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**RESTRAINING INTERNATIONAL CAPITAL MOVEMENTS:  
WHAT DOES IT MEAN?**

**Graham Bird and Ramkishen S. Rajan**

**March 2000**

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**CIES DISCUSSION PAPER 0014**

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# RESTRAINING INTERNATIONAL CAPITAL MOVEMENTS: WHAT DOES IT MEAN?

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## ABSTRACT

Though there has been much general debate recently about the pros and cons of *restraining global capital movements* there remains substantial confusion and uncertainty about what exactly is entailed by the term. Popular discussion around this has typically been long on rhetoric and loose generalizations and acutely short on specifics. The principal aim of this paper is to help refine the debate by clarifying, systematically classifying and analyzing the various concepts that have been discussed in policy circles. We highlight and discuss two specific country experiences with restraining capital flows, viz. Chile and Malaysia.

Key words: *capital controls, Chile, exchange controls, IMF, Malaysia, Tobin Tax*

JEL Classification: *F30, F31, F34*

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## NON TECHNICAL SUMMARY

The 1990s have witnessed three broad periods of severe turbulence in international financial markets. The turmoil in Brazil, East Asia (Indonesia, Malaysia, South Korea, Thailand and the Philippines) and Russia in 1997-99 was preceded by the Mexican-Tequila crisis in 1994-95 and the virtual collapse of the European Exchange Rate Mechanism (ERM) in 1992-93. Each time a crisis has occurred, there have been calls for some kind of curbs on “speculative” foreign currency transactions and global capital movements. Though there has been much general debate recently about the pros and cons of *restraining global capital movements*, there remains substantial confusion and uncertainty about what exactly is entailed by the term. Popular discussion around this has typically been long on rhetoric and loose generalizations and acutely short on specifics. The principal aim of this paper is to help clarify thinking on the notion of restraints on capital account transactions, rather than provide a detailed analysis of their economic rationale (which is conventional wisdom by now). To this end, a categorization of capital restraints is provided to assist in the evaluation of various proposals for and against capital restraints. It is noted that restraints on capital movements may be divided into controls on capital account transactions per se (*capital controls*) and controls on foreign currency transactions (*exchange controls*). It is emphasized that when analyzing curbs on capital movements, the four key features to keep in mind are whether they are *comprehensive* or *selective*; whether they are meant to be *temporary* or *permanent*; whether they are imposed on *outflows* or *inflows*; and whether they are *direct/administrative* or *price-based*. Two specific country experiences with restraining capital movements, viz. Chile and Malaysia are highlighted and discussed.

# RESTRAINING INTERNATIONAL CAPITAL MOVEMENTS: WHAT DOES IT MEAN?

Graham Bird and Ramkishen Rajan

## 1. Introduction

The 1990s have witnessed three broad periods of severe turbulence in international financial markets. The turmoil in Brazil, East Asia (Indonesia, Malaysia, South Korea, Thailand and the Philippines) and Russia in 1997-99 was preceded by the Mexican-Tequila crisis in 1994-95 and the virtual collapse of the European Exchange Rate Mechanism (ERM) in 1992-93. Each time a crisis has occurred, there have been calls for some kind of curbs on “speculative” foreign currency transactions and global capital movements. For instance, following the ERM crisis, the Committee on Economic and Monetary Affairs of the European Parliament encouraged the European Commission to “submit detailed proposals for regulating foreign exchange transactions” (Eichengreen, et al., 1996, p.303 and Kenen, 1995, p.185). In the midst of the East Asian crisis, Malaysia’s prime minister, Mahathir Mohamed, reportedly lashed out at currency speculation - calling currency trading “unnecessary, unproductive and immoral” - taking particular aim at George Soros, probably the most prominent market participant<sup>1</sup>. Most recently, the G7 policy statement (1999) also acknowledged that, “in exceptional cases, countries may impose capital or exchange controls as part of payments suspensions or standstills in conjunction with IMF support...”. A number of prominent economists have also recently argued against a completely *laissez faire* attitude towards international capital movements<sup>2</sup>.

While receiving growing attention, there however remains substantial confusion about what one exactly means by *restraining international capital movements*. Popular discussion has typically been long on rhetoric and loose

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<sup>1</sup> For instance, see the **Asiaweek** (October 3, 1997, pp.62-3) and **International Currency Review** (April 1998, pp.7-8).

<sup>2</sup> This growing list includes Jagdish Bhagwati (1998), Barry Eichengreen (1999), Paul Krugman (1998), Helmut Reisen (1998), Dani Rodrik (1998) and Joseph Stiglitz (1988a,b), to name a few.

generalizations and short on specifics. The principal aim of this paper is to help refine the debate by clarifying, systematically classifying, and analyzing some of the main concepts that have been discussed in policy circles.

This paper is organized as follows. Section 2 provides a brief classification of restraints on capital movements and discusses their global quantitative importance. It also reviews the IMF's push towards capital convertibility and makes the important but often over-looked distinction between capital account deregulation and financial services liberalization. Section 3 discusses the principal theoretical issues raised with the debate on restraining capital movements and evaluates them according to a number of criteria. Section 4 goes on to examine two cases where restraints on capital movements have been used (viz., Chile and Malaysia), and assesses the lessons that may be learnt from these country experiences. Section 5 offers some concluding remarks.

## **2. Classifying Restraints on Capital Movements**

Restraints on capital flows may broadly be divided into those that focus on capital account transactions (*capital controls*) and those that focus on foreign currency transactions (*exchange controls*).

### **2.1 Capital Controls**

These involve constraining one or more elements of the balance of payments capital account. In principle they can cover foreign direct investment (FDI), portfolio investment, borrowing and lending by residents and non-residents, transactions making use of deposit accounts and other miscellaneous transactions. Within each of these categories, there may be a wide range of possible controls. For example:

- a) FDI by either residents abroad or non-residents domestically can be directly restricted, or restrictions can influence the repatriation of profits and initial capital, and to structure of ownership;

- b) Portfolio investment restrictions can take the form of regulations on the issuance or acquisition of securities by residents overseas or by non-residents domestically. Limitations on the repatriation of dividends and capital gains and transfers of funds between residents and non-residents may also exist, as may “market-oriented” tax measures (such as the well known US real interest equalization tax);
- c) Regulations on external debt transactions largely take the form of ceilings or taxes on external debt accumulation by residents and firms (financial and non-financial institutions). Special exemptions are often provided in the case of trade-oriented enterprises or on a case-by-case basis, as determined by the regulatory authorities.
- d) Restrictions on deposit accounts may be imposed on foreign currency deposits held locally by residents and non-residents, or deposits held in local currency by residents abroad or by non-residents overseas or locally.
- e) Other capital controls entail restrictions on real estate, emigration allowances and other forms of capital transfers.

Table 1 provides a summary of the types of restraints imposed by developing countries, based on data available in 1994<sup>3</sup>.

*Insert Table 1*

## **2.2 Exchange Controls**

Exchange controls regulate the rights of residents to use (remit or receive) foreign currencies and hold offshore or onshore foreign currency deposits. They also regulate the rights of non-residents to hold domestic currency deposits onshore. In addition, they may be defined to include taxes on currency transactions and multiple

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<sup>3</sup> For a more exhaustive list of possible forms of controls on capital and current account transactions, see the latest country survey in the IMF's **Exchange Rate Arrangements and Exchange Restrictions Annual Report**.

exchange rate practices which are aimed at influencing the volume and composition of foreign currency transactions.

### **2.3 Capital Account Convertibility**

Convertibility implies the absence of restrictions on foreign currency transactions. The IMF (1998) has defined capital account convertibility as the:

freedom from quantitative controls, taxes, and subsidies - that affect capital account transactions between residents and non-residents. Examples of such transactions include all credit transactions between residents and non-residents, including trade - and nontrade-related credits and deposit transactions, and transactions in securities and other negotiable financial claims.

Given the linkages between currency trading and capital movements, for all practical purposes capital account convertibility is generally seen in the wider context of liberalization of capital account transactions. However, ambiguities can arise. Table 2 lists the developing countries which, according to the IMF, had no restrictions on capital account transactions between 1973 and 1996. For instance, Malaysia is presented as having had no capital account restrictions during that period, whereas in fact, Malaysia introduced a set of (temporary) measures to restrict capital *inflows* in January 1994 (see section 4.2).

*Insert Table 2*

One reason for the Fund's apparent lack of a clarity on the issues is that it has no legal jurisdiction over the liberalization of the capital account of member countries. While *current account* convertibility is covered by Article VIII, no such obligation

exists for *capital account* transactions<sup>4</sup>. In fact, the Interim Committee of the Fund's Board of Governors agreed in September 1997 to amend the Articles of Agreement to make capital account liberalization one of the specific purposes of the IMF and to give it legal jurisdiction to oversee member countries' transitions towards capital account convertibility. However, the onset of the East Asian crisis seems to have stalled major initiatives in area, and it remains to be seen what (if any) follow-up there is on the issue by the IMF<sup>5</sup>.

#### **2.4 Capital Account Deregulation versus Financial Services Liberalization**

Most emerging economies in East Asian and elsewhere may be classified as being bank-based. In such economies, it is particularly important to distinguish clearly between capital account deregulation and internationalization of financial services (IFS). The relation between international capital movements and financial services may be succinctly and effectively captured by Table 3, which is borrowed from Kono and Schuknecht (1999). While Cell I on the uppermost left-hand corner refers to the case of financial autarky, i.e., neither financial services trade nor an open capital account. Cell IV on the bottom right-hand side denotes the case of "complete" IFS, i.e. liberal capital account and bank internationalization. The remaining two cells may be broadly classified as "partial IFS". Specifically, Cell II involves the case of bank internationalization with capital restrictions; while Cell III is the case of capital account deregulation but with restrictions on trade in banking services maintained. Of

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<sup>4</sup> The Fund's articles do actually permit the use of controls on capital account transactions. For instance, Article VI states that the "Fund may request a member using its general resources to impose capital controls."

<sup>5</sup> See Polak (1998) for an excellent critique of the IMF's general attitude towards and proposed legal jurisdiction on capital account restraints. Quirk et al. (1998) and Fischer (1998) provide the IMF view on the issues.

course, in reality, the two elements of IFS are related and cannot be cleanly separated. However, the assumption of total separability is useful conceptually, with Cells II and III best being seen as matters of degree of the two elements of IFS.

It is useful to note that, as per the General Agreements on Trade in Services (GATS), the WTO has emphasized that countries could maintain selective controls on the capital account while moving towards internationalization of the banking sector, which broadly involves providing national treatment to foreign services and service suppliers<sup>6</sup>. This being said, the focus of the remainder of this paper is on restraints on the capital account in particular.

*Insert Table 3*

### **3. Restraining International Capital Movements: Some Key Distinctions**

There is a large body of literature which examines the arguments for and against capital controls<sup>7</sup>. Rather than rehearse these arguments here, we focus instead on four issues/categories in the context of evaluating restraints on capital movements. Mechanisms for seeking to restrain international capital flows may be applied on a *selective* or *comprehensive* basis; they could be done so on *outflows* or *inflows*; they could either be *temporary* or *permanent*; they could be applied *unilaterally* or *universally*; and they could focus on direct *quantitative* controls designed to frustrate the wishes of market participants or on using the *price mechanism* via explicit or implicit taxation to influence their wishes. We discuss each of these distinctions in some detail below.

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<sup>6</sup> For discussions on the GATS agreement on financial services, see Claessens and Glaessner (1998), Kono and Schuknecht, (1999) and Kono and Associates (1997). Bird and Rajan (2000) provide the analytical basis for a financial services first liberalization in bank-based economies.

<sup>7</sup> For instance, see Bird (1998), Dooley (1995), Eichengreen (1999), Eichengreen et al. (1999), Fischer (1998) and Rajan (1998).

### **3.1 Selective versus Comprehensive**

Curbs on capital movements may be more or less extensive. At one end of the range, there could be virtual inconvertibility on the capital account (i.e., comprehensive capital controls). India and China are notable examples in Asia<sup>8</sup>. This being said, it is more typical for a country to impose controls, however selectively, on one or more items within the capital account. Of the 155 countries surveyed, 119 were reported to have imposed some type of (selective) restrictions on certain capital account transactions<sup>9</sup>. Of the 119 countries with some controls, 67 were reported to use comprehensive controls. However, the distinction between selective and comprehensive controls may not be precise. For instance, even in the cases of India and China, there exists relative freedom on some forms of capital movements (such as FDI). The distinction is therefore more one of degree rather than kind. A generally illiberal regime, i.e. one with comprehensive controls, typically has a “positive list” of exceptions to the controls. A generally liberal regime, i.e. one that imposes controls selectively, is likely to have a “negative list” of items to be controlled.

### **3.2 Outflows versus Inflows**

Restraints on capital outflows are generally advocated for a couple of reasons. First, they are claimed to slow the speed of capital outflows when a country is faced with the possibility of a sudden and destabilizing withdrawal of capital during a time of uncertainty. Second, they are supposed to break the link between domestic and

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<sup>8</sup> See Ariyoshi et al. (2000) for discussions of the Chinese and Indian case-studies.

<sup>9</sup> This contrasts with 123 countries (out of 153 surveyed) in 1990 (Mathieson and Rojas-Suarez, 1993).

foreign interest rates, recognizing that a country cannot maintain a flexible exchange rate regime, monetary policy autonomy and an open capital account all at once (i.e., “impossible trilemma or trilogy”). Thus, crisis-hit economies could conceivably pursue expansionary monetary and credit policies as a means of growing their way out of debt without having to worry about possible capital flight and the concomitant weakening of the currency.

Restraints on inflows serve a preventive function. The aim here is to preclude a surge in capital inflows during boom times, so as to minimize the chances of an abrupt and sharp capital reversal (bust) in the future<sup>10</sup>. Of the 67 developing countries imposing comprehensive controls in 1994, all imposed them on outflows but only 17 did so on inflows (see Table 1). Yet empirical studies have indicated that capital controls have been more effective at preventing “excessive” capital inflows than at stemming capital flight<sup>11</sup>.

### **3.3 Temporary versus Permanent Restraints**

Temporary restraints are seen as a deterrent to excessive outflows or inflows during an “extraordinary” period. Thus, they may be used at a time when a country is faced with the possibility of capital flight, so as to give policy makers breathing room to make appropriate changes in economic policy. Conversely, they may be imposed

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<sup>10</sup> As noted by Dooley (2000):  
an important empirical regularity associated with recent crises in emerging markets is that speculative attacks are preceded by very large private capital inflows into the country.  
Also see Bird and Rajan (2000).

<sup>11</sup> For instance, see Mathieson and Rojas-Suarez, 1993 and Reinhart and Todd Smith, 1997. Rossi (1999) however finds that restraints on capital inflows are associated with slower growth.

when an economy experiences unsustainably large capital inflows, due to excessive confidence in the growth prospects of the economy (i.e. “irrational exuberance”).

The rationale behind temporary restraints arises from the fear that such capital surges could lead to a loss of competitiveness through a real exchange rate appreciation (sometimes referred to as the “financial Dutch Disease phenomenon”), and could create macroeconomic disequilibrium (Calvo et al., 1996). In addition, the literature on optimal sequencing of economic liberalization has emphasized the need to reform the financial sector in conjunction with putting in place adequate prudential regulation so as to limit the possibility of systemic risks, before attempting to decontrol capital account transactions. As such, temporary controls may allow reforms to be phased<sup>12</sup>.

Permanent controls are seen as necessary even during “normal” times. The rationale here is that even if all the microeconomic distortions are eliminated and macroeconomic policies are generally sound, there may nonetheless exist certain inherent market failures that cause sub-optimal decisions to be made in a decentralized and free market economy. Insofar as these market failures are prevalent in a *laissez faire* economy, they may provide a rationale for capital restraints on a permanent basis rather than on an event-specific or transitory basis.

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<sup>12</sup> See for example, Eichengreen (1999), Fischer and Reisen (1992), Goldstein and Turner (1996) and Quirk et al., (1995). Note that bank internationalization is a key aspect of these reforms (Bird and Rajan, 2000). The East Asian crisis have made apparent the dangers of inappropriate sequencing of the capital account, with most of the countries being too hasty in capital account liberalization (Rajan, 1999). A particularly relevant and interesting question given the regional turmoil, is the following: granted that capital account liberalization has been ill-sequenced and ill-timed, is there a case for the reimposition of capital controls while the necessary financial sector reforms are put into place? In a second best world, there does not seem to be any obvious reason for an *a priori* dismissal of such a policy.

### **3.4 Universal versus Country Specific**

Inasmuch as capital controls seek to protect the capital account of the balances of payments, their effectiveness at an individual country level will depend on their degree of universality. Used universally, controls might be expected to lower the global volume of capital movements. Used only by a relatively few countries, they may be expected to alter the geographical pattern of capital flows (see the discussion of the Tobin tax in subsection 3.5.1). Capital controls, as described earlier, are usually discovered in a country-specific environment, although as the data show, they are a policy weapon that many developing countries have chosen to use. In contrast, currency taxation in the form of a Tobin tax is envisaged as being applied universally. Its focus is to reduce systemic capital volatility with the intention that the tax discriminates against speculative capital movements.

### **3.5 Direct/Administrative versus Market/Price-Based Restraints**

Restraints could either directly control market movements, or they could be a market-based mechanism which alters the structure of price incentives that face market participants, thereby inducing them to modify their behaviour. There are the well known problems relating to the potential for rent-seeking activities (bribery, corruption and so forth) that controls generate, not to mention the high enforcement costs, the inevitable creation of a black market and the general porousness of quantitative restrictions, particularly in the medium and longer terms. These drawbacks of controls, on the one hand, and the potential for generating tariff revenues, on the other, have generally led economists to prefer cost-based levies over quantitative restrictions. This is where currency taxation could come into the picture.

### 3.5.1 The Tobin Tax

A tax on international foreign currency activities was originally proposed by Nobel Laureate James Tobin in 1978<sup>13</sup>. The so-called Tobin tax is essentially a permanent, uniform, ad-valorem transactions tax on international foreign exchange flows. The burden of a Tobin tax is claimed to be inversely proportional to the length of the transaction, i.e., the shorter the holding period, the heavier the burden of tax. For instance, a Tobin tax of 0.25 percent implies that a twice daily round trip carries an annualized rate of 365 percent; while in contrast, a round trip made twice a year, carries a rate of 1 percent. Accordingly, and considering that 80 percent of foreign exchange turnover in 1995 involves round trips of a week or less, it has been argued that the Tobin tax ought to help reduce exchange rate volatility and consequently curtail the intensity of boom-bust sequence due to international capital movements.

*What does Available Research Tell us about the Tobin Tax?*

The currency crises of the 1990s and the wild gyrations in global foreign exchange markets, have provided the impetus for a resurgence of interest in the Tobin tax. The political economy of currency taxation suggests that it will receive greater support if it can be shown to make a significant contribution to offsetting the perceived inefficiencies of private international capital markets. Based on available research on the topic, the following policy conclusions may be drawn<sup>14</sup>.

*Geographical Coverage*

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<sup>13</sup> Of course, explicit taxation could be imposed on other types of cross-border flows. In addition, market-based restraints need not generally be limited to explicit taxation of cross-border flows, they also encompassing indirect taxation (such as the Chilean deposit requirement which is discussed in section 4.1) and multiple exchange rates (Ariyoshi, et al., 2000).

<sup>14</sup> This section draws on Bird and Rajan (1999).

As noted, the Tobin tax cannot be applied unilaterally, as this will merely lead to a migration of foreign exchange transactions to untaxed countries (i.e., avoidance via migration). However, as long as the Tobin tax is levied on the trading site rather than the booking or settlement site, the high fixed costs involved in developing the human and physical infrastructure, ought to act as a disincentive against migration. Accordingly, rather than being completely universal (in the sense of including all countries), the Tobin tax need only be imposed by all the major financial centres in a uniform manner.

#### *Asset Coverage*

If the Tobin tax is limited to spot transactions (as per Tobin's original suggestion), this will lead to a tax-saving reallocation of financial transactions from traditional spot transactions to derivative instruments. As such, to prevent tax avoidance via asset substitution, it ought to be applied on all derivative products such as forwards, futures, options and swaps.

#### *Tax Rates*

While much research needs to be done in order to determine issues such as the optimal tax rate, coverage, and the like, there is broad consensus that the tax must be levied at a rate designed to minimize the incentive to undertake synthetic transactions in order to evade the tax (i.e., geographical or asset substitution) or to alter the foreign exchange market structure from a decentralized, dealer-driven market to one that is centralized and customer-driven. Suggestions of the "most appropriate" rate of taxation have generally ranged between 0.1 and 0.25 percent.

#### *Preventive Rather than Curative*

A Tobin tax will probably be far more successful in (and ought to be aimed at) moderating (short term) capital *inflows* (especially debt financing), rather than

*outflows*. In other words, the aim should be to prevent excessive booms from occurring in the first instance, rather than attempting to mitigate the effects of (let alone, eliminate) the busts that invariably follow.

While it is certainly true that the annualized rate of tax varies positively with the speed of the round trip, in an important sense, this is irrelevant. What really matters is whether the expected gains exceed the costs defined to include the payment of the tax. In the midst of an international financial crisis when its stabilizing properties are most needed, a currency tax will be least effective, because of the large expected gains from speculation.

Tobin (1996, p.xi) noted that “the essential property of the transactions tax - the beauty part” is that “this simple, one-parameter tax would automatically penalize short horizon round trips, while negligibly affecting the incentives for commodity trade and long term capital investments.” However, insofar as agents engaged in international trade in goods and services, FDI and other “productive” cross-border activities hedge their financial transactions, while those engaged in portfolio flows that are short term in nature do not, it is possible that the Tobin tax ends up being relatively more burdensome on the former. This conclusion is arrived at by assuming that each hedging operation requires four or more financial transactions (each of which would be taxed). In contrast, speculative transactions involve only two (i.e., round-trip) cross-border movements. As such, to the extent that long term capital movements are more conducive to economic growth than short term ones, application of the Tobin tax in a pro-cyclical manner would not just be ineffective, it could actually be growth-reducing.

### *Counter-cyclical rather than Pro-cyclical*

Given the above (preventive) objective of a Tobin tax, it needs to be imposed in a counter-cyclical manner, i.e., raise the tax rate during a boom period and lower it (even eliminate altogether) at other times. This is consistent with the Chilean experience with and management of its interest-free deposit requirement (see Section 4.1); as well as the empirical literature on capital restraints, which seems to indicate that capital controls have been more effective at preventing excessive credit build-up than at stemming capital flight.

### **3.6 Summary**

Admittedly, the above categories are somewhat arbitrary, and there is considerable overlap in practice. However, they do seem to provide a basis for systematic analysis, something that has largely been missing from the literature on the subject thus far. The next section applies the categorization developed to two countries that have restrained capital movements, viz. Chile and Malaysia

## **4. *Unilateral Imposition of International Capital Movements: Country Experiences***

### **4.1 The Chilean Case**

Since 1991, and in response to a sharp inflow of capital - partly attracted by bullish expectations of the economy as it underwent a successful reform program - Chile has levied *permanent* and *selective market-based capital restraints*, predominantly on *inflows* of capital. The only restraint on capital *outflows* has taken the form of a one year restriction on capital repatriation, which in turn is meant to discourage the entry of short term speculative capital.

Restrictions on inflows have been designed largely to favor equity over debts and medium and long over short term capital inflows. There are three broad types of such restraints (Table 4). One, are the implicit taxes (in the form of interest-free reserve requirements to be deposited at the central bank) on all portfolio inflows. The deposit requirements cover capital inflows of all maturities for a period of one year, after which the central bank returns the funds. Such a non-remunerated reserve requirement acts as an implicit tax on capital inflows, with the rate varying inversely with maturity. Intermittent adjustments are made to the implicit tax rate in response to changing macroeconomic circumstances. In particular, the restraints are counter-cyclical in nature, being tightened during bullish periods when there is an upsurge in capital inflows, and relaxed when inflows subside. Thus, the rate was reduced from the peak of 30 percent in the early 1990s when all emerging economies were faced with large-scale capital inflows, to zero in September 1998, as international financial market conditions became bearish (see note b in Table 4)<sup>15</sup>. Two, all capital coming into Chile must be parked in the country for a minimum one year period. Three, Chilean firms and banks are permitted to access global debt markets only if their credit ratings are of a minimum level/quality.

*Insert Table 4*

Chile has managed to keep short term debt relatively low (relative to total debt and share of capital inflows), and has enjoyed relatively greater levels of long term equity flows<sup>16</sup>. With low levels of short term external indebtedness - a key criterion in determining the vulnerability to a currency crisis (Rodrik and Velasco, 2000) - and a

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<sup>15</sup> For a detailed chronology of changes in the implicit tax rate and coverage, see Ariyoshi et al. (2000), De Gregario et al. (2000) and Hernandez and Schmidt-Hebbel (1999).

<sup>16</sup> Chile's short term external debt fell from about 20 percent in 1990 to about 5 percent in 1997-98 (De Gregario et al., 2000).

sound financial system, the Chilean economy was relatively less affected by the Tequila crisis of 1994-95 than other Latin American economies. Chile has generally enjoyed faster and steadier economic growth (in terms of being both less variable and less inflationary) compared to either Mexico or Argentina (Neuhas et al., 1998).

While some questions regarding the effectiveness of the controls in reducing aggregate capital inflows remain unresolved, there is nonetheless a growing body of evidence to suggest that Chilean controls, while not significantly affecting the *level* of capital inflows (and therefore the extent of real exchange rate appreciation), have been effective in extending their *duration* (maturity structure)<sup>17</sup>.

Paradoxically, perhaps it has been the effectiveness of capital restraints in ensuring relative stability in the short term (by biasing capital inflows towards those that are longer term and more durable and potentially less destabilizing) that has increased the enthusiasm to invest in Chile. This successful “maturity-stretching” role of the restraints may in turn have led to an overall increase in net inflows, hence diminishing the “inflow-reducing” effects of the tax. For instance, it has been found that a one percent increase in the (implicit) Chilean tax has a greater impact when the trend economic growth is low than when it is high (Larrain et al., 1997). The Chilean experience in the active management of capital inflows has therefore increasingly been seen as at least indicative of the potential benefits of restraints on capital inflows.

Conversely, the Chilean model also highlights one of the major drawbacks of capital restraints. Specifically, trade credits are also subject to the implicit tax (thus acting as a trade barrier), since if they were to be exempt, there could be non-negligible evasion under the guise of trade credit. The potential consequence has been

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<sup>17</sup> See Ariyoshi et al. (2000) (and references cited within) and De Gregario et al. (2000).

an adverse effect on Chile's international trade<sup>18</sup>. Similarly, the Chilean authorities have had to closely monitor all international capital movements to and from the country to ensure that short term flows do not enter under the guise of FDI. This in turn entails administrative burdens and introduces the possibility of rent-seeking activities.

The argument is made in some quarters that it has been Chile's sound macro fundamentals and robust financial system that have been the key to success, rather than the restraints on capital movements. But Chile took about a decade to upgrade its banking system and capital restraints may, at the very least, have played a role in allowing the country to improve the soundness of its domestic financial institutions, including risk-control systems and business practices, and the administrative capacities of financial sector regulators<sup>19</sup>. Indeed, IMF Managing Director, Stanley Fischer (2000), has recently noted that the "Fund has supported the use of some Chilean-style market-based controls on capital inflows for countries whose financial systems are not yet sufficiently robust.."<sup>20</sup>.

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<sup>18</sup> While financial innovations and advances in communications technologies have made capital controls increasingly porous, empirical studies do show that capital controls are most effective when combined with restraints on trade/current account transactions (Mathieson and Rojas-Suarez, 1993).

<sup>19</sup> It is revealing that the empirical study by Klein and Olivei (1999) finds that while open capital accounts seem to significantly increase financial depth in developed economies, the same cannot not be said of developing economies. This seems to suggest the need for a milieu of strong institutions and prudential regulations to be in place before a country might hope to enjoy the full benefits of an open capital account. Ariyoshi et al. (2000) stress that the lines between capital controls and prudential policies are not always clear, and that the former may serve certain prudential purposes. See also Rossi (1999) for a recent empirical investigation of the links between prudential regulation and capital account controls (on both inflows and outflows).

<sup>20</sup> Similarly, the group of twenty nine experts assembled by the Council on Foreign Relations (1999) to discuss possible changes to the international financial architecture, also recommended the imposition of Chilean-type restraints on capital inflows in economies with fragile systems.

## 4.2 The Malaysian Case

Malaysia's recent experiences with capital controls may be broadly divided into two episodes. In the first period (1994), Malaysia was faced with a massive boom, with net capital inflows peaking at 17.4 percent of GDP in 1993 (Table 5). In response, the monetary authorities (Bank Negara) implemented a series of *selective* and *temporary market-based capital controls* to limit speculative *inflows* and reduce the risks associated with macroeconomic heating and deteriorating asset quality.

*Insert Table 5*

The measures included a bank ceiling on non-trade or non-investment related external liabilities and a ban on the sale of Malaysian monetary instruments by residents to non-residents, as well as limits on external debt accumulation in “non-productive” activities by Malaysian banks (Table 6)<sup>21</sup>. The controls, along with a sharp decline in Malaysia's interest rate differential (which had been on a declining trend), in turn led to an abrupt and steep fall in net capital inflows from 17.4 percent of GDP in 1993 to 1.5 percent in 1994, mainly due to a reversal of capital inflows during the second half of 1994. Revealingly, the reversals was overwhelmingly due to the “other investment” category, which includes short and long term credits (including use of IMF credit) and currency and deposits and other accounts receivable and payable, and is highly interest-sensitive. FDI and other long term investments did not decline much during this period. Given the desire of the Malaysian authorities to maintain the *de facto* US dollar peg, these capital outflows were met with a sharp drain in reserves (Table 6). The IMF has concluded that the controls were “apparently

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<sup>21</sup> To the extent that residents were limited in foreign currency borrowings from Malaysian banks, the above regulation has implicitly been binding on all residents (banks and non-banks). See Ariyoshi (2000) for more description and discussion of the Malaysian measures.

effective in reducing the volume and in changing the composition of capital inflows” in Malaysia (Ariyoshi, 2000, Part II, p.11). Having attained their goals, most of the controls were removed by the end of 1994.

*Insert Table 6*

In the second episode, on September 1, 1998, Malaysia announced a package of wide-ranging and fairly *comprehensive exchange and capital* (i.e., portfolio and deposit accounts) *quantitative/administrative restraints on outflows*<sup>22</sup>. Although it was unclear at the time of the imposition as to whether the controls were intended to be *temporary* or *permanent*, they proved to be the former. Broadly, the measures included the forced liquidation of offshore ringgit accounts by residents and non-residents, a ban on the provision of credit facilities to non-residents, and a one year holding period prior to the sale of Malaysian securities (Table 7).

*Insert Table 7*

The *economic* motivation for the measures announced and implemented by the Malaysian authorities was broadly two-fold<sup>23</sup>. One, to divorce the domestic financial market from the international one, hence allowing expansionary monetary policy to reflate the recession-hit economy without fear of capital flight and weakening

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<sup>22</sup> Foreign exchange and share trading were restricted during the height of the crisis in August 1997 to prevent capital *outflows*. This seemed only to intensify the short selling of the Malaysian ringgit and other regional currencies. This may help to rationalize why Malaysia was heavily impacted by the crisis despite it being commonly acknowledged that its macro as well as broad financial indicators seemed to suggest limited vulnerability (Rajan, 1999). Dellas and Stockman (1993) develop a simple multiple equilibria model of capital controls. They show that when it is generally known (expected) that the government will impose capital restraints in the event of a negative shock, investors will expect to be compensated for this implicit devaluation, thus leading to a currency run and a further drain on reserves. In other words, imposition – or threat of imposing – such controls may be self-fulfilling.

<sup>23</sup> It has also been argued that the Malaysian controls were at least partly imposed due to internal domestic political considerations (**Business Times**, Singapore August 30, 1999).

exchange rate<sup>24</sup>. Thus, Malaysia's central bank, Bank Negara, immediately proceeded to cut the benchmark interest rate to 8 percent from 9.5 percent, the statutory reserve requirement from 6 percent to 4 percent (with an announcement that it would be halved again soon), raised fiscal spending by 20 percent and fixed the ringgit to 3.80 per US dollar. The authorities also announced a substantial loosening of the criterion used for defining non-performing loans (double the international standard of three months). Two, to preclude speculative attacks on the currency by forcing the liquidation of external/offshore accounts, which were roughly estimated at between RM20-25 million (and held mainly in Singapore).

In February 1999, the one year holding (administrative) levy on the repatriation of portfolio capital was replaced with an exit tax (price-based) levied on a declining scale. A two-tier system was introduced, whereby funds that came in on or after February 15, 1999 were subject to a 30 percent tax on profits made and repatriated within a year and 10 percent on profit repatriated after one year. This policy was further modified in September the same year, being replaced by a flat 10 percent levy on repatriation of profits on portfolio investment (Bank Negara, Malaysia). This move was meant to serve two purposes, viz. lower the effective tax burden on portfolio capital as well and allow for easier of administration of the scheme.

There were a number of concerns initially raised about the Malaysian controls. For instance, it had been argued in some quarters that, insofar as there has been a global trend towards economic liberalization (with many alternative investment opportunities with an increasing range of economies), adopting exchange controls

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<sup>24</sup> Malaysia's economy shrank 2.8 and 6.8 percent in the first and second quarters of 1998 respectively. This was its first recession (defined as two consecutive quarters of negative growth) in thirteen years and the second in more than 40 years (Sopiee, 1998).

may lead Malaysia to be overlooked by the international community as a viable investment destination<sup>25</sup>. There was also a feeling that the *unilateral* introduction of such controls may have been unwise in the midst of prevailing bearishness as it may be interpreted as a sign of weak economic fundamentals or the unsustainability of prevailing economic policies, hence exacerbating the situation<sup>26</sup>. As noted by Edison and Reinhart (1999, p.4):

Malaysia's controls...represented the most extreme example of "adverse signaling". Such signals (were) reinforced by Dr. Mahathir's anti-foreigners rhetoric at the time the controls were launched, which raised widespread concerns that even more drastic measures, including expropriation, would follow.

Reluctance to specify early on whether the controls were temporary or permanent created an additional element of uncertainty.

There is surely an element of truth in these concerns. For instance, immediately following the imposition of the restraints, Malaysia was removed from a number of key investment benchmarks, including the IFC, MSCI and FT-S&P; Malaysia's risk premium in international markets appreciated; Malaysia's sovereign ratings were downgraded; and FDI levels to Malaysia fell despite being exempted from the controls (Ariyoshi, 2000).

However, early empirical work on the administrative controls imposed between September 1998 and end 1999 suggests that they did in fact accomplish the goal of providing greater policy autonomy. This allowed Malaysia to pursue independent (i.e. loose) monetary policy and a fixed exchange rate regime (Edison and

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<sup>25</sup> See Oxelheim (1993), who refers to a "global race" for foreign investments or Contractor (1995) who discusses the shift in the "bargaining power" from sovereign countries/governments to global investors.

<sup>26</sup> See Bartolini and Drazen (1997) for a theoretical model in which capital restraints can convey information about a policy maker's preferences to the market.

Reinhart, 1999). This in turn may have contributed to the early recovery of the Malaysian economy from the crisis<sup>27</sup>.

How replicable is the Malaysian experience? Experiences with illiberal regimes (trade or finance) has suggested that there is inevitably much inertia in removing controls. In other words, an illiberal regime once initiated tends to become a permanent feature, rather than a temporary tool which “buys time” to undertake the necessary institutional and policy reforms. This is so, as many emerging economies may be characterized as being “soft” states *a la* Rodrik (1998), being captured by interest groups. However, Malaysia, being a “hard” or “autonomous” state, was able to ensure that there was a fairly quick and smooth transition to a relatively more transparent and less onerous set of restraints (price-based). This, along with the fact that much more detailed empirical work remains to be done on the Malaysian experience with restraining capital movements, suggests the need for significant caution in advocating it as a panacea to other crisis-hit economies. Indeed, Malaysian economic recovery per se cannot necessarily be interpreted as a sign of “success” of the policy. This is so, as Thailand and South Korea, which both pursued the IMF programs and maintained open capital accounts, also saw rapid economic recoveries. In addition, Malaysia entered the crisis in a stronger macroeconomic position than the other two economies.

## **5. Concluding Remarks**

The main purpose of this paper has been to help clarify thinking on the notion of restraints on capital account transactions, rather than provide a detailed analysis of

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<sup>27</sup> Having shrunk by 7.5 percent in 1998, the Malaysian economy grew by 5.4 percent in 1999 and is expected to grow at between 6 to 7 percent in 2000 (**Far Eastern Economic Review**,

their economic rationale. To this end, a categorization of capital restraints has been provided to assist in the evaluation of various proposals for and against capital restraints. It has been noted that restraints on capital movements may be divided into controls on capital account transactions per se (*capital controls*) and controls on foreign currency transactions (*exchange controls*). It has been emphasized that when analyzing curbs on capital movements, the four key features to keep in mind are whether they are *comprehensive* or *selective*; whether they are meant to be *temporary* or *permanent*; whether they are imposed on *outflows* or *inflows*; and whether they are *direct/administrative* or *price-based*. Two specific country experiences with restraining capital movements, viz. Chile and Malaysia, have been highlighted and discussed.

While the debate on the pros, cons and effectiveness of restraints on capital flows has invariably intensified with the onset of any currency and financial crisis, on balance, the opponents of such restraints have thus far prevailed. However, the magnitude (in terms of the depth, breadth and longevity) of the recent crises in emerging economies have, rightly or wrongly, given renewed and unprecedented vigor to proponents of restraining cross-border capital movements. Importantly, the recent turmoil in international financial markets has visibly won over many more supporters, including some prominent international economists and an increasing number of policy makers in Asia and elsewhere.

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**Table 1**  
**Capital Controls in Developing Countries (155 Surveyed)**

Category	Number of Countries
Any form of capital control	119
Comprehensive Controls <sup>a</sup> :	67
on Outflows	67
on Inflows	17
FDI	107
Of non-residents	84
Of residents	35
Profit repatriation and capital liquidation	34
Taxes on capital transactions	9
Non-resident-controlled enterprises	6
Portfolio Investments	61
Of non-residents	30
Of residents	33
Security Issuance by non-residents	15
Security Issuance abroad by residents	6
Debt-to-Equity Conversions	2
Financial Transactions	78
Of non-residents	41
Of residents	66
Trade-Related Financial Transactions	7
Deposit Requirements for borrowing from abroad by residents	2
	83
Deposit Accounts	37
Of non-residents in foreign exchange	52
Of non-residents in local currency	29
Of residents abroad	23
Of residents in foreign currency with domestic banks	70
Other Capital Transfers	34
Personal capital transfers	24
Blocked accounts	23
Real estate transactions	23
of residents	30
of non-residents	23

Note: a) Not explicitly defined in source  
Source: Quirk et al. (1995)

**Table 2**  
**Developing Countries with No Restrictions on**  
**Capital Account Transactions, 1973-96**

Country	Period of No Restrictions
Argentina	1994-96
Bolivia	1987-96
Costa Rica	1973-74, 1981-82, 1996
Ecuador	1973-93
The Gambia	1992-96
Guatemala	1974-80, 1990-96
Honduras	1973-80
Hong Kong	1973-96
Indonesia	1973-96
Iran	1975-78
Liberia	1973-84
Malaysia	1974-96
Mexico	1973-82
Nicaragua	1973-78
Niger	1996
Panama	1973-96
Paraguay	1983-84
Peru	1979-84, 1994-94
Seychelles	1978-96
Singapore	1979-96
Togo	1995
Uruguay	1979-93
Republic of Yemen	1973-90

Source: Rodrik (1998)

**Table 3**  
**Matrix on Domestic Versus International Capital Flows and Bank**

**Internationalization<sup>a</sup>**

	Loan provided by domestic supplier	Loan provided by foreign supplier
Loan involves domestic capital only	<u>Cell I:</u> <i>Neither financial services trade nor international capital flows</i>	<u>Cell II:</u> <i>Financial services trade only</i>
Loan involves international capital only	<u>Cell III:</u> <i>International capital flows only</i>	<u>Cell IV:</u> <i>Financial services trade and international capital flows</i>

Source: Kono and Schuknecht (1999)

**Table 4**  
**Restrictions on Capital *Inflows* into Chile**

<b>Type of Restriction</b>
No restrictions on repatriation of profit of FDI, but initial investment capital must remain in country for one year. Maximum proportion of FDI that may be financed through debt is 50 percent <sup>a</sup>
Issuance of American Deposit Receipts (ADRs) by Chilean companies is regulated. Only companies with risk classifications of BBB (for non-financial companies) and BBB+ (for financial institutions) are permitted to issue ADRs. Minimum account requirement as of November 1995 is US\$10 million
Bonds issued by local companies in global markets must have an average minimum maturity of four years
All other portfolio flows (including foreign loans, bond issues) above US\$10,000 are subject to a non-remunerated 10 percent reserve requirement to be deposited at the central bank for one year interest-free. The reserve requirement is independent of maturity (length of stay) of inflow
Credit lines for trade financing operations also subject to the 10 percent reserve requirement <sup>b</sup>

Notes: a) reduced from 70 percent to 50 percent in mid 1996

b) initially increased from 20 to 30 percent in May 1992. Subsequently reduced to 10 percent in June, 1996 and then zero in September 1998 in response to a general slowdown in portfolio capital Inflows to all emerging economies

Source: Edwards (1998) Hernandez and Schmidt-Hebbel (1998) and IMF (1998, 1999)

**Table 5**  
**Composition of Net Capital Flows to Malaysia (% of GDP), 1989-1996**

	1991	1992	1993	1994	1995	1996	Simple Average <sup>b</sup>	1997 <sup>c</sup>
Private Capital	11.2	15.1	17.4	1.5	8.8	9.6	10.2	4.7
Flows	8.3	8.9	7.8	5.7	4.8	5.1	7.2	5.3
Direct investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portfolio	2.9	6.2	9.7	-4.2	4.1	4.5	2.9	-0.6
Investment	0.4	-0.1	-0.6	0.2	-0.1	-0.1	0.0	-0.1
Other Investment	-2.6	-11.3	-17.7	4.3	2.0	-2.5	-5.1	3.6
Official Flows								
Change in Reserves <sup>a</sup>								

Notes: a) minus sign denotes a rise and vice versa

b) 1989 to 1996

c) estimates

Source: IMF

**Table 6**  
**Restrictions on Capital Inflows into Malaysia, 1994**

<b>Type of Restriction</b>
Prohibition of residents from selling Malaysian money market securities with less than one year maturity to non-residents
Curtailment of speculative activities of offshore agents through the prohibition of commercial banks to engage in non-trade related bid-side swap or forward transactions with non-residents
Asymmetric limits on banks' external liability positions with non-residents excluding trade-related and FDI flows
Non-interest bearing deposit requirements for commercial banks against ringgit funds of foreign banking institutions

Source: Ariyoshi (2000)

**Table 7**  
**Restrictions on Capital *Outflows* by Malaysia**  
**(as initially announced on September 1, 1998)**

<b>Type of Restriction</b>
<p><u>External Accounts</u></p> <p>Transfers of between external accounts would require prior approval for any amount.</p> <p>Transfers to resident accounts in Malaysian banks are permitted until Sept 30, 1998. Thereafter, such transfers require approval.</p> <p>Sources of funding the external account are limited to:</p> <ul style="list-style-type: none"> <li>- Proceeds from sale of ringgit instruments, securities registered in Malaysia or other assets in Malaysia;</li> <li>- Salaries, wages, commissions, interest, dividend;</li> <li>- Sale of foreign currency.</li> </ul> <p>Use of funds in the account is limited to the purchase of ringgit assets in Malaysia.</p>
<p><u>General Payments</u></p> <p>Generally residents are freely allowed to make payments to non-residents for any purpose up to RM10,000 or its equivalent in foreign currency (reduction in amount), except for all payment for imports of goods and services.</p> <p>Generally residents are freely allowed to make payments to non-residents in foreign currency only for amounts exceeding RM10,000 equivalent. However, investments abroad in any form and payments under a guarantee for non-trade purposes require approval.</p>
<p><u>Export of Goods</u></p> <p>Prescribed manner of payment for exports in foreign currency only, other than currencies of Israel, Serbia and Montenegro.</p>
<p><u>Credit Facilities to Non-Residents</u></p> <p>Domestic credit facilities to non-resident correspondent banks and non-resident stockbroking companies are no longer allowed.</p>
<p><u>Investments Abroad</u></p> <p>Residents with no domestic borrowing are allowed to make payment to non-residents for purpose of investing abroad, up to an amount of RM10,000 or its equivalent in foreign currency per transaction.</p> <p>All residents require prior approval to make payments to non-residents for purposes of investing abroad, for an amount exceeding RM10,000 equivalent in foreign currency.</p>

Foreign Currency Credit Facilities and Ringgit Credit Facilities from Non-residents

Residents are not allowed to obtain ringgit credit facilities from any non-resident individuals.

Securities

Ringgit securities are required to be deposited with authorized depositories. Ringgit securities held by non-residents must be transacted through an authorized depository for good delivery.

All payments by non-residents for any security registered in Malaysia must be made in foreign currency or in ringgit from an external account.

All proceeds in ringgit received by a non-resident from the sale of any resident security must be retained in an external account (subject to the conditions on such accounts). However, should the ringgit security be held for more than one year, proceeds from the sale of such securities can be:

- converted immediately to foreign currency;
- or credited to the external account.

All payments to residents for any security registered outside Malaysia from non-residents must be made in foreign currency only

Import and Export of Currency Notes, Bills of Exchange, Assurance Policies, etc.

A resident traveler is permitted to import:

- ringgit notes up to RM1,000 only; and
- any amount of foreign currencies.

A resident traveler is permitted to export:

- ringgit notes up to RM1,000 only; and
- any amount of foreign currencies up to the equivalent of RM10,000.

A non-resident traveler is permitted to import:

- ringgit notes up to RM1,000 only; and
- any amount of foreign currencies.

A non-resident traveler is permitted to export:

- ringgit notes up to RM1,000 only and
- foreign currencies up to the amount of the foreign currencies brought into Malaysia. Prior approval is required for the import and export of ringgit notes and the export of foreign currency notes, other than as permitted above.

[Transitional Provision: Up to Sept 30, permission is given to a traveler (resident and non-resident) to import any amount of ringgit on his person or in his baggage.]

Source: Bank of Negara (Malaysia)

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