

Capital Management Techniques In Developing Countries:

Managing Outflows in Malaysia, India and China

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Abstract

This paper uses the term, *capital management techniques*, to refer to two complementary (and often overlapping) types of financial policies: policies that govern international private capital flows and those that enforce prudential management of domestic financial institutions. While management of inflows has recently gained some respectability, those affecting capital outflows, especially if they are in place for long periods of time, are still very controversial.

This chapter presents case studies of the capital management techniques employed in India, China, and Malaysia, three countries that managed capital outflows during the 1990s. The cases reveal that policymakers were able to use capital management techniques to achieve critical macroeconomic objectives. These included the prevention of maturity and locational mismatch; attraction of favored forms of foreign investment; reduction in overall financial fragility, currency risk, and speculative pressures in the economy; insulation from the contagion effects of financial crises; and enhancement of the autonomy of economic and social policy. The paper examines the structural factors that contributed to these achievements, and also weighs the costs associated with these measures against their macroeconomic benefits.

I. INTRODUCTION

The external macroeconomic and normative environment facing developing countries in the last several decades has been decidedly *neo-liberal* and challenging, as well: aspects include norms of domestic and international financial liberalization; increasingly unstable international capital mobility; a focus on export-led growth in an increasingly competitive environment; intense competition to attract foreign direct investment (FDI); privatization and a focus on private (as opposed to public) investment; and monetary policy oriented toward achieving low inflation (“inflation targeting”) (Taylor and Pieper, 1998).

Policy-making dilemmas abound in such an environment. Economists are fond of discussing the so-called impossible trinity of independent monetary policy, fixed exchange rates and free capital mobility; yet the experiences of developing countries in the last several decades suggest some trade-offs that are much more troublesome both for the neo-liberal policy prescription and for policy-makers, as well. In particular, it is increasingly evident that inflation targeting, free capital mobility, financial liberalization, and export led-growth are inherently contradictory policy options. To state the issue starkly: the problems created by free capital mobility are at the very heart of these contradictions.

A few examples illustrate the problem. Inflation targeting with free capital mobility has led to excessive capital inflows, over-valued exchange rates and a shifting of resources from traded to non-traded sectors, harming the prospects for export-led growth, while encouraging financial fragility (eg. Brazil). At other times or places, capital mobility, inflation targeting and a hands-off attitude toward the exchange rate has led to speculative attacks and a depreciating exchange rate, leading to inflationary pressures and confusion about the proper role for monetary policy (eg. South Africa). Free capital mobility has led to currency mismatches on balance sheets of banks and non-financial corporations, and unsustainable asset bubbles, leading, in turn, to bankruptcies and the need for bail-outs of liberalized financial institutions (eg. Thailand, Turkey). (Taylor, 2002; Ocampo and Palma, this volume).

In short, open capital markets, in combination with other neo-liberal prescriptions have undermined some key policy tenets of the “Washington consensus”, and more importantly, led to serious economic problems for a number of developing countries.

The financial crises of the 1990’s – including the Mexican, Turkish, Asian and Russian - brought many of these problems center stage. In response there has been a renewed interest in the role of capital controls in developing countries within both policy and academic circles. Even strong proponents of capital account liberalization have acknowledged that many countries that avoided the worst effects of financial crises were also those that used capital controls, including the three countries we study here: Malaysia, India and China. Consequently, prominent mainstream economists and even the IMF have relaxed their insistence that immediate capital account liberalization is the best policy for all countries in all circumstances [IMF, 2000; Fischer, 2002; Eichengreen, 2002a].¹ Adding momentum to the discussion over the last several years, a number of highly respected economists have actively argued in favor of capital controls [e.g., Bhagwati, 1998; Stiglitz, 2002; Krugman, 1998; Rodrik, 1998].

Despite this apparent increase in the tolerance for capital controls, most mainstream academic and policy economists remain quite skeptical about the viability and desirability of controls, at least in two specific senses. Increased tolerance for capital controls applies, if at all,

¹ Of course, doctrinaire hold-outs on capital account liberalization still exist. For instance, some members of the US Treasury took this stance in recent negotiations with Chile and Singapore over free trade agreements.

only to controls on inflows, *not* to controls on outflows. Moreover, controls on inflows are generally seen as a “temporary evil,” useful *only* until all of the institutional pre-requisites for full financial and capital account liberalization are in place.

In this chapter we present case studies of three countries – China, India and Malaysia – that counter both of these claims. China, India and Malaysia have very successfully utilized controls on *outflows* as well as inflows (See Ocampo and Palma, this volume, for a discussion of controls on *inflows*). Furthermore, in the case of two of these (China and India) controls have been in place for a significant period of time. Moreover, though both China and India are currently engaged in liberalizing their controls, both countries still retain effective controls while insisting on retaining the right to re-impose stronger controls when necessary. In the words of our taxonomy described below, these countries have implemented and presumably will retain for a considerable period of time both *static* and *dynamic* controls. Moreover, all three countries can be cited as success stories in terms of having avoided the worst of the Asian financial crisis, as well as having achieved highly respectable and in some cases (especially China and India) spectacular rates of economic growth.

In discussing these three cases, we emphasize that a thorough understanding of their policies as well as the policy options facing developing countries necessitates that we expand the discussion of capital controls to include what we term “capital management techniques.” (Epstein, Grabel and Jomo, 2003). Capital management techniques include the traditional menu of capital controls but add a set of policies that we term “prudential financial regulations.” We argue that certain types of prudential financial regulations actually function as a type of capital control in the sense that they alter the opportunities or affect the incentives facing resident and/or non-resident investors to exchange domestic and foreign financial assets or liabilities. Moreover, we argue that capital controls themselves can function as or *complement* prudential financial regulations. Our research demonstrates that there is often a great deal of synergy between prudential financial regulations and traditional capital controls. (See Ocampo, 2002).

Moreover, it can be difficult (and sometimes impossible) to draw a firm line between prudential domestic financial regulation and capital controls. For instance, domestic financial regulations that curtail the extent of maturity or locational mismatches may have the effect of influencing the composition of international capital flows, even though these types of regulations are commonly classified as prudential domestic financial regulations and not as capital controls.

We believe that these three case studies show that, properly construed, and in the right context, capital management techniques –even ones that manage *outflows* - can ameliorate some of the dilemmas and problems described above, and, more importantly, contribute to development and growth. Controls on outflows can help countries manage exchange rates, avoid external debt problems, and help promote the quantity and quality of investment. They can do this by supporting industrial policies designed to channel credit and saving to productive uses; by reducing the availability of domestic currency offshore than can be used by non-residents to speculate against the domestic currency, thereby helping to maintain exchange rates within targeted ranges (i.e., policies to prevent the *non-internationalization* of the domestic currency²); by reducing the need for foreign borrowing to finance capital outflows and thereby lower domestic vulnerability; by creating degrees of freedom for monetary and credit policy to lower interest rates to foster investment; and by reducing the vulnerability to sudden capital outflows that could threaten the exchange rate and add to inflationary pressures that inflation targeting central banks would have to attend to.

² See Ishi [2001], Watanabe, et. al. [2002], Ma, Ho and McCauley [2004], and section III below.

Controls on inflows, as is better known, can also help: they help countries manage accumulation of external debts and help maintain healthy balance sheets of financial and non-financial firms; they can help to avoid asset bubbles; can help avoid over-valuation of exchange rates in inflation targeting contexts and maintain export competitiveness and employment; can help to avoid costly sterilization measures which can erode government balance sheets; finally, they can reduce the economy's vulnerability to asset bubbles and financial crashes.

Country experience has shown, moreover, that capital management techniques comprise a multifaceted tool box of fine instruments, not just one blunt, one size fits all tool as some critics imply (Epstein, Grabel, and Jomo, 2003, and tables, below). Countries have developed a rich array of instruments that affect different assets, different liabilities, various actors, in varying combinations to achieve local needs in different contexts. With such a large variety of tools, governments can tailor their approach to reach the governments' goals, while trying to avoid the costs that are particularly high.

Of course, no set of tools is perfect or cost-free and capital management techniques are no exception. Furthermore, tools often need to be changed to fit with changing circumstances. For example, all three countries discussed here have chosen to foster integration between their domestic financial markets and global financial markets. Given the decision to do that, the questions facing their governments include these: What is the best way to integrate? What markets? What agents? How far? How fast? These are all questions that do not have prima facie answers as some advocates of financial liberalization imply. The useful question is NOT, as many analysts suggest, what are the pre-requisites to full capital account liberalization,. The important question is: how much and what type of capital management techniques do countries want to have and what is the right path to find them? These are the issues we hope this chapter can help to illuminate.

The rest of this chapter is organized as follows. In section II we discuss capital management techniques in more depth, focusing on types of techniques, goals, achievements and costs. In section III we present the three case studies of the capital management techniques employed in during the 1990s and describe their effects, including both their benefits and their costs. There we focus on controls on *outflows*. In Section IV we summarize our chief findings and discuss some issues of broader policy relevance.

II. CAPITAL MANAGEMENT TECHNIQUES: TOOLS, OBJECTIVES AND COSTS

A. What are Capital Management Techniques?

We use the term capital management techniques to refer to two complementary (and often overlapping) types of financial policies: policies that govern international private capital flows, called "capital controls," and those that enforce prudential management of domestic financial institutions. Regimes of capital management take diverse forms and are multi-faceted. Capital management techniques, as actually implemented by governments around the world, make a number of fine distinctions, including according to *actor*, *institutions*, *instruments*, and *location*. (Epstein, Grabel, Jomo, 2003; Rajamaran, 2001; Nayyar, 2002; Reddy, 2004). Governments make distinctions between residents and non-residents (and sometimes between nationally affiliated or not, as, for example, in non-resident Indian nationals, as opposed to other non-residents); between non-financial corporations, financial institutions and individuals; between foreign exchange (i.e., exchange controls), equity and debt instruments (and derivatives), and within equity between portfolio investment (PI) and foreign direct investment

(FDI) and within debt instruments whether they are short-term or long-term; and between onshore and off-shore markets. Moreover, instruments can be quantitative or administrative. Within administrative they can involve strict penalties (civil or in some cases criminal) or they can involve only monitoring and reporting. These myriad distinctions are not incidental, but go to the very heart of the rich array of capital management techniques that governments implement.

1. Complementary policies: Capital controls and prudential financial regulation

Capital controls refer to measures that manage the volume, composition, or allocation of international private capital flows (see Neely [1999]). Capital controls can target inflows or outflows. Inflow or outflow controls generally target particular flows (such as portfolio investment), based on their perceived risks and opportunities. Capital controls can be tax-based or quantitative. Reserve requirement taxes against certain types of investments are an example of a tax-based control. Quantitative capital controls involve outright bans on certain investments (e.g., the purchase of equities by foreign investors), restrictions or quotas, or license requirements.

“Prudential domestic financial regulations” are another type of capital management technique. These refer to policies, such as capital-adequacy standards, reporting requirements, or restrictions on the ability and terms under which domestic financial institutions can provide capital to certain types of projects. They also refer to prudential rules on currency mismatching on balance sheets, or restrictions on issuing certain types of derivatives or forward contracts.

As the last examples suggest, a strict bifurcation between capital controls and prudential regulations often cannot be maintained in practice (as Ocampo [2002] and Schneider [2001] observe). Policymakers frequently implement multi-faceted regimes of capital management as no single measure can achieve diverse objectives (as we will see in section III). Moreover, the effectiveness of any single management technique magnifies the effectiveness of other techniques, and enhances the efficacy of the entire regime of capital management. For example, certain prudential financial regulations magnify the effectiveness of capital controls (and vice versa). In this case, the stabilizing aspect of prudential regulation reduces the need for the most stringent form of capital control. Thus, a program of complementary capital management techniques reduces the necessary severity of any one technique, and magnifies the effectiveness of the regime of financial control.

2. Static versus dynamic capital management techniques

Capital management techniques can be static or dynamic (though here, too, the strict distinction is not always maintained in practice). Static management techniques are those that authorities do not modify in response to changes in circumstances. Examples of static management techniques include restrictions on the convertibility of the currency, restrictions on certain types of activities (such as short-selling the currency), or maintenance of minimum-stay requirements on foreign investment.

Capital management techniques can also be dynamic, meaning that they can be activated or adjusted as circumstances warrant. Three types of circumstances trigger implementation of management techniques or lead authorities to strengthen or adjust existing regulations.

First, capital management techniques are activated in response to changes in the economic environment (e.g., changes in the volume of international capital flows or the emergence of an asset bubble).³ For example, the Malaysian government implemented stringent

³ Ocampo [2002] proposes dynamic, counter-cyclical domestic financial regulation as a complement to permanent, adjustable capital controls. Palley [2000] proposes counter-cyclical, variable asset-based reserve requirements.

temporary inflow controls in 1994 to dampen pressures associated with large capital inflows. (See Ocampo and Palma, this volume). Second, capital management techniques are activated to prevent identified vulnerabilities from culminating in a financial crisis or to reduce the severity of a crisis.⁴ For example, the Malaysian government implemented stringent capital controls in 1998 to stabilize the economy and to protect it from the contagion effects of the regional crisis. Both China and Taiwan POC strengthened existing capital management techniques and added new measures to insulate themselves from the emerging regional crisis. Third, capital management techniques are strengthened or modified as authorities attempt to close loopholes in existing measures. For example, authorities in Taiwan POC, Chile and China adjusted their capital management techniques several times during the 1990s as loopholes in existing measures were identified.

3. Inflows, Outflows, and Non-Internationalization Policies

As mentioned earlier, management policies can focus on managing inflows or outflows. Watanabe, et. al. [2002] present a useful discussion of channels through which outflows can affect exchange rates and/or reserves: 1) short positions in the local currency taken by non-residents 2) Withdrawal of short-term funds and portfolio investments by non-residents and 3) capital flight by residents. Capital management techniques for outflows have been designed to manage these three channels.

An increasingly common set of policies in Asia directed toward managing outflows and involve preventing the *internationalization* of domestic currencies, and more specifically, to reduce the off-shore access to domestic currency by non-residents. (See Table 2 below)The aims of these regulations are to reduce exchange rate volatility, reduce the likelihood of financial crises, and restore some autonomy to monetary policy through the suppression or elimination of offshore markets in the home currency. [McCauley, 2001; Watanabe, et. al., 2002] In response to these policies, markets in *non-deliverable forwards* have sprung up in some off-shore financial centers in currencies restricted by non-internationalization policies [Ma, Ho, McCauley, 2004; Table 2 below], raising questions about the viability of these practices. However, as discussed later, most evidence suggests that the non-internationalization policies are effective despite the non-deliverable forward markets.

B. Objectives of Capital Management Techniques

Policymakers use capital management techniques to achieve some or all of the following five objectives:⁵

1. Capital management techniques can promote financial stability

Capital management techniques can promote financial stability through their ability to reduce currency, flight, fragility and/or contagion risks. Capital management can thereby reduce the potential for financial crisis and attendant economic and social devastation.

Currency risk refers to the risk that a currency will appreciate or depreciate significantly over a short period of time. Currency risk can be curtailed if capital management techniques

⁴ Grabel [1999, 2003a] proposes “trip wires and speed bumps” as a framework for dynamic capital management. This approach aims to identify the risks to which individual countries are most vulnerable, and to prevent these risks from culminating in crisis.

⁵ Discussion of objectives and costs draws on Chang and Grabel [2004: ch.10] and Grabel [2003b]; discussion of the means by which capital management techniques attain their objectives draws on Grabel [2003a].

reduce the opportunities for sudden, large purchases or sales of domestic assets by investors (via controls on inflows and outflows, respectively). Capital management can protect the domestic currency from dramatic fluctuation via restrictions on its convertibility. Finally, capital management can provide authorities with the ability to engage in macroeconomic policies that sterilize the effects of sudden, large capital inflows or outflows on the currency.

Investor flight risk refers to the likelihood that holders of liquid financial assets will sell their holdings *en masse* in the face of perceived difficulty. Lender flight risk refers to the likelihood that lenders will terminate lending programs or will only extend loans on prohibitive terms. Capital management can reduce investor and lender flight risk by discouraging the types of inflows that are subject to rapid reversal (namely, PI, short-term foreign loans, and liquid forms of FDI). Capital management can also reduce investor and lender flight risk by reducing or discouraging the opportunities for exit via outflow controls.

Fragility risk refers to the vulnerability of an economy's private and public borrowers to internal or external shocks that jeopardize their ability to meet current obligations. Fragility risk arises in a number of ways. Borrowers might employ financing strategies that involve maturity or locational mismatch. Agents might finance private investment with capital that is prone to flight risk. Investors (domestic and foreign) may over-invest in certain sectors, thereby creating overcapacity and fueling unsustainable speculative bubbles. Capital management techniques can reduce fragility risk through inflow controls that influence the volume, allocation and/or prudence of lending and investing decisions.

Contagion risk refers to the threat that a country will fall victim to financial and macroeconomic instability that originates elsewhere. Capital management techniques can reduce contagion risk by managing the degree of financial integration and by reducing the vulnerability of individual countries to currency, flight and fragility risks.

2. Capital management techniques can promote desirable types of investment and financing arrangements and discourage less desirable types of investment/financing strategies

Capital management techniques can influence the composition of the economy's aggregate investment portfolio, and can influence the financing arrangements that underpin these investments. Capital management techniques (particularly those that involve inflow controls) can promote desirable types of investment and financing strategies by rewarding investors and borrowers for engaging in them. Desirable types of investment are those that create employment, improve living standards, promote greater income equality, technology transfer, learning by doing and/or long-term growth. Desirable types of financing are those that are long-term, stable and sustainable. Capital management can discourage less desirable types of investment and financing strategies by increasing their cost or precluding them altogether.

3. Capital management can enhance the autonomy of economic and social policy

Capital management techniques can enhance policy autonomy in a number of ways. Capital management techniques can reduce the severity of currency risk, and can thereby allow authorities to protect a currency peg. Capital management can create space for the government and/or the central bank to pursue growth-promoting and/or reflationary macroeconomic policies by neutralizing the threat of capital flight (via restrictions on capital inflows or outflows). They can also help countries fight inflation without inducing over-valued exchange rates (Ho and McCauley, 2003). Moreover, by reducing the risk of financial crisis in the first place, capital management can reduce the likelihood that governments may be compelled to use contractionary macro- and micro-economic and social policy as signal to attract foreign investment back to the country or as a precondition for financial assistance from the IMF.

4. Capital management can help manage the exchange rate for trade purposes

Capital management techniques give policy makers extra degrees of freedom to manage their exchange rates. Despite the mainstream advice to either freely float or adopt a hard peg through a currency board or dollarization, many developing countries, including so-called “emerging market” economies, use capital management techniques to help them manage their exchange rates (Mohanty and Klau, 2004; McCauley, 2001). Use of capital management techniques is widespread among those countries that adopt inflation targeting as well. Despite the mainstream advice, few countries completely ignore exchange rates when attempting to lower inflation. This helps them avoid over-valued exchange rates, which harm trade competitiveness and can lead to financial crises, and, on the other hand, can help avoid under-valuations that can worsen inflation. In the latter case, inflation targeting central banks would be forced to raise interest rates and restrict credit which could harm employment and growth.

5. Capital management techniques can enhance democracy

It follows from point three that capital management can enhance democracy by reducing the potential for speculators and external actors to exercise undue influence over domestic decision making directly or indirectly (via the threat of capital flight). Capital management techniques can reduce the veto power of the financial community and the IMF, and create space for the interests of other groups (such as advocates for the poor) to play a role in the design of economic and social policy. Capital management techniques can thus be said to enhance democracy because they create the opportunity for pluralism in policy design.

C. Costs of Capital Management Techniques

Critics of capital management techniques argue that they impose four types of costs—they reduce growth; reduce efficiency and policy discipline; promote corruption and waste; and aggravate credit scarcity, policy abuse, uncertainty and error. Critics argue that the benefits that derive from capital management (such as financial stability) come at an unacceptably high price. However, the evidence for these costs is quite limited (Epstein, Grabel and Jomo, 2003). As suggested above, the strongest criticism is reserved for controls on outflows and permanent controls. But as we argue in the case studies below, controls on outflows have been successfully applied in three dynamic economies, and the prima facie evidence is that, even assuming there have been costs, the successes are even more apparent.

III. CASE STUDIES: CAPITAL MANAGEMENT TECHNIQUES IN CHINA, INDIA AND MALAYSIA SINCE THE 1990S

A. Objectives and Case Selection

In this section we present case studies that analyze the capital management techniques employed during the 1990s in Malaysia, India and China. As mentioned above, we have chosen these three because they represent important counter examples to the mainstream claim that controls on outflows and long-term controls do not work.

B. The General Context

Table 1 presents a summary of the major capital management techniques and their objectives in each of our cases. In what follows we will describe in detail the types of management techniques used by Malaysia, India and China, what their costs and benefits have

been, and what their likely prospects are. The focus will be on controls on outflows, though we will also discuss, when relevant prudential controls on inflows. Of course, managing inflows can be important in reducing the vulnerability to outflows. So inflows and outflows are not easily separated in the policy context.

1. Malaysia⁶

Context

In the first two-thirds of the 1990s, Malaysia experienced rapid economic growth due to growth in spending on infrastructure, FDI and exports. During this period, the Malaysian capital account was so liberalized that there was an offshore market in ringgit, perhaps the only case of an offshore market in an emerging-market currency [Rajaraman, 2001] Indeed, by most conventional measures, Malaysia had had one of the longest running open capital accounts in the developing world [Rajaraman, 2001].

Rapid economic growth in Malaysia came to a halt with the Asian financial crisis of 1997. The Malaysian government bucked trends in the region and, rather than implement an IMF stabilization program, implemented capital controls and adopted an expansionary monetary policy 14 months after September 1998. Malaysia's introduction of capital controls was widely seen as a major departure from its long reputation for a liberal capital account. The Malaysian government, of course, had implemented capital controls in 1994, but these were eliminated within a few months.

Objectives

The 1998 controls had somewhat different goals. These were to facilitate expansionary macroeconomic policy while defending the exchange rate, reduce capital flight, preserve foreign exchange reserves and avoid an IMF stabilization program [Kaplan and Rodrik, 2002].

Capital management techniques in Malaysia

Capital management in September 1998. The policy package is generally recognized as comprehensive and well designed to limit foreign exchange outflows and ringgit speculation by non-residents as well as residents, while not adversely affecting foreign direct investors. The offshore ringgit market had facilitated exchange rate turbulence in 1997-98. Thus, the measures were designed to eliminate this source of disturbance. Table 3 describes some of these policies according to the channels of outflows mentioned above (Watanabe, et. al. [2002]).

The measures introduced on 1 September 1998 were designed to achieve the following objectives [Rajaraman, 2001; BNM; Mahathir; Jomo 2001]:

- *eliminate the offshore ringgit market*, by prohibiting the transfer of funds into the country from externally held ringgit accounts except for investment in Malaysia (excluding credit to residents), or for purchase of goods in Malaysia. The offshore ringgit market could only function with externally held ringgit accounts in correspondent banks in Malaysia because offshore banks required freely usable access to onshore ringgit bank accounts to match their ringgit liabilities, which the new ruling prohibited. Holders of offshore deposits were given the month of September 1998 to repatriate their deposits to Malaysia. This eliminated the major source of ringgit for speculative buying of US dollars in anticipation of a ringgit crash. Large-denomination ringgit notes were later demonetized to make the circulation of the ringgit currency outside Malaysia more difficult.

⁶ This section draws mainly on Jomo [2001]; BNM, various years; Kaplan and Rodrik [2002]; Rajaraman [2001]; Mahathir [2001]. We focus here on the 1998 controls on outflows. For a discussion of the earlier controls on inflows see Ocampo and Palma [this volume] and Epstein, Grabel and Jomo [2003].

- *eliminate access by non-residents to domestic ringgit sources* by prohibiting ringgit credit facilities to them. All trade transactions now had to be settled in foreign currencies, and only authorized depository institutions were allowed to handle transactions in ringgit financial assets.
- *shut down the offshore market in Malaysian shares* conducted through the Central Limit Order Book (CLOB) in Singapore.
- *obstruct speculative outward capital flows* by requiring prior approval for Malaysian residents to invest abroad in any form, and limiting exports of foreign currency by residents for other than valid current account purposes.
- *protect the ringgit's value and raise foreign exchange reserves* by requiring repatriation of export proceeds within six months from the time of export.
- *further insulate monetary policy from the foreign exchange market* by imposing a 12-month ban on the outflow of external portfolio capital (only on the principal; interest and dividend payments could be freely repatriated).

The September 1998 measures imposed a 12-month waiting period for repatriation of investment proceeds from the liquidation of external portfolio investments. To pre-empt a large-scale outflow at the end of the 12 month period in September 1999 and to try to attract new portfolio investments from abroad, a system of graduated exit levies was introduced from 15 February 1999, with different rules for capital already in the country and for capital brought in after that date. For capital already in the country, there was an exit tax inversely proportional to the duration of stay within the earlier stipulated period of 12 months. Capital that had entered the country before 15 February 1998 was free to leave without paying any exit tax. For new capital yet to come in, the levy would only be imposed on profits, defined to exclude dividends and interest, also graduated by length of stay. In effect, profits were being defined by the new rules as realized capital gains.

Credit facilities for share as well as property purchases were actually increased as part of the package. The government has even encouraged its employees to take second mortgages for additional property purchases at its heavily discounted interest rate.

The exchange controls, still in place, limit access to ringgit for non-residents, preventing the re-emergence of an offshore ringgit market. Free movement from ringgit to dollars for residents is possible, but dollars must be held in foreign exchange accounts in Malaysia, e.g. at the officially approved foreign currency offshore banking center on Labuan.

Assessment

Did Malaysia's September 1998 selective capital control measures succeed? They clearly succeeded in meeting some of the government's objectives. The offshore ringgit market was eliminated by the September 1998 measures. By late 1999, international rating agencies had begun restoring Malaysia's credit rating, e.g., the Malaysian market was re-inserted on the Morgan Stanley Capital International Indices in May 2000.

But, did these controls succeed in the sense of allowing more rapid recovery of the Malaysian economy? The merits and demerits of the Malaysian government's regime of capital controls to deal with the regional currency and financial crises will continue to be debated for a long time to come. Proponents claim that the economic and stock market decline came to a stop soon after the controls were implemented [Kaplan and Rodrik, 2002; Jomo, ed. 2001; Palma, 2000; Dornbusch, 2002]. On the other hand, opponents argue that such reversals have been more pronounced in the rest of the region. Kaplan and Rodrik present strong evidence that the

controls did have a significant positive effect on the ability of Malaysia to weather the 1997 crisis and reflate its economy. While this debate is likely to go on for some time, our reading of the evidence suggests that Kaplan and Rodrik are correct: controls segmented financial markets and provided breathing room for domestic monetary and financial policies; and they allowed for a speedier recovery than would have been possible via the orthodox IMF route.

Supporting factors

It is often argued that prior experience with capital management techniques have been important to the success of capital management in the 1990s. However, the case of Malaysia seems quite different: the country had a highly liberalized capital account prior to the 1990s. Nonetheless, the government was able to implement numerous capital management techniques, all under rather difficult circumstances. This suggests that a history of capital management is not a necessary condition for policy success.

Costs

It is difficult to identify any significant costs associated with the short-lived 1994 controls. The most important cost of the 1998 controls was the political favoritism associated with their implementation. It is difficult, however, to estimate the economic costs of political favoritism [Jomo, 2001; Kaplan and Rodrik, 2002; Johnson and Mitton 2002]. Moreover, these costs (if quantified) must be weighed against the significant evidence of the macroeconomic benefits of the 1998 controls.

2. India⁷

Following Independence from Britain, India had for many decades a highly controlled economy, with exchange and capital controls an integral part of the developmental state apparatus. Over time, and partly in response to economic crisis in 1991, India gradually liberalized and with respect to the capital account, this process of liberalization greatly accelerated in the 1990's. Most mainstream observers have suggested that the pace of liberalization is far too slow. However, supporters of gradual liberalization point to the relative success India has had in insulating itself from the excesses of the international financial markets which led to the crises of some of its neighbors in 1997. Moreover, key officials in India insist that despite its commitment to liberalization, India must retain the right to reimpose controls when necessary.

Context

The Indian financial system and Indian approach to capital management are best understood in the context of its history of colonization, and the subsequent developmentalist plan that it pursued following independence in 1947. Given the history of British colonialism, policy makers were understandably reluctant to open their economy to foreign capital. In terms of the external account, in the first few years following independence, an intricate set of controls evolved for all external transactions. Equity investments were further restricted in 1977 when many multinational companies left India, rejecting the government's effort to enforce a law that required them to dilute their equity in their Indian operations to 40 percent. Although the eighties saw the beginning of new industrial reforms, the general consensus was still that export orientation and openness could not provide a reasonable basis for growth.

Like many other developing countries, India's decision to dramatically liberalize its intricately planned economy in 1991 was necessitated by a balance of payments crisis. By March

⁷ This section draws mainly on Rajaraman [2001] and Nayyar [2000].

1991, the crisis had reached severe proportions. India turned to the IMF for an emergency loan, and the resultant conditionalities led to the adoption of extensive liberalization measures.

Objectives

The goals of India's capital management techniques are to foster financial development (through gradual capital account liberalization) and attract foreign investment. Prudential financial regulations aim to reduce the likelihood of speculative crises driven by excessive foreign borrowing and to help authorities manage the exchange rate. To further this goal, capital management has attempted to shift the composition of capital inflows from debt to equity. In addition, capital management techniques have been oriented towards maintenance of domestic financial stability by limiting foreign equity and foreign currency deposit investments in the financial sector. In addition, the government has sought to retain domestic savings, stabilize the domestic financial sector by limiting the deposits of foreign currencies, and allocate foreign equity investment to strategic sectors, such as information technology.

Capital management techniques in India

India has had significant controls on both inflows and outflows. These controls have been applied to a broad spectrum of assets and liabilities, applying to debt, equity and currency. These capital management techniques have involved strict regulation of financial institutions, as well as controls of external transactions. Although the Indian economy has moved towards a progressively freer capital market, this has been an extremely gradual process⁸. In particular, the management of integration into the world financial market has been based, until very recently, on fundamental asymmetries between residents and non-residents, and between corporates and individuals. While non-resident corporates enjoy substantial freedom to repatriate funds, until recently this has been severely limited in the case of individual residents. Resident corporates have had to obtain approval before exporting capital, and resident individuals have been, for all practical purposes subject to very strict and low limits with respect to these. Moreover, there have been restrictions on debt accumulation as well as foreign currency deposits and loans by domestic financial institutions. (See Table 1)

Controls on outflows. As mentioned above, the liberalization process has maintained a clear distinction between residents and non-residents: it has maintained strict controls on outflows by residents, while giving significant latitude to non-residents to repatriate funds. Table 2 presents information on Indian policies with respect to the *non-internationalization* of the currency. As Table 2 shows, a market in non-deliverable forwards has developed. In principle, this market (and other moves toward financial liberalization) could affect the ability of India's central bank to affect domestic interest rates relative to foreign rates. But a study by the Bank for International Settlements suggests that India has been able to maintain a differential between onshore and offshore rates, an indication that their controls are still working despite substantial financial liberalization. (Ma, Ho and McCauley, 2004).

Borrowing and short-term debt accumulation and prudential regulation. Prudential regulations having capital account implications are widespread in India. Responding to the lessons of the 1997 Asian crisis, commercial borrowing in foreign currencies has remained significantly curtailed. Commercial banks, unlike in some East Asian countries, have not been and are still not allowed to accept deposits or to extend loans which are denominated in foreign currencies. As Nayyar [2000] describes the crisis context of India's initial reform: "It prompted strict regulation of external commercial borrowing especially short-term debt. It led to a

⁸ Rajaraman calls this the 'incremental dribble' of Indian policy making.

systematic effort to discourage volatile capital flows associated with repatriable non-resident deposits. Most important, perhaps, it was responsible for the change in emphasis and the shift in preference from debt creating capital flows to non-debt creating capital flows” [Nayyar, 2000].

Foreign direct investment. Before liberalization, FDI and equity investments were strictly controlled in virtually all sectors. By the early 2000's, however, these restrictions have been significantly lifted. The first steps in liberalization involved lifting restrictions on FDI. By 1993 when there were far reaching changes in the Foreign Exchange Regulation Act (FERA) of 1973. Some of these reforms may have been used as a tool of industrial policy, guiding FDI into certain industries, including computer hardware and software, engineering industries, services, electronics and electrical equipment, infrastructure projects, chemical and allied products, and food and dairy products. Recent changes have meant that by 2001-2002, most sectors are open to FDI. Still, important restrictions remain. In particular, FDI is severely restricted in banking, finance, real estate and infrastructure.

Portfolio investment. The attitude towards portfolio investment liberalization has been equally gradual. India's first attempt to capture part of the growing funds being channeled into emerging markets came during the second half of the 1980s, as India opened five closed-end mutuals for sale on offshore markets. They also reformed the structure of equity regulations on the Stock Exchanges. By the late 90's, the limits on foreign institutional investor ownership of share capital had been lifted almost up to the level of majority stakes.

Assessment

India has had some successes and a few question marks in this decade of capital account management. On the credit side, India has had consistent net inflows (a legacy of its discrimination between residents and non residents) and has not had any major financial meltdowns in a decade that saw three serious crises around the world (and one literally next door). Some of this has certainly been due to the prudential discrimination between various types of flows.

Another major element on the credit side has been India's success in increasing the share of non-debt creating inflows. There has been a particularly impressive reduction in short-term loans. However, India has had only limited success in attracting foreign direct investment instead of portfolio investment. In fact, the decade has seen a marginally greater percentage of foreign inflows being accounted for by FPI than by FDI (52% to 48%)

India's exchange rate policy seems to have worked. Although there has been a steady decline in the external value of the rupee, there have been relatively few periods of volatility, and the only really difficult period (in 1997) saw the external value fall by 16%.

Supporting factors

Among the contributing factors to the success of India's partial liberalization process and continuing use of capital management techniques, three are most important. First is the widespread institutional experience of the Indian authorities in managing controls, including long-standing experience with regulating Indian financial institutions. Second, the controls themselves were well-designed, clearly demarcating the distinction between resident and non-resident transactions. Finally, liberalization of FDI and the very success of the controls themselves contributed to the ability of India to accumulate foreign exchange reserves and limit the accumulation of foreign debt, both of which reduced the vulnerability of the Indian economy.

Costs

In India's case, this is a complex question because the Indian economy has been undergoing a dramatic liberalization process, which is only ten years old. It is hard to disentangle

the costs of the controls from the costs of previous controls, or indeed, from the costs of the liberalization process itself and other factors, both internal and external. For example, many observers still point to the relatively underdeveloped financial markets in India compared to other semi-industrialized economies. But these are certainly due to many factors, including previous controls, and cannot be necessarily attributed to the current controls, which fall mostly on residents, and, in any case, have been in place for a relatively short time. In short, assessing the costs of the current system will undoubtedly have to wait for more information.

Other achievements

As suggested above, India's capital management techniques clearly helped to insulate India's economy from the ravages of the 1997 Asian financial crisis [Rajamarn, 2001]. By limiting capital flight by residents, they have also helped to retain domestic savings that are critical for domestic investment.

The Future

In recent budgets, Indian policies on outflows have substantially changed, at least on an experimental basis. Restrictions on individuals and domestic corporates have been loosened to allow substantial investments abroad. Most significantly, mutual funds in India are now permitted to invest up to 1 billion dollars abroad. Moreover, individuals are now permitted to invest abroad without limit. In addition, companies can now invest in foreign companies too, but there is a quantitative restriction on the amount (less than 25% of the company's worth). If this recent liberalization is retained on a permanent basis, it will represent a fundamental change in India's capital management techniques.

Still, the Governor of India's central bank, Dr. Y. V. Reddy, insists that India places enormous importance on capital management techniques, not only for the short run but also in the long-run, thereby bucking the common view among economists that controls are simply a temporary evil. [V.S. Reddy, 2004] At the same time, some critics are concerned that capital account liberalization has gone too far and it will be difficult for the authorities to respond to future crises, and issue we address further below. (Nayyar, 2000; Ghosh, 2004)

3. China⁹

Among the cases we study in this paper, the People's Republic of China (PRC) has, the most comprehensive foreign exchange and capital controls. At the same time, China's record of economic growth and development in the last several decades, as well as its ability to attract high levels of foreign direct investment has been greatly admired by many countries both in the developed and developing world. Finally, like its neighbor India, China was able to avoid highly significant negative repercussions from the Asian financial crisis of the late 1990's. The relatively strict capital controls along side enviable economic growth and the ability to attract large quantities of foreign capital starkly calls into question the common view among economists that capital controls on outflows necessarily hinders economic growth and deter capital inflows. Indeed, China's policies suggest that, under the right conditions, strong capital management techniques might be useful in protecting macroeconomic stability and enhancing economic growth and development.

⁹ This section is based on Icard [2002], Haihong [2000], Fernald and Babson [1999], Jingu [2002], Lardy [1998], Naughton [1996].

Context

As is well known, the People's Republic of China has achieved an admirable record of success in terms of economic growth and development in the last decade or more, averaging an annual growth rate of GDP of 8 percent or more, depending on one's view of the accuracy of the PRC's government statistics. This record has been associated with a high savings rates, 40% of GDP or more, a long record of current account surpluses, a large inflow of foreign direct investment (even discounting for the fact that half or more of it may really be 'domestic investment' which is 'round-tripped' through Hong Kong or elsewhere in order to take advantage of preferential treatment afforded to foreign investors), a huge stock of foreign exchange reserves, and, even in light of a substantial foreign debt, a likely net creditor status [see for example, Icard, 2002].¹⁰ After a short period of high inflation and interest rates in the mid-1990's, China has experienced low domestic interest rates and, until recently, deflation.¹¹ In terms of exchange rate management, China has maintained a fairly consistent U.S. dollar peg. Whether this is a "hard" or "soft" peg is a matter of some controversy.

Objectives

Capital management techniques in China are an integral part of China's development strategy, implemented by its "developmental state." The objectives of the controls evolved over time, but generally have included the following: to retain savings; to help channel savings to desired uses; to help insulate China's pegged exchange rate in order to maintain China's export competitiveness; to reduce the circumvention of other controls such as tariffs; to protect domestic sectors from foreign investment; to strengthen China's macroeconomic policy autonomy; and to insulate the economy from foreign financial crises.

Capital management techniques in China

China has followed a fascinating pattern of economic liberalization since the early 1980's, one that does not conform to any simplistic view of sequencing commonly found in the economics literature. The typical, currently prescribed liberalization sequence starts with liberalizing the trade account, then relaxing foreign exchange restrictions, then the long term capital account, then the short term capital account. Instead, China has liberalized quite selectively within each of these categories, often on an experimental basis, and sometimes moving a step or two backwards before moving once again forward. This complex pattern of experimentation and liberalization thus defies easy description, and makes over-simplification in a short summary such as this almost inevitable.

When China, under the leadership of Deng Xiao Ping embarked on its experimentation with liberalization and integration into the world economy, it had comprehensive controls over foreign exchange, current account and capital account transactions. In its experimentation with Special Economic Zones it began to allow foreign investment in foreign minority owned joint-ventures, and liberalized to some extent controls over necessary imports for these "foreign invested enterprises". (See Braunstein and Epstein, 2004, for a brief summary and references).

Many of these restrictions were loosened over time and a major change in capital management techniques occurred in 1996 with China's acceptance of IMF Article VIII and the consequent liberalization of foreign exchange controls with respect to current account

¹⁰ A recent estimate of round-tripping finds a large amount, equal to 25-40% of FDI [Xiao, 2004].

¹¹ Of course, the Chinese economy and society also face significant problems and challenges, including high unemployment and underemployment, significant environmental destruction, and the perceptions, if not reality, of wide-spread government corruption.

transactions. Moreover, since that time, controls over inflows and outflows by non-residents have been significantly loosened. Still, strict foreign exchange controls have been retained; in addition controls over foreign ownership of domestic assets have been retained to allow industrial policy tools with respect to foreign investment to be effective. In addition, strict controls over outflows and inflows of capital by domestic residents have been retained. Still, significant exceptions have been made, partly by choice and partly by necessity, to allow a somewhat porous capital account, and thereby facilitating some capital outflows (capital flight) and round tripping of foreign direct investment.

China's current capital management techniques have the following characteristics [Icard, 2002; IMF, 2000; Haihong, 2000]¹²: strict exchange controls on the capital account but few restrictions on the current account; some liberalized sectors for equity inflows and outflows by non-residents accompanied by some sectors of quite strict controls on non-resident equity inflows, eg. banking, insurance and the stock market; strict controls on foreign borrowing by residents, including on currency denomination and maturity structure of debt inflows; strict but porous controls on inflows and outflows by residents; tight regulations over domestic interest rates.

Dynamic Controls

China's experience during the Asian financial crisis illustrates well not only how successful management of the capital account can be in terms of insulating an economy from crisis, but also in terms of how active management of the techniques can be required to deal with a dynamic, unfolding crisis.

The State Administration of Foreign Exchange (SAFE) managed the 1997 crisis by reinforcing regulations and instituting new ones. [SAFE, 2002]. First, given China's relatively high foreign debt, in 1998 SAFE moved to control risk and improve the management of foreign debt by tightening control over the scale and structure of foreign borrowing. For example, borrowing for real estate speculation was sharply curtailed. SAFE's ability to limit the borrowing of short term debt borrowing is widely recognized as a key factor in helping China to avoid the worst of the crisis.

SAFE also had to confront capital flight stemming from the expectation that China would devalue the renminbi. Speculators found loopholes to the exchange controls, including borrowing renminbi from domestic banks. For example, SAFE noticed a sharp increase in stand-by letters of credit unaccompanied by increases in trade figures, so it swiftly moved to ban early redemption of foreign currency loans. Also, firms were falsifying documents to get hard currency for imports; SAFE tightened monitoring of such behavior. SAFE also tightened penalties for the holdings of forex offshore. For example, SAFE supported legislation to make holding such forex offshore a more serious crime. Forex swap centers had become transit points for the outflow of foreign currency, so SAFE closed most of the centers, and closely supervised the ones that remained open.

SAFE also took measures to build up China's forex reserves as a treasure chest to deter speculation and defend the currency. They raised the interest rates paid to residents on forex accounts to get them to turn forex into banks. They also took measures to prevent exporters from holding earnings overseas. For those with low repatriation rates, banks were to closely examine their books before issuing loans, and the firms could lose their export licenses.

¹² This list is a very short summary of a very long and complex set of controls. See the references cited above for much more detail.

These are just some of the examples of dynamic techniques the SAFE implemented to strengthen the management of capital outflows during the Asian Financial Crisis. After the crisis eased, many of these restrictions, in turn, were eased.

Assessment

The system of capital and exchange controls has been an integral part of China's development strategy of the last twenty years. The Chinese government could not have pursued its policy of incremental liberalization based on exports, extensive infrastructure spending, and labor-intensive FDI, expansionary monetary and fiscal policy and competitiveness oriented exchange rate policy without its system of exchange and capital controls. Given that China's growth record in the past twenty years is the envy of much of the world, and the important role played by the capital management techniques, one must deem them a success in terms of reaching the Chinese government's objectives.

Most recent commentary has focused on the role that the controls may have played in insulating the Chinese economy from speculative excesses. More specifically, this system of controls is widely credited with helping China avoid the boom- bust cycle associated with the Asian financial crisis [eg. Fernald and Babson, 1999; Eichengreen, 2002; Haihong, 2000]. Controls on foreign debt accumulation prevented the excessive accumulation of unsustainable amounts and maturities of foreign debt by resident institutions; controls on equity inflows prevented a speculative bubble in the stock market from spilling over into other sectors of the economy, and limited, to some extent, the fall out from bubbles in real estate and other assets; controls on outflows prevented devastating surges of capital flight; exchange controls and the control over derivative and futures markets limited the desirability and feasibility of domestic and foreign residents speculating on the renminbi.

As liberalization in China and elsewhere proceeds, china's controls still have bite. China has been able to reach its exchange rate targets. Offshore markets in non-deliverable forwards have developed but differentials between on-shore and off-shore interest rates remain [Ma, Ho and McCauley, 2004]. (See Table 2)

At the same time, we note the paradox of tight controls with large amounts of "capital flight" and "round-tripped" investment [Xiao, [2004]; Zhu, Li and Epstein [2004]. The Chinese authorities have clearly tolerated a degree of flexibility in the controls. Some of this is undoubtedly related to possible corruption and unwanted evasion. But some of it reflects a "safety valve", allowing some evasion at the margins in order to protect the average effectiveness of the controls; and some of the "evasion" is allowed in order to facilitate other objectives. This ebb and flow of capital flight thus to some extent reflects, the "dynamic" nature of the controls, with the Chinese authorities tightening enforcement during periods of perceived need, including during crisis periods and then loosening them when the crisis subsides.

Supporting factors

The most important factors supporting the success of capital management techniques in China are: the government's extensive experience with implementing economic controls; the comprehensive nature of the controls; the success in building foreign exchange reserves through exports and FDI; and the flexibility of policy.

Costs

Capital management in China is not without cost. China's financial system does not have the breadth and depth of financial systems in more advanced economies, such as the USA. Capital management, while facilitating China's industrial policies, has also facilitated the accumulation of bad debts at China's state banks [Lardy, 2000]. Capital management (as with

other aspects of China's state-guided policies) has facilitated credit allocation and industrial policies. But it has also created opportunities for corruption by government officials. These costs are likely to have been outweighed by the significant contributions that capital management has played in China's highly successful economic development over the past several decades.

Other achievements

Even though there has been significant capital flight from China, most observers have suggested that capital flight would have been significantly greater in the absence of the capital management techniques employed. Further, capital management policies have allowed the Chinese government to follow an expansionary monetary policy to try to counter the strong deflationary forces pressures facing the Chinese economy. Finally, China is the largest recipient of FDI among developing countries. While some argue that capital management discourages FDI inflows [Wei, 2000], the econometric evidence on this point lacks robustness. Moreover, interviews on this subject do not suggest that capital management has been an obstacle to FDI. Indeed, sound capital management appears to encourage FDI inflows [Rosen, 1999].

IV. LESSONS AND OPPORTUNITIES FOR CAPITAL MANAGEMENT IN DEVELOPING COUNTRIES

A. Lessons

What lessons can we learn from these case studies about capital management techniques and their possible use to developing countries that are trying to navigate the often-treacherous waters of the world economy? To clear the field for the *positive* lessons that we draw from our cases, we first consider six commonly held mistaken claims about capital management techniques.

One common view of capital management is that it can only work in the "short run" but not the "long-run." However, with the exception of Malaysia all of our cases show that management can achieve important objectives over a significant number of years. Taking China and Singapore as two cases at different ends of the spectrum in terms of types of controls, we have seen that both countries effectively employed capital management techniques for more than a decade in the service of important policy objectives.

A second common view is that for capital management to work for a long period of time, measures have to be consistently strengthened. In fact, the reality is much more complex than this. As the cases of Malaysia, Chile and China show, at times of stress, it may be necessary to strengthen controls to address leakages that are exploited by the private sector. However, as these same cases demonstrate, controls can be loosened when a crisis subsides or when the international environment changes, and then reinstated or strengthened as necessary. More generally, looking at a broad cross-section of country experiences, one finds that the use of dynamic capital management means that management evolves endogenously according to the situation and the evolution of government goals [Cardoso and Goldfajn, 1999].

A third common, but misleading view, is that for capital management to work, there must be an experienced bureaucracy in place. It is certainly true that having experience helps. China, and India have many years of experience. Malaysia, however, is an important counter-example: it was a country that was able to successfully implement capital management even without having had a great deal of experience in doing so. In the case of Chile, to take another example, the central bank had had no obvious previous experience implementing the reserve requirement scheme, though it had had some negative experiences in trying to implement capital controls in

the 1970's. In short, having experience is no doubt helpful, but it does not seem to be a pre-requisite for implementing successful capital management techniques. What is more important is *state capacity* and *administrative capacity* as discussed in sections III and IV.

Fourth, a recent view that has gained currency is that controls on capital inflows work, but those on outflows do not. However, in our sample we have seen examples of policy success in both dimensions.

Fifth, a common view is that capital management techniques impose significant costs by leading to higher costs of capital, especially for small firms. As we have seen, in some cases there may be some merit to these arguments. But much more evidence needs to be presented before this is established as a widespread cost.¹³

B. The Bottom Line

Table 4 summarizes the main achievements and costs of the capital management techniques in Malaysia, India and China in the 1990's. As we have suggested, there is strong evidence that these policies have had many positive impacts on these three countries, including helping to insulate them from the worst affects of the Asian financial crisis. However, as Table 4 suggests, the positive impacts have gone significantly beyond that achievement.

In recent years, all three countries have continued to liberalize their capital account and exchange controls. Indeed, as this process of liberalization is ongoing, any snap shot of controls is bound to soon be out of date. Many economists and policy makers maintain the full capital account liberalization must be the obvious and ultimate goal, and that these countries must continue to travel down the path to full liberalization as soon as is feasible.

We have argued, on the contrary, the capital management techniques, not only with respect to inflows but also outflows, must be available to developing country governments over the long term as they try to stay afloat in the treacherous waters of international finance. Dr. Y. V. Reddy, Governor of India's Central Bank, perhaps summarizes our argument best. In a recent speech to the Central Bank Governors' Symposium at the Bank of England in London, Reddy made the following points [Reddy, 2004]:

First, capital account liberalization "has to be managed". Second, "caution" must be exercised in implementing liberalization. Third, the capital account itself needs to be managed during the process of capital account liberalization". Fourth, the management of capital account requires "safeguards against misuse of liberalized current account regime to effect capital transfers." Fifth, prudential regulations over financial intermediaries, and especially banks, with regard to their forex transactions and exposures are crucial. "Such prudential regulations should not be treated as capital controls". Moreover, capital controls should be treated as one component of the management of the capital account. Sixth, "the freedom to change the mix of controls and to reimpose controls should always be demonstrably available. Finally, "in respect of emerging economies, the conduct of market participants show the automatic self-correcting mechanisms do

¹³ In any case, this observation is just the beginning of the analysis since it says nothing about the balance of costs and benefits. As economists are fond of pointing out, there are always trade-offs. Our cases demonstrate that capital management techniques can have important macroeconomic or prudential benefits. Of course, these benefits must be weighed against the micro costs. But as James Tobin was fond of remarking, "It takes a lot of Harberger Triangles to fill an Okun Gap".

not operate in the forex markets. Hence, the need to manage capital account – which may or may not include special prudential regulations and capital controls.”

A recent symposium on capital account liberalization sponsored by the Bank for International Settlements and China’s State Agency for Foreign Exchange (SAFE) reached similar conclusions. Among them is the following: “...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.” [Wang and Xie, 2002]

Indeed, critics are not mistaken to be concerned that liberalization may be proceeding too far and too fast in some cases. The main point, though, as we have tried to argue, is that retaining the prerogative and the capacity to manage capital *inflows AND outflows* over the long term, should be a permanent part of most developing countries’ economic toolkit.

Table 1

Summary: Types and Objectives of Capital Management Techniques Employed During the 1990's*

Country	Types of Capital Management Techniques	Objectives of Capital Management Techniques
Malaysia (1998)	<p>Inflows -restrictions on foreign borrowing</p> <p>Outflows <i>non-residents</i> -12 month repatriation waiting period -graduated exit levies inversely proportional to length of stay</p> <p><i>residents</i> exchange controls</p> <p>Domestic financial regulations <i>non-residents</i> -restrict access to ringgit <i>residents</i> encourage to borrow domestically and invest</p>	<p>-to maintain political and economic sovereignty</p> <p>- kill the offshore ringgit market</p> <p>-shut down offshore share market</p> <p>-to help reflate the economy</p> <p>-to help create financial stability and insulate the economy from contagion</p>
India	<p>Inflows <i>non-residents</i> Strict Regulation of FDI and PI</p> <p>Outflows <i>non-residents</i> -none</p> <p><i>residents</i> exchange controls</p> <p>Domestic Financial Regulations -strict limitations on development of domestic financial markets</p>	<p>-support industrial policy</p> <p>-pursue capital account liberalization in an incremental and controlled fashion</p> <p>-insulate domestic economy from financial contagion</p> <p>-preserve domestic savings and forex reserves</p> <p>-help stabilize exchange rate</p>
China	<p>Inflows <i>non-residents</i> -strict regulation on sectoral FDI investment -regulation of equity investments: segmented stock market</p> <p>Outflows <i>non-residents</i> -no restrictions on repatriation of funds -strict limitations on borrowing Chinese</p>	<p>-support industrial policy</p> <p>-pursue capital account liberalization in incremental and controlled fashion</p> <p>-insulate domestic economy from financial contagion</p> <p>-increase political sovereignty</p>

	<p>Renminbi for speculative purposes</p> <p><i>residents</i> exchange controls</p> <p>Domestic Financial Regulations -strict limitations on <i>residents</i> and <i>non-residents</i></p>	<p>-preserve domestic savings and foreign exchange reserves</p> <p>-help keep exchange rates at competitive levels</p>
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*Sources: See Section IV.

Table 2
Limits on International Capital Flows in East Asia and India
And the Existence of Non-deliverable offshore forward markets

	Non-Deliverable offshore forward market for domestic currency	Limits on non-resident access to domestic-currency liabilities	Limits on foreign currency deposits in domestic banks	Limits on corporate borrowing in foreign currency	Limits on non-resident equity purchases
China	Y	Y	N	Y	Y ^a
Hong Kong	N	N	N	N	N
India	Y	Y	Y	Y	Y
Indonesia	Y	Y	N	N	N
Korea	Y	Y	N	N	N
Malaysia	N	Y	N ^b	Y	N
Philippines	Y	Y	N	Y ^c	N
Singapore	N ^d	Y	N	N	N
Thailand	N	Y	Y	N	N
Taiwan	Y	Y	N	Y ^e	Y

- a) Non-residents not allowed to buy A-shares listed in Shanghai and Shenzhen but are allowed to buy B-shares
- b) Only corporate accounts permitted
- c) Registration of foreign loans with the Bangko sentral ng Pilipnas is necessary only in order to obtain foreign exchange from the central bank
- d) Borrowing of Singapore dollars to buy Singaporean equities, bonds and real estate now permitted; offshore issuers of Singapore dollar bonds without local need for the funds are required to swap the proceeds into foreign currency.
- e) Taiwanese corporations are allowed to borrow foreign currency freely but not to exchange the proceeds for New Taiwan dollars.

Sources: McCauley [2001], Ma, Ho, and McCauley [2004]; Economist Intelligence Unit (EIU).

Table 3
Controls on Outflows Pre and Post Crisis: Malaysia

Channel for outflows	Transactions	Malaysia	
		Pre-Crisis	Post-Crisis
Short selling of local currency by non-residents	Lending to nonresidents in local currency	Subject to a maximum outstanding limit	Not permitted
	Swap transactions with nonresidents	Free *subject to a maximum outstanding limit of 2 million \$'s	Not permitted since after Sept. 1998
	Accounts in domestic currency held abroad	Not permitted	Not permitted
Withdrawal of capital by non-residents	External Borrowing	Free for approved borrowing	Unchanged
	Purchase of Stocks by nonresidents	Purchase share limited to maximum of 30% of total shares issued by indiv. company	
Capital flight by residents	Convertibility from domestic currency to foreign exchange without underlying trade & investment activities	Not permitted	Not permitted
	Foreign Exchange accounts held domestically (surrender requirement)	Exporters allowed to hold up to RM 10 million with designated banks	Unchanged
	Foreign Exchange Accounts held abroad (repatriation requirement)	Export proceeds must be repatriated when contractually due, and in any case no more than 180 days from the date of exports. Proceeds must be retained in local ringit accounts.	Unchanged
Memo: Existence of non-deliverable forward Market?	No	No	

Sources: Watanabe, et. al. 2002.

Table 4

Summary: Assessment of the Capital Management Techniques Employed During the 1990s*

Country	Achievements	Supporting Factors	Costs
Malaysia 1998	-facilitated macroeconomic reflation -helped to maintain domestic economic sovereignty	-public support for policies -strong state and administrative capacity -dynamic capital management	-possibly contributed to cronyism and corruption
India	-facilitated incremental liberalization -insulated from financial contagion - helped preserve domestic saving -helped maintain economic sovereignty	-strong state and administrative capacity -strong public support for policies -experience with state governance of the economy -success of broader economic policy regime -gradual economic liberalization	-possibly hindered development of financial sector -possibly facilitated corruption
China	-facilitated industrial policy -insulated economy from financial contagion -helped preserve savings -helped manage exchange rate and facilitate export-led growth -helped maintain expansionary macro-policy -helped maintain economic sovereignty	-strong state and administrative capacity -strong economic fundamentals -experience with state governance of the economy -gradual economic liberalization -dynamic capital management	-possibly constrained the development of the financial sector -possibly encouraged non-performing loans -possibly facilitated corruption

*Sources: See Section III.

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