Chinese government, one vicious and one virtuous. In the first policy trap, which we find in the financial sector, the magnitude of the bad debt problem in the state-owned banks combined with concerns over urban unemployment from shutting down insolvent SOEs leads to policies which seek to delay meaningful changes in corporate governance or lending behavior. Policies of forgiveness and forbearance, protectionism and favorable regulation for large state firms, and an unwillingness to sell off state shares to truly privatize them, combined with resistance to allowing international banks to compete in the banking sector on a level playing field in spite of China’s WTO commitments, all lead to a growing non-performing loan problem and a drag on economic growth.

But there is a virtuous trap too. In this scenario, which we think explains China’s situation in the last three years or so, the perception that the yuan is undervalued by the market has unintended, positive, consequences which make it difficult for the government to change policies. Not only does the low price of the yuan help Chinese export growth, and thus allow for increased employment and incomes along with improved productivity from the shift of resources, but it also creates an asymmetric expectation of revaluation that provides implicit insurance for domestic and foreign investors alike. Expectations of a possible revaluation of the yuan have increased investors’ willingness to hold Chinese assets despite poor projected performance in the stock market, bad loans, and a troubled banking system (Bradsher, 2003). This leads to rising FDI, which is needed
to fund export growth because the banking sector devotes too much of its resources into inefficient domestic firms. Illegal capital flight turns from an outflow into an inflow, as Chinese savers and speculators alike become more willing to keep their money in yuan. Because stocks and other non-monetary asset markets are still poorly developed, money demand rises. Depositors are willing to keep their money in the big state banks, in spite of their high bad debt ratios, because of the government’s implicit guarantees and the insurance that the undervalued exchange rate provides them, and the government’s guarantees become more credible as their foreign exchange reserves rise.

Finally, though the accumulation of foreign reserves has led to rapid growth in the money supply (M2 money supply has grown at an annual rate of almost 15 percent since 1997, while nominal GDP has grown at an annual rate of almost 7 percent), high money demand transitorily dampened inflationary pressures: the price level has fallen by an average of 1 percent per year in the period 1997–2002, and as Cargill and Parker (2004) argue, lower price inflation has a further positive and marginally significant effect on money demand. This becomes a policy trap because a change in the exchange rate regime now has real and significant costs. Once the revaluation occurs, money demand may fall back and price inflation may result — even though foreign exchange accumulation would slow or reverse. Capital flight out of China may occur, inward FDI could slow, and depositors may lose some faith in the value of their yuan-denominated

Figure 11.7 Vicious and virtuous policy traps.
China’s financial and foreign exchange systems

assets. This in turn could exacerbate the banking problem. Moreover, China’s government lacks incentives to revalue the yuan, because China is now holding large amounts of US dollar-denominated securities. Much as the Bank of Japan, the Deutsche Bundesbank, and other central banks tried to prop up the dollar before the collapse of the Bretton Woods regime in 1971, China has an additional strong interest in the current valuation because the losses from a falling dollar would be significant.

The policy trap previously discussed runs contrary to Hume’s famous specie-flow mechanism, and standard expectations that a surplus in the balance of payments will quickly result in inflation. It did not happen quickly, but eventually the standard adjustment mechanism occurred; as of December 2003, inflation, which was dormant for most of the year, reached the 6 percent monthly rate. The sudden appearance of price inflation coupled with a credit boom (bank credit grew by 21 percent in the year to the first quarter of 2004) and other signs pointing to an overheated economy (GDP growth of almost 10 percent and investment growth of more than 40 percent in the year to the first quarter of 2004) triggered concerns about a possible hard landing.

The way forward

As in Japan and Korea, the Chinese financial regime has created a vicious policy trap that makes it difficult to implement significant financial liberalization and address the corporate governance issues that were created as a legacy of China’s socialist past. But China has also followed, however unintentionally, an exchange rate regime that has recreated the strategy followed by Japan and Korea in their initial decades of postwar development, and in China’s case at least this has created another (virtuous) policy trap. This virtuous policy trap has temporarily addressed some of the problems created by the financial regime, and as a result of this and other factors it now provides China’s leadership with two choices. First, the government can continue to rely on this mechanism and delay much needed reforms. Second, the government can use the opportunity provided by the current situation to address long-standing problems and begin the process of real reform in domestic and international financial markets.8

The accident waiting to happen scenario

China’s undervaluation, whether intentional or unintentional, is part of a larger strategy to encourage export-led economic growth. Other parts of the strategy include capital account controls, regulations designed to encourage FDI, and a financial system protected by the government. To the extent the strategy is successful, rapid export and GDP growth masks inefficiency in the financial system and allows China’s financial system to continue to build up high levels of NPLs. The success of the strategy is
manifested in trade and current account surpluses which in turn, generate international reserve assets, primarily in the form of dollars which in turn provides China with the ability to maintain an undervalued currency and at the same time provides an incentive to maintain an undervalued currency because of the large exchange rate loss that would occur with a higher value of the yuan. This in turn provides incentives for FDI since foreign investors judge the probability of revaluation low.

All good things must come to an end. Eventually, of course, money supply will outstrip money demand, and price inflation will then begin to cause real exchange rate appreciation. This could in turn start a cascade of events, and the virtuous policy trap could turn into a vicious cycle. A rising exchange rate could lead to a fall in money demand and FDI, which could be a severe problem, setting off financial distress, inflation, and rising unemployment.

Eliminating the asymmetry affecting how exchange rate movements are being currently perceived could lead once again to capital flight. In addition, the effects on the US economy could be unexpected. US producers subcontract with China and this could affect their profits and prices. Chinese holdings of US dollar assets not only provide a disincentive for the Chinese to allow their currency to appreciate, but they also dampen interest rates in the US at a time when federal deficits are projected to be large for the next several years. Rising interest rates, if significant, could slow the US recovery and cause the US deficit to grow larger.

The longer the undervaluation and other export-strategies continue, the more financial distress is likely to accumulate in the Chinese banking system. Not only does the undervaluation and export strategy in general mask accumulating financial distress, the success of the strategy in terms of rapid GDP growth supports a “forgiveness and forbearance” policy on the part of government in dealing with the financial distress. Foreign investors adopt a similar perspective as long as the export sector and GDP are increasing at rapid rates.

At some point, however, the financial system distress reaches a level that induces capital flight, financial instability, and lost output. Thus, long-term undervaluation and other export-led growth strategies generate an “accident waiting to happen” scenario. China thus needs to resolve the NPL and SOE problem immediately. The longer this is postponed, the further China moves down the steps of an accident waiting to waiting scenario. While other domestic financial reforms and external liberalization are desirable, Chinese authorities need to carefully consider the sequence of reforms in both the domestic and international sectors. In particular, China should reject pressure to revalue the yuan and/or liberalize the capital account.
Domestic and international financial liberalization

The Chinese government recently announced that it would use $46 billion of its foreign exchange reserves to bail out the banking sector. As this demonstrates, the current situation provides an opportunity to address China’s financial problems, if it accompanies real reform in corporate governance for both firms and banks, and liberalization in domestic and international financial markets. What would this entail?

China’s capital account liberalization has been focused on encouraging inflows of FDI and most restrictions on FDI have been lifted, however, China maintains tight controls on other components of the capital account such as restricting outflows of capital and closely regulating capital and money market transactions and foreign borrowing. In general, outflows remain more tightly regulated than inflows.9 Regarding inflows of foreign capital, the domestic capital and money markets remain tightly controlled: inflows of capital to the domestic capital market are permitted only through purchase of shares or securities issued by Chinese institutions abroad. In December 2001 several steps were taken to relax controls on foreign exchange transactions. Importantly, requirements for domestic firms to establish foreign exchange accounts in the previous year or the total amount of foreign exchange spending in the previous year. China’s capital account, however, remains tightly controlled and no timetable for its liberalization has been announced to date.

The potential for capital flight is only one element of the costs of capital controls. Other costs (see Gao 2000) include: (i) insufficient diversification of portfolios; (ii) costs of enforcing control regulations, investigating suspected violations of controls, and prosecuting violators of the capital controls code; (iii) associated rent-seeking activities induced by capital control regulations themselves; and (iv) adjustment costs, if capital controls induce private agents to believe that the government is using capital controls as a short-term fix for more fundamental problems connected with the balance of payments, monetary policy, or the prudential regulation of banks.

In light of these problems intrinsic to capital controls, should China remove controls on the capital account? This would certainly be the policy recommendation from standard economic models where trade occurs across all different time periods (and across all different states of nature). In this context, the rationale for the opening up of the capital account is the same as the rationale for free international trade.

Because international investment is intertemporal trade, trade between periods and trade between countries have the same welfare effects in an Arrow-Debreu framework. In other words, in a first-best world, maintaining restrictions on capital flows is not recommended; yet it is a well known result of the theorem of the second best that removing one distortion may not be welfare enhancing if other distortions are in place. Clearly, then, in a second-best world the immediate unconditional opening up of the capital
account is not necessarily an optimal policy, and indeed, it will more likely be suboptimal (see the section below on the speed and sequencing of capital account liberalization in a second-best scenario).

Different forms of financial liberalization have different implications for financial stability. As stressed by Eichengreen (2001), permitting banks access to off-shore banking but not simultaneously permitting foreign access to domestic equity and bond markets may be more destabilizing than doing the reverse because it allows foreign funds to flow through the banking system, the weakest link in the financial chain. In recent crises episodes the liberalization of off-shore bank funding came before foreign investors were granted access to domestic securities markets. This factor seems to have played a prominent role in the Venezuelan banking crisis of 1994, and it was also an issue in Korea’s banking crisis.

The sequencing of external and internal liberalization is critical to financial stability, and Chile during the late 1970s illustrates the danger of dismantling capital controls before commencing domestic financial liberalization and strengthening financial supervision. The elimination of controls on capital inflows should come at a relatively late stage in the liberalization process. Chile learnt from its mistakes and subsequently followed a cautious strategy that avoided dismantling controls on capital inflows and indeed, imposed steep marginal reserve requirements on very short-term capital inflows.

Interventionist approaches to allocating credit to privileged sectors and export-promoted activities in the context of no bankruptcy among exports and financial institutions have a short life (Cargill and Parker, 2002). Once enough inefficiencies have been accumulated economic growth slows down, inefficiencies become harder to hide, the marginal product of capital declines, investors’ optimism falls, and political support erodes. At some point, effective bankruptcy policies will have to be enforced in both the real and financial sectors and in the case of China, especially among the SOEs. The example of Japan during the 1990s neatly shows the consequences of ignoring this important lesson.

Implicit and/or explicit deposit guarantees that were pervasive in Korea, Japan, and other Asian and South American economies need to be an integral part of the reform process. Failure to reduce these guarantees in the face of financial liberalization creates a fundamental flaw that renders the financial system unstable. Moral hazard problems are exacerbated if implicit guarantees operate combined with a lack of appropriate financial supervision, as discussed by Gao (2000) for the case of Thailand in the late 1990s and by Diaz Alejandro (1985) for the case of Chile in the early 1980s. The experiences of virtually every country in the past three decades illustrates the danger of pursuing liberalization without a corresponding redesign and reduction of government deposit guarantees.
The speed and sequencing of capital account liberalization

This section elaborates further on the critical issue concerning the timing of external versus domestic financial liberalization, by discussing a framework where policy makers are uncertain about the outcomes of the reforms they introduce, and thin markets prevent contingent contracts that cover policy makers against risk. In those circumstances the benefit of a gradualist approach is that it keeps the option of (early) reversals open to the policy makers.

Dewatripont and Roland (1995) presented a general second best framework for studying the effects of uncertainty (both aggregate and idiosyncratic) on the speed and sequencing of reforms. For the case without political constraints and no binding majority rule (the most relevant case in the present context, since the CCP faces no formal opposition) the framework stresses the key role played by the option value of early reversal at the time of determining the optimality of gradualism versus a Big Bang approach.

The cost of gradualism is simply the current-period loss from implementing partial reform rather than immediate full reform (that is, the opportunity cost of being unable to reap off all the benefits from reform). The gain from gradualism comes from the possibility of learning about the negative expected outcomes of full reform, and thus the possibility of reversing the reform process at a lower cost than otherwise possible.

Regarding the speed of reforms, if policy makers’ learning is fast enough and the probability of early reversals of reforms is positive, then gradualism is proved to be optimal, relative to Big Bang, in the face of aggregate uncertainty. Regarding the optimal sequencing of reforms, the reforms with higher expected benefits should be implemented first, as long as the policy makers display a positive rate of time preference.

When comparing two different reforms, one riskier than the other (the fixing of the banking problem versus the sudden opening up of the capital account, for example), abstracting from risk aversion – and given identical expected outcomes and reversal costs – the riskier reform should be implemented first. This is so, because starting with the riskier reform increases the option value of reversibility and hence the expected outcome. When both gains and losses from reform grow, a reform becomes more attractive if losses can be avoided by reversal.

This abstract framework has important implications for China. The reforms with the highest expected return and also the riskiest if delayed or not properly implemented involve the resolution of the banking problem, establishing a transparent regulatory and supervisory framework, and reducing further the number and importance of SOEs. Of the three, the bank problem is the pivotal element. Not only should banking reform be accomplished first, but policies closer to a Big Bang rather than a gradualist approach are preferred. This is because the longer the period of resolution,
the larger the problem of moral hazard. Lardy (1998: 17) considers a sound banking system as a prerequisite for capital account convertibility, particularly given the relative importance of banks in China’s financial system and the high degree of state ownership in the banking sector.

The international evidence regarding the GDP costs of banking crises leaves no room for doubt about the potential risks and benefits stemming from a reform of the banking system. Estimates of these costs for recent crises are provided in Frydl and Quintyn (2000) and Dziobek and Pazarbasioglu (1997). Likewise, the international evidence about the costs of opening up the capital account without having fixed weaknesses in the domestic banking system beforehand is also unambiguous (e.g. Edwards, 1984 regarding Southern Cone countries).

The AFC alerted Chinese authorities of the risks of a rapid liberalization of the capital account without sufficient preparation. Indeed, there seems to be a consensus in Chinese policy circles about the wisdom of adopting a cautious, gradualist approach in regard to the issue of capital account liberalization. In particular, there seems to be agreement around a well-defined set of preconditions for a successful implementation of capital account liberalization. These preconditions include the following: (i) prudent macroeconomic management (sound fiscal and monetary policies, in particular the need to ensure a proper coordination between the two); (ii) an adequate real exchange rate (in particular the need to avoid dangerous overvaluations that proved to be very costly in the cases of the Southern Cone countries during the late 1970s; (iii) continuing development of the domestic financial markets and institutions including the need to put a modern, effective and efficient framework of prudential regulation and supervision in place, and the need to complete domestic financial liberalization; and (iv), resolving the banks’ balance sheet problems, including the weakness of the four state-owned banks that currently hold NPLs estimated at 20 percent of their outstanding loans (Lin and Schramm, 2003).11

Policy dilemmas

Policy dilemmas for China can be classified from a domestic and international perspective. Domestically, interest rate and financial liberalization in general need to be balanced against the fragility of inefficient SOEs and insolvent big four state-owned banks, that account for 90 percent of all assets and 70 percent of deposits held by financial institutions, respectively. Two factors play a crucial role. First, domestic financial liberalization increases the fragility of the four big state-owned banks, as they will have to pay higher interest rates to depositors and charge lower rates to creditors if domestic competition is increased. Second, if domestic banks also face competition from abroad, this could pose a serious threat to China’s financial stability. However, foreign banks also introduce competition, the use of international best practices, etc. Chinese authorities will
need to balance the tradeoffs very carefully. Because the banking system is
usually regarded as the “weakest link in the financial intermediation
chain” (Eichengreen, 2001), access by foreign banks to the domestic
market should probably be permitted only after the process of cleaning
domestic banks’ balance sheets is well underway.

As noted by Lardy (1998), Gao (2000), Cargill and Parker (2001), and
others, a key link in the reform process is the one connecting the perfor-
ance of SOEs, the NPL problem, and fiscal policy. Fiscal policy will have
to generate the fiscal surpluses that will be required to support both a tran-
sitory safety net to deal with the excess labor currently hoarded by ineffi-
cient SOEs, and also the recapitalization of banks.

The international perspective emphasizes that in a world of perfect
capital mobility, countries cannot maintain control of the exchange rate
and monetary policy at the same time. One monetary tool must inevitably
be surrendered. So far China has virtually maintained a fixed exchange
rate arrangement and, given the prevalence of a wide range of capital con-
trols combined with a degree of imperfect asset substitutability between
domestic and international assets, has also been able to use monetary
policy for countercyclical purposes. This is clearly illustrated by the expan-
sionary monetary policy following the AFC and the continued fixed
exchange rate. This type of flexibility to accommodate shocks will clearly
be lost once China liberalizes the capital account significantly. At this
stage, policy makers will have to adjust for the loss of degrees of freedom.
Deeper financial markets, a more effective framework for prudential regu-
lation, and the generalization of market strategies for risk management
will all act as functional substitutes for the loss in flexibility stemming from
a reduced number of policy tools that will inevitably accompany the
opening up of the capital account. A corollary of this principle is that the
liberalization of domestic interest rates will have to wait until China moves
towards a more flexible exchange rate regime to take place or the price to
be paid by Chinese policy makers would be the complete loss of monetary
independence.

To complicate things more from an international perspective, the move
towards a more flexible exchange rate regime and the associated need to
resort to more indirect methods of monetary control (i.e., open market
operations) the Chinese authorities should promote the creation of
markets for government bonds of different maturities, currency denomina-
tions, etc. At the same time, Chinese authorities need to pursue a firm
fiscal policy that reduces public debt (including pressing implicit commit-
ments as well as explicit ones) as a share of GDP. In this sense the
experience of Chile after 1985 provides a very interesting example on how
to manage this tension in a successful way (Johnston, Darbar, and Echeve-
erria, 1997).
Implications

China’s exchange rate regime has created conditions that currently mitigate the problems caused by the vicious policy trap created through the interaction of state firms and the domestic banking sector, but this may in turn create a virtuous policy trap if it induces China’s leadership to avoid needed financial reforms. Delaying the completion of the reform agenda is costly, and Japan and South Korea are good examples of the costs involved. As Japanese regulators avoided addressing their troubled banks, non-performing loans grew, and Japan’s economy suffered. Korea’s unwillingness to address these issues rendered the Korean financial system increasingly susceptible to shocks, as the Asian financial crisis so clearly demonstrated.

China has acted on the presumption that delay in the context of high GDP growth would permit the economy to outgrow the problems, but this policy of forgiveness, forbearance, and delay has proved to be non-optimal in the long run. Chinese authorities should more closely study the experiences of Korean, Japan, other Asian countries as well as the US and many of the European countries. China’s export strategy has thus generated an accident to waiting sequence and the longer China delays meaningful reforms, the more likely the real and financial sectors will experience serious difficulties. Drawing the various issues discussed in this chapter, the following four policy recommendations are offered.

First, China should not rush to opening up its capital account nor give in to external pressure to revalue the yuan. While there are costs to delaying capital account liberalization, the costs of a massive banking crisis likely outweigh the allocative, efficiency, and enforcing costs of capital controls. In general, domestic liberalization should precede external liberalization.

Second, the most immediate focus of reform is the interconnected twin problems of inefficient state-owned enterprises and non-performing bank loans. This will involve a high fiscal commitment to recapitalize banks and to provide emergency assistance to the large number of unemployed workers that will result from the implementation of bankruptcy procedures.

Third, resolving the banking problem needs to be accompanied by a broad set of reforms to enhance human capital in the financial sector and to design a regulation and supervisory regime. Financial expertise needs to be developed along with an effective framework for financial regulation and supervision that limits systemic risk.

Fourth, this broad range of financial liberalization reforms can accompany resolution of the banking and the state-owned enterprise problems, however, other reforms of the financial sector cannot proceed until this is accomplished. These two problems present the most serious threat to China’s financial stability and must be addressed immediately. Once
accomplished, the following financial reforms can then be pursued. The
development of capital and money markets is an important part of broad-
ening the financial asset base of the economy, which in turn require flexi-
ble interest rates and interest rate deregulation of the banking sector. If
China is to eventually move to more indirect methods of monetary control
(policy instruments, high powered money, and the economy), an appropri-
ate array of government instruments need to be developed to give the
monetary authority a variety of options to conduct open market opera-
tions. Without sufficiently developed market for government bonds indi-
rect ways of monetary control will be inadequate to stabilize the price
level, as the experience of so many developing countries illustrates. The
move towards a more flexible exchange rate system is conditional on the
development of a market for foreign exchange, since it is well known that
floating the currency in the face of a shallow market tends to produce
excess price volatility that is in turn transmitted to the real sector of the
economy through the so-called balance sheet effect.

In conclusion, China’s export strategy and unintentional undervaluation
has generated a serious policy dilemma. On one side, the export-led
growth has been responsible for significant economic growth, but on the
other side, the narrow focused strategy has weakened the financial sector
and rendered China susceptible to shocks with serious adverse effects on
the real and financial sectors. Revaluation of the yuan and/or capital
account liberalization is not the solution and would only make the situ-
ation worse. Chinese authorities should stand firm in rejecting the
demands for the revaluation of the yuan and/or for a move towards imme-
diate capital account convertibility and should instead, move immediately
to tackle the reforms with the highest expected payoff as outlined above.

Notes

1 Using official exchange rates, China ranks behind the US, Japan, Germany,
France, the UK, and France. If China’s currency is undervalued by 40 percent,
as the US government has recently claimed, then it would be the world’s fourth
largest economy, behind only the US, Japan, and Germany. If the purchasing
power parity (PPP) estimates published by the World Bank are used instead,
then only the US remains a larger economy. These comparisons however, are
for the level of GDP. With an official GDP per capita of roughly $1,000 ($5,000
in PPP terms), China remains a less developed economy, particularly outside its
prosperous coastal cities.

2 Many observers point out that this bilateral trade deficit significantly overstates
the US bilateral current account deficit, both because of measurement differ-
ces and, more significantly, because the US has a bilateral surplus in services
and investment income receipts, as many US firms produce goods in China for
the Chinese domestic market.

3 It might be worth noting, however, that since 1955 US manufacturing employ-
ment has gradually declined from 32 to 11 percent of total non-farm employ-
ment, and it has been declining in absolute terms since 1980, from 19.4 million
Meanwhile, between 1995 and 2002 China lost 16 million manufacturing jobs, 15 percent of its total. The net gainers of manufacturing jobs appear to be Canada, Mexico, Spain, Taiwan, and the Philippines, though the absolute numbers are relatively small (Baum, 2003).

4 Gowa (1983: 143) cites a public statement to this effect by Philip Trezise, the Assistant Secretary of State for Economic Affairs, four months prior to President Nixon’s 1971 announcement to no longer support the dollar price of gold.


6 The government encouraged the development of non-bank financial institutions, money and capital markets began to develop, foreign financial institutions were permitted greater access to the domestic financial system, restrictions on inflows and outflows of capital were relaxed, and the won was permitted more market sensitivity.

7 Official estimates understated the magnitude of the problem according to many outside observers, for example, Huh and Kim (1994) found higher NPL rates for Korean than Japanese banks over the period from 1971 to 1991. NPLs ranged from 12–25 percent of total loans in the late 1980s with no apparent downward trend during the entire period studied. Chung (1991) found similar results based on examination of NPLs for eight major Korean commercial banks in 1988 based on internal Bank of Korea data.

8 As one example of the opportunity that the foreign exchange regime presents for addressing the problems of the banking sector, China just announced a transfer of $45 billion from its international reserves to two of its state-owned commercial banks, the third large bailout in less than six years (Bradsher, 2004). Rating agencies such as Standard & Poor and Moody’s welcomed the bailout as a sign that Chinese authorities were addressing difficult and pressing problems in the financial sector. What Chinese banks badly need, however, is not only the additional resources to recapitalize themselves, but the right set of incentives that lead them to reform their lending practices and stop making bad loans. In this respect, introducing credit-risk management procedures should be a key ingredient of the reform package. Unless this system is introduced, the banks will continue to be pressed to make politically connected loans, whether at the provincial and municipal levels as has been the case so far, or at the national level if they centralize their lending decisions in Beijing as recent developments seem to indicate.

9 For a detailed documentation of China’s Foreign Exchange Policies since 1979, see Lin and Schramm (2003).

10 The riskiness of the reform refers to the risk to the economy if the objective of the reform is left unresolved.

11 See the comprehensive discussion contained in BIS Papers #15, in particular the reflections in Zhang (2003) included in that volume.

12 We are ruling out the possibility of China moving right away to a purely clean float here, simply because it is not a plausible scenario. The basic requirement of deep financial markets is not met.

References


China’s financial and foreign exchange systems


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