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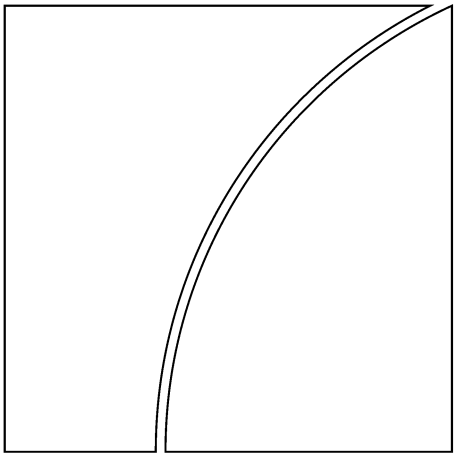

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China's capital account liberalisation: international perspectives

Monetary and Economic Department

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Introduction

Guonan Ma and Robert McCauley

This volume collects the papers presented at the joint BIS/SAFE seminar on "Capital account liberalisation in China: international perspectives", held on 12-13 September 2002 in Beijing, China. Seminar participants from outside China were mostly experienced practitioners and policymakers from 13 economies across four continents. Chinese participants consisted mainly of staff from the State Administration of Foreign Exchange, the People's Bank of China and the Chinese Academy of Social Sciences. The main aim of the seminar was to draw on the diverse international experiences in managing cross-border capital flows and to shed light on how China should proceed to implement capital account liberalisation in the years ahead, following its recent historic entry into the WTO. The present collection includes 16 seminar papers, which are organised under the following six topics:

- Overview
- Japanese experience
- Bank-related capital flows
- Corporate and non-bank flows
- Equity portfolio flows
- Offshore banknote flows

Our introduction should be read in close conjunction with the welcome speech by SAFE Deputy Director General Ma Delun and with the SAFE summary chapter by Wang Yungui and Xie Yuelan, which follow immediately.

1. Overview

The three contributions in the first session set the stage of the seminar and provide a broad overview of China's capital account management. The first is the seminar opening speech made by Mr André Icard, Deputy General Manager of the BIS. Mr Icard contrasts China's current position to that of many countries on the threshold of opening up their capital markets and capital accounts. China is experiencing stable prices (even modestly falling prices), low nominal interest rates and relatively high equity prices - not inflation, high local currency interest rates and cheap equities, as has been the case in many countries at such a stage. In addition, China enjoys strong foreign direct investment inflows, abundant foreign exchange liquidity and net international creditor status, rather than suffering from heavy reliance on short-term debt, scarce foreign exchange liquidity and rising international indebtedness. Mr Icard's speech outlines the main factors that may be more or less favourable to China's capital account liberalisation. Given the flows not only from China's accumulating official reserves but also from its banking system to global securities markets and interbank markets, the question is not whether funds will be allowed to flow out of China in response to anticipated returns. Rather it is which additional channels will be permitted and what accompanying policies and regulatory frameworks are required.

The second paper, by Mr Zhang Xiaopu, Deputy Division Chief at the Capital Account Management Department of the SAFE, gives a brief overview of China's capital account management and its control of both capital account transactions and related foreign exchange transactions. The author sums up the current key capital control measures in China and reviews the progress so far in opening its capital account. The paper also sheds light on the main considerations behind further capital account liberalisation, which include the restructuring of the Chinese economy, developing domestic capital markets and improving international competitiveness. In discussing China's gradual move towards renminbi capital account convertibility, Mr Zhang anticipates that China's capital account liberalisation would be likely to proceed at a different pace across assets, markets, type of investors, direction of

flows and currencies. Thus, there could be many small steps rather than a few big steps in the process of opening up China's capital account.

In their joint paper, Mr Guonan Ma and Mr Robert McCauley (both from the BIS Representative Office for Asia and the Pacific) argue that the abundance of foreign currency liquidity in the Chinese economy is a positive factor for China's ongoing liberalisation of its capital account. The recent build-up of large dollar surpluses in China is partly a result of strong demand for foreign currency deposits, which mainly reflects interest rate differentials between dollar and renminbi deposits. This factor, at times supplemented by speculative currency expectations, in turn also dampens the demand for foreign currency loans in the Chinese banking system and thus the overall surplus dollar liquidity in the sector. The paper also argues that the same set of factors could also explain the recent marked shifts of surplus dollars from the banking sector to the accumulation of official foreign exchange reserves. Finally, the authors suggest that the experience of the Chinese government with private holdings of foreign currency assets and with managing high levels of surplus foreign currency liquidity over the years has prepared it for the next stage of capital account liberalisation.

2. Japanese experience

The second session turns to an in-depth discussion of initial conditions and broad strategies of capital account liberalisation, with special reference to the case of Japan. In his paper, Mr Mitsuhiro Fukao, Professor of Economics at the Faculty of Business and Commerce at Keio University and formerly Director of Economic Research at the Bank of Japan, describes the long road that Japan trod. He recalls that, throughout the 1960s, changes in official foreign exchange reserves broadly tracked the current account surplus. From 1971, however, reserve changes reflected, among other things, shifts in trade financing (leads and lags) and foreign direct investment in addition to the current account, despite strict exchange controls. This description of Japan in some ways resembles China today, whose reserve changes owe relatively little to fluctuations in the current account. Mr Fukao also provides a perspective on how long it took Japan to liberalise its capital account. From 1971, when there was partial deregulation of foreign exchange control, to Japan's new foreign exchange law of 1980, when onshore and offshore yen money market yields were equalised, took nine years. Another eight years passed before the limits on foreign securities holdings by institutional investors were raised enough to become non-binding. And another eight years intervened before the 1996 "big bang" liberalisation. Thus, depending on the milestone used, at Japan's pace, China could be 10, 15 or 25 years away from effective and full capital account liberalisation. Mr Fukao concludes that it is difficult to choose the timing of the transition to an open capital account so as to satisfy all the preconditions and that, in fact, Japan had not satisfied them. He also emphasises that the Japanese authorities mishandled the transition from fixed to flexible exchange rates, an inevitable transition in his view for a large country that needs an independent monetary policy and eventually free movement of capital. In particular, by resisting appreciation in an inflationary world, destructive inflation was inflicted on the Japanese economy. The lesson for China in a world in which prices of internationally traded manufactured goods have been falling for over six years is not obvious.

The paper contributed by Mr Richard Koo, Chief Economist of Nomura Research Institute and formerly a Federal Reserve Bank of New York economist, warns that our understanding of international capital flows remains rather limited and that the history of portfolio flows between Japan and the United States often proved a case of unintended consequences. Capital flows can be rather destabilising and may worsen current account imbalances. Mr Koo points out, moreover, that the list of conditions for a successful capital account opening had lengthened after the Asian financial crisis. At the same time he also highlights the benefits of international capital flows to large countries with well developed markets like the United States and Japan. In particular, he makes the point that foreign investors generally supported Tokyo's equity market during the 1990s when Japanese investors lost some of their capacity to take on risks owing to lower asset prices. However, he also cautions that once the capital account is opened, some of the previously strictly domestic issues in an economy can well become subjects for international discussion.

3. Bank-related capital flows

Key choices in opening up a financial system pertain to the management of capital flows related to the banking sector, and the third session takes up this subject. Whether and how to limit non-residents' ability to borrow domestic currency are important questions, particularly at times of exchange market pressure. The three contributions for this section cover the experience of managing bank-related capital flows in Italy, Korea and Singapore. The paper by Mr Antonello Biagioli, Head of the Statistics Department at the Italian Exchange Office, walks through a half century of post-World War II capital account management in Italy, discussing both main policy goals and instruments and detailing the two foreign exchange crises in 1976 and 1992. The paper provides an account of the international activities of Italian banks and the corresponding regulations governing the dimensions of dollar/lira, onshore/offshore, assets/liabilities and spot/forward markets until 1992. It underlines that it was only 12 or 13 years ago that non-residents in principle were allowed to borrow in Italian lire. The European exchange market crises of 1992-93 made clear the difficulty of maintaining exchange rate stability in the face of market pressure by relying largely on intervention and without deriving any support from the previous restraints on banking system credit to non-residents.

The paper by Mr Yoon-Je Cho (Professor, Graduate School of International Studies at Sogang University in Korea) and Mr Robert McCauley (Deputy Chief Representative of the BIS Representative Office for Asia and the Pacific) shows how unbalanced official strategies added to the already difficult challenges of Korea's capital account liberalisation in the presence of high corporate leverage and substantial current account deficits. In the course of both domestic financial liberalisation and capital account opening during the early 1990s, price liberalisation in short-term and non-bank financial liabilities moved far ahead of that of long-term and bank liabilities. This uneven approach was in part due to the political influence of the chaebol in Korea, which had an immediate stake in liberalisation of short-term and non-bank financing instruments compared with bank intermediation. Financial flows, including cross-border capital movements, thus shifted more into short-term and less regulated channels, leading to an excessive build-up of short-term foreign borrowing and thereby aggravating the financial vulnerability of the Korean corporate and financial sectors to external reappraisals. The paper also discusses further liberalisation measures (especially in the banking sector) and other prudential regulations that have been introduced in Korea since the crisis. These reforms adopt a more balanced approach to capital account opening in Korea, although in practice foreign investment in domestic bonds remains limited.

The paper by Mr Ong Chong Tee, Assistant Managing Director of the Monetary Authority of Singapore (MAS), provides a perspective on the non-internationalisation policy of the Singapore dollar. Its rationale is to support a monetary policy focused on the exchange rate in view of the small and open nature of Singapore's economy. Consistent with this policy and Singapore's desire to expand its role as an Asian financial centre, banks operating in Singapore operate less regulated "Asian Currency Units" that deal in currencies other than the Singapore dollar. Singapore's experience can be interpreted in two different manners. The step-by-step liberalisation of the policy to prevent the internationalisation of the Singapore dollar in 1998, 1999, 2000 and 2002, as described by Mr Ong, can be seen as amounting to the gradual lifting of the policy. The retention of the prohibition on credit extensions above a threshold to non-resident financial firms, however, can be read another way. An economy enjoying large fiscal and current account surpluses, a record of low inflation and relatively large official foreign exchange reserves chooses not to learn whether a reasonable degree of exchange rate, and therefore price, stability can be reconciled with an unrestrained ability of non-residents to short the currency. The implicit advice from Singapore to China is to move cautiously on the route to renminbi capital account convertibility.

4. Corporate and non-bank flows

Market developments have heightened the importance of policies constraining the asset choices of non-bank financial institutions and the liability choices of corporations, which is the subject of the fourth session. It contains three papers on the experience of foreign exchange control and capital account management in France, South Africa and the Philippines, respectively. The paper by Mrs Françoise Drumetz, Deputy Director of the Balance of Payments Directorate of the Bank of France, divides the experience of capital account management in the years since World War II in France into two distinct periods, with 1983/84 as the watershed. In the first period, close capital

account management suited France's relatively closed and regulated economy, while in the second period, eased policy reflected an improving balance of payments, a stronger financial sector and faster liberalisation. The author views capital account opening as part of the overall economic and financial policy framework in France, arguing that it should and did proceed in step with other policy reforms. One of the last restrictions to be removed in France was the limit on French franc lending to non-residents. Mrs Drumetz also gives a potentially useful answer to how an unbalanced outflow into foreign securities might be prevented in the aftermath of liberalisation. By reforming the French government bond market before liberalisation, inflows into these domestic bonds generally exceeded French insurance companies' purchases of foreign securities. This experience suggests that reform of China's bond markets might help balance inflows and outflows associated with capital account liberalisation.

The paper contributed by Mr James Cross, former Senior Deputy Governor of the South African Reserve Bank (SARB), highlights the occasional reversal in the SARB policy in response to extreme external events and the asymmetry of South Africa's exchange controls. In the face of an abrupt cutoff of international credit in the mid-1980s, or of very strong pressure on the rand in late 2001, the SARB reverted to or tightened enforcement of controls on capital account transactions. As conditions permitted, however, liberalisation could and did move forward. Most recently, with the strengthening in the rand in the course of 2002 as the background, the February 2003 budget of the South African government proposed to ease restrictions on outflows by South African companies and institutional investors. Through these swings of policy, however, South Africa's exchange controls came to feature a consistent asymmetry in the treatment of non-residents and residents. Non-residents, whether holders of South African stocks, bonds or real assets or not, could short the currency freely. Meanwhile, South African companies faced limits in their ability to mobilise their equity to make acquisitions abroad, and insurance companies and pension funds faced limits in acquiring foreign assets. Resident individuals have also been subject to various ceilings on investing in overseas assets. Mr Cross sees little logic to this asymmetry in foreign exchange controls on residents and non-residents. China is in effect invited to consider whether it wants to proceed in such an asymmetric fashion.

In the same fourth session, the paper presented by Ms Celia Gonzalez, Director of the International Operations Department of the Central Bank of the Philippines, describes the Philippines' management of the foreign currency debts of the corporate sector. Foreign currency debts are subject to a system of registration, approval and monitoring in order to manage the burden of external debts. This system is used to prevent build-ups of short-term foreign currency debts and more generally to avoid bunching of repayments. There is at least one important difference between the Chinese and Philippine management: in the Philippines, approval is not required for foreign currency loans unless they are to be serviced with dollars from the domestic banking system, whereas in China, official approvals for any foreign currency loans are mandatory. Thus, the Philippine system may be regarded as lying between China's and a liberal system in which creditors and shareholders are expected to enforce prudent corporate debt management.

5. Portfolio equity flows

In the fifth session on the subject of equity flows, the paper by Mr Gopalaraman Padmanahan, General Manager of the Exchange Control Department of the Reserve Bank of India, offers an overview of India's experience with capital account liberalisation. The paper makes two key points. First, India's basic approach to liberalisation has been to create non-debt inflows, hence the opening of the local equity market (as well as improving access for foreign direct investment). Second, the original intention to achieve capital account convertibility in three years, first put forward in early 1997, was deferred for a while after the Asian financial crisis, in part owing to the concerns over India's weak fiscal position and fragile banking system. The paper argues the case for step-by-step liberalisation. Since the paper was submitted for publication, the Indian authorities have announced new capital account opening measures against the background of substantial growth of the country's official exchange reserves during 2001-02.

In the second paper of the equity flow session, the presentation by Ms Karen Lu, Vice President of Investor Services at JP Morgan-Chase Bank, outlines some of the key elements of the qualified foreign institutional investor (QFII) scheme in Taiwan, China (hereafter, Taiwan), which has been in

place since 1990. The basic purpose of the scheme is to limit the potential volatility of non-resident demand for domestic equities and to smooth its effect on the foreign exchange market. The paper indicates that, in the pursuit of these ends, the Taiwanese QFII system has evolved over time, with restrictions gradually relaxed and loosened as the authorities gained confidence. In particular, the liberalisation of the Taiwanese QFII system proceeded along the dimensions of foreign exchange controls, minimum lock-up time, range of eligible foreign investors and classes of domestic financial assets open to investment by foreign investors. Often these liberalisation moves occurred piecemeal, and it is not easy to discern a pattern in the sequence. China's recent introduction of a similar scheme will lead to comparisons with this earlier experience.

6. Offshore banknote flows

In the sixth and final session, the discussion of the management of international flows of banknotes posed a stark choice for the Chinese authorities. On the one hand, the paper by Mr Stefan Hardt of the Cash Department at the Bundesbank describes the passive approach of the German, and now apparently European, monetary authorities. The approach entails allowing banks and central banks to pick up and deliver banknotes to the central bank, which is careful not to credit fully for returned notes until they are fully checked to avoid any extension of credit.

On the other hand, the paper by Mr Joseph Botta, Senior Vice President of the Financial Services Group at the Federal Reserve Bank of New York, profiles the more active approach taken by the US authorities. This approach entails stationing the Federal Reserve's cash holdings in selected locations offshore and forging partnerships with private banks in order to share the central bank's work and to provide it with information. It is an interesting question whether the difference in these approaches is related to the weight given to monetary aggregates by these central banks. To the extent that Europeans value broad money as an intermediate target, then a lack of enthusiasm for the necessarily variable foreign demand for banknotes could be expected; to the extent that Americans attach lesser importance to monetary aggregates, then a willing accommodation of the vagaries of demand, verging on marketing of the greenback, could be expected. Both, however, referred to banknotes as a "commodity".

But the example of Hong Kong, where policy leaves the amount of money to market forces but which also adopts a fairly passive approach to cross-border flows of banknotes, suggests that this parallel between monetary and cash policy should not be pushed too far. The paper by Mr Peng Wensheng and Ms Joanna Shi, of the Economic Research Division at the Hong Kong Monetary Authority, surveys the practical techniques available for estimating offshore circulation of local banknotes and applies the approaches to the case of Hong Kong dollar banknotes circulating offshore. The authors estimate that between 15 and 25% of the Hong Kong dollar banknotes circulate outside Hong Kong, principally in mainland China. Moreover, even as the holdings of Hong Kong dollar banknotes inside mainland China have increased in recent years, holdings of renminbi banknotes in Hong Kong have also increased. This trend rise in the interpenetration of cash holdings in Hong Kong and mainland China leaves it unclear whether there are more Hong Kong dollar notes in China or renminbi notes in Hong Kong, an extraordinary state of affairs given the convertibility of one and the capital account inconvertibility of the other.

7. Summing-up

A number of common experiences came into view in the seminar. First, the diverse international experiences suggest that many economies have adopted a step-by-step approach to their capital account liberalisation. This relates in part to the limits of our understanding of the risks associated with cross-border capital flows. Second, many economies have tried to strengthen their market and supervisory infrastructures ahead of opening their capital accounts. This is also consistent with the view that the initial conditions of the liberalising economy tend to have a major bearing on its choice of specific liberalisation policy measures. Third, there could be occasional delays or even policy reversals during the liberalisation process, often in response to unexpected external developments. Nevertheless, over time, many economies have, though not along a straight line, moved generally in the direction of capital account liberalisation. Finally, in most economies, policy measures adopted to

manage the capital account vary across sectors, range of investors, markets, type of assets, currencies and directions of flow. Policymakers have often been quite practical in their handling of the actual capital account liberalisation process. In sum, there is a wide spectrum of policy instruments to manage capital flows of various types in economies with diverse endowments and in different market environments. But one thing is clear - our brief overview cannot do justice to the rich experience of capital account liberalisation contained in this volume.

Summary

Wang Yungui and Xie Yuelan

1. Initial conditions for capital account opening

In his opening speech, the Deputy General Manager of the Bank for International Settlements holds the view that a general lesson drawn from previous experiences is that an economy's particular circumstances often determine the risk profile and policy choices related to capital account liberalisation. Even though China maintains foreign exchange controls, it is already open to international capital flows in some respects. There are three initial conditions that may favour China's capital account opening. The first and probably the more important positive element is the high growth rate and saving rate of the Chinese economy. Another circumstance that favours China's capital account liberalisation is that currently, domestic interest rates do not substantially exceed those in international markets. Third, China's healthy balance of payments and sizeable international reserves also represent a major plus. But the fiscal deficit, high level of non-performing loans in the banking system and fragile domestic capital markets could prove more of a challenge. China should take into consideration both capital inflows and outflows in mapping and managing its capital account liberalisation.

The two papers on Japan's capital account liberalisation suggest that Japan followed a gradual, "stop-and-go" process. Acceleration and deceleration of capital account liberalisation sometimes depended upon whether its current account was in surplus or deficit. The sequence of its capital account opening has been generally from long-term investment to short-term investment, from direct investment to indirect investment, and from portfolio investment to bank transactions. Such gradualism seemed to aim at maintaining current account balance, controlling short-term capital flows and avoiding financial crises. However, gradual liberalisation also had its costs, including underdevelopment of currency hedging products, underdevelopment of financial markets, and foreign criticism. With respect to the capital account liberalisation in China, the Japanese experts stress that the pace of capital account liberalisation needs to be aligned with that of domestic interest rate deregulation. Strengthening of China's financial sector through restructuring state-owned enterprises and banks and developing domestic financial markets are also important. The second challenge for China is to manage the risks related to globalisation. If greater exchange rate flexibility is to be envisaged, there will be an increased need for hedging instruments and markets for foreign currency forwards and swaps. Sustained healthy trade balances and foreign direct investment flows are also important. Where currency risk management techniques are underdeveloped or significant market distortions exist, some forms of mild capital controls should not be ruled out. The third challenge is to proactively attract foreign capital in order to facilitate financial sector and corporate restructuring.

In discussing the Indian experience of capital account liberalisation, the participant from the Reserve Bank of India suggests several important liberalisation lessons. (1) Stronger supervision is needed for greater liberalisation. (2) Opening up the capital account entirely is not a prerequisite for all emerging market economies in their efforts to attract foreign capital. (3) Under special circumstances, some capital controls must be retained. (4) For most emerging market economies, it is generally easier to manage capital inflows than outflows. (5) Caution is required to guard against the potential balance sheet risks. In 1997, the Indian government set up a roadmap towards achieving full capital account convertibility and also proposed certain preconditions, such as a ratio of fiscal deficit to GDP below 3.5%, an inflation target of 3-5%, and the ratio of non-performing assets to advances falling to 5% from the 20% of the fiscal year 1991-92. Later, the Indian government slowed the capital liberalisation process due to the Asian financial crisis. Since late 2002, the liberalisation pace has been picking up again. In the liberalisation process, the fiscal deficit and the non-performing loans in the banking system have been the two main concerns of the Indian government, which is now in the process of changing the regulations on bank accounting systems and risk management towards international standards. Generally speaking, the Indian liberalisation experience has been to follow a well thought out, gradual pattern of liberalisation, encouraging non-debt creating capital flows, offering full convertibility to non-residents first but affording greater freedom to resident corporates to enhance

their international competitiveness, encouraging capital flows into priority sectors, and not internationalising the Indian rupee prematurely.

2. Sequencing and policy coordination during liberalisation

The seminar paper by the Italian participant characterises Italy's experience of abolishing exchange controls as a two-phase process after World War II. From 1945 to 1988, strict exchange controls were in place. From 1988 to 1990, the controls were gradually relaxed. In 1990, full capital account convertibility was achieved. After full capital account liberalisation, the growth of banking aggregates appears quite high in volume terms but much less remarkable in relative terms. The paper also contends that there is no definite conclusion concerning the costs and benefits of capital account liberalisation. However, the benefits of market-based policy operations seem to exceed the related costs. For Italy and other European countries, once the capital account has been fully opened up, it would be difficult to reverse course.

The representative of the Bank of France reviews France's history and policy stance of exchange control and liberalisation. France's capital account liberalisation process after World War II can be roughly divided into two distinct periods. The first period lasted until the mid-1980s and featured strict foreign exchange controls that suited France's relatively closed, protected and regulated economy at that time. The second period started in 1984 at a time when the situation of French firms and of France's balance of payments began to improve gradually. The foreign exchange controls were completely dismantled in six years. The liberalisation process took place in three steps. In the first step, trade-related foreign exchange controls were gradually liberalised from 1984 to 1986. In the second step, from 1986 to 1988, most financial transactions were also allowed. The last step, from 1988 to 1990, phased out most of the remaining controls: residents were allowed to freely open and keep their own foreign currency denominated accounts in France and maintain foreign currency and franc-denominated accounts abroad; lending in francs by French banks to non-residents was totally liberalised; all remaining administrative restrictions regarding foreign direct investment in France were also phased out. The capital account liberalisation policies in France were designed with the following three considerations. First, capital account liberalisation has to be part of a sound overall economic policy framework. Second, capital account liberalisation has to be part of the broader financial policy framework. Third, capital account liberalisation has to be carefully sequenced. Three main conclusions seem to emerge from the discussion. (1) There is the need to enhance the real and the financial sectors' capacity to manage risks associated with capital flows prior to liberalisation. (2) It is important to coordinate different economic policies in the liberalisation process. (3) The government needs to choose the proper nominal anchors for both the exchange rate regime and monetary policy.

The expert from the South African Reserve Bank points out that monetary policy, interest rate policy and trade policy all mattered in the process of capital account liberalisation in South Africa. The objective of South Africa's capital account liberalisation was to attract capital inflows, especially portfolio inflows. In March 1995, the exchange controls on the movement of funds of non-residents were abolished. Non-residents could transact in the foreign exchange market freely, while resident companies and non-financial institutions were strictly prohibited from doing so. This situation created asymmetry, and corporate residents were disadvantaged vis-à-vis non-residents. From 1997, exchange controls applied to residents were gradually lifted. The foreign exchange regulations changed from a system of general prohibitions save for explicit permissions to a regime of general permissions with explicitly stated exceptions. Exchange controls on non-financial institutions were loosened, with the quota system still in place. Qualifying institutions, ie long-term insurers, pension funds, unit trusts and fund managers, as well as resident individuals, are allowed to invest offshore up to certain ceilings. The present ceilings on offshore portfolio investments are 15% of total assets for long-term insurers and pension funds, and 20% for unit trusts. Though individual transactions account for only 20% of the total foreign exchange transaction volume in South Africa, it is important for maintaining market confidence.

3. Managing capital flows during liberalisation

In their paper on Korea's capital account liberalisation, the two authors argue that in the course of liberalisation before the Asian crisis, short-term capital flows were favoured over long-term capital flows, while short-term borrowing was favoured over foreign direct investment. This policy bias contributed to the greater dependence of Korean corporations on short-term foreign currency borrowing and the lax regulations on short-term foreign borrowing by Korean banks and merchant banking companies. As a result, following the capital account liberalisation, the ratio of short-term debts to Korea's total foreign debts increased rapidly, further heightening the vulnerability of the corporate and banking sectors. Such vulnerability became more visible during the down-cycle, and a string of bankruptcies of Korean banks and corporations ensued. After the 1997 financial crisis and on the basis of the IMF's advice, Korea has completely opened up its capital account. Both the stock and bond markets have been totally opened to foreign investors. On the other hand, this opening has been accompanied by a strengthening of the prudential and supervisory standards. The Financial Supervisory Commission has introduced specific rules regulating the maturity mismatch between foreign exchange assets and liabilities. Since the opening-up, there has also been a huge improvement in Korea's foreign exchange reserves.

The paper by the staff of the Bangko Sentral ng Pilipinas (Central Bank of the Philippines) illustrates the current status of capital account management in the Philippines. The country started capital account liberalisation from the early 1990s, but has retained so far certain restrictive and approval requirements in order to optimise the utilisation of banks' foreign exchange funds and to maintain the convertibility of the Philippine peso. Specifically, there are no restrictions on the inflow of foreign investments except in areas included in the Foreign Investment Negative List. Registration of foreign investment with the Central Bank of the Philippines is not mandatory. Outward investments are also allowed to some extent. In the case of external borrowings, prior approval of the Bangko Sentral is needed for all public sector borrowings. Private banks are also required to seek prior central bank approval for their foreign borrowings, except for normal short-term interbank transactions. Meanwhile, non-bank private sector entities are, in general, free to contract foreign loans unless they intend to fund payments of principal and interest on the obligations with foreign exchange purchased from the banking system. Short-term foreign borrowings, to be serviced with foreign exchange to be purchased from the banking system, may finance exclusively foreign exchange costs of eligible projects payable to foreign beneficiaries. Medium- and long-term borrowings may finance both local currency costs and foreign exchange costs payable to foreign beneficiaries. The Philippine central bank makes a distinction among the following three cases of foreign borrowing by private non-bank corporates: foreign currency borrowings by residents, foreign currency borrowings by non-residents from banks in the Philippines, and local currency borrowings by non-residents from banks in the Philippines. The intensity of management and regulation varies across these three cases. There are no restrictions on the disposition of foreign exchange receipts of residents. However, purchases of foreign exchange from banks in the Philippines are subject to certain documentary requirements.

The paper submitted by the JP Morgan participant offers an overview of the background and evolution of the Qualified Foreign Institutional Investor (QFII) system in Taiwan, China. The introduction of the Foreign Investment Plan set the stage for a three-phase policy. First, foreign indirect investment was allowed through buying beneficiary certificates of trust funds. Second, direct foreign investment in securities by QFIIs was introduced. Third, direct investment in securities by non-resident individuals of Taiwanese origin or otherwise was sanctioned. The QFII policy framework, including regulations on foreign exchange, the establishment of financial institutions, and the Securities and Exchange Law, was also gradually liberalised and became more accommodating over time. Operationally, foreign investors seem to have four key considerations when they make decisions on whether to participate in the Taiwanese securities market: (1) the application process; (2) the investment quota; (3) the settlement mechanism; (4) the reporting process.

4. Cross-border movements and offshore circulation of currency

The paper presented by the participant from the Federal Reserve Bank of New York cites three main benefits of the overseas circulation of US dollar banknotes. First, foreign holders of US banknotes benefit by acquiring a liquid, secure and stable asset. Second, overseas circulation of US dollar banknotes helps to maintain the stability of the payment system. Third, overseas circulation of

US dollar banknotes brings considerable seigniorage benefits. Currency in circulation increased at a rate of 4.7% in recent years. Excluding the factor of economic turbulence in some economies, the growth trend is relatively stable. As of May 2002, total currency in circulation was about USD 620 billion. Of this total, 50-70% is estimated to circulate outside the United States. For 2000, the securities counterpart to total Federal Reserve banknotes earned USD 32.7 billion in interest income. There are, however, challenges in overseas banknote circulation. The first challenge associated with the international use of the dollar is the responsibility to ensure that the dollar is not used for illicit trade or activities. At the moment, about 5% of the dollar banknotes in circulation are used for "grey markets". The second challenge is counterfeiting. The third one is potential complications of targeting monetary aggregates. The Extended Custodial Inventory Program has been established, in part to meet these challenges. However, the US Federal Reserve has neither encouraged nor set overseas currency holding as one of its specific policy objectives.

The paper contributed by the Deutsche Bundesbank expert summarises the Bundesbank's experience of managing cross-border movements of Deutsche mark (DEM) banknotes. The DEM banknotes which used to be issued by the Bundesbank were released at the counters of various Bundesbank branches, as are euro banknotes now. The Bundesbank's customers (counterparties) and partners in monetary policy operations are essentially commercial banks. The Bundesbank does not ask customers how the currency withdrawn from its accounts at the Bundesbank is later to be used or where the cash is to be transported. It only knows the stocks of currency the credit institutions hold at given times on the basis of reports which the commercial banks have to submit every month. In the 1990s, currency in circulation abroad increased due to rising number of travellers and "guest workers", resulting in a circulation abroad equivalent to around 30 to 40% of the total DEM currency in circulation. In absolute terms, this amounted to between DEM 65 billion and DEM 90 billion. It should be noted that the Bundesbank has never fostered the overseas circulation of DEM banknotes. As of 1 January 2002, the date of the official introduction of the euro as legal tender, all reporting requirements on the import and export of banknotes in existence up to that time were lifted. Given the size of the euro area and the amount of euros in circulation, which is far larger than the circulation of DEM banknotes before the introduction of the euro, it will certainly not be easy to obtain data on the circulation of euros outside the euro area.

The paper submitted by the two staff members of the Hong Kong Monetary Authority (HKMA) discusses the potential benefits and concerns of Hong Kong dollar (HKD) circulation outside Hong Kong SAR. First, it brings benefits to Hong Kong in the form of seigniorage. When the three note-issuing banks issue banknotes, they are required to submit US dollars (at HKD 7.80 = USD 1) to the HKMA for the account of the Exchange Fund. The US dollar funds are then invested by the Exchange Fund in liquid US dollar assets. The SAR government then earns seigniorage from banknotes held by non-residents. Second, it enhances the intermediation role of the banks in Hong Kong. Third, Hong Kong residents also benefit from savings on foreign exchange transactions when they use HKD notes for transactions on the mainland. The external demand for currency notes also gives rise to some concerns. One is about counterfeiting. Secondly, external holdings of HKD may complicate the interpretation of movements in the amount of currency outstanding and other monetary aggregates. Thirdly, offshore circulation of HKD notes may distort Hong Kong's balance of payments statistics. In recent years, there are signs of an increase in the holdings of HKD currency on the mainland. One reason is that the renminbi remains a non-convertible currency. Holdings of HKD banknotes - a convertible, stable currency - represent a means of accumulating foreign assets for some individuals and business firms on the mainland. Another reason is that the economic and social ties between Hong Kong and the mainland are becoming increasingly closer. Moreover, the relatively large denominations of the HKD banknotes also play a part. Finally, some regulatory changes on the mainland in the past few years may have also facilitated the increased use of HKD banknotes. In general, there are two possible ways to estimate the portion of the currency stock that is held externally. One approach directly seeks data that measure the size of external holdings. But none of the economies in the world has such complete data. The other, indirect approach uses econometric models to estimate domestic holdings and then take foreign holdings as the residual. There are two main indirect estimation methods. One is based on the trend of the currency-to-GDP ratio. The other takes into account the opportunity cost of holding currency, ie the influence of the inflation rate and real interest rate. Generally speaking, the latest HKMA estimates suggest that a significant amount of HKD currency - in a range of 15-25% of the total outstanding stock - is currently circulating outside Hong Kong.

5. Preliminary insights from the seminar

First, most economies in the world have adopted a cautious and gradual approach to capital account liberalisation. Fiscal stability, low inflation, a sound banking system and corporate sector, and ample foreign exchange reserves are some of the preconditions for capital account liberalisation. However, these preconditions are relative and not absolute.

Second, the sequencing of capital account liberalisation depends on the objective of liberalisation and the starting economic and financial position of the economy. Therefore, there is no universal rule. Generally speaking, long-term, non-debt capital inflows should be opened up first.

Third, capital account liberalisation should be coordinated with monetary policy, exchange rate policy and overall economic and financial policies. Corporate and banking sector reforms to enhance their stability and competitiveness are especially important for the success of capital account liberalisation.

Fourth, in the course of capital account liberalisation, it is important to maintain a proper balance between the treatment of transactions by residents and non-residents, capital inflows and outflows, and different types of financial institutions. The authorities may pay more attention to issues related to capital outflows when inflows are excessive. How to effectively manage capital outflows could present a major challenge to the process of capital account liberalisation.

Fifth, given sound macroeconomic and financial fundamentals, some capital controls may be an effective way to cope with unexpected crises. However, capital controls could only be used as a temporary policy measure with specific aims and should not be a substitute for sound economic policies. More prudential regulations are needed along with the capital account liberalisation process. Both the domestic and offshore activities of the corporate and banking sectors should be supervised.

Finally, the offshore circulation of the home currency is normally not a policy objective but a result of cross-border trade flows and currency stability. However, central banks should strengthen the statistics on and supervision of offshore circulation of domestic banknotes. Also, premature internationalisation of the domestic currency may invite speculation.

Welcome speech: gradually and steadily promoting China's capital account liberalisation

Ma Delun

The seminar on "Capital account liberalisation in China: international perspectives", jointly held by the Bank for International Settlements (BIS) and the State Administration of Foreign Exchange (SAFE), is now getting started. On this occasion, I would like, on behalf of the SAFE, to welcome all the international experts, representatives of The People's Bank of China and the Chinese Academy of Social Sciences, as well as my colleagues from various regional branches of the SAFE, to this seminar.

The BIS has given the SAFE much support during our long cooperation and in particular has helped to bring about this seminar. We are honoured that Mr André Icard, the Deputy General Manager of the BIS, is able to spare the time to attend and even to chair a section of the seminar, which itself gives this event a boost. There is an old Chinese saying: "It is always a pleasure to greet a friend from afar." It is my sincere hope that Mr Icard, Mr Ooi Sang Kuang, Deputy Governor of the Central Bank of Malaysia, and all the other friends present will enjoy their stay in Beijing.

At present, China runs a unified, managed floating exchange rate regime based on market demand and supply. Since this regime was first established eight years ago, the exchange rate of the renminbi has been basically stable. With regard to the allocation and use of foreign exchange, China has abolished the foreign exchange retention scheme, the mandatory surrender system for foreign exchange earnings, and the system of planning and administrative approval of foreign exchange uses. In their place, China has established a system of "purchase and sale of foreign exchange through designated banks", thereby establishing a market-based mechanism of foreign exchange supply and demand and achieving the full current account convertibility of the renminbi. At the same time, in view of the current situation of the country, certain controls have been maintained on capital account transactions, with the intensity of such management and control measures varying across different types of capital transactions.

Generally speaking, the current foreign exchange management system is consistent with China's situation and the requirements of a market economy; it has contributed to the maintenance of China's balance of payments and the stability of the renminbi, supported the rapid and healthy development of the Chinese economy, and guarded China's economic security related to external transactions. In recent years, with few exceptions, China has achieved surpluses on both its current and capital accounts, and its overall balance of payments displays a promising outlook. The amount of foreign exchange purchases and sales through banks is an indicator reflecting the total foreign exchange revenues and outlays of the economy. Judging by this indicator, the foreign exchange sales and purchases for trade, non-trade and capital account transactions all showed net surpluses during 2001. This trend was maintained, and even accelerated noticeably, in the first half of 2002. After the reform of the foreign exchange management system in 1994, China's foreign exchange reserves rose rapidly for several successive years to reach USD 246.5 billion by the end of July 2002, which is 11 times the USD 21.2 billion level achieved at the end of 1993. The renminbi exchange rate has remained steady and even appreciated.

China became an official member of the WTO in December 2001. It is now actively amending its relevant laws and regulations according to its accession commitments to the WTO and speeding up the adjustment of its industrial structure. Although China did not make any commitment to open up its capital account in its WTO accession agreement, its current foreign exchange management system does not constitute a restriction on legal and normal transactions under capital account either. However, we understand that the long-run goal of China's foreign exchange system reform is to push forward renminbi convertibility for capital transactions and ultimately to achieve full renminbi convertibility. Therefore, it is important for the SAFE to study issues related to capital account liberalisation.

Over the past few years, the SAFE has organised several seminars on capital account liberalisation, which have served as a useful reference for the further reform of China's foreign exchange

management system. This joint BIS/SAFE seminar, however, is unique and differs from previous ones in that the topics selected for discussion cover some of the more difficult, less known, not yet clarified but unavoidable issues that we have come across in our research on capital account liberalisation. For instance, it remains controversial whether certain preconditions are necessary for capital account liberalisation. Some believe that the capital account cannot be liberalised unless certain preconditions are met, while others hold that preconditions are unnecessary because conditions can be created along the liberalisation process. Another example is how to coordinate and harmonise monetary policy, fiscal policy and supervisory policy towards capital markets in the process of capital account liberalisation. Finally, the seminar looks into the question of how we manage the pace of capital account liberalisation so as to steadily and properly promote the progress of renminbi convertibility, safeguard the security of China's financial system, and effectively prevent financial risks and crises. After repeated discussions and consultations with the experts of the BIS, we decided on some of the above questions as the topics for discussion at this seminar. Then, international experts were invited to give us presentations on their own economies' practice and international experience in accordance with the questions raised. It appears that the papers the experts have submitted are well organised and feature in-depth analysis, providing a basis for the success of this seminar.

We hope that all the participants can actively engage in discussion and exchanges throughout the seminar, and offer their opinions and advice on how to improve China's foreign exchange management system and promote renminbi convertibility under the capital account. I am confident that this seminar will be a great success.

Capital account liberalisation in China: international perspectives

André Icard

1. Introduction

The Asian financial crisis led to a rethinking of the issues related to capital account liberalisation. Before that crisis, it had been well understood that sound macroeconomic policies were needed to minimise the risks entailed in an opening of the capital account. After that crisis, the critical role played by a well capitalised, well managed and well regulated financial system came into sharper focus. The risks of a highly leveraged corporate structure without effective shareholder discipline also became clearer. Policymakers better appreciate that successful capital account liberalisation depends on effective policies on a broad front.

This seminar on *Capital account liberalisation in China: international perspectives* is particularly opportune as China prepares for the next phase of financial liberalisation following its recent entry into the World Trade Organization (WTO).

My introduction seeks to provide the broad background and set the stage for the next two days. I shall first briefly describe the lessons drawn from the experience of capital account liberalisation in other countries. Then, I shall sketch some key features of the Chinese economy and contrast them with the standard scenario assumed when capital account liberalisation is being discussed. In doing so, I shall argue that China's peculiar initial conditions pose unusual risks and offer unusual opportunities. Finally, I shall highlight this seminar's main features and outline its programme.

2. Stylised facts and conventional wisdom

The liberalisation of the capital account has frequently been associated with crises in both industrial and emerging market economies. During the late 1980s and early 1990s, attempts to combine exchange rate stability in Europe with the progressive liberalisation of capital accounts ran into a series of foreign exchange crises. My experience at the Bank of France has left me convinced that it would be a mistake to overemphasise the permissive factor of capital account liberalisation while underestimating the importance of weaknesses in fiscal policy as well as incompatibilities between desirable monetary policies and actual exchange rate policies. At the same time, I am also convinced that momentum in capital account liberalisation should be adapted to the degree of resilience of the domestic financial sector to external shocks and its ability to deal with larger flows of foreign capital.

In Scandinavia, Latin America and East Asia, capital account liberalisation gave rise to capital inflows too large for the domestic financial system to absorb safely. As time passed, capital inflows reversed into capital outflows, revealing an impaired financial system. The main features of this boom-bust cycle are as follows. Owing to faster growth, higher inflation or both, interest rates tend to be higher in the liberalising economy than international market levels. This interest rate gap combines with the new opportunities offered by liberalisation to lead to surging capital inflows, mostly in the form of short-term bank claims or portfolio inflows, as if the floodgates were lifted. This influx of foreign capital in turn leads to currency appreciation under a more flexible exchange rate regime, or to even larger capital inflows under a more stable exchange rate, which falsely implies that there is little risk to foreign currency borrowing. Either way, the recipient economy can experience rapid monetary and even more rapid credit growth, asset price bubbles, and booming consumption and investment.

The boom will turn to bust, however, once diminished competitiveness, worsening current accounts and accumulating non-performing loans eventually erode investor confidence. The real appreciation of the currency, whether resulting from nominal appreciation or higher inflation, undermines competitiveness and leads to a deterioration of the current account balance. After asset prices peak, the credit extended against property and shares can prove hard to service while much business

investment may produce little in the way of cash flows. External imbalance and domestic financial fragility signal higher risks and capital outflows ensue. This reversal puts pressure on both the exchange rate and domestic asset markets and places the authorities in a dilemma between raising interest rates and allowing the exchange rate to depreciate. This dilemma is even greater if the exchange rate was kept fixed until the boom turned to bust. Currency depreciation can increase financial distress in the corporate sector exposed to large foreign currency loans, especially if depreciation follows a period of fixed exchange rates. At the extreme, such sudden capital flow reversals can be associated with the severe currency and banking crises that convulsed Scandinavia, Latin America and East Asia, notwithstanding some important differences between these episodes.

Several policy implications have been drawn from these stylised facts. First, governments need to pursue sound macroeconomic and trade policies to minimise the risks of capital account liberalisation. Second, economies ought to strengthen their own financial systems and supervisory infrastructure before opening up their capital accounts. Third, a corporate sector marked by fragile finances and poor governance may systematically abuse the opportunities provided by capital account liberalisation. Fourth, many argue that a more flexible exchange rate regime is an important precondition for containing the accumulation of balance sheet risks related to currency mismatches and for preventing exchange market tensions from turning into a full-scale financial crisis. Finally, some draw the conclusion that the capital inflows should be managed or channelled with measures like the Chilean reserve requirements against short-term flows. While there is room for debate about particular policies, the broad lesson is that capital account liberalisation is most likely to succeed if it takes place in a sound macroeconomic environment and if it forms part of a coherent programme of economic reform. Shortcomings in other areas can lead to disastrous results from opening the capital account.

3. Main characteristics of the Chinese economy

A general lesson drawn from previous experiences is that an economy's particular circumstances often determine the risk profile and policy choices related to capital account liberalisation. China's situation differs markedly from that of countries in Latin America and even some of the Asian economies. Therefore, please allow me to spend a few minutes now in offering an outsider's perspective on some of the important features of the Chinese economy and considering which elements favour liberalisation and which do not. In this section, I will mainly focus on the technical elements of liberalisation and not any more on general preconditions, such as the foreign exchange regime that I have just discussed.

First of all, even though China maintains foreign exchange controls, it is already largely open to international capital flows. One could even say that China has been more open to foreign direct investment (FDI) than some OECD economies, especially as it has lately encouraged outward FDI in natural resources and technology. Errors and omissions in its balance of payments have shown relatively large outflows until recently, further indicating considerable cross-border activity. There are growing cross-border flows of renminbi banknotes between China and its neighbours, where the renminbi is sometimes treated as a hard currency. Perhaps the most striking indication of China's financial openness is the marked expansion of onshore foreign currency deposits. Such deposits by Chinese households and firms have reached 8% of local currency deposits, in part because of the government's policy of keeping onshore dollar deposit rates broadly in line with prevailing international market yields. Monthly changes in these deposits exhibit sensitivity to movements in interest rate spreads and exchange rate expectations. These aspects of financial openness favour capital account liberalisation in that they point to substantial adjustments that have already occurred.

The question is sometimes posed whether Chinese officials are prepared to permit money to flow out of China. But the rising dollar deposits, joined by falling foreign currency loans extended by Chinese banks, have already produced a large surplus of foreign currency liquidity in China's banks. These dollars, more than the increase in China's official reserves, contributed to an outflow of some $140 billion during 1999-2001 that eventually found a home in US debt markets and the international banking system. Therefore, the question for China's capital account liberalisation is, in practice, no longer *whether* funds will be allowed to flow out of China in response to market signals. Rather, the question is *whether additional channels* should be allowed through which such funds could flow and what conditions need to be fulfilled in order to ensure a smooth move in this direction. Let me first describe what are the characteristics of the Chinese economy which would facilitate the transition to

more openness and then indicate the domains in which significant reforms should be undertaken as a precondition for financial liberalisation.

The first and probably the more important positive element is that China's economy has grown rapidly over the past five years, with average GDP growth of 8%. International trade has almost doubled. With among the fastest growth rates in the world and a gross domestic saving rate of 40% of GDP, the flow of savings in China permits the diversification of domestic portfolios to occur and provides a favourable environment for domestic institutions.

Another circumstance that distinguishes China from many other cases in a manner that favours capital account liberalisation is that domestic interest rates do not at present substantially exceed those in international markets. In the early 1990s, China had experienced moderately high inflation. But a tightening of policy then brought inflation down to a low level. In more recent years, prices in China have fallen mildly. Domestic interest rates in China, still basically set by the government, have come down with inflation to low levels on a par with and even below those prevailing in international markets.

The situation of the balance of payments and the size of international reserves also reflect a big strength: the Chinese currency. The renminbi became convertible for current account transactions in 1996 and has been tightly tied to the US dollar since 1994. Over the years, China has run small current account surpluses and has enjoyed large net capital inflows on average. A fairly stable inflow of FDI has dominated the capital account and represents the principal counterpart of official foreign reserves of USD 240 billion. As a result, China's claims on the rest of the world probably exceed its debt to the rest of the world, and in any case the liquidity afforded by its official reserves is very comfortable in relation to its short-term debts. Going forward, China's entry into the WTO is thought likely to promote more FDI inflows even though the WTO-related market opening may put some pressure on its current account. It seems safe to say that China's reliance on stable FDI and its international balance sheet favour capital account liberalisation.

Fiscal policy could prove more of a challenge. Government investment in infrastructure financed by debt has been pursued in recent years, but the stated ratio of government debt to GDP remains manageable. However, the country's underfunded pension system remains a concern as does the banking system's capitalisation. These contingent liabilities suggest a significantly higher effective debt burden.

But the sector which in my view deserves most attention as a potential handicap to a safe capital liberalisation process is the financial one. China's financial system is dominated by a banking sector that is large and liquid, but is not strong. The ratio of broad money to GDP has reached 165%, high by any standard. Chinese banks also enjoy strong liquidity: the loan-to-deposit ratio dropped from 86% in 1999 to 78% in 2001, resulting in large excess reserves. However, the same system is generally regarded as weak in solvency terms, since the reported non-performing loan levels are still high. The Chinese government has taken the first steps to recapitalise in part the largest banks and to resolve some of the distressed debts. One would agree that more has to be done here in order to reduce potential risks arising from China's capital account liberalisation process.

China's financial system also features new but expanding domestic capital markets. Its stock markets have been growing particularly fast, with a total market capitalisation approaching 45% of GDP. However, the market free float is only a small fraction of the total capitalisation, owing to large government-held stakes in the listed state companies. The equity market has been volatile and richly valued, with prices an average of 50 times earnings. So far, the quality of offerings and range of investors have been limited: listings have been mostly restricted to state firms and retail investors predominate. China's bond market has also grown rapidly, exclusively on the basis of bonds issued by the government and state policy banks that are overwhelmingly held by Chinese banks. Thus, while China's immature capital markets may not favour capital account liberalisation, certain liberalisation measures could help quicken capital market development.

4. The implications of initial conditions

The general impression drawn from the preceding section on the characteristics of the Chinese economy is that China's initial conditions do not resemble closely the starting point leading to a stylised capital inflow problem. The two main contrasts between China's particular situation and the stylised facts can be summarised as follows:

- First, China is experiencing stable or slightly falling prices, low nominal interest rates and high valuation of domestic assets, whereas the archetypal inflow scenario features relatively high inflation, high local currency interest rates and lower asset prices.
- Second, China enjoys strong long-term FDI inflows, abundant foreign currency liquidity and an apparently comfortable position of a net international creditor, rather than suffering from heavy reliance on short-term debt inflows, barely adequate foreign exchange liquidity and rising external indebtedness.

In general, an economy's initial conditions shape the risks of its capital account liberalisation. In particular, the scenario of massive capital inflows upon liberalisation seems less likely and less risky in China. It is possible, I suppose, that FDI inflows could prove excessive. Nevertheless, this situation would lead to a re-examination of the policy that requires such investment to be funded abroad. This policy could be eased if the capital inflow proved to be uncomfortably large.

The main challenge for China probably lies more in successfully managing the liberalisation of capital outflows through more diversified channels. As noted above, this would broaden and institutionalise what we have already witnessed in China: Chinese households and firms switching into dollar deposits, prepaying dollar debts and bundling their capital into informal flows into Hong Kong's stock market. Stepping back, this should be expected, given China's particular situation. With or without liberalisation, market forces in China favour portfolio outflows via more diversified channels, as Chinese residents naturally seek better returns.

China's initial conditions, with incipient capital outflows rather than inflows, pose interesting policy questions. With regard to the currency mix of bank deposits, experience elsewhere suggests that greater exchange rate flexibility and ongoing interest rate deregulation in China could sharpen the already evident shifts in onshore foreign currency deposits and loans, perhaps leading at times to large outflows. While interest rates could be raised to stem such outflows, their coinciding with falling domestic prices might pose a monetary policy dilemma. To overcome this problem, could these shifts into local foreign currency accounts be addressed with reserve requirements different from those on domestic currency deposits, as has been done elsewhere? Of course, the answer needs to bear in mind reserve-free deposits available just offshore; thus the measure risks proving ineffective unless some form of capital control remains limiting the free conversion of renminbi into foreign currencies by Chinese residents.

With regard to the gradual liberalisation of two-way equity portfolio flows, how should China strike the balance between regulating and attracting foreign portfolio inflows into China? For instance, could China consider setting up a qualified foreign institutional investors (QFII) scheme, on the one hand, and channelling domestic portfolio outflows abroad via some qualified domestic institutional investors (QDII) mechanism on the other? If portfolio outflows prove stronger, might some fee, possibly related to length of holding period, be set and varied to affect such flows in a manner similar to what private mutual funds do to affect shareholder behaviour? Obviously, answers to such questions depend not only on the initial conditions but also on the weights given to various policy objectives and the degree of liberalisation to be achieved. As experienced by some countries, a progressive approach is conceivable with the maintenance of controls and procedures aiming at addressing temporary and specific difficulties. However, these measures should be strong to be effective. They should also be strictly focused to remain compatible with the principle of capital liberalisation, a balance which could prove difficult to achieve and maintain over time. I hope that the diverse liberalisation experiences of the economies represented at this seminar will help Chinese policymakers to ask the right questions and to find sensible answers.

Finally, the idea that China's initial economic conditions could help shape its policy choices with respect to liberalising the capital account is consistent with China's general approach to economic reform. To date, "Chinese characteristics" have played a prominent role in this evolutionary process. Consider the current situation in China where many subsidiaries and joint ventures of foreign companies successfully operate in the country but are still basically forbidden to obtain low-cost funding in the local stock markets or the domestic bond markets. Might China place a high policy priority on reforming and strengthening its capital market and permitting foreign companies operating in China to issue domestic currency stocks and bonds? Since it is compatible with China's initial conditions of a high level of domestic savings, inviting such foreign-invested firms to participate in the local equity and debt markets is likely to work if the structure of these markets is made appropriate. Moreover, this move would support domestic capital market development and economic growth while complementing China's long-term policy of attracting foreign direct investment.

5. The seminar programme

This seminar brings to China 13 participants from four continents who have already experienced capital account liberalisation. They will use their experience to address both broad strategy and sector-by-sector policies. Participants on the Chinese side comprise largely those in the State Administration of Foreign Exchange (SAFE) who are directly responsible for implementing current and future policy. Our seminar programme also reflects the importance of an economy's initial conditions in its liberalisation of the capital account. Here, I would like to first highlight two special features of our seminar and then briefly outline the seminar programme for the next two days.

First, our choice of case studies reflects the need to pay closer attention to initial economic conditions. Thus the seminar does not focus on Latin America, as does so much of the recent writing on the subject. This programme is intended to allow Chinese policymakers to sample a richer and more balanced mix of experiences with capital account liberalisation. In particular, I wish to emphasise the cases of Japan and Singapore, where initial conditions appear to have resembled China's.

Second, our seminar focuses on practical considerations and actual experience rather than general macroeconomics. It thus covers five topics: the role of initial conditions and the overall strategy, bank flows, non-bank financial and corporate flows, equity portfolio flows and cross-border cash flows. This sectoral approach reflects the perspective of policymakers and practitioners, since the instruments to manage liberalisation will in practice vary by sector and asset.

Against this general background, Session II explores specifically the role played by initial economic conditions in the overall choice of strategy, focusing on the Japanese experience. As mentioned earlier, when Japan started its liberalisation process, it shared some of the features of China's current environment: low inflation, relatively low interest rates and surpluses in the balance of payments.

Session III focuses on capital flows related to banks. These have posed significant risks in a number of countries. This session addresses the relationship between onshore and offshore money markets, liquidity management of the foreign currency book, and prudential controls on lending foreign currency to residents as well as domestic currency to non-residents. On this subject, the seminar is fortunate to have speakers from Italy, South Korea and Singapore.

Session IV examines issues related to capital flows involving the non-bank financial and corporate sectors. They include both domestic firms tapping offshore funding and foreign companies seeking local currency funding onshore, as well as foreign currency investment by households, pensions, mutual funds and insurance companies. The session draws on the experiences of France, South Africa and the Philippines.

Session V discusses the management of equity portfolio flows. From the perspective of Chinese policymakers, interesting and very topical questions include whether and how to allow QFII, QDII and China depository receipts. The issue of how to merge local and foreign currency shares is also topical. The session explores the Malaysian, Indian and Taiwanese experiences.

The penultimate session (Session VI) focuses on offshore circulation of local currency. The Chinese authorities attach great importance to this issue. This is evident from People's Bank of China Governor Dai's recent suggestion that banks in Hong Kong might accept deposits of renminbi currency notes. It is very unusual for a currency to become widely used outside its borders before capital account liberalisation. As a result, this session consults the experience of currencies with little or no living memory of capital controls, namely the Deutsche mark and the US and Hong Kong dollars. The final session is designed to bring together some of the more interesting lessons and ideas from the seminar.

In conclusion, I anticipate and sincerely hope that this joint BIS/SAFE seminar on capital account liberalisation will prove useful to all the participants. The Bank for International Settlements, the economies in the region, and the whole world share an interest in the success of China's capital account liberalisation. Thank you all for your attention.

Capital account management and its outlook in China

Zhang Xiaopu

1. Current status of capital account management in China

Since the introduction of the reform and opening-up policy, China has made eye-catching progress in developing its economy, including great advancements in transforming its foreign exchange control regime into a market-oriented arrangement. In 1994, substantial reform measures were introduced to restructure China's foreign exchange control system, which resulted in the establishment of the system of "purchasing and surrendering foreign exchange through designated banks", the nationwide foreign exchange interbank market, the unification of dual exchange rates and the managed floating exchange rate regime. In December 1996, China made its currency, the renminbi (RMB), convertible for current account transactions, removing both quantitative and regulatory restrictions on the use of foreign exchange for current account transactions.

Despite the fact that China continues to maintain a certain control over transactions and currency exchanges on the capital account, including restrictions applied to cross-border capital flows as well as quantitative and regulatory controls on exchange between the RMB and foreign currencies, a limited and selective liberalisation has been pioneered in capital account management since 1979, when the reform policy was first adopted. In terms of transaction items, current restrictions on the capital account are mainly reflected in the following three aspects:

1.1 Restrictions on access by foreign investors to domestic financial markets and by Chinese investors to foreign financial markets

In opening the securities market to foreign investors, the Chinese government is pursuing a strategy of "fragmenting the market with separate investors", which means foreign investors are only allowed to buy foreign currency denominated shares and debt instruments in either the domestic or the overseas market, including B shares onshore, as well as H shares and Red Chips offshore, and overseas foreign currency bonds, but not RMB-denominated A shares, bonds or other money market instruments. Meanwhile, Chinese residents are largely prohibited from buying, selling or issuing capital or money market instruments in the overseas market.

1.2 Restrictions on external borrowing

While foreign-funded enterprises are free from any restrictions on raising short- or long-term debts in the overseas market, other domestic entities need to obtain the required qualifications as the main borrowers and to have the proposed borrowing amount certified by the relevant authorities, with the terms of the borrowing reviewed and approved by the SAFE. In addition, domestic financial institutions can only issue external loans in line with certain provisions set in the rules on foreign exchange liability/asset ratio management upon prior approval by the relevant authorities while domestic non-financial enterprises are strictly prohibited from extending any external loans.

1.3 Restrictions on direct investment

For foreign investors, no restrictions are imposed on their direct investment in China except that they are required to follow the industrial policy guidance given by the Chinese government. However, outward direct investment by domestic entities needs to be approved by the relevant government departments; the necessary foreign exchange sources and the associated risks of such outward direct investment need to be assessed and verified by the SAFE.

Government restrictions on the capital account in China mainly involve the following two forms of management:

- Controls imposed on cross-border capital transactions by relevant government departments such as the State Development and Planning Commission (SDPC), The People's Bank of China (PBC), the China Securities Regulatory Commission (CSRC) and the Ministry of Foreign Trade and Economic Cooperation (MOFTEC). For example, if a financial institution intends to borrow from overseas markets, its qualification as the main borrower has to be approved by its regulatory authority, the PBC, with the borrowing amount to be allocated by the SDPC.
- Controls imposed on certain phases of foreign exchange transactions related to cross-border capital transactions by the SAFE, including restrictions on cross-border fund remittance and repatriation and RMB/foreign currency exchange related to capital account transactions. For example, the SAFE requires all foreign exchange proceeds from capital account transactions overseas to be repatriated to China on a timely basis.

In sum, China's control over the capital account is a direct restriction based mainly on administrative approval and quantitative limitation. However, different entities and capital account transactions are subjected to different degrees of control. For example, fewer restrictions are imposed on foreign-funded enterprises and domestic financial institutions, but more on domestic enterprises, especially non-financial institutions.

As a matter of fact, China has been largely benefiting from economic and financial globalisation thanks to its cautious approach to capital account liberalisation. Since reform and the opening-up to the outside world, foreign investment in China has become increasingly diversified, with China's level of actually utilised foreign investment ranking among the top levels in the world and first among developing countries. By the end of 2001, China had altogether licensed 390,484 foreign-funded enterprises, with total direct investment amounting to USD 395.47 billion. The cumulative drawdown of external debts has reached USD 409.16 billion. The outstanding balance of China's external debts stood at USD 170.11 billion at end-2001, and capital funds raised through overseas listing and B share issue in the domestic market topped USD 58.6 billion and USD 4.63 billion, respectively.

Foreign investment has made a significant contribution to China's economic development by meeting financing requirements, introducing into China advanced technology and management know-how from abroad, promoting a more open and market-based economy, and supporting industrial upgrading. As past experience shows, a regional economy or an industry is likely to be more advanced and competitive if it is more broadly liberalised or deregulated at an earlier stage. Economic development in China's coastal regions and the growth of its electronics industry both serve as a good example in this regard. While China is becoming more attractive to foreign investors, some Chinese enterprises have also started to explore investment opportunities in the overseas market. According to the MOFTEC statistics, by end-2001, contracted Chinese direct investment in overseas markets had reached USD 8.4 billion, involving a total of 6,610 overseas investment projects. At the same time, foreign assets maintained by Chinese financial institutions are also growing rapidly in addition to the central bank's holding of more than USD 240 billion in foreign exchange reserves.

2. The need to gradually achieve capital account convertibility

In terms of liberalising the capital account, neither the IMF nor the WTO mandates its members to have currency convertibility on the capital account, and actually the Chinese government has made no such commitments when negotiating its accession to the WTO. That said, we realise that liberalisation of the capital account and full convertibility of the RMB always stand as the ultimate goal for China's foreign exchange administration. With the deepening of economic reform and greater market opening, opening up the domestic capital market and relaxing controls on capital account transactions in a gradual and orderly way will eventually become a necessity and trend for China. Such a necessity is mainly reflected in the following five aspects:

2.1 The need to restructure the economy

The 10th five-year plan mapped out by the Chinese government has already put economic restructuring as the top priority in the coming years, when industrial and ownership structures will be improved along with a reduction of disparities across regions and between urban and rural areas. Attraction of foreign investment into China to promote capital account liberalisation could be taken as an active approach to benefit the great course of strategic restructuring of the Chinese economy. Considering the present adequacy of financial resources in both foreign and domestic currency, utilisation of foreign capital to a great extent serves to introduce into China advanced technology, skilful professionals and management know-how to promote economic restructuring and industrial upgrading.

2.2 The need to develop domestic financial markets

The Chinese government deems nurturing and developing the financial markets as the core of the financial reform, as the financial markets constitute an important platform for effecting financial transactions. Following years of effort, China has preliminarily put into place a financial market system commensurate with the development of its socialist market economy, which mainly consists of a money market dominated by transactions in the interbank bond, interbank lending and commercial paper markets, a nationwide foreign exchange trading market and a capital market characterised by rapid growth of stock trading. However, these markets, in particular the capital market, are still in the nascent stages of development and beset with problems such as a lack of investment instruments, poor corporate governance in listed companies and irrational investment cultures. Such problems have greatly impaired the efficiency of resource allocation in the financial market and could further slow down the reform process in other fields. In such a case, opening the capital market in an appropriate way could provide a good window for China to acquire relevant and useful experience from foreign countries so as to enhance the quality of the listed companies and build a regulatory framework up to international standards to guide and supervise the healthy development of the capital market.

2.3 Improving the international competitiveness of Chinese enterprises

The Chinese government has already identified a broad multilayer strategy to open its economy up to the outside world. On the one hand, foreign investments are welcomed by China; on the other, Chinese enterprises are encouraged to go abroad and compete internationally. Liberalising the capital account appropriately is an effective way to encourage Chinese enterprises to invest overseas and strengthen cooperation with their foreign counterparts in technological and economic fields, through which a fleet of China's own transnational companies will be gradually nurtured. To make China a real economic power in the world, we urgently need to adopt such a strategy to improve China's overall economic strength and international competitiveness. However, the pursuit of the "go abroad" strategy would naturally pose a stern challenge to the current regime of capital account management that restricts capital outflows. In fact, there are many weaknesses in China's capital account management with regard to both capital inflows and capital outflows, which could no longer accommodate the changed economic environment and business development of Chinese enterprises. Therefore, it has become necessary to accelerate the capital account convertibility of the RMB.

2.4 The need to reduce the cost of capital account control

First of all, ever since RMB convertibility for current account transactions was achieved in 1996, a distinction has had to be made between transactions on current and capital account so as to exercise effective control over the latter. However, certain balance of payments transactions share the characteristics of both current and capital account transactions and are thus sometimes hard to clearly distinguish between, thus leaving loopholes for some capital account transactions to escape regulatory control. Second, controls on some capital account transactions have already been lifted in China. Given the potential substitutability between different regulated and liberalised financial instruments, capital flows are more likely to move in and out through the more liberalised instruments. This will tend to create a regulatory vacuum or loopholes in capital account control and thus undermine its effectiveness. Third, international experience has proved that no capital control is completely effective if incentives or motivation for capital flight remain. Capital control can only provide

a temporary shelter but not long-lasting protection for the stable development of China's economy and financial system.

2.5 Post-WTO environment

With wider opening of the market after China's accession to the WTO, service industries, including banking and insurance, are expected to grow more rapidly, which will generate substantial capital flows and intensify the pressure to further liberalise capital account transactions. In addition, more liberalised and growing trade activities are likely to increase the level of cross-border capital flows. As a result, market players such as trading companies and banks will increasingly demand the removal of restrictions on cross-border investment and capital flows.

3. Principles for pushing forward capital account convertibility

Full convertibility of the RMB is a necessary condition for China to be adequately integrated into the global economy. However, convertibility for capital account transactions has been proved by both empirical studies and country experience to be a double-edged sword for the developing countries. In general, certain preconditions must be met before a country makes its currency convertible for capital account transactions, and premature liberalisation of the capital account would produce a negative impact on economic development. Recent crises in many emerging market economies serve as examples in this regard. In pursuing capital account convertibility in China, we need to observe the following principles:

3.1 Liberalisation of capital account transactions and the related exchange control could be conducted separately

Liberalising the capital account does not necessarily mean a complete removal of exchange control. Furthermore, the IMF only requires its member countries to achieve convertibility for current account transactions, not for capital account transactions. Therefore, in practice, liberalisation of capital account transactions and the removal of the related exchange controls could be conducted in a separate and sequenced manner, which means that, taking into consideration a country's balance of payments position and economic stability, certain restrictions may remain in place on exchange transactions even after the liberalisation of some capital account transactions.

3.2 Policy stance must be clarified in the process of exercising exchange controls related to capital account transactions

Exchange controls should be flexibly implemented to reflect policy concerns in different time periods on different transaction items or the need to maintain the balance of payments. At present, appropriate action should be taken to encourage inflow of long-term capital while short-term capital inflows and capital flight need to be restricted. Moreover, attention should be paid to improving the quality, not only increasing the quantity, of capital inflows.

3.3 Capital account convertibility should go hand in hand with the following conditions:

- *Macroeconomic stability,* eg in the form of appropriate economic growth, stable price levels, a sound fiscal position and a basic balance of the current account.
- *Microeconomic fundamentals* need to be established and improved. A modern corporate system should be set up in the corporate sector to make enterprises responsible for their business operations and losses/profits, to improve corporate governance and to strengthen market transparency.
- *Sound and healthy development of the financial system*. Non-performing bank assets must be dealt with first. Financial institutions should be encouraged to learn advanced financial techniques from foreign countries with a view to improving financial services and cleaning up

balance sheets. Domestic financial markets should be expanded and deepened to cultivate an efficient money market and capital market. Meanwhile, financial supervision needs to be strengthened to guide sound development of the financial system.

– *Improvement of the exchange rate and interest rate regime.* Once capital account transactions are liberalised, China's external balance will rely more on timely adjustments of the exchange rate and interest rate. To accommodate such a development, the flexibility of the RMB exchange rate should be gradually increased while at the same time interest rate liberalisation is steadily nurtured.

4. Policy considerations in pushing forward RMB capital account convertibility

4.1 China will further liberalise its financial industry and increase capital account convertibility through more active participation in economic and financial globalisation

RMB convertibility for capital account transactions has always been regarded as an important target of overall economic reform by the Chinese government, which will continue to make steady efforts to accelerate its realisation. Meanwhile, reform in other fields, including reform of the financial, trade and corporate systems, will be speeded up to accommodate the progress being made in liberalising capital account transactions.

4.2 Efforts will be intensified to attract more foreign investment to expand capital account liberalisation

In the foreseeable future, China should and will be able to attract more foreign investment. More sectors are expected to open up for foreign investors and the investment quality is also likely to be improved with enhanced management of capital inflows. Meanwhile, the involvement of foreign investors in merging with, acquiring and restructuring Chinese enterprises as well as in disposing of non-performing banking sector assets will be encouraged and standardised. Qualified institutional investors will be introduced on a pilot basis and the securities market will be liberalised to attract good-quality main issuers from foreign countries. In addition, the investment culture will be rationalised by improving the quality of the listed companies and developing the domestic capital market.

4.3 Capital account management will be enhanced through improved legal and policy transparency

The existing differences between capital account management in China and international practice are yet to be bridged. For example, China maintains different approaches to Chinese- versus foreign-funded enterprises, corporate entities versus natural persons, and state-owned versus privately owned enterprises in controlling capital account transactions, and these have to be gradually brought into line with international practice. Moreover, legal and policy transparency needs to be consistently improved through timely disclosure of relevant rules and regulations to enhance overall capital account management.

4.4 Monitoring of short-term capital flows will be strengthened

As a developing country, China should always stand vigilant against possible attacks from the more risky short-term capital flows. Precautions will be taken to carry out monitoring of cross-border capital flows on a real-time basis through the improved computer-based surveillance system and the statistical system. Meanwhile, contingent arrangements should be made available and ready to handle any abnormal developments in the capital account. Should all preventive measures be in place, the risks of balance of payments disequilibrium can be defused and managed on a timely basis.

The continuous development of China's external sector and deepening of economic reform have called for more extensive liberalisation of its capital account. China will continue to participate actively in the process of economic and financial globalisation, accelerate domestic economic reform and steadily increase RMB convertibility so as to more vigorously serve the needs of reform and economic development.

Opening China's capital account amid ample dollar liquidity

Guonan Ma and Robert McCauley

As China prepares for the challenging task of capital account liberalisation, its authorities have the advantage of years of experience with private holding of foreign currency assets. Despite capital controls, the Chinese economy has already been quite open to international capital movements in some respects. In particular, the widespread presence and marked expansion of foreign currency deposits in the Chinese banking system carry important implications for the country's gradual opening of its capital account.

This paper examines determinants of the demand for foreign currency deposits in Chinese banks, explores the changing relative importance of the Chinese surplus dollars stemming from both the banking and official sectors, traces their deployment overseas, and discusses possible policy implications for China's evolving capital account management.

Several findings emerge from our analysis. It is found that interest rate differentials, exchange rate concerns and the one-off effect of the liberalisation of part of China's stock market jointly account for almost half the variation in demand for foreign currency deposits. We also analyse the recent ups and downs of dollar loans booked by banks in China, and their implications for the foreign currency liquidity position of banks on the mainland. We argue that the same set of forces helps us understand the changing locus of surplus dollars in the Chinese banking and official sectors. Our study indicates that, over the past three years, surplus dollars of China's banking and official sectors were vented mainly into the international interbank markets and US debt markets. Going forward, the main challenge of China's capital account liberalisation is not so much whether to permit portfolio outflows as the choice of new channels for such already large outflows.

Table 1

Foreign currency bank deposits of non-banks in mainland China

End of period, in billions of US dollars

	1992	1995	1997	2000	2001
Total	60.7	69.7	83.5	145.6	154.5
In mainland China (onshore)	57.9	66.7[1]	79.7[1]	134.8	142.6
Locally owned banks	56.1	63.6[1]	75.2[1]	128.3	134.9
Individuals	9.4	15.9[1]	29.2[1]	73.0	81.6
Firms	26.7	29.3[1]	33.7[1]	46.0	45.3
Others	20.1	18.4[1]	12.3[1]	9.3	8.0
Foreign banks[2]	1.8	3.1	4.5	6.5	7.8
Offshore[3]	2.8	2.9	3.8	10.9	11.9
Memo:					
In locally owned banks as a percentage of total renminbi deposits	*12.3*	*8.7*	*6.9*	*8.6*	*7.8*
Foreign exchange reserves	*19.4*	*73.6*	*140.0*	*165.6*	*212.2*

[1] Dollar deposits estimated using bank data from *Almanac of China's Banking and Finance*. [2] Onshore foreign currency deposits at foreign banks operating in mainland China are estimated as their total deposits, assuming that they are all foreign currency denominated. [3] Non-bank Chinese deposits at BIS reporting banks.

Sources: The People's Bank of China; *Almanac of China's Banking and Finance*; BIS; authors' own estimates.

1. Growth of foreign currency deposits of Chinese non-banks

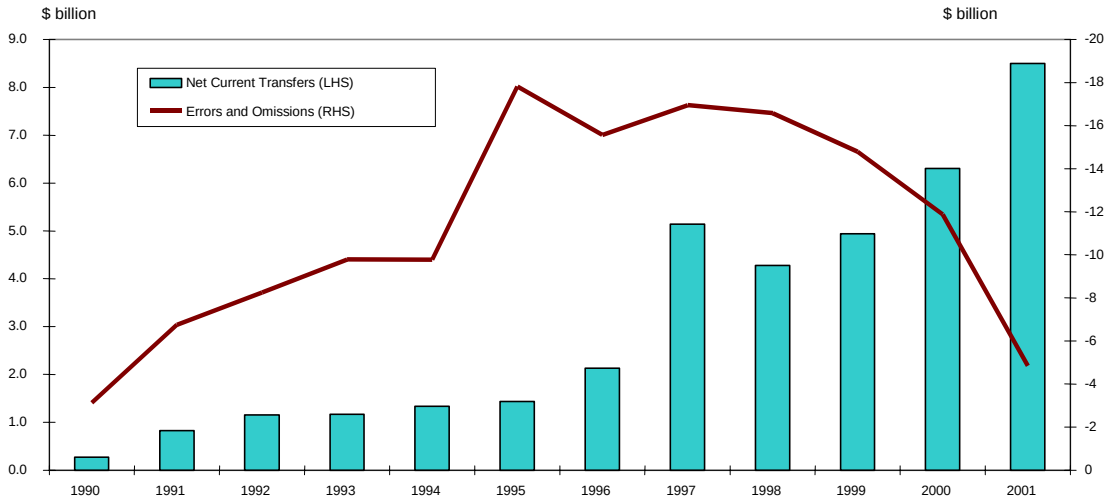
Most of the surplus dollars from the Chinese banking sector have come about as a result of the rapid growth in foreign currency deposits at banks in China (Table 1). Foreign currency deposits of non-banks resident in China have grown very rapidly, averaging some 10% per annum during the 1990s. These deposits have accumulated principally at Chinese banks on the mainland, as well as in banks offshore (including in Chinese banks' affiliates in Hong Kong SAR and elsewhere) and at foreign banks in mainland China, which until recently could serve only foreign firms and individuals. Increased individual deposits represent most of the recent growth. The focus of our paper is primarily on the foreign currency deposits at Chinese-owned banks in China.

It is difficult to say where all the dollar deposits have come from. One source has been remittances from overseas Chinese, which lie behind the reported net current transfers of over USD 8 billion in 2001 (Graph 1). The easing of restrictions on foreign travel by Chinese residents led to 12 million reported travellers in 2001, each entitled to convert domestic currency equivalent to USD 2,000 into foreign currency. Leakage in China's foreign exchange controls may partly explain the outflows implied by the substantial errors and omissions in China's balance of payments. And reasonably competitive interest rates on domestic dollar deposits have served to domesticate what might otherwise have been capital flight. China's foreign currency deposits amount to some 8% of its broad money, comparable to Taiwan (China) and Canada but higher than the United States and Japan.

Graph 1

Sources of foreign currency deposits for China's household sector

In China's balance of payments, billions of dollars



Sources: The People's Bank of China.

2. Explanations

Following the structure of an analysis of Taiwanese foreign currency deposits (Fung and McCauley (2001)), we consider four factors to explain the monthly variation of foreign currency deposits in Chinese banks on the mainland. The Appendix details the econometric work. To summarise the results, country risk and credit risk are rejected as explanations, while interest rate differentials and exchange rate expectations appear to play important roles. In addition, the partial liberalisation of the so-called B-share market, previously intended to be restricted to non-resident investors, explains a temporary drawdown in deposits in the first quarter of 2001. This general finding is remarkably consistent with the earlier works on China (Ma (1999)) and Taiwan, China (Fung and McCauley (2001)).

Country risk

If Chinese depositors were acquiring dollars to avoid country risk, one would expect to see them placing foreign currency offshore, beyond the reach of domestic authorities. However, the available data do not indicate that they favoured offshore over onshore deposits. While offshore deposits have grown somewhat faster than total foreign currency deposits (Table 1), over 90% of such deposits remain in banks on the mainland, subject to Chinese law and policy. Country risk cannot, therefore, explain much of the measured build-up of foreign currency deposits.

Credit risk

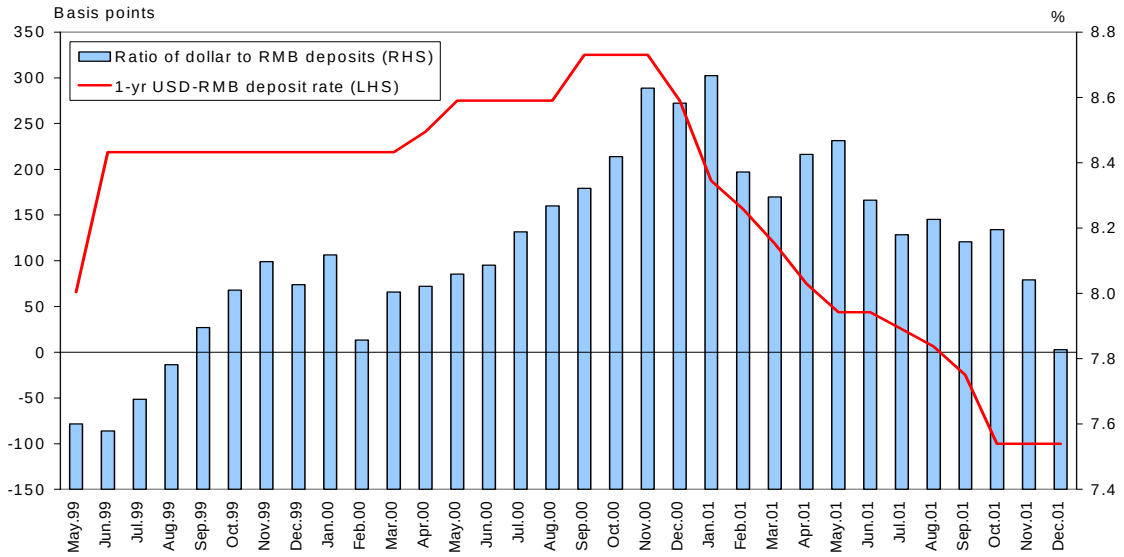
With open discussion of the high levels of non-performing loans in Chinese banks, Chinese depositors might have been expected to react to heightened perceptions of credit risk in the banking system by shifting deposits to better rated foreign banks in the form of foreign currency deposits. While foreign banks, under the terms of China's entry into the World Trade Organization (WTO), will be allowed to take deposits from households in China, they have, however, not generally enjoyed that right to date and deposits at foreign banks in China have remained small. In effect, the credit sensitivity of Chinese depositors largely remains to be tested. Meanwhile, credit risk cannot explain the build-up of foreign currency deposits by non-banks in China.

Interest rate differentials

Chinese depositors could adjust the mix of foreign and local currency deposits in response to changing interest rate differentials. Given the anecdotal evidence that some 90% of foreign currency deposits are in US dollars, we focus on differentials between the onshore dollar deposit rate and the renminbi deposit rate. From mid-1999 to late 2000, the 12-month dollar/renminbi interest rate spread widened to as much as 300 basis points in favour of onshore dollar deposits, which spurred accumulation of foreign currency deposits relative to renminbi deposits (Graph 2). With the Federal Reserve's easing of US dollar rates in 2001, the situation reversed, with dollar/renminbi interest rate differentials turning decisively in favour of renminbi deposits. Chinese depositors apparently reacted by allowing the ratio of dollar to renminbi deposits to fall.

Graph 2

Foreign currency deposits and relative dollar deposit yields



Note: The onshore dollar deposit rate is for small deposits (USD 3 million or less).

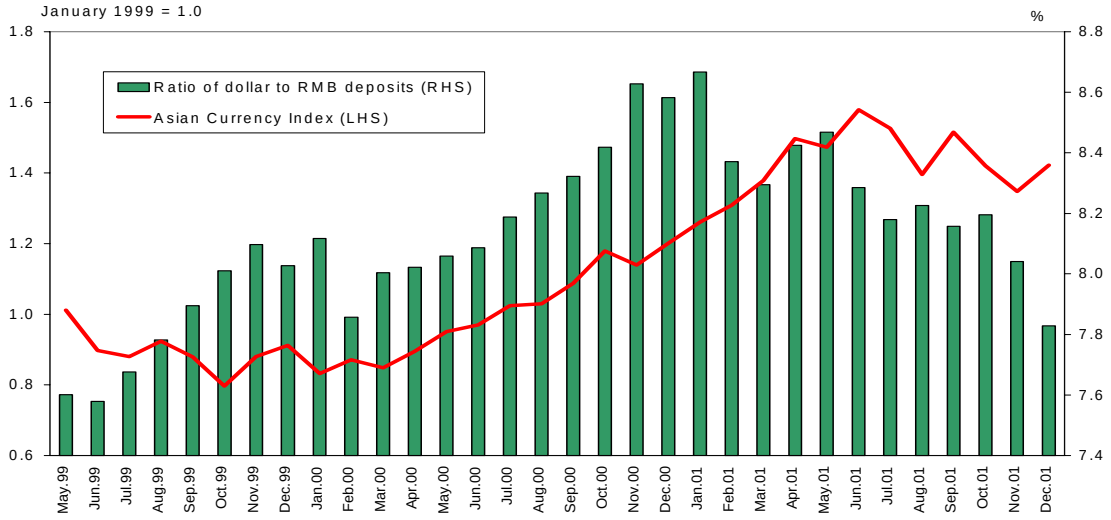
Sources: The People's Bank of China; Bank of China; authors' own estimates.

Exchange rate expectations

Similarly, total expected returns on foreign currency deposits would rise in anticipation of renminbi weakness, which should encourage the holding of foreign currency deposits. Given the stability of the renminbi against the dollar, it may seem odd to speak of expectations of its movement. However, when neighbours' currencies weakened against the dollar, there was public discussion of the loss of competitiveness and the possibility of some response in the renminbi's exchange rate. Thus, we take as a proxy for exchange rate expectations (or fears, since the expectations were never justified in the sample period) a trade-weighted index of the main floating East Asian currencies (see the Appendix). When neighbours' currencies slip, Chinese depositors might then be expected to hold more foreign currency deposits. The index weakened against the dollar from mid-1999 to late 2000 before stabilising into 2001 (Graph 3). Consistent with our hypothesis, Chinese depositors did seem to adjust the currency denomination of their bank deposits. With the occasional weakness of the US dollar in 2002, Chinese residents seem to have eased their accumulation of foreign currency deposits.

Graph 3

Foreign currency deposits and currency expectations



Note: A rise in the Asian currency index indicates an effective depreciation of the included Asian currencies against the US dollar.

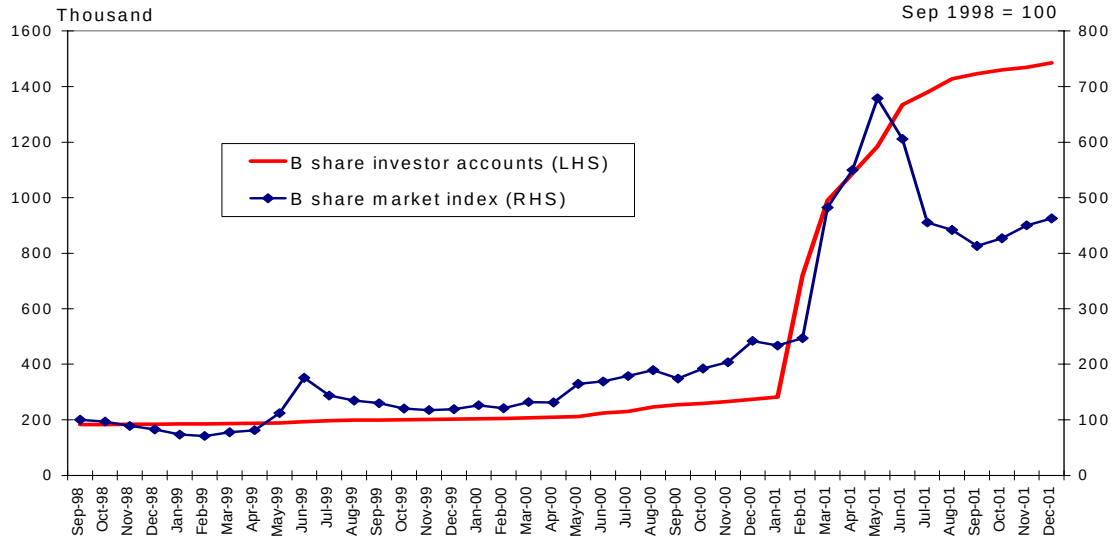
Sources: The People's Bank of China; Bank of China; CEIC; authors' own estimates.

B-share liberalisation

In February 2001, the Chinese government announced a decision to allow Chinese individuals to invest their existing foreign currency deposits in the B-share market, which is traded in foreign currency. This market had a market capitalisation of less than USD 8 billion before the announcement (10% of household dollar deposits), of which it was widely believed that Chinese residents already owned more than half, despite the official prohibition. Given the wide ownership of foreign currency deposits and the relatively attractive valuations of the B-shares at that time, the newly empowered Chinese individual investors snapped them up (Graph 4). This policy shift was associated with a USD 2.5 billion drop in foreign currency deposits in February and March 2001. It appears that foreign investors took profits and exited the B-share market and that Chinese residents drew down dollar accounts to finance their purchases. However, over the medium term, the policy shift could increase Chinese demand for such deposits if investors anticipate that foreign currency holdings might tend to enjoy advantages in the course of further liberalisation.

Graph 4

The B-share market liberalisation factor



Note: The B-share index is a weighted index of Shanghai and Shenzhen's B-share market indices.

Source: CEIC.

3. Foreign currency liquidity of Chinese banks

Falling foreign currency loans

While Chinese non-banks have built up their onshore foreign currency deposits, Chinese firms have also been paying off their dollar debts until recently. Cumulatively, onshore dollar loans fell by more than USD 25 billion during 1999-2001. As a result, the Chinese foreign currency loan/deposit ratio fell from 130% to 70% in four years (Graph 5). It should be noted that the dollar loan/deposit ratio fell not only at Chinese banks but also at foreign banks operating in China.

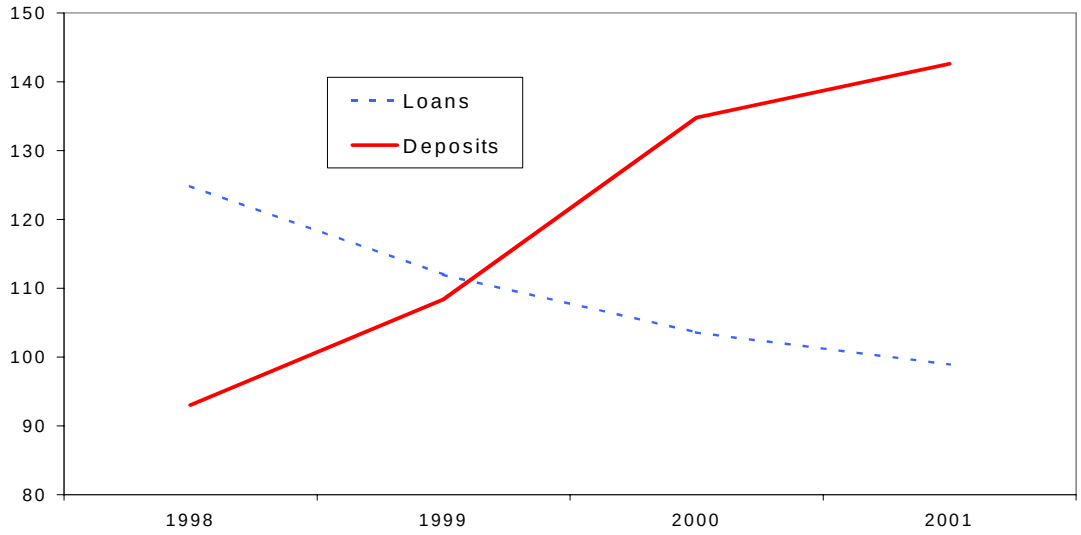
Chinese firms seem to have paid off dollar loans for the same reasons that Chinese households and companies increased their holdings of dollar deposits. Falling renminbi lending rates relative to dollar rates induced Chinese companies to switch to local currency loans. Reinforcing this incentive, episodes of heightened perceptions of currency risk may also have encouraged Chinese firms to reduce exposure to dollar obligations. Similarly, fears of renminbi weakening appear to have prompted affiliates of foreign companies operating in China to seek local currency financing of their operations. Since mid-2001, dollar loans outstanding appear to have stabilised and might even have risen somewhat, consistent with the shift in interest differentials as well as the occasional weakness in the US dollar that moderated dollar deposit growth, as discussed earlier.

Rising dollar deposits, together with declining dollar loans, generated a foreign currency surplus of USD 75 billion in mainland banks in 1999-2001, a sum larger than the USD 67 billion increase in China's official foreign reserves in the same period. Taken together, the increase in foreign currency liquidity in China's banking system and higher official foreign exchange reserves exceeded USD 140 billion during 1999-2001. The Box discusses the investment of these foreign exchange funds abroad.

Graph 5

Foreign currency deposits and loans at banks in China

In billions of US dollars



Sources: The People's Bank of China; authors' own estimates.

Shifting banking and official dollar flows

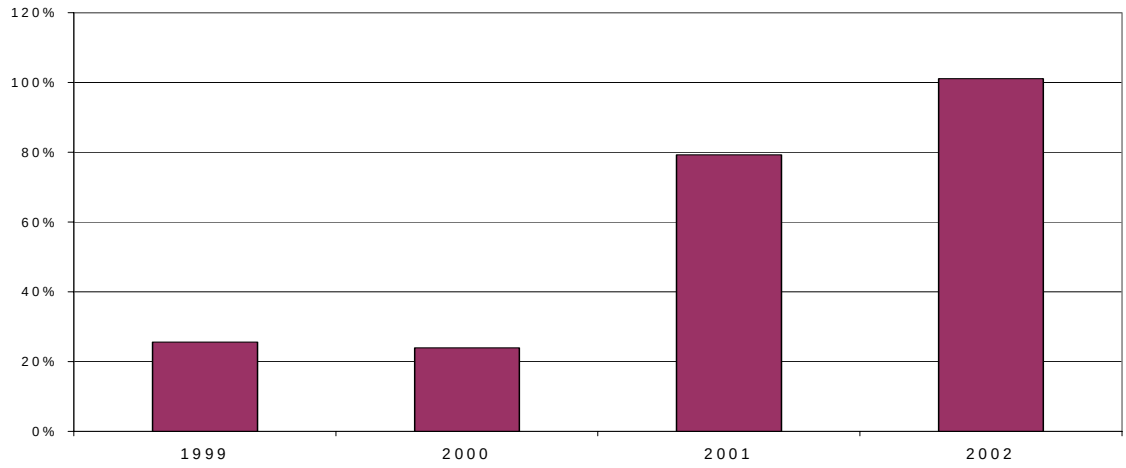
The above analysis of the determinants of demand for foreign currency deposits also provides a basis for understanding the shifting sectoral composition of China's surplus dollars over time. To highlight the shift, one could divide the period between 1999 and September 2002 into two episodes: 1999-2000 and 2001 to September 2002. The build-up of the combined foreign currency liquidity of the banking and official sectors was some USD 80 billion in the first episode and USD 100 billion in the second.[1] However, there was a decisive shift in the relative contribution of the banking and official sectors to this combined surplus foreign currency (Graph 6). In the first episode, the official and banking sectors accounted for one quarter and three quarters, respectively, of the combined surplus dollars. This relative contribution reversed in the second episode, with 85% stemming from the official sector and only 15% from the banking sector. In fact, the banking sector produced virtually no surplus dollars for the first three quarters of 2002. Apparently, between these two episodes, the build-up of the banking sector's foreign currency surplus eased while the accretion of the government's foreign exchange accelerated.

This marked shift in the banking and official flows is no accident and responded to the same set of factors underlying the movements in foreign currency deposits and loans at banks in China. As discussed earlier, the 11 successive interest rate cuts by the US Fed during 2001 and the occasional weakness in the US dollar in 2002 helped slow down the build-up of foreign currency surpluses in the Chinese banking system. Given China's strong basic balance of payments and the position of the monetary authorities as the dollar buyer of last resort under China's exchange rate regime, changing relative returns and shifting currency expectations led the surplus foreign currency liquidity away from the banking system and into the official accounts in the form of higher foreign exchange reserves. The absence of more diversified channels for cross-border flows could only reinforce this trend. In effect, relatively low US dollar yields and prospects of a weaker dollar tend to shift foreign exchange risks onto China's central bank from the rest of the Chinese economy.

[1] There were apparent changes in the definitions of government statistics on foreign currency deposits and loans over the course of 2002, and we have made minor but rough adjustments to the official data.

Graph 6

Change in reserves to change in the banking and official sectors' dollar liquidity



Source: The People's Bank of China; authors' own estimates.

These developments in mainland China paralleled in a muted fashion those across the Taiwan Strait, suggesting possibly greater dollar shifts between the Chinese banking and official sectors in the years ahead. During the first nine months of 2002, a weaker US dollar slowed the growth but did not reduce the level of foreign currency deposits in China, whereas Taiwanese households and firms reacted to the occasional dollar weakness by actually decreasing their holding of foreign currency deposits, mainly since late 2001. Given the commitment of the Taiwanese monetary authorities to keep the New Taiwan dollar steady, withdrawals of foreign currency deposits at banks helped boost Taiwan's foreign exchange rseserves. Thus, in the first three quarters of 2002, Taiwan's foreign exchange reserves jumped 28%, compared to an 18% rise in China's foreign exchange reserves over the same period.

Understanding the more pronounced swing in foreign currency liquidity between the Taiwanese banking and official sectors could be useful for China's policymakers. The greater shifts of dollar flows between the Taiwanese banking and official sectors probably reflected, among other things, the more relaxed regimes for both foreign exchange controls and the exchange rate. While a less stringent exchange control regime would most likely accentuate the movements in foreign currency liquidity between the banking and official sectors, a more flexible exchange rate system could strip the one-way option implicit in a tight peg system and thus present greater exchange risks for the private sector, moderating the fluctuations in dollar liquidity between these two sectors. These two factors tend to have opposite effects in shaping the private and official sector dollar liquidity dynamics, though, on balance, their net effect seems to be greater shifts between these two sectors.

China's outflows and Hong Kong SAR

As the Box shows, the recent dollar surpluses of Chinese banks together with increases in official foreign exchange reserves have mostly flowed into BIS reporting banks and major global debt markets. Therefore, China has already experienced large portfolio outflows in recent years, though mainly through the limited channels of the banking and official sectors. The scale of this flow has given rise to discussion of policies to channel it in a manner that would benefit regional financial centres in Asia.

Box

Overseas deployment of surplus dollars

Where does the surplus dollar liquidity of the banks on the mainland go? Publicly available data do not permit this question to be answered for China's banking system alone, but it can be answered for the official and banking sectors in aggregate. Taken together, Chinese data suggest that Chinese bank managers and official reserve managers needed to find uses for over USD 140 billion of the increase in foreign currency liquidity in China's banking system and higher official foreign exchange reserves during the period 1999-2001. We attempt to trace this sum and find that it flowed in large part into BIS reporting banks and US debt markets (see the table in this Box).

First, some USD 40 billion increased the net claims of Chinese banks and official monetary authorities on the international banking system (represented by the BIS reporting banks). Of this sum, USD 14 billion flowed through banks located in Hong Kong SAR, mostly in the form of repayments on interbank advances denominated in foreign currencies. Second, the bulk of China's surplus foreign currency liquidity flowed into US debt securities. The US Treasury reports that Chinese residents bought equal amounts of US Treasury and agency securities in 1999, but the balance tipped towards agencies in 2000 and 2001 (as well as the first three quarters of 2002). Moreover, 2001 actually saw significant investment in corporate securities for the first time. Finally, Chinese funds also flowed into other markets. But flows into German and Japanese securities, for instance, represented only a fraction of recorded uses of dollar liquidity in the same period.

The shift along the risk spectrum related to the US debt securities can be interpreted as showing a greater appetite for return and acceptance of risk, but was also consistent with changing relative supplies of different debts. On the whole, however, Chinese residents continued to choose high-quality and liquid US securities. While 90% of Chinese net purchases of US debt securities over the last three years flowed into Treasury and agency bonds, the rest of the world allocated only a third of such purchases to these safe bonds. This behaviour may reflect the institutions responsible for foreign investments in China compared to the rest of the world, where insurance companies and investment funds play a larger role.

China's foreign currency liquidity flows

Changes, in billions of US dollars

	1999	2000	2001	2002[1]	1999-2001
Sources[2]	**38.0**	**45.7**	**58.8**	**45.5**	**142.4**
Foreign exchange reserves	9.7	10.9	46.6	46.0	67.2
Deposits in onshore banks[3]	15.4	26.4	7.9	5.5	49.6
Less loans of onshore banks[3]	12.9	8.4	4.3	–5.9	25.6
Uses[2]	**24.9**	**55.3**	**44.9**		**125.0**
Net claims on BIS reporting banks	9.7	34.1	–4.2	13.0	39.6
of which: on banks in Hong Kong	*3.8*	*14.4*	*–4.2*	*5.3*	*14.1*
Net purchases of US debt securities	15.1	20.5	44.1	32.8	79.7
Treasury bonds and notes	8.2	–4.0	19.1	1.6	23.3
Agency bonds	8.3	18.8	26.0	17.1	53.1
Corporate bonds	0.5	0.8	6.7	4.7	8.0
Money market instruments	–2.0	4.8	–7.7	9.4	–4.9
Net purchases of German securities	1.5	1.7	1.3		4.5
Net purchases of Japanese securities	–1.4	–1.0	3.7		1.3

[1] Sources cover the first three quarters of 2002, while uses cover the first seven months of 2002. The definitions of Chinese official data appeared to have changed in the course of 2002. [2] Sources do not include the corporate and non-deposit finance sectors; uses are also incomplete. [3] At both domestic and foreign banks. Onshore loans fell, thus adding to sources.

Sources: The People's Bank of China; Deutsche Bundesbank; Hong Kong Monetary Authority; Bank of Japan; US Treasury; BIS; authors' estimates.

To strengthen Hong Kong SAR's role as a financial centre without sacrificing returns on China's investment of surplus dollars, Governor Dai Xianglong of The People's Bank of China proposed in February 2002 to funnel foreign exchange into Hong Kong's financial markets. Banks in Hong Kong have seen only about 10% of this flow of some USD 140 billion in 1999-2001. Thus, there is much scope for the Chinese authorities to increase the flow of dollar liquidity to Hong Kong if they wish to do so. One proposal would be to choose Hong Kong banks as the recipients of such flows. To the extent that Hong Kong banks serve entrepôt functions, in effect re-exporting the inflows to the rest of the global banking system, increasing this flow might not have much of an impact on Hong Kong's own financial markets. For example, Hong Kong's loans outstanding, whether denominated in foreign or local currencies, have contracted noticeably in recent years.

An alternative approach would be to channel the surplus dollars currently invested by Chinese banks into investments in Hong Kong-listed shares (possibly initially those of China-related firms) through authorised funds (in the form of "qualified domestic institutional investors"). A policy of this kind could bring new investors to Hong Kong's stock market, adding liquidity, and alter the risk profile of China's offshore investments. More generally, one of the main challenges of China's capital account liberalisation is not so much whether to allow portfolio outflows but how to successfully manage their taking more diversified and efficient channels (Icard (2003)).

4. Conclusion

China's households and firms have made significant deposits of foreign currency in Chinese banks over the past decade. Whatever the source of the funds, the government has chosen to attract onshore foreign currency deposits, partly by keeping onshore dollar deposit rates broadly in line with overseas markets. That this policy was important is suggested by our finding that interest rate differentials seem to affect the monthly variation in the fraction of foreign currency bank deposits. Perhaps more surprisingly, our proxy for currency expectations also helps explain increments in the share of foreign currency deposits, notwithstanding the steadiness of the renminbi against the US dollar. The official coupling of the opening of the B-share market and foreign currency deposits immediately drained away some deposits, but over the medium term it may suggest that further head starts may be given to holders of these accounts, thereby potentially increasing demand for them.

The same driving forces behind rising dollar deposits in 1999-2000 might have arguably also led to repayments of dollar loans over the same period, and lately to shrinking surplus dollars of the banking sector. More generally, these factors account for the marked shifts in the relative importance of the banking and official sectors in the accumulation of the overall surplus dollars. US rate cuts and a weaker US dollar slowed the banking sector's build-up of foreign currency liquidity and, together with the government's commitment to currency stability, helped accelerate the accumulation of the official foreign exchange reserves in 2002.

Most of the combined surplus dollars of the banking and official sectors seemed to have flowed into BIS reporting banks and the US debt markets. However, the balance has been shifting more towards US agency bonds of late and even for the first time corporate debt instruments, perhaps reflecting greater appetite for return and acceptance of risk, as well as the changing relative market supply of financial products.

Looking forward, asynchronicity in the US and Chinese interest rate cycles would alter interest rate differentials, while any shift to a more flexible exchange rate system in China would add a new element to the formation of exchange rate expectations. Whatever variations in the demand for foreign currency deposits in China, they are serving as an early experiment in China's interest rate liberalisation. In addition, under the terms of China's WTO entry, Chinese and foreign banks will first compete for foreign currency deposits before competing directly in the renminbi business.

Finally, China's sizeable dollar deposits and large surplus foreign currency liquidity indicate a more internationalised banking system than conventionally thought. Already, China has experienced large portfolio outflows through the banking as well as the official sector. A natural extension of this trend could be to experiment with a more diversified pattern of portfolio outflows, as one possible step in China's gradualist programme of capital account liberalisation.

Appendix:
Some econometric evidence on determinants of Chinese foreign currency deposits

We rely on regression analysis to explain the monthly change in the ratio of onshore foreign currency deposits to renminbi deposits for a very limited sample from 1999:06 to 2001:12. We test three hypotheses posed by our analysis. First, the ratio would rise in response to wider differentials between onshore dollar deposit rates and local currency deposit rates. Second, the ratio would increase in anticipation of dollar appreciation vis-à-vis the renminbi. Finally, the recent B-share market liberalisation would drain foreign currency deposits from the system on impact. The estimated coefficients reported below are of the right sign and statistically significant. The empirical evidence lends support to the main arguments of our analysis. More interestingly, the magnitudes of our estimation results are broadly consistent with those obtained for the case of Taiwan, China (Fung and McCauley (2001)).

$$F_t = -0.065 + 0.041R_t + 0.382E_{t-1} \quad (1)$$
$$(-1.96) \quad (2.59) \quad (1.13)$$

$\bar{R}^2 = 0.190$; $DW = 2.175$; $LLF = 25.14$

$$F_t = -0.042 + 0.083R_t + 0.558E_{t-1} - 0.002B_t \quad (2)$$
$$(-1.46) \quad (2.83) \quad (1.93) \quad (-3.54)$$

$\bar{R}^2 = 0.426$; $DW = 2.203$; $LLF = 31.04$

where

F_t = the change in the ratio of onshore foreign currency deposits to renminbi deposits

R_t = the interest rate differential (onshore USD minus CNY 12-month rate)

E_{t-1} = the lagged percentage changes in the Asian currency index

B_t = the percentage change in the number of B-share investor accounts

Note: The "Asian currency index" is the trade-weighted index of the bilateral US dollar rates of seven floating Asian currencies: the Indonesian rupiah, Japanese yen, Korean won, Philippine peso, Singapore dollar, New Taiwan dollar and Thai baht. The trade weight is the 1999 total trade value in dollars.

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Capital account liberalisation: the Japanese experience and implications for China

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1. Introduction

This paper discusses the experiences of capital account liberalisation in Japan and their implications for China. In Section 2, I provide an overview of the postwar liberalisation process for exchange controls, paying attention to the interaction between exchange controls, the balance of payments and exchange rate movements. In particular, in Section 3 I examine the period 1971-74, when Japan shifted from a fixed rate system to a floating rate system. In my view, this change in the exchange rate regime was not well managed by Japanese policymakers and it may provide an important lesson for China. Then I look into the exchange rate policy in the late 1970s and early 1980s, when Japan liberalised capital account transactions. In this part, I focus on the prudential policy on foreign exchange risk management by financial institutions because it affects international capital movements and exchange rates. Section 4 provides possible lessons for China today. And the last section summarises my conclusions.

2. Overview of the liberalisation process for foreign exchange controls

Japan launched its postwar economy under a state-controlled trade system with extremely strict foreign exchange controls. I will provide a short overview of the liberalisation of exchange controls in Japan based on Fukao (1990) and Fukao et al (1993).

2.1 The immediate postwar period

When Japan surrendered in August 1945, it lost all of its foreign assets. From 1945 until 1949, all international transactions were effected through SCAP (the Supreme Commander of the Allied Powers) and the Japanese government. International prices and domestic prices bore little relationship to each other. Most domestic prices were strictly controlled with a widespread rationing system but black markets thrived. The differences between controlled official prices and black market prices were as large as thirtyfold (3,000%) at the end of 1945 although the price gaps gradually narrowed due to the recovery of production and rapid inflation.

The government purchased exportable goods at elevated prices and sold them at their international prices. The imported necessity goods such as food were sold at low prices to help the starving. As a result, Japan effectively had a multiple exchange rate regime. This multiple exchange rate system provided export and import subsidies, which were financed by Bank of Japan yen credit to the government and aid from the United States. In other words, Japan's current account deficits were financed by the United States (see Table 1). In 1948, the United States demanded that SCAP quickly reduce US subsidies to Japan. In order to halt inflation and current account deficits, SCAP ordered Japan to adopt a very tight monetary and fiscal policy and a single unified exchange rate.

In April 1949, Japan adopted a unified exchange rate of JPY 360 per dollar that lasted until 1971. Owing to an IMF-style stabilisation policy, Japan quickly brought an end to rapid inflation and, as a result, was able to remove most of the price controls and the rationing system. At the end of 1949, the Foreign Exchange and Foreign Trade Law was promulgated. Under this law, foreign exchange transactions were generally prohibited, with exemptions granted only according to directives and notifications by government ministries. Under this system, while exports were carried out relatively freely, imports of goods and services and international financial transactions were heavily regulated.

A surrender requirement that forbade the holding of foreign exchange by private parties was adopted. Any residents who obtained foreign exchange were required to sell it to the monetary authorities

through authorised “foreign exchange banks”. This “foreign exchange concentration system” was maintained with subsequent modifications until May 1972. The foreign exchange holdings that the government built up under this system were allocated for foreign payments on a quarterly basis starting in January 1951 through the Foreign Exchange Budget System (on a semiannual basis from fiscal 1952 and abolished in April 1964). Under this system, the yen was not convertible even for current transactions because it was necessary to obtain a special allocation of foreign exchange from MITI (the Ministry of International Trade and Industry), which controlled this budget process.

Graph 1 shows the current account balance and changes in reserves from 1951 to 1972. In the 1950s, the two lines moved very closely because there were almost no private capital movements under the tight exchange control system.

2.2 The recovery of current account convertibility

In April 1952 Japan regained its independence, and it joined the IMF in 1952 and GATT in 1954. The IMF requested Japan to liberalise current transactions. In July 1960, Japan introduced non-resident free yen accounts. As a result, non-residents were able to deposit yen, received either through current transactions with Japan or through the sale of foreign exchange, into these accounts, which could be freely converted back into foreign currencies. The other side of the coin, however, was that other yen balances could not be converted freely into foreign exchange. With the introduction of the non-resident free yen account, international trade transactions could be settled through the transfer of free yen deposits.

In 1964, when the Olympic Games were held in Tokyo, Japan became an IMF Article VIII country and joined the OECD. OECD membership meant that Japan would liberalise international financial transactions, especially foreign direct investments. Japan also had to liberalise trade-related financial transactions. As a result, international capital movements started to increase gradually in the 1960s. We can observe the small but increasing gap between Japan’s current account balance and its changes in foreign reserves in this period (see Graph 1). However, most countries, including the United States, maintained some foreign exchange controls on pure international financial transactions so as to maintain the pegged rate system. The international financial market was fairly small and Japan borrowed money from the World Bank to build a new motorway between Tokyo and Osaka in the early 1960s.

Even in the 1960s, the potential for large capital flows existed. At that time, exports and imports were equivalent to some 10% of GDP, implying that even with only a two-month shift in the payments and receipts of exports and imports (so-called “leads and lags” of overseas payments), potential capital flows would amount to over 3% of GDP (20 x 2/12 = 3.33). When one considers the fact that Japan’s foreign exchange reserves in the mid-1960s were about USD 2 billion or just over 2% of GDP, it was easy to see that independent monetary policy under a pegged exchange rate system required fairly strict exchange controls on capital transactions.

2.3 The end of the pegged rate system

In the late 1960s, Japan started to accumulate a current account surplus and began to be subjected to political pressure from the United States to revalue the yen. After 1968, the Japanese current balance tended to show surplus, so that foreign exchange reserves, which had fluctuated at about USD 2 billion, reached USD 4.4 billion by the end of 1970. On the other hand, the US economy overheated because of the escalation of the Vietnam War. The US balance of payments showed a trade deficit in 1971 for the first time in the postwar period and the outflow of capital increased sharply. At the same time, the emphasis of foreign exchange controls in Japan switched from trying to prevent capital outflows to trying to encourage them. In April 1970 permission was granted for Japanese mutual funds to purchase foreign securities (with an upper limit of USD 100 million), and in January 1971 insurance companies were also permitted to purchase foreign securities (with the same upper limit). In addition, in August 1971, both mutual funds and insurance companies saw the abolition of upper limits on their purchase of foreign securities, while general investors were also granted blanket permission for the sale and purchase of foreign securities. Despite these measures, capital exports from Japan did not rise significantly because of the strong anticipation of a devaluation of the dollar. As Graph 2 shows, long-term capital outflows rose after 1972 with the expansion of foreign direct investments, credits related to plant exports, and loans for developing overseas resources and securing distribution networks. However, foreign securities investment and short-term capital outflows

did not expand because of the strong expectations that the yen would strengthen in the future (Graph 3).

In May 1971, the German mark began to float, and this gave rise to expectations that the yen would also be revalued. As a result, huge capital flows into Japan occurred, and official exchange reserves rose from the USD 4.4 billion at the end of 1970 to USD 7.9 billion at the end of July 1971. In this situation, the United States suspended the convertibility of the dollar to gold on 15 August, and also announced a 10% import surcharge tax (the so-called Nixon Shocks). Capital inflows in the 11 days between 16 and 27 August, just before Japan's shift to the floating rate system, amounted to USD 4 billion in such forms as prepayment of exports. Foreign exchange reserves by then amounted to USD 12 billion. These figures demonstrate that the liberalisation of exchange controls on current transactions allowed huge amounts of capital flows even with strict exchange controls on pure capital transactions.

As seen in Graph 2, the increase in official exchange reserves during 1971 was considerably larger than that in the current account surplus. These capital flows are believed to have arisen mostly from the activities of Japanese companies abroad. The subsidiaries of Japanese firms borrowed large amounts in dollars, and used these dollars to remit prepayments for exports to parent companies or to purchase yen-denominated securities (see Bank of Japan (1986, page 321) or Komiya and Suda (1983b, page 12)). At this time, there were controls on the prepayment of exports; but when huge profits over a very short period could be foreseen, the effectiveness of such controls was limited. After the United Kingdom shifted to floating exchange rates on 23 August, Japan did likewise on 28 August, and the postwar system of fixed exchange rates collapsed. Still, the floating in this period was very different from the floating experience of recent years. In this early period, extremely tight exchange controls were still imposed to an extent that made even current transactions difficult, while the authorities revalued the yen gradually and intentionally in the market.

The extreme control measures included the freezing of the short-term foreign exchange liabilities of foreign exchange banks at the level of 18 August 1971 (this freezing was abolished on 21 December). Because of this regulation, foreign exchange banks were no longer able to take on the dollar-denominated liabilities necessary to hedge dollar purchases. Consequently, even daily foreign exchange businesses such as the hedging of export contracts and the purchase of export bills and traveller's cheques were disrupted. For this reason, foreign exchange banks suspended the publication of forward rates for customers from 19 August until 29 October and some banks refused to become the counterparty in the hedging of export contracts. In addition, when Japan shifted to the floating exchange rate system on 28 August, upper limits were introduced on the outstanding amount of non-resident free yen accounts at foreign exchange banks. Since some free yen deposits were used for the settlement of international transactions, even normal international transactions were made difficult. For this reason, these controls were abolished in January 1972.

With the Smithsonian Agreement of December 1971, the yen's IMF parity was revalued to JPY 308 per US dollar, and the exchange rate fluctuation band was widened from 1% to 2.5%. Just after the revaluation, the dollar was rather strong, but soon yen buying pressure strengthened and capital controls were imposed during 1972, such as a restrengthening of export prepayment controls, establishment of high reserve requirements on increases in non-resident free yen deposits, and limitation of non-resident purchases of Japanese securities to the amount of non-resident sales. Among these measures, the establishment of reserve requirements on increases in yen deposits was implemented in the form of having foreign exchange banks make non-interest bearing deposits at the Bank of Japan equal to a portion of the non-resident free yen deposit received. In effect, this lowered the yen interest rates that could be offered to non-residents.

In May 1972, the foreign exchange concentration system was abolished and both residents and non-residents were allowed to hold foreign currency deposits with banks in Japan. However, there were important restrictions. For example, residents were not allowed to deposit foreign currency obtained from yen sales and could only deposit that received from transactions stipulated under the laws and regulations, such as export proceeds (it was possible to sell foreign currency deposits to obtain yen). In addition, there were many regulations on deposits into and payments from non-resident foreign currency accounts.

At this time, macroeconomic policymakers feared a deep recession because of the revaluation of the yen after the Smithsonian Agreement. They also tried to avoid a further revaluation and to reduce the current account surplus. Public opinion was strongly against a further revaluation in 1972. At this time, the imposition of export tax and quantitative restrictions on exports was seriously discussed to reduce

the current account surplus. Some politicians and economists advocated “adjustment inflation”: raising general prices to avoid further revaluations. Probably, these politicians and pseudoeconomists could not understand that a real appreciation through inflation is as bad as a nominal appreciation for export industries. Certainly, some serious economists advocated a shift to a floating rate system and explained the benefit of a stronger yen. However, they were unable to obtain wide support from the public. Therefore, the policymakers adopted a highly expansionary fiscal policy together with a very loose monetary policy.

The macroeconomic stimulus led to severe inflation in the second half of 1972 (Graph 4). The inflation rate accelerated to a double digit level in the next year and was further fuelled by the sharp increase in oil prices by the OPEC countries. This was one of the biggest mistakes made by the macroeconomic policymakers, including the Ministry of Finance, the Bank of Japan and the Economic Planning Agency. The Japanese GNP deflator rose by 50% from 1972 to 1975. In spite of the strong macroeconomic stimulus, Japan had to face both an appreciation of the yen and “adjustment inflation”.

In order to enable the supply and demand of foreign exchange towards the end of the fixed rate system to be understood, Graph 5 shows the accumulated current balance along with the accumulated changes in official reserves. The difference between these two values is the portion of the current account surplus not being held as short-term assets by the government; this amount can be seen as roughly equal to the net overall foreign exchange position of the private sector. From this estimate, one can see that the current account in the period 1965-68 was financed almost wholly by an accumulation of foreign exchange holdings by the private sector. From 1969 to 1971, both private sector foreign exchange holdings and increases in official reserves were needed to finance the current account surplus. And, finally, in 1971, while the current account surplus was rising considerably, an imminent devaluation of the dollar was expected. The private sector sold much of its accumulated dollar position, so that official exchange holdings increased by more than USD 10 billion. From this graph, we can see that the private sector shifted its exchange risk to the government.

The Smithsonian system did not last very long. In June 1972, the pound sterling shifted to a floating exchange and, in early 1973, selling pressure on the dollar in foreign exchange markets became so severe that the yen shifted to the floating rate system on 13 February. In March, major member countries of the European Community, including West Germany and France, began a joint float. At that time, policymakers expected that the floating exchange rate would be a temporary system but it has continued to this day.

2.4 Capital account liberalisation under the floating rate system: the 1970s

Graph 6 shows yen/dollar and yen/mark exchange rates since 1970. A strong upward trend in the yen/dollar exchange rate is visible. However, this trend can be explained in part by the inflation rate differential between Japan and the United States. Graph 7 shows the real yen/dollar and yen/mark exchange rates. The upward trend of the real yen/dollar exchange rate is much less pronounced than that of the nominal rate.

The exchange controls on international financial transactions were generally maintained in the 1970s and no significant liberalisations were carried out until 1980. The MOF tried to manipulate foreign exchange controls so as to stabilise the exchange rate, but with very limited success.

Between the stabilisation of monetary conditions in Europe at the end of March 1973 and the outbreak of the oil crisis in mid-October of that year, the yen fluctuated in an extremely narrow margin centring on JPY 265 per dollar. Due to the overheating of the Japanese economy and the effects of yen revaluation, Japan’s current account balance went into deficit in the middle of 1973. With the oil crisis in October, the current account deficit reached 2% of GNP between the end of 1973 and the first half of 1974. In addition to the worsening of the current account balance, there was a very rapid increase in general prices. As a result, strong selling pressure on the yen developed, so that the exchange rate reached JPY 320 per dollar by January 1974.

Facing this selling pressure on the yen, the MOF first abolished the exchange controls that hindered capital inflows and also beefed up controls on capital outflows. At the end of 1973, the strict ceiling on inward securities investment (which limited non-resident purchases of Japanese securities to the amount of non-resident sales) was abolished, and the reserve requirements on increases in non-resident free yen deposits were lowered. Also, in early 1974, there was a relaxation of the controls on receiving export advances.

Corresponding to these relaxations was the tightening on the other side, including the introduction of a voluntary restraint which did not allow net increases in foreign investments by banks, securities companies, investment trusts and insurance companies starting in January 1974 along with the introduction of controls that did not allow net increases in residents' foreign currency deposits. Moreover, macroeconomic policy switched to an extreme tightening of both fiscal and monetary policy.

The Japanese current account returned to near balance by the end of 1974 as the economy went into a deep recession. Due to the lagged recovery of the Japanese economy in 1975 relative to that of the United States, a current account surplus for Japan had resumed by 1976. From 1977, the foreign asset holdings of the private sector began to rise, and the yen exchange rate began to strengthen (see Graph 6 and 7).

In response to the rapid strengthening of the yen in 1977, official market intervention was undertaken to purchase dollars while capital export controls were eased and capital import controls were strengthened. In June 1977, the controls on outstanding balances of residents' foreign currency deposits were abolished, as were the measures that prohibited the acquisition of short-term foreign securities by residents. In addition, in November, a 50% reserve requirement on increases in the free yen deposits of non-residents was instituted. In March 1978, this reserve ratio on increases was raised to 100%, which effectively prohibited the payment of interest on such increases. In addition, the acquisition of yen-denominated securities by non-residents was also strictly controlled. This time, unlike the case of 1971, the extreme control measures that would have made even current transactions difficult were not taken.

However, the huge short-term capital inflows seen in 1971 based on increases in import usance and export advances (leads and lags) were not repeated (see Graph 2). This lack of large short-term capital inflows was presumably due to the fact that, under a floating exchange rate system, large and uncertain changes in exchange rates were possible, in contrast to the easy bet under the fixed exchange rate system. In other words, short-term exchange rate speculation became many times more risky. In this sense, the strength of the yen at this time was not due principally to speculative capital inflows. Rather, as will be explained below, it was attributable to the fact that large current account imbalances were occurring in a regime with exchange controls that made private capital outflows difficult.

The appreciation of the yen continued until November 1978, when dollar defence measures were announced by the Carter administration (see Graph 7). The current account surplus began to shrink at this time, because of the effects of the high yen and expansion of the Japanese economy. With the large increase in crude oil prices in 1979 (the second oil crisis), the Japanese current account fell into large deficit in 1979 and in 1980. Given this changing environment, all capital inflow controls that had been taken in the high yen period were abolished during 1979, and the prohibition of non-resident participation in repo (gensaki) transactions was lifted in May.

2.5 Interest rate differentials and exchange controls

The change of direction in exchange controls can also be observed in the relationship between domestic yen interest rates and euroyen interest rates, which are the yen rates that are used in interbank lending and borrowing transactions by banks abroad. Graph 8 compares three-month gensaki (repo) interest rates with three-month euroyen interest rates (both at the end of the month). Since data on euroyen rates are only available after 1975, rates prior to that time are estimated using the three-month eurodollar rate and the three-month spot-forward spread of the yen/dollar exchange rate in the Tokyo foreign exchange market. This is because one could always carry out yen financial transactions in the euromarkets by combining dollar financial transactions and yen/dollar forward transactions even if euroyen transactions themselves were thin. Therefore, the euroyen interest rate, on the one hand, and the combination of the eurodollar interest rate and the yen/dollar spot-forward spread, on the other, would have the following relationship:

Euroyen interest rate = eurodollar interest rate + dollar forward premium (1)

The domestic yen interest rate and the euroyen interest rate should be almost identical in the absence of exchange controls because of arbitrage between domestic and foreign markets. But, in fact, until about 1980, Japanese exchange controls were rather strict, and there were large differentials between these two interest rates. Let us now consider why this divergence of yen interest rates at home and overseas occurred.

2.5.1 The case of capital inflow controls

First, let us consider the case of capital inflow controls by the Japanese monetary authorities under strong upward pressure on the yen. In this case, non-residents would seek profits from the yen appreciation through investing in yen-denominated assets such as non-resident free yen deposits and yen-denominated securities. However, if the acquisition of yen-denominated securities were forbidden because of exchange controls, then non-resident free yen deposits would be left as the only means of investment. Moreover, the application of high reserve requirements on increases in non-resident free yen deposits reduced the profitability of such deposits for foreign exchange banks. Japanese banks would lower interest rates on such yen deposits. By arbitrage, the euroyen interest rates would fall relative to domestic yen interest rates, and they even approached zero.

As more strict exchange controls were adopted, banks began to refuse to accept such deposits, and the effective interest rates on yen funds for non-residents even became negative. In cases where foreign banks that had accepted euroyen deposits could not invest them in Japan because of the Japanese exchange controls, they had to lend these yen funds to other non-residents to hedge their foreign exchange risks. This put the banks in a difficult position: because of the large risk of yen liabilities when a yen appreciation was expected, such loans required negative interest rates. The fall of euroyen interest rates therefore lowered the interest income received through yen investments by non-residents and worked towards weakening the buying pressure on the yen. As can be seen from the above equation, a decline in the euroyen interest rate under a given eurodollar interest rate would lead to an expansion of the discount of the dollar against the yen in the forward markets. By purchasing yen cash (ie banknotes) from Japan, a yen investment with a zero interest rate is always possible. However, there would be high transaction costs associated with the transportation of cash funds and short-term gains from such arbitrage would be small. Once a negative euroyen interest rate continued over a prolonged period because of exchange controls, an expansion in cash outflows would work towards making these controls ineffective in the long run.

In times of strong upward pressure on the yen, it was also advantageous for residents to have uncovered dollar liability positions. That is, they would borrow dollars and sell them in the spot market, invest the proceeds in yen and, after a fall in the dollar, repurchase dollars and repay their dollar debts, thus realising a capital gain. For this reason, exchange controls that aimed to prevent an appreciation of the yen would have to be implemented by the monetary authorities in such a way as to limit dollar borrowings by residents.

Imposition of controls on dollar borrowing by Japanese residents is similar in effect to raising the interest rate on dollar borrowings within Japan relative to dollar interest rates abroad. The difference between dollar interest rates at home and abroad and the difference between yen interest rates at home and abroad are opposite sides of the same coin. That is, if forward dollar transactions are permitted in Japan, dollar fund transactions can be carried out using the yen funds market and the forward exchange markets in the dollar. In this case, the effective dollar interest rate in Japan can be calculated from the following formula:

Effective dollar interest rate in Japan = yen interest rate in Japan + dollar forward discount (2)

A high dollar interest rate in Japan means a large forward discount of the dollar. If there is no separation between domestic and foreign forward exchange markets, the yen interest rate abroad is determined by the following formula:

Effective yen interest rate abroad = dollar interest rate abroad – dollar forward discount (3)

Therefore, when the forward discount is large because of exchange controls, the effective yen interest rate abroad is lower than the yen interest rate in Japan.

2.5.2 The case of capital outflow control

Let us next consider the case of capital outflow controls by the Japanese monetary authorities under strong downward pressure on the yen. In this case, euroyen interest rates exceed domestic yen interest rates. When market participants expect a depreciation of the yen, non-residents try to carry out yen borrowings, purchase dollars with the proceeds of these borrowings and, once the yen has fallen, earn a profit by repaying their borrowings with yen bought cheaply in the future. For this reason, exchange controls must limit yen lending to non-residents by residents such as Japanese banks. In the case where outflows of yen funds from Japan are completely stopped, any non-resident wishing to speculate against the yen must borrow yen funds from some other non-residents. Such yen funds will

be difficult to obtain, however, when there is an expectation of yen devaluation. Because of a strong possibility of a capital loss on yen lending, non-residents would not lend yen except at high interest rates. For this reason, euroyen interest rates would rise above yen interest rates in Japan. Under the same mechanism as in the case of upward pressure on the yen seen above, the forward premium of the dollar would expand.

Moreover, in this case, Japanese residents would also wish to sell yen and try to realise capital gains by investing in dollars. Therefore, foreign exchange controls would have to limit the acquisition of foreign securities by residents and their placing of foreign currency deposits.

2.5.3 Exchange control and euroyen interest rates

As can be seen in Graph 8, from 1972 until September 1973 euroyen interest rates reflected the controls on capital inflows and were either below domestic gensaki rates or at about the same levels. In November 1971 and February 1973, particularly, the euroyen interest rates calculated from formula (1) went to –10%, which reflects the intensity of the capital controls at that time. In contrast, after October 1973, when the first oil crisis broke out, euroyen interest rates were far above the domestic gensaki interest rates, and reached 40% temporarily. The situation in which euroyen interest rates exceeded domestic yen interest rates by a wide margin continued until the middle of 1974, when the confusion caused by the oil crisis abated.

After the oil crisis, foreign exchange controls were relaxed and the divergences between euroyen interest rates and domestic gensaki rates returned to a relatively narrow margin. Then in November 1977, with the strengthening of capital inflow controls, euroyen interest rates fell far below gensaki rates. As can be seen in Graph 8, euroyen interest rates were 2-5 points below gensaki rates. However, with the abolition of these foreign exchange controls, euroyen rates and gensaki rates came closer together, and particularly after the permission granted in May 1979 to non-residents to participate in the gensaki market, the divergence between these two rates became extremely small.

In this way, one can see how foreign exchange controls limited the arbitrage between yen markets overseas and at home and therefore reduced selling pressure on the yen when it was weak and the buying pressure on it when it was strong. These effects allowed a stabilisation of the spot foreign exchange market with smaller amounts of intervention. However, at the same time, the forward exchange market was disrupted: we have to take account of the costs of hedging import and export transactions in the forward market. When the yen was expected to weaken, foreign exchange controls raised the premium on forward dollars, so that importers who wished to buy dollars forward were forced to buy them at higher prices that included the expected increase in the value of the dollar.

2.6 Exchange control and internationalisation of Japanese financial markets

To provide an overall picture of the effects of exchange control policy in the 1970s on the internationalisation of Japanese financial markets, Graph 9 tracks the development of Japan's external assets and liabilities. It shows the ratio of outstanding foreign assets and liabilities at the end of calendar years to nominal GNP in the same year. These data are displayed from 1971, when the assets and liabilities data were first published. The graph shows that Japan's gross foreign assets and liabilities were roughly stable relative to the Japanese economy in the 1970s. This stability reflects the fact that the relaxations of foreign exchange controls in this period were rather sporadic, responding to changes in the yen exchange rate, and did not attempt to promote capital exchange between foreign and domestic financial markets. Despite the mild liberalisation of foreign securities investment for general investors after 1971, there remained strict controls, based on the real demand principle, against hedging such asset holdings in a flexible way through forward contracts (these rules were eased in April 1978 but not removed until 1984). Moreover, because the old foreign exchange law forbade all foreign transactions in principle, while permitting certain transactions through exemption by administrative order, it was rather difficult for general investors to know which types of transactions were actually liberalised. This was a hindrance to foreign investment.

As far as official regulations are concerned, the large financial institutions such as banks, securities companies, investment trusts and insurance companies were allowed to conduct foreign investment during the years of the floating exchange rate system except for the period of "self restraint" imposed from January 1974 to June 1975, in which no net increases of foreign securities holding were allowed (this period lasted until March 1977 for banks). However, before the adoption of the new foreign exchange law at the end of 1980, only life insurance companies carried out any foreign investments

after 1978 and the other institutions did not carry out any significant foreign investments. This was probably due to the generally negative attitude of the monetary authorities towards foreign securities investments by financial institutions.

Looking therefore at the 1970s as a whole, the internationalisation of the Japanese financial markets did not progress substantially relative to the growing size of the Japanese economy. In short, the level of internationalisation of Japanese financial markets remained as at the beginning of the 1970s when the foreign exchange concentration system was abolished.

Next, let us look at the net foreign asset position and its financing. After the Japanese economy overcame the first oil crisis, a current account surplus emerged by the end of 1975 and continued expanding until the beginning of 1978 (see Graph 10). In contrast, because the liberalisation of international capital transactions had not increased substantially, private capital outflows were relatively small; therefore, it was a necessity to finance these current account surpluses through official intervention. In fact, on an ex post basis, two thirds of the increase in net foreign assets that accompanied the current account surpluses between 1976 and 1978 was financed by increases in official reserves. However, despite this, the yen rose sharply against the dollar between 1977 and 1978. This was probably due to the fact that official intervention in Japan was following the leaning against the wind strategy (for an empirical investigation into Japanese intervention in this period, see Quirk (1977)). Consequently, the intervention was able to absorb the current account surpluses only after the fact of appreciation.

One may interpret this experience as follows. With the current account surplus rising on trend and with liberalisation of capital transactions on foreign securities and other types of investments insufficient, the private sector was unable to absorb increases in foreign currency assets. This situation gave rise to selling pressure on the dollar. To offset this pressure, official dollar purchases were carried out passively. In other words, with relatively strict foreign exchange controls, only foreign exchange intervention was available to absorb large current account surpluses. However, since official intervention strategy was passive in the sense of leaning against the wind, it led to a large appreciation of the yen. This leaves open the possibility that a more aggressive official intervention strategy would have held the yen appreciation to a lower level by absorbing increases in the current account surplus into official reserves. The game theory aspect of the market cannot, however, be ignored. If the authorities had been able to stop the appreciation of the yen through intervention, this would have resulted in a one-way option such as that of summer 1971, which would have increased pressure on the yen even further. Therefore, a rather large appreciation of the yen was not to be avoided.

2.7 Financial market internationalisation under the new foreign exchange law: the 1980s

At the end of 1980, the foreign exchange law was revised. Contrary to the old law, under which all foreign exchange transactions were prohibited in principle, the new law allowed any foreign exchange transactions unless specifically restricted. The restrictions on foreign securities investment by institutional investors such as insurance companies, trust banks and the postal life insurance system (Kampo) were also liberalised thereafter. This liberalisation of international capital transactions, combined with the high interest rates in the United States at that time, made for quite active foreign securities investment and became one of the reasons for the weakness of the yen over most of the first half of the 1980s.

2.7.1 Implementation of the new foreign exchange law

A new foreign exchange law (known officially as the Law Partially Revising the Foreign Exchange and Foreign Trade Control Law) was implemented in December 1980. This law changed the basic principle behind foreign exchange control in Japan from that of “prohibition of foreign transactions with exceptions” to “freedom of transactions with exceptions”. Under the new law, Japanese residents could buy and sell foreign currency assets freely as long as they were dealing with authorised foreign exchange banks and designated securities companies as their counterparties. However, direct foreign currency transactions among residents and direct financial transactions between residents and non-residents were restricted.

Under this law, foreign currency deposits and foreign currency borrowings with authorised foreign exchange banks became completely free. In addition, the interest rates on foreign currency deposits were exempted from the upper limits of the Temporary Interest Rate Adjustment Law and therefore

were free interest rates. At the same time, controls on capital transactions could be implemented in the following emergency situations: (i) when maintenance of balance of payments equilibrium was difficult; (ii) in cases of sharp fluctuations in the foreign exchange market; and (iii) when financial markets were adversely affected because of international capital movements. To date, however, no capital controls have been invoked under these emergency provisions.

The new law enabled residents to freely hold foreign assets and liabilities. This was a fundamental change in exchange controls and was effectively an abolition of virtually all restrictions on the convertibility of the yen. And since the yen became almost fully convertible, non-resident free yen deposits came to be known simply as non-resident yen deposits (see Fukui (1981, page 118)). Reflecting the significant liberalisation measures on international financial transactions, the gap between euroyen and gensaki rates in Graph 8 almost disappeared after the end of 1980.

However, even under the new foreign exchange law, the quotas on banks' net short spot positions in foreign currencies and the real demand requirements for forward exchange transactions were not removed. However, these remaining restrictions were no longer meaningful given the wide-ranging liberalisations under the new law (see Fukao (1990)). The real demand requirements for forward transactions and the restrictions on net short spot positions were both eliminated, in April and June 1984, respectively.

2.7.2 Trends in the Japanese balance of payments and exchange rates in the 1980s

After hitting a high of JPY 175.5 per dollar in October 1978, the yen fell rapidly with the onset of the second oil crisis, the deterioration of Japan's balance of payments, and the sharp rise in dollar interest rates with the monetary tightening in the United States from summer 1979. By the end of 1979, the yen/dollar rate had hit JPY 240 per dollar. However, Japan was able to overcome the inflation of the second oil crisis in a relatively short period of time through timely initiation of a tight-money policy. By the end of 1980, the deficit in the current account had also disappeared. The yen strengthened during 1980 towards JPY 200 per dollar. However, with the continuation of very high real interest rates in the United States, there was increasing pressure for long-term capital outflows from Japan, and the yen followed a downward trend until the beginning of 1985. Because of the yen's weakness, the Japanese current account surplus continued to accumulate. However, in spring 1985, this downward trend of the yen reversed and the currency began to strengthen. Between the Plaza Accord of September 1985 and the end of 1987, there was a sharp increase in the value of the yen.

Graph 10 shows the current account balance, the current account balance plus direct investment balance (hereafter the "basic balance"), and changes in foreign exchange reserves from 1970 to the present. The basic balance is intended to be a proxy for the overall balance of non-financial transactions. The changes in foreign exchange reserves correspond roughly to the amount of intervention by the monetary authorities and can be interpreted as the public sector capital balance. As can be seen from this graph, with the exception of the period of large inflows of short-term capital in 1971, these three balances moved in parallel until the beginning of the 1980s. That is, private sector capital flows were relatively small, and therefore the surpluses in the current balance or the basic balance corresponded closely to increases in official reserves.

This pattern has changed since the 1980s. The gap between the basic balance and the changes in reserves became wide in the first half of the 1980s. Looking at the current account and the changes in reserves, one sees that the current account surplus rose very rapidly after 1983 while the changes in reserves stayed at a very low level. The main reason for the differential between these two balances was the huge increase in long-term capital outflows, particularly of private foreign securities investment.

As the basic balance accumulated, the yen started to appreciate in 1985 (see Graph 7). When the yen appreciated beyond a certain point, official interventions were conducted to limit the appreciation. This intervention pattern is clearly visible for the periods 1986-88, 1993-95 and 1999-2001. On the other hand, when the basic balance declined, the yen weakened and intervention in support of the yen was carried out. This is also visible for the period 1989-90. Let us consider a possible reason for this pattern of balance of payments and exchange rates.

Generally speaking, whenever an international payment is made to settle an international transaction of goods and services, the ownership of some financial asset moves from the buyer country of such goods and services to the seller country. In other words, the ownership of financial assets moves in the opposite direction to the movement of goods and services. On the other hand, in the case of pure

international financial transactions, buyers and sellers simply exchange two kinds of financial assets in the market and there are no changes in the net amounts of financial assets owned by individual countries. Foreign direct investment is not a pure financial transaction but a transaction that involves real assets such as factory or real estates. Therefore, the sum of the current account balance and direct investment balance is equal to the total amount of changes in ownership of financial assets. The country running surplus in this basic balance accumulates net external financial assets issued by the rest of the world.

When Japan runs a basic account surplus without official interventions, the Japanese private sector accumulates foreign assets mostly denominated in US dollars. Since the Japanese household sector has enjoyed a relatively stable monetary environment since the 1950s, it has never invested in foreign currency assets on a large scale, regarding them as risky instruments. The sectors that have invested in foreign currencies are financial institutions including life insurance companies, mutual funds and some banks. When these financial institutions cannot expect any risk premium in foreign financial assets to compensate for a higher risk profile, there will be selling pressure on the dollar.

Thus, in the 1980s, international capital movements through the private sector intensified extraordinarily, and the divergence between the basic balance and the public sector capital balance widened considerably. As a result, the internationalisation of Japanese financial markets progressed at an extremely rapid pace. This can be seen from the ratios of Japan's overseas assets and liabilities to GDP in Graph 9. These ratios rose extremely quickly after the beginning of the 1980s. For example, at the end of 1980, foreign assets were about 13% of GDP but by the end of 1989 had reached 62%. The liabilities rose from about 12% of GNP at the end of 1980 to approximately 52% at the end of 1989. During this period, the net foreign asset position continued to improve because of current account surpluses - from 1% of GDP at the end of 1980 to 10% at the end of 1989.

The composition of these assets and liabilities naturally reflects the structure of the balance of payments. On the asset side, the major contributors were private overseas securities investment by institutional investors and private short-term capital outflows by foreign exchange banks. On the liability side, the major increases were in private sector short-term capital inflows by foreign exchange banks and increased acquisition of Japanese securities by non-residents. Among these, the increases in short-term overseas assets and liabilities of foreign exchange banks were notable.

2.7.3 Foreign securities investment by institutional investors

The new foreign investment law did not fundamentally change the prudential regulations on foreign securities investment for institutional investors. However, with the implementation of the new law, the attitude of the MOF towards foreign investment by such institutional investors became much more lenient. Prior to the 1980s, foreign investment by institutional investors was in fact quite limited. For example, the outstanding holdings of foreign securities by life insurance companies were merely 2.7% of total assets at the end of 1980 (the upper limit on such investment was 10% of total assets between 1971 and 1986).

However, from the start of the 1980s, there was a rapid liberalisation of foreign securities investment (see Appendix B of Fukao (1990) for details of the controls on foreign securities investment by institutional investors). In January 1981, pension trusts were permitted to invest up to 10% of total assets in foreign currency denominated instruments. In addition, in May 1983 the postal life insurance system was allowed to acquire foreign securities equivalent to up to 10% of total assets. These liberalisations of foreign securities investment for institutional investors occurred in the first half of the 1980s when the demand for funds was low because of the weak recovery of the Japanese economy and when real interest rates in the United States were extremely high. For this reason, institutional investors such as life insurance companies started to acquire dollar-denominated securities en masse.

The increasing foreign securities investment by institutional investors generated very strong capital outflow pressure and the yen remained weak between 1981 and 1985. Responding to this weakness of the yen, the monetary authorities introduced temporary controls on certain types of foreign securities investment. For example, life insurance companies were subjected to an upper limit on increases in foreign investment between April 1982 and August 1986. In addition, non-life insurance companies, pension trusts and postal life insurance were also subjected to similar controls.

However, after 1985, with the sharp appreciation of the yen, these controls were abolished, and the upper limits on the ratio of foreign securities holdings to total assets were loosened. During 1986, the upper limit for life and casualty insurance companies was raised from 10% to 30%, while the limit for

the postal life insurance system was raised to 20%. After these changes, the actual amounts of foreign securities investment by institutional investors have been far less than these upper limits permitted by regulations, so that these limits have not constituted a binding constraint.

Graph 11 shows the outstanding amounts of foreign securities investment for major institutional investors. The five categories of financial institutions shown in the graph held about three quarters of the Japan's total foreign securities holdings at the end of 1988. The foreign securities held by banks are generally hedged through foreign currency borrowings because of prudential regulations on banks' foreign exchange positions. In contrast, the foreign securities holdings of insurance companies and securities investment trusts (mutual funds) are not fully hedged and these institutions are the most important holders of foreign securities on an unhedged basis. The share of foreign securities in the total assets of institutional investors rose very rapidly from the beginning of the 1980s.

2.8 Further liberalisation under the Japanese big bang

The Foreign Exchange Law was further amended to liberalise international financial transactions in 1998. Even after the 1980 revision of the law, the following regulations were not removed:

(i) Authorised foreign exchange bank system

Ever since the first Foreign Exchange Law of 1949, the authorised foreign exchange bank system has been the pillar of foreign exchange control in Japan. Japanese residents have to go through foreign exchange banks to conduct international financial transactions unless they have special authorisation from the MOF. Even big Japanese companies with extensive international networks have to use authorised foreign exchange banks to carry out settlements of individual transactions. Cost-minimising techniques such as payment netting were not allowed under the old law and some big Japanese firms moved their settlement centres to much more accommodating locations such as London, Hong Kong and Singapore. One senior MOF official characterised this system as a "cartel among banks" to protect foreign exchange business.

(ii) Regulations on special payments

In order to restrict circumvention of exchange controls by "leads and lags" (see Section 2.2), the 1980 law set limits on the periods for prepayment and deferred payment of international transactions. As a result, exports of big items such as chemical plants and public infrastructure projects entailed a very cumbersome procedure for gaining approved from the MOF.

(iii) Restrictions on direct transactions with foreign counterparties

The 1980s law required residents to obtain individual permission from the MOF when conducting direct international financial transactions with banks and other entities located abroad. In order to open a demand deposit account with a New York bank, a resident had to obtain special permission from the MOF. Direct derivatives transactions with foreign financial institutions located abroad also required prior approval. In order to buy foreign securities without red tape, Japanese residents had to go through designated securities companies in Japan.

The 1998 revision of the Foreign Exchange and Foreign Trade Law removed all of the above restrictions and, in the new environment, Japanese firms and individuals can execute direct transactions with foreign counterparties.

On the other hand, reporting requirements and penalties for non-reporting were strengthened for statistics and taxation purposes. Exemption clauses were retained for emergency situations.

It is my impression that the liberalisation of the financial sector lagged behind development in the non-financial sectors. The Japanese administration tried to slow the pace of liberalisation and removed controls only after being subjected to a large dose of foreign pressure ("gaiatsu" in Japanese). When I read the history of exchange control liberalisation, I learned that some drafters of the 1949 law did not expect such a strict control law to survive for more than 30 years. Certainly, the bureaucrats tinkered with directives and notifications to adapt it to the fast growing Japanese economy of the 1960s and 1970s. However, the Foreign Exchange Control Law became a source of rent for regulated banks and bureaucracy.

3. Implications for Chinese foreign exchange policy

The biggest mistakes Japan made in its foreign exchange policy were the transition from an adjustable peg system to a floating rate system in 1971-73 and the policy against a strong yen in 1977-78. Since these episodes would be illustrative for Chinese policymakers, we examine them in this section.

3.1 Transition from pegged system to floating system

It is well known that it is not possible to achieve all three of the following desirable objectives of international monetary arrangements:

(i) maintaining an independent monetary policy;

(ii) allowing free international transactions, including foreign direct investment and financial transactions; and

(iii) keeping the exchange rate pegged to an anchor currency.

Japan was facing this choice in 1971. As the Japanese economy developed rapidly, industry wanted to have more freedom in international transactions. When the Japanese economy was less developed, free current transactions had been enough to sustain growth. However, as Japan started to export complex products and services, exporting firms wished to set up distribution networks and factories in foreign countries. They also desired to import sophisticated technology and software from foreign firms. Japanese financial institutions wanted to establish foreign branches and subsidiaries so as to provide services for Japanese as well as foreign customers. In order to allow such transactions, the government had to liberalise a wider range of international transactions.

When Japan selected the second objective (free international transactions) in the late 1960s, it had to choose between an independent monetary policy and a pegged exchange rate system. However, Japan tried to keep all three objectives. If a country liberalises international transactions under a pegged rate system, capital will move from a low interest rate country to a high interest country. This would make it very difficult to maintain an independent monetary policy. Japan tried hard to maintain a pegged rate system when the economy was overheating in 1972. It tightened exchange controls. In the early 1970s, the Japanese foreign exchange control system was reputed to be “watertight.” However, Japanese firms and financial institutions that had established foreign subsidiaries and branches could cheat this exchange control system. For example, in order to receive a large amount of export prepayments, a firm had to obtain special permission from the MOF. However, it was possible to receive a small amount of export prepayments through simple notification. Some Japanese firms asked foreign subsidiaries to send a large number of small export prepayments to hedge future dollar export receipts. In view of these actions, the MOF reduced the threshold to one tenth but found that it had to process a tenfold volume of notification. Once internationalised, a firm can easily disguise financial transactions as current transactions through transfer pricing, leads and lags, and so on.

Japan could neither stop capital inflows nor maintain an independent monetary policy in the early 1970s. Monetary policy remained very loose in 1972 and money supply (M2) rose by 27%. In 1973, Japan experienced serious inflation. To make matters worse, the first oil crisis broke out in late 1973. Had Japan shifted to floating in 1972, it could have minimised this inflation.

In this context, it is necessary to take account of the following factors:

(i) For a large and relatively closed economy like Japan with an export/GDP ratio of 10% in the early 1970s, it was not possible to abandon independent monetary policy as a macro instrument.

(ii) The losers (the Japanese export industries) were politically very noisy while the winners (the Japanese import industries and household sector) were quiet.

(iii) Tightening of exchange controls tended to punish honest parties that did not sell dollars at the time.

Sooner or later, China will have to liberalise international transactions to the extent that Japan did in the early 1970s. Then, China as a large economy has to opt for an independent monetary policy rather than a pegged exchange rate system.

3.2 Sequencing of liberalisation and exchange rate management in the 1970s

Table 2 shows the liberalisation process Japan has been following over the past 50 years. The liberalisation started with trade and foreign direct investment and expanded to financial transactions. Japan could not choose the timing for floating its exchange rate. Probably, it should have liberalised its bond market before the floating. In order to have stabilising market forces in the foreign exchange market, it is necessary to have two-way movements of long-term capital. Japan did not have a deep government bond market until 1977. Moreover, simple deregulation of foreign exchange control itself is not enough to provide such two-way capital flows. Japan maintained fairly strict prudential regulations on the foreign exchange exposures of major financial institutions until the early 1980s. Finally, without the active participation of large financial institutions, the foreign exchange market will be thin and the monetary authority has to intervene to stabilise the currency market. As I explained in Section 2.6, the passive intervention policy and the shallow foreign exchange market may have created a highly unstable yen/dollar foreign exchange market in the 1970s.

Apparently, the MOF did not pay enough attention to the following identity:

Current account surplus = private capital outflows + increase in reserves (4)

Since the MOF restricted private capital outflows, the Japanese government had to mop up the excess supply of foreign currency through official interventions.

In order to prepare for the inevitable floating of the renminbi, it will be wise for the Chinese government to develop an active government bond market. Based on the Japanese experience, the stock market is less important for the functioning of the foreign exchange market. Financial institutions such as life insurance companies and mutual funds have to develop the capacity to manage foreign exchange risk. Since it takes time to develop dealing, accounting and risk controlling capacity for such financial transactions, the Chinese government should start early to allow domestic financial institutions to undertake limited foreign exchange transactions.

4. Conclusions

There are both similarities and differences between Japan in its high-growth period and China today. Like China today, Japan maintained high economic growth with a strong manufacturing sector; internationalisation of business firms and financial institutions proceeded rapidly; both have controls on deposit interest rates. On the other hand, the economic environments are very different. Japan gradually liberalised foreign exchange controls when such controls were the norm in most developed countries. As a result, the pressure for liberalisation in Japan was less strong in the 1970s and 1980s. Japan's problem of state-owned enterprises was much less severe in the 1970s and 1980s than that of China today.

Many countries have made mistakes in the transition from a pegged rate system with exchange controls and independent monetary policy to a new regime with much more liberalised exchange controls. The Asian currency crisis in 1997 was partly induced by excessive adherence to pegging to the US dollar. If Thailand and Korea had allowed appreciation of their currencies at an earlier stage so as to implement a tighter monetary policy, they could have mitigated the severe downturn in the crisis.

A move to a floating rate system is a difficult decision for macro policymakers in any country. However, the long-run cost of adjustment through floating would be much lower than the passive strategy of "adjustment inflation" followed by Japan in the 1970s.

Table 1

Balance of payments in occupied Japan

(in millions of US dollars)

Year	Exports	Imports	Trade balance	Freight and insurance	Military procure-ments	Transfers	Current balance
1946	65	303	–238	–36	0	195	–78
1947	182	449	–267	–88	0	405	46
1948	262	547	–285	–120	19	462	75
1949	533	728	–195	–164	49	514	207
1950	920	886	34	–90	63	429	476
1951	1,354	1,645	–291	–226	624	170	329

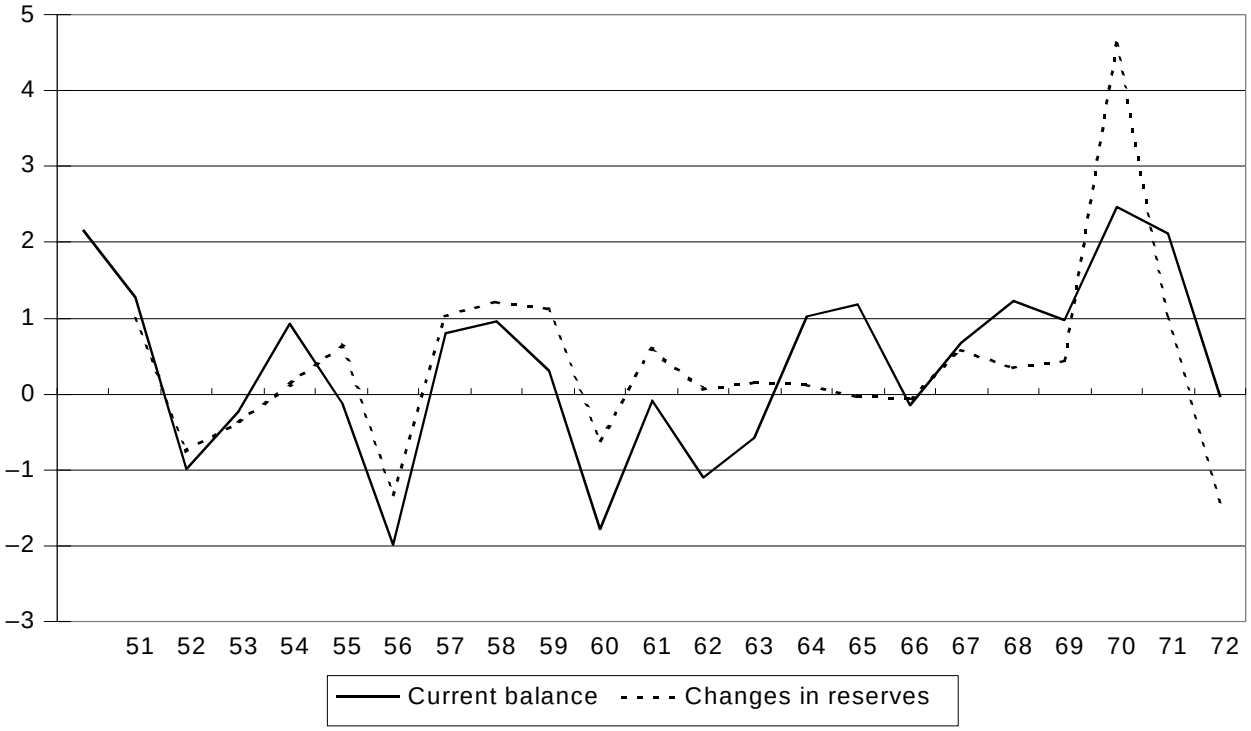
Note: The 1946 figure includes September 1945 to December 1946.

Source: Ministry of Finance (1978), pp 120-1.

Graph 1

Current account balance and changes in reserves

(as a percentage of GNP)

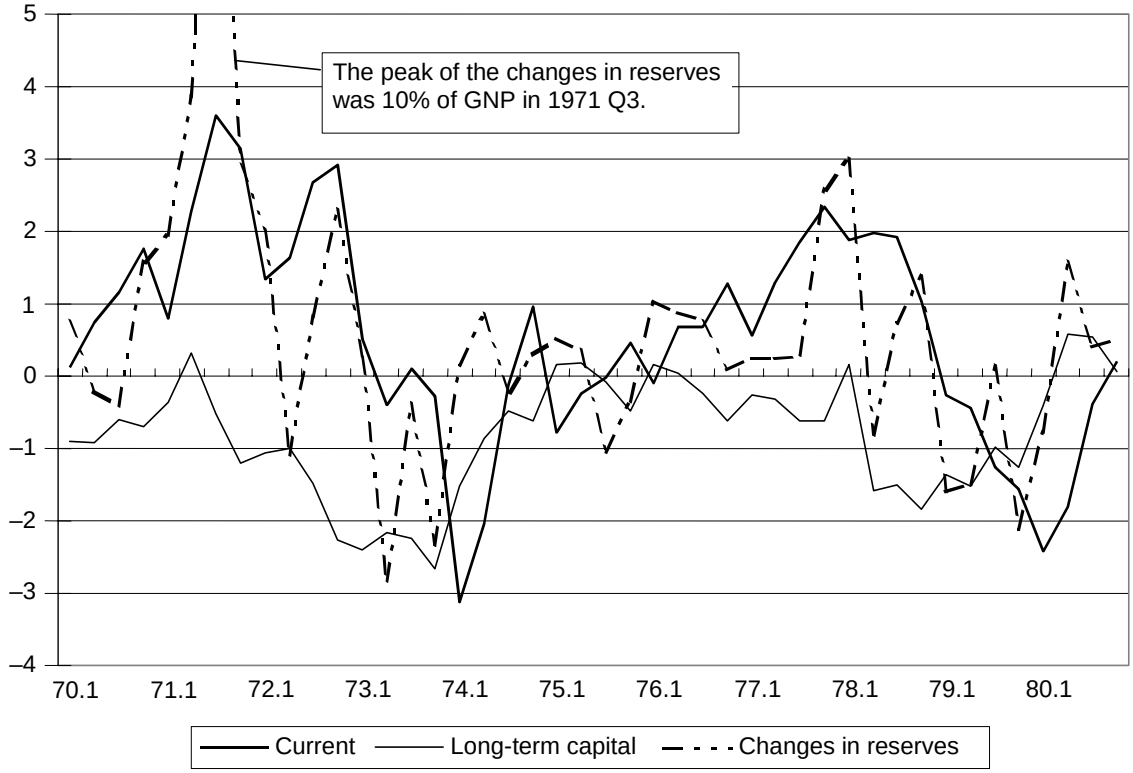


Source: Balance of Payments Statistics, Bank of Japan.

Graph 2

Current balance and capital flows

(as a percentage of GNP)

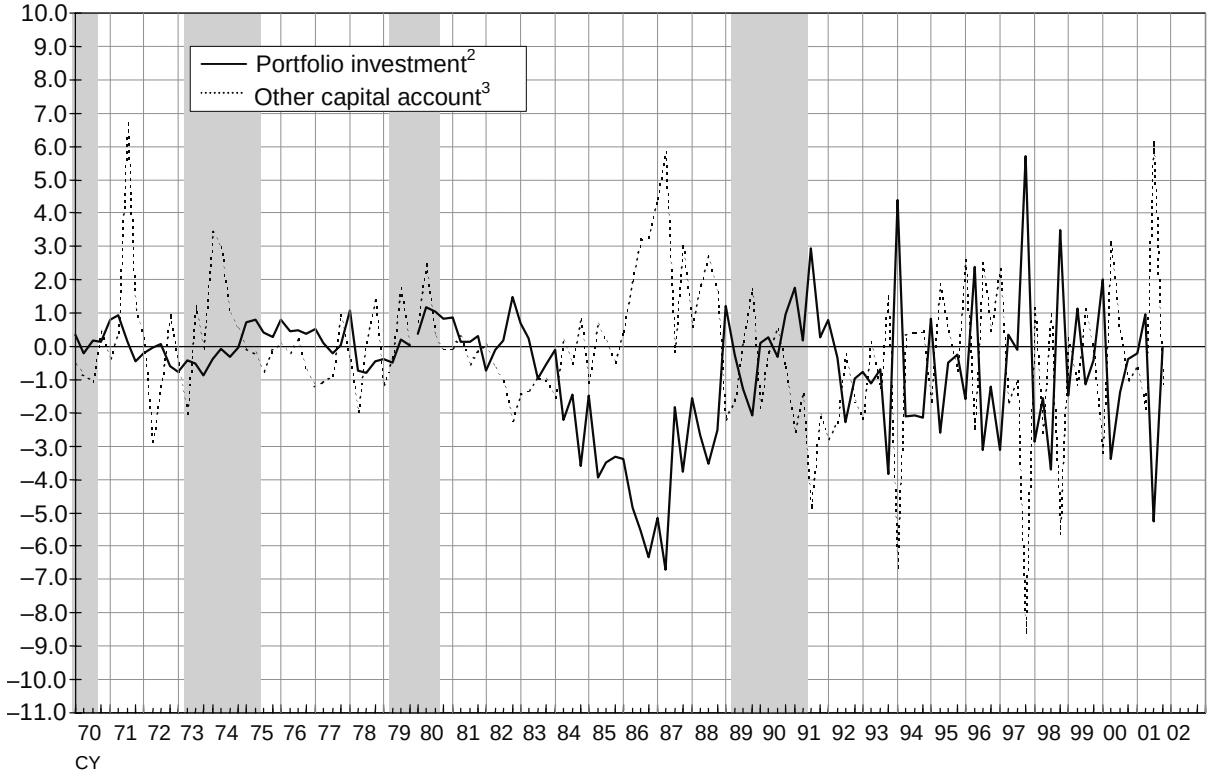


Source: Balance of Payments Statistics, Bank of Japan.

Graph 3

Balance of payments[1]

Percentage of nominal GDP



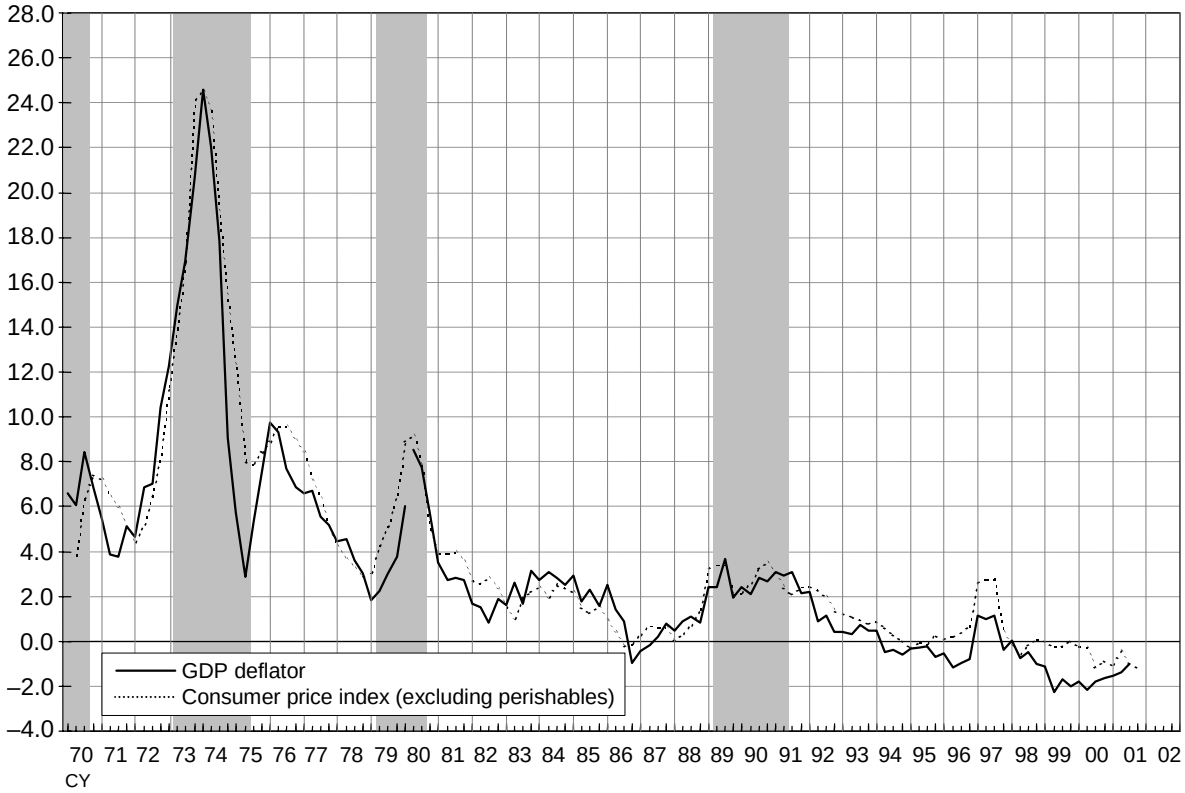
[1] Figures are based on revised balance of payments statistics from January 1996. In line with this revision, the data have been retroactively revised until 85 Q1 on the new basis (figures on the old basis until 84 Q4). [2] Original figures. Data until 79 Q4 = 68SNA basis; data from 80 Q1 = 93SNA basis. [3] Other capital account = Changes in reserve assets – (Current account + Direct investment + Portfolio investment).

Source: Bank of Japan CD-ROM, 2002.

Graph 4

GDP deflator and CPI inflation

(percentage change from previous period)



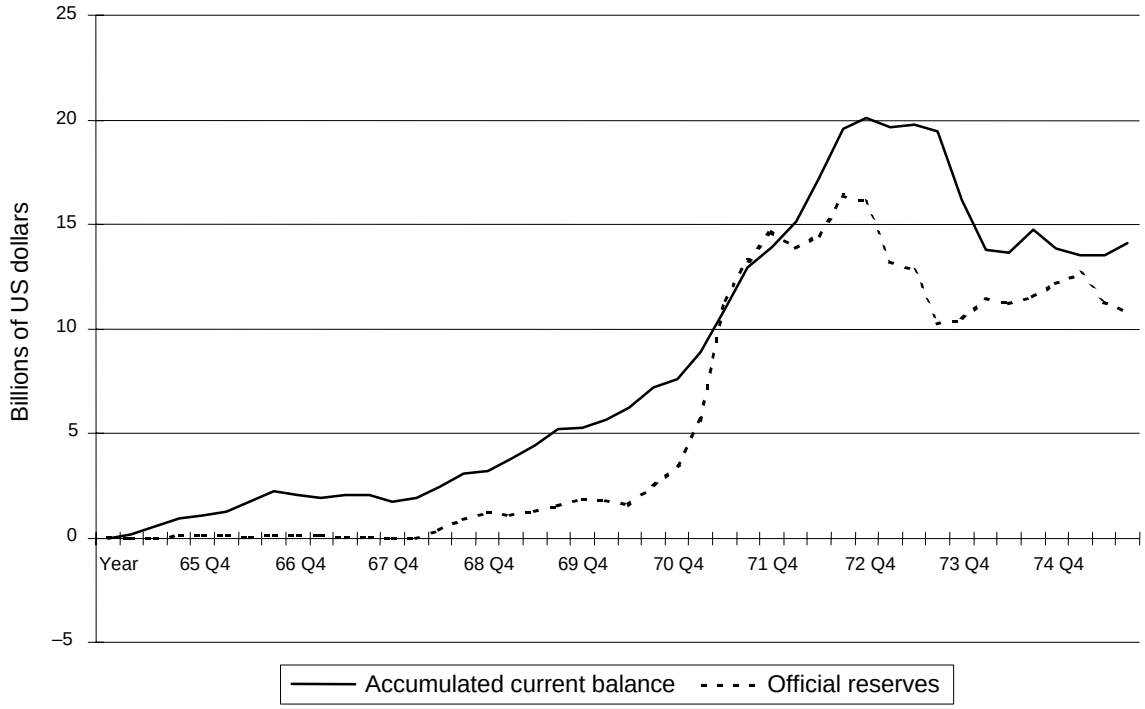
(seasonally adjusted at an annual rate, 3-qtr MA)

Note: GDP deflator: data until 80 Q1 = 68SNA basis, data from 80 Q2 = 93SNA basis.

Source: See Graph 3.

Graph 5

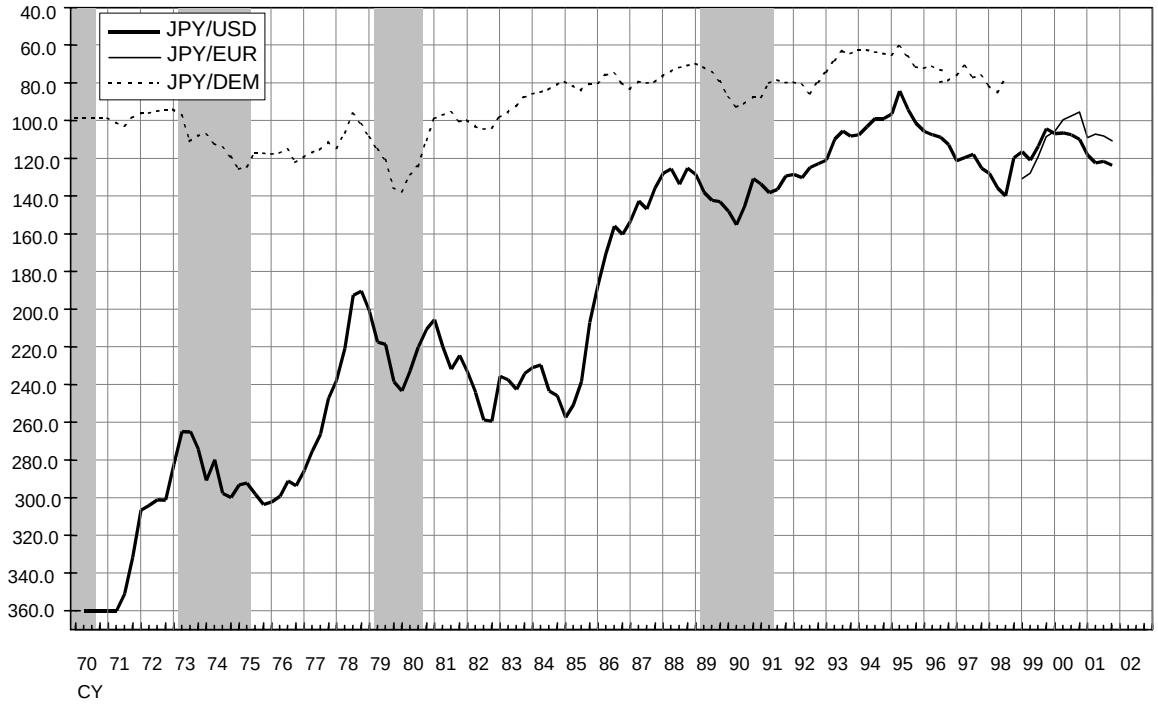
Accumulated current balance and reserves



Source Fukao (1990).

Graph 6

Nominal foreign exchange rates[1]

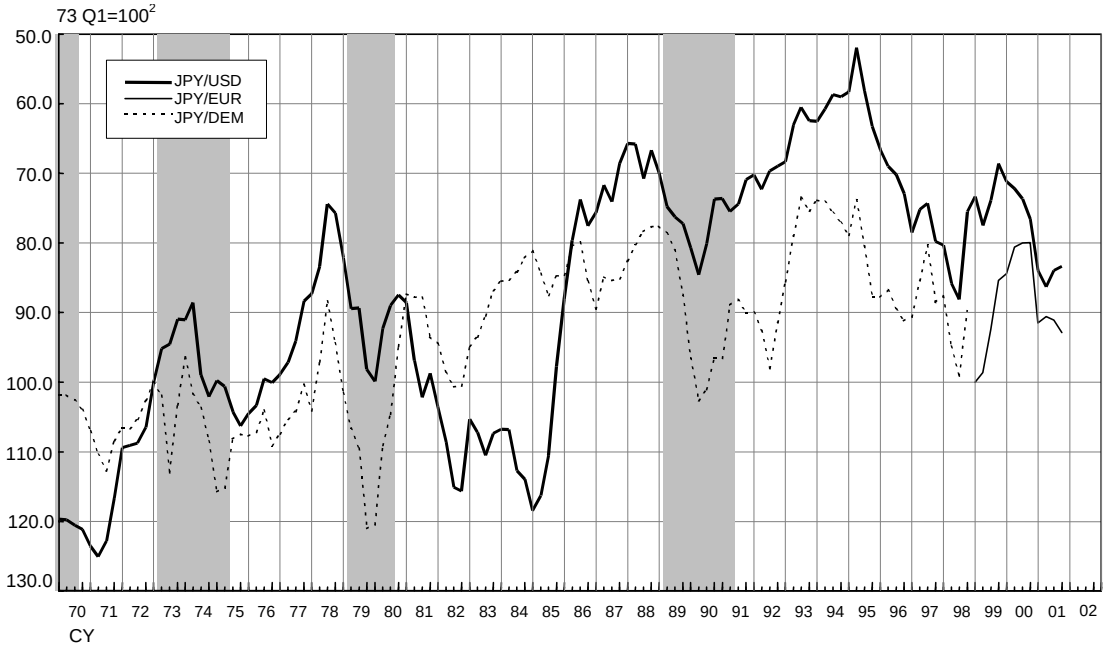


[1] Spot rate on the Tokyo foreign exchange market, monthly (quarterly) average. Until 21 December 1994: closing rate. From 22 December 1994: spot rate at 15:30. From 1 March 1995: spot rate at 17:00. From January 1999, JPY/EUR. JPY/DEM = JPY/USD ÷ USD/DEM (from 1970 to 1998); JPY/EUR = JPY/USD ÷ USD/EUR (from 1999).

Source: See Graph 3.

Graph 7

Real foreign exchange rates[1]

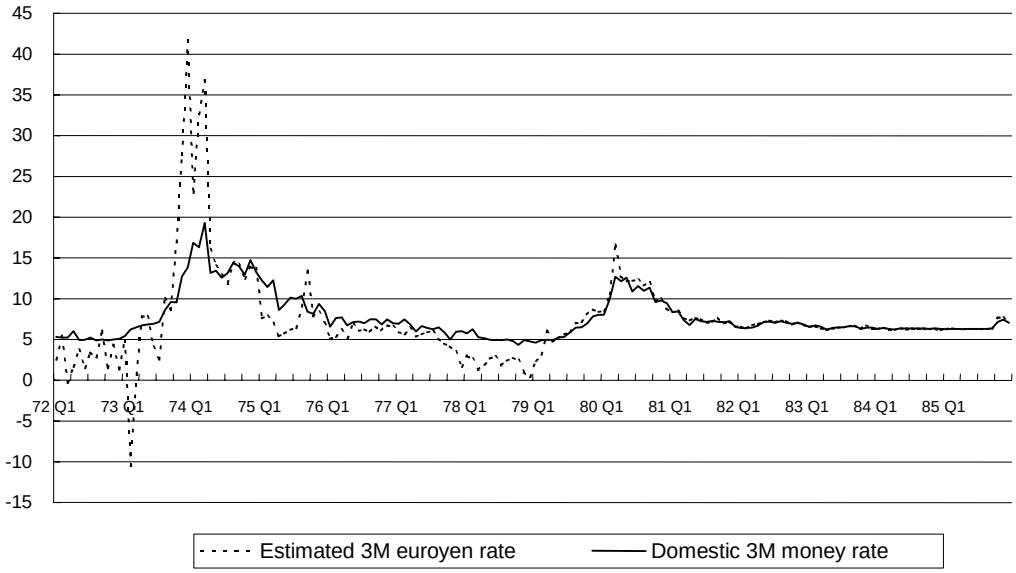


[1] Spot rate on the Tokyo foreign exchange market, monthly (quarterly) average. Until 21 December 1994: closing rate. From 22 December 1994: spot rate at 15:30. From 1 March 1995: spot rate at 17:00. Figures deflated by PPI (United States, Germany and euro area) and domestic wholesale price index (Japan) (present figures based on the latest actual figures available). [2] From January 1999, JPY/EUR. JPY/DEM=JPY/USD÷USD/DEM (from 1970 to 1998, 1973 Q1=100). JPY/EUR=JPY/USD÷USD/EUR (from 1999, 1999 Q1=100).

Source: See Graph 3.

Graph 8

Interest arbitrage conditions

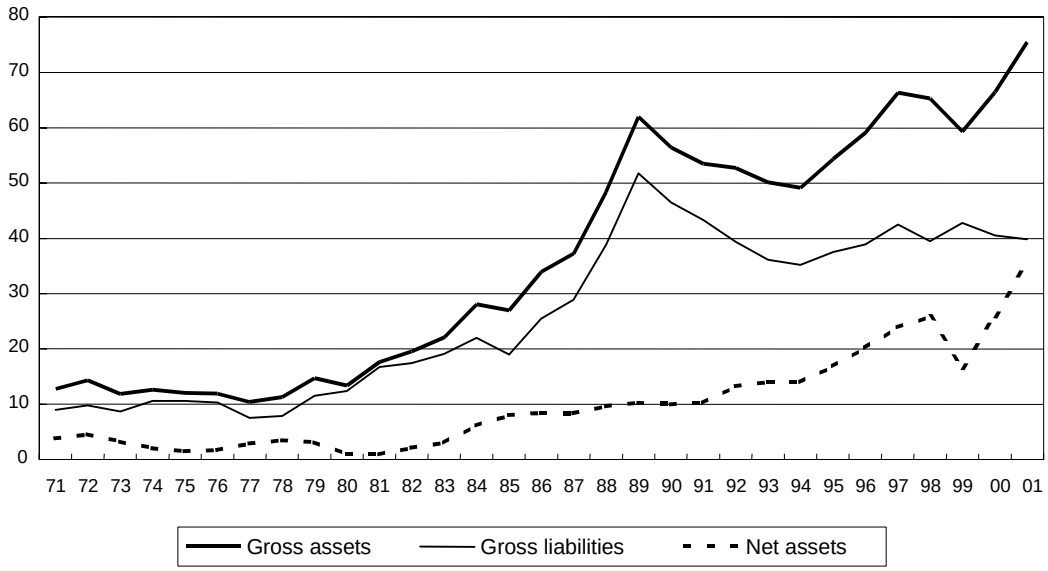


Source: Fukao (1990).

Graph 9

Japan's external assets and liabilities

(as a percentage of GDP)

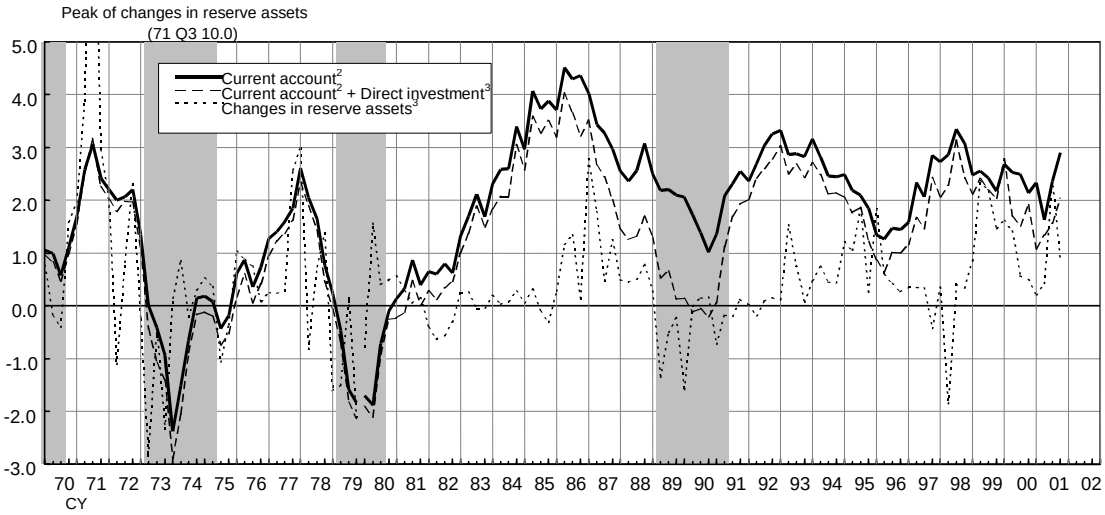


Source: Balance of Indebtedness Statistics, Ministry of Finance.

Graph 10

Current account balance and changes in reserves[1]

(as a percentage of nominal GDP)



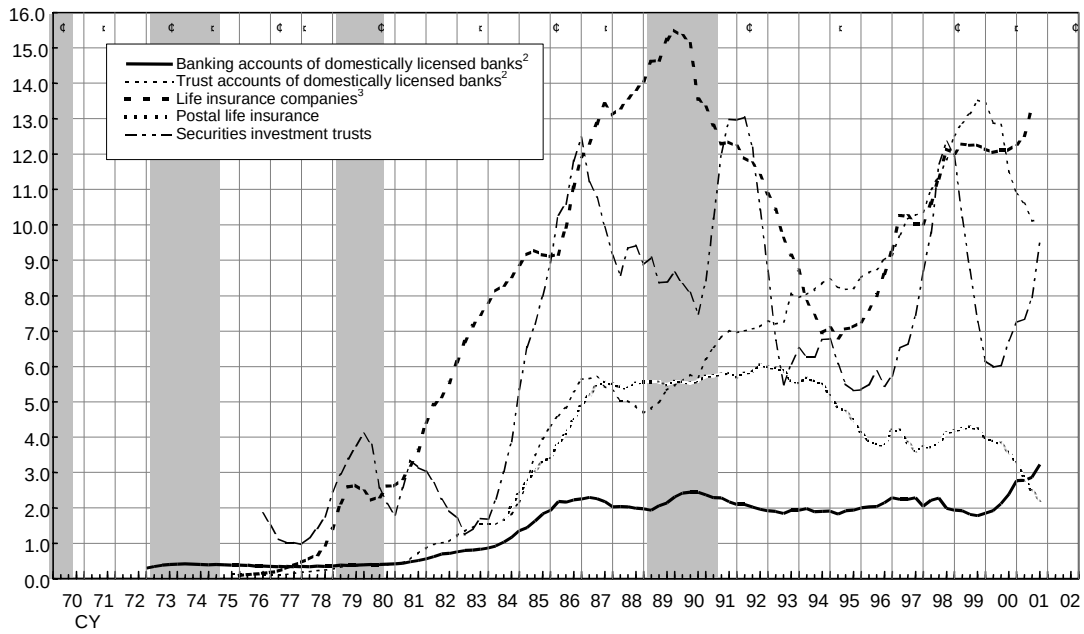
[1] Figures are based on revised balance of payments statistics from January 1996. In line with this revision, the data have been retroactively revised until 85 Q1 on the new basis (figures on the old basis until 84 Q4). Financial capital flow = Current account + Direct investment – Changes in reserve assets. Data until 79 Q4 = 68SNA basis; data from 80 Q1 = 93SNA basis. [2] Seasonally adjusted by X-12-ARIMA. [3] Original figures.

Source: See Graph 3.

Graph 11

Ratio of foreign securities investment to total assets[1]

(percentages)



[1] Total assets outstanding by financial institution (end of 2001).

Banking accounts of domestically licensed banks	JPY 759 trillion	Postal life insurance	JPY 123 trillion
Trust accounts of domestically licensed banks	JPY 397 trillion	Life insurance companies (end of 2000)	JPY 180 trillion
Securities investment trusts	JPY 45 trillion		

[2] Domestically licensed banks: until 93 Q3, banking accounts of member banks of the Federation of Bankers Association of Japan. [3] Life insurance companies: until 91 Q4, 27 companies basis; from 92 Q1, all insurance companies basis. Source: Total Life Insurance Association of Japan.

Source: See Graph 3.

Table 2

Japanese liberalisation sequence

1949	Removal of most rationing and price controls Unified exchange rate at JPY 360 per dollar Free exports
1964	Free current transactions: current account convertibility
Late 1960s	Free direct investment
Early 1970s	Spontaneous development of Gensaki (repo) market New entry of foreign banks Japanese banks enter foreign markets More flexible deposit interest rates
1973	Shift to floating rate system
1977	Termination of government bond price support system Emergence of large domestic bond market
1979	Introduction of large negotiable CDs
1980	Foreign currency deposits with free interest rates Free foreign investment: capital account convertibility
1984	Free forward exchange transactions
Mid-1980s	Liberalisation of foreign portfolio investment by financial institutions
1985-94	Gradual liberalisation of yen deposit interest rates
1998	Free direct international financial transactions
1999-2004	Introduction of International Accounting Standard

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Several observations on capital flows in Japan

Richard Koo

I am very happy to participate in the joint BIS/SAFE seminar on capital account liberalisation, since the subject of capital flows is one of those economic issues that I have covered very extensively in Japan over the last 19 years. In fact, this seminar has managed to invite two of the more experienced experts on Japanese capital flows, Professor Fukao and perhaps myself. Mr Fukao has covered quite a bit of the development in the 1970s and made a number of very valuable comments on what happened in the 1970s. My experience covering Japanese capital flows actually starts from the 1980s, first from the US side at the Federal Reserve Bank of New York, where we were following these inflows of Japanese money into US markets, after which I moved to Nomura Research Institute, the research arm of Nomura Securities, where all the capital account liberalisation action was taking place. Therefore, the focus of my discussion will be more on the developments of Japan's capital flow liberalisation since the 1980s.

There is an important difference between capital flows in the 1970s and those in the 1980s for Japan. One needs to distinguish the two types of financial flows: banking flows and portfolio flows. Banking flows would always be associated with international trade once an economy has opened its current account. Once portfolio flows are liberalised, they can prove very extended and they may not easily reverse. We all know from both academic literature and actual experience that the opening-up of an economy's current account does help a lot in terms of economic growth, especially in terms of resource allocation. But how much we know about the opening-up of portfolio flows is a very questionable issue, in the sense that we actually do not have a very long history of free and open portfolio flows. In other words, our knowledge of the costs and benefits of open portfolio flows is much more limited in both theory and practice. This is the first point I want to stress.

If one looks at the major economies in the world such as the United States, Japan and Europe, all of these economies were actually largely closed to portfolio flows until the late 1970s. It was only in the late 1970s that the United Kingdom opened up its markets to portfolio flows, and, following this, the United States began to deregulate as well. Only with the Monetary Control Act in 1980 was Regulation Q phased out. In Japan, it was in December 1980 when portfolio flows were deregulated. So, the liberalisation of portfolio flows goes back only some 20 years, and, before that time, no one knew this world of free capital movements.

And in particular, for those of us who studied economics in the 1970s or early 1980s, there were no free capital movements in any of the literature we studied because these free capital flows did not exist during that period. When we talked about open economy, we mostly meant open economy on the current account side, and almost never on the capital account side. So, there was a lot of trial and error. For example, when I was working at the New York Fed, I was assigned to do the current account forecasting for the United States as an input to the New York Fed econometric model. I must say that we never got it right because our senior managers told us to put in US dollar depreciation as an assumption for the current account forecast. Any time we did our forecasting, we had a 10% depreciation of the US dollar, which repeatedly failed to happen; instead, the US dollar kept on appreciating. Therefore, we were consistently wrong about our assumption, but we had no clue why we were so wrong.

Looking back, I think it was mainly because the Japanese investors were buying a huge amount of US Treasury securities and this flow kept the US dollar high in spite of a large trade surplus on the Japanese side and a huge trade deficit on the US side. When the Japanese capital account was opened, the expectations of the parties involved were not entirely the same. On the Japanese side, for example, the market was opened to portfolio flows because many of the institutional investors in Japan, life insurance companies in particular, found that they did not have enough investment opportunities inside the country. Furthermore, they were losing market shares to the domestic banks. Therefore, they wanted to go outside and invest abroad, which amounted to portfolio outflows. But the incentive of the US government was quite different: the United States wanted to pry open the Japanese capital markets so that more money would flow into Japan and push the yen higher. As a result, the current account and trade imbalance problems between the two countries would be addressed. As it turned out, the portfolio outflow from Japan was much bigger than anyone had

expected. A large capital outflow from Japan and into the United States turned out to be a very destabilising factor, as it pushed the dollar higher and enlarged trade imbalances between the two countries at least until 1985.

In 1985, the strength of the US dollar and the corresponding weakness of the yen and European currencies led to rampant protectionism in the United States. The President of the New York Fed, Mr Anthony Solomon, used to say that the United States lost as much industry in three years as it would in normal circumstances have lost in 30 years. The strong dollar's evident damage to US industry forced the US government to put together the so-called Plaza Accord in 1985 to push the US dollar down. This was done with quite a bit of "terrorising" by the Bank of Japan, which included the destruction of the government bond futures market that had been put together with very much effort over the years. In October 1985, the Japanese government bond futures market was shut down for three days because the Bank of Japan raised rates so high. Japanese institutional investors concluded that the Bank of Japan was really serious about pushing the yen much higher.

Despite such strong action taken to push the US dollar down and the Japanese yen up, the dollar's decline only lasted for three years or so. If you look at the 1980s as a whole, the US dollar was up for seven years and only down for three years. So in this sense, the large portfolio outflow from Japan at that time was a very destabilising development. Finally, the US government came up with a solution, the so-called Structural Impediments Initiative (SII). The core argument behind the SII was captured by a question: why should the Japanese, who live in less desirable houses than American houses, buy US Treasuries? In other words, why were the poor people lending money to the rich people? It did not make any sense. Many Japanese fund managers who were buying US Treasuries at that time also felt the same way. They asked the question, why do we live in rabbit hutches while lending money to these Americans who are living in such fantastic houses?

The answer given was that there was something structurally wrong in Japan. The problem might be the many prevailing restrictions on investment in Japan, particularly in the area of housing. The US government, using the research done by Japanese researchers, including my work, told the Japanese government to deregulate land use, to change the tax laws on land, and even to deregulate how many hours department stores were open in Tokyo. The important message is that, once an economy deregulates capital flows, such an opening can become very destabilising, particularly on the trade front. When that happens, then everything that affects capital flows in the domestic economy will become fair game for international discussion. If the economy does not open up the capital market, then only trade flows matter. If so, there will be a self-regulating mechanism within the trade flows and exchange rates that tends to more or less keep things from becoming excessively unstable. But once the economy opens up its capital markets, there could potentially be sustained large outflows from a surplus economy, which actually exacerbates the current account surplus for the surplus economy and worsens the current account deficit for the deficit economies. In this situation, once the capital flows turn out to be destabilising, issues that would normally remain domestic issues would probably become international issues.

The other point I want to address is the lesson we learn from the Asian currency crisis. Once the Asian currency crisis hit, some people, particularly those in Washington DC and New York, started talking about transparency, accountability, proper bankruptcy laws, strong regulations and strong banking systems. But a senior statesman of Singapore, Mr Lee Kuan Yew, put it very nicely at one conference: "Nobody told us that these things were necessary before we open our capital account. We only found out after the disaster that these things were necessary". This is a corollary of my earlier point that the opening-up of capital flows is all very new to us, and there is relatively little in the academic literature about the benefits and costs, and the conditions for capital flows. All of us are still learning about capital flows.

Furthermore, the fact that so many people after the Asian currency crisis talked about the bankruptcy laws in Thailand and accountability problems in Indonesia suggests that these people did not know what the bankruptcy law in Thailand was. This observation suggests that a lot of international investors, I am afraid, do not do their homework. They are like sheep: when everybody goes there, they just have to be on the bandwagon. In fact, when I was assigned to the foreign exchange desk of the New York Fed, the first thing my supervisor told me was that, in graduate schools, everybody tells you how efficient the market is, but in actual fact only about 15% of the market participants know what they are doing. 85% are just following the crowd. In the Asian currency crisis, we saw what damage the 85% can do. Thai people never tried to keep their bankruptcy laws secret. Anyone who wanted to know what the Thai bankruptcy laws looked like could just go to the law book and it was all there. But none of these investors bothered to look at it. They did not care and assumed that the banking and

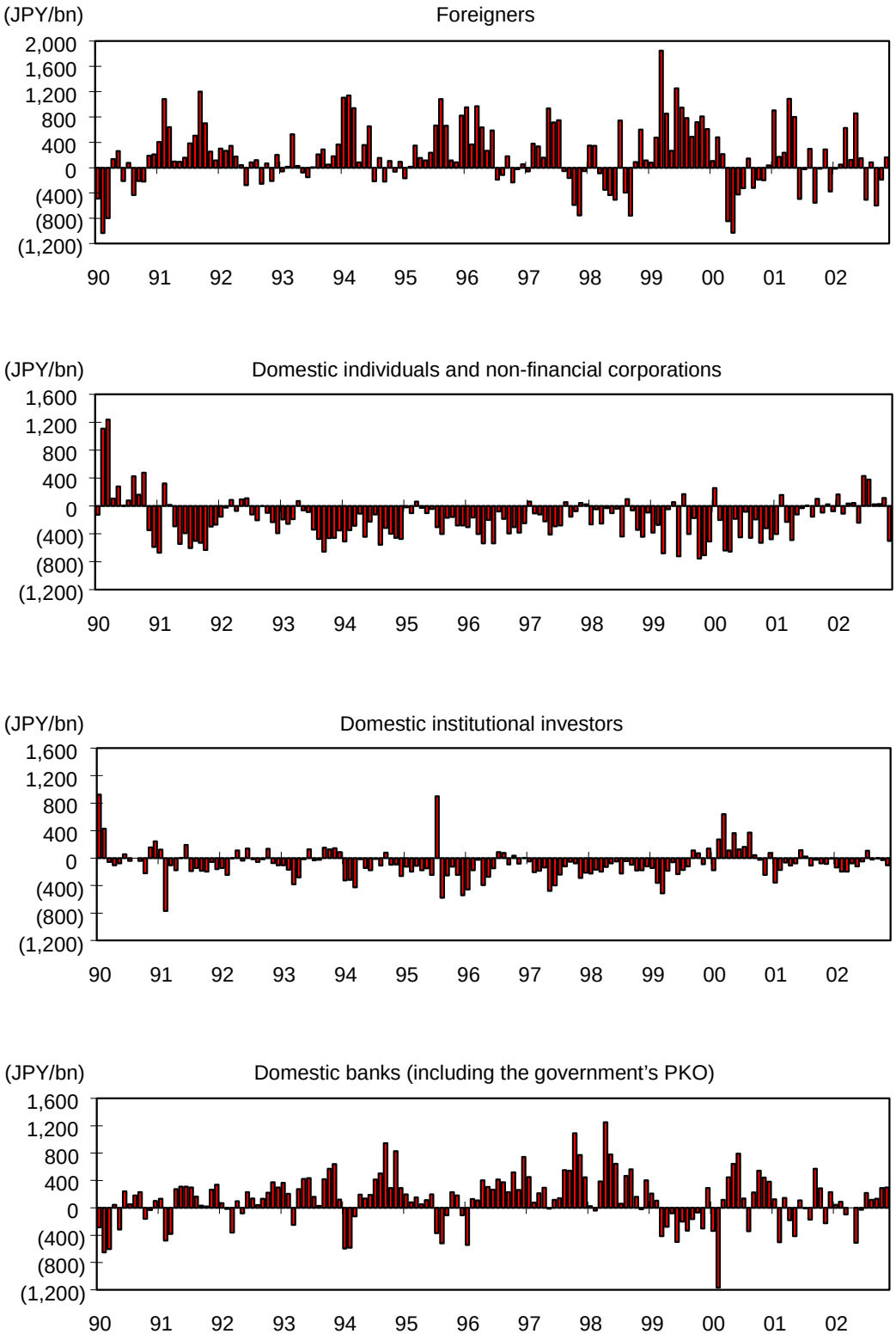
corporate numbers were good and reliable in these Asian economies. Of course, we now know in the United States that some of those numbers are no good as well.

But when a newly opened economy has those investors who do not do their homework coming to the home market, these less well informed investors tend to panic very easily. Once they do panic, it may give rise to horrendous problems facing the government of the opening economy. Even if some of the American graduate schools tell you that the market is always efficient and an open economy is better than closed economies, I am afraid that the real world is not that simple. When there are a lot of investors who do not do their homework coming into a newly open market, there could potentially be real problems. Therefore, I think it is important for governments to have some controls in place to make sure that such less well informed and easily panicking investors do not destroy the economies.

Having said that, I must mention that the countries that did benefit greatly from the freedom of capital movements are none other than Japan and the United States, despite the initial destabilising developments. Japan benefited from the opening of portfolio flows because in the 1990s, when the Japanese economy suffered a very serious and what I call balance sheet recession, it was the foreign investors, particularly the US investors, who kept the Japanese stock market from collapsing. If you look at Graph 1, it shows that it was the foreign investors, not Japanese investors, who kept the Japanese stock market up. Japanese investors were so devastated at that time by what happened to asset prices in the country that they had no capacity to take additional risk. The foreign investors kept the stock market up, so the total value of the whole stock market from the peak fell by around 60% to 65%. But in those markets where foreigners did not come in, such as commercial real estate or golf club memberships, prices fell to just one tenth of their peak values. Therefore, foreign investors in the Japanese stock market were a very stabilising factor, at least for this period. And in the United States, I might add, in the 1980s, when the United States was running large trade and budget deficits that needed to be financed, Japanese investors provided that financing through large purchases of US Treasury paper and kept a crisis from happening. Thus, the two largest economies in the world, Japan and the United States, did benefit strongly from the freedom of capital movements.

But for smaller, emerging markets, sometimes, free capital movements can cause pretty horrendous damage to their economies. I think it is important to make sure that investors who do come to these markets do their homework before they are allowed to invest.

The Japanese stock market has been led by foreign investors (net purchases)



Source: Tokyo Stock Market.

The experience of Italian banks: from strict controls to full liberalisation

Antonello Biagioli

1. Introduction

Italy's foreign exchange restrictions were already in place soon after the First World War. However, the system of foreign exchange controls applied up to the full liberalisation of capital movements in 1990 was built after the Second World War and operated for almost 50 years. For the sake of simplicity and clarity, reference will be made in general to the post-World War II system and in particular to the experience in the years immediately preceding and following 1990.

In 1990, all capital controls were lifted. Since then, Italy has had a liberalised system fully compliant with European directives and international banking activity has increased at a rapid pace. It would be difficult to compare, in either absolute or relative terms, the dimensions of international banking today with those of more than half a century ago. It would be even more difficult to find homogeneity between the global financial markets of today and the segmented, protected markets of the past. Actually, it can be assumed that the system of foreign exchange restrictions of the past does not fit into the present liberalised world. However, one can look for similarities between the past and the present, with a view to assessing the advantages and disadvantages of a system based on foreign exchange restrictions compared with a fully liberalised one. Yet it is important to stress that in the present circumstances reintroducing restrictions would not produce the same effects as in the past; rather, controls would probably prove to be ineffective or even disruptive.

Section 2 of the paper will provide a presentation of the philosophy and main instruments of foreign exchange controls in Italy, together with a brief chronology of the main developments and measures taken by the Italian authorities. An analysis of a case of a foreign exchange crisis under strict controls (for example, the 1976 foreign exchange crisis) is given in Section 3. An analysis of a case of a foreign exchange crisis under no controls (1992) is illustrated in Section 4, with a view to drawing some lessons on capital account liberalisation, if any. Subsequently, the evolution of the international activities of Italian banks (onshore and offshore) is described, placing the Italian experience in the international framework (Section 5). Some tentative conclusions are drawn in the last section of the paper (Section 6).

2. The system of controls up to 1990

The foreign exchange control system in Italy was built on the principle of "monopoly", according to which all residents (except the Italian Exchange Office - UIC - the monopolist) were prevented from engaging in foreign exchange transactions of any kind. The Italian Exchange Office had the power to grant general/specific authorisations to carry out foreign exchange transactions (under instructions issued by the Ministry for Foreign Trade).

In 1958, the lira was made externally convertible. In the following year, Italian banks were allowed to engage autonomously in foreign exchange transactions and in foreign currency asset/liability management. However, they had to comply with a set of very strict rules (Table 1):

- The balance of foreign currency claims and liabilities, spot and forward, vis-à-vis both residents and non-residents had to be kept close to zero on a daily basis; or the aggregate balance had to be kept within a fixed ceiling (the spot and forward operations ceiling).
- The net position vis-à-vis non-residents (including the above positions and also positions in lire) had to comply with the needs of balance of payments financing, ie positive, negative or neutral according to circumstances.

- The forward net position (the sum of net forward positions vis-à-vis residents and non-residents, aggregated across currencies and maturities) had to be kept within a ceiling fixed on a bank by bank basis (the spot against forward operations ceiling).

Table 1

Mechanism of bank controls

Balance sheet scheme	Assets	Liabilities	Balance
Vis-à-vis non-residents			
fx spot (a)	50	60	–10
fx forward (c)		20	–20
Vis-à-vis residents			
fx spot	40	20	20
fx forward (d)	10		10
A Foreign currencies balance (sum of the above)	**100**	**100**	**0**
Lira net external position (b)	20	20	0
B Net external position (a+b)			**–10**
C Net forward operations balance (c+d)			**–10**

Note: Basic instruments: A - foreign currencies balance (spot and forward operations ceiling); B - net external position; C - net forward operations balance (spot against forward operations ceiling).

In the following years, these three rules became instruments of foreign exchange and monetary policy, managed by the central bank according to its needs. The rules were used:

- to combat speculative attacks against the lira, whether in response to developments in the current account, capital account or politics;
- to enforce a completely risk-averse attitude to taking positions in foreign exchange; and
- to monitor and limit the potential shift from lira claims/liabilities into foreign currency claims/liabilities and thereby to protect the official foreign exchange reserves, to give support to the exchange rate, and to limit domestic credit expansion.

After 1960, some dollar/lira swap arrangements between the Italian Exchange Office and the banks gave some flexibility to the aforementioned foreign exchange position balancing requirement. Given the opportunity provided by the authorities to swap lire for dollars from Italy's foreign reserves, Italian banks developed their own activity at the international level, for instance extending trade credit in dollars. At times, according to the balance of payments needs, the liquidation of these swap arrangements was imposed by the Italian government, together with the adoption of other restrictions on the forward ceiling and, mostly, on the net position vis-à-vis non-residents.

The most "difficult" years were 1973, when a dual exchange rate system (for current and capital account transactions) was introduced, and 1976, when the lira came under heavy speculative attacks. In 1988, the system of capital control was made much more flexible. In 1990, the residual limitations were lifted and a fully liberalised system came into being.

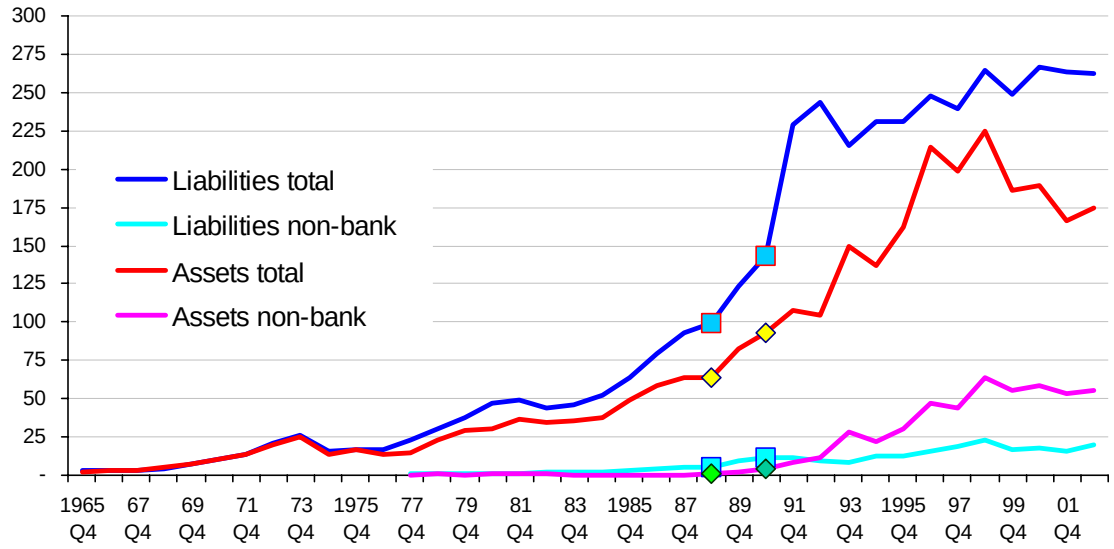
Did the various measures adopted up to 1990 have the desired effect on the banking aggregates? What would have happened in the markets if these measures had not been taken? The answers to questions of this kind are a matter of relativity and, of course, there is no "control solution" to rely on. However, if the ex post empirical evidence is looked at, the impression is that the banking aggregates complied with the rules, but also that international banking developed at a rate below its potential (Graphs 1-4).

Graph 1

Development of main banking aggregates

External positions of banks operating in Italy in all currencies (domestic and foreign)

Billions of US dollars

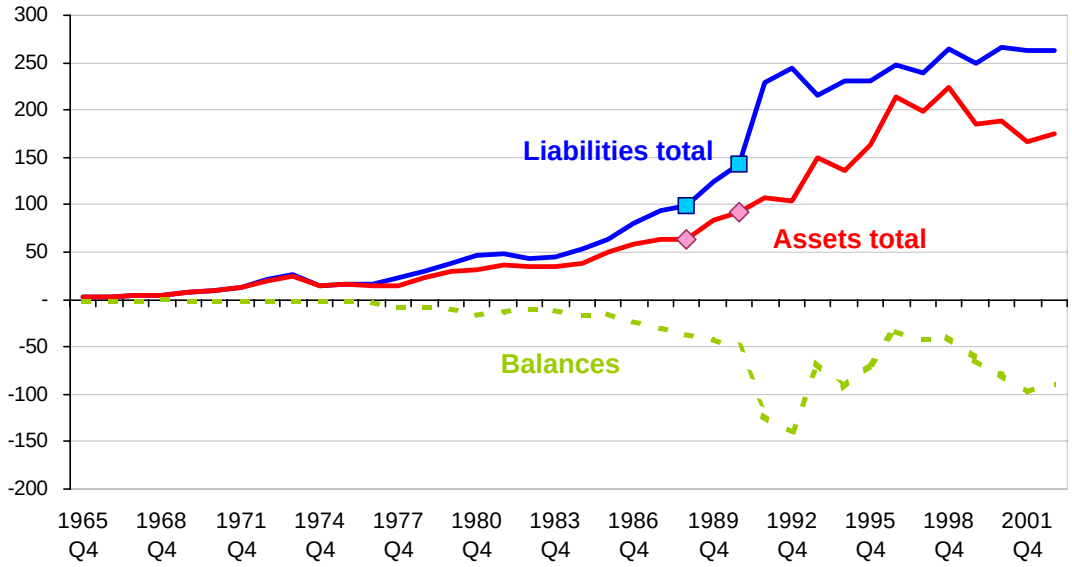


Sources: BIS; Italian Exchange Office.

Graph 2

External positions of banks operating in Italy in all currencies (domestic and foreign)

Billions of US dollars



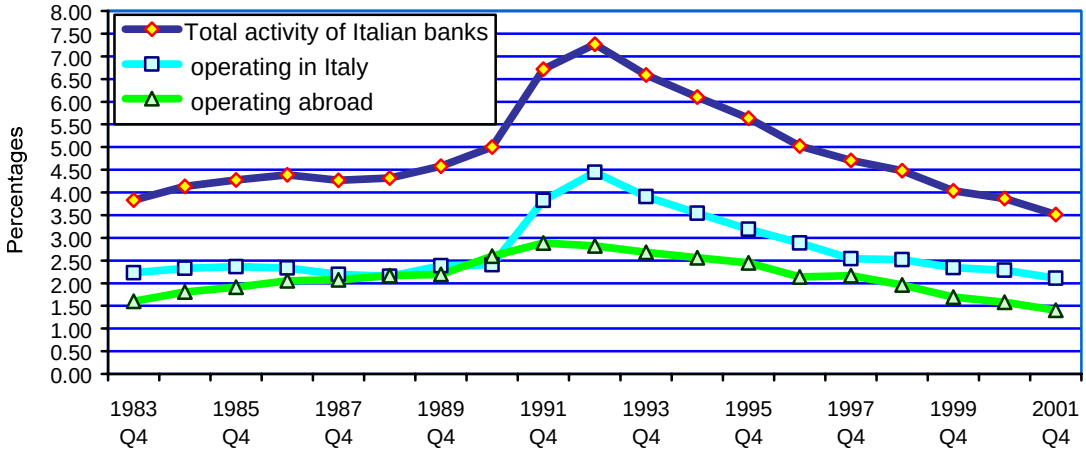
Sources: BIS; Italian Exchange Office.

Graph 3

Share of Italian banks' activities (domestic and foreign) in total activities of BIS reporting banks

Liabilities

Period: December 1983 - December 2001



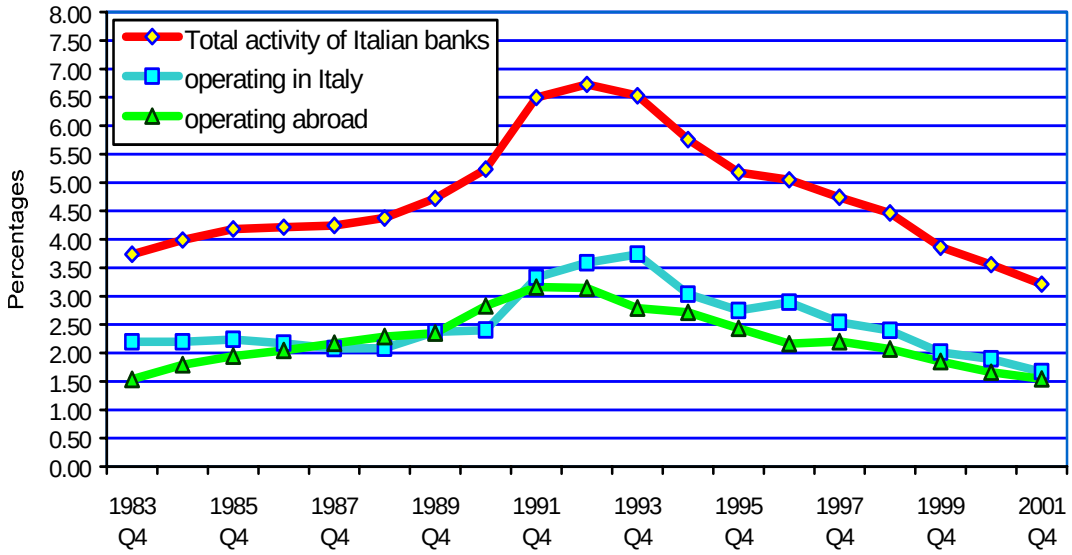
Sources: BIS; Italian Exchange Office.

Graph 4

Share of Italian banks' activities (domestic and foreign) in total activities of BIS reporting banks

Assets

Period: December 1983 - December 2001



Sources: BIS; Italian Exchange Office.

3. International banking: the regulatory experience of 1976

From the second half of 1975, the Italian economy experienced a strong recovery. The recovery very soon became incompatible with the balance of payments constraint. Italian banks' foreign currency debtor positions decreased significantly together with official external reserves.

Italy experienced one of the most serious exchange rate crises at the beginning of 1976. The external convertibility of the lira was suspended between January and February of that year. A tax and a compulsory non-interest bearing deposit on external payments were introduced; the obligation to finance advance payments for imports and export credits in foreign exchange was reinforced; the time limits on residents' foreign currency holdings ("surrender requirements") were shortened; and debtor balances on foreign lira accounts (ie the extension of banking system credit to non-residents) were discouraged (by means of fines).

Italian banks were limited in both their international and domestic activities. The expansion of domestic loans in lire was made subject to a system of ceilings. Banks were prohibited from having creditor foreign currency positions. On the contrary, a debtor foreign currency position was strongly encouraged, inducing the banks to borrow to strengthen official reserves. Foreign claims in lire were frozen. The ceiling on "spot against forward" operations was lowered by 50% (in addition, the use of this ceiling was confined to resident counterparties).

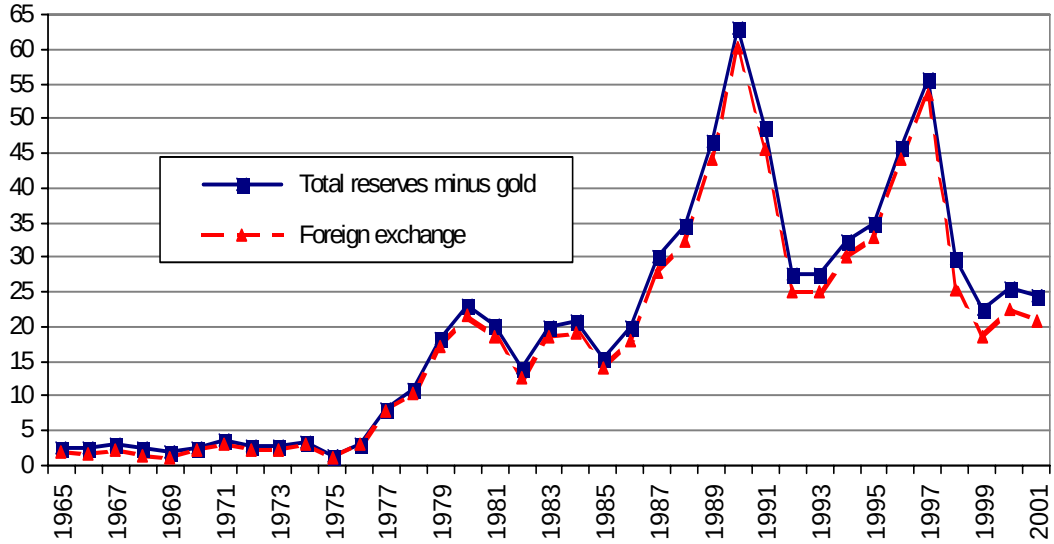
Notwithstanding these measures, the lira depreciated in the foreign exchange market. The nominal effective exchange rate depreciated by 14% in the first three months of 1976 and by 16% on average in 1976 over 1975.

Looking at the development of banking aggregates in 1976 and thereafter, it appears that this set of measures produced the desired results, albeit with the side effect of curbing Italian banks' overall international operations. On the one hand, the net foreign liabilities of the banks went up from around zero to some USD 3 billion at the end of 1976. The figure continued to rise in the following years and reached some USD 15 billion at the beginning of the 1980s. Official foreign exchange reserves were thereby replenished (Graph 5). On the other hand, it can be seen that the overall activity of the banks (claims and liabilities) decreased sharply after peaking in 1973-74, and remained at a relatively low level in the following 3-4 years (see Graphs 1-4).

Graph 5

Official reserves

Billions of US dollars



Sources: BIS; Italian Exchange Office.

As a matter of fact, the regulatory framework of banking activity was conceptually, and indeed also practically, a very efficient and "closed" mechanism. Total (resident and non-resident) foreign currency claims had to be equal to total foreign currency liabilities (by groups of currencies, or even, as in the case of the dollar, by currency). In addition, even if net foreign currency spot claims were matched by forward foreign currency liabilities, the balance (spot against forward) could not exceed a fixed amount. Accordingly, the scope for speculation (coming from domestic sources) against the lira was limited and therefore under control. At the same time, speculation of foreign origins was under control too, because lira funding of non-resident counterparties was restricted.

There was no way for non-resident banks (or non-banks) to build short positions in lire, either directly with Italian banks or indirectly. The expansion of the offshore lira market was ultimately confined by Italian banks' assets, which were the necessary base of international banking in lire. This base was limited, as was its international expansion.

4. International banking: the fully liberalised experience of 1992

The liberalisation process took place gradually. The first important step in this direction was made in 1988. In that year, the compulsory balancing of foreign exchange positions was allowed within a range of ± 5%. Net foreign currency positions vis-à-vis non-residents were allowed to be creditor. Net lira positions vis-à-vis non-residents were dealt with separately. Foreign lira claims could be granted up to the outstanding foreign lira liabilities. Constraints on the foreign currency financing of residents were abolished. However, for monetary policy purposes, a compulsory reserve requirement scheme was adopted for net foreign currency liabilities. The spot against forward operations ceiling was significantly increased. As a result of these measures, the international activity of Italian banks increased at a rapid pace. In the first four months of 1989, the net foreign debtor position rose by some USD 20 billion dollars, or by one third of the stock outstanding at the end of September 1988.

In 1990 all the residual restrictions were lifted. Since then, a fully liberalised institutional setup has been in place. The process of international integration of the Italian economy accelerated. In 1992 the financial transactions turnover in the balance of payments reached 180% of GNP. It had been 90% just two years previously, while in the 1980s it had been constantly below 70%.

The currency crisis in September 1992 affected all European countries. Italy, together with other countries, had to devalue its currency. The banking aggregates bore the bulk of the changes in the demand for and supply of lire in foreign exchange markets and provide an interesting explanation of these developments. In the first eight months of 1992, the net inflow of capital through resident banks was around USD 40 billion. In September of the same year alone, the outflow was more than half that entire amount (USD 21 billion; see Table 2). Foreign exchange reserves decreased at the same pace.

A reconstruction of the main balance sheet items of resident banks at constant exchange rates allows the development of the banks' domestic and foreign positions to be followed. Before September 1992, the banks increased their net foreign currency fund-raising abroad and their foreign currency lending to residents. Their customers apparently did not cover the exchange rate risk in the expectation that the lira would not be devalued, given that uncovered interest rates on foreign currencies were far lower than those on the lira.[1]

As expectations of a depreciation of the lira materialised, the outflow of bank capital came from an increase in external assets and a decline in external liabilities. On the other hand, banks' foreign currency assets vis-à-vis residents decreased while foreign currency liabilities vis-à-vis residents increased. Banks used a large part of the domestic funds raised in September 1992 to reduce their net external liabilities. Overall, they increased their net liabilities in lire and reduced those in foreign currency.

[1] Italian residents were not alone in their short foreign currency, long lira positions. Non-resident portfolio investors had built up positions in Italian government securities in the expectation of lira stability against the Deutsche mark.

The change in the spot position was offset by the net forward foreign currency position. Banks' commitments to deliver foreign currency against lire rose by some USD 14 billion (Table 2).[2] Given this evidence, it is clear that the Italian banks did not take a speculative (short) position in lire. The combined spot and forward positions did not change significantly. However, the official foreign exchange reserves decreased sharply and the lira was devalued.

Table 2

Main banking aggregates, 1992

Flows at constant exchange rates, in billions of US dollars

		June-August	September
External position		**–16**	**21**
in lire	Assets	–1	2
	Liabilities	1	1
in forex	Assets	–6	10
	Liabilities	8	–10
Domestic forex position		**10**	**–6**
	Assets	16	0
	Liabilities	6	6
Domestic lira position		**6**	**–15**
Forward commitments against lire		**–2**	**–14**
	Forex receivable	16	10
	Forex for delivery	18	24
Forex overall position		**–6**	**0**
Memo: Official reserves		*17*	*26*

Note: A positive number on bold lines indicates outflows.

Source: Italian Exchange Office.

One important explanation of the banks' net repayment of external foreign currency liabilities can be found in arbitrage operations in lire. The cost of hedging foreign currency funds (interest plus the forward discount on the lira) exceeded the banks' rate on lira funds, therefore inducing them to repay external foreign currency liabilities. In addition, non-resident banks probably sold lire short, or sold lire forward or borrowed lire to be converted into foreign currency spot, thereby increasing the demand for eurolira and pushing up interest rates. Since Italian banks were the source of lire in the euromarket, the domestic interbank rate also rose, but not as much, therefore determining a differential which further stimulated arbitrage operations in lire.

There was no way to stop this process except by devaluing the lira or increasing domestic interest rates to a level consistent with the expected depreciation, which, in the very short term of, say, a week, would have meant a yield 50 times higher. Fears of a reintroduction of exchange controls might have caused eurolira rates to rise further. The nominal effective exchange rate of the lira depreciated by 13% in the first three months of the crisis, and by 16% 12 months afterwards on a yearly average basis.

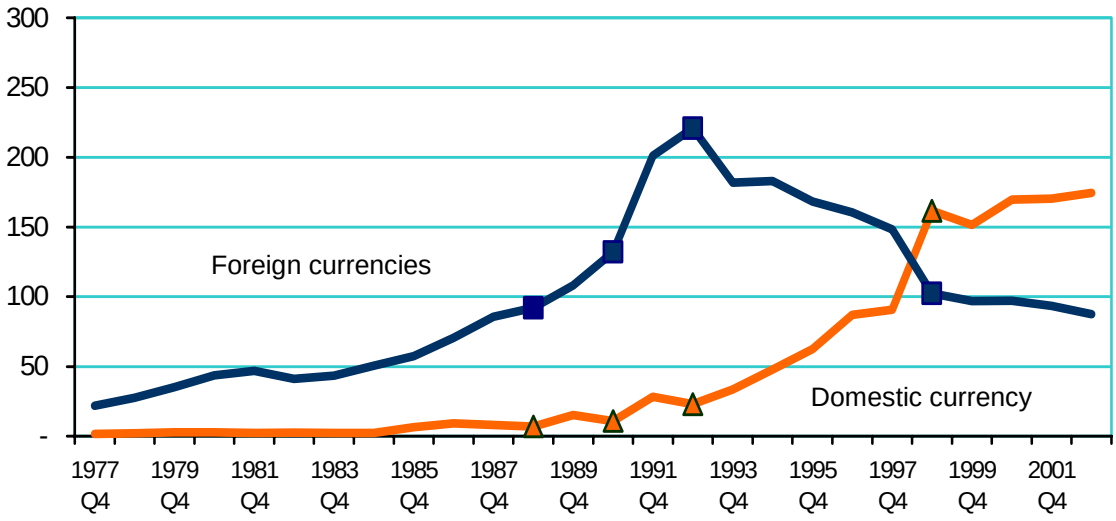
[2] The banks can be seen as accommodating the demand for forward cover on short foreign currency positions of residents or on long lira positions of non-residents.

Graph 6

Banking aggregates, historical series from 1977 stocks outstanding

External liabilities of banks operating in Italy in domestic and foreign currencies

Billions of US dollars

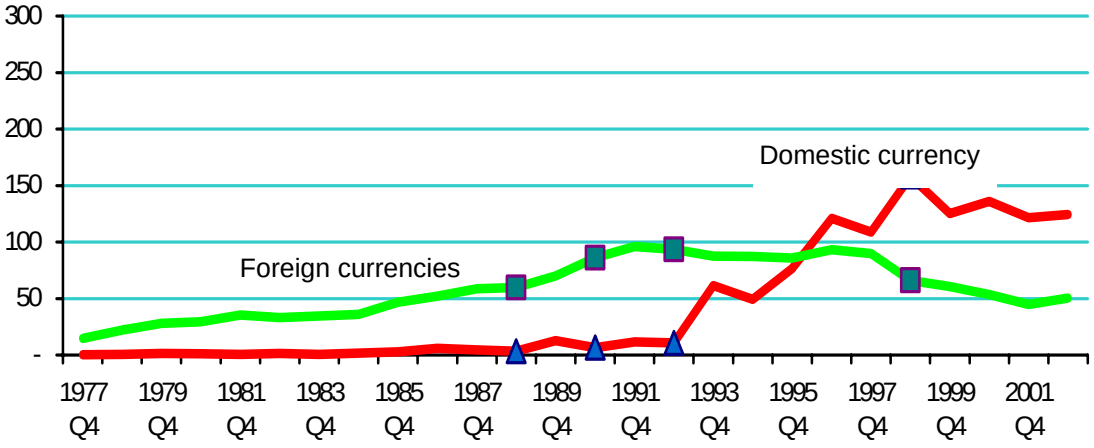


Sources: BIS; Italian Exchange Office.

Graph 7

External assets of banks operating in Italy in domestic and foreign currencies

Billions of US dollars

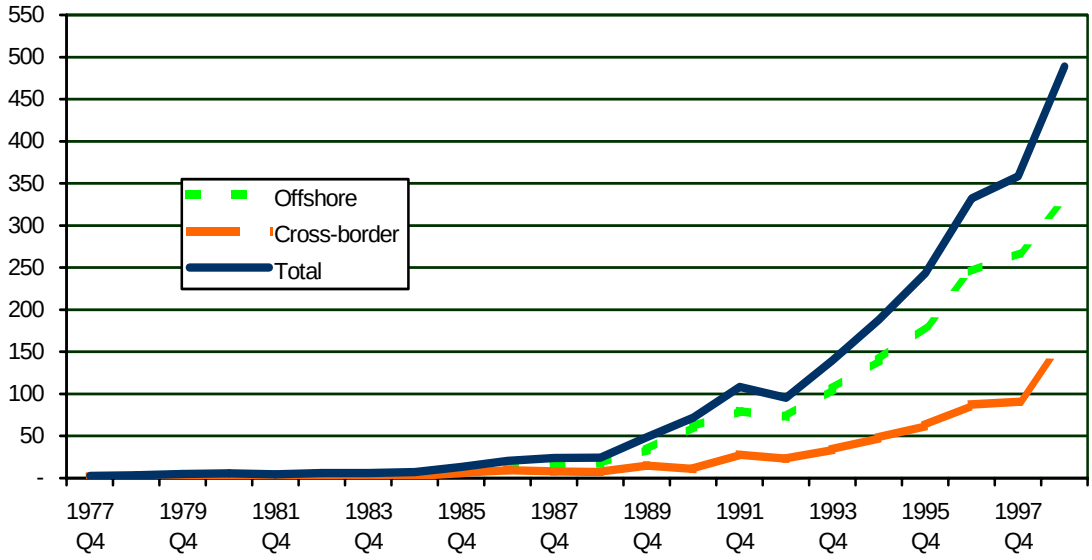


Sources: BIS; Italian Exchange Office.

Graph 8

Lira global market (offshore + cross-border) liabilities

Billions of US dollars

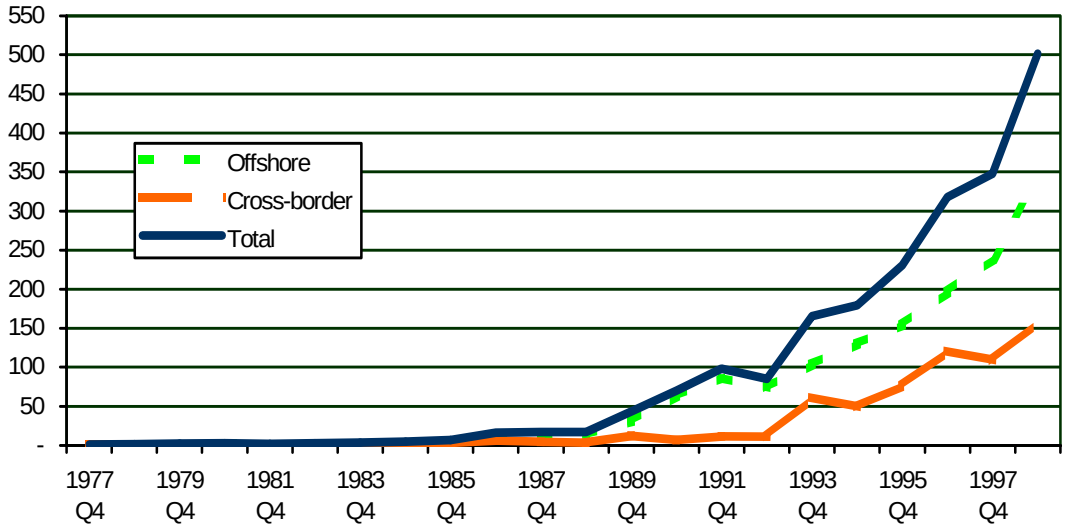


Sources: BIS; Italian Exchange Office.

Graph 9

Lira global market (offshore + cross-border) assets

Billions of US dollars

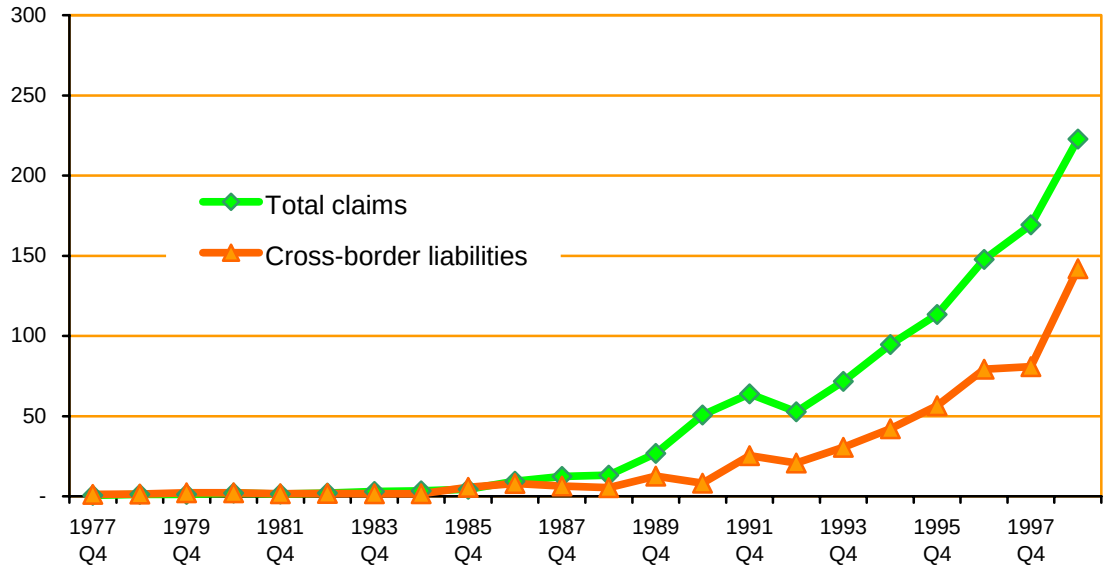


Sources: BIS; Italian Exchange Office.

Graph 10

Lira interbank market: Italian banks' cross-border liabilities and BIS reporting banks' total claims

Billions of US dollars

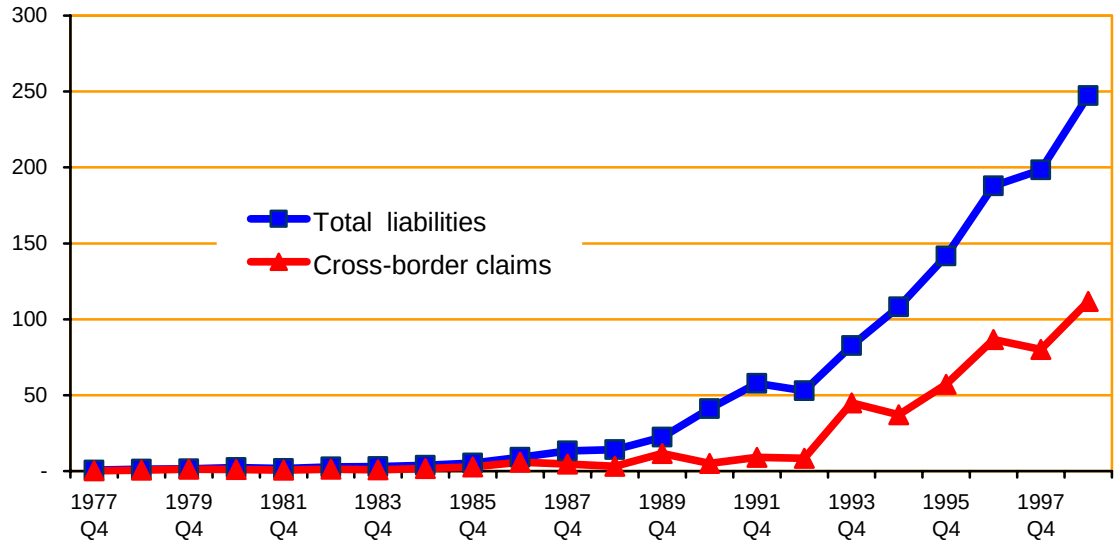


Sources: BIS; Italian Exchange Office.

Graph 11

Lira interbank market: Italian banks' cross-border assets and BIS reporting banks' total liabilities

Billions of US dollars



Sources: BIS; Italian Exchange Office.

5. International banking in the 1990s

In the years which followed the 1992 crisis, Italian banks experienced significant rates of growth in their international business, albeit in line with the growth of banks in other countries (Graphs 6-11). Their positions grew, either spot, forward, domestic or external, with rather differentiated patterns. However, the main characteristic of their behaviour appears to be risk aversion.

With a view to monitoring the development of the demand for and supply of foreign currencies and of the source for funding currency and external positions, the Italian Exchange Office introduced a system of daily reporting which was not meant to reintroduce controls but rather to enrich the statistical evidence and therefore enhance the knowledge of the workings of the foreign exchange markets.

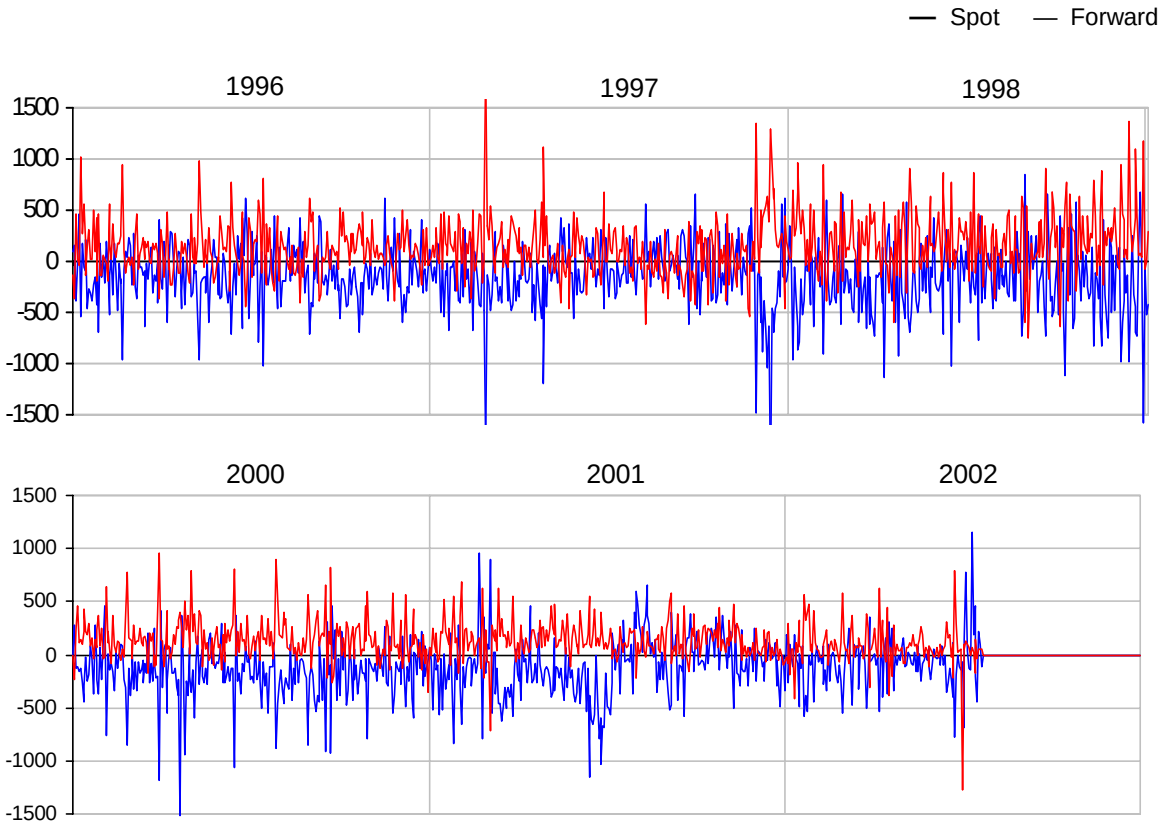
From 1996 up to 2002 a large quantity of high-frequency data was collected. A rapid look at Graphs 12-15 provides an interesting picture of the present international banking scenario. First of all, the overall foreign exchange position is almost constantly balanced. The spot pluses or minuses are systematically offset by opposite values in the forward section of the banks' activity. At the same time, one can see that net claims/liabilities vis-à-vis non-residents quite often find compensating positions vis-à-vis residents. Lira lending/borrowing to/from non-residents (euro since 1999) developed faster than that of foreign currency lending/borrowing.

Graph 12

Banking aggregates, daily turnover from 1996 onwards

Foreign exchange daily net position

Millions of euros

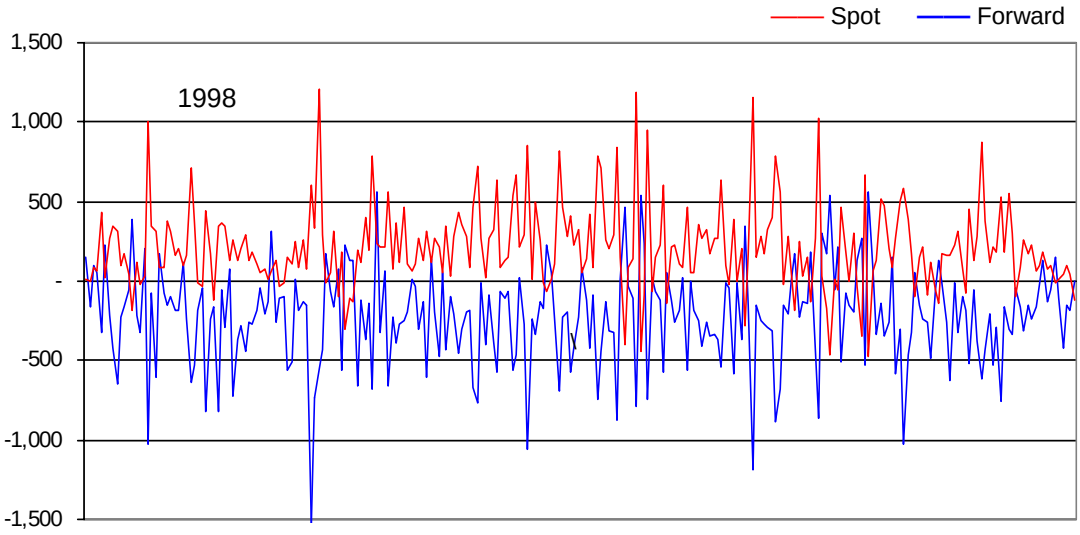


Source: Italian Exchange Office.

Graph 13

Foreign exchange daily net position

Millions of euros

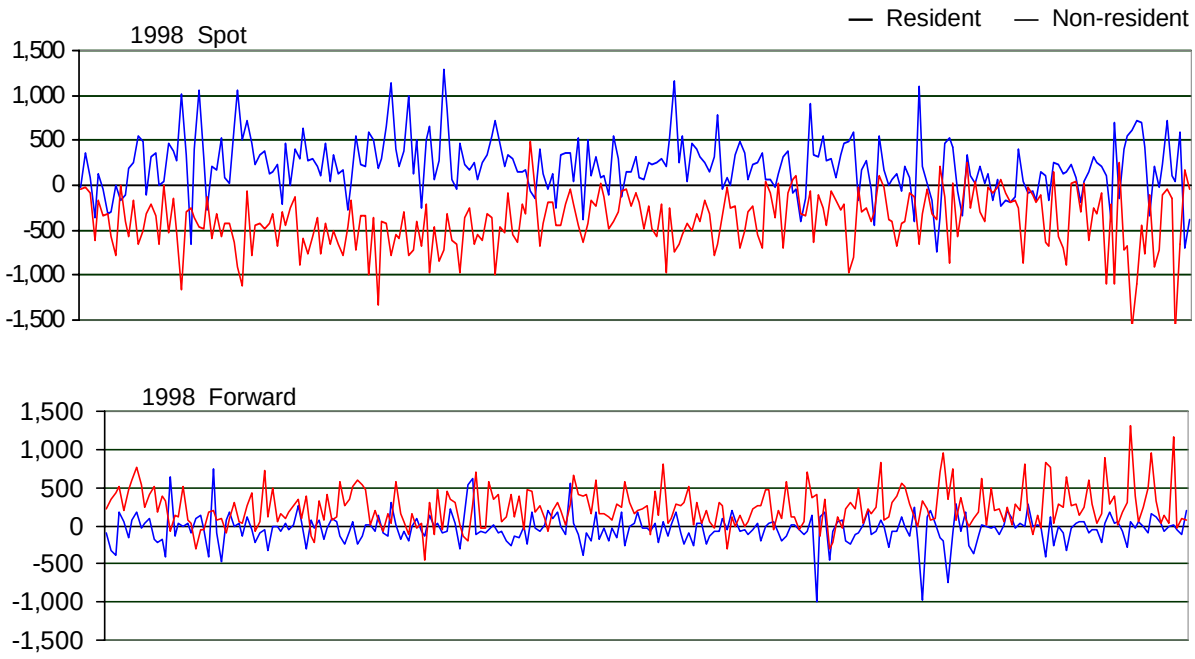


Source: Italian Exchange Office.

Graph 14

Foreign exchange daily net position

Millions of euros

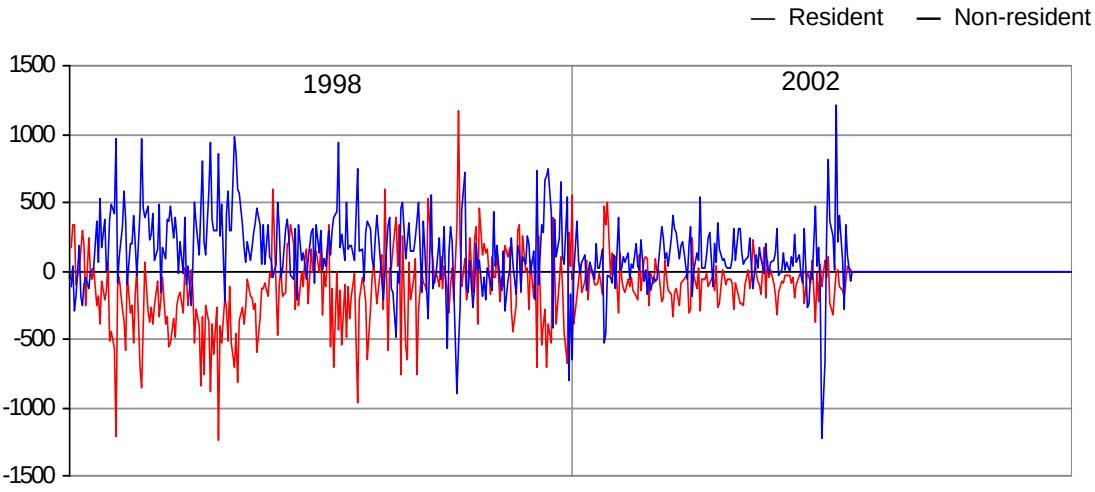


Source: Italian Exchange Office.

Graph 15

Foreign exchange daily net position, spot and forward transactions

Millions of euros



Source: Italian Exchange Office.

6. Conclusions

Exchange controls did play an important role in the past. As a result, exchange rate crises were well managed, but banks came to compete in international markets under a sort of protective environment. As a matter of fact, the rapid increase in their international activities was largely attributable to the swap arrangements between them and the Italian Exchange Office.

As exchange crises erupted, their activity became restricted and the banking aggregates were somehow frozen.

More than a decade has elapsed since the full liberalisation of exchange controls in Italy. Since 1990, banks have been facing pure competition. The growth of the banking aggregates appears quite high in volume terms. However, it is much less remarkable in relative terms. A sort of constant risk-averse attitude still appears to prevail.

There is no way to ascertain whether a cost-benefit analysis applied to a system of controls in comparison with a system of full freedom would bring any conclusive results. According to accepted wisdom, however, the system of controls appears to be outdated in today's world and unlikely to be resumed in the future.

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Liberalising the capital account without losing balance: lessons from Korea[1]

Yoon Je Cho and Robert N McCauley

Introduction

The experience of Korea in the 1990s may provide useful lessons to any country contemplating the joint liberalisation of its financial system and its capital account. The country is generally thought to have pursued broadly reasonable macroeconomic policies. Its current account, while in deficit, was still less than the level of 5% of GDP that is usually perceived as a warning signal. Its underlying international position, as measured by its net international liabilities to the rest of the world, was by no means unhealthy. And yet with shock and surprise the country experienced a wrenching foreign exchange and banking crisis.

Korea entered its process of domestic financial and capital account liberalisation with the vulnerability of highly leveraged large conglomerate firms and with domestic interest rates substantially higher than international interest rates. The authorities compounded the challenge posed by these difficult initial conditions by pursuing an unbalanced course of financial liberalisation. Pricing was freed up on short-term securities more than long-term securities and on the assets and liabilities of non-bank financial firms more than banks. This shifted financing flows towards short-term instruments, increasing corporate financial fragility, and towards financial intermediaries that were barely regulated. The lack of balance in the domestic programme of financial liberalisation had its counterpart in the capital account liberalisation, which restricted foreign flows into longer-term instruments. In addition, while the scope of permitted foreign currency lending was widened, banks' longer-term foreign borrowing remained controlled. At the same time, many of the poorly regulated finance companies were allowed to enter the foreign currency lending business by converting themselves into merchant banks. Thus, the build-up of fragile financial structures externally paralleled the build-up of fragile domestic corporate finances.

This paper first characterises the domestic financial liberalisation undertaken in Korea in the early 1990s. The second section draws the implications for corporate finances in Korea. Then the third section characterises the capital account liberalisation and the fourth shows how it made Korea's external balance sheet vulnerable to a reassessment by foreign creditors. Further liberalisation of the capital account since the crisis, accompanied by prudential measures and a build-up of official liquidity to limit future vulnerability, are described in the fifth section. Finally, lessons and conclusions are drawn.

1. Domestic financial liberalisation

Financial liberalisation in Korea in the early 1990s set out to free interest rates in four stages and to encourage competition among financial institutions. The Kim Young-Sam administration of 1993-98 accelerated this process. The course of liberalisation proved not to be neutral as between institutions and term of instruments. In the event, non-bank financial institutions were favoured over banks and short-term markets were favoured over long-term markets. Bank interest rates and corporate bond yields remained under the de facto control of the authorities, while commercial paper yields were

[1] The authors thank San-Sau Fung for research assistance and comments by participants of the Seminar, but responsibility for any errors remains the authors' own. The views expressed are those of the authors and not necessarily those of the Bank for International Settlements.

allowed to find their own levels. The gap between intentions and policy reflected the weight of various interests that stood to gain from liberalisation, as well as the politics of monetary policy.

Unbalanced liberalisation[2]

The four-stage plan to liberalise interest rates announced in 1991 seemed to draw on the principles of moving gradually from long-term to short-term interest rates, from the securities market to bank interest rates, and from large- to small-denomination instruments. The final plan showed less coherence (Table 1). Moreover, actual implementation deviated in important respects. Yields on commercial paper were in principle freed in 1991, but in fact became market determined only in 1993-94. Yields on bank loans were in principle freed in 1993, but the authorities used moral suasion and administrative means to guide them until 1996. Yields on short-term time deposits were freed in 1995, but remained under control until mid-1996. Corporate bond yields were freed in 1991, but limits on issuance rationed access and thereby held yields on this most representative interest rate in check until 1997. For most of the period 1994-97, commercial paper yields exceeded those on three-year corporate bonds, which exceeded in turn prime bank lending rates.

While commercial paper, unsecured IOUs of generally less than three months' maturity, proved the favoured instrument, non-bank financial institutions proved the favoured institutions. Commercial paper was accepted by finance companies and merchant banking companies and marketed by them to final investors. Among these were investment trust companies and, after 1993, the trust accounts of banks. These issued beneficiary certificates the yields on which were in principle related to the performance of a portfolio of investments but which in practice were set ex ante. The gatekeepers in this process were domestic rating agencies, which were not only extremely easy graders by comparison to the international agencies, but also kept their ratings unchanged in most cases three to six months before bankruptcy (Cho (2001, pp 169-70)).

The political economy of the unbalanced liberalisation[3]

In retrospect, financial liberalisation in Korea could have been more carefully designed and implemented in conjunction with reform in the corporate sector (deleveraging and improvement in corporate governance) and with the development of supervisory capacity and financial infrastructure. Instead, it was implemented in a reactive way in response to internal and external pressures. In particular, several factors help explain the lack of balance in Korea's financial liberalisation of the early 1990s. First, the vested interests behind the non-bank financial firms pushed more vigorously for liberalisation than the interests behind the banks. In the 1980s, chaebol had acquired substantial control over the financial system, by owning most of the non-bank financial firms. They saw in the programme of deregulation and globalisation of President Kim Young-Sam an opportunity to gain access to more funds through their financial affiliates, in effect widening their internal capital markets. While banks had been privatised in the early 1980s, and MOF appointment of bank managers generally ceased in the early 1990s, political influence remained important in the leadership and at times lending decisions of banks. Without any large shareholders, banks did not marshal a countervailing political force to balance the lobbying of the chaebol on behalf of the non-bank financial firms.

[2] This section draws on Cho (2001).

[3] This section draws on Cho (1999).

Table 1

Four-stage liberalisation of interest rates in Korea

	Instrument	Measures
First stage: implemented in November 1991	Deposits	*Banks:* certificates of deposit (CDs), large-denomination repurchase agreements, commercial bills and trade bills, time deposits with maturity of three years (new).
		Non-banks: large-denomination commercial paper (CP), time deposits with maturity of at least three years, time deposits of mutual savings and finance companies with maturity of at least two years, etc.
	Loans	*Banks:* overdrafts, discounts on commercial paper apart from loans eligible for Bank of Korea rediscount, overdue loans.
		Non-banks: discounts on commercial bills of trust, mutual savings and finance companies, discounts on CP and trade bills of investment finance corporation, etc.
	Bonds	Corporate bonds with maturity of at least two years.
Second stage: implemented in November 1993	Deposits	*Banks:* time deposits with maturity of at least two years, instalment-type deposits with maturity of at least three years such as instalment savings, mutual instalments, etc.
		Non-banks: time deposits with maturity of at least two years, instalment-type deposits with maturity of at least three years such as instalment savings, mutual instalments, etc.
		Mutual savings and finance companies: time deposits with maturity of at least one year and instalment savings with maturity of at least two years, etc.
	Loans	All loans of banks and non-bank financial institutions except policy loans.
	Bonds	Corporate bonds with maturity of less than two years, financial debentures, government and public bonds.
Third stage: from July 1994	Deposits	*Partially implemented in July 1994:* shortened the minimum maturity of CP from 91 days to 60 days and allowed the issue of banks' cover bills.
		Partially implemented in December 1994: time deposits with maturity of less than two years and instalment savings with maturity of two years or less than three years.
	Loans	Liberalised the interest rate of loans eligible for discount with the Bank of Korea under the aggregate credit ceiling system to the extent of prime rate.
		Partially implemented in July 1995:
	Deposits	Time deposits with maturity of six months to one year and instalment savings with maturity of one year or less than two years.
		Expanded short-term marketable products liberalisation (shortened the minimum maturity and lowered the minimum issue denomination).
	Loans	Loans eligible for discount under the aggregate credit ceiling system of the Bank of Korea.
		Full implementation in November 1995:
	Deposits	Time deposits with maturity of less than six months and instalment savings with maturity of less than one year, etc.
		Preferential savings and company savings with maturity of at least three months.
		Expanded liberalisation of short-term marketable products (lowered the minimum denomination).
Fourth stage: implemented in July 1997	Deposits	*Banks:* savings deposits, preferential savings with maturity of less than three months and money market deposit account (MMDA), company savings with maturity of less than three months and MMDA.
		Merchant banks: bills issued with maturity of less than one month, trust-type securities savings.
		Investment trusts: passbooks.
		Mutual savings: preferential time and savings deposits with maturity of less than three months.
		Mutual credits and credit unions; community credit cooperatives: deregulated the maturity of short-term marketable products (CD, RP, CP, etc), the minimum denomination, repurchasing fee of trust companies, interest rate of time deposits with maturity, etc.

Source: Cho (2001).

Another factor favouring the unbalanced liberalisation was the politics of monetary policy. The MOF (MOFE since 1996) took responsibility for both economic growth and monetary policy. The latter centred on the control of M2. While the deregulation of long-term time deposits led them to grow more rapidly and thereby to boost M2 growth, deregulation of the commercial paper market, non-bank financial firms' liabilities and eventually bank trust accounts all encouraged intermediation not captured by M2. Of course, controlling the growth of a given aggregate while allowing the more rapid growth of a wider aggregate is likely to alter the relationship between the targeted monetary aggregate and nominal GDP and, if unrecognised, can even frustrate the goal of inflation control. In addition, political pressure led to the retention and at times expansion of the Bank of Korea window to rediscount loans to small and medium-sized firms at preferential rates. The need to absorb the liquidity thereby created made it hard to reduce reserve requirements, which remained around 10% until late 1996, and required open market operations that constrained banks more than their rivals. Reserve requirements and absorption of Bank of Korea liabilities made it difficult for banks to compete in price even if allowed to.

The difference in the political forces backing the non-banks and the banks also worked against an improvement of supervision that should have gone hand in hand with the liberalisation. The Office of Banking Supervision, an affiliate of the Bank of Korea, supervised the banking accounts of banks, while the MOF supervised most non-bank financial firms and the trust accounts of banks with scant manpower or expertise. Bank examination focused more on checking compliance with official credit allocation guidelines than risk exposures and management. Classification of non-performing assets did not meet international standards. Bank trust departments' holdings of loans, commercial paper and bonds were not subject to the single-borrower limits that applied to banks' general accounts.

Even a vigorously pursued effort to strengthen supervision, it should be recognised, would have faced huge challenges. Given the leverage and size of the chaebol, there were limits to what the prudential management of loan portfolios could have accomplished. In addition was the perception, falsified since the crisis, that the government would keep lenders to the big chaebol whole.

2. Consequences for corporate finances

The unbalanced interest rate liberalisation had consequences for the patterns of corporate finance in Korea in the 1990s. Essentially, financing shifted into the markets and institutions least controlled by the authorities. Outside fund-raising by corporations shifted to the commercial paper market (Table 2). While commercial paper had provided firms with only 2.5% of their outside funds in 1990-92, such short-term securities represented 13.1% of outside funding in 1993-96, peaking at 17.5% in 1996.

This new financing opportunity did not present itself to all Korean businesses. It was mainly chaebol that were able to sell commercial paper. Thus, the unbalanced liberalisation and the consequent shift of corporate liabilities to the short term increased the financial fragility of the larger firms in the Korean corporate sector. Short-term paper increasingly financed long-term investment in automobile, petrochemical and heavy machinery plants. To the extent that the credit gatekeepers in the favoured chain of finance, namely the rating agencies and managers and supervisors of non-bank financial firms, screened such investment projects more recklessly than the previous gatekeepers, namely the banks, then fragility also increased as more debt was piled on equity.

Table 2

Corporate sector's financing pattern

In percent of total funds raised

	90	91	92	93	94	95	96	97	98	99	00	01
Total financing	100	100	100	100	100	100	100	100	100	100	100	100
Memo: *Total in KRW trillions*	*…*	*…*	*54.9*	*65.0*	*89.0*	*100.2*	*118.8*	*118.0*	*28.4*	*53.0*	*65.8*	*51.9*
Direct financing	42.4	37.9	41.4	52.9	38.1	48.1	47.2	37.4	178.9	50.0	28.6	70.9
Commercial paper	3.7	–3.8	7.6	13.9	4.9	16.1	17.5	3.7	–42.2	–30.8	–1.7	8.1
Bonds	21.5	24.2	12.1	14.5	14.2	15.3	17.9	23.3	165.9	–3.2	–3.2	22.6
Stocks	11.8	11.5	13.1	14.7	14.8	17.6	11.6	9.9	53.2	77.6	31.3	31.8
Indirect financing	38.4	41.8	36.3	31.4	44.5	31.8	28.0	36.8	–57.3	3.8	17.1	2.3
Banks	15.8	19.8	15.1	13.1	20.7	14.9	14.0	12.9	2.5	28.2	35.1	6.5
Non-banks	22.6	22.0	21.1	18.3	23.8	17.0	13.9	23.9	–59.8	–24.3	–18.0	–4.6
Overseas borrowing	6.4	4.1	7.1	1.5	6.6	8.4	10.4	65.6	–35.5	18.7	23.7	4.4
Other[1]	12.8	16.1	15.3	14.2	10.8	11.7	14.4	20.3	13.9	27.4	30.6	22.4

[1] Includes inter-firm credit.

Source: Bank of Korea, *Monthly Bulletin*, various issues.

3. Capital account liberalisation

Korea's external accounts evolved into a vulnerable state notwithstanding a cautious approach to the liberalisation of foreign capital flows. The authorities recognised that, with strong corporate demand for funds and domestic interest rates well in excess of foreign interest rates (Graph 1), a sudden liberalisation risked massive capital inflows that could destabilise the domestic macroeconomy.

With the intention to join in the OECD,[4] however, Korea accelerated its capital account opening in 1994. With further capital market opening, corporate treasurers built up expectations of an appreciation of the Korean won and the gradual decline of domestic interest rates to the level of foreign interest rates, and thus increased their foreign borrowing to fund domestic investment.

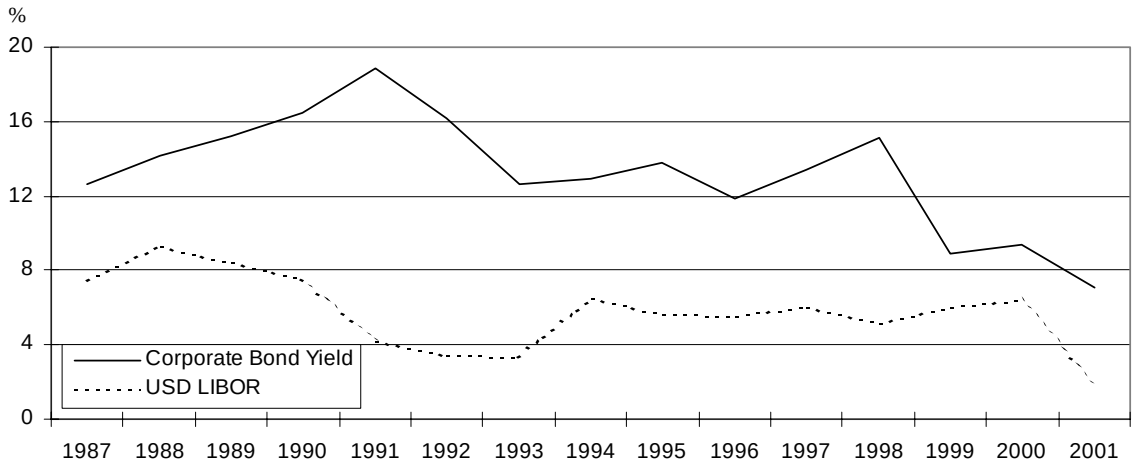
In opening the capital account, the government favoured Korean firms' borrowing dollars over non-residents' buying won-denominated equity or debt. The limits on foreign investments in the domestic stock market were lifted only gradually. Unlike many countries in the region, Korea had substantial government and corporate bond markets; however, foreign investment in these was strictly controlled. Only when Korea fell into crisis and agreed an IMF programme was the Korean capital market completely opened. Meanwhile, foreign borrowing at short term to finance trade was further relaxed, control over the issuance of Korean firms' securities in foreign capital market was eased and offshore borrowing was permitted. And, from early on, no significant restrictions stood in the way of foreign borrowing by Korean banks and merchant banking companies, especially short-term borrowing.[5]

[4] See Harris (forthcoming) for an insider's account.

[5] A broad limit on long-term borrowings was guided by the balance of payment projection (or target) of the year.

Graph 1

Gap between domestic and foreign interest rates

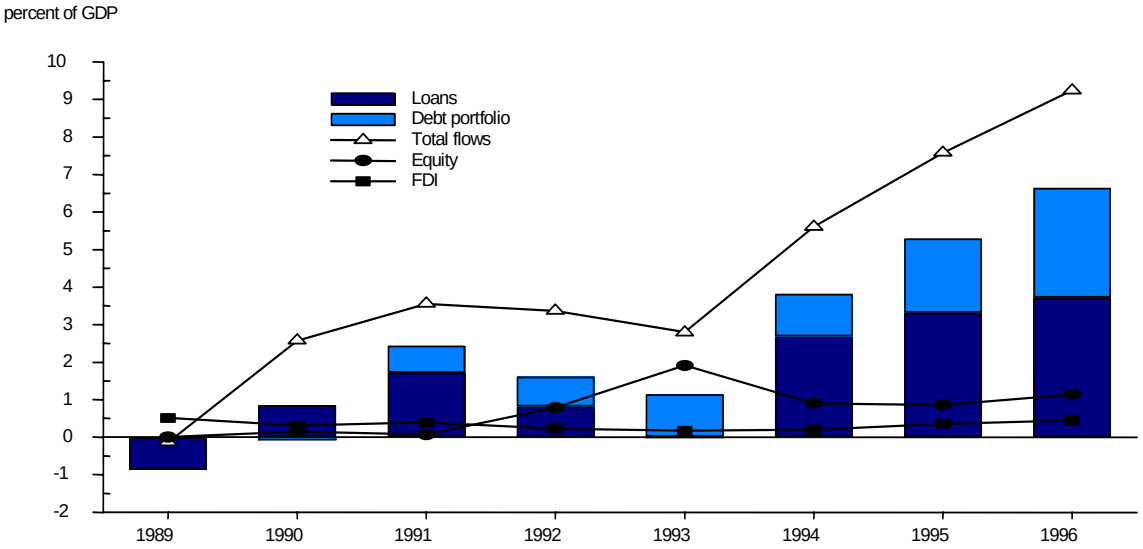


Source: Bank of Korea, *Monthly Bulletin*, various issues.

This policy created biases not only towards foreign currency borrowing, but also towards short-term foreign currency borrowing, much as the domestic liberalisation had biased corporate fund-raising to short-term instruments (Graphs 2 and 3).

Graph 2

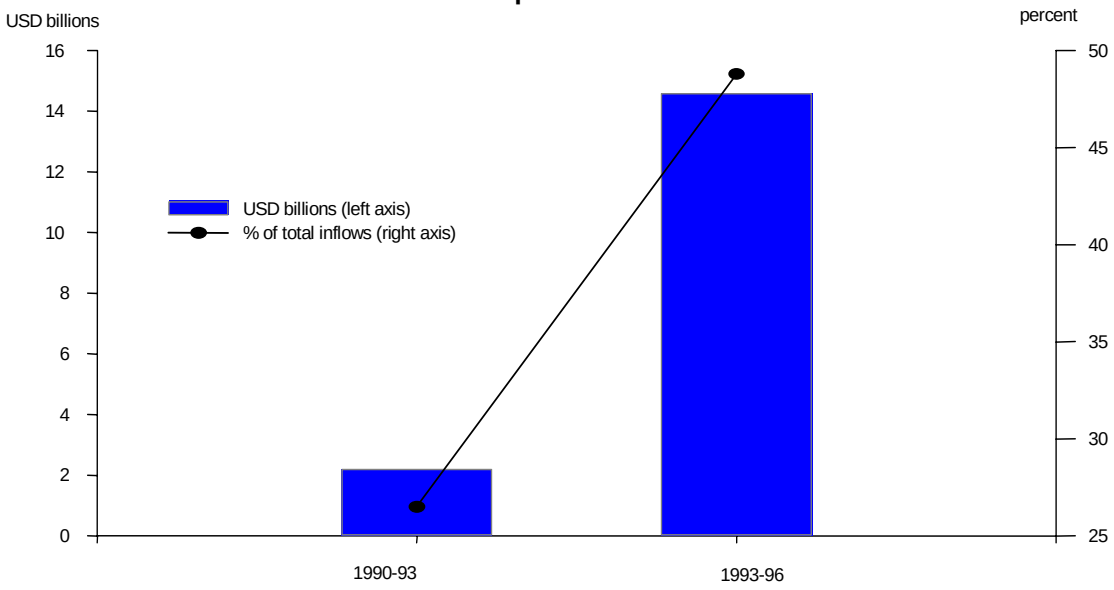
Capital inflow



Sources: Ministry of Finance and Economy (MOFE); Bank of Korea, *Monthly Bulletin*, various issues.

Graph 3

The bulk of capital inflow was short-term



Sources: MOFE; Bank of Korea, *Monthly Bulletin*, various issues.

First, corporate sales of securities abroad faced restrictions: minimum qualifications for issuers of foreign currency securities, minimum maturities for foreign currency securities sold overseas of three years, and limits on the use of the proceeds were in place up until the crisis.[6] These policies, perhaps defensible in themselves, contrasted with ready access to dollar loans from banks and merchant banks. Second, there was asymmetry in the deregulation schedules between the foreign currency denominated lending and borrowing by Korean financial institutions. In 1993, the Korean government expanded the positive list of purposes for which financial institutions could provide foreign currency loans. However, as regards the foreign currency funding by financial institutions, although short-term borrowing of banks was freely allowed, the government maintained quantitative restrictions on long-term borrowing as a means of capital flow management. The result was a dramatic increase in short-term foreign debts of financial institutions as they financed strong corporate investment associated with the economy's boom in 1994. Third, many new players were allowed into the business of extending foreign currency loans. A total of 24 finance companies were transformed into merchant banking corporations between 1994 and 1996, while banks opened 28 new foreign branches in the same three years. Transformation of finance companies into merchant banking corporations on a large scale meant a corresponding increase in the number of participants in the international financial markets since finance companies were not allowed to deal in foreign exchange but merchant banks were (Graph 4).

In retrospect, the capital market opening could have been more prudent. These changes in the institutional framework contributed to the strong growth in dollar lending by the financial sector after 1994 and an associated mismatch problem, with long-term dollar loans funded with short-term dollar liabilities. As the inexperienced merchant banking companies borrowed heavily in the short-term dollar money market (because the interest rates of short-term debt were lower), the competition in the foreign currency lending business in the domestic market became heated. Viewed from the domestic perspective, the dollar share of business loans rose from 13% in 1992 to 18% in 1996 (sixth column of Table 3). This perspective, however, does not include the offshore borrowing that was liberalised in the 1990s. Taking into account loans booked offshore (and reported by BIS area banks), the fraction of loans to Korean businesses denominated in foreign currency rose from 20% in 1992 to 28% in 1996.[7] In the Latin American context such a development has come to be known as financial

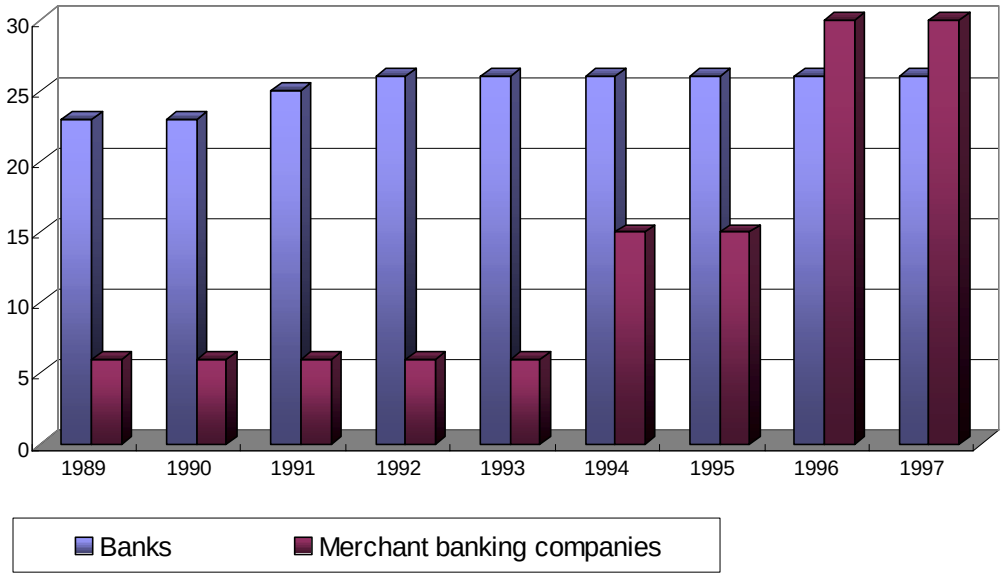
[6] See Financial Stability Forum, Working Group on Capital Flows (2000, p 53).

[7] The rise in the ratio in 1997 is heavily influenced by the depreciation of the Korean won at the end of the year.

dollarisation.[8] Such a degree of dollarisation of the liabilities of the Korean corporate sector, in itself, might not have been imprudent in view of the openness of the Korean economy, with exports equal to a third of GDP.[9] But banks and merchant banking companies were increasingly accumulating long-term assets in foreign currencies financed by short-term liabilities.

Graph 4

Number of financial institutions



Source: MOFE.

Of course, an appropriate strengthening of the supervisory structure could have prevented such an accumulating maturity mismatch in foreign currency. But reform of supervision was gradual, at best. The Office of Bank Supervision introduced a belated guideline for matching foreign currency liabilities with foreign currency assets of a given maturity only in June 1997. Such guidelines had been used by the French and Japanese authorities to enforce a lengthening of dollar liabilities in the wake of the debt crisis of the early 1980s, which lengthened dollar claims on Latin America (McCauley (1984)). The MOFE, the supervisory authority for merchant banking companies, had not established any measure to deal with the problem until the eruption of the crisis (Shin and Hahm (1998)). Moreover, the lack of prudential regulations on the merchant banking companies' operations was not confined to supervision of foreign currency liquidity. Basic regulations such as capital adequacy ratios did not apply and the MOFE's oversight capacity was extremely limited. Indeed, after the crisis, some merchant banking companies were found to have committed fraud (Shin and Hahm (1998)).

[8] In this case liability dollarisation. See Levy Yeyati and Sturzenegger (2002).

[9] With high corporate leverage, however, exchange rate depreciation can raise debt above accounting values for assets and create distress before cash flows have a chance to rise in response to the depreciation.

Table 3

Foreign currency loans to Korean non-banks

Year-end value, in KRW trillions

	Domestically booked foreign currency loans	Offshore booked loans to Korean non-banks	Total loans of deposit money banks in Korea	Business loans of deposit money banks in Korea[1]	Onshore foreign currency loans/total domestic loans (%)	Onshore foreign currency loans/ business loans (%)	All foreign currency loans/all loans (%)	All foreign currency loans/all business loans
	A	B	C	D	A/C	A/D	A+B/B+C	A+B/B+D
1992	10.3	6.8[2]	102.8	79.9	10.0	12.9	15.6	19.7
1993	10.4	7.0[2]	115.1	87.0	9.1	12.0	14.3	18.5
1994	13.5	8.8[2]	135.9	99.3	10.0	13.6	15.4	20.6
1995	17.7	11.4	152.5	111.0	11.6	15.9	17.7	23.8
1996	23.0	16.8	177.2	127.0	13.0	18.1	20.5	27.7
1997	38.6	25.8	200.4	141.9	19.3	27.2	28.5	38.4
1998	29.3	13.7	200.3	144.8	14.6	20.2	20.1	27.1
1999	18.4	13.1	250.2	171.1	7.4	10.8	12.0	17.1
2000	15.2	13.0	310.8	201.9	4.9	7.5	8.7	13.1
2001	8.3	16.4	357.4	199.8	2.3	4.2	6.6	11.4

[1] All loans excluding household loans. Household loans are assumed to be denominated in Korean won only. [2] Estimated using average loans/assets ratio in BIS data from 1995 and 1996.

Sources: CEIC (columns A, C and D); BIS (column B); authors' estimates.

There was, however, a fairly crude liquidity regulation of Korean banks' foreign currency books, and its evolution in the 1990s is telling. Korean banks had been required to maintain long-term dollar liabilities in excess of 60% of the total dollar liabilities. Facing competition from the newly entered merchant banking companies in the foreign currency lending business, the commercial banks lobbied hard for the authorities to relax this foreign currency liquidity requirement. In 1994 this ratio was reduced from 60% to 40%. As a result, not only did the foreign debt increase rapidly but also its structure became more short-term from 1994 (see below).

In retrospect, relaxed standards for managing foreign currency liquidity left the Korean banks very vulnerable to a change in creditor banks' perceptions of risk. What is often overlooked is that the cost to the Korean banks of insurance against such a change in perceptions and consequent liquidity problems was not large in the mid-1990s. From BIS data derived from Dealogic Capital Data, we have identified 60 dollar-denominated floating rate notes sold in international markets by Korean banks and merchant banking firms. The additional cost of extending maturities on these issues (unlike the cost of fixed rate issues) is readily measured as the spread over the floating rate base, generally three- or six-month Libor. For the 50 issues sold in 1991-97, the average spread was about 43 basis points (Table 4).[10] For this premium, a Korean bank could replace an interbank deposit that might be withdrawn at maturity in a month or two with an instrument with a stated average life of four years, and an average life to the put (which would be exercised by holders under adverse circumstances) of three years. Even merchant banks, with riskier assets, less capital and weaker supervision, were able to market such dollar paper, albeit at wider spreads and shorter stated and effective maturities. In other words, the maturity structure of Korean banks' dollar liabilities was not imposed by the global interbank market, but was a choice subject to the premium. Korean banks could have exploited the readiness of

[10] Additional issuance fees, not reported in our source, might add another 10 basis points to the all-in costs.

international banks to provide medium-term credit at modest cost to guard against the same international banks' change of judgment.

The importance of supervision can be readily appreciated: if a single bank chooses to solidify more of its dollar liabilities, it will earn lower (initial) profits on its dollar loans or have to charge higher spreads over Libor than its less liquid competitors. The authorities have a particular interest in promoting self-insurance if there is a chance that they will be called upon to provide foreign currency liquidity in extremis.

Table 4

Dollar floating rate notes issued by Korean banks, 1991-2001

	Number	Amount (USD millions)	Spread (basis points)	Maturity (years)	Maturity to put (years)
1991	6	240	42.3	3.0	3.0
1992	2	90	50.0	3.0	3.0
1993	1	100	37.5	5.0	3.0
1994	7	705	33.1	4.7	3.7
1995	6	660	29.3	3.1	2.4
1996	23	1,975	48.7	5.8	5.3
1997	5	280	57.1	4.4	2.7
1998	0	0	.	.	.
1999	3	200	328.8	4.0	3.3
2000	6	671	36.5	2.4	2.1
2001	1	150	160.0	3.0	3.0
Total	**60**	**5,071**	**63.4**	**4.5**	**3.9**
Memo: pre-1998	*50*	*4,050*	*42.8*	*4.8*	*4.1*
Memo: Merchant banks	*13*	*640*	*53.0*	*3.9*	*3.1*

Sources: Dealogic Capital Data; BIS; authors' calculations.

4. Implications for Korea's external accounts

The unbalanced nature of Korea's domestic financial liberalisation, reinforced by an unbalanced opening of the capital account, left Korea vulnerable to a change in risk perceptions or risk appetite by its external creditors. Starting in early 1997, a string of corporate bankruptcies raised questions about the asset quality of Korean banks and thus about the risk of rolling over interbank advances to them. Events elsewhere in Asia reinforced the effect of greater perceived risk with reduced appetite for risk in the region.

Korea's international balance sheet

Korea's reliance on short-term debt was very evident in its national balance sheet. Korean data showed an increasing reliance on short-term debt by both the banking sector and the corporate sector up to 1996 (Table 5).

Table 5

External debts by sector

In USD billions

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001[1]
Public sector	5.6	3.8	3.6	3.0	2.4	18.0	36.5	29.5	28.3	20.8
Long-term	5.6	3.8	3.6	3.0	2.4	18.0	36.5	29.5	28.3	20.8
Short-term	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corporate sector	13.7	15.6	20.0	26.1	35.6	42.3	41.2	46.6	52.6	54.1
Long-term	6.5	7.8	9.0	10.5	13.6	17.6	29.4	29.9	30.4	34.9
Short-term	7.2	7.8	11.0	15.6	22.0	24.7	11.8	16.7	22.2	19.2
Financial sector	23.5	24.4	33.3	49.3	66.7	60.5	71.0	61.0	50.8	42.8
Long-term	12.2	13.0	13.9	19.6	27.7	33.9	52.1	38.5	25.1	22.9
Short-term	11.3	11.4	19.4	29.7	39.0	26.6	18.9	22.5	25.7	19.9
Total	42.8	43.9	56.8	78.4	104.7	120.8	148.7	137.1	131.7	117.7
Long-term	24.3	24.7	26.5	33.1	43.7	69.6	118.0	97.8	83.8	78.5
Short-term	18.5	19.2	30.4	45.3	61.0	51.2	30.7	39.2	47.9	39.1
Total/GNP (%)	**14.0**	**13.3**	**15.1**	**17.3**	**21.8**	**27.5**	**47.6**	**34.2**	**28.7**	**27.9**
Memo: Total assets	…	…					*128.5*	*145.4*	*164.7*	*162.8*
Memo: Net assets	…	…					*–20.2*	*8.3*	*33.1*	*45.2*

[1] Preliminary.

Sources: Bank of Korea; Ministry of Finance and Economy.

Korea's short-term debt to international banks, as captured in the BIS international banking data, accelerated in 1994 with the capital account liberalisation measures described above (Graph 5). It is important to note that the share of short-term debt, taken in isolation (Graph 6), does not signal vulnerability. In the case of Korea, long-term debt was paid down in the late 1980s as Korea ran large current account surpluses. Thus, the increased short-term debt ratio was due to the prepayment of long-term debt rather than an increase in short-term debt. While the ratio of short-term debt reached a high level in the late 1980s, it did not signal great vulnerability. The ratio's significance changed in the 1990s. However, during this period, total debt was increased rapidly, mainly through the increase in the short-term debt. The floating rate notes sold by Korean banks in 1996 improved the maturity profile marginally that year - a step in the right direction, but in the event too little and too late.

Korea's offshore debt

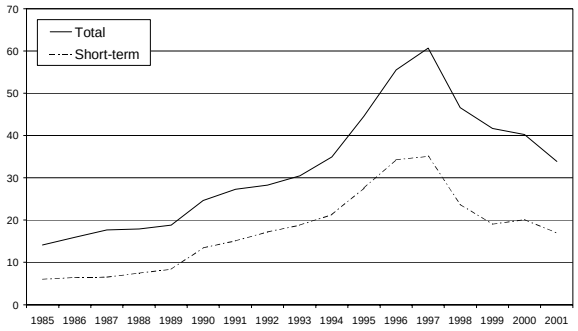
Compounding Korea's external financial vulnerability that resulted from heavy reliance on short-term debt by Korean banks and firms *in Korea* was the financing of their *offshore* operations. The scale of these offshore debts, and their short-term composition, came to light at the worst possible time in early December 1997 when a Korean newspaper reported that maturing debt over the next year was USD 116 billion, not USD 65 billion, when debts of Korean banks and companies offshore were included (Blustein (2001, p 182)). Some idea of the scale of these offshore debts could be gathered from US banking statistics and the balance sheets of Korean subsidiaries in the United States.

Graph 5

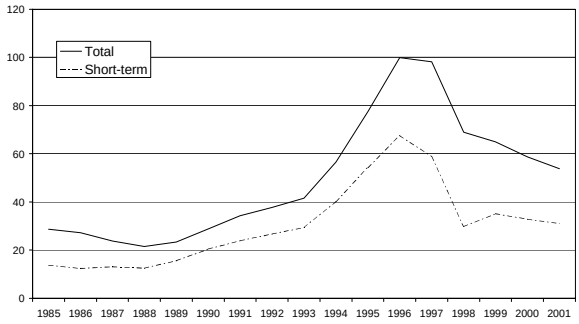
Maturity of foreign claims of BIS reporting banks on individual countries

In USD billions, 1985-2001

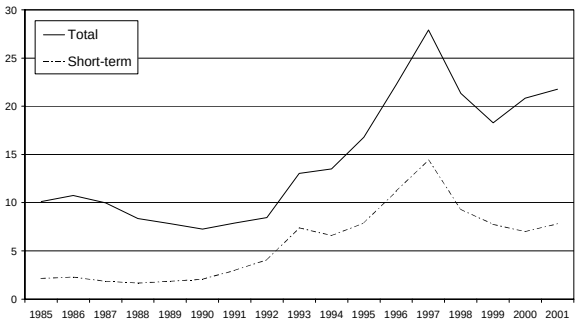
Indonesia



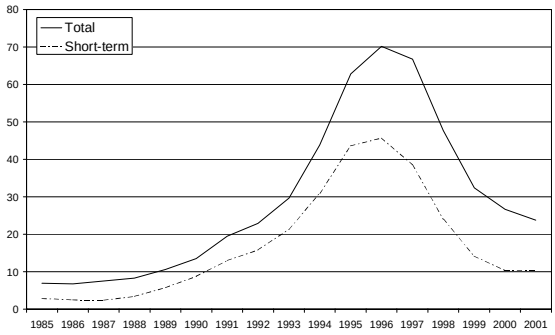
Korea



Malaysia



Thailand

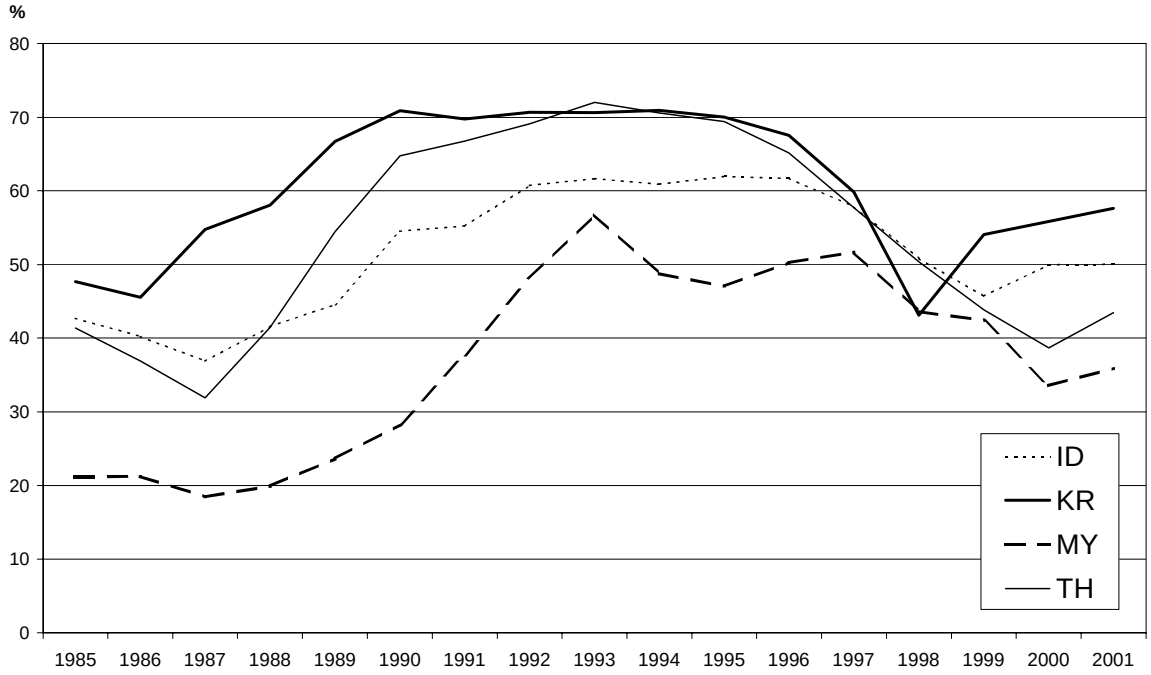


Source: BIS.

Graph 6

Short-term foreign claims of BIS reporting banks on individual countries

1985-2001, as percentages of total claims

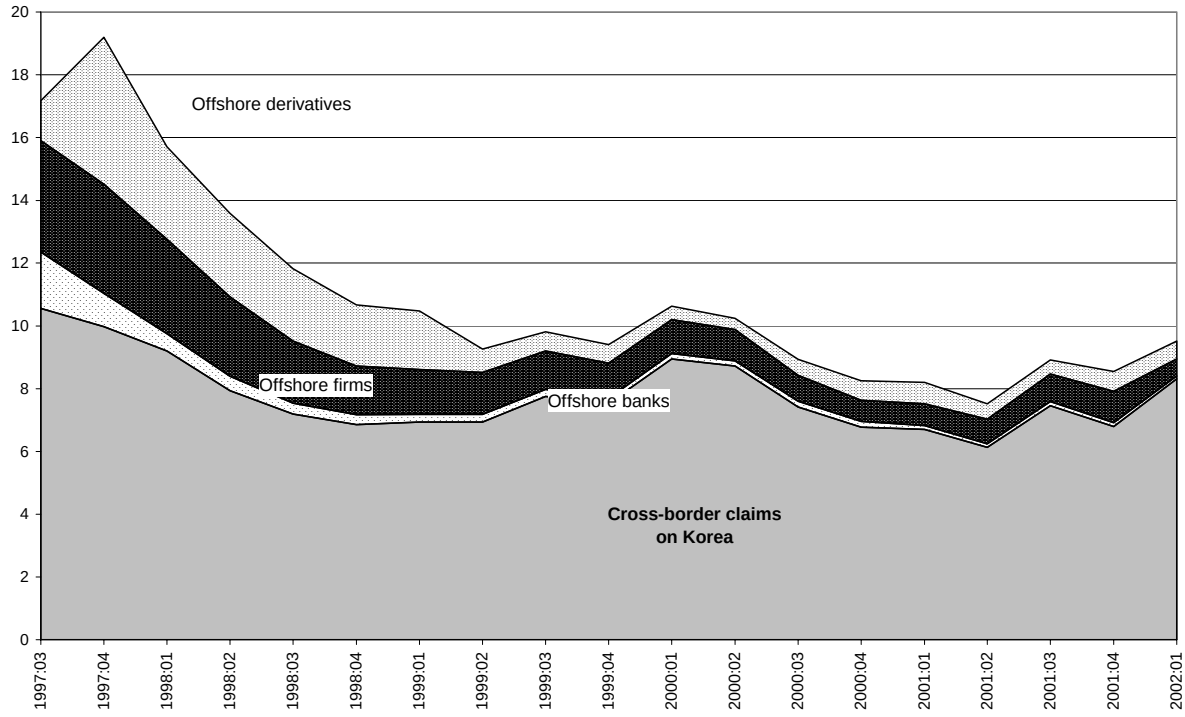


Source: BIS.

Graph 7

US banks' exposure to Korea

In USD billions



Source: Federal Financial Institutions Examination Council, *Country Exposure Lending Survey*.

In mid-1997, when US banks tallied their exposure to Korea, claims on Koreans that are not resident in Korea loomed large.[11] US banks had almost as large offshore claims as cross-border claims (Graph 7). Moreover, some of these claims got much larger with the financial turbulence. Changes in financial prices on which derivative contracts were based, including the Korean won's exchange rate and Korean interest rates, increased US banks' claims on Korean banks and corporations (Ruud (2002)). In many cases, the contracts would have called for the posting of collateral. Thus the rise in derivative claims, as well as the decline in interbank advances to Korean banks in Hong Kong, London and New York, both tended to increase the Korean banks' and firms' need for dollar liquidity.

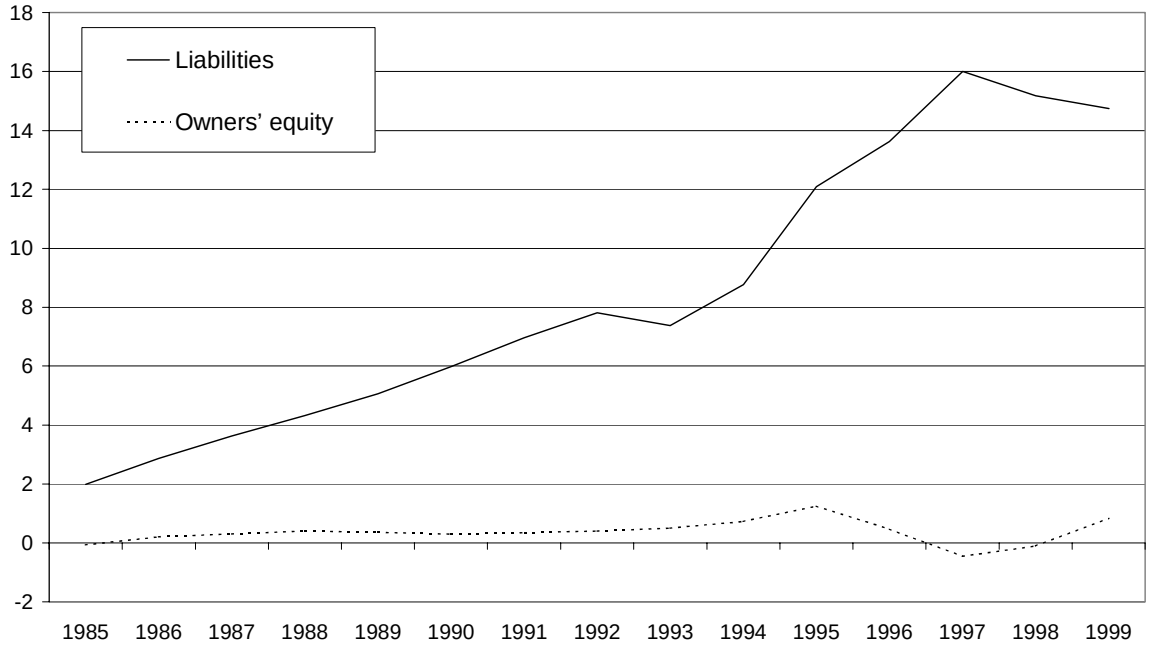
The balance sheets of Korean firms' subsidiaries in the United States also indicate financial vulnerability (Graph 8). While no breakdown of debts by maturity is available, Korean subsidiaries in the United States relied almost entirely on debt rather than equity.

[11] The US data are shown not because there was anything special about US claims but rather because the US authorities started to publish the offshore derivative exposures before other authorities. In the aftermath of the Asian crisis, central banks contributing consolidated international banking claims agreed to pool their exposure data. These add to cross-border claims the offshore exposures shown in Graph 7 (which are guaranteed by Korean residents) and take out claims on Korean residents that are guaranteed by residents of other countries. The latter include, for example, claims on the branch of a non-Korean bank located in Korea and claims on a Korean airline that are guaranteed by an export credit agency in the G10. "Consolidated banking statistics on an ultimate risk basis with a detailed sectoral breakdown and including off-balance sheet positions will begin to be published in 2005…" (Wooldridge (2002, p 90)). See also BIS (2000).

Graph 8

Financing of Korean direct investment in the United States

In USD billions



Source: US Department of Commerce, *Foreign Direct Investment in the United States: Operations of US Affiliates of Foreign Companies*.

5. Post-crisis liberalisation

The post-crisis period has seen almost complete liberalisation of Korea's capital account accompanied by a strengthening of prudential standards and a huge improvement in national foreign exchange liquidity. New prudential standards have included regulations on banks' maturity mismatches in their foreign currency assets and liabilities. With substantial current account surpluses and intermittent inflows of foreign capital into Korean equities, the Korean private sector has paid down its foreign currency debt, with cross-border debt to BIS area banks falling by almost one half between 1997 and 2001. At the same time, the striking rise in official foreign exchange reserves has left Korea with a very liquid international balance sheet.

Following the crisis of 1997-98, the Korean authorities relaxed most of the remaining restrictions on capital account transactions (Chung (2000)). Foreign investment in equities was freed in May 1998. In June 1998, minimum qualifications for issuers of foreign currency securities and restrictions on the use of the proceeds were dropped. In the following month, minimum maturities for foreign currency borrowing and for foreign currency securities sold overseas were reduced from three years to one year.

In contrast to the other three countries most caught up in the Asian crisis, Korea has substantially liberalised its foreign exchange market. The new law that took effect in April 1999 marked the transition from specifically allowed to prohibited transactions (ie, from a so-called positive list to a negative list). An offshore non-deliverable forward (US dollar-settled) market still exists, but arbitrage between it and the onshore spot foreign exchange and money markets generally keeps onshore and offshore yields in line (McCauley (2001, p 34)). Prohibitions on non-resident deposits in won of less than one year's maturity were removed in January 2001. Safeguard clauses in the new law, which have not been invoked at the time of writing, allow a reversion to previous controls and imposition of reserve requirements on inflows.

While foreign investment in Korean bonds was opened in July 1998, it remains very small: the Bank of Korea's flow of funds accounts show that the rest of the world holds less than 1% of government and corporate bonds, as compared to a quarter of equities.[12] Thus, Korea's bond market crises of 1999-2000 were very much domestic affairs, reflecting the joint fragility of major chaebol financing and non-bank financial firms. In particular, two major chaebol resisted government policies requiring them to deleverage and financed themselves through loosely regulated securities investment trusts. Eventually, the financial distress of Daewoo and some Hyundai affiliates set off runs on the non-banks and led to a seizing-up of the bond market (Cho (2002a,b)). Just as the earlier financial liberalisation had favoured non-bank financial intermediaries, so, too, the post-crisis reforms concentrated on the banks and allowed much credit to flow through vulnerable non-banks.

Korea's reconstituted prudential authority, the Financial Supervisory Commission, has introduced regulations to limit the maturity mismatches in banks' foreign currency books. In particular, foreign currency assets of less than three months' maturity must cover a minimum of 80% of such liabilities, while such assets maturing in a month must cover 90% of corresponding liabilities and such assets maturing in seven days must more than cover corresponding liabilities. Foreign currency assets of over three years' maturity must be at least half matched by liabilities of similarly long tenor.

The liquidity of Korea's international balance sheet has improved very markedly since onset of the crisis. There was first an unprecedented decline in BIS area bank claims on Korea in the first quarter of 1998, and then a USD 14 billion exchange of short-term debt for debt maturing in two or three years (Kim and Byeon (2001)).[13] With investment spending by Korea's corporate sector relatively low, it has used its financial flexibility to pay down its foreign currency debt, both that booked onshore and especially offshore (Tables 2 and 3 and Graphs 5 and 7).[14] At the same time, official foreign exchange reserves have risen from effectively near zero in the crisis to more than USD 110 billion.

Korea's national liquidity position appears comfortable from a number of perspectives. One common comparison is between short-term debt and foreign exchange reserves, and reserves have risen from a small fraction to twice short-term debt reported by BIS area banks (Graph 9). Of course, such a comparison juxtaposes official liquidity and private debt, and implicitly presumes that the private sector has a claim on, or can count on the backstop of, official reserves. This raises the issue of the moral hazard: if the private sector can count on foreign currency liquidity "insurance" from the public sector, will not its incentives to manage its own foreign currency liquidity prudently be undermined?[15] One way of viewing the prudential measures just outlined is that they represent an attempt to require banks to invest in liquidity self-protection in order to limit the moral hazard.

Official foreign exchange liquidity might be subject to demands from other directions. In Korea, analysts sometimes take a portion of the foreign portfolio investment in Korean equities - often, drawing on the 1997-99 experience, 20% - as a potential capital outflow that might need to be financed in adverse circumstances. Argentina's recent crisis has highlighted the potential for deposits of dollars (or other foreign currency) in the local banking system to be withdrawn in adverse circumstances.[16] Thus, one could add local dollar deposits to short-term cross-border debt to obtain a more comprehensive measure of potential liquidity needs. On this broader measure, Korea's liquidity position still appears very comfortable.

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[12] Taxes on interest receipts limit the appeal to non-residents. See Patel and Hohensee (1999, p 25).

[13] It is not obvious from Kim and Byeon how the USD 16.5 billion reduction of BIS-area bank claims on Korea, of which only USD 2.5 billion was against the non-bank sector, was consistent with the terms of the exchange.

[14] There is no implication from Table 3 that foreign banks have disengaged from the Korean bank loan market. Foreign banks in Korea, as elsewhere, are increasingly engaged in lending won. See McCauley et al (2002).

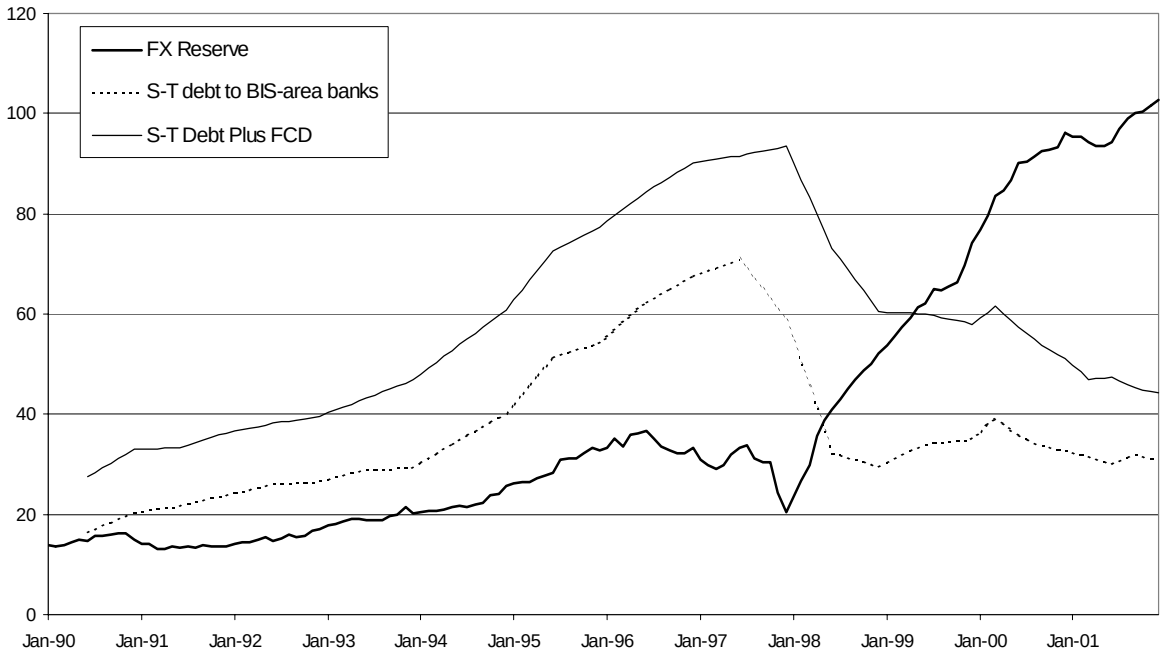
[15] See Hawkins and Turner (2000) for a discussion.

[16] Korea's experience during the crisis, however, was a rise in demand for such deposits, consistent with findings for Taiwan of Fung and McCauley (2001) that depreciation of the home currency leads to a rise in demand for foreign currency deposits.

Graph 9

Korea's foreign exchange reserves and short-term debt

In USD billions



Sources: Bank of Korea; CEIC; BIS.

6. Lessons and conclusions

Financial and capital account liberalisation raises the stakes associated with vulnerabilities in corporate finances and the financial system. If a country's corporate governance system imposes weak constraints on managers who rely heavily on debt to finance asset growth, financial and capital account opening risks relaxing financial constraints. The results can prove to be more reckless investment and more fragile corporate finances. These can leave an economy and its banks more exposed to weakening revenues in the down phase of the business cycle. To the extent that foreign creditors have lent at short term, they can react by withdrawing their funds in a manner that can precipitate a crisis.

Specific lessons to be drawn include:

- Domestic financial deregulation and capital account liberalisation may be dangerous in the presence of high leverage in the corporate sector, poor corporate governance and weak supervision.
- Long-term financial instruments should be liberalised before short-term ones to avoid a rapid expansion of short-term financing and a deterioration of corporate financial structure and the country's international balance sheet.
- Maintaining balance in liberalisation is important with regard not only to the maturity of instruments but also to the type of financial institution. Banks should receive comparable treatment to that accorded to the non-bank financial sector.
- The authorities should recognise the externalities of the banks' and the corporate sector's reliance on short-term foreign currency debt and take steps to limit it. Such prudential measures make it possible for the official sector to ensure that foreign exchange reserves are adequate in relation to potential national liquidity needs.

- When foreign creditors total up their exposures to a country, they add in their exposures to domestic banks' and firms' offshore operations. Thus, the authorities need to at least keep an eye on the offshore financing activities of the banking system, non-bank financial firms and the corporate sector.

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Singapore's policy of non-internationalisation of the Singapore dollar and the Asian dollar market

Ong Chong Tee

1. Introduction

This paper provides a brief review of Singapore's experience with its policy of non-internationalisation of the Singapore dollar (SGD policy) and the development of the Asian dollar market in Singapore. However, it needs to be emphasised at the outset that neither of these are capital account restrictions, as the last vestige of exchange controls in Singapore was repealed in 1978. Even prior to their removal in 1978, residents and non-residents alike were free to remit funds into and out of Singapore. This was predicated on Singapore's outward-oriented economic development strategy.

2. Policy of non-internationalisation of the SGD

2.1 Background and rationale of the SGD policy

The Monetary Authority of Singapore (MAS) has a long-standing policy of not encouraging the internationalisation of the SGD. This stems from MAS's use of the exchange rate as the principal tool of monetary policy. The policy is aimed at ensuring that the growth of the SGD market is commensurate with the development of the economy and that the effective conduct of MAS's monetary policy is not compromised. Monetary policy in Singapore is centred on management of the trade-weighted SGD exchange rate.

The high import content of Singapore's domestic expenditures means that domestic inflation in Singapore is largely determined by changes in foreign prices and the exchange rate. Traditional monetary policy instruments, such as money supply and interest rates, are therefore less effective in controlling output and prices given the openness of our economy. Hence, a strong and credible currency is a key pillar of Singapore's macroeconomic policy. Moreover, in Singapore's earlier stages of development, a hard currency was an important sign, and also direct outcome, of the Singapore government's pursuit of sound, disciplined and consistent macroeconomic policies. This differentiated Singapore from the many developing countries with chronic budget deficits.

In line with Singapore's open economy and its emergence as an international financial centre, Singapore progressively dismantled exchange controls in the 1970s, until all restrictions were removed in 1978. The absence of exchange or capital controls, coupled with the small size and openness of our economy, made the conduct of monetary policy that much more difficult when Singapore shifted to an exchange rate centred monetary policy in 1981.

Hence, MAS maintained an explicit policy of not encouraging the internationalisation of the SGD, ie the use of the SGD outside Singapore for activities unrelated to its real economy. Under the policy, the extension of bank credit in SGD to non-residents was limited except for the purpose of funding economic activities. In addition, some restrictions were placed on interbank SGD derivatives, such as FX, currency and interest rate swaps and options, which could facilitate the leveraging or hedging of SGD positions. These restrictions made it harder for potential speculators to short the SGD, and signalled unambiguously our disapproval of such speculation.

The SGD policy has served Singapore well. The strength and stability of the SGD have instilled confidence and kept inflation low. This in turn has provided the foundation for sustained economic growth as well as continued strengthening of the SGD.

2.2 Limitations of the SGD policy

While our SGD policy has been a valuable and effective deterrent against speculative attacks on the SGD, no restrictions can render the SGD, or any other currency, completely impervious to speculative attacks.

Indeed, our best defences against such attacks have been Singapore's sound economic fundamentals and a credible exchange rate policy that is aligned with underlying fundamentals. These conditions render it unattractive for would-be speculators to bet on a major appreciation or depreciation of the SGD. As highlighted by the IMF,[1] Singapore's success in maintaining internal and external balance also owed much to the Singapore government's steadfast pursuit of a set of sound and prudent monetary and fiscal policies.

2.3 Impetus to liberalise the SGD policy

The SGD policy is not without cost. The safeguards we had put in place under the policy might have hindered the development of our capital markets, in particular the bond markets. In addition, despite the SGD being freely convertible, some potential foreign investors might have been deterred from investing in Singapore as they did not fully understand the policy.

Changes in our economic and financial environments have also created the impetus to liberalise our SGD policy. As Singapore's financial industry matures and its economy becomes more internationalised, corporate players and financial institutions have a greater need for SGD and its derivatives for commercial transactions. At the same time, the domestic economy and financial system have grown and become more mature and resilient. This has strengthened our ability to manage the exchange rate and given us room to liberalise our policy.

2.4 Initiatives to liberalise the SGD policy

Hence, since 1998, MAS has undertaken four major reviews of the SGD policy to keep it updated and relevant in the face of changing economic and market conditions, and liberalised the policy where warranted.

Table 1 below traces the evolution of Singapore's SGD policy over the past 20 years.

2.5 Existing SGD policy

Following the revisions to MAS 757 in March 2002, only two core requirements of the policy remain. First, financial institutions may not extend SGD credit facilities exceeding SGD 5 million to non-resident financial entities where they have reason to believe that the proceeds may be used for speculation against the SGD. This continues to be necessary to prevent offshore speculators from accessing the liquidity in our onshore FX swaps and money markets.

Second, for a SGD loan to a non-resident financial entity exceeding SGD 5 million or for a SGD equity or bond issue by a non-resident entity that is used to fund overseas activities, the SGD proceeds must be swapped or converted into foreign currency before use outside Singapore. This guideline is unlikely to stand in the way of market development, as the SGD is not a currency commonly used for transactions abroad, and non-resident entities will in any case wish to swap or convert the SGD proceeds into a currency of their choice for overseas use.

With this latest review and liberalisation, all impediments to capital market developments have been removed and the policy is reduced to its essence of discouraging speculation on the SGD through the above two requirements. These are unlikely to hinder the activities of legitimate players, while providing us with some basic safeguards against funding of speculative activities on the currency.

[1] IMF Country Report No 01/177, "Singapore: Selected Issues", October 2001.

Table 1

Evolution of the SGD policy of Singapore

Period	Events
1983	Issue of MAS Notice 621, which codified the policy of discouraging the internationalisation of the SGD.
1992	Amendment to MAS Notice 621 to allow the extension of SGD credit facilities of any amount to non-residents where the SGD funds were used for activities tied to economic activities in Singapore.
13 Aug 1998	The new MAS 757 replaced MAS 621. MAS 757 reaffirmed the basic thrust of the SGD policy, but contained clearer and more explicit provisions than MAS 621. This would minimise the need for banks to consult MAS. Some activities under the SGD policy, specifically in relation to arranging SGD equity listings and bond issues of foreign companies, were relaxed to foster the development of the capital market in Singapore.
26 Nov 1999	Key changes were made to MAS 757 to allow banks to: (1) transact all SGD interest rate derivatives with non-residents freely. This followed the launch in September 1999 of the SGD interest rate futures on SIMEX (now Singapore Exchange) where participation was open to residents and non-residents; (2) arrange SGD equity listing for foreign companies freely, provided the proceeds were converted into foreign currency before being used outside Singapore.
6 Dec 2000	Key changes were made to MAS 757 to allow banks to: (1) lend SGD to non-residents for investment purposes in Singapore. This would allow non-residents to obtain SGD funding for investment in SGD equities, bonds and real estate, and broaden the investor base for SGD assets; (2) extend SGD credit facilities to non-residents to fund offshore activities, as long as the SGD proceeds were first swapped into foreign currency before being used outside Singapore.
20 Mar 2002	Key changes were made to MAS 757 to: (1) exempt all individuals and non-financial entities from the SGD lending restrictions of MAS 757. This recognised that such entities were not usually the prime drivers of destabilising currency speculation; (2) allow non-resident financial entities to: (i) transact freely in asset swaps, cross-currency swaps and cross-currency repos. Previously, such transactions were treated as forms of SGD lending; (ii) lend any amount of SGD-denominated securities in exchange for both SGD and foreign currency denominated collateral. Previously, lending of SGD securities exceeding SGD 5 million had to be fully collateralised by SGD collateral; (iii) transact freely in SGD FX options with non-resident entities. Previously, such transactions were allowed only if they were supported by underlying economic and financial activities in Singapore.

3. The Asian dollar market

3.1 Background

Most banks in Singapore operate both a domestic banking unit (DBU) and an Asian currency unit (ACU). The segregation between the ACU and the DBU within a bank is essentially only in accounting terms, ie the ACU and DBU are but separate accounting books. Banks are allowed to deal with any currency in the DBU. In the ACU, they are allowed to deal in all currencies except for the SGD.

3.2 Rationale for allowing banks to operate ACUs

Singapore first allowed the establishment of ACUs in 1968 as part of its initiatives to develop Singapore as a regional financial centre. Singapore had a time zone advantage, bridging the gap between the close of markets in the United States and the reopening of business the next day in Europe. In addition, Singapore was well placed, with its good infrastructure and political stability, to serve as a point of intermediation for fund flows in an industrialising Asia. The development of an offshore Asian dollar market (ADM) also took cognisance of the limitations of Singapore's small domestic banking market.

The ACU is subject to fewer regulatory rules and requirements than the DBU. Banks are therefore able to accept non-SGD deposits and lend out non-SGD funds more freely through the ACU, paving the way for the creation of the ADM in Singapore (the counterpart of the eurodollar market in London). In addition, unlike in the DBU, statutory reserves need not be maintained for deposit liabilities in the ACU.

Notwithstanding the existence of separate ACUs and DBUs in the banking system in Singapore, there are no restrictions on residents or non-residents moving their funds between the ACU and DBU.

3.3 Analysis of ACU assets and liabilities[2]

From its modest beginning, the ADM expanded, reaching total assets of USD 463 billion in July 2002. The total asset size of the ADM peaked in November 1997 with a total asset size of USD 560 billion, but shrunk subsequently in tandem with the Asian crisis (see Graph 1).

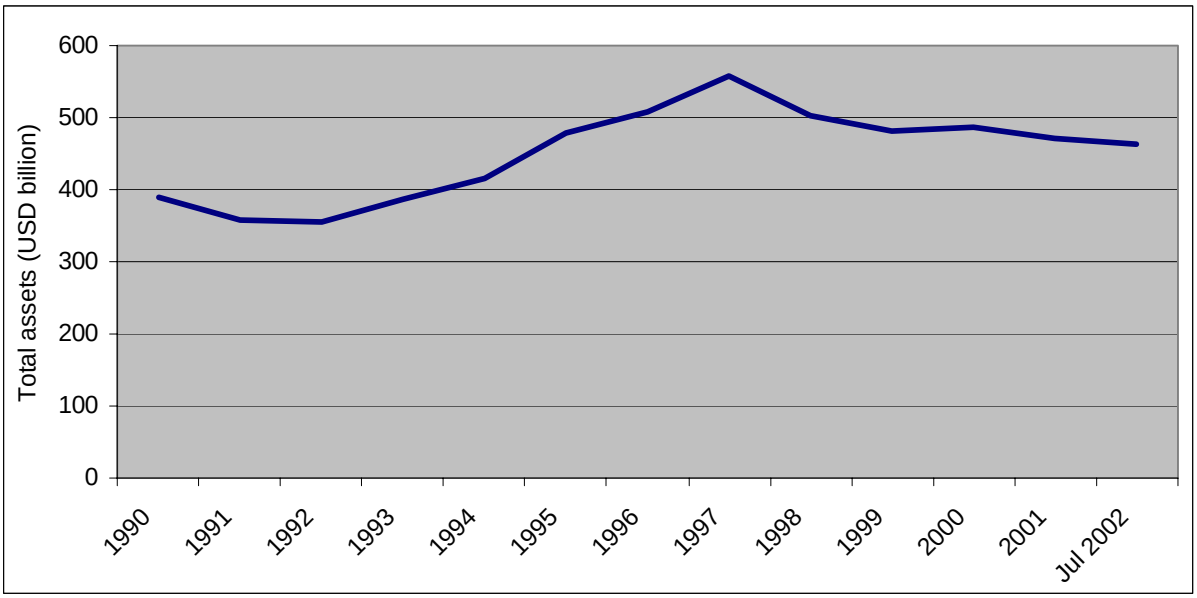
The strength of the DBU market could have reflected the continued confidence in the SGD from investors. The bulk (more than 99% in July 2002) of DBU non-bank deposits are in SGD. From the beginning of 1990 to end-2001, the non-bank deposits of the DBU grew annually by 10.8%, exceeding the 6.9% on the ACU side (see Graph 2). Pre-Asian crisis, from the beginning of 1990 to end-1996, the annual growth rates in non-bank deposits of the DBU and ACU were 12.0% and 8.2%, respectively.

The DBU has been able to maintain its share of funds that non-bank depositors place with banks in Singapore, despite the rapid development of the ADM. At end-1989, resident and non-resident non-bank depositors held 80% and 9%, respectively, of their total deposits with banks in Singapore in the DBU. At end-July 2002, the corresponding proportions for both groups of depositors increased to 83% and 12%, respectively.

[2] Figures used in this section are extracted from the MAS Monthly Statistical Bulletin.

Graph 1

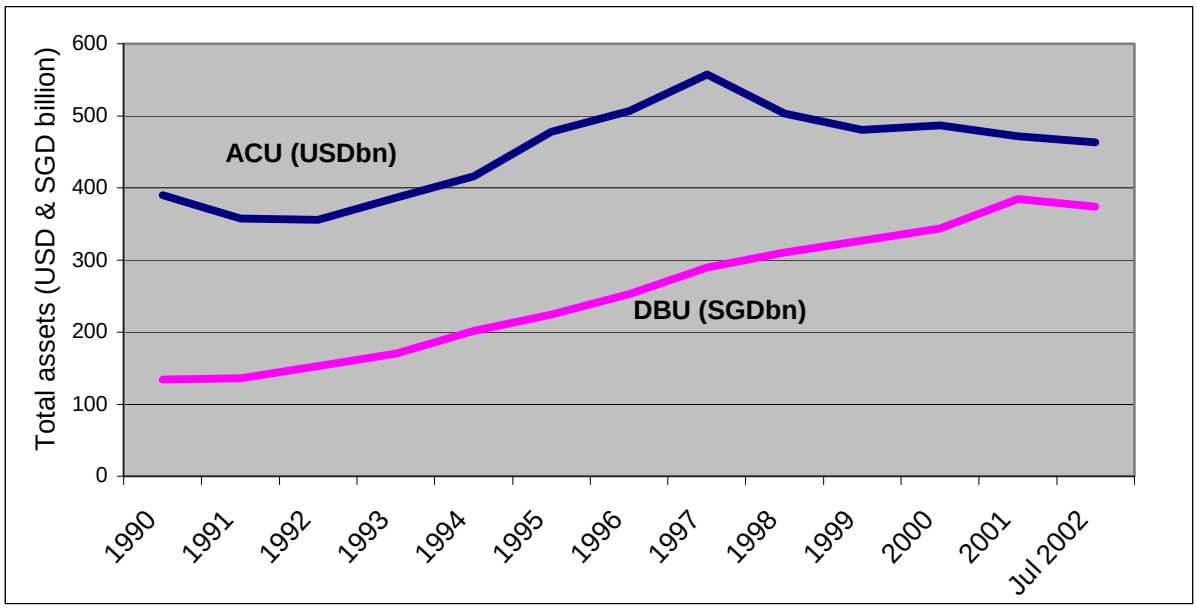
Total asset size of Asian dollar market (1990 to July 2002)



Source: Monthly Statistical Bulletin, MAS.

Graph 2

DBU vs ACU total asset size (1990 to July 2002)



Source: Monthly Statistical Bulletin, MAS.

Funds raised in the ACU from overseas bank and non-bank depositors are largely re-channelled out of Singapore through placements with banks and loans to non-bank borrowers outside Singapore, as shown in Table 2 below. In July 2002, only USD 2.5 billion or 1% of funds raised in the ACU from bank and non-bank depositors outside Singapore was retained in Singapore. Hence, although there are no restrictions which specifically limit the amount ACUs can lend to domestic borrowers, the net impact of ACU activities on the capital account of Singapore has been limited.

Table 2

ACU assets and liabilities in July 2002

ACU items	Amount (USDm)
Amount due to banks outside Singapore	246,760
Deposits from non-bank investors outside Singapore	86,079
Sub-total: amount raised from banks and non-banks outside Singapore	**332,839**
Less:	
Amount due from banks outside Singapore	251,670
Loans to non-bank borrowers outside Singapore	78,711
Sub-total: amount lent to banks and non-banks outside Singapore	**330,381**
Total: net amount retained in Singapore	**2,458**

Source: Monetary Authority of Singapore, September 2002.

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France's experience of exchange controls and liberalisation

Françoise Drumetz

This paper reviews the foundations and performance of the French policy of capital account liberalisation. It also attempts to illustrate the lessons China may draw from this experience.

1. A brief history of foreign exchange controls in France

France's economic history since the Second World War and, in particular, its capital account control history, can be roughly divided into two distinct periods.

1.1 The first period: World War II to 1983

The first period lasted until the mid-1980s and featured an economic management style that suited France's relatively closed, protected and regulated economy. Monetary policymaking in this period was based on quantitative credit controls and strict foreign exchange controls.

Current account and capital flows were regulated most of the time, with additional restrictions, mainly concerning current account transactions, being frequently implemented following exogenous shocks, which were sometimes symmetrical and sometimes asymmetrical:

– In December 1958, payments related to current account transactions were liberalised; at that time, foreign exchange controls were exclusively focused on capital flows.

– After a brief period of abolition of control measures in 1966, the political crisis in May 1968 led to a re-establishment of regulations on payments related to current account transactions.

– Exchange rate controls were at their tightest in March 1983 after speculative attacks against the exchange rate and three devaluations of the French franc inside the EMS exchange rate mechanism (ERM) in 18 months; measures intended to prevent evasion via the use of leads and lags in current account transactions and to prohibit all forward exchange transactions by importers and exporters were introduced; drastic curtailments in foreign travel allowances were also implemented.

The explanation for this situation can be found in some of the distinctive features of the French economy in the 1970s and early 1980s:

– The slow adjustment of the French economy to the two oil shocks created a persistent current account deficit and spurred the French authorities to use foreign exchange controls to protect the French franc against speculation.

– Credit ceilings were inevitable so long as French interest rates were held down to artificially low levels.

– This policy of low interest rates was necessary because of the poor financial situation of French firms up until the mid-1980s.

1.2 The second period: 1984 to 1990

The second period started in 1984 when the situation of French firms and of the French balance of payments began gradually to improve. Regulations, notably foreign exchange regulations, were dismantled progressively in the second part of the 1980s at a time when hard policy choices had to be made to improve macroeconomic fundamentals. Foreign exchange controls, which had been in force for almost 50 years, were totally dismantled in six years. The liberalisation process ended with a

decree in December 1989 to abolish all remaining foreign exchange controls. The process was carefully sequenced in three steps.

In the first step, trade-related operations were gradually liberalised from 1984 to 1986. Notably, in 1986, currency hedging for foreign currency denominated imports was totally liberalised and the administrative control of trade transactions was definitively removed.

In a second step, from 1986 onwards, most financial transactions were allowed:

(i) In 1986, French residents - households, corporations, banks - were allowed to buy freely shares listed on foreign markets.

(ii) French banks were also authorised in 1986 to lend in francs to non-residents within a ceiling defined by the outstanding balances of non-resident deposits on their balance sheets.

(iii) Corporations and households were allowed in 1987 to borrow in foreign currencies and also in francs abroad within a FRF 50 million ceiling, which was also abolished in 1988.

(iv) Direct investment abroad was also gradually liberalised: the acquisition of foreign real estate by French residents was fully liberalised in 1986; control of foreign investment abroad by French firms was relaxed progressively; in 1986, only investments in holding corporations and foreign direct investment in France were still subject to prior authorisation from the Treasury (the ceilings above which interest-taking by non-EU resident companies was subject to administrative authorisation were removed).

The last step, from 1988 to 1990, was mainly dedicated to the phasing-out of the remaining controls:

(i) Residents were allowed in 1989 to freely open and keep foreign currency denominated accounts in France and foreign currency and franc-denominated accounts abroad.

(ii) In 1989, lending in francs by French banks to non-residents was also totally liberalised.

(iii) All remaining administrative restrictions regarding foreign direct investment in France were also phased out.

2. The importance of a consistent economic and financial framework

To succeed, capital account liberalisation has to be part of a consistent economic and financial framework and to be sequenced carefully. Capital account liberalisation in France was envisaged, from the start, as part of an all-encompassing process.

2.1 Capital account liberalisation as part of a sound economic policy framework

Monetary policy played a leading role by providing economic agents with a solid anti-inflationary anchor. Since 1979, France had been part of the ERM. That implied a commitment on its part to keep the franc's fluctuations vis-à-vis the other currencies in the system within a range relative to their central rates. This commitment acted as a very powerful constraint on economic and monetary policy. However, the central rate between the franc and the Deutsche mark had to be readjusted on six occasions between 1979 and January 1987, evidencing, inter alia, the growing ineffectiveness of foreign exchange controls.

Foreign exchange controls can only help to delay an unavoidable readjustment of the exchange rate. Moreover, such controls entail heavy administrative costs. Also, exchange role controls do not ensure a level playing field between banks or firms: big banks and/or firms, arguing that they suffered a competitive loss vis-à-vis their foreign competitors, were awarded derogations whereas small banks/firms were subject to the normal regime. Finally, financial innovation undermines foreign exchange controls as it complicates the assessment of its observance and facilitates its avoidance.

A more coherent and stringent policy mix and subsequent successes in the fight against inflation gradually worked to strengthen the external credibility of the franc.

Indeed, monetary policy became part of a consistent economic policy framework in which fiscal policy and wage cost moderation converged towards the goal of curbing inflation. Accordingly, from 1983 till the beginning of the 1990s, France ran a tight fiscal policy in general which helped to forestall any

additional shortfall in public saving. Furthermore, the mechanisms of wage formation were modified: wages were no longer linked to past inflation but to an official norm for the expected rate of price increase. This disindexation led to a distribution of value added more favourable to firms, enabling them to cope with the consequences of the anti-inflationary stance of monetary policy, which led to an increase in real interest rates with the abolition of subsidised loans.

Therefore, on the domestic scene, economic agents steadily incorporated the authorities' resolve to maintain the stability of the currency in their expectations. This provided them with a solid anti-inflationary anchor as they could no longer rely on currency depreciation to maintain or to increase their competitiveness.

In turn, this increased credibility of economic policy minimised the risks of foreign exchange liberalisation which could have otherwise contributed to draining official reserves.

2.2 Capital account liberalisation as part of the financial policy framework

Tight economic management is all the more sustainable and credible, moreover, if economic agents are willing and able to adjust to the new environment. So there is also a need for policies to hasten the modernisation of supply in keeping with a sound macroeconomic management. Essentially, these policies seek to inject a healthy competitive climate where most needed and, simultaneously, to promote the development of rational resource allocation. Therefore, a comprehensive package of liberalisation measures was implemented to adapt France's financial markets to the reality of an open world economy and the general move towards financial deregulation and globalisation and to promote financial sector stability.

At the beginning of the 1980s, the French financial system presented three main characteristics:

(i) bank financing predominated, given the low profitability of firms and consequently their poor cash flow, the weak development of financial markets and the important role of subsidised loans;

(ii) the distribution of credit was closely monitored by the monetary authorities;

(iii) these authorities also kept under close control the distribution of credit and financial transactions with the rest of the world.

The cons of this regime of administrative financing became more and more apparent: permissiveness as regards inflation, excessive cost of bank financing, and suboptimality of the allocation of financial resources. Moreover, financial markets were unable to respond to growing borrowing needs by the central government and by corporations. These growing needs required the introduction of new types of securities whose characteristics would attract resident and non-resident investors alike and would limit the management cost of the debts induced by the increase in interest rates.

The mid-1980s saw many momentous changes in the environment and in the organisation of the French capital markets as well as the development of financial innovation. A regulated derivatives market was created in 1985. The French government securities market was overhauled, with issues covering the full range of maturities, new issuing procedures and the selection of primary dealers. The money market was also fully reorganised into two compartments, one for interbank transactions, and the other open to all borrowers and investors on which short-term instruments are traded. Moreover, the development of money market funds (MMFs) gave non-financial agents easy access to money market-related remuneration for their liquid assets.

The banking system was liberalised and banking supervision was rendered more effective in keeping with increased competition among banks and with the gradual liberalisation of capital flows. The 1984 banking law promoted the regulatory harmonisation of credit institutions and banking deregulation. State-owned banks were privatised from 1986 onwards. In 1989, the control of the aggregate foreign exchange position of commercial banks was abolished and replaced by prudential regulations. The prudential framework derived from the decisions taken by the Basel Committee was progressively implemented.

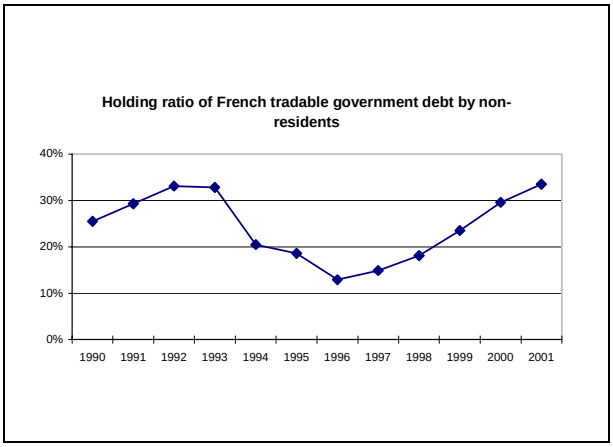
In turn, the enhanced credibility of the policy mix, together with the development of large and efficient financial markets, prevented the risk of a massive portfolio reallocation in favour of foreign financial assets following the liberalisation of capital controls and the subsequent relaxation of regulations restricting currency mismatches on institutional investors' balance sheets concerning inter alia insurance companies.

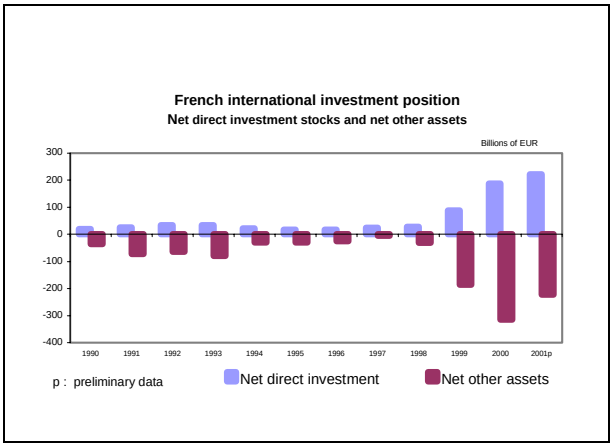
Capital flows (in billions of euros)

	1980	1985	1989	1991	2001
Financial account	**1.24**	**–0.36**	**10.18**	**1.71**	**–27.50**
of which					
Direct investment	0.12	0.49	–8.35	–7.09	–33.74
French abroad	*–2.00*	*–3.07*	*–17.70*	*–19.31*	*–92.55*
Foreign in France	*2.11*	*3.56*	*9.35*	*12.23*	*58.81*
Portfolio investment	0.19	8.88	23.05	11.47	20.99
By residents in securities issued by non-residents	*–1.33*	*–3.38*	*–6.04*	*–12.37*	*–93.02*
By non-residents in securities issued by residents	*1.53*	*12.26*	*29.08*	*23.84*	*114.01*
(Net errors and omissions)	**(1.46)**	**(0.40)**	**(–5.75)**	**(3.57)**	**(4.08)**

Source: Bank of France

In the aftermath of the removal of capital controls, the increase in net capital outflows by French residents (in particular, direct investments abroad) was more than offset by the surge in foreign capital inflows, essentially the purchase of French securities by non-residents. In particular, the aforementioned reforms in the functioning of the public debt market led to growing investment in French government securities (bonds, bills and notes) by non-residents.[1] The holding ratio of marketable French government debt by non-residents, almost insignificant in the 1970s, peaked at 35% at the end of 1992 (33.5% at end-2001).





As regards the French international investment position, the global balance did not show diverging trends between the net direct investment stocks (IIP signs) and the net position for other assets and liabilities during the major part of the 1990s. It is only at the very end of the 1990s that the figures for the net direct investment stocks became increasingly positive because of the growing number of operations by French companies, and the other assets and liabilities increasingly negative. However, these two phenomena can be partly related: the outflows of direct investment have been financed by growing foreign currency debts, either in the form of securities issued by investors or via the resident banks borrowing from their non-resident correspondents.

[1] The government is a major player on the Paris bond markets, representing 57% of gross bond issues compared to 23.5% for banks and financial institutions and 12% for firms.

2.3 A careful sequencing

The French experience could almost be analysed as a classical textbook case concerning the pace of the liberalisation of foreign exchange controls:

(i) The liberalisation of current account transactions has to go hand in hand with or, preferably, to be preceded by reforms aiming at strengthening the real sector and the competitiveness of the real economy.

(ii) These reforms will also help the economy to withstand the liberalisation of inward foreign investment.

(iii) Liberalisation of portfolio capital flows has to be coordinated with domestic banking sector strengthening and liberalisation, as well as with the development of efficient financial markets so as to broaden the ranges of financing and investment instruments available, and with the improvement of banking supervision and financial discipline.

(iv) These reforms have an impact on monetary policymaking, which has evolved into an interest rate-based monetary policy. Consequently, the effects of monetary policy are no longer transmitted via financial intermediaries alone. They are propagated throughout the financial markets and affect the behaviour of economic agents via their portfolio choices. This makes the task of gauging the impact of interest rate changes on consumption and investment more complex.

3. Conclusions

Admittedly, the precise operational sequencing of capital account liberalisation depends on the nature of the controls that are being liberalised, the objective of the reforms and the starting position of the country.

However, three main conclusions and issues seem to stand out from this overview of the foundations and performance of the French policy of capital account liberalisation:

(i) the need to enhance the capacity - in terms of soundness of balance sheets but also of accounting procedures, prudential regulation and supervision - of the real and of the financial sector to manage the risks associated with capital flows prior to the liberalisation process;

(ii) the need to coordinate all economic policies towards this goal;

(iii) the key role of the choice of an appropriate exchange rate regime and nominal anchor for monetary policy consistent with medium-term economic fundamentals and therefore conducive to a stabilisation of expectations.

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Global integration and capital account liberalisation in South Africa

James H Cross

1. The impact of South Africa's financial isolation

It is well known that South Africa became the subject of severe financial sanctions during the course of the 1980s. The most visible impact of the pariah status which South Africa had attained was the imposition of a debt standstill by the South African authorities in September 1985. Then numerous foreign lenders refused to roll over short-term credit facilities which had up to that point been utilised by domestic borrowers, thereby causing a severe dearth of foreign exchange. In spite of the standstill, foreign capital nevertheless flowed out of the country: first a very considerable amount of short-term capital, mostly related to trade finance, that could not be brought within the standstill net because that would have damaged normal trade flows; thereafter, amounts which became payable in terms of the various standstill agreements in addition to some other outflows falling outside the standstill net. From mid-1985 to mid-1994 the average outflow amounted to some 2.5% of gross domestic product and 13% of gross domestic fixed investment.

During the nine years up to mid-1994 the South African economy was forced to generate current account surpluses for lack of foreign sources of funding. This curtailed the freedom of the domestic macroeconomic policymakers to a considerable extent. Nevertheless, it led to a reduction in the relative burden of South Africa's foreign debt to acceptable levels by developing country standards. Foreign debt denominated in both foreign and local currency receded from 126.1% of annual exports of goods and services in 1985 to 89.2% by the end of 1993. As a percentage of gross domestic product, it fell back from 42.9% to 21.6% over the same period.

Although the overall debt picture therefore seemed to have strengthened quite considerably, events during the two years up to mid-1994 were challenging, to say the least. Political uncertainties had reinforced capital outflows and the authorities had to draw on their rather limited foreign credit facilities to supply liquidity to the foreign exchange market. During the period of the elections in 1994 net foreign currency reserves of the Bank had declined to a level of approximately ZAR 500 million.

After the inauguration of President Mandela in May 1994, the capital outflows were abruptly reversed. Apart from substantial private sector inflows, the South African government also returned to the international capital markets in December 1994 with a global bond issue of USD 750 million. The scale of the inflows was such as to make it possible to simultaneously finance a modest current account deficit and replenish the South African Reserve Bank's net gold and foreign exchange position. During this time, the real effective exchange rate of the rand remained stable with a slight upward bias, in spite of the Reserve Bank's net purchases of foreign exchange in the market. Contrary to many analysts' predictions, this situation continued following the scrapping of the financial rand system of exchange control over non-residents in March 1995. It was only in February 1996 that a correction, in which the exchange rate of the rand fell significantly, was triggered by a number of rumours and factors.

2. A stable macroeconomic framework

A macroeconomy environment characterised by high and variable inflation, considerable swings in fiscal policy stance and accordingly strong fluctuations in key financial rates such as the exchange rate and interest rates may undermine sound economic management. A volatile financial environment can, for instance, at times deliver a combination of financial rates conducive to attracting foreign capital but usually not on a sustainable basis. A virtuous circle of exchange rate appreciation and capital inflow may result and continue for some time but can be abruptly reversed when the sustainability of the situation becomes suspect. The resulting correction may be extremely painful, involving a major realignment of financial rates and a strong tightening of policy. This may, in turn, have unexpected

secondary effects, such as the threat of widespread bank failures, government action to prevent this by feeding more liquidity into the monetary system and consequent further rises in inflation, and so on. The Mexican, Asian and Russian experiences illustrate the magnitude of the corrections which the economy may face if macroeconomic policies prove to be unsustainable. Fortunately South Africa has maintained a consistent framework conducive to macroeconomic stability while various adjustments have taken place. Government remains committed to financial stability, including fiscal and monetary prudence. A track record has also been established - monetary policy has been firmly anti-inflationary since the late 1980s and fiscal policy has advanced from a point in 1992/93 when the budget deficit amounted to 8.5% of GDP to the current level of around 2%. Inflation has been brought down from a maximum of almost 21% in early 1986 to single digit average levels since 1993 in spite of the exchange rate volatility.

3. General comments on the monetary policy process

With the integration of international capital markets, central banks have found it increasingly difficult to pursue financial stability, especially in smaller open economies. Central banks have in effect seen their degree of freedom in controlling the level of exchange rates substantially eroded, and have been forced towards either accepting a fixed exchange rate or adopting a free floating regime.

In the wider pursuit of financial stability, other dimensions such as the health of financial institutions, debt structures, the liquidity in financial markets and financial market infrastructure (eg payment systems) must be considered. The South African Reserve Bank is responsible for banking supervision and the national payment system, both of which have been or will be improved to match world class standards.

Under a fixed exchange rate regime monetary policy tends to be less flexible, and under a floating exchange rate regime fiscal policy tends to lose its countercyclical influence through inflexibility. Furthermore, international capital flows have become disruptive in emerging market economies, often exposing weak financial systems. Up until the recent emerging market crises, the free flow of international capital had been encouraged by international monetary authorities. Subsequent to these developments, a more cautious approach has been adopted, and the need for temporary capital controls to ease financial stress has been widely discussed.

It is generally accepted that a central bank's function is to pursue domestic price stability. The primary objective of the South African Reserve Bank is set out in the South African Reserve Bank Act 90 of 1989 as amended as the *protection of the value of the currency of the Republic in the interest of balances and sustainable growth*. A central bank conducts monetary policy through the size of its own balance sheet (the capacity to control the level of bank reserves). As can be seen from South Africa's experience, central banks are not generally able to have a lasting influence over the rate of unemployment, the real exchange rate and the trade balance. The most credible policy therefore seems to be that of the pursuit of domestic price stability.

In the absence of a fixed exchange rate, where monetary policy tends to be dictated by the country to whose currency the exchange rate is fixed, monetary policy seems to be the only flexible tool in the short run with which to balance the macroeconomy. This burden on monetary policy can be clearly seen from the events of 2001, when external price shocks and volatile capital flows had to be balanced by a direct monetary policy response.

South Africa has in effect been forced to adopt a floating exchange rate regime and is committed to price stability. This type of approach has in recent times been adopted in many open economies such as Australia, New Zealand, Sweden, Canada and the United Kingdom. South Africa introduced an inflation targeting regime in 2000 with an initial target of between 3 and 6% on average for the calendar year 2002 declining to 2 to 5% on average in 2005. An inflation targeting regime is more transparent and the South African Reserve Bank holds regular monetary policy forums in various centres throughout the country during which progress is reviewed. By its very nature, inflation targeting is a forward-looking exercise and regular reports are published setting out results and forecasts. A comprehensive study has been made of the transmission mechanism but more experience must be gained on the time lag between the policy adjustment and the eventual effect on core inflation.

Under floating exchange rates, both interest rates and the exchange rate have an effect on spending and inflation pressure. The link between spending and the exchange rate in South Africa may not

always agree with textbook economics. A weaker exchange rate should lead to lower demand for imported goods, but in 1998 and more recently in 2001 the initial response was to increase imports despite a lower exchange rate and higher interest rates. In J-curve fashion, the initial effects of a depreciation have thus been to widen the current account deficit, while money supply and bank credit growth accelerated. The maintenance of high real rates of interest eventually tends to restore balance by encouraging a partial reversal of depreciation and easing of pressures on the current account and dampening inflation expectations. In addition, fiscal policy has remained restrictive during the depreciation episodes and thus the monetary authorities have been expected to support market pressures for lower interest rates.

On balance, exchange rate stability will be enhanced by the *stability in the conduct of monetary policy*. The main advantage of adopting an inflation target is a publicly announced goal leading to increased transparency in the application of monetary policy. Furthermore, countries that have adopted inflation targeting seem to have been more successful in reducing inflation than those that have not adopted this policy.

4. The approach to markets

As noted above, South Africa - like many other countries - is not able to control the level of the exchange rate. Financial market integration and the high degree of capital mobility will encourage the authorities to pursue long-term sustainable macro policies in the interests of sustainable growth. However, in the medium term, South Africa had a number of financial imbalances due to a history of isolation and sanctions which have been corrected along with implementing long-term sustainable macro policies.

It is these vulnerabilities which were somewhat exploited whenever emerging market countries become unstable due to external price shocks and/or internal political events. For as long as South Africa was seen to have a shortage of external liquidity and an excess of foreign currency guarantees issued by the South African government (the Forward Book), the country would be a prime target for currency attacks. Such events have led in the past to higher inflation, higher real rates of interest and lower economic growth due to volatile domestic markets and uncertainty.

5. The build-up of forward exchange liabilities for account of government

The build-up of the Forward Book took place after the announcement of the foreign debt standstill in September 1985, at which time the country's foreign debt was close to the level where it was at the end of 2001, amounting to some USD 24 billion. At the time, the South African Reserve Bank had a net open forward position (the oversold Forward Book minus the net gold and foreign exchange reserves of the South African Reserve Bank) (NOFP) of some USD 12 billion, implying that the economy probably had an outstanding uncovered foreign exchange position of up to USD 10 billion (approximately USD 2 billion represented debt of the government which is not covered forward). It is important to note that this was not a commitment of one institution, but many South Africans had foreign commitments at the time. It emerged after the debt standstill that there were government agencies and private sector corporations that had large foreign exchange exposures. The type of crisis that was experienced in 1997 and 1998 in Asia was in fact experienced by South Africa, albeit for different reasons, back in the mid-1980s at the time of the debt standstill. It was in the ensuing years that the South African Reserve Bank provided an additional amount of some USD 10 billion's worth of forward cover to the market and by September 1988 the outstanding Forward Book stood at USD 25 billion.

The country had no access to the international capital markets at the time, including no access to borrowing from the IMF or other official agencies. With the South African government unable to borrow foreign currency, the country could only use one mechanism to raise foreign capital, ie providing forward cover to the private sector to ensure its use of trade credits. In macroeconomic terms Savings minus Investment must equal Exports minus Imports, which was not so in South Africa's case for a number of years after the debt standstill. These trade deficits were funded by private sector and government corporations accessing trade credit abroad. In addition, certain private sector and

government corporations were able to raise trade credit for longer terms, eg for purchases of items such as power generators or aircraft, but the South African Reserve Bank had to provide forward cover for those foreign currency exposures as well.

The large Forward Book and the NOFP thus became a surrogate for what would have been IMF or other international capital market borrowing. Without the above-mentioned limitations, the exchange rate risks that the South African government was carrying through the Forward Book might have been carried in a different format, which would have been better understood by the markets.

In 1995 the dual exchange rate mechanism was abolished, thereby channelling the proceeds of any purchases and sales of assets in South Africa through the unitary exchange rate. Foreign exchange flows emanating from such transactions therefore became available for purchase by the Bank, influencing the NOFP. A large inflow from the purchase of bonds or shares by non-residents would make a difference to the net reserves, implying that the South African Reserve Bank could start reducing its Forward Book and NOFP. After the abolition of the dual exchange rate in March 1995, there was significant euphoria and the South African Reserve Bank was able to make a significant reduction in the NOFP in a matter of 12 months. By March 1995 the NOFP was USD 28 billion, and by March 1996 it had been reduced to USD 8.5 billion.

What actually happened was that the risk position that the South African government had been carrying with the NOFP at USD 25 billion was reduced mainly by purchasing foreign exchange from the market. The proceeds of government bond issues abroad were purchased, and the balance was purchased from the market. The result was that the market carried significantly more risk in March 1996 than it was carrying in March 1995. This significant portfolio shift almost inevitably influenced the exchange rate of the rand and it depreciated sharply in 1996, partly due to speculative activity.

In an effort to counter such speculative activity, the South African Reserve Bank in 1996 increased the Forward Book to USD 22 billion, in other words it sold about USD 14 billion into the market. That meant that a large amount of risk had been taken on again by the South African Reserve Bank on behalf of the South African government. However, this only contained the depreciation of the rand from ZAR 3.5 = USD 1 to ZAR 4.5 = USD 1.

Then in 1997, after this episode, the South African Reserve Bank was again successful in reducing the NOFP by almost USD 10 billion. That came from portfolio inflows, the purchase of shares and bonds by non-residents. However, in 1998 the emerging markets crisis occurred, and South Africa appeared to be used as a surrogate hedge for investors and speculators who had exposures to other emerging market countries with less liquid financial markets.

Again the Bank reacted, this time in two ways. First, it sold USD 11 billion forward to the market. Second, interest rates were hiked by 7% in real terms. However, these actions only resulted in containing the depreciation from a level of around ZAR 5.0 = USD 1 to a level of around ZAR 5.8 = USD 1. This implied returning the NOFP to exactly the situation 10 years before, almost to the last billion dollars.

Subsequent to this episode, there was a shift in the South African Reserve Bank's policy. A decision was taken to reduce the NOFP to zero. The IMF was highly critical of the country for having intervened by means of the Forward Book, and the advice was to reduce the NOFP. This advice was followed and the NOFP was reduced by around USD 9 billion in 1999, from USD 22 billion in December 1998 to USD 13 billion in December 1999. During that year the exchange rate actually appreciated by 0.6 % on a trade-weighted basis.

However, despite regional instability, the South African Reserve Bank continued reducing the NOFP, from USD 13 billion in December 1999 to USD 9.5 billion at the end of 2000. That was a small reduction compared to the year before, but because of regional events the markets were unwilling to accept additional risk. Consequently, the rand depreciated on a trade-weighted basis by 12.4% during the year 2000.

Table A1 in the Appendix has been compiled from BIS and IMF figures and demonstrates that the risks carried on the Forward Book were not unlike the risks of many other countries. Looking at the Forward Book of the South African Reserve Bank in isolation is an incorrect approach, as it is necessary to consider the external currency risks of governments, in other words their offshore borrowing, the position of the central bank and any derivatives transactions. In South Africa's case, there are no derivatives transactions, so government borrowing plus the NOFP equals the foreign exchange risk. There are many countries where foreign currency liabilities for account of their governments exceed the level of their reserves.

Relatively speaking, South Africa was not out of line, but a skewed picture emerges when the South African Reserve Bank's balance sheet is considered in isolation.

The most important fact is that the foreign exchange liabilities of the South African government have been significantly reduced over the last two and a half years. Today the forward liabilities have been reduced to USD 1.8 billion, which will be expunged by the proceeds of privatisation and the issue of bonds offshore by the South African government.

As mentioned previously, significant strides have been made in liberalising exchange control.

6. Overview and summary of exchange control relaxation

The present exchange control system in South Africa is used primarily to control movements of capital by South African residents. South Africa has, however, now reached the stage where there are no exchange controls on the movement of funds of non-residents and effectively no controls on current account transactions. Resident corporates, financial institutions and private individuals all have limited scope to make some investments abroad. This situation has been achieved by the South African government following a policy of gradually phasing out exchange controls. The South African government is, therefore, committed to the removal of exchange controls.

Events since 1994

- A first major step was the abolition in March 1995 of the financial rand, which had been reintroduced in 1985. No capital controls are, therefore, applied to non-residents, who may freely invest in and disinvest from South Africa. This applies to portfolio investment as well as foreign direct investment into South Africa.
- South African corporations have been allowed to make increasingly large offshore investments and to raise foreign capital against their domestic balance sheets. On approval, local corporates may transfer up to ZAR 500 million abroad for a new investment. For an approved investment into Africa, including the Southern African Development Community (SADC), an amount of up to ZAR 750 million may be remitted for a new investment. In addition to the aforementioned, corporates are allowed to effect foreign currency transfers for up to 10% of the cost of the investment in excess of the aforementioned respective limits.
- Qualifying institutions, ie long-term insurers, pension funds and the unit trust industry as well as fund managers, are allowed to invest a portion of their net inflows into portfolio investments offshore. The present limits for such portfolio investments are 15% of their total assets for long-term insurers and pension funds and 20% for the unit trust industry.
- Exchange control restrictions on foreign investments by private individuals resident in South Africa were lifted in July 1997 and the current limit stands at ZAR 750,000 per individual.
- Since July 1997, resident individuals have been permitted to retain foreign income earnings abroad.

Table 1

Exchange control: key changes

5 February 1983	Exchange controls over non-residents abolished and limits on resident transactions raised.
28 August 1985	South African foreign exchange market and Johannesburg Securities Exchange (JSE) closed.
2 September 1985	Foreign debt standstill imposed and financial rand system of exchange control over non-residents reimposed.
10 March 1995	Financial rand system abolished.
13 July 1995	Asset swap mechanism for South African insurers, pension funds and unit trusts introduced.
1 July 1997	South African individuals in good standing with the tax authorities allowed to hold up to ZAR 200,000 offshore.
11 March 1998	Limit for offshore holdings raised from ZAR 200,000 to ZAR 400,000 per individual. CFC period raised from 30 days to 180 days.
23 February 1999	Limit for offshore holdings raised from ZAR 400,000 to ZAR 500,000 per individual.
23 February 2000	Limit raised from ZAR 500,000 to ZAR 750,000 per individual.
21 February 2001	Asset swap mechanism scrapped. Prudential limits remain.

Note: For further relaxations, see Table A2 in the Appendix.

7. Summary of current exchange controls

A. Corporates

(i) ***Foreign investment***. Corporates are allowed, on application, to transfer up to ZAR 750 million from South Africa per new approved investment in Africa, including the SADC, provided a longer-term benefit to South Africa can be demonstrated. In respect of investments elsewhere in the world, corporates are limited to the transfer from South Africa of up to ZAR 500 million per new approved investment subject to the same criteria.

For more costly investments, corporates may, on application, raise foreign finance facilities on the strength of their South African Balance Sheet provided the facility is for a minimum period of two years.

Corporates are, on application to the Control, also allowed to utilise their local cash holdings in South Africa to partly finance new investments where the cost thereof exceeds the respective amounts of ZAR 750 million and ZAR 500 million. Such additional foreign currency transfers are restricted to 10% of the cost in excess of the foregoing amounts irrespective of the size of the transaction. The balance of the finance required must still be raised abroad on the basis outlined above.

Corporates wishing to invest in countries outside the Common Monetary Area may, in addition to the foregoing, on application to the Control, also engage in corporate asset/share swap transactions in order to finance the cost of such investments.

(ii) ***Foreign loans***. All loans from outside the Common Monetary Area require prior exchange control approval. Approval is normally granted provided the interest rate charged is market-related.

B. Institutional investors

Long-term insurers and pension funds may, on application, acquire foreign portfolio assets for up to 15% of their total assets and registered fund managers up to 15% of their total assets under management, subject to the regulatory framework within which they operate.

Unit trusts through unit trust management companies may, on application, acquire foreign portfolio assets for up to 20% of their total assets under management, subject to the regulatory framework within which they operate.

The foreign portfolio assets may be acquired by transferring foreign currency abroad. Such transfers will be limited to 10% of the previous calendar year's net cash inflow.

C. Foreign-controlled entities

(i) ***"Affected persons"***. South African registered entities which are 75% or more foreign-controlled are restricted in the amount of local financial assistance they may obtain. Dividend/profit/income distributions are, however, freely transferable in proportion to the percentage shareholding/ownership, provided the relative distribution will not cause the entity to be placed in an overborrowed position in terms of formula requirements.

D. Individuals

(i) ***Foreign investment***. Investment up to ZAR 750,000 per individual is permitted for any purpose outside the Common Monetary Area provided the party is over 18 years old and a registered taxpayer in good standing.

See Table A3 in the Appendix for further details.

8. Conclusion

Since 1994, significant progress has been made towards reintegrating the South African economy into the global economy:

- Tariffs and surcharges have been drastically reduced and the number of tariff lines has almost been halved. See Table A4 in the Appendix.
- As a consequence, the current account of the balance of payments appears to be far more resilient. For example, the economy grew by 3.4% in the year 2000 with a current account deficit of 0.4% despite a doubling of the price of oil imports in domestic currency terms and a significant increase in dividend payments as a result of investment flows.
- Inflation has been reduced from levels as high as 17% in the early 1990s to single digit figures today.
- The public sector borrowing requirement has declined from levels as high as 10% of GDP in the early 1990s to less than 2% over the last two and a half fiscal years.
- With the liberalisation of exchange control, residents have invested significant sums abroad. The foreign assets of South African residents have increased. Simultaneously, the foreign liabilities of South Africa for inward investment have increased (Table 2).
- Foreign exchange liabilities of government have been reduced by USD 22.8 billion but this reduction has nevertheless impacted on the exchange rate.

It is now seven years since the implementation of major macroeconomic reform in South Africa. The experiences of other countries which have implemented similar reforms have demonstrated that there is a significant lag between the reform implementation and a return to normal growth rates. The Australian authorities, for example, had noted that the time lag was around seven years in their case.

The South African economy is showing signs of a return to a somewhat higher growth rate in excess of 3% and a foundation has been laid for a stable macroeconomic environment. Against this background, it may be expected that South Africa will be amongst the better performing emerging market economies in years to come.

Table 2

South Africa's foreign assets and liabilities

(USD millions)

Foreign assets	**1994**	**2000**
Direct investment	19,000	35,000
Portfolio investment	107	50,000
Foreign liabilities	**1994**	**2000**
Direct investment	13,000	47,000
Portfolio investment	19,000	40,000

Source: South African Reserve Bank.

Additional tables appear in the Appendix:

Table A5 Major steps in the reform of South Africa's foreign exchange market

Table A6 Highlights in the evolution of the South African monetary policy dispensation since 1980

Appendix

Table A1

Debt indicators, June 2000

(USD millions)

Country	External public debt	International reserves	Gross domestic product	External public debt as percentage of international reserves	Net external public debt as percentage of GDP
Australia	27,618	16,730	382,804	165.1	2.8
Canada	147,861	30,273	695,452	488.4	16.9
Spain	66,708	37,605	556,332	177.4	5.2
Italy	241,016	45,973	1,064,500	524.3	18.3
Portugal	22,073	13,934	104,416	158.4	7.8
Belgium	53,071	11,967	231,496	443.5	17.8
Greece	49,606	14,900	124,806	332.9	27.8
Egypt	30,404	14,959	88,781	203.2	17.4
Tunisia	11,872	2,265	20,888	524.2	46.0
Croatia	9,443	3,025	18,988	312.2	33.8
Hungary	29,042	10,983	46,200	264.4	39.1
Poland	54,268	25,494	155,539	212.9	18.5
Mexico	166,960	31,782	567,740	525.3	23.8
Turkey	101,796	24,351	196,956	418.0	39.3
South Africa[1]	**7,976**	**7,486**	**125,088**	**106.5**	**0.4**
South Africa[2]	**18,099**	**7,486**	**125,088**	**242.0**	**8.5**

[1] External public debts exclude NOFP. [2] External public debts include NOFP. Taking into account the NOFP of USD 4.8 billion as at the end of December 2001, the respective ratios would have been 170.7% and 4.2%.

Sources: IMF; BIS.

Table A2

Further relaxations of exchange control

- The removal of controls on the level of foreign exchange holdings by authorised dealers in foreign exchange, ie South African banks.
- The licensing of foreign exchange bureaux.
- The ability of non-residents of the Common Monetary Area to maintain foreign currency denominated deposits with South African banks.
- The abolition of separate travel allowances for neighbouring countries and other foreign countries.
- The establishment of US dollar/South African rand futures contracts through the South African Futures Exchange for non-residents and authorised dealers in foreign exchange.
- Permission for immigrants to repatriate funds brought into the country.
- South African gold producers are no longer required to market their gold through the South African Reserve Bank.
- Permission for Southern African Development Community (SADC) firms to list on the JSE to raise capital up to a maximum of ZAR 750 million for projects anywhere in the SADC region.
- Permission for the issue of SADC Depositary Receipts in South Africa for companies listed in the SADC region.
- The requirement to repatriate foreign currency earnings within 30 days of accrual has, in respect of businesses utilising customer foreign currency accounts, been extended to 180 days.
- Restrictions on the opening and operation of customer foreign currency accounts by businesses making profits or commission on foreign transactions have been removed, subject to the 180-day limit for the repatriation of funds.
- The non-resident ownership level at which foreign-controlled resident entities become subject to the limits on local borrowing has been raised to 75%.
- A relaxation in the capital structure requirements of foreign-controlled South African resident entities.
- The extension of loans to foreign shareholders by such companies in lieu of dividend transfers.
- Current account payments and receipts are generally unrestricted.
- Permission for corporates utilising customer foreign currency accounts to offset foreign import commitments against export proceeds.
- Limits in respect of discretionary expenditure such as travel allowances are reviewed on an annual basis.
- In line with international practice and to accommodate permissible foreign currency payments for small transactions, eg imports over the internet, South African residents are allowed to make such payments via credit/debit cards. Payments are limited to ZAR 20,000 per transaction. This arrangement does not, however, exempt cardholders from the requirements imposed by the customs authorities or ad valorem excise and customs duties.

Table A3

Further exchange control dispensations for individuals

Foreign loans	All loans from outside the Common Monetary Area require prior exchange control approval. Approval is normally granted provided the interest rate is market-related.
Travel allowances	ZAR 140,000 per calendar year per person aged 12 years or over. ZAR 45,000 per calendar year per child under 12 years of age.
Foreign study allowances	ZAR 140,000 per calendar year per single student. ZAR 280,000 per calendar year per married student accompanied by spouse.
Holiday travel allowances for students studying abroad	ZAR 45,000 per calendar year per single student. ZAR 90,000 per calendar year per married student accompanied by spouse.
Gifts and donations to non-residents	ZAR 25,000 per applicant per calendar year.
Maintenance payments to non-residents	ZAR 7,000 per month to direct family members.
Alimony payments	ZAR 7,000 per month over and above the amount awarded by court to a beneficiary.
Emigrants	Persons emigrating to any country outside the Common Monetary Area qualify, at the time of their emigration and after all their assets have been brought under the control of an authorised dealer, for the following facilities: • a settling-in allowance of ZAR 400,000 per family unit; or • a settling-in allowance of ZAR 200,000 in respect of single persons; • a travel allowance applicable to each member of the family unit subject to the limits laid down under point (ii) above; • household and personal effects and motor vehicles to the value of ZAR 1 million may be exported. Various restrictions remain on the use of emigrants' blocked funds in South Africa.

Table A4

Highlights in the evolution of the South African trade policy dispensation since 1980

Date	Description
Prior to 1980	Imported control (permit control) in respect of numerous product categories; generally high import duties, including a surcharge on imported goods; some export subsidies.
27 March 1980	7.5% surcharge on imports abolished.
11 February 1982	Surcharge on imports reintroduced at a rate of 10%.
26 November 1982	Surcharge on imports lowered to 7.5%.
25 February 1983	Surcharge on imports lowered to 5%.
29 November 1983	Surcharge on imports abolished.
1 January 1984	Import control relaxed in respect of many product categories.
1 July 1985	Further relaxation of import control.
23 September 1985	Surcharge on imports reintroduced at a rate of 10%.
12 August 1988	10% surcharge changed to differentiated surcharges ranging from 0 to 60%.
14 March 1990	Surcharges reduced to 0 to 40%.
20 March 1991	Surcharges reduced.
2 September 1994	Surcharge and import duty on cars reduced.
12 June 1995	The Minister of Trade and Industry unveils final proposals for dramatic reform of the motor, textile and clothing industries designed to compel South African industry to become internationally competitive. Vehicles: customs duty on built-up cars will decline from 65% in 1995 to 40% in 2002; on components, duties will decline from 49% in 1995 to 30%. The ratio of these two sets of duties will be maintained at 1.33:1. Manufacturers would be entitled to a 27% duty-free allowance on component imports, based on the wholesale value of the vehicles manufactured. Excess duty-free components may be used to import completely built-up vehicles at a reduced duty. An import/export trade balance rebate is also provided for in the scheme; it enables the duty-free importation of vehicles and components equal to the local content value of the motor vehicles and components exported. Textiles/clothing: a period of eight years (no longer 10 years) is provided for scaling down duties, as follows: Clothing 90% to 40% Household textiles 55% to 30% Fabrics 45% to 22% Yarn 32% to 15% Polyester fibre 25% to 7.5% Rebates of duties on goods imported for the manufacture of exports will be phased out over 10 years.
1 September 1995	Comprehensive reduction in import duties introduced - the first step in the implementation of the announced tariff reduction programme.
1 October 1995	Remaining surcharge on imports abolished.
After 1995	Import duty reductions have continued on an annual basis in the subsequent years.

Table A5

Major steps in the reform of South Africa's foreign exchange market

22 December 1993	The IMF officially approves South Africa's first borrowing since 1982, when the Fund's board unanimously vote to grant South Africa's request for a USD 850 million drawing under the IMF Compensatory and Contingency Financing Facility.
1 January 1994	Start of arrangements under the Final Debt Agreement, to run until 2001.
10 March 1995	Announcement that the financial rand system of exchange control over non-residents will be scrapped from 13 March 1995.
1 May 1995	Foreign banks are allowed to open branches in South Africa, whereas earlier on they would have had to start a subsidiary or maintain a representative office.
13 July 1995	Asset swaps with foreign institutions are allowed; these enable South African insurance companies, pension funds and unit trusts to acquire foreign assets up to 5% of their total assets.
3 October 1995	Exporters are exempted from the requirement to take out forward cover on exports.
14 June 1996	South African institutional investors are henceforth allowed to enter into asset swaps with foreign institutions for up to 10% of their total assets (previously 5%). They may also transfer up to 3% of their annual cash inflow to foreign countries without swaps, but must stay within the 10% foreign asset limit.
12 March 1997	Announcement of relaxation of exchange controls on South African residents; individuals will from 1 July 1997 inter alia be allowed to invest a limited amount abroad or, alternatively, hold foreign currency deposits with South African banks.

Table A6

Highlights in the evolution of the South African monetary policy dispensation since 1980

Date	Description
Prior to 1980	Credit ceilings, deposit interest rates controlled.
28 March 1980	Deposit interest rate controls abolished.
12 September 1980	Credit ceilings abolished.
17 March 1986	Introduction of money supply targeting, flexibly applied.
23 March 1990	Money supply targets renamed money supply guidelines, to emphasise flexibility.
7 March 1998	Informal, central bank announced inflation target introduced, alongside money supply guidelines.
23 February 2000	Formal inflation targeting introduced.

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Liberalisation and management of the private non-bank corporate capital account: the Philippine experience

Celia M Gonzalez

1. Introduction

The Philippines taps foreign capital to augment domestic savings and support the country's huge development financing requirements. External capital account transactions have been liberalised since the early 1990s but certain prudential requirements are imposed, particularly on those involving the purchase of foreign exchange from the banking system, in order to optimise the utilisation of banks' foreign exchange resources and help maintain the convertibility of the peso. These requirements have also tempered the growth of foreign borrowings, particularly at the short end of the maturity spectrum, thereby dampening the adverse effects of external shocks such as the 1997-98 Asian financial crisis. This paper presents the Philippines' current policies and rules and regulations governing foreign exchange transactions with a special focus on the management of private non-bank corporate foreign borrowings.

2. Policy framework for foreign exchange transactions

Central Bank Circular no 1389 dated 13 April 1993, as amended, contains the consolidated rules and regulations governing the country's foreign exchange transactions. After more than 40 years of varying foreign exchange controls, the Circular laid out a liberalised regulatory environment for foreign exchange transactions following the country's adoption of a floating exchange rate system, the implementation of a series of structural and other reforms in the financial sector, and the decision to move towards greater integration with the global economy.

On the current account, all types or merchandise imports/exports are allowed except for certain items that are either regulated or prohibited for reasons of national interest and by legal provisions. There are no duties on exports while those on imports have been progressively reduced pursuant to commitments under international and regional trade/economic cooperation agreements. The Philippines is an Article VIII member of the International Monetary Fund (IMF) and is committed not to impose restrictions on current account payments without the approval of the IMF.

On the capital account, there are no restrictions on the inflow of foreign investments except in areas included in the Fourth Regular Foreign Investment Negative List dated 24 August 2000. Foreign investments are preferred over foreign borrowings as a source of foreign capital and the government provides tax and other incentives for those that invest in specified areas such as in companies registered with the Board of Investments. Registration of the foreign investment with the Bangko Sentral ng Pilipinas (Bangko Sentral) is not mandatory but gives the investor or its designated representative authority to purchase foreign exchange from the banking system to fund capital repatriation and remittance of dividends/profits/earnings derived on the registered investment.

Outward investments are also allowed without the need for prior Bangko Sentral approval if funded by the investor's own foreign exchange resources or with foreign exchange purchased from the banking system up to the specified limit.

In the case of foreign borrowings, prior approval of the Bangko Sentral is needed for all public sector borrowings, irrespective of maturity, creditor or source of foreign exchange for servicing the borrowings. Private banks also require prior Bangko Sentral approval for their foreign borrowings, except for normal interbank transactions.

Meanwhile, non-bank private sector entities are, in general, free to contract foreign loans provided that they do not intend to fund payments of principal and interest on the obligations with foreign exchange

purchased from the banking system; otherwise, the prior approval of and/or registration with the Bangko Sentral are required (for details and exceptions, see Section 4).

In general, the policies on foreign borrowings also apply to foreign currency borrowings from offshore banking units as well as from banks with foreign currency deposit units operating in the Philippines.

There are no restrictions on the disposition of foreign exchange receipts of residents (eg from exports and salaries earned from overseas employment). Residents have the option of selling these receipts for pesos to banks or outside the banking system, or retaining or depositing them in foreign currency accounts, whether in the Philippines or abroad. However, purchases of foreign exchange from banks and bank-affiliated foreign exchange (forex) corporations are subject to certain documentary requirements to evidence the presence of a valid underlying obligation. The objective is to optimise the use of the foreign exchange resources of the banking system and promote stability in the foreign exchange market.

3. Institutional/legal framework for external debt management

The management of external debt involves the concerted efforts of various government agencies led by the Bangko Sentral (see Box 1 for the institutional setting). As overseer of the country's foreign exchange system and tasked with maintaining international reserves sufficient to meet any foreseeable net demands on it for foreign currencies, the Bangko Sentral is required by law to regulate foreign borrowings to keep external debt service requirements at manageable levels (see Box 2 for legal bases for the Bank's role in external debt management). It performs these tasks through the Monetary Board, its highest policymaking body, and the International Operations Department which, inter alia, handles the day-to-day activities of debt management.

4. Specific policies on private non-bank corporate foreign borrowings

Prior to the 1990s and consistent with existing controls on foreign exchange inflows and outflows, all foreign borrowing proposals had to be approved by and registered with the old central bank. Each purchase of foreign exchange from the banking system for debt servicing was likewise subject to prior central bank approval. With the liberalisation of foreign exchange transactions, private sector borrowers were, in general, given the option not to undergo the approval and registration process provided that they are not purchasing foreign exchange from the banking system for debt servicing purposes. This approach is consistent with the freedom Philippine residents now have in the use of their foreign exchange receipts, which were previously subject to a mandatory surrender requirement.

Circular no 1389, as amended, identifies the areas/economic activities eligible for foreign financing. Such areas are based primarily on the projects listed in the country's annual Investment Priorities Plan, medium-term development plan and medium-term public investment programme. The objective is to channel proceeds of foreign borrowings to priority areas for development such as infrastructure, agriculture and fisheries, build-operate-transfer projects, export-oriented activities, and socialised (low-cost) housing.

To regulate the country's debt service burden, existing rules require that short-term foreign borrowings intended to be serviced with foreign exchange to be purchased from the banking system shall finance exclusively foreign exchange costs of eligible projects payable to foreign beneficiaries. Exceptions would be borrowings for export-related requirements of direct and indirect exporters which may finance both local costs and foreign exchange costs payable to foreign beneficiaries. Medium- and long-term borrowings may finance both local costs and foreign exchange costs payable to foreign beneficiaries excluding working capital requirements.

Box 1

Institutional arrangements for debt management in the Philippines

*Bangko Sentral ng Pilipina*s. The central bank is vested with the responsibility of formulating guidelines to regulate and monitor foreign borrowings and to ensure that obligations are obtained on reasonable terms and that they are within the country's capacity to pay. It derives its mandate from the highest law of the land, the Philippine Constitution, as well as other legislation/executive issuances (see Box 2).

Department of Finance. The agency is responsible for raising funds for the national government from tax and non-tax revenues. As such, it handles the programming and execution of the national government's foreign borrowing activities, including the extension of guarantees for borrowings by other public sector entities such as government-owned/controlled corporations, including government financial institutions.

Investment Coordination Committee (ICC). This is a cabinet-level inter-agency body that evaluates the technical, financial, economic and social feasibility/viability, including the impact on the environment and institutional development, of major capital projects intended to be financed by official development assistance, whether in the form of grants or loans. The Committee also reviews the fiscal, monetary and balance of payments implications of these projects as well as projects under build-operate-transfer (BOT) and similar financing arrangements whose total costs exceed specified floor amounts. The current membership includes a member of the Monetary Board of the Bangko Sentral ng Pilipinas and the heads of the following offices/departments: Finance, Budget and Management, Trade and Industry, Agriculture, Energy, Environment and Natural Resources, the Office of the President, the National Economic and Development Authority and the Coordinating Committee for Private Sector Participation. The ICC Cabinet Committee is supported by a Technical Board and a Secretariat.

Inter-agency Committee on the Review of Foreign Loan Documents. Chaired by the Bangko Sentral ng Pilipinas, the Committee reviews the draft loan and guarantee agreements including all related documents for proposed foreign borrowings to be contracted or guaranteed by the public sector. Through this review the Committee aims, inter alia, to: (a) determine compliance with the terms and conditions of enabling Monetary Board approvals and other applicable foreign exchange regulations and, when necessary, negotiate for the improvement of said terms and conditions; and (b) ascertain possible implications for related contracts and discuss/resolve these with proponents or lenders. The Committee's clearance of the covering loan and guarantee agreements and related documents is one of the conditions required for Bangko Sentral final approval of public sector loans. The Committee is composed of representatives from the Bangko Sentral, the Department of Finance, the Department of Justice, and the borrowing agency concerned.

National Economic Development Authority. As the country's central economic planning body, the Authority coordinates the preparation of the country's medium-term development plan and the medium-term public investment programme. These define the development financing requirements of the country and the priority areas for development in support of the country's medium-term economic and social objectives.

Board of Investments. An agency attached to the Department of Trade and Industry, the Board draws up an annual Investment Priorities Plan (IPP) that identifies preferred sectors for investment in specific regions of the country. The IPP lists the activities that are eligible for incentives, with a view to influencing the flow of investments into activities and locations where financing needs are greatest.

4.1 Foreign currency borrowings by residents

The following require Bangko Sentral approval, irrespective of the source of foreign exchange for debt servicing: (a) loans guaranteed by government-owned/controlled corporations and/or government financial institutions; (b) loans covered by foreign exchange guarantees issued by local commercial banks; and (c) loans to be granted by foreign currency deposit units and specifically or directly funded from, or collateralised by, offshore loans or deposits.

Prior Bangko Sentral approval has been waived for some accounts such as short-term trade credits, loans covering importation of freely importable commodities covered by letters of credit, open account or document against acceptance arrangements, and parent company loans for funding eligible projects/purposes. Upon compliance with Bangko Sentral registration requirements, these loans shall be eligible for servicing with foreign exchange to be purchased from the banking system.

Rules on short-term loans for trade financing have also been simplified by waiving the approval/registration requirement for loans against the lending programmes of foreign banks that have been duly noted by the Bangko Sentral.

Box 2

Legal bases for the external debt management responsibility of the Bangko Sentral ng Pilipinas

The Philippine Constitution of 15 October 1986 requires, inter alia, prior concurrence of the Monetary Board for all foreign loans to be contracted or guaranteed by the Republic of the Philippines. It also provides that foreign loans may only be incurred in accordance with the law and the regulation of the monetary authority.

The Letter of Instructions no 158 dated 21 January 1974 requires all foreign borrowing proposals of the government, government agencies and government financial institutions to be submitted to the central bank for approval in principle by the Monetary Board as to purpose and credit terms, inter alia, before commencement of actual loan negotiations. Actual negotiations for such credits shall be conducted by the Secretary of Finance and/or the central bank Governor or their duly authorised representatives as chief or co-chief negotiators together with representatives of the borrowing entity concerned.

The Foreign Borrowings Act (*Republic Act no 4860* dated 8 September 1966) provides, inter alia, that the central bank shall promulgate and enforce such measures as may be necessary to reduce external debt service requirements.

The New Central Bank Charter (*Republic Act no 7653* dated 10 June 1993) provides that the Bangko Sentral shall maintain international reserves adequate to meet any foreseeable net demands for foreign currencies, paying special attention to the volume and maturity of the foreign exchange assets and liabilities of the various sectors in the Philippine economy. The Bank is empowered to collect data and other information necessary for the effective discharge of its functions and responsibilities.

Executive Order 352 ("Designation of Statistical Activities") dated 1 July 1996 assigned to the Bangko Sentral ng Pilipinas the responsibility of compiling balance of payments accounts and monetary and banking statistics. This is in accordance with a system of designated statistics enabling the identification and generation of the most critical statistics required for social and economic planning/analysis.

Administrative issuances from the Bangko Sentral ng Pilipinas (eg circulars, circular letters and memoranda to all agent banks) embody the policies and related implementing rules, regulations and clarifications that the Bank deems necessary to achieve its primary objectives of maintaining price stability and the convertibility of the Philippine peso. Circulars contain policies and major rules and regulations that are of interest not only to Bangko Sentral supervised institutions but also to the general public and are therefore required to be published in the Official Gazette or in two newspapers of general circulation. They take effect 15 calendar days after publication.

4.2 Foreign currency borrowings by non-residents from banks in the Philippines

Commercial banks licensed to operate under the expanded foreign currency deposit system are authorised to extend foreign currency loans to non-residents provided, inter alia, that the foreign exchange for servicing the loans shall not be sourced from the banking system.

4.3 Local currency borrowings by non-residents from banks in the Philippines

Banks are prohibited from extending Philippine peso loans to non-residents. This is aimed at curbing undue speculation in the foreign exchange market and at further reinforcing the policy requiring peso deposits of non-residents to be funded from inward remittance of foreign exchange.

5. Loan approval and registration process

Bangko Sentral approval for a loan proposed by a private sector borrower (that is intended to be serviced with foreign exchange to be purchased from the banking system) must be obtained before the covering loan documents may be executed and the funds disbursed. The application for loan approval must be accompanied by certain prescribed documents, eg borrower profile, loan profile and project profile; drawdown and amortisation schedules of the proposed borrowing; and annual cash flow projections for the duration of the proposed loan.

The Bangko Sentral's evaluation process involves a thorough review of the proposed borrowing, starting with the determination of the eligibility for foreign financing of the proposed purpose/project.

Having established the eligibility of the purpose/project proposed for foreign financing, the Bangko Sentral focuses its evaluation on the financial terms and conditions of the proposed borrowing, such as the loan amount, maturity, interest rate, default rate, upfront fees, and principal and interest payment schedules, and verifies if these are comparable with the terms of similar loans approved in the past as well as the prevailing credit terms for other emerging market borrowers. It also looks at the borrower's cash flow projections before and after availment of the proposed loan to determine its capacity to service the loan on due dates. The Bangko Sentral then estimates the impact of the proposed borrowing on the country's future debt service burden (measured as total principal and interest payments on outstanding foreign loans) as well as the ratio of the debt service burden to the sum of the country's projected exports of goods and services and receipts of income for the same period.

In order to ensure compliance with the terms and conditions of the Bangko Sentral approval, private sector borrowers are required to register Bangko Sentral approved foreign loans following receipt and use of borrowed funds. The borrower is required to submit copies of the signed loan documents as well as proof of disbursement and utilisation of loan proceeds, and these are reviewed by the Bangko Sentral to verify if the loan was disbursed and proceeds used for the approved purpose. A Bangko Sentral Registration Document (BSRD) is issued only after full disbursement of the loan and review of the utilisation of the loan proceeds. The BSRD authorises the borrower to buy foreign exchange from local banks for servicing of the registered obligation on scheduled due dates. (Purchase of foreign exchange from banks to cover any payment not consistent with the loan terms reflected in the BSRD as well as any amendment to loan terms requires prior Bangko Sentral approval.) On a case by case basis, and to minimise pressures on the foreign exchange market, the Bangko Sentral may authorise staggered purchases of foreign exchange to fund large debt payments, such as for bonds that involve bullet payments.

The Bangko Sentral notes partial utilisations of the approved loan to enable the servicing of the noted portion with foreign exchange purchased from the banking system. Pending registration of the loan, specific authorisation from the Bangko Sentral is required for each principal amortisation and/or interest payment on the noted portion of the loan to be funded with foreign exchange purchased from the banking system.

6. Transparency, disclosure and market discipline

External debt and related statistics are compiled by the International Operations Department of the Bangko Sentral on a quarterly basis. The data, which are presented in US dollars, are reported to the Monetary Board with a corresponding press release also on a quarterly basis. Summary statistics on external debt (including debt service burden and selected debt ratios) are also published in the Bangko Sentral Annual Report and in the Monthly Selected Philippine Economic Indicators. Data are also posted on the website of the Bangko Sentral: www.bsp.gov.ph.

In 1971, the Bangko Sentral adopted yearly aggregate ceilings (with quarterly sub-ceilings) on medium- and long-term foreign borrowing approvals (with original maturity of more than one year). There is no sub-ceiling for the public sector but there is a sub-ceiling on total loan approvals with maturities from over one year up to five years. In addition, there is a ceiling on the stock of short-term debt contracted or guaranteed by the public sector to help keep the size of external debt and debt service payments falling due each year to manageable levels. The loan approval ceilings, which have generally been observed, take into account the following: (a) programmed borrowings by major public and private sector borrowers for the year that were submitted to the Bangko Sentral; (b) the stock of external debt; and (c) the projected debt service requirements of existing as well as new borrowings programmed for the year.

The Bangko Sentral also implements measures to prevent bunching of debt, to improve the maturity profile of the country's external debt, and to obtain borrowings at lower costs. These are communicated to major borrowers in advance of any borrowing proposal or as part of the conditions for Bangko Sentral approval of proposed foreign borrowings. Companies with approved loans are also required to submit annual audited financial statements to monitor the borrower's liquidity and solvency positions. In general, private sector companies are required to limit their outstanding borrowings (domestic and foreign) to a maximum of three times their equity (or a total debt-equity ratio of no more than 75/25) to avoid over-leverage.

Private sector borrowers, especially those with huge financing requirements, often consult with the Bangko Sentral on the requirements for loan approval, current policies/rules and regulations, and the proper timing of their borrowings/bond issues in order to avoid undue competition in the capital market from other large borrowers that could adversely impact on credit terms.

To strengthen their ability to deal with adverse shocks, inter alia, banks are required to set aside a general loan loss provision, as well as specific loan loss provisions for certain categories of loans. Banks licensed to operate foreign currency deposit units are also required to maintain a 100% asset cover on all foreign exchange liabilities and to keep 30% of that cover in liquid assets. These requirements serve to limit banks' foreign currency lending and prevent exposure to excessive foreign exchange risks. The Bangko Sentral also utilises the Credit Bureau rating and Top 500 Borrowers report of its Supervision and Examination Sector as part of its off-site examination of individual bank exposures as well as to detect early warning signs of liquidity and solvency risks among the top corporate borrowers.

The Securities and Exchange Commission (SEC) is responsible for the prudential supervision and regulation of capital markets. In the performance of its functions, the SEC requires all companies listed on the Philippine Stock Exchange to fully disclose material facts that would affect investment decisions by the public, and to exercise due diligence in ensuring that information released by prospective borrowers is accurate and comprehensive. It also requires all corporations, whether listed or unlisted on the stock exchange, to submit annual financial reports.

Both the Bangko Sentral and the SEC impose administrative and monetary sanctions on supervised firms/institutions for violations of rules and regulations promulgated by them in the exercise of their respective functions.

7. Debt monitoring system

To address the data requirements of internal and external users, the Philippine external debt management system has been designed to cover all data categories, ie: (a) by borrower (public, private, bank and non-bank); (b) by original and residual maturity (short-term, and medium- and long-term); (c) by creditor; (d) by currency; and (e) by country of creditor. Borrowings of foreign-owned companies operating in the Philippines are reported as part of external debt.

Data are obtained principally from regular reports from borrowers, banks and selected creditors while initial information on foreign borrowings by large corporations that did not apply for Bangko Sentral approval are secured from news articles in local and international publications. The Bangko Sentral requires, as a condition for approval of private sector borrowing proposals, the submission of monthly reports on the status of Bangko Sentral approved loans and transactions on those loans (disbursements, principal and interest payments) using the prescribed format. Borrowers that did not seek prior Bangko Sentral approval of their loans are also required to submit monthly reports using the same prescribed format for statistical purposes in order to allow the compilation of comprehensive statistics on external debt.

Debt statistics are regularly reviewed and compared with those released in other publications such as the BIS-OECD *Statistics on External Indebtedness,* the BIS's *International Banking and Financial Market Developments* and the World Bank's *Global Development Finance*.

8. Summary

The Philippines maintains a liberalised policy on external current and capital account transactions. However, private non-bank corporate borrowings generally require the prior approval of and/or registration with the Bangko Sentral if the foreign exchange required for debt servicing will be purchased from the banking system. External debt management involves the concerted efforts of a number of government institutions led by the Bangko Sentral, which derives its mandate, inter alia, from the Constitution.

Operationalising capital account liberalisation: the Indian experience

Gopalaraman Padmanabhan[1]

1. Introduction

Increasing globalisation in the past few decades has seen more and more countries, especially emerging market countries, open up their capital accounts either partially or totally to avail themselves of the benefits of burgeoning international capital flows. India has also recognised that the move towards complete integration with the international economy is inevitable, and this has led to a cautious but sustained move towards capital account convertibility.

After Independence, the policy adopted by India was one of inward orientation and self-reliance in which dependence on the external sector was discouraged on both the current and capital account. Investments were financed largely through domestic savings, with capital flows restricted to a bare minimum. The capital account was important only as a financing function, with external financing being limited to external assistance from mainly official sources, ie bilateral and multilateral agencies. External assistance accounted for 80% of total financing requirements. Restrictions were, however, imposed on private capital flows at this time.

In the 1980s, however, this form of external financing dwindled, and as financing needs exceeded external financing it became necessary to find other sources of capital. Furthermore, the repayments to be made to the IMF for the Extended Fund Facility drawings of the early 1980s added to the requirement for fresh sources of foreign capital funds. Hence, recourse was taken to external debt on commercial terms. Syndicated loans, external commercial borrowings, etc were accessed on a modest scale during this time. Capital inflows were also obtained through two non-resident Indian (NRI) deposit schemes: the non-resident external rupee account NR(E)RA scheme and the foreign currency non-resident account FCNR(A) scheme.

2. Reforms in the 1990s

However, more substantive, albeit gradual, progress towards capital account convertibility started only in 1991. The outline for reforms in the external sector was provided in the report of the High Level Committee on Balance of Payments headed by Dr C Rangarajan. While the Committee recommended complete current account convertibility, it suggested a very gradual approach towards capital account liberalisation. The report emphasised the need to shift away from debt creating to non-debt creating inflows, with emphasis on more stable long-term inflows in the form of foreign direct investment (FDI) and portfolio investment. It also advocated a very gradual liberalisation of capital outflows from India.

Foreign institutional investments

Based on the recommendations of the Committee, many steps have been taken since 1991 to promote non-debt creating flows and reduce reliance on debt creating flows. Foreign institutional investors (FIIs) were allowed to invest in Indian equity and debt markets in 1992. The following year foreign brokerage firms were also allowed to operate in India. Prior to the reforms, NRIs and overseas corporate bodies (OCBs) were allowed to hold about 1% individually and 5% jointly of the paid-up capital of Indian companies. In 1992, this ceiling was raised to 24%, and subsequently to 40% in 1998.

[1] The author thanks ICICI Bank Limited and in particular Ms Madhur Jha for her assistance in preparing this paper. The views presented in this paper do not reflect the views of the Reserve Bank of India.

These limits have been raised even further since then. At present, investment by FIIs is allowed in different sectors up to the sectoral limits set for FDI investments. Since 2001, FIIs have also been allowed to invest in equity derivatives in India.

Currently, there are about 500 FIIs registered with the Securities and Exchange Board of India (SEBI) from around 28 different countries. In terms of market capitalisation, the share of FIIs had also increased to almost 12% of total market capitalisation of the Bombay Stock Exchange by August 2002. In FY02 portfolio investments accounted for nearly 40% of total foreign investments in India and in FY01 for 90% of the current account deficit. A major chunk of these portfolio investments came in the form FII investments.

Indian companies were also encouraged to issue American depositary receipts and global depositary receipts (ADRs and GDRs) to raise foreign equity in 1992 subject to the rules governing the repatriation and end use of funds. These rules were further relaxed in 1996 after being tightened in 1995 following a spurt in such issues. The requirement of a three-year track record was removed for investments in infrastructure projects, restrictions on the number of issues per year were lifted and end use requirements were relaxed. At present, ADRs, GDRs and foreign currency convertible bonds can be raised through the automatic route without any restrictions.

Foreign direct investment

FDI norms have been liberalised and more and more sectors have been opened up for foreign investment. Investment was initially allowed up to 51% through the automatic route in 35 priority sectors. The approval criteria for FDI in other sectors were also relaxed and broadened. In 1997, the list of sectors in which FDI could be permitted was expanded further with foreign investment allowed up to 74% in about nine sectors. The areas covered under the automatic route have been expanding ever since 1991. This can be seen from the fact that while till 1992 inflows through the automatic route accounted for only 7% of total FDI inflows, this proportion has increased steadily with investments via the automatic route accounting for about 25% of total FDI inflows in India in 2001.

Table 1

Foreign investments

(in USD millions)

	FDI	Portfolio
1990-91	97	6
1991-92	129	4
1992-93	315	244
1993-94	586	3,567
1994-95	1,314	3,824
1995-96	2,144	2,748
1996-97	2,821	3,312
1997-98	3,557	1,828
1998-99	2,462	–61
1999-00	2,155	3,026
2000-01	2,339	2,760
2001-02	3,904	2,021

Source: *Handbook of Statistics on Indian Economy,* 2001.

Today, FDI is usually permitted through the automatic route unless otherwise specified and is allowed in non-bank financial activities and insurance. There are an increasing number of fields where 100%

foreign investment has been allowed, such as special economic zones (SEZs) and telecommunications. Recently a decision has been taken to allow FDI in the print media. Thus, today, FDI is allowed in almost all sectors except defence, information and broadcasting, agriculture and plantations, and atomic energy.

The FDI policy followed by the Indian authorities has been to encourage investment in infrastructure and the development of telecommunications and basic industries. This can be inferred from the fact that, in the first three months of 2002, maximum inflows were directed into the fuel and power generation industry followed by telecommunications, transportation and the automobile industry. The source countries for these flows are very diversified, with maximum inflows from Mauritius, the United States and Japan; the leading Asian countries are Korea, Singapore and Hong Kong. A list of reforms in this area during the last two years is provided in the Annex.

External commercial borrowings

Management of the capital account is also operationalised through policies on external commercial borrowings (ECBs) and non-resident deposits. There were some modifications to the limits for raising ECBs in 1991 to avoid excessive dependence on borrowings, which was instrumental in the 1991 balance of payments crises. In March 1997, the list of sectors allowed to raise ECBs was expanded; limits for individual borrowers were raised while interest rate limits were relaxed and restrictions on the end use of the borrowings largely eliminated. However the rule of thumb that was followed was to discourage the raising of short-term debt.

In 2000, the Indian government permitted the raising of fresh ECBs for an amount up to USD 50 million and refinancing of all existing ECBs through the automatic route. Corporates no longer had to seek prior approval from the Ministry of Finance for fresh ECBs of up to USD 50 million or for refinancing of prevailing ECBs. The Indian government further delegated powers to the Reserve Bank of India (RBI) in respect of ECB approvals by increasing the limit for the ECB approvals that could be given by the RBI to USD 100 million under all windows. The ECB limit for equity investment in infrastructure projects was raised to USD 200 million.

End use restrictions were also relaxed further, with ECBs being permitted for all purposes except investment in real estate and capital markets. Other incentives were also provided, with export-oriented units (EOUs) being permitted to have a foreign currency exposure up to 60% of the project cost. The RBI was also delegated the power to approve prepayments as per existing guidelines, even for ECBs that had been approved earlier by the Ministry of Finance. In order to discourage a bunching-up of flows depending on market conditions, prepayment of loans is generally discouraged. Recently, given the comfortable forex reserve position, prepayment of ECBs has been allowed to the extent of foreign currency balances with corporates in the exchange earners' foreign currency account.

NRI deposits

Non-resident deposits were first accessed in the 1980s. There were basically two kinds of deposit schemes available: deposits denominated in Indian rupees, which did not have any exchange guarantee, and foreign currency denominated deposits.

Rupee-denominated deposit schemes were of two types: NR(E)RA and NR(NR)RD. The non-resident external rupee account (NR(E)RA) scheme was introduced in February 1970 and could be opened only by non-residents of Indian origin and by overseas corporate bodies. It allowed the repatriation of both principal and interest payments. The other scheme, NR(NR)RD, ie the non-resident, non-repatriable rupee deposit scheme, was introduced in June 1992 and permitted the opening of accounts by all non-residents, including foreign citizens. It provided for the repatriation of interest payments only.

Different types of foreign currency denominated non-resident deposit schemes were introduced over time. The foreign currency non-resident account (FCNR(A)) scheme came in in 1975. This scheme was open only for non-residents of Indian origin and OCBs. In this scheme the foreign exchange risk was borne by the RBI and subsequently by the Indian government. The scheme was withdrawn with effect from August 1994. The FCNR(B), or foreign currency non-resident (banks) account scheme, was introduced in May 1993, with the foreign exchange risk borne by banks. The external payments crisis of 1990-91 led to the introduction of the foreign currency (banks and others) deposit (FC(B&O)D) scheme. This scheme was open not only to NRIs/OCBs but also to foreign citizens and banks and

other institutions. Withdrawals before maturity were not possible in this scheme, and it was terminated in July 1993. Another scheme which was terminated was the foreign currency (ordinary non-repatriable) scheme since it did not receive a positive response from investors. Finally, an account was started as late as April 1999 to simplify the procedures applicable to the operation of bank accounts and financial transactions for persons who would voluntarily undertake not to seek repatriation of funds held in this account and/or the income/interest accrued thereon. Since the beginning of the 1990s, the inflows on account of NRI deposits have been rising steadily. The total annual net inflows rose from INR 14.12 billion in 1991-92 to INR 105.85 billion in 2001. At the end of March 2002, balances in the non-resident deposit schemes stood at USD 25.15 billion.

Since 1991, there have been major changes even with respect to inflows on account of NRI deposits. In the 1990s, steps were taken to rationalise the structure of non-resident deposits. The flight out of India of such capital during the 1991 crises led to the view that these deposits were an expensive and very volatile component of the capital account. Keeping this in mind, spreads between the regulated rates paid on these deposits and international rates were reduced to make these deposits less attractive. While relaxations were introduced with respect to the types of schemes that could be offered, banks were also allowed to provide differential rates of interest on these deposits. Steps have also been taken to bring the statutory liquidity ratio (SLR) and cash reserve requirement (CRR) on such deposits into line with those on other deposits. As a further move towards full capital convertibility, NRI deposits were made fully convertible as of 1 April 2002.

Committee on Capital Account Convertibility (Tarapore Committee)

Seeing the benefits that other countries were reaping from a more open capital account and greater integration with the international markets, a Committee on Capital Account Convertibility was set up under the chairmanship of Dr Tarapore. It submitted its report in May 1997. The report acknowledged the need to move towards full capital account convertibility and suggested a roadmap for achieving it. Bearing in mind the dangers of greater capital flows in terms of volatility and the impact on the domestic financial system, the report, however, suggested certain preconditions that needed to be met before full capital account convertibility could be attained.

The Committee put forward three basic preconditions in this connection. First, a reduction in the fiscal deficit to gross GDP ratio to 3.5%; second, an inflation target of 3-5%; and lastly, measures to strengthen the financial sector, and especially the banking sector. The ratio of gross non-performing assets (NPAs) to advances was to be reduced to 5% and the CRR to 3%. All these measures, it was hoped, would be achieved by 1999-2000. At the same time, the Committee called for a reduction in the external debt service ratio to about 20% and the prescription of a net foreign assets to currency ratio of 40%.

While most of these targeted recommendations are in place at the moment, the fiscal deficit to GDP ratio and ratio of non-performing assets to total advances are still at levels higher than that envisaged in the recommendations. The country has not, however, implemented capital account convertibility as per the schedule envisaged in the report. It was also felt that greater caution had to be exercised after the Asian currency crisis of 1997, which saw the economies of many of the Southeast Asian countries that had embraced capital account convertibility crumble as the contagion spread. However, the spread of the crisis did not imply a complete reversal of the liberalisation trend or a halt in the move towards capital account convertibility. The process of liberalisation has continued at a cautious but sustained pace.

Today many of the recommendations suggested by the Tarapore Committee's report have been implemented. Thus, while the inflows from abroad have been freed to a large extent, outflows associated with these inflows, such as interest, profits, sale proceeds and dividends, are completely free of any restriction. All current earnings of NRIs in the form of dividends, rent, etc have been made fully repatriable.

In line with the recommendations of the report, convertibility in terms of outflows from residents, however, remains more restricted. Residents are not allowed to hold assets abroad. However, direct investment abroad is permissible through joint ventures and wholly owned subsidiaries. This is encouraged since it helps India to earn foreign exchange through earnings such as dividends, royalties and fees for the transfer of technical know-how. Such ventures also encourage the export of Indian goods and technology to the rest of the world and lead to the dissemination of Indian technical know-how.

An Indian entity can make investments in overseas joint ventures and wholly owned subsidiaries in the order of USD 100 million during one financial year via the automatic route. At the same time, investments in Nepal and Bhutan are allowed in the order of INR 3.5 billion in one financial year. Units located in SEZs can invest out of their balances in the foreign currency account. Such investments are, however, subject to an overall annual cap of USD 500 million.

Indian companies are also permitted to make direct investments without any limit out of funds raised through ADRs/GDRs. Indian entities engaged in health services, information technology and entertainment software services, chartered accountancy and legal and other related activities, etc are allowed to invest in overseas ventures of a similar nature subject to a limit of USD 1 million for a given financial year. Recently, mutual funds have been allowed to invest in rated securities of countries with convertible currencies within existing limits.

3. Banking sector reforms

A strong and robust banking system is a prerequisite for attempting capital account liberalisation. One major reason why India was able to ward off the crippling effects of the Southeast Asian crisis and manage its external sector so well is that the external sector reforms have been enmeshed with financial sector, and especially banking sector, reforms. When the first set of reforms in the external sector were introduced in 1991, the Narasimhan Committee was also constitued to provide guidelines for banking sector reforms.

The financial system from the nationalisation of banks in 1969 to the early 1990s was characterised by financial repression, with the system primarily acting as an instrument of public finance. Banks had been nationalised in the hope of spreading their reach to rural and backward areas and providing institutional sources of credit to the priority and neglected sectors of the economy. There was control of deposit and lending rates and amounts. Credit was made available to the government and priority sectors at below market rates; competition in the financial sector between different players was limited, with the public sector being predominant.

However, these policies led to banks becoming plagued by inefficiency and growing non-performing assets, a lack of transparency in operations and diminishing confidence in the health of the banking sector. The increasing dependence of the government on the banking sector to finance its deficits through the SLR meant that funds left for credit to the corporate sector were minimal. The government's appropriation through the CRR and SLR was as high as 63.5% on an incremental basis by 1990-91. This implied that, for every rupee invested in the form of deposits, it left only about a third to be lent to the commercial sector. The presence of non-price allocation mechanisms also led to the inefficient use of whatever funds were allocated to the commercial sector.

Thus was the background against which the Narasimhan Committee was set up and presented its Report on the Financial System. Since then, several of the Committee's recommendations have been incorporated with a view to strengthening the Indian banking system and making it more transparent and market-determined. The primary thrust of these reforms has been to improve the competitiveness and efficiency of the banking system. The major reforms can be broadly categorised into three main categories; the removal or relaxation of external constraints; the introduction of prudential norms; and institutional strengthening. In line with the best practices followed in developed countries, banking sector reforms were introduced. The main objective of these reforms was to bring in transparency in banks' operations with more disclosures, capital restructuring, asset classification and provisioning norms, and valuation of securities based on market rates. Banks were also required to cut down costs and bring in profit orientation.

As part of the reforms, the interest rate structure was liberalised, with banks being free to fix their own deposit rates for different maturities. There has been a rapid reduction in the CRR and SLR to 5% and 25%, respectively. Competition has been increasingly encouraged in the financial sector, with the setting-up of nine new private banks since 1994 and 21 new foreign banks by FY01.

4. Exchange market reforms and management

Sodhani Committee report

In 1993, the exchange rate was made market-determined. Further, recognising the importance of the development of the foreign exchange market, in a country opting for globalisation, an Expert Group on Foreign Exchange (the Sodhani Committee) was set up in 1994 to recommend measures to develop and deepen the forex markets, improve risk management techniques and introduce new products to enhance market efficiency.

The Committee made wide-ranging recommendations to liberalise the market and to enable the introduction of sophisticated risk management products. Most of the Committee's recommendations have been implemented in stages. Although certain restrictions were reimposed in the wake of the Asian crisis, most of these measures have since been withdrawn.

The Sodhani Committee's recommendations can be said to be the basis for the development of a fairly active foreign exchange market in India. Today, with a daily turnover of around USD 3.5 billion and ample liquidity up to one year, the Indian foreign exchange market is the largest in southern Asia. Corporates today have a broad menu of risk management products such as options, swaps and forward rate agreements for managing of interest rates and exchange risk. Corporates are also permitted selectively to hedge the commodity price risk in the international commodities exchanges.

Gold market

Internationally, gold is deemed on a par with a currency or any other investment asset. It is therefore presumed that any liberalisation measures on the capital account would have to be accompanied by a contemporaneous liberalisation of gold. In India, gold continues to be treated as a commodity for its traditional values. Severe restrictions were placed on the import of gold into the country up to 1990 but, along with the economic reforms of the 1990s, India brought about a sea change in its gold import policy. First, gold was allowed to be brought into country by non-resident Indians up to a specified amount on payment of import duty. Subsequently, in 1997, select commercial banks were authorised to import gold freely for sale in the domestic market. The tariff structure on gold was also reviewed simultaneously to ensure that the differential between international and domestic gold prices was kept to a minimum. Over a period of time the agenda is to create a deep and vibrant gold market in the country which would enable investors to look at gold more as an investment asset rather than a mere store of value.

Managing exchange markets

The authorities have not only undertaken a concerted and balanced approach towards reforms, with a careful mix of external sector and financial sector reforms, but have also used monetary and exchange rate policies efficiently to control any volatility in the exchange markets. These policy decisions along with the sustained rise in foreign exchange reserves and declining short-term debts have increased the confidence of investors in the Indian markets. The prudent mix of monetary and exchange rate policies to obtain foreign exchange market stability can be seen from two brief episodes since 1991 where currency market volatility was reduced through various measures.

Exchange market volatility in 1995-96

In the financial year 1995-96, there was an overall balance of payments deficit caused by a steep rise in the current account deficit to 1.7% of GDP from 0.9% for the previous year (Table 2). The simultaneous slowing-down of FII flows into the country implied that this rise in the deficit could not be covered by capital flows. A sharp rise in imports by about 26.9% over the previous year caused the trade deficit to almost double, although exports registered a rise of 20.8% powered mainly by a jump in agricultural exports.

Table 2

External sector indicators

(in USD millions)

	1994-95	1995-96	Percentage change (year on year)
Exports	26,331	31,797	20.76
Oil imports	5,928	7,526	26.96
Non-oil imports	22,727	29,151	28.27
Trade balance	–2,324	–4,881	110.03
Current account	–3,396	–5,899	73.70
Capital account	9,156	4,678	–48.91
FCNR(A)	7,051	4,255	–39.65
FCNR(B)	3,063	5,720	86.75
FDI	1,314	2,133	62.33
FII	1,503	2,009	33.67

Source: RBI, *Annual Report,* 1995-96.

Net capital flows, declining sharply and for the first time since 1992-93, were unable to cover the current account deficit. Both external assistance and external commercial borrowings saw declines and were able to meet only about one sixth of financial requirements. Net commercial borrowings almost halved in the year, as did net drawings under short-term credit.

There was a spurt in FDI flows in the order of USD 2.13 billion (Table 2) to financial companies, engineering and electronics companies, etc, reflecting the strong performance of the industrial sector in the country. There was a completely different picture on the portfolio investment front, however. Portfolio flows fell from USD 3.62 billion in 1994-95 to USD 2.21 billion. Flows to emerging markets had slowed down in this period, with investors already wary on the back of the Mexican currency crisis in 1994 and rising rates of interest in the United States attracting funds. Inflows into India also saw a decline, as there was a slump in inflows on account of GDRs of Indian corporates in the euromarkets.

The initial weakening of the Indian rupee came about in October 1995 with a rise in the value of the US dollar against all other major currencies. The pressure for depreciation mounted as importers covered positions and exporters held back remittances, causing a continuous mismatch between the demand for and supply of dollars.

In response, the RBI withdrew liquidity totalling INR 2.78 billion from the system to contain the money supply imbalance in October 1995. This exchange market operation led to a steep rise in the call rates. The burgeoning demand for investment credit called for an easing of reserve requirements and an injection of liquidity into the system via reverse repo auctions.

To deal with the growing demand for credit, the CRR for scheduled commercial banks were cut systematically from 15% in November 1995 to 12% in July 1996. CRR for non-resident deposit schemes were also systematically reduced from November 1995. Furthermore, the SLR on outstanding liabilities under the NR(E)RA scheme was lowered from 30% to 25% in April 1996. These measures were undertaken to attract funds into the foreign exchange market by encouraging banks to mobilise foreign exchange deposits.

Simultaneously, the RBI took measures to reinforce the exchange market intervention, by encouraging the remittance of export proceeds and arresting the pace of import payments. Effective from October 1995, the interest rate surcharge of 15% was imposed on outstandings under the import credit limit. The USD/INR exchange rate regained some stability at around INR 35.00 till January 1996, when it jumped to INR 37.95.

The RBI again moved in to control the volatility in the foreign exchange market. The interest surcharge on import finance was hiked from 15% to 25% to discourage the overuse of credit for financing imports. It also discontinued the scheme of post-shipment export credit denominated in foreign currency in February 1996 to prevent exporters from earning a positive differential over the cost of funds simply by drawing credit and retaining the forward premia. The rule under which exporters not realising export proceeds within six months of the shipment of goods were liable to face punitive action was enforced more vigorously. The RBI also made mandatory the reporting of any cancellation of forward contracts booked by banks for amounts of USD 100,000 and above on a weekly basis.

On the interest rate front, scheduled commercial banks were allowed to set the interest rates on domestic term deposits with a maturity of over two years from October 1995. This was extended to domestic term deposits with a maturity of more than a year. This move was also intended to provide banks with greater funds for credit disbursal purposes. Further, the minimum period for term deposits was reduced from 46 to 30 days.

To realign the interest rate on domestic deposits and that on non-resident external rupee term deposits, the latter was raised by 400 bp. Some banks reduced their prime lending rate, which had climbed from 14% in October 1994 to 16.5% in November 1995, to 16%. All these measures ensured that the instability in the foreign exchange market was controlled and the USD/INR exchange rate stabilised at around INR 35.80.

The FCNR(A) scheme was discontinued in 1994 and so all net inflows were on account of the recouping of maturing deposits. Banks had a problem attracting deposits under the FCNR(B) scheme given the prohibitive costs implied by the high rates of forward premia in the foreign exchange market. However, the systematic easing of the CRR on the FCNR(B) scheme from 14.5% to 7.5% in November 1995 and the further exemption from the CRR of 7.5% for the deposits outstanding on 24 November 1995 helped banks to mobilise funds in the last quarter of the year and deposits grew by about 85% over the previous year.

Exchange market volatility in 1998-99

1998-99 again saw a period of volatility in the foreign exchange markets. The REER was overvalued by about 2% in this period. On the balance of payments front, the current account deficit fell to 1.1% of GDP in 1998-99 from 1.3% of GDP in 1997-98, mainly on account of a fall in import payments and good inflows via invisible receipts (Table 3). Imports fell largely due to easing oil prices, whereas inflows on account of software exports, wage remittances, etc boosted invisible receipts. Exports were sluggish following a slowdown in both the domestic and international markets after the Asian currency crisis.

Table 3

External sector indicators

(in USD millions)

	1997-98	**1998-99**	**Percentage change (year on year)**
Exports	35,006	33,219	–5.10
Oil imports	6,399	10,482	63.81
Non-oil imports	33,321	35,990	8.01
Trade balance	–6,478	–7,068	9.11
Current account	–5,500	–4,308	–21.67
Capital account	9,844	8,565	–12.99
FCNR(A)	–	–	–
FCNR(B)	8,467	8,323	–1.7
FDI	3,557	2,462	–30.78
FII	5,385	2,401	–55.41

Source: RBI, *Annual Report,* 1998-99.

The capital account, on the other hand, saw a lot of volatility. Net capital inflows fell from USD 9.8 billion in 1997-98 to USD 8.6 billion in 1998-99. This fall was basically caused by outflows on the portfolio account in the order of USD 68 million, as compared to an inflow of USD 1.83 billion for the previous year. The general slowdown of the Indian economy from 6.3% in 1997-98 to 4.6% in 1998-99 together with wariness to invest in Asian markets following the currency crisis in 1997 were the major reasons for these outflows. The imposition of economic sanctions on India following the nuclear tests in May 1998 led to further outflows.

The overall balance of payments showed a surplus of about USD 4.2 billion. However, inflows of around USD 4.3 billion on account of the Resurgent India Bond scheme accounted for a major portion of the surplus.

There was general pressure on the USD/INR exchange rate to depreciate as the USD strengthened against other Asian currencies in the wake of the crisis in 1997. With the imposition of economic sanctions following the nuclear tests and the ensuing flight of capital, there was a situation of excess demand for dollars in the economy. This led to a sharp weakening of the Indian currency from about INR 39.7 per USD in May 1998 to about INR 42.4 in June 1998.

Although the foreign exchange market had seen some volatility towards the third quarter of the financial year 1998, there was overall stability in the market in the last quarter of FY98. Given this stability on the external front and in order to provide a fillip to the lagging domestic industry, the RBI had reduced the bank rate (the key policy rate) by 1.5 percentage points in April. This measure was intended to encourage investments and boost industrial growth. Other interest rates linked to the bank rate were also lowered. Public sector banks reduced their prime lending rates and deposit rates. The repo rate was reduced by 100 bp on three successive occasions to reach a level of 5% by June 1998.

The response of the RBI in this period is a classic example of the way in which any apex bank uses monetary policy to impact the economy. The RBI alternated between an easy and a tight monetary policy in the same financial year depending upon the situation prevalent in the economy.

Initially, in June 1998, the RBI announced its readiness to sell foreign exchange in the markets to rebalance the demand and supply of funds. It also allowed the FIIs to manage their exchange risk exposure by undertaking foreign exchange cover on their incremental equity investment from June 1998 onwards.

Banks and authorised dealers of foreign exchanges were allowed to directly approach the RBI for foreign exchange purchases and all domestic financial institutions were allowed to buy back their own debt paper or other Indian paper from international markets. Banks were also cautioned against using a spread of more than 1.5 percentage points above Libor on export credit in foreign currency, down from the 2 to 2.5 percentage points allowed earlier. The rupee stabilised reasonably on the back of these measures.

The rupee, however, came under pressure again in August 1998 as the crisis spread to Russia and there were concerns of Chinese renminbi devaluation. To prevent speculative forces from causing violent movements in the rupee, the RBI took various measures to tighten monetary policy. It raised the CRR from 10% to 11% and the repo rate from 5% to 8%. These measures were essentially short-term measures, which left the deposit and lending rates of the banks unchanged. They were intended to prevent excess funds from the domestic market spilling over to the foreign exchange market.

The Reserve Bank enhanced the forward cover facilities for FIIs and withdrew the facility to rebook the forward contracts cancelled for imports and splitting the forward and spot legs for a commitment. It also allowed flexibility in the exchange earner foreign currency accounts but made it mandatory to remit export proceeds within the specified time period except under exceptional circumstances.

These measures were accompanied by the introduction of the Resurgent India Bond scheme aimed at attracting foreign exchange flows into India after the imposition of sanctions and the subsequent downgrading of the country. The scheme attracted flows worth USD 4.23 billion and, together with the measures taken by the central bank, led to the re-establishment of stability in the foreign exchange market.

The RBI, while explicitly not targeting any level of the exchange rate, moves in to support the USD/INR exchange rate whenever it foresees volatile movements in the currency. For this, it usually follows a policy of changing its foreign exchange reserve position, drawing down the reserves when there is excess demand for dollars in the market and augmenting them when there is an excess supply. In this

way it ensures that all corrections to the USD/INR exchange rate take place very smoothly and without causing any panic in the exchange markets.

5. Benefits of capital account convertibility

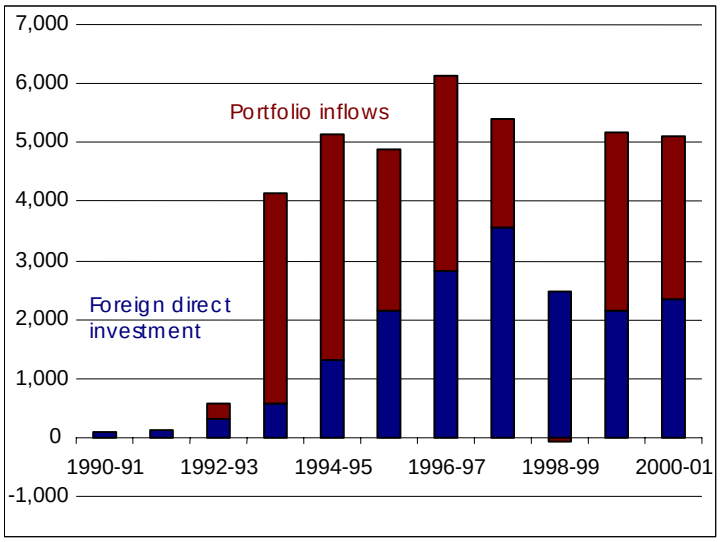
Economic growth, efficiency and productivity increase

A transition towards capital account convertibility is most beneficial for a developing country such as India since the country may be constrained in its ability to provide resources to finance its own growth. The savings-investment gap of such a country is usually very wide and is reflected in a burgeoning current account deficit. Capital inflows help finance this current account deficit. Since the time that India liberalised the capital account to some extent, capital inflows have exceeded the deficit on the current account in all but a few years and net private capital inflows have exceeded inflows on the official account. This is reflected in the rapid accretion in reserves, from USD 4.89 billion in April 1991 to USD 60.15 billion on 2 August 2002.

An increasing number of countries have encouraged foreign investments in order to bolster their economic growth through efficient utilisation of untapped resources. Furthermore, foreign investment, especially FDI, is accompanied by a transfer of state of the art technology and better management and operational practices, which enhance the productivity of the sectors obtaining the investment. The experience of India so far has borne out this fact. Since the introduction of partial capital account convertibility in India, total foreign investment inflows (foreign direct plus portfolio) rose from USD 0.13 billion in 1991-92 to USD 4.15 billion in 1994-95 and have averaged around USD 5 billion per annum since then (Graph 1).

Graph 1

Foreign portfolio and direct investment inflows

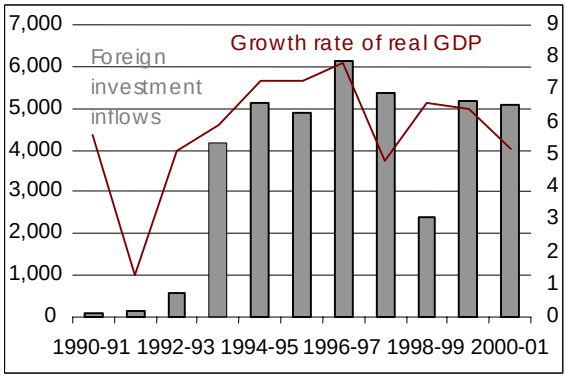


Source: *Handbook of Statistics on Indian Economy*, 2001.

India's real GDP growth rate showed a perceptible increase from 5.1% per annum in 1992-93 to 7.3% per annum in 1994-95, when foreign investment flows into India actually picked up, since when it has maintained a respectable average of over 6% (Graph 2). At the same time, the fact that capital flows are financing the wider savings-investment gap caused by domestic absorption exceeding GNP can be seen from the rise in the rate of investment in the economy. The rate of real gross domestic capital formation increased from 22.9% in 1992-93 to 26.4% in 1994-95 and has hovered around those levels since then (Graph 3).

Graph 2

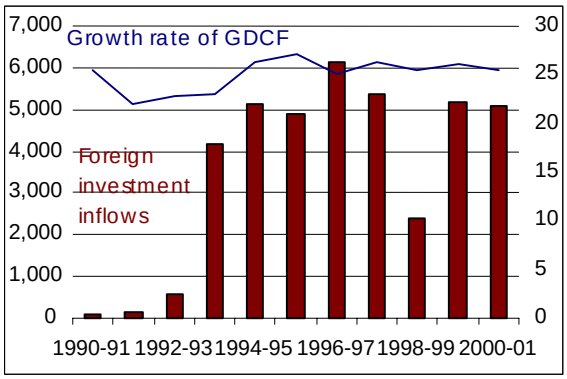
Foreign investment inflows and GDP growth



Source: *Handbook of Statistics on Indian Economy*, 2001.

Graph 3

Foreign investment flows and capital formation



Source: *Handbook of Statistics on Indian Economy*, 2001.

In a falling international interest rate regime, allowing corporates and other institutions to raise commercial borrowings abroad helps reduce the cost of funds and improves the prospects of profitability for the entity raising the resources. Competition from foreign firms also increases the efficiency of domestic firms.

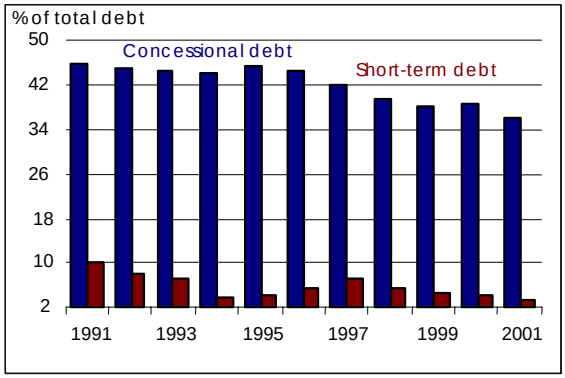
Reduction in external debt

Managing India's external debt position assumed importance for the country after the 1991 crisis. Capital inflows from sources other than debt, such as FDI and NRI deposits, along with prudent management thereof by the authorities have helped in improving India's external debt position (Graph 4). The balance of payments crisis of 1991 was largely attributable to India running up a very high proportion of short-term debt, as witnessed by a short-term debt to foreign currency asset ratio of 382.1%. At the same time, the proportion of short-term debt to total debt stood at 10% in 1991.

Accessing other sources of capital has helped India to drastically reduce these figures. At end-March 2001 the ratio of short-term debt to foreign exchange reserves stood at 8.2% while the short-term debt to total debt ratio was just 2.8%.

Graph 4

India's external debts



Source: *Handbook of Statistics on Indian Economy*, 2001

Management of foreign exchange reserves

The general policy with regard to managing foreign exchange reserves has been to ensure a comfortable level of reserves in order to instill confidence in the ability of the authorities to tide the market over through any adverse situation and quell all speculative attacks on the currency. India believes that an orderly market is a prerequisite for maintaining investor confidence. There has been a sustained increase in India's foreign exchange reserves from the low of USD 4.62 billion in 1991 to some USD 60 billion in August 2002. Reserves have grown not only in absolute terms but also in terms of their sufficiency if we look at the import cover that they provide, ie the number of months that imports can be sustained on the basis of foreign reserves. While this number stood at a low of just two and a half months during 1990-91, it has grown steadily over the years. While it averaged about six to eight months in the past few years, FY02 has again seen a jump in the import cover provided by forex reserves to about 12 months.

An analysis of India's vulnerable liabilities including its external debt with a residual maturity of less than one year (Table 4), shows that the country is at present comfortably placed to allow for greater capital account freedom.

Table 4

Vulnerable liabilities

(in USD billions, 2001)

FII investments	13.40
NRI deposits	15.43
Short-term debt	3.46
Trade credit	5.84

Source: CMIE, *Monthly Review of the Indian Economy*, September 2002.

A more cross-sectional comparison of various indicators of reserve sustainability across countries (Table 5) also shows that India had a relatively more comfortable reserve position than most other countries even by end-2000. However, a look at the ratio of total debt to reserves shows that the total external debt stands at a little more than double the reserves of our country. Nevertheless, most of this debt is long-term, which would not threaten the reserve position in the short term. In fact, the ongoing debate in India is whether the strengthening of the Indian rupee and comfortable reserve position present a golden opportunity to prepay some of the high-cost debts.

Table 5

Various indicators of reserve sustainability across a selection of countries

(expressed as percentages)

	External debt/GDP	Debt service/exports	Interest payments/GDP	Reserves/GDP	Debt/reserves
India	22.00	12.70	0.80	9.25	237.80
China	13.90	13.90	0.70	15.95	87.15
Korea	29.40	23.00	0.90	21.04	139.73
Indonesia	92.50	25.40	4.70	19.17	482.42
Argentina	51.40	85.50	3.50	9.29	553.52
Pakistan	52.10	26.10	1.40	2.61	1,998.36
Thailand	65.80	14.90	2.60	26.79	245.58
Malaysia	49.70	4.70	2.50	33.31	149.20
Philippines	69.40	13.70	3.30	19.96	347.70
Mexico	26.90	32.70	2.00	5.85	460.01

Note: Data as of 2000.

Source: World Bank site.

6. Why gradual liberalisation?

There are two basic approaches to capital account convertibility: the first is the big bang approach, in which the economy is opened on the capital account very rapidly; the other is the more gradualistic approach in which the liberalisation is undertaken slowly and over a period of time. India has followed the latter approach towards capital account convertibility.

Given the various benefits of capital account convertibility, why has India not opted for a more aggressive opening-up of the capital account? The reason lies in the fact that while a move towards complete capital account convertibility would bring in its wake several benefits, the attendant risks are also many. The authorities have realised that rapid and unplanned liberalisation of the capital account can imply more harm than benefit to an economy that is not equipped with sound macroeconomic fundamentals as indicated by the fiscal deficit and inflation levels and a strong financial sector.

The caution seems to have been validated by the experience of the East Asian countries which saw rapid growth rates and tremendous improvements in living standards comparable to those of the developed countries after opening up their economies to capital inflows. The export-led strategies followed by these countries, based on a high degree of import intensity, resulted in rising current account deficits. Opening the capital account led to massive private capital inflows, which financed these current account deficits, and domestic investment booms reflected in 40-50% investment growth rates. Implicit government guarantees to banks and fixed exchange rates encouraged excessive risk-taking by banks and led to a deterioration in loan quality. When export growth declined in 1996, investors' exuberance also faded simultaneously.

Capital outflows put sharp downward pressure on the exchange rates and the contagion effects saw the collapse of stock markets and even greater pressure on exchange rates. In this situation debt servicing became increasingly difficult, adding to the liquidity constraints. There was a burgeoning of non-performing loans and increasing debt-equity ratios for corporates as the foreign debt component increased in local currency terms. The end result was a crippling destabilisation of the financial and exchange rate markets.

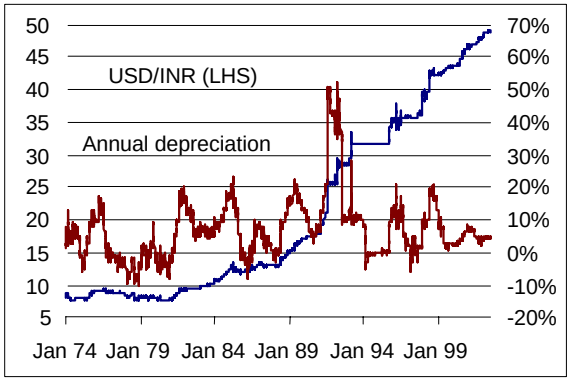
The Indian authorities have recognised the pitfalls of unrestrained capital account convertibility and the fact that domestic autonomy in terms of monetary authority becomes untenable in a situation of free

capital flows. This comes out most clearly in the case of the "impossible trinity" of fixed exchange rates, free capital flows and domestic autonomy, as can be seen from the Southeast Asian and Latin American crises. The fact that India emerged relatively unscathed from the contagion that gripped Southeast Asia has been a testimony to the prudence of following a policy of gradual opening-up of the capital account.

The Indian authorities have been quite successful in combining a gradual opening-up of the capital account with getting domestic monetary and exchange rate stabilisation policies to spur and enhance one another. While Southeast Asian currencies saw their values fall by 30-40% in terms of the REER, the Indian authorities have succeeded in reducing exchange rate volatility since the 1990s, which has imparted a certain sense of confidence to foreign investors. At the same time, robust capital inflows have helped keep the balance of payments position comfortable in most years and contributed to maintaining exchange rate stability (Graph 5).

Graph 5

The USD/INR exchange rate and its rate of depreciation



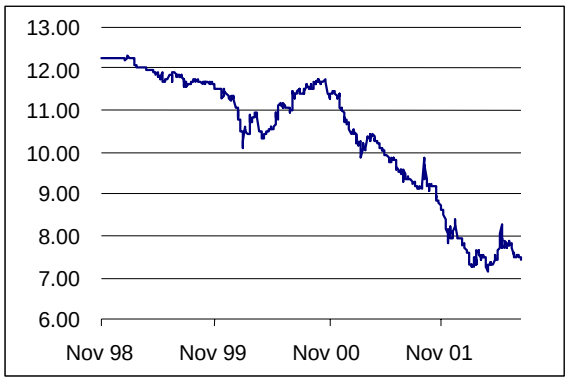
Source: Reuters.

The interest rate policy followed by the central bank has also enhanced the country's ability to attract capital inflows. Although interest rates have been falling in India, they are at higher levels than in some other countries (Graph 6). This has helped to attract capital inflows, especially in terms of NRI deposits. Good capital flows have also meant that domestic liquidity management can be used to lower interest rates and bolster domestic economic activity by reducing the cost of raising capital for investment (government securities).

Graph 6

Ten-year government bond yields

(in percentages)



Source: Reuters.

7. Further reforms: the road ahead

While perceptible liberalisation has taken place since the 1990s, full capital account convertibility would require further steps on all fronts. Liberalisation so far has occurred in line with the broad reforms being undertaken elsewhere in the economy, such as the export-import, banking sector and financial reforms. Further liberalisation and its pace would depend on how quickly reforms are implemented in other areas, the health of the economy, especially the banking sector, and the level of foreign exchange reserves.

The sectoral limits for FDI can be raised to 100% for most areas except sensitive sectors. Furthermore, the range of sectors in which investment is allowed via the automatic route could be expanded to cover almost all areas. However, the experience of other countries also indicates that, maybe, the current restrictions on foreign investment in real estate should continue even in the future in order to minimise risks of a currency crisis.

On the external commercial borrowings front, corporates could be allowed to raise loans through the automatic route in most cases and the minimum maturity guidelines can be relaxed further. Limits for such automatic route approvals may be raised fom the current USD 50 million level. Furthermore, prepayments of ECBs could be further liberalised and the need for withholding tax reviewed. Similarly, NRIs could be allowed to repatriate the proceeds from the sale of assets without any limits.

What is also essential to achieving full capital account convertibility is the freeing-up of capital outflows for residents. The limits on outward foreign direct investment by companies should be raised from the current level of USD 100 million per financial year. Furthermore, Indian residents could be allowed to hold assets abroad and invest their money in equity and debt markets through approved investment vehicles such as mutual funds. This would enable them to have a diversified and hence lower risk portfolio as well as enhance their wealth holdings.

8. Conclusion

Any debate on capital account liberalisation and convertibility always reaches a consensus about the central importance of financial sector reform, prudential norms and effective regulatory supervision. One more issue that would have to be added for a country like India where, for decades, the central bank monetised the deficit of the government is the need for fiscal discipline. These areas are gravely deficient in several developing economies, leading as they do to a worsening of the situation and in turn a crisis following capital account liberalisation.

As evident from the foregoing discussion, India has been consistently attempting discernible improvement in each of the above areas before becoming fully convertible in the capital account. The sequencing of reforms was carefully thought out. Although the Asian crisis slowed down the move to capital account convertibility, the move is still very much on. So far, the stated stance of the authorities has been that the freedom of resident individuals is of least priority while sequencing reforms. Although even this stance is undergoing review at present, the country still firmly believes that unless we are fully equipped, we should not rush into convertibility only to regret it at leisure.

In order to prepare the country for capital account convertibility, the Indian government has recently taken a very important step in setting up SEZs based on the Chinese model. The banking sector in the country is undergoing a transformation. Public sector banks, which account for about 80% of business, are being privatised in stages. Banking conglomerates are emerging on account of mergers and acquisitions. Risk management systems and accounting standards are being revamped for both banks and corporates to put them on a par with international standards.

The NPAs of the Indian banking system continue to be above acceptable levels although the position is continuously improving. Legal changes have been effected to improve the recovery process.

Most importantly, the Indian government has been making conscious efforts to improve its finances. The Fiscal Responsibility Act is in the offing. The above changes have hastened India's march towards full capital account convertibility. China, as seen from the various reports, is more or less in the same position. In the years to come, these two large economies, it is hoped, will lead world growth.

Annex:
Major initiatives to attract FDI during 2000-01 and 2001-02

- In pursuit of its commitment to further facilitate Indian industry's unhindered engagement in various activities, the Indian government has permitted, except for a small negative list, access to the automatic route for FDI, whereby foreign investors only need to inform the Reserve Bank of India (RBI) within 30 days of bringing in their investment, and again within 30 days of issuing any shares.
- Non-banking finance companies (NBFCs) may hold foreign equity up to 100% if they are holding companies.
- Foreign investors can set up 100% operating subsidiaries (without any restriction on the number of subsidiaries) without the condition of disinvesting a minimum of 25% of their equity to Indian entities, subject to bringing in USD 50 million, of which USD 7.5 million to be brought up front and the balance in 24 months. Joint venture operating NBFCs that have 75% or less than 75% foreign investment will also be allowed to set up subsidiaries for undertaking other NBFC activities, subject to the subsidiaries also complying with the applicable minimum capital inflow.
- FDI up to 49% from all sources is permitted in the private banking sector on the automatic route subject to conformity with RBI guidelines.
- In the process of liberalising FDI policy, the following policy changes have been made:
    1. 100% FDI permitted for B2B e-commerce.
    2. The condition of dividend balancing (a condition that foreign exchange invested should be matched through dividends over a specified numbers of years) on 22 consumer items removed forthwith.
    3. Removal of cap on foreign investment in the power sector.
    4. 100% FDI permitted for oil refining.
- The automatic route is available for proposals in the information technology sector, even when the applicant company has a previous joint venture or technology transfer agreement in the same field. The automatic route for FDI up to 100% is allowed in all manufacturing activities in special economic zones (SEZs), except for the following:
    1. Arms and ammunition, explosives and allied items of defence equipment, defence aircraft and warships.
    2. Atomic substances.
    3. Narcotics and psychotropic substances and hazardous chemicals.
    4. Distillation and brewing of alcoholic drinks.
    5. Cigarettes/cigars and manufactured tobacco substitutes.
- FDI up to 100% is allowed with some conditions for the following categories in the telecoms sector:
    1. Internet service providers not providing gateways (for both satellite and submarine cables).
    2. Infrastructure providers providing dark fibre (IP category I).
    3. Electronic mail.
    4. Voice mail.

- FDI up to 74% is permitted for the following telecom services subject to licensing and security requirements (proposals with FDI over 49% require prior government approval):

    1. Internet service providers with gateways.
    2. Radio paging.
    3. End-to-end bandwidth.

- Payment of royalty up to 2% on exports and 1% on domestic sales is allowed under the automatic route for the use of trademarks and the brand name of the foreign collaborator without technology transfer. Payment of royalty up to 8% on exports and 5% on domestic sales by wholly owned subsidiaries to offshore parent companies is allowed under the automatic route without any restriction on the duration of royalty payments.
- Offshore venture capital funds/companies are allowed to invest in domestic venture capital undertakings as well as other companies through the automatic route, subject only to Securities and Exchange Board of India (SEBI) regulations and sector-specific caps on FDI.
- FDI up to 26% is eligible under the automatic route in the insurance sector, as prescribed in the Insurance Act, 1999, subject to the procurement of a licence from the Insurance Regulatory and Development Authority.
- FDI up to 100% is permitted for airports, with FDI above 74% requiring the prior approval of the Indian government. FDI up to 100% is permitted with the prior approval of the Indian government in courier services subject to existing laws and the exclusion of activities relating to the distribution of letters. FDI up to 100% is permitted with the prior approval of the Indian government for the development of integrated townships, including housing, commercial premises, hotels, resorts, city and regional level urban infrastructure facilities such as roads and bridges, mass rapid transit systems and the manufacture of building materials for all metros, including associated commercial development of real estate. Development of land and provision of allied infrastructure will form an integral part of township development.
- FDI up to 100% is permitted on the automatic route in the hotel and tourism sector and for mass rapid transport systems in all metropolitan cities, including associated commercial development of real estate. FDI up to 100% in drugs and pharmaceuticals (excluding those which attract compulsory licensing or are produced by recombinant DNA technology and specific cell/tissue-targeted formulations) placed on the automatic route.
- The defence industry sector is opened up to 100% for Indian private sector participants with FDI permitted up to 26%, both subject to licensing.
- International financial institutions such as the Asian Development Bank, IFC, CDC and German Investment and Development Company are allowed to invest in domestic companies through the automatic route, subject to SEBI and RBI guidelines and sector-specific caps on FDI.
- Decision taken to allow FDI in print media.

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An overview of the Taiwanese qualified foreign institutional investor system

Karen Lu

1. Introduction

This paper details, at high level, JPMorgan's global custody and local custody experience of the Taiwanese qualified foreign institutional investor (QFII) model. The paper focuses on foreign exchange and quota monitoring systems in relation to the equity market from a foreign investors' perspective. Furthermore the paper also provides background market information; information on liberalisation initiatives which have modernised the QFII's investment opportunities; and details of market standards and mechanics, as well as adopted best practices, in relation to foreign exchange.

2. Background

The Taiwan Stock Exchange commenced operations in February 1962 with foreign investors admitted in 1982, pursuant to the Introduction of Foreign Investment Plan approved by the Executive Yuan (the administration). The Introduction of Foreign Investment Plan was a three-phase policy and was adopted as follows:

Phase 1: Direct investment through buying beneficiary certificates of securities investment trust funds;

Phase 2: Direct investment in securities by approved foreign investment institutions (QFIIs); and

Phase 3: Direct investment in securities by non-resident individuals of Taiwanese origin or otherwise (generalised foreign individual investors or GFIIs).

On 28 December 1990, in accordance with the amended Regulations Governing Securities Investment by Overseas Chinese and Foreign Investors and Remittance Procedures promulgated by the Executive Yuan, foreign institutional investors were permitted to invest directly in local securities with the approval of the securities authority. To cope with the internationalisation and liberalisation of the securities market, the Regulation was amended again on 8 November 1993, 5 July 1995 and 3 January 1996, to relax some investment restrictions on a step-by-step basis (see Section 5). Since inception, foreign institutional investors have assumed an important role in introducing professional investment techniques as well as providing the securities authority with the opportunity to experience the management of such investors. As a result of this experience, the Regulations were further revised and promulgated on 1 March 1996 to allow non-resident individuals of Taiwanese origin or otherwise to invest directly in local securities.

The Taiwan market has undergone much liberalisation in relation to exchange rates, capital flow, interest rates, financial institution development and securities market enhancements (see Section 6). Through various market directives, which resulted in amended rules and regulations, enhancements have helped modernise the market, encouraging greater foreign investment whilst maintaining adequate control, monitoring and supervision. The key laws applicable to the securities market are the Banking Law, the Securities and Exchange Law and the Insurance Law.

3. Policy framework in relation to QFIIs

Liberalisation of the market for foreign investors will continue with a three-step plan through the period 2002-4. The Statute for Investment by Foreign Nationals ("The Statute"), introduced in 1954 and amended in 1997, provides the main framework for QFIIs and foreign investors.

Article 7 of the Statute prohibits investment in certain industries, while Article 8 requests the foreign investor to submit an investment application along with an investment plan and relevant documents to the competent authority.

Three other areas which may influence QFIIs, if indirectly, are foreign exchange, choice of financial institution, and the Securities and Exchange Law.

Foreign exchange regulation

In 1949 Taiwan promulgated the Statute Governing Foreign Exchange, which was subsequently amended in 1970 with the introduction of fixed exchange rates, whereby the Central Bank managed the foreign exchange system countrywide through authorised foreign exchange banks. A shift to a flexible exchange rate system (floating rate) was adopted in 1978, with rates influenced by the Central Bank through effective control. 1989 saw the central exchange rate move to a floating exchange rate mechanism albeit with reference rates limiting fluctuations to +/– USD 0.1. In 1990 reference exchange rates were abolished, which provided banks with full discretion to negotiate foreign exchange rates, based on cost of capital, supply and demand, and the bank's position.

Liberalisation of the establishment of financial institutions

For a number of decades, Taiwan adopted a restrictive policy on financial institutions with a view to creating stability; however, this policy restricted improvements, as well as quality of service. The government then took steps to liberalise, allowing establishment of new financial institutions. In 1988 the government permitted the establishment of securities firms, which led to a sixfold increase in securities brokerage firms, securities dealers and underwriters during the next 10 years.

Securities and Exchange Law

Under Article 14-1. public companies, securities exchanges, securities firms and enterprises shall establish financial and operational internal control systems. The competent authority may prescribe rules governing internal control systems of companies or enterprises, providing a framework for corporate governance.

4. Market considerations for QFIIs

Operationally, foreign investors have four key areas for consideration when investing in the market:

(a) Application process

(b) Investment quota

(c) Settlement mechanics

(d) Reporting process

In order to supervise, monitor and administer the market, the authorities introduced reporting controls at market entry, foreign exchange execution, and at the point of trading and settlement. Originally foreign investors found it difficult to meet the QFII qualification criteria, resulting in limited investment applications (1991). The Taiwanese authorities gradually relaxed the application criteria, resulting in an increase of QFII accounts and inward remittance (1993). Further increases were witnessed as the market broadened the eligibility criteria to include pension funds (1995) and mutual funds (1996). As supervisory experience was gained through the development of the QFII and GFII systems, further steps were taken to relax the market entry criteria (2001). This has resulted in the current QFII investment position, which to date tallies at 656 QFII accounts and investment of inward remittances of USD 36 billion.

Table 1

History of QFII market developments

Year	High-level QFII market developments
1982	Executive Yuan approved three-phase policy *Phase 1*: Indirect Investment through buying of beneficiary certificates of securities investments trust funds. *Phase 2*: Direct investment in securities by Qualified Foreign Institutional Investors (QFIIs). *Phase 3*: Direct investment in securities by non-resident individuals of Taiwanese origin or otherwise (GFIIs).
1991	QFII programme introduced.
1992	55 foreign investors applied and obtained approval (QFIIs).
1993	Authorities commence relaxation of QFII qualification criteria.
1995	Foreign investor QFII eligibility extended to include pension funds.
1996	Introduction of non-resident individuals of Taiwanese origin or otherwise (GFIIs), foreign investor QFII eligibility extended to include mutual funds.
2001	Relaxation of Taiwan securities market in line with preparation to enter the WTO.

Table 2

Market shares for different types of investors, June 2002

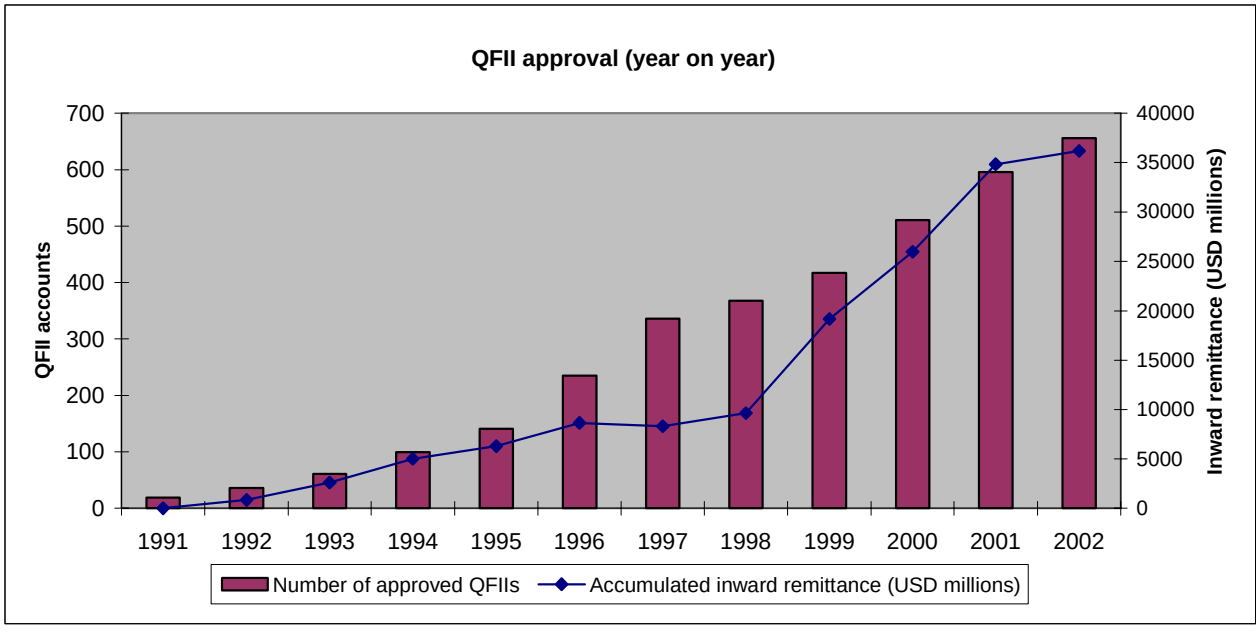
Local institutional investors	Foreign institutional investors	Local individual investors
10.5%	6.1%	83.4%

QFII approval compared to USD investment year on year (1991-2002)

The following graph provides a comparison between the liberalisation of investor eligibility criteria, and therefore application approval, and the corresponding US dollars remitted into the Taiwan market.

Graph 1

QFII approvals and inward remittance



5. Overview of QFII liberalisation

Since the inception of foreign institutional investors (QFIIs) in 1991, the Taiwan market has gradually liberalised entry criteria to an almost uniform "total assets exceeding USD 200 million", across all investor types:

Table 3

QFII eligibility and entry criteria

Investor type	1991	1993	1995	1996	2001
Bank	– Top 500 banks. – Total securities > USD 0.3bn.	Top 1,000 banks.	No change.	No change.	– Total securities > USD 0.2bn. – Established for 1 year. – Securities custody and management experience. – International finance or trust experience.
Insurance company	– 10 years' experience – Total securities > USD 0.5bn.	– 5 years' experience.	– 3 years' experience – Total securities > USD 0.3bn	No change.	– Total securities > USD 0.2bn. – 1 year of insurance experience.
Fund manager	– Incorporated for 5 years. – Total securities > USD 0.5bn.	– Incorporated for 3 years. – Total securities > USD 0.3bn.	– Total securities > USD 0.2bn	No change.	– Assets > USD 0.2bn. – Incorporated for 1 year.
Mutual fund/unit trust	n/a	n/a	n/a	– Incorporated for 3 years. – Total securities > USD 0.2bn.	– Assets > USD 0.2bn. – Incorporated for 1 year.
Securities house	n/a	– Intl experience in securities. – Total assets > USD 0.150bn.	No change	No change.	No change.
Foreign government	n/a	n/a	– Foreign governments permitted.	No change.	No change.
Pension fund	n/a	n/a	– Incorporated for 2 years.	No change.	No change.
Other investors	n/a	n/a	– Other investors to be approved by the Securities and Futures Commission.	No change.	– Total securities > USD 0.2bn. – Established for 1 year.

6. Overview of market liberalisation

The liberalisation of the market can be evidenced in five main areas: exchange rate, capital flow, interest rates, financial institutions and securities markets. The table below provides a timeline for liberalisation of these areas.

Table 4

Summary of financial market liberalisation

Year	Exchange rate liberalisation	Capital flow liberalisation	Interest rate liberalisation	Financial institution liberalisation	Securities market liberalisation
1976				Money market established.	
1978	Flexible exchange rate system established.				
1979		Foreign exchange market opened.			
1980			Banks permitted to set interest rates on negotiable certificates of deposit and debentures and bill discounts.		
1983					Securities investment trust system established.
1984		Offshore banking units (OBUs) opened.		Rules governing establishment of branches by domestic banks relaxed.	
1985			Banks permitted to set their own interest rates.		
1986				Foreign banks permitted to establish branches outside Taipei.	– Banks permitted to invest in foreign securities through specific trust funds. – Private and state enterprises permitted to issue bonds.

Table 4 (cont)

Summary of financial market liberalisation

Year	Exchange rate liberalisation	Capital flow liberalisation	Interest rate liberalisation	Financial institution liberalisation	Securities market liberalisation
1987		Foreign exchange control on trade-related transactions abolished. Relaxation on repatriation without permission, USD 5m. Inward remittance USD 50,000 per person.			
1988				Securities houses permitted in the market.	– Revision to the securities transaction law. – Foreign institutional investors permitted to invest in the market.
1989	Central exchange rate system replaced by negotiable exchange rate system.	Foreign exchange interbank call loan market established.	Interest rates liberalised.		– Foreign brokerage firms permitted to open branches. – Over-the-counter market opened.
1990	TWD exchange rate free floating and determined by market forces.				
1991		Forward foreign exchange market established.			– Permission given for Taiwan Depository Receipts. – QFII programme introduced. – Foreign ownership level (FOL) 10%.
1992		Repatriation and remittance increased to USD 5m per person.			– Insurance market opened to foreign insurance companies. – Domestic companies permitted to issue global depository receipts.

Table 4 (cont)

Summary of financial market liberalisation

Year	Exchange rate liberalisation	Capital flow liberalisation	Interest rate liberalisation	Financial institution liberalisation	Securities market liberalisation
1993		– QFII investment limit raised from USD 100m to USD 200m. – QFIIs permitted to return repatriated funds to the market within a three-month period from the point of repatriation.		Establishment of commercial banks permitted.	
1995		QFII investment quota raised from USD 200m to USD 400m.			– QFIIs permitted to trade non-deliverable forwards. – Securities traded on the TSE become scripless. – Liberalisation of QFII entry criteria. – FOL 15%.
1996					– FOL 25%. – GFII introduced.
1998		QFII investment quota raised from USD 400m to USD 600m.			– Taiwan Futures Exchange established. – FOL 30% (96-97 FOL 25%).
1999		QFII investment quota raised from USD 600m to USD 1.2bn.			FOL 50%.
2000		QFII investment quota raised from USD 1.2bn to USD 2bn.			FOL removed for the majority of market securities.
2001		QFII investment quota raised from USD 2bn to USD 3bn.			Liberalisation of entry criteria for QFII investors.

7. QFII funding

Taiwan's QFII funding can be described under three main headings:

– Investment quota

– Foreign exchange

– Reporting

7.1 Investment quota

The securities authority determines a maximum investment quota for each QFII after consulting with the foreign exchange authority. The investment quota is calculated and monitored in US dollars. The investment quota remitted into Taiwan must be converted into New Taiwan dollars within the prescribed period set by the securities authority. The portion of the quota which is not remitted and converted within the prescribed period loses its eligibility to be remitted and converted and is effectively forfeited.

Over a period of time step-by-step liberalisation has been adopted. The investment quota system, the mechanism of which covers the ceiling, quota remittance period and FX conversion procedure, has been altered, providing more opportunities to the foreign investor. The table below provides an overview of the market as it has developed.

Table 5

Overview of quota development

Year	Country quota ceiling (in US dollars)	Quota ceiling for each QFII (in US dollars)	Quota remit period	Quota revolving period	Repatriation restriction	
					Principal	Gain
1991	2.5bn	50m	3 months	nil	3 months	annually
1993	**5.0bn**	**200m**	**6 months**	**3 months**	3 months	annually
1994	**7.5bn**	200m	6 months	3 months	3 months	annually
1995	**lifted**	**400m**	6 months	3 months	3 months	annually
1996	lifted	**600m**	6 months	**6 months**	**lifted**	**lifted**
1997	lifted	600m	**1 year**	**1 year**	lifted	lifted
1998	lifted	600m	1 year	1 year	lifted	lifted
1999	lifted	**1.2bn**	1 year	1 year	lifted	lifted
2000	lifted	**2.0bn**	1 year	1 year	lifted	lifted
2001	lifted	**3.0bn**	**2 years**	**lifted**	lifted	lifted

7.2 Funding foreign exchange

During the period 1991-95, the foreign exchange authority controlled FX conversion execution. FX conversion for each inward remittance under the investment quota was subject to prior approval from the authority that determined the conversion execution date upon receipt of the conversion request from the QFII through its custodian bank. In consideration of the restriction on execution of FX conversion, QFIIs were required to fund their accounts by way of capital injection.

Starting from January 1996 when phase 3, which allowed direct investment in securities by non-resident individuals of Taiwanese origin or otherwise, was introduced, prior approval for conversion execution was lifted. This change allowed investment capital to be freely remitted into Taiwan as long as the remitted amount was within the quota ceiling for each QFII. This enhancement enabled QFIIs to change their funding practices and fund their accounts in line with their securities trade settlement.

The outward remittance of invested capital, gains and income has been liberalised on a step-by-step basis. From 1991 to 1995, the remitted capital could be repatriated after three months of capital injection, while gains could be repatriated annually. Since 1996, the remitted capital and its gains can be freely repatriated, although gain repatriation is subject to the submission of evidence of appointment of a tax guarantor or tax clearance certificate.

7.3 Reporting

Investment quota utilisation is tracked on a daily basis by the local custodians, and notified to the authorities through a number of reporting mechanisms.

Under the Taiwan regulations, the local custodian is required to establish an exclusive account for posting of daily transactions comprising investment activities for each QFII. These reports are normally submitted to the authority within 10 days after each month-end. The necessary reports are prepared and submitted to the authorities by the local custodian. The reports comprise securities and foreign exchange details, a statement of securities transactions, securities information and remittance report for the preceding month. Two months after the calendar year-end, local custodian banks prepare an annual financial statement in respect of the QFII's investment activities on its Taiwan portfolio. These reports are audited and certified by a CPA, prior to submission to the securities and foreign exchange authorities, who use these for record purposes.

8. Taiwan QFII settlement mechanics

The settlement mechanics of the Taiwan market exposes the QFII to settlement risk: securities and cash are settled separately, with a time lag on the funding.

For a purchase transaction good title is received on T+2 via Taiwan Securities Central Depository, with no interim exposure; however, for a sales transaction good funds are received on T+2 via FIS (interbank money transfer system) whilst securities are delivered on T+1. This results in interim exposure for the QFII, until funds are received, from the clearing banks and selling broker.

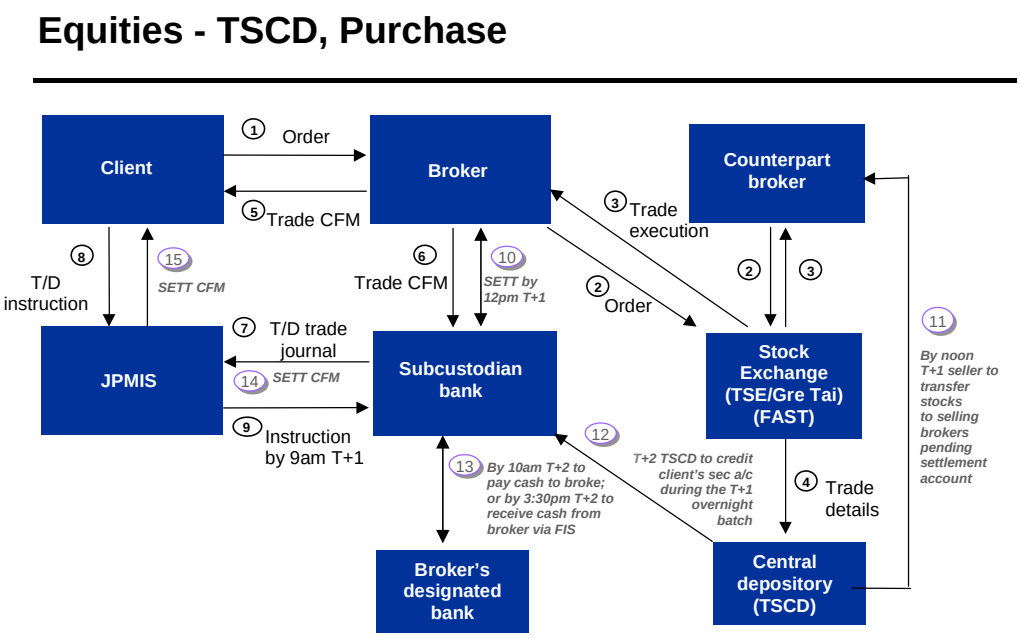
Foreign investors have greater confidence when investing in markets which posses true DVP (delivery versus payment) or RTGS (real-time gross settlement). Markets which do not provide these risk mitigating features may be viewed as less attractive to overseas investors, due to associated risks.

9. Settlement considerations for QFIIs

The authorities currently have a T+2 settlement timeframe for DVP; stock moves on T+1, with cash moving on the morning of T+2. The market has evolved with a stringent failure penalty; that is, suspension for three years should a trade fail. Although these deterrents are in place to help buoy the market, the implications of failure place tremendous pressure on the local participants, giving little room to manoeuvre should problems arise. Furthermore, there is no buy-in procedure in the market to avoid penalties should settlement failure occur. In December 2001 the market did, however, introduce Investor Error Trade Reporting. This system provides investors with the opportunity to declare an "error trade" before settlement providing an option to unwind a trade which may fail. Error trade reporting is an indication of the liberal steps the market is taking to align with markets which have sophisticated settlement failure and buy-in systems.

Graph 2

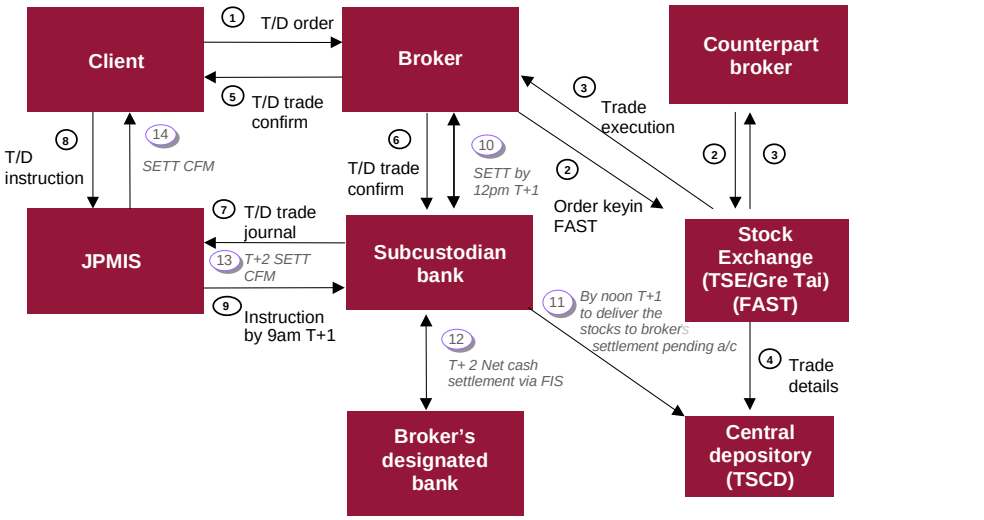
Purchase transaction equity flow



Buy side: good title will be received on T+2 via TSCD before payment is made.

Graph 3

Sale transaction equity flow



Sell side: good funds are received on T+2 via FIS while the shares have been delivered on T+1.

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The Federal Reserve Bank of New York's experience of managing cross-border migration of US dollar banknotes

Joseph Botta

1. Introduction

This paper discusses the manager's or practitioner's view of the size and scope of the distribution of US banknotes outside the United States.[1] The main issues discussed in this paper are:

- The main (direct and indirect) benefits and costs of the internationalisation of the stock of US dollars and its implications for monetary policy.
- The estimation of international stocks and flows of US dollars, and characteristic patterns and variations in the circulation of currency.
- The management of large cross-border flows of cash and the selection of institutions which arrange cross-border currency shipments.

The Federal Reserve supplies currency on demand, so the quantity of US currency in circulation increases when new demands originate anywhere in the world. While the international popularity of the US dollar has not been a deliberate policy objective, neither has it been a complete surprise. The extraordinary strength and stability of both the US economy and the US dollar, as well as the dollar's nearly unchanging appearance and the US policy of never recalling older-series notes, have given rise to near universal recognition and acceptance of the US dollar. Meeting the international demands for US currency results in many direct and indirect benefits and costs, several of which are discussed below.

2. Costs, benefits and monetary policy implications of international dollar circulation

Benefits of external dollar circulation

The circulation of US currency overseas provides benefits to both the United States and its foreign users. Foreign holders of US banknotes benefit by acquiring an asset that is liquid, secure and stable in value. These characteristics are often unavailable in their own country's currency during and after periods of turmoil. US citizens and businesses, as well as international users of the dollar, all gain a common medium of exchange that may be used to acquire goods and services. In addition, US taxpayers gain by effectively receiving an interest-free loan in the amount of the currency held overseas. The earnings from this interest-free loan are commonly referred to as seigniorage.

Seigniorage benefits are realised from the interest earned on the asset counterpart to the Federal Reserve liability for the currency in circulation. Thus, the Federal Reserve issues non-interest bearing obligations (Federal Reserve banknotes) and then uses the proceeds to acquire interest bearing assets. As currency in circulation has increased in response to the growing demands from the international markets, interest earnings have also increased. For 2000, the securities counterpart to

[1] The information and analysis presented here is largely drawn from research conducted at the Federal Reserve Board by Richard Porter and Ruth Judson (1993, 1996, 2001) and from US Department of the Treasury (2000).

Federal Reserve banknotes earned USD 32.7 billion in interest income. The Federal Reserve remits the bulk of these earnings to the US Treasury.

Costs of external dollar circulation

The Federal Reserve incurs limited direct costs in connection with the international circulation of US currency. These costs are mainly incremental expenses associated with the physical handling of payments and receipts and authentication when banknotes are ultimately returned to the United States and deposited at a Federal Reserve Bank. In addition, the Federal Reserve Bank of New York (FRBNY), manages the international banknote business for the Federal Reserve System, and incurs expenses for its Extended Custodial Inventory programme.

The large volume of dollars held overseas represents a windfall to US taxpayers in the form of billions of dollars in seigniorage revenue. However, the international use of the dollar also presents challenges, including the responsibility to ensure that the dollar is used for legitimate purposes and not for illicit trade or activities and the responsibility to ensure the integrity of US currency.

The universal acceptance of the dollar makes it an inviting target for counterfeiters, who range from organised professionals with sophisticated printing facilities to casual amateurs using copying machines or inexpensive computer printers. Where genuine dollars circulate and are accepted, counterfeits also have a chance of being accepted. Inside the United States, jurisdiction over counterfeiting cases is held by the Secret Service, which was established in 1865.[2] It routinely receives information about counterfeiting from the Federal Reserve, commercial banks and the local law enforcement authorities. Outside the United States, where the Secret Service has no jurisdiction, it is both more dependent upon and less connected to other sources of information. Further, procedures invoked when counterfeit notes are found overseas vary widely. The United States Secret Service and the Federal Reserve System have invested resources, such as opening overseas offices and providing technical assistance, to help ensure the worldwide integrity of US currency.

Implications for monetary policy

Currency makes up a small share of the domestic monetary aggregates in the United States. Currently, it comprises approximately 50% of the narrow monetary aggregate, M1, and about 10% of the broad monetary aggregate, M2.[3] However, a large volume of currency is outstanding: currency in circulation at the end of May 2002 was about USD 620 billion and it is estimated that between 50% and 70% of all notes, or between USD 310 billion and USD 435 billion, is now held abroad.[4]

Since fluctuations in the demand for currency affect the Federal Reserve's day-to-day open market operations, the FRBNY cash office is in constant communication with the FRBNY's trading desk. The FRBNY manages monetary policy for the Federal Reserve System and the US Treasury. This communication helps to keep the desk informed of international movements of banknotes so that this activity may be factored into the desk's decisions, especially at times when international demand is heavy or erratic. Data on the flows of US banknotes are also provided to the monetary affairs staff at the Board of Governors, as well as to the research function at the FRBNY, in order to assist these areas as they conduct economic research and projections.

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[2] Lambert and Stanton (2001).

[3] M1 is defined as a measure of the US money stock that consists of currency held by the public, traveller's checks, demand deposits and other checkable deposits, including NOW (negotiable order of withdrawal) and ATS (automatic transfer service) account balances and share draft account balances at credit unions. M2 includes M1, certain overnight repurchase agreements and certain overnight eurodollar deposits, savings deposits (including money market deposit accounts), time deposits in amounts of less that USD 100,000, and balances in money market mutual funds (other than those restricted to institutional investors (Board of Governors of the Federal Reserve System (1994)).

[4] Board of Governors of the Federal Reserve System (2002).

3. Estimation of international stocks and flows of US dollars, and characteristic patterns and variations in the circulation of currency

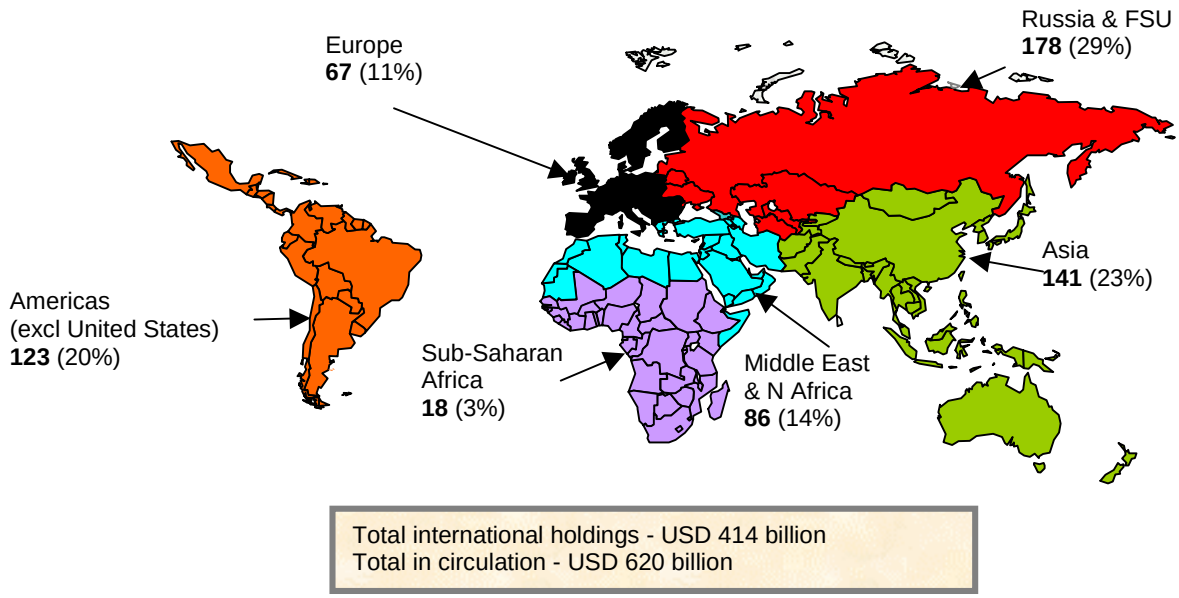
Estimation of international dollar holdings

The Federal Reserve has developed several statistical models for estimating the stocks and flows of US currency abroad. These models use confidential data on the currency shipments to and from the Federal Reserve Banks, data collected by the US Customs Service, data on cash processing at the Federal Reserve Banks and less formal information collected during international study trips. Figures 1 and 2 display the current estimates of the stock of US dollars held in various regions and the estimates of the stock of dollars held abroad from 1980 to 2005.

Figure 1

International holdings of US currency by region

(in billions of US dollars, Federal Reserve estimates as of May 2002)



Measuring flows of US currency abroad

Currently, monthly reports on the volumes sources and destinations of incoming and outgoing international currency shipments are provided to the FRBNY by large commercial banks and other banknote brokers. These reports have been provided since 1988 and present the most complete overview of currency flows. Because currency can move quickly throughout the world, often without being reported or detected, the determination of its location on any occasion is extraordinarily difficult. Nonetheless, it is clear that the lion's share of overseas US currency is in emerging market countries.

Patterns in the use of US dollars abroad

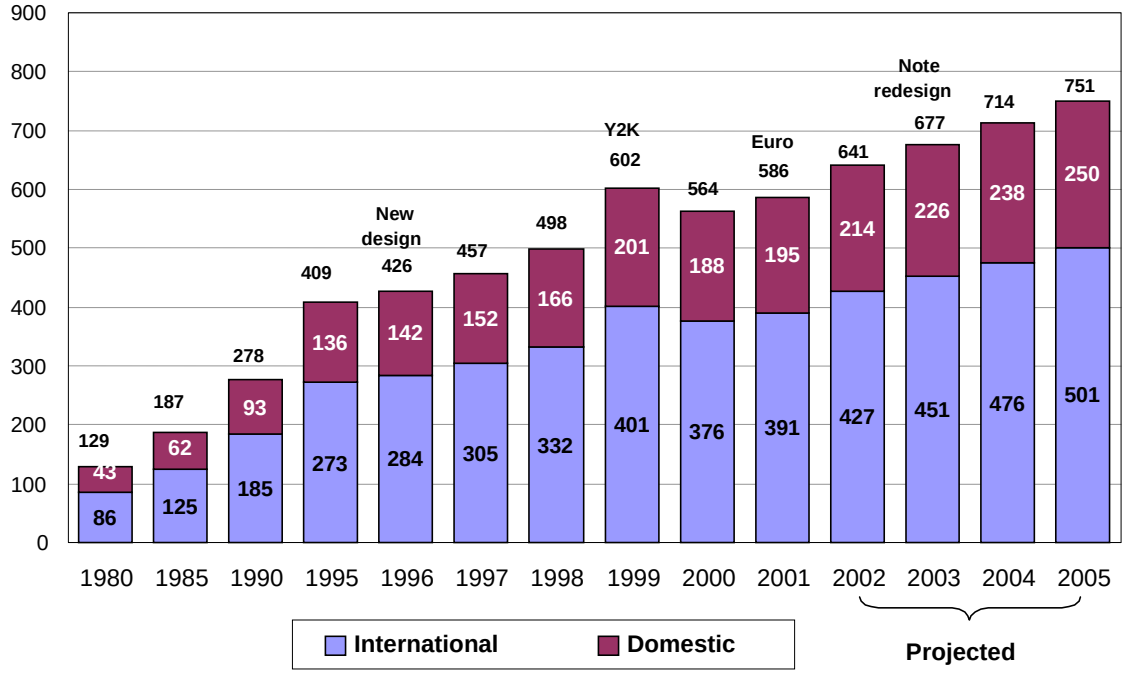
The dollar is widely used in many countries as a store of value, a transaction medium and a unit of account, even when it is not the official currency. In countries with underdeveloped banking sectors, cash is used to settle transactions of all magnitudes. In those countries with the additional burden of unstable currencies, US dollars are being held as cash and as a store of value, used for many transactions, and are often the unit of account, especially for larger transactions. Even in some countries with developed banking sectors and stable currencies, dollars are the preferred currency for

travellers, cross-border trade, settlement of large cash transactions, and transactions in the informal or "grey market" sector.

Figure 2

Currency in circulation 1980–2005

(in billions of US dollars,
Federal Reserve operations planning estimates)



Although the relative importance of each varies with economic and political conditions, there are five basic motivations for holding and using cash dollars:

- In times and places where the political or economic situation is uncertain, dollars are held for security against inflation and general calamity.
- Expatriate workers throughout the world often carry their earnings to their home countries in dollars and, between visits home, some of these workers hold dollars in cash rather than in a bank.
- Travellers to other parts of the world carry dollars because they are easier to exchange than local currencies.
- Cross-border trade in many areas is conducted largely in dollars.
- The informal or "off the books" sectors in many economies are highly dollarised.

Even though the circumstances in each country are unique, demand for US dollars (or any other currency that circulates widely outside its home country) during a crisis does follow certain patterns. A crisis leading to increased dollar usage typically originates as a growing fiscal deficit that is eventually financed by rapid money creation, which leads to inflation. Surging prices sharply reduce the purchasing power of the domestic currency and the value of accumulated savings. Monetary and fiscal reforms are proposed or promised, but, if they come at all, their arrival is usually slow and erratic. Inflation is correspondingly volatile, which in turn generates uncertainty about the future purchasing power of both cash and bank holdings denominated in domestic currency. Similarly, high and unstable inflation complicates the calculation and evaluation of any large or long-term financial transactions or investments, such as leases or time deposits.

Residents of countries experiencing these crises naturally seek other, more stable assets, and the US dollar is often the most convenient and familiar of those available. Similarly, they seek to set prices

and conduct financial negotiations in terms that are less likely to be affected by domestic inflation. Thus, as the inflationary process evolves, the first use of the US dollar is as the unit of account for large-scale and longer-term transactions in the economy. As "dollarisation" spreads, more transactions for large items like cars and real estate are either priced in US dollars or conducted in US dollars. As the realisation that usage of US dollars will prevent further losses spreads across the economy, US dollar inflows accelerate. In a simple model of this process, the demand for the foreign currency (dollars) depends on the variability of inflation rates and on the difference between the inflation rates of the United States and the developing country. The larger the variability and the difference, the greater will be the demand for US dollars.

The degree to which a country becomes dollarised and the degree to which residents prefer cash dollars to dollar-denominated bank accounts depends on confidence in the domestic banking system. Periodic bouts of inflation often wipe out the savings held in domestic currency, which encourages flight to other assets. Interest rate premiums and indexation of accounts for domestic inflation are alternatives to dollarisation, but they are only effective when people have confidence that they will provide full protection against inflation. Similarly, allowing dollar-denominated deposits is not always sufficient to eliminate a flight to the cash dollar. The bitter experience of having one's foreign currency account confiscated or devalued even once is enough to keep many people from trusting banks for decades.

A country's demand for cash dollars also depends on its economic circumstances: in order to buy US dollars, countries must have something of value to sell. Thus, richer countries or countries with well developed export sectors are more likely to be able to afford to buy US dollars. Although dollars flow into countries when the domestic currency weakens or political crisis looms, they often remain when the crisis passes. For example, an estimated 50% of the currency that flowed into Argentina in the late 1980s, into the Middle East before Operation Desert Storm, and into Taiwan after the 1996 crisis in the straits is still in those areas. Thus, it is reasonable to anticipate that US banknotes will remain abroad even after local currencies stabilise in parts of eastern Europe, the former Soviet Union and Latin America.[5]

4. How large cross-border flows of cash are managed and the role of individuals versus institutions

International distribution of US banknotes

US banknotes circulate freely throughout the world via bank and non-bank channels. In most periods, a majority of dollars in international commerce move through banking channels, which include local retail banks and major wholesale banknote dealers. Transactions in this channel represent sales and purchases to and from the public and wholesale banks. However, a significant volume of currency also moves across borders outside banking channels, in the pockets and suitcases of travellers and traders. There is presently a joint US Treasury Department/Federal Reserve effort, the International Currency Awareness Program, to further the understanding of these two markets. Unfortunately, no formal data collection system can definitively measure the total dollar value or location of US banknotes circulating outside the United States. In part, this situation arises because currency so easily and invisibly moves across national borders in the hands of travellers.

Structure of the international market for US banknotes

As with other financial instruments, US banknotes are traded internationally with small bid-ask spreads. While many financial institutions trade US dollars for other currencies in the international foreign exchange markets, no more than 30 institutions worldwide participate actively in the wholesale buying and selling (including transport and delivery) of physical US banknotes. This group of

[5] US Department of the Treasury (2000).

wholesalers includes those who are active globally and those who trade only in regional markets. Wholesale dealer banks purchase from the FRBNY approximately 90% of the US dollars that are exported to the international markets.[6] Most of the remaining purchases are distributed among the offices of the Federal Reserve Banks of San Francisco and Atlanta. The wholesalers purchase banknotes to fill customer orders and the notes are shipped either directly to the customer overseas or to distribution centres. Approximately 60% of the dollar value of US notes that the wholesale dealing banks purchase in the markets and return to the United States is deposited for processing at the FRBNY. Most of the remaining repatriated notes are deposited at the Federal Reserve Banks of San Francisco, Dallas and Atlanta.

Six geographical locations serve as the principal international distribution and consolidation hubs for US banknotes: one in the western hemisphere (Buenos Aires), three in western Europe (Frankfurt, London and Zurich) and two in offshore Asian centres (Hong Kong and Singapore). The pre-eminence of all these locations arises from their accessible transportation networks as well as their historical focus on international commerce.

US banknotes are distributed over international wholesale channels either as new notes (bundled in blue plastic wrappers from the Bureau of Engraving and Printing (BEP)), which are the preferred form for the majority of international market participants, or as fit notes (recirculated banknotes) in good condition. The preference for new notes reflects the associated lower shipping and insurance costs together with the labour costs saved by not having to count and authenticate the new notes. Most importantly, BEP notes are attractive to the international market because their original wrapping and direct delivery from the FRBNY ensures that they are counterfeit-free.

5. Extended Custodial Inventory (ECI) programme

Overview of the ECI programme

In 1996, the FRBNY introduced the ECI pilot programme, in response to the Treasury's introduction of the new design banknotes and recognition that an assured supply of US currency abroad helps to maintain stability in international financial markets throughout the world. The programme gave the Treasury an efficient and cost-effective means to distribute the new design banknotes to international markets and to facilitate the repatriation of old design currency.

An ECI facility is an overseas cash depot maintained by a private sector bank that holds currency for the FRBNY on a custodial basis in a segregated area of its vaults. The FRBNY manages the ECI programme and bears the costs associated with providing management oversight and monitoring the programme. It coordinates the shipment and receipt of currency between Federal Reserve facilities and the ECIs. All banknotes, while in inventory at an ECI, and during transit between a Federal Reserve facility and an ECI, are carried on the books of the FRBNY.

Requirements for ECI facilities

Each wholesale dealer that enters into an ECI arrangement maintains an account at a Federal Reserve Bank. That account is debited whenever the dealer sells banknotes and the banknotes are paid out of the ECI inventory to its overseas customers. Conversely, that account is credited when the bank purchases currency from its overseas customers and deposits it into the ECI inventory.

The dealers that operate the ECIs must meet the following requirements:

- They must sort the currency they deposit into the ECI inventory into old design and new design notes, and then sort the new design notes into fit and unfit bundles.

[6] US Department of the Treasury (2000).

- Old design and unfit notes must be sent back to a designated Federal Reserve cash processing operation for verification and ultimate destruction.
- Fit notes must be placed in the inventory for recirculation.
- Counterfeits detected must be reported to either the United States Secret Service or the appropriate national law enforcement agency.

Dealers that operate ECI sites bear the costs for insurance coverage and staffing of the ECI site, maintaining processing operations, and making the necessary physical renovations to house the ECI. The dealers are contractually obligated to pass on any savings realised from operating ECIs to their customers. Nonetheless, global wholesale dealers have recognised that the ECI programme has become a valuable supplement to the private distribution network.

Economists at the Federal Reserve evaluated the implicit costs and benefits of the ECI programme to the US Treasury and concluded that the implicit cost is small compared with the benefit of potential additional seigniorage that might occur as a result of increased overseas traffic in US currency. The cost is even less significant when viewed in the light of continued confidence in large stocks of US currency held abroad. Finally, the ECI programme has provided important new knowledge and information on international flows of the US currency, both genuine and counterfeit, which is critical to the US Treasury Department.

In summary, the ECI programme represents a successful new approach in the Federal Reserve System's currency distribution and processing policies. It has demonstrated that partnership with the private sector can be a cost-effective and market-sensitive approach.

ECI programme results

The ECI programme has been an efficient vehicle for the international markets to recirculate fit notes and circulate new design notes while simultaneously expediting the repatriation of older design notes. During the disruptions to the international air transportation network after the 11 September 2001 terrorist attacks, the ECI inventories allowed for a prompt response to market demands. The ECI operators have also played a significant ongoing role in the distribution of public education material relating to the new design of US banknotes and its authentication features. The planned introduction of a new design banknote in autumn 2003 will once again have the Federal Reserve and the Treasury conducting a worldwide international public education campaign, and the commercial banks that operate the ECIs and all the international wholesalers and retailers will be involved in this effort.

6. Conclusion

The US dollar is the most widely used currency in the world, reflecting the inherent trust in the stability of the economic and political structure of the United States. Foreign holders of US banknotes benefit by acquiring an asset that is liquid, secure and stable in value. As such, the dollar is used in many countries as a store of value, as a transaction medium and as a unit of account, even when it is not the official currency of the country.

Domestically, seigniorage benefits are realised from the interest earned on the asset counterpart (Federal Reserve banknotes) to the Federal Reserve liability for the currency in circulation. The Federal Reserve issues these non-interest bearing obligations and then uses the proceeds to acquire interest bearing assets. The bulk of the interest income earned is remitted to the US Treasury Department.

While there are benefits to both the United States and to the foreign users of dollars, there are challenges that must be addressed when large volumes of currency are held overseas. These include ensuring the integrity of the currency and preventing it from becoming a target for counterfeiters and ensuring that the currency is used for legitimate purposes and not for illicit trade or activities. In addition, estimating the extent of holdings and measuring the flows into and out of the United States can be challenging, but are critical data elements in making effective monetary policy decisions.

Several mechanisms are utilised to measure holdings and international flows of US currency. These include the use of statistical models which estimate stocks and flows of US currency abroad, collection

of data by the US Customs Service, and analysis of data on cash processing at the Federal Reserve Banks. Furthermore, key data regarding volumes, sources and destinations of incoming and outgoing international currency shipments are provided to the Federal Reserve by large commercial banks and other banknote dealers.

On a broader level, the US Treasury Department and the FRBNY have joined forces to establish the International Currency Awareness Program. The goal of this programme is to create a comprehensive understanding of good strategies for the introduction of new currency designs and the general patterns of currency use and counterfeiting abroad. Another tool which the FRBNY uses to manage international flows of US currency is the ECI programme, which was introduced in 1996. This programme began as a pilot when the Treasury was preparing to introduce the 1996-series new currency design banknotes. Since the programme proved useful both during the introduction process and, later, in expediting the repatriation of old design notes and promoting the recirculation of fit currency, it became a longer-term programme.

In conclusion, the liberalisation of a currency, such as the Chinese renminbi, can present a host of benefits to the Chinese domestic market. However, as experience with overseas holdings of the US dollar has shown, certain care must be taken prior to the liberalisation of any currency. Control mechanisms should be well thought out and implemented in order to ensure the future integrity of the currency as well as to shield the currency from counterfeiting. In addition, since data on the volume of currency held outside the country can be critical for monetary policy decision-making, mechanisms should be put in place to measure overseas flows and holdings. These mechanisms may include record-keeping on the part of the central bank or monetary authority as well as development of relationships with organisations such as domestic banks that can provide data on currency shipments overseas. If liberalisation of the Chinese renminbi is accompanied by such control mechanisms, positive results can be realised.

Appendix:
International Currency Awareness Program (ICAP) overview

The ICAP report presents the result of a joint study done by the US Treasury, US Secret Service and Federal Reserve on currency usage and counterfeiting activities abroad.[7] Activities included study trips to areas of the world where dollars are believed to circulate in significant quantities. The establishment of the ECIs was an outgrowth of an earlier project similar to ICAP.

ICAP operates under a congressional mandate, and its reports include three components as specified in that mandate: models of US currency usage overseas, models of counterfeiting abroad, and information obtained from country surveys with cash handlers and others knowledgeable about the extent of currency usage and counterfeiting issues abroad.[8]

Overseas currency holdings

The FRBNY supplies currency on demand and implicitly accommodates new demands. Between half and two thirds of all US banknotes in circulation are held overseas. Although the circumstances in each country are unique, demand for US dollars (or indeed any other currency that circulates widely outside its home country) during a crisis does follow certain patterns. In a simple model of this process, the demand for foreign currency (dollars) depends on the volatility of inflation and the differential between the inflation rate in the United States and the developing country. The degree to which a country becomes "dollarised" and the degree to which residents desire cash dollars rather that dollar-denominated bank accounts depends on confidence in the domestic banking system. In addition, the quantity of cash dollars demanded also depends on a country's experience with dollars in the past and its economic circumstances.

Overseas counterfeiting

Numerous news reports in the mid-1990s suggested that vast quantities of counterfeit dollars might be circulating overseas. However, examination of the data and information gathered on the ICAP country visits indicated that the incidence of counterfeiting is quite low, of the order of one in 10,000 notes. Nonetheless, it does not follow that one should be complacent about the future. The nature of counterfeiting appears to be moving from an activity involving offset printing to one involving computers and attached printers, for which prices are falling and technology and accessibility are rising. Given these technology changes, improvements in both banknotes and Secret Service procedures are needed to stay ahead of the advancing counterfeiting threats.

In addition, improvements in US Secret Service capabilities are necessary, including more field offices and improvements in the traditional methods of record-keeping. In terms of the former, the US Secret Service has increased foreign offices and task forces significantly since the ICAP trips began in 1994. On the latter, the US Secret Service has recently developed two new systems to improve statistical reporting: the Counterfeit Contraband System and the Counterfeit Note Search on the internet.[9]

Currency distribution and education campaign

Historically, new banknotes from the Bureau of Engraving and Printing have been attractive to the international market for one reason: their newness guarantees they are counterfeit-free. The 1996-Series Currency Introduction Plan provided for the establishment of an ECI pilot programme to facilitate the introduction of the new design currency, expedite the repatriation of the old design banknotes, and promote the recirculation of fit new design currency. In addition, the ECI programme

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7 US Department of the Treasury (2000).

8 US Department of the Treasury (2000).

9 US Department of the Treasury (2000).

was intended to facilitate information flows about the circulation of both genuine and counterfeit currency. Both of these goals have been realised. Currency circulation and redistribution have become more efficient, and the European and Asian ECIs have also become an important direct source of information on external counterfeiting, as the US Secret Service receives information directly from ECI operators regarding counterfeit notes detected during their verification process.

In addition, the ECIs provided a natural safety valve to deal with potential increases in currency demand related to concern about the year 2000 date change. By stockpiling US currency inventories in strategic international distribution centres, banks and currency dealers overseas have an assured, immediate supply of US currency to meet financial panics.[10]

ICAP conclusions and recommendations

ICAP has reached five main conclusions:

- The ICAP country visits have been successful in establishing new sources of information and building relationships with banknote traders as regards the use and circulation of genuine and counterfeit US banknotes abroad.
- The ECIs have worked well in providing more up-to-date information on overseas counterfeiting threats and encouraging the repatriation of old design notes.
- Due to the success of the new design note in deterring counterfeiting, more aggressive strategies for the repatriation of old design notes should be considered.
- The US Secret Service has obtained valuable information and has developed very valuable contacts through the ICAP country visits, and continues to draw upon information arising from the visits to evaluate its international strategy.
- The public education campaign did contribute to the smooth reception of the new design 1996-series notes. Information on any future new currency design should reach the international markets well before the new notes do. In particular, in future campaigns additional emphasis should be placed on early delivery of training and educational material to both cash handlers and the general public.[11]

[10] US Department of the Treasury (2000).

[11] US Department of the Treasury (2000).

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Experience of cross-border movements of Deutsche mark banknotes

Stefan Hardt

1. Introduction

The countries participating in European economic and monetary union introduced the euro as scriptural money on 1 January 1999. On 1 January 2002, monetary union was completed since, on that date, the previous national currencies, and thus also the Deutsche mark, were replaced by euro banknotes and coins. Therefore, the following comments will deal with both Deutsche mark banknotes and euro banknotes.

2. The circulation of Deutsche mark abroad

Until the introduction of euro (EUR) banknotes and coins, the Deutsche Bundesbank was the only institution in Germany which had the right to put unrestricted legal tender into circulation: in other words, banknotes denominated in Deutsche mark (DEM).

The DEM banknotes were released at the counters of various Bundesbank branches (as is the case for those EUR banknotes which are now issued by the Bundesbank). The customers (counterparties) were (are) essentially commercial banks. As a rule, the counters of Bundesbank branches deal with the commercial banks themselves or with cash in transit (CIT) companies commissioned by them. The CIT companies may also be holders of an account at the central bank, but no monetary policy operations are conducted with them.

The Deutsche Bundesbank does not ask customers how the currency withdrawn from the accounts at the central bank is later to be used or where the cash is to be transported. We know what stocks of currency the credit institutions hold at given times only on the basis of reports which the commercial banks have to submit every month. The stock of currency held by the credit institutions, however, makes up no more than a small part of all currency in circulation.

In the 1990s, it was noted that currency in circulation outside the banking system had been increasing for several years in both nominal and real terms. The increase in currency in circulation could not be explained by domestic payments. Nor could it be accounted for by suspected stockpiles of cash in Germany, the ultimate destruction of cash, or activity in any parallel grey or black economy. This only left the possibility that the rise in currency in circulation was due partly to demand abroad.

But how much DEM currency was there abroad? A statutory regulation obliged the resident credit institutions to report DEM sent to foreign economic areas as well as DEM received from foreign economic areas together with the settlement of the relevant amounts. However, the imports and exports of DEM reported by the credit institutions were likewise unable to entirely explain the high level of currency in circulation. Now, the Germans have the reputation of being enthusiastic travellers. They like going on holiday and often spend their holidays abroad. In Germany, there are also many “guest workers” who not only spend a comparatively small part of their income, but also save money and transfer it to their home country. As was pointed out in 1995 in a discussion paper published by the Economic Research Group of the Deutsche Bundesbank,[1] all these factors resulted in a circulation abroad equivalent to around 30 to 40% of total DEM currency in circulation. In absolute terms, this amounted to between DEM 65 billion and DEM 90 billion. This amount of demand for DEM banknotes

[1] Seitz, Franz (1995): “The circulation of Deutsche mark abroad”, *Deutsche Bundesbank Discussion Paper*, no 1/95.

resulted from private and commercial transactions and has never been fostered by the Deutsche Bundesbank.

Up to the end of 2001, commercial banks in Germany were required to report to the Bundesbank their imports and exports of banknotes or their settlement and to classify the data by country of origin and country of destination. However, these reports provided us with no more than limited data on the countries in which DEM banknotes mainly circulate. That is because DEM banknotes which were circulating in one country for payment purposes, for example, became surplus to requirements at some time or other and were bought by a commercial bank located in that country in foreign currency trading, but did not necessarily flow back from the commercial bank in question directly to Germany. In many cases, a commercial bank engaged in international currency trading is involved. If this commercial bank active in international currency trading happens to have its head office in a third country, the banknotes are officially imported into Germany from that third country. It is therefore not surprising that these reports often state countries of origin or of destination for the DEM banknotes in which major commercial banks active in currency trading have their head office - but these are countries in which DEM have quite definitely not been used either as a store of value or for payment purposes.

3. The changeover to the euro

At the turn of 2001-02, the time of the changeover to the EUR, the situation regarding currency in circulation was as follows. DEM in circulation had declined significantly during 2001 by more than DEM 112 billion. As of 1 January 2002, however, the EUR that had been frontloaded from September 2001 were shown in the central bank balance sheets. This temporarily led to an enormous bloating of the volume of notes in circulation.[2]

In the short term, it was difficult to forecast the scale and timing of the continued increase in currency in circulation from the start of 2002 and the return flow of the nationally denominated currency. The forecasting difficulties also had to do with the fact that there is no precise information on who is holding how much currency for what purposes or on the timing or the channel chosen for exchanging the currency. In actual fact, the additional EUR demand at the start of 2002 exceeded the Eurosystem's expectations, whereas the old banknotes flowed back more slowly than projected. However, the changeover to the EUR proceeded smoothly outside the euro area too. This assessment relates to both the return flow of the old national banknotes and the introduction of EUR banknotes and coins.

3.1 The return flow of Deutsche mark

Especially in central and eastern Europe, DEM banknotes played an important role as a store of value and also, in some cases, as a means of payment. An orderly return flow of these banknotes to the branches of the Bundesbank was very important from a logistical point of view. In order to prevent uncertainty and logistically undesirable reactions in those countries, the Bundesbank provided the countries concerned with information on how the exchange of DEM for EUR was to be implemented.

In particular, the general public in those countries was given the message that DEM banknotes would not lose their value and would be exchanged by the Bundesbank for an unlimited period free of charge even after the DEM had ceased to have the status of legal tender. In its information campaign the Bundesbank thus assumed that DEM circulating abroad were mainly being held by non-banks. Of course, commercial banks in those countries were also holding DEM in order to conduct foreign currency business with the DEM. However, the size of the DEM stocks held by those banks is likely to have been geared primarily to foreign currency turnover with their customers and presumably was thus significantly lower than the stocks held by the general public.

[2] The countervalues of the frontloaded banknotes were not immediately debited in full to the credit institutions' central bank accounts. Instead, one third of the amount was debited on each of the key refinancing dates: 2, 23 and 30 January 2002.

This meant that, by and large, the Bundesbank attempted to spread the exchange of DEM for EUR cash over a period of time. As mentioned above, DEM banknotes in circulation had already fallen significantly in 2001 by more than DEM 112 billion. This was accompanied by a marked increase in overnight deposits with the credit institutions. Mainly households, but also non-financial enterprises, significantly built up their liquid stocks of scriptural money. This behaviour is understandable, given the well known fact that EUR banknotes and coins were not yet available in 2001. Besides a reduction in residents' stockpiles of cash, a large return flow of currency from abroad was also a factor, though. For some of the DEM that flowed back from abroad it may be assumed that the previous holder had changed the cash into another currency and thus remained a holder of cash. We are unable, however, to make a conclusive judgment on the currencies into which an exchange was made, either into domestic currency or into a third currency such as the US dollar. Equally, some of the DEM in circulation abroad are likely to have been paid into domestic accounts. If the money stays in these accounts in the long term or is withdrawn from the accounts in domestic banknotes - for example, owing to increasing price stability in those countries - that part of the former DEM in circulation abroad will no longer have any further implications for future EUR in circulation abroad.

3.2 The circulation of euros abroad

The circulation of EUR abroad covers the circulation outside the countries participating in monetary union. The starting point in December 2001 was an external circulation of zero. In December 2001, as part of frontloading, the Eurosystem then began to issue more than EUR 4 billion to central banks and credit institutions active in international currency dealing outside the euro area. Anyone who thinks this made it possible to make a precise statement on EUR in circulation abroad at the start of 2002 is mistaken. In line with the terms of frontloading, commercial banks too were able to send currency abroad in advance without having to report this to the central bank. As of 1 January 2002, the date of the official introduction of the EUR as legal tender, all reporting requirements on the import and export of banknotes in existence up to that time were lifted. We do try now to obtain information on a voluntary basis, but there is no reason to assume that voluntary reporting will result in a more comprehensive picture than was the case with the earlier mandatory reports.

4. Conclusion

The procedure for handling inpayments and outpayments of cash at the Bundesbank branch counters described above makes it clear that we, as a central bank, have no knowledge of where the banknotes that leave our branches will subsequently be used. Conversely, we are unable to identify whether the banknotes that are returned to our branches have been used previously in Germany or in other countries. That is especially the case if a German commercial bank that is active in currency trading has bought DEM banknotes (from the start of 2001, EUR banknotes) in international currency trading. Since the German commercial bank is not only an international trader of currency but also conducts operations domestically with private and business customers, the banknotes from international currency trading are paid into our accounts along with the banknotes from domestic business operations.

On average, each DEM banknote was paid in, processed and paid out again at the Bundesbank branches between three and four times a year. In view of that fact, how is one supposed to keep track of cash movements? We did not know where the DEM banknotes were circulated, and the amount of DEM currency abroad had to be estimated. The circulation abroad was never promoted by the Deutsche Bundesbank, however. We still have no information about how often EUR banknotes will flow back into the central bank system in future. But given the size of the euro area, the amount of EUR in circulation - which is far larger than the circulation of DEM banknotes used to be - and the lifting of reporting requirements, it will certainly not be easy to obtain data on the circulation of EUR outside the euro area.

Offshore use of currency: Hong Kong's experience

Wensheng Peng and Joanna Y L Shi[1]

1. Introduction

This paper discusses a number of issues related to the circulation of Hong Kong dollars (HKD) outside Hong Kong. These include potential benefits and concerns for Hong Kong, and factors contributing to the external demand for HKD. The paper also provides empirical estimates of the likely holdings of HKD outside Hong Kong. Our estimates suggest that some 15-25% of the total outstanding stock of HKD may be held outside Hong Kong. In particular, the demand for HKD in mainland China appears to have increased in recent years, reflecting greater socio-economic integration and the non-convertibility of the renminbi as well as some relaxation of the foreign exchange transaction rules by the mainland authorities. The paper is organised as follows. The next section outlines the implications of HKD circulation outside Hong Kong, including the potential benefits and concerns for Hong Kong. Section 3 examines the factors that have contributed to the external demand. Section 4 provides some estimates of the likely size of the external holdings of HKD, including a review of other studies in this area. The final section concludes.

2. Potential benefits and concerns

There are a number of reasons why we have an interest in gaining some idea of the size of the external holdings of HKD banknotes.[2] First, it brings benefits to Hong Kong in the form of seigniorage. In its purest form seigniorage is simply the profit which accrues to the issuer from the issue of physical currency, because the holders of currency are in effect holding obligations of the central bank or government on which no interest is paid. In Hong Kong, when the three note-issuing banks (NIBs) issue banknotes, they are required to submit US dollars (at HKD 7.80 = USD 1) to the Hong Kong Monetary Authority (HKMA) for the account of the Exchange Fund in return for Certificates of Indebtedness (which are required by law as backing for the banknotes issued).[3] The US dollar funds are then invested by the Exchange Fund in liquid US dollar assets. At the end of 2001, the total amount of outstanding Certificates of Indebtedness was equivalent to about USD 14 billion. Assuming a rate of return of 3.5% per annum, the seigniorage is estimated to be USD 0.48 billion per year.[4] If 20% of the HKD notes are held outside Hong Kong, this means that the SAR government earns USD 0.1 billion per year from non-residents.[5] As will be discussed later, most of the HKD outside Hong Kong are held in the southern parts of mainland China (the mainland), particularly in Guangdong province.

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[1] The views expressed are those of the authors and do not necessarily reflect those of the Hong Kong Monetary Authority. The authors would like to thank Stefan Gerlach, Tony Latter and participants in the BIS/SAFE seminar on Capital Account Liberalisation in Beijing for helpful comments.

[2] Latter (2000) provides a discussion of the benefits and disadvantages of the internationalisation of currencies, which is related to the general use of a currency for international trade and financial transactions.

[3] In the case of coins, which are issued by the HKMA, transactions between the HKMA and the agent bank responsible for storing the coins and distributing them to the public are settled against US dollars at the rate of HKD 7.80 to USD 1. A new HKD 10 note, issued by the SAR government, went into circulation in mid-September, and its backing arrangement is the same as for coins.

[4] The assumption of a 3.5% rate of return was based on the average yields on three-month US Treasuries in 2001. The net return is reduced by the costs of producing the banknotes, but these are negligible relative to the earnings, particularly in the case of the higher-denomination notes.

[5] As shown later, 20% is about the midpoint of the range of our estimates.

One could also count as seigniorage, in a broader sense, any gains to the Hong Kong banking system from the use of HKD in the mainland, associated with additional demand for holding bank balances in the currency. Specifically, some of the HKD banknotes brought to the mainland, say by visitors from Hong Kong, are deposited with mainland banks, and end up as placements by the mainland banks with banks in Hong Kong. The banks in Hong Kong earn a profit margin on this intermediation. Hong Kong residents also benefit from savings on foreign exchange transactions when they use HKD notes for transactions in the mainland.

While the external demand for currency notes brings some benefits, it also has some potential disadvantages that warrant attention. One concern is counterfeiting. Opportunities to counterfeit are increased when a currency circulates outside the issuing jurisdiction because users are unfamiliar with the currency and anti-counterfeiting control mechanisms may be absent. In recent years, there have been occasional reports of a discovery of counterfeit HKD notes, but the total value has been minimal compared with the total notes outstanding. Efforts have been made to combat counterfeiting and increase public awareness of forged notes, including the introduction of new security features to the HKD 1,000 banknotes issued since 2000. In addition, the HKMA has improved and enlarged public education programmes on banknote security features in cooperation with the police and the media.

Second, external holdings of HKD, if significant and unrelated to domestic spending, may complicate the interpretation of movements in the amount of currency outstanding and in various other monetary aggregates. Third, they can also create distortions in the balance of payments statistics. Specifically, circulation of the HKD in the mainland increases Hong Kong's external liabilities, which is a capital inflow in the balance of payments. Conversely, the mainland increases its external claims, which is a capital outflow. However, these flows may not be captured by the balance of payments statistics, and estimates of such flows would help reduce the size of the errors and omissions category in the external transaction accounts.[6]

3. The external demand for Hong Kong dollars

With the opening of the mainland economy since the late 1970s, there have been increasing flows of goods, capital and people across the boundary. In particular, the number of visitors from Hong Kong to the mainland (mainly to neighbouring Guangdong province) has risen strongly in the past two decades (Graph 1). The trade, investment and personal contacts mean that HKD are frequently transferred to the mainland. Some of these HKD flow back to Hong Kong through channels such as interbank placements and spending in Hong Kong by mainland visitors. The remainder circulate in the mainland as a medium of exchange as well as a store of value.[7]

In earlier years, relatively high inflation in the mainland, episodes of renminbi (RMB) devaluation before the unification of the dual exchange rate system in 1994, and the comparative lack of alternative financial assets were important factors underlying the demand for HKD.[8] Since the mid-1990s, the RMB has been stable along with the strong performance of the mainland economy. In fact, reflecting increased confidence in the RMB and the rising importance of the mainland as a trade and investment partner, there is increasing use of RMB in the neighbouring economies including Hong Kong. Nevertheless, demand for the HKD continues in the mainland. In fact, there have been signs of an increase in the external holdings of HKD in recent years.

First, HKD banknote issuance has expanded considerably in recent years against a background of generally weak economic activity in Hong Kong, and only a moderate rise in broad money. As a result, the ratio of currency to broad money has increased (Graph 2). Of course, there are also factors that suggest a rise in domestic demand for cash. In particular, the price deflation in the past few years has

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[6] If the funds flow back to Hong Kong through the interbank placements as noted above, they are still Hong Kong's liabilities, but would be reflected in the balance of payments statistics.

[7] HKD banknotes have long been circulated in Macau in parallel to patacas. However, the magnitude of the holdings in Macau is estimated to be small because of the small size of its population (about 437,700) and economy. See Chan (2001).

[8] During 1986-93, the mainland maintained a dual exchange rate system, with an official rate that was adjusted periodically and a more depreciated market-determined rate set in the swap centres.

increased the amount of small-value purchases, and thus the use of cash. The introduction of bank charges and fees on various types of services may have induced some customers to make fewer, but larger, cash withdrawals, resulting in greater cash holdings.[9] It may have also discouraged the use of cheques or bank coupons for small-value transactions. In addition, the decline in interest rates in 2001 has reduced the opportunity costs of holding cash.[10] On the other hand, there has been increasing use of non-cash payment means including credit cards. The number of credit card accounts has nearly doubled in the past four years (to 9.5 million as of end-June 2002). The more popular use of Octopus cards in some retail chains since 2000 may have also substituted cash to some extent in small-value transactions.

Second, the rise in the stock of HKD banknotes in recent years was due largely to issuance of large-denomination notes (Graph 3). Considering the increasing use of non-cash payment means, and the weak economic activity in Hong Kong, it is difficult to imagine that the greater issuance of large banknotes was solely for domestic use. Third, informal information from some major banks suggests that the transfer of HKD cash across the boundary changed from a net inflow to Hong Kong three to four years ago to a net outflow currently, indicating increased demand from the mainland.

The unabated demand for HKD in the mainland in the face of a stable RMB probably reflects a combination of factors. First, the RMB remains a non-convertible currency, and there are controls on capital and financial account transactions by the mainland authorities. Holdings of HKD banknotes - the HKD being a convertible, stable currency - represent a means of accumulating foreign assets for some individuals and business firms in the mainland.

Second, there is an increasing number of Hong Kong enterprises operating in the mainland, and a rising number of Hong Kong residents live in or frequently travel to the mainland.[11] For these persons, the preferred means of transaction remains the HKD, reflecting the RMB's non-convertible status.

Third, the relatively large denominations of the HKD banknotes probably help the HK currency's use as a store of value as well as a means of payment, as the mainland is still largely a cash-based economy. While HKD banknotes are issued in large denominations, including HKD 100, 500, and 1,000, the denomination of the largest RMB note is only 100 (about HKD 95 at an exchange rate of 1.05).[12]

Finally, some regulatory changes in the mainland in the past few years have possibly also facilitated the increased use of HKD banknotes. Foreign-invested enterprises in the mainland are now allowed to use their RMB earnings to buy HKD from banks to pay the salary and reimburse the living expenses of their foreign employees. In addition, more domestic banks in the mainland are being allowed to conduct foreign exchange transactions. Moreover, foreign banks are being permitted to conduct such business not only with foreign-funded enterprises as in the past, but also with mainland enterprises and residents. These factors imply that demand by banks for HKD vault cash has increased to meet daily transaction needs in the mainland.[13]

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[9] A number of banks in Hong Kong have introduced a wider variety of fees and charges on account and banking services following the final phase of interest rate deregulation in July 2001.

[10] Furthermore, there has reportedly been an increase in underground economic activity, such as rising numbers of hawkers. While it is difficult to gauge the size of this increase, the incentive structure suggests that it is unlikely to be large. The tax regime has been stable and, if anything, there have been tax concessions in the past few years. Moreover, an increase in the number of tourists from the mainland, who use cash as the primary means of transaction, may have also raised the use of HKD cash in Hong Kong. Nevertheless, some of the transactions by mainland visitors are now conducted in RMB.

[11] According to a recent survey conducted by the Planning Department, some 41,300 Hong Kong residents were living in the mainland. Of that total, around 95% were living in Guangdong province and 78% were "required by work". Another survey conducted in 2001 suggests that some 496,300 persons travelled frequently, at least once a week, across the boundary for various purposes, including business, work, leisure and visits to family members. The number represented an increase of 35% over that of the 1999 survey, and most of the people concerned travelled to areas in Guangdong (Shenzhen, Dongguan and Guangzhou).

[12] Experiences in the United States indicate that the net new demand for USD 100 notes came primarily from abroad (Porter and Judson (1996)). Rogoff (1998) suggests that the issuance of large euro notes (including EUR 100, 200 and 500 bills) may enable the euro over time to challenge the dominance of the US dollar in the global market as a safe, reliable vehicle currency.

[13] This point was made by a bank that conducts considerable foreign exchange transactions in the mainland.

4. Estimating external holdings of Hong Kong dollars

In general, there are two possible ways of estimating the portion of the currency stock that is held externally. Either we could find data that measure the size of external holdings directly or we can try to find characteristics that explain domestic holdings and then take foreign holdings as the residual. The first method cannot be applied to Hong Kong because of a lack of data.[14] There are a couple of studies that rely on indirect methods by examining the demand for HKD. The following provides a brief review of the existing studies, as well as our own estimates based on alternative approaches.

Hawkins and Leung (1997) and Chan (2001) estimated external holdings of HKD by explicitly taking into account the influence of the opening-up and reform of the mainland, using a currency demand function for HKD. The former added a "dummy" time trend in the currency demand equation to approximate the external influences. The latter explicitly included macroeconomic variables in Guangdong in the model. Both studies assumed that "the mainland impact" started from around the mid-1980s.[15] Hawkins and Leung estimated that around 25% of the total currency outstanding at end-1994 was held outside Hong Kong, while Chan's estimates pointed to about 11% as of end-1999.[16]

It should be noted that both methods have limitations. In Hawkins and Leung's case, the linear time trend may not capture the dynamic impact on demand for HKD alongside the ongoing structural and financial reforms in the mainland. There is no reason to assume an increasing linear trend in the demand for HKD, for example. One drawback of Chan's method is that the estimates rely heavily on the use of appropriate macroeconomic variables of the mainland, which may vary in line with the structural and regulatory changes in the period.

An earlier study by Greenwood (1990) employed a more straightforward method, based on the assumption that the currency/GDP ratio (CR) would decrease over time as a result of the development of cashless payments and other financial innovations. Specifically, a trend to the ratio was fitted for the period 1966-84, which was extrapolated to predict the domestic demand for HKD in 1985-89. Greenwood's estimates suggest that about 18% of total outstanding HKD were held outside Hong Kong at end-1989.

We update Greenwood's estimates by extending the sample period to 2001. Graph 4 exhibits the ratio of currency to nominal GDP from 1966 and 2001. The ratio recorded a pronounced downward trend during the period 1966-84, but reversed to an increasing trend in the subsequent period. This change in the trend is similar to the patterns observed for the United States and Germany, both of which are known to have a significant amount of their currencies circulating offshore (Graph 5, Panel A). However, it is in contrast with the trend in the ratios for a group of Asian economies and some small OECD economies (Graph 5, Panels B and C).

A curve of the form of equation (1) was fitted for the period 1966-84, which was used to extrapolate the CR series for the period 1985-2001. Specifically,

$$CR = a + bx^{-n} \qquad (1)$$

where x is the time trend 66,67 …84, and n = 12.[17]

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[14] Studies on foreign holdings of the US dollar have made use of some direct sources of information about currency flows abroad. These include the Currency and Monetary Instrument Reports required by the US Customs Services and information acquired by the Federal Reserve Bank of New York on incoming and outgoing currency shipments by banks. However, these do not provide a complete picture as they miss much of the cash that is hand-carried or remitted by guest workers and travellers. Sources of indirect information about currency flows such as surveys have thus been employed. Porter and Judson (1996) provide a review of the different approaches to estimating the amount of US dollar holdings by foreigners.

[15] In the early stages of the mainland's "open door" policy (1979-83), the emphasis was put on the agricultural sector. It was only after 1984 that the emphasis shifted. Price reforms were implemented and the economy was moved towards the socialist market system. Reforms have also been steadily introduced since the mid-1980s to the financial and monetary sectors.

[16] Including an estimate of about 3% of holdings in Macau.

[17] The value of n was selected by trial and error to ensure that the CR converges asymptotically to a.

The constant *a* of equation (1) was determined with reference to the average ratio (of 0.06) in three Asian economies (South Korea, Malaysia and Taiwan, China) during 1990-2001.[18] These economies are suitable benchmarks because they have similar sets of holidays, festivals and customs to Hong Kong, and there is no significant external demand for their currencies.

Graph 6 shows the actual and extrapolated CR for the period under study. It was found that the deviation of the fitted CR from the actual CR was around 2% at end-2001, implying that about 25% (or HKD 25 billion) of total outstanding HKD were held externally. It should be noted that the estimates are sensitive to the assumption of the underlying value of the ratio. For example, if the underlying ratio was assumed to be 4% or 5%, external holdings would be about 50% and 37% respectively of the total amount as of end-2001 (Graph 7). Furthermore, this method does not capture the effects of changes in interest rates on domestic demand for currency. In particular, the declines in interest rates in 2001, which have reduced the opportunity cost of holding currency, should have raised the demand for HKD.

To capture the interest rate effect, we estimated a demand function for the HKD. However, rather than allowing explicitly for the influence of the mainland factors, we let the data search for the best-fit function for domestic demand. This was done by trying different proportions of external holdings of HKD in searching for the maximum of the log likelihood function (LLF). Specifically, the demand for narrow money balances in Hong Kong was specified as a function of real income and opportunity cost variables (including the real interest rate and expected inflation rate) (equation (2)).[19]

$$\log\left(\frac{M-\theta * CU}{P}\right)=\alpha_o+\alpha_1\log\left(\frac{Y}{P}\right)+\alpha_2\pi+\alpha_3 r+\varepsilon \qquad (2)$$

where

M = nominal narrow money, which includes the total outstanding stock of currency (*CU*) and demand deposits with banks;

θ = the ratio of external holdings of HKD ($0 \le \theta \le 1$);

P = the price level;

Y = nominal income;

π = the expected inflation rate; and

r = the real interest rate.

The left-hand side of the equation represents the real narrow money balances that are demanded domestically. For $\theta = 0$, all currency is held at home; for $\theta = 1$, all currency is held abroad. Equation (2) was estimated successively to find the value of θ that yields the maximum of the LLF (see Appendix for the details on data and estimation). The estimates suggest that the LLF reaches its maximum at $\hat{\theta} = 0.16$ (Graph 8). This implies that some 16% (or HKD 16 billion at end-2001) of HKD were held externally. A limitation of this method is that it assumes a constant proportion of external holdings, which may not be appropriate. As a result, it may overestimate the ratio in the earlier years but underestimate it in the more recent periods.

In view of the limitations and uncertainties of the different methods, all the point estimates should be treated with caution. Nevertheless, they provide a broad indication of the likely size of the external holdings of HKD. Specifically, our own two estimates in this paper suggest that a range of 15-25% of the total amount of HKD is probably held outside Hong Kong (Table 1). This is broadly in line with the estimates of the other studies for the earlier periods. For a given ratio, the increased total amount of HKD in circulation implies a rise in the external holdings in recent years. For example, at a ratio of

[18] It is assumed that should there be no offshore demand for HKD, the CR would converge gradually to the average ratio in these economies. Greenwood assumed a value of 4% for *a* with reference to the ratios in seven developed economies in the mid-1980s.

[19] A similar methodology was applied by Krueger and Ha (1995) to estimate the demand for South African rand in Swaziland. The real interest rate captures the real return on interest bearing financial instruments, while the expected inflation rate measures the opportunity cost of holding narrow money.

20%, the amount of external circulation would be about HKD 21 billion in June 2002, compared with HKD 18 billion and HKD 20 billion at end-2000 and end-2001 respectively.

Table 1

Summary of estimates of external holdings of HKD

Study	Estimates of external holdings of HKD		Period
	Value (HKD bn)	In % of total currency in circulation	
Greenwood (1990)	6	18	End-1989
Hawkins and Leung (1997)	17	25	End-1994
Chan (2001)	9	11	End-1999
Peng and Shi (2002a)[1]	25	25	End-2001
Peng and Shi (2002b)[2]	16	16	End-2001

[1] An updating of Greenwood estimates. [2] Method based on searching for the best fit of the domestic money demand function.

5. Concluding remarks

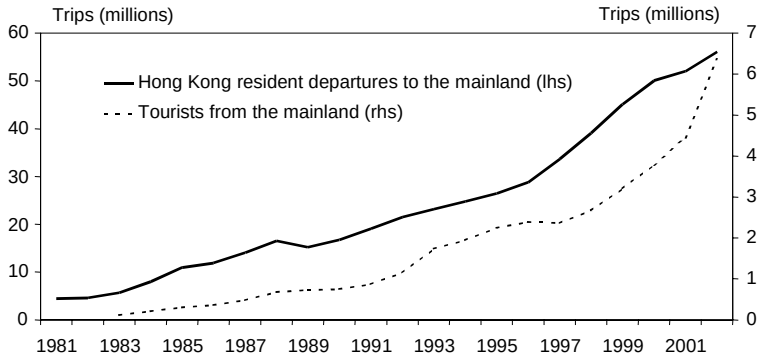
This paper examines a number of issues related to the circulation of HKD banknotes outside Hong Kong. These include potential benefits and concerns for Hong Kong, factors underlying the external demand for HKD, and empirical estimates of its likely size. Our estimates suggest that a significant amount of HKD - in a range of 15-25% of the total outstanding stock - is currently circulating outside Hong Kong.

What is interesting is that there seems to have been an increase in holdings of HKD banknotes in the mainland in recent years. This is against the background of a stable RMB, which itself has become a stronger currency that is increasingly being used in the neighbouring economies, including Hong Kong. This development probably reflects a combination of factors, including the non-convertibility of the RMB, increasing socio-economic integration between Hong Kong and the mainland, the relatively large denominations of the HKD, and some relaxation of foreign exchange transaction rules by the mainland authorities.

Finally, it should be noted that the external demand for HKD largely depends upon conditions outside Hong Kong. In particular, the non-convertibility of the RMB probably makes the acquisition of HKD - a convertible currency - particularly attractive. While the relatively large denominations of banknotes probably help, it is certainly not the case that they were designed to promote their offshore use.

Graph 1

Hong Kong resident departures to the mainland and tourist arrivals from the mainland

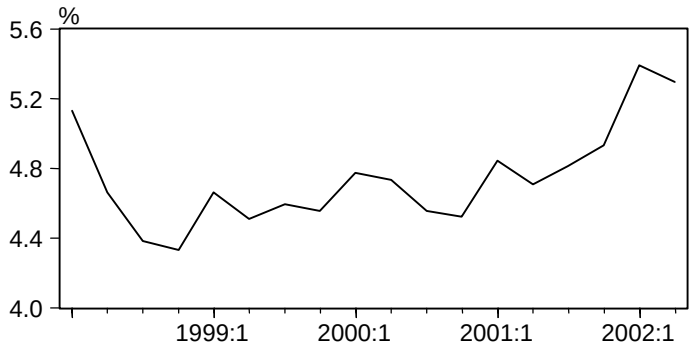


Note: 2002 figures are projected using the year-on-year growth in the first half.

Graph 2

Ratio of HK currency to broad money

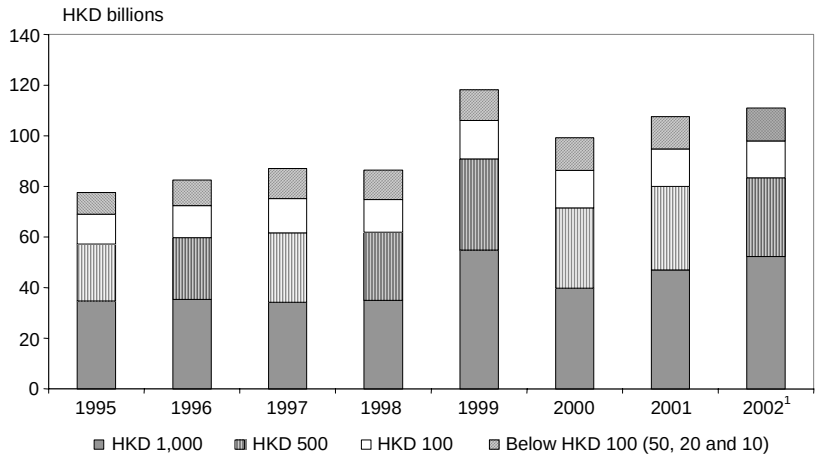
(quarterly figures)



Graph 3

Distribution of notes in circulation

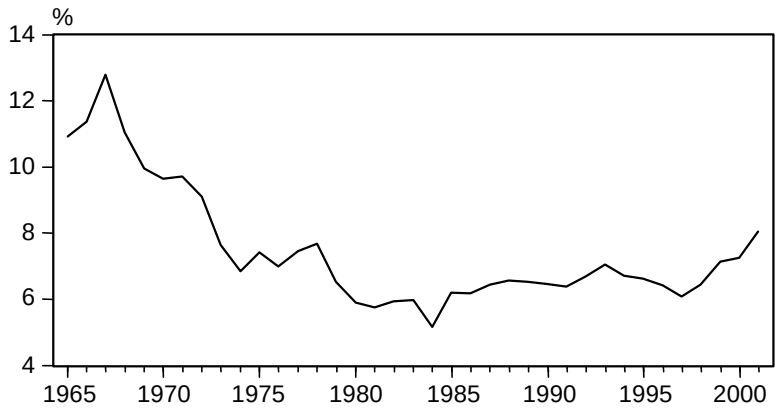
(by value)



[1] End-July 2002 figures.

Graph 4

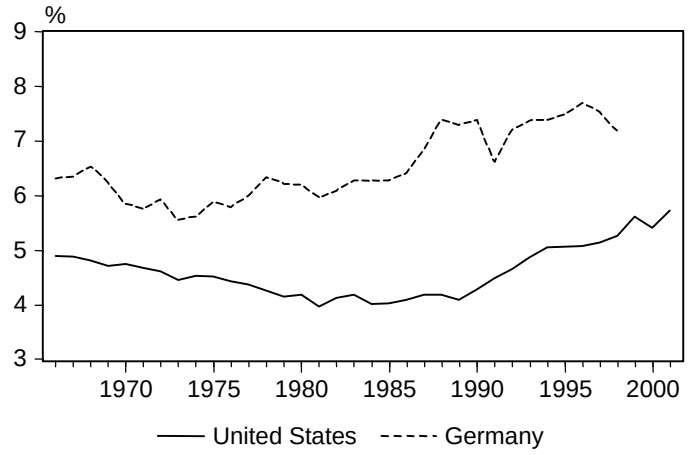
Ratio of currency to nominal GDP in Hong Kong



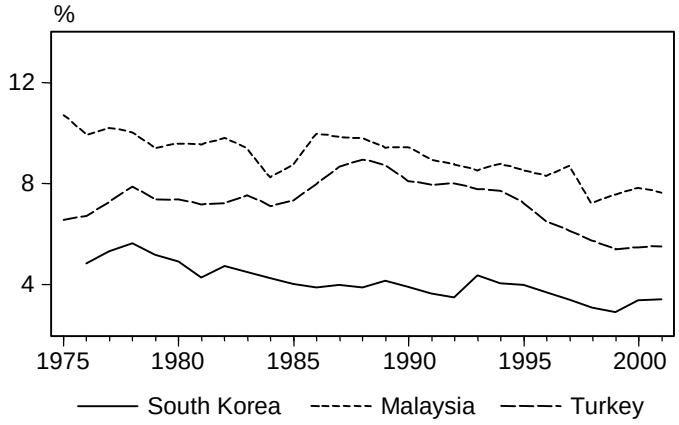
Graph 5

Ratio of currency to nominal GDP

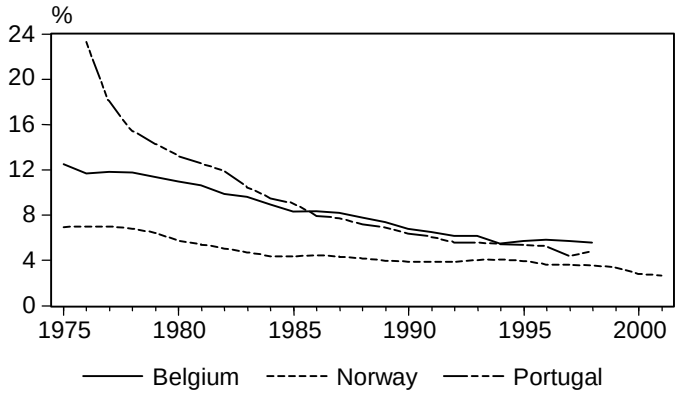
Panel A: United States and Germany



Panel B: Asian economies

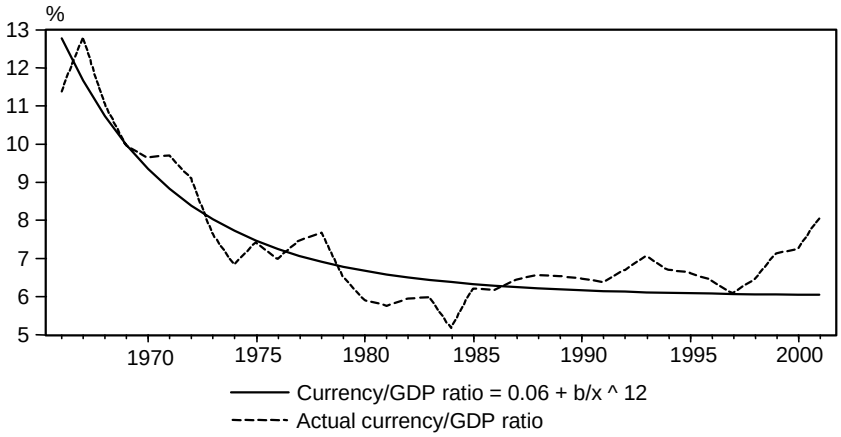


Panel C: Small OECD economies



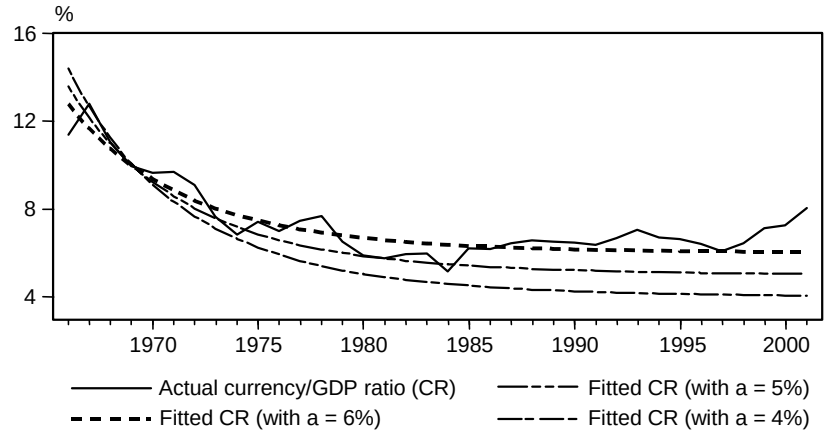
Graph 6

Actual and fitted currency/GDP ratios



Graph 7

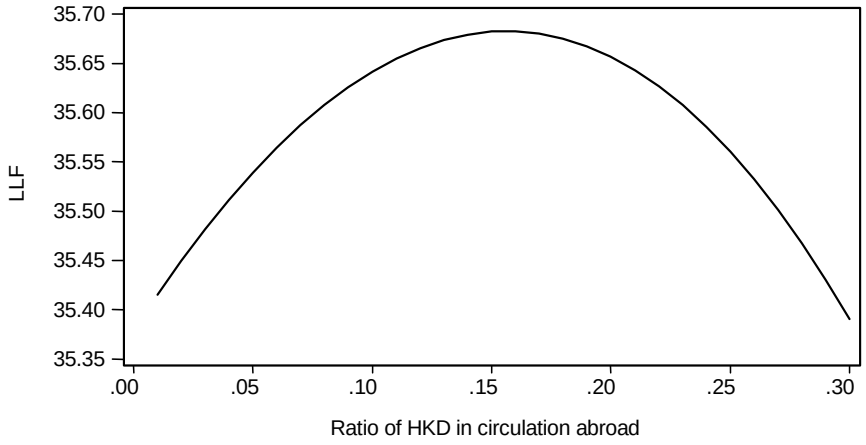
Comparison of various currency/GDP ratios



Note: The dotted curves were fitted by assuming different underlying currency/GDP ratios.

Graph 8

Log likelihood functions (LLF) for various values of θ



Appendix:
Search for the best fit of the domestic demand for money

Annual data from 1972 to 2001 were used in the estimation, and θ was assumed to be zero before 1985. Real narrow money balances were obtained by deflating the nominal data by the price deflator for private consumption expenditures, and real income was measured by real GDP. The real interest rate was computed as the difference between the average three-month deposit rate and the inflation rate, which is measured by the year-on-year percentage change of the private consumption deflator. The expected inflation rate was proxied by the percentage change of the private consumption deflator over a year. All data except the interest rate and inflation rate were in logarithms.

An error-correction modelling approach was employed. This requires the variables to be stationary in first difference and cointegrated with a stationary linear relationship. These were confirmed by Augmented Dickey-Fuller unit root tests and some preliminary results of Johansen cointegration tests. The money demand equation was then estimated successively to find the value of θ that yields the maximum of the log likelihood function (LLF). The estimates suggest that the LLF reaches its maximum at $\hat{\theta} = 0.16$. The final estimation results are shown below. All coefficients are significant and have the expected signs. Diagnostic tests do not show evidence of instability in the residuals.

$$\Delta m_t = -1.807 + 1.196\Delta y_t - 1.962\Delta\pi_t - 0.432(m_{t-1} - 0.828y_{t-1} + 4.907r_{t-1} + 6.736\pi_{t-1}$$

(–1.88) (2.51) (–3.64) (–2.38) (–9.28) (3.01) (3.10)

$\bar{R}_2$	0.56	
Equation standard error	0.08	
LM test for serial correlation	0.95	[0.40]
Jarque-Bera test for normality	0.60	[0.74]
White test for heteroskedasticity	1.06	[0.45]

where

$m_t = \log\left(\frac{M - \theta * CU}{P}\right)$, and

Δ = the first difference operator.

Note: Numbers in ( ) are t-ratios, and numbers in [ ] are p-values.

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