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# RESTRAINTS ON CAPITAL FLOWS: WHAT ARE THEY?

**RAMKISHEN RAJAN**
Research Associate
The Institute of Policy Studies
e-mail: ramkishen_rajan @ips.org.sg

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# RESTRAINTS ON CAPITAL FLOWS: WHAT ARE THEY?


## ABSTRACT

Though there has been much general debate recently about the pros and cons of capital controls, there remains substantial confusion and uncertainty about what exactly is entailed by the term ‘restraining global capital flows’. Popular discussion around this has typically been long on rhetoric and loose generalisations and acutely short on specifics. The aim of this paper is therefore to help refine the debate somewhat by clarifying and systematically categorising the various concepts that have been discussed in policy circles and the popular media. Two specific country experiences with restraining capital flows, viz. Chile and Malaysia are highlighted and discussed, as are the recent and much-publicised proposals for exchange controls (a la Paul Krugman) and a global currency transactions tax in the forms of a Tobin tax.

## 1. Introduction

The 1990s have witnessed three periods of severe financial turbulence in global financial markets. The turmoil in East Asia 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 by policy-makers about the need for some kind of curbs on 'speculative' foreign exchange (forex) transactions and global capital flows. This time has been no different. What has however been particularly interesting as the East Asian crises have unfolded, is the number of distinguished economists who have also recently come out strongly against taking a completely *laissez faire* attitude towards international capital flows[1]. These include Joseph Stiglitz (1988a,b), the Senior Vice President and Chief Economist of the World Bank[2]; Jagdish Bhagwati (1998) of Columbia University; Paul Krugman (1988) of MIT; Helmut Reisen (1998) of the OECD; and Dani Rodrik (1988) of Harvard University.

The debate has taken on a new, urgent and much-enhanced dimension, with the recent unilateral imposition of a set of exchange and capital controls by Malaysia in response to the recessionary conditions faced by the country (to be discussed below). Probably most telling of all is the recent reported statement by a high-ranking official in Hong Kong – often held up as the model free market economy by Milton Friedman and others - of the need for a "global plan to discipline financial markets and control the flow of funds to fight speculators."[3]

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[1] This is best captured by the Economist magazine's articles discussing the costs and benefits of capital controls in each of the three periods: the ERM crisis (October 3, 1992, p.69), the Tequila crisis (February 4, 1995, p.72) and the East Asian crises (January 24, 1998, pp.71-2 and March 14, 1998, p.92). Given the magazine's ideological bent towards *laissez faire*, their conclusions about capital restraints are obvious.

[2] Indeed, Stiglitz's repeated and strong advocacy of capital restraints is in direct contradiction to the views of the IMF (see section 3) and the US Treasury (not to mention officials in the World Bank itself). This is reported to be a source of some tension between Stiglitz and the IMF-Treasury combine (Muehring, 1998).

[3] Quote attributed to Hong Kong's Finance Secretary, Donald Tsang (Business Times, Singapore, September 9, 1998).

Though there has been much general debate recently about the pros and cons of capital controls, there remains substantial confusion and uncertainty about what exactly is entailed by the term ‘restraining global capital flows’. Popular discussion around this has typically been long on rhetoric and loose generalisations and acutely short on specifics. The aim of this paper is therefore to help refine the debate somewhat by clarifying and systematically classifying the various concepts that have been discussed in policy circles and the popular media. To preview the main conclusion of the discussion that follows: once one moves away from the broad conceptual level to a consideration of specifics, it is quickly realised that there exist a multitude of forms of ‘capital restraints’. Indeed, nowhere is the adage, “the devil is in the details” more relevant than in the discussion of this topic.

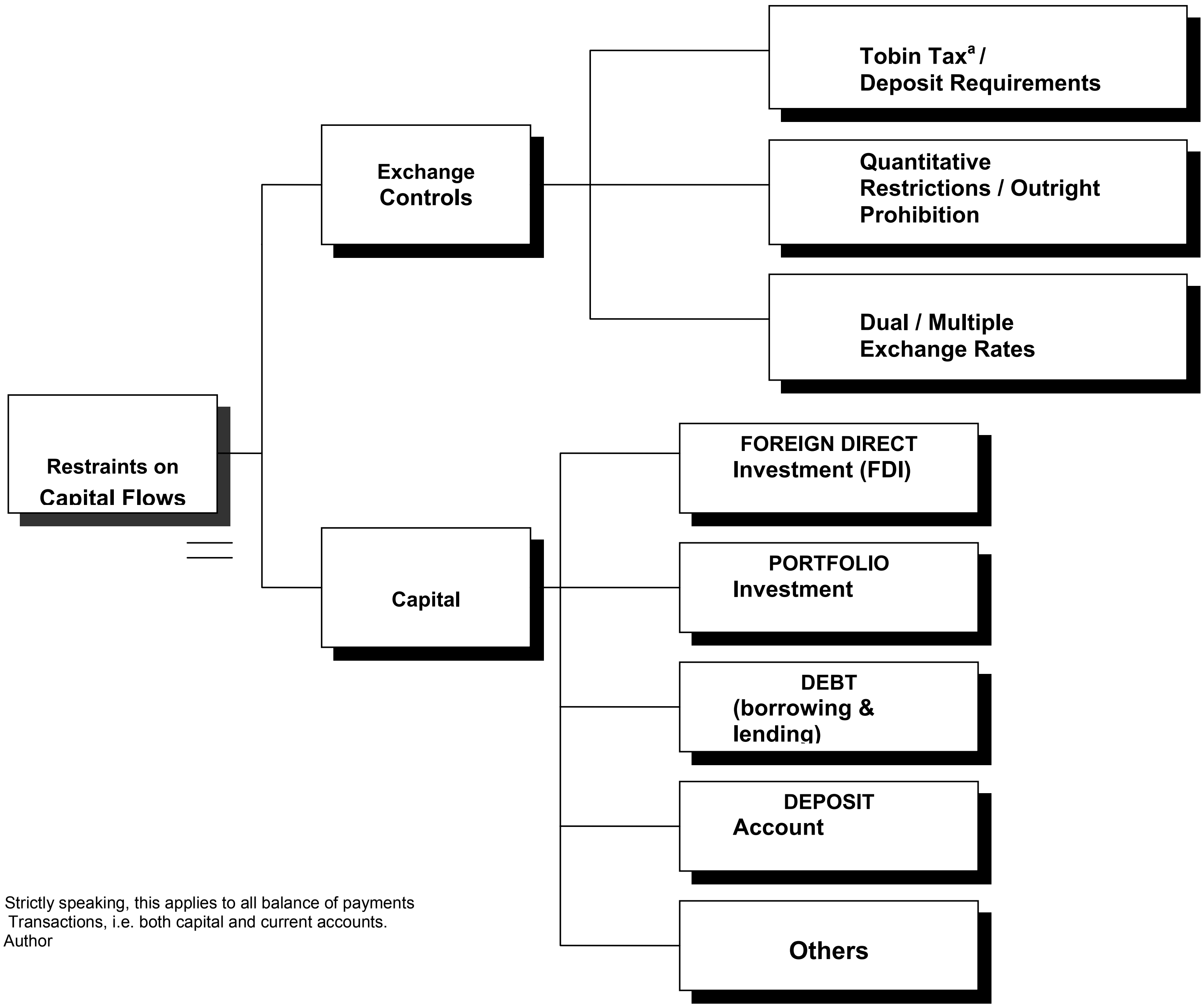
## 2. Brief Survey of Restraints on Capital Flows

It is important to note the fact that restraints on capital flows can be broadly categorised into two (see Chart 1):

a) restraints on capital account transactions (*capital controls*);

b) restraints on forex transactions (*exchange controls*).

## Chart 1: Types of Restraints on Capital Flows




**Note :** a) Strictly speaking, this applies to all balance of payments Transactions, i.e. both capital and current accounts.
**Source** : Author

## 2.1 *Capital* Controls

One of the few to define capital controls is Fane (1998b), who refers to them as “measures which impose quantitative restrictions, or explicitly or implicitly tax broad categories of capital movements and which apply to all firms and households.” As he notes though, any definition of capital controls is fairly arbitrary. As such, it is imperative to move away from the broad, conceptual level and focus on specific types of curbs on capital flows that are proposed or actually imposed, based on country experiences.

There are five main categories that make up the capital account: foreign direct investment (FDI), portfolio investment, borrowing and lending by residents and non-residents, transactions effected through deposit accounts, and other (miscellaneous) capital account transactions. Thus, capital controls involve directly constraining one or more of these elements of the capital account (Quirk et al., 1995).

Within each of these five categories, there could exist a wide range of possible controls. For instance:

a) FDI activities of either residents abroad or non-residents domestically could be restricted. Restrictions could also take the form of repatriation of profits and initial principal, taxes, share of ownership, etc.

b) Portfolio investment restrictions could 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 equalisation 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 for in the case of trade-oriented enterprises or for other purposes on a case-by-case basis as determined by the regulatory authorities.

d) Restrictions on deposit accounts may be imposed on forex 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 allowance limits and other forms of capital transfers.

Table 1 provides a succinct summary of the types of curbs imposed and the number of developing countries doing so, based on data available in 1994. It is to be noted, however, that the list in the table, while indicative, is by no means exhaustive[4].

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[4] 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.

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

| Category | Number of Countries |
|---|---|
| Any form of capital control | 119 |
| Comprehensive Controls[a]: | 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 |
| | |
| Deposit Accounts | 83 |
| of non-residents in foreign exchange | 37 |
| of non-residents in local currency | 52 |
| of residents abroad | 29 |
| of residents in foreign currency with domestic banks | 23 |
| | |
| Other Capital Transfers | 70 |
| Personal capital transfers | 34 |
| Blocked accounts | 24 |
| Real estate transactions | |
| of residents | 23 |
| of non-residents | 30 |

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

## 2.2 *Exchange* Controls

According to Fane (1998b), exchange controls "include restrictions on the right to remit or receive payments in foreign currencies, the right of non-residents to hold domestic currency deposits on-shore, the right of residents to hold off-shore deposits, and the right of residents to hold foreign currency deposits on-shore." This definition however only entails quantitative restrictions, unlike those of capital controls noted above, which include implicit and explicit taxes. Consistency therefore necessitates that the definition of exchange controls be broadened to include measures that tax broad categories of forex transactions to and from the country. As such, exchange controls in this paper also encompass currency transactions taxes (such as the 'Tobin tax') and dual or multiple exchange rates (the former usually divided between current and capital account transactions, the latter involving further division between different types of capital account transactions).

Exchange controls are usually seen as one particular tool in restraining capital flows (usually outflows). However they need not necessarily be a 'subset' of capital controls. For instance, they may be used in the case of trade-related transactions (also see the country case studies in sections 7 and 8).

## 3. The IMF and Capital Account Convertibility

The IMF does not seem to have a formal definition of capital account convertibility. The notion of 'convertibility' per se refers solely to the absence of restrictions on forex transactions, but not necessarily on international trade or capital flows. Broadly, the IMF (1988) defines 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."

In recognition of the linkages between currency flows/payments systems and capital flows, for all practical purposes, capital account convertibility is seen in the wider context of liberalisation of capital account transactions in general (Greene and Isard, 1991 and Quirk et al., 1995). Little is however available beyond this broad definition. To illustrate the ambiguity of the IMF definition, consider Table 2, which lists the developing countries with no restrictions on capital account transactions between 1973 and 1996. On the basis of the Fund's annual reports on exchange restrictions, Malaysia is considered to have had no capital account restrictions during that period. This is despite the fact that Malaysia is known to have introduced a set of measures to restrict capital *inflows* in January 1994, which were announced to be temporary (see section 8).

**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)

Part of the reason for the Fund's apparent lack of a clear definition is the fact that it has no legal jurisdiction over the liberalisation of the capital account of member countries. While *current account* convertibility is covered by Article VIII, no such obligation exists for *capital account* transactions[5]. 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 liberalisation one of the specific purposes of the IMF and give it legal jurisdiction to oversee member countries' transitions towards capital account convertibility. It remains to be seen what (if any) follow-up there is on the issue[6] (especially in light of the increasing dissension with unfettered capital flows following the East Asian crises[7]).

## 4. Thinking About Restraints on Capital Flows

The previous sections emphasise the need to be absolutely clear as to the type and rationale of restraint(s) that could conceivably be imposed. In this light, it is useful to consider the following three questions when evaluating restraints on capital flows (Chart 2):

a) are the restraints *selective* or *comprehensive*?

b) are the restraints on *outflows* or on *inflows*?

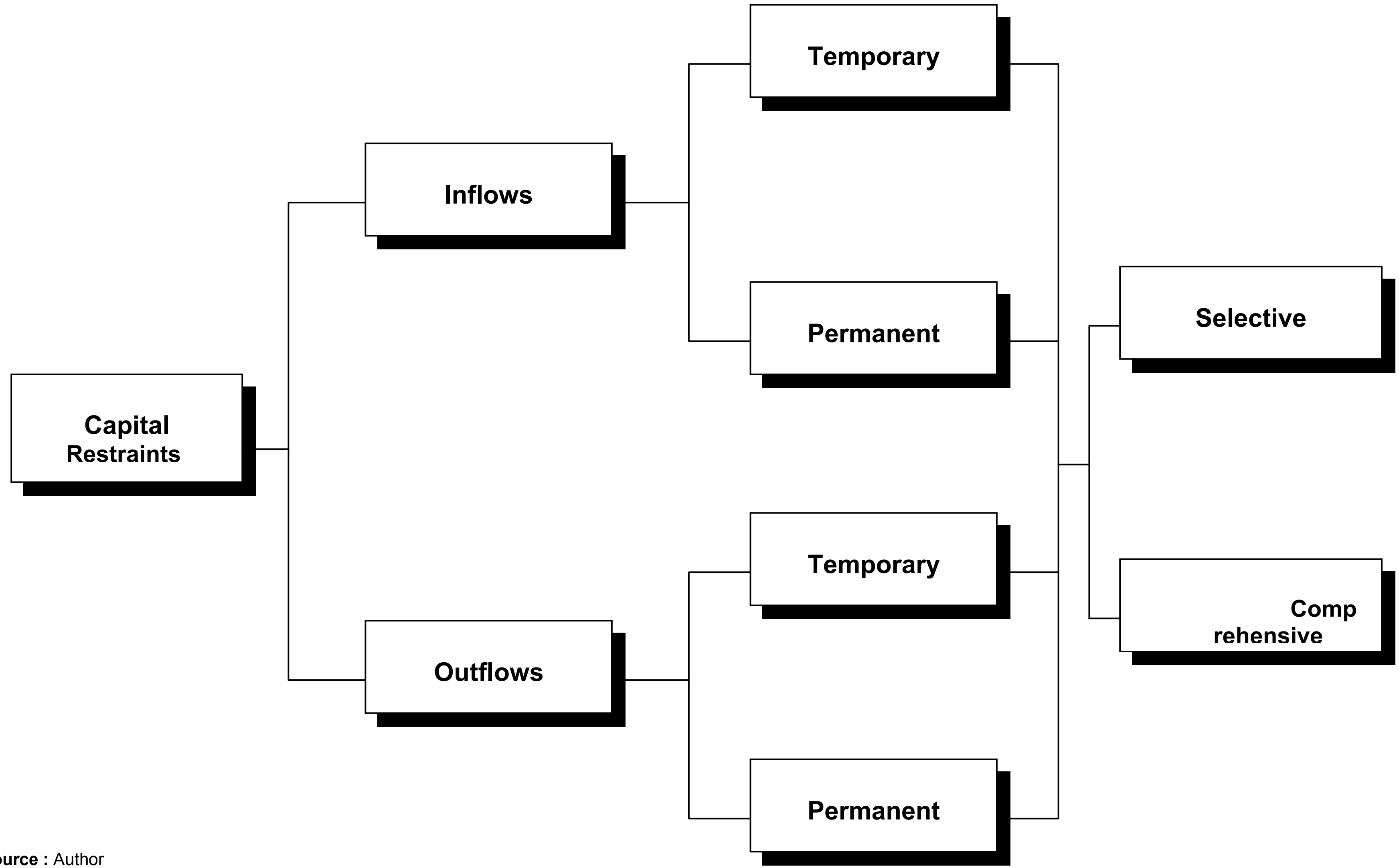
c) are the restraints *temporary* or *permanent*?

[5] 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."

[6] 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.

[7] Note that this statement is not meant to necessarily imply that 'irrationality' of global capital markets was the primary reason for the current and previous crises. The point is that, rightly or wrongly, the East Asian turmoil in particular, has undoubtedly led to a sharp appreciation in the number of people who advocate restraining cross-border capital flows. We return to this theme in the concluding section.

**Chart 2: Classification of Forms of Capital Restraints**




**Source :** Author

### 4.1 *Selective* versus *Comprehensive* Restraints

In practice, there are various degrees of extensiveness of curbs on capital flows. At the highest level, this would involve virtual inconvertibility on the capital account, with accompanying controls on capital flows, i.e., comprehensive capital controls. China and India are notable examples in Asia. It is more typical for a country to impose some form of exchange controls or selective controls on one or more areas of the capital account.

Of the 155 countries surveyed, 119 were reported to have imposed some type of (selective) restrictions on certain capital account transactions[8]. Of the 119 countries with some controls, 67 were reported to use 'comprehensive' controls (though no formal definition of what this entails is provided). However the distinction between *selective* and *comprehensive* controls may not be so precise. For instance, even in the case of India and China, there exists relative freedom on some forms of capital flows (such as FDI). As such, the distinction is 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, while a generally liberal regime (i.e. one that imposes controls selectively) is likely to have a 'negative' list of items to be controlled.

### 4.2 Restraints on Capital *Outflows* versus *Inflows*

Restraints on capital *outflows* are advocated for two reasons. First, they are aimed at slowing the speed of capital outflows (if not preventing them) when a country is faced with the possibility of a 'sudden' and 'destabilising' withdrawal of capital during a time of uncertainty.

[8] This contrasts with 123 countries (out of 153 surveyed) in 1990 (Mathieson and Rojas-Suarez, 1993).

Second, the imposition of restraints on outflows are supposed to break the link between domestic and foreign interest rates. - This is just an application of the 'impossible or inconsistent trilogy', i.e. a country cannot maintain a flexible exchange rate regime, monetary policy autonomy and an open capital accounts all at once. - Thus, the 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 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 minimise the chances of an abrupt and sharp capital reversal ('bust') in the future (see Rajan, 1998c for an anatomy of such 'boom-bust' cycles). 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). Empirical studies have indicated that capital controls have been more effective at preventing 'excessive' capital build-up than at stemming capital flight (Mathieson and Rojas-Suarez, 1993 and Reinhart and Todd Smith, 1997).

### 4.3 *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 or threatened with the possibility of capital flight, so as to give policy-makers 'breathing room' to make appropriate policy alterations. Or conversely, they may be imposed when an economy experiences unsustainably large capital inflows, due to confidence in the current and potential growth prospects of the economy ('irrational exuberance'?).

The rationale behind temporary restraints are broadly two-fold. First, such capital surges could lead to a loss of competitiveness through a real exchange rate appreciation (so-called ‘financial Dutch Disease’ phenomenon) and generally give rise to serious macroeconomic policy quandaries and trade-offs.

Second, the literature on ‘optimal’ sequencing of economic liberalisation has emphasised the need to reform the financial sector along with undertaking adequate prudential regulation, before attempting the decontrol of capital account transactions (see for instance, Goldstein and Turner, 1996 and Quirk et al., 1995)[9].

*Permanent* controls are seen as necessary even during ‘normal’ times. The rationale for such controls are that even if all the necessary microeconomic distortions are revoked and macroeconomic policies are generally sound, it is possible that there may nonetheless exist certain inherent ‘market failures’ that cause sub-optimal decisions to be made in a decentralised and free market economy. Insofar as these market failures are prevalent in a *laissez faire* economy, they may provide rationale for instituting capital restraints on a permanent basis, rather than on an event-specific/transitory basis[10].

Admittedly, the above categorisation is somewhat arbitrary with much overlap in practice. However it does help systemise the thought process when evaluating proposals for and against capital restraints (Chart 2). We use the above segmentation to highlight and briefly describe four specific examples of restraining capital flows. We first consider two much-publicised proposals, viz. exchange controls a la Paul Krugman (section 5) and a global tax on forex transactions a la James Tobin (section

[9] The East Asian crises have made apparent the dangers of inappropriate sequencing of the capital account, with most of the countries being too hasty in capital account liberalisation (Rajan, 1998a). What is interesting and particularly relevant given the regional turmoil, is the following: granted that capital account liberalisation 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?

[10] Great care must be taken in defining the form of market failure and whether capital restraints are necessarily the ‘first-best’ option to correct the failure. This subject is the particular focus of Rajan (1998c). Also see Fane (1998a).

6). We then go on to highlight two country experiences, viz. Chile (section 7) and Malaysia (section 8).

## 5. Exchange Controls a la Paul Krugman

There is a school of thought that argues that the austere IMF conditionalities (i.e. tight fiscal and particularly monetary policies) for the crisis-hit economies in East Asia have contributed to a rapid deterioration of economic conditions in the region (in terms of current and short-term expected growth rates), while doing little by way of stabilising exchange rate levels and variability[11]. The seeming failure of this plan (referred to as Plan A) has been the primary motivation for Krugman's (1998) exchange control proposal for afflicted countries in East Asia (so-called Plan B).

Plan B broadly entails the imposition of *temporary exchange controls* on capital *outflows*[12]. The rationale for such controls is, as previously noted, to divorce the domestic financial market from the international one, hence allowing for expansionary monetary policies to be pursued (no longer being constrained by the 'impossible trilogy'), without fear of capital flight (given higher returns to be obtained abroad) and weakening exchange rate. Before proceeding, it bears noting that from his brief description in the Fortune magazine, Krugman does not seem to differentiate between capital and current account (broadly trade) transactions, suggesting exchange controls on all transactions (as opposed to, for instance, dual or multiple

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[11] See Rajan (1998a) for a summary of main criticisms leveled against the IMF prescriptions. In fairness though, some degree of exchange rate stability has been restored in the countries under the IMF plan (viz. Indonesia, Korea and Thailand), though the issue is whether this was necessarily the least costly method of achieving the goal.

[12] He has separately also come out in favour of the Chilean model as a preventive measure once recovery in the region is well underway.

exchange rates)[13]. Notwithstanding the above, while the economic rationale of Krugman's proposal is not logically inconsistent, there exist a number of potential drawbacks of such a policy that he has not sufficiently emphasised.

First, unlike countries like China and India, countries in this region (Thailand and Malaysia particularly) have been extremely open, trading economies. For instance, Malaysia's trade-to-GDP ratio is about 2, while Thailand's is about 1. While the ratio is expectedly lower for Indonesia (at about 0.5 to 0.6)[14], all the economies in Southeast Asia have been heavily dependent on FDI as a vehicle of rapid growth (see for instance, the recent survey article by Athukorala and Hill, 1998). At a time when there has been a global trend towards economic liberalisation, and there consequently exists a number of alternative investment opportunities in the region and worldwide, such a policy may lead to economies in the region being overlooked by the international community as viable investment destinations[15].

Second, such controls are in complete contrast to the trend towards greater economic liberalisation that the countries in the region have been pursuing (through binding commitments to the WTO, APEC, AFTA, etc.). Accordingly, imposition of such 'market-unfriendly' policies (particularly if done unilaterally), could exacerbate the lack of policy credibility of the authorities, which had already been much-damaged because of the regional crises. Indeed, if such policies are imposed, the obvious question on the minds of the private sector agents would doubtless be the following: "If the economic situation deteriorates further, will even harsher measures be undertaken?"

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[13] In fairness though, Krugman does make this distinction explicit in an open letter to the Malaysian Prime Minister, Mahathir Mohamad (available on Krugman's homepage) - an after-thought?

[14] Based on 1995 data from the World Bank (1997). For comparison, the corresponding ratios for India and China were about 0.3 and 0.4 respectively.

[15] 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. Rajan and Marwah (1998) draw inspiration from these views in formalising the choice and timing of FDI.

Third, while the Chilean example has been often cited as a case in point regarding the virtues of restraints on capital flows, as will be discussed, the Chilean controls are meant to restrain *inflows* (i.e. preventive), while those proposed by Krugman are meant to preclude *outflows*[16] (i.e. curative). As noted, empirical studies have generally found that controls on inflows are far more effective than on outflows, with capital flight occurring as long as there is sufficient incentive to do so. Given the consequent lowering of interest rates in the country (which is the whole idea of the policy in the first place) on the one hand, and particularly if there is a 'premature' fixing of the exchange rate on the other (thus providing increased scope for its inappropriate valuation), the incentives to evade the restraints could be very strong. In such a case, the authorities have one of two choices. One, either forsake the controls (and possibly go/return to the IMF if funds have flown out on a massive scale, i.e. a typical balance-of-payments crisis). Two, attempt to close the loopholes by making the controls comprehensive, extending them to other trade/current account transactions as well as those relating to FDI (i.e. 'controls beget controls')

Fourth, there are the well-known problems relating to the potential for rent-seeking activities (bribery, corruption and so forth) that such an administrative-intensive measure generates, not to mention the high enforcement costs and the inevitable creation of a black market.

Fifth, to repeat, one of the primary aims of the controls is to increase liquidity domestically to provide credit for 'viable' firms remaining in operation, so as to enable them to grow their way out of debt. However, there is an important caveat that is often overlooked. In a decentralised economy, even if banks are flush with credit, they may well choose to maintain excess reserves, rather than lend during recessionary periods. This is particularly so, as the financial crisis in East Asia has contributed to a

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[16] Other important differences between the two, based on the catergorisation made in section 4, are that Krugman's policies are *exchange* rather than *capital* controls, and they are *temporary* rather than *permanent*.

severe contraction of the net asset positions of virtually all domestic banks. These institutions are focused primarily on consolidating their balance sheet situations, hence making them acutely reluctant to rollover existing loans, let alone extending new ones[17].

Sixth, as noted, one must question the wisdom of a *unilateral* introduction of such controls in the midst of prevailing bearishness. Such a move may only aggravate market uncertainties and be interpreted as a sign/confirmation of weak economic fundamentals or the unsustainability of prevailing economic policies. This in turn may exacerbate the bearish conditions already in existence. In addition, and of most concern, historical country experiences have suggested that there is inevitably much inertia in removing the controls, i.e. the illiberal regime once initiated tends to become a permanent feature.

## 6. The Tobin Tax (TT)[18]

A TT is essentially a *permanent*, uniform, ad-valorem transaction *tax* on *forex transactions* which is aimed at diminishing the speculative element of forex flows. The typical rates that are mentioned for such a tax are fairly modest, at about 0.1 - 0.25 percent. The tax must be imposed on a global basis, as it is argued that a unilateral imposition of the tax would drive much of the forex trading offshore[19]. Since the tax can be amortized over a longer-period, the burden of a TT is claimed to be inversely

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[17] See Rajan (1998b) for a discussion of this problem in the context of the Japanese economy. Indeed, it has been suggested by prominent Malaysian analyst and policy consultant, Noordin Sopiee (1998), that the Malaysian authorities have felt it necessary to simultaneously "pressure the banks to lend to productive sectors". If this is so, the increasing bureaucratisation of the economy (and the consequent scope for rent-seeking, unproductive activities and the supplanting of the market mechanism), could lead to gross inefficiencies hinder future growth - especially if maintained on a sustained basis.

[18] Named after Nobel Laureate, James Tobin, Professor Emeritus at Yale University who proposed it in 1974.

[19] An alternative, closely-related proposal by Eichengreen and associates (1995, 1996) is for a Chilean type non-interest bearing deposit requirement, which is applicable to all forex round-trips (unlike that in Chile, which involves only inflows).

proportional to the length of the transaction, i.e., the shorter the holding period, the more heavy the burden of the tax. For instance, a TT of 0.25 percent implies that a twice daily round trip carries an annualized rate of about 350 percent, while in contrast, a round trip made twice yearly carries a tax rate of 1 percent. Accordingly, and considering that 80 percent of forex turnover in 1995 involved round trips of a week or less (Rajan, 1998c), the TT ought to help reduce exchange rate volatility and concomitantly curtail the intensity of 'boom-bust' cycles, while not adversely impacting longer-term ('productive') capital.

The discussion of TT has been kept intentionally brief, it being the particular focus of Rajan (1998c) and the papers in the book by Haq et al., eds. (1996).

## 7. The Chilean Case

Since 1991, 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* capital restraints, predominantly on *inflows* (Table 3). The only restriction on capital *outflows* takes the form of a one year requirement before investment capital may be repatriated. This is meant to discourage the entry of short-term 'speculative capital' (so-called 'hot money').

**Table 3**
**Restrictions on Capital *Inflows* into Chile**

| Type of Restriction |
|---|
| 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[a]. |
| 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 $10 mn. |
| Bonds issued by local companies in global markets must have an average minimum maturity of four years in order to encourage long-term financing. |
| All other portfolio flows (including foreign loans, bond issues) are subject to a non-remunerated 10 percent reserve requirement to be deposited at the central bank for one year interest-free[b]. 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[b]. |

**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 as of June 26, 1996 in response to a general slowdown in portfolio capital inflows to all emerging economies.
**Source**: Compiled by author from Edwards (1998), Fane (1998b), Massod (1998), Neuhas et al. (1998), Quirk et al. (1995) and The Economist (March 14, 1998)

Restrictions on *inflows* are largely meant to favor equity over debt and medium- and long-term capital inflows over short-term ones. There exist three broad types of such restraints.

First, 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 are meant for capital inflows of all maturities for a period of one year, after which the central bank returns the funds. It can be shown that 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 countercyclical in nature, being tightened during bullish periods when there is an upsurge in capital inflows and relaxed when inflows subside.

Second, all capital coming into Chile must be parked in the country for a minimum one year period.

Third, Chilean firms and banks are permitted to access global debt markets only if their credit ratings are of a minimum level/quality.

While questions regarding the effectiveness of the controls in reducing aggregate capital inflows remain unresolved, there is nonetheless a general consensus that they have helped lengthen the average maturity of capital inflows. Chile has enjoyed greater levels of FDI, both relative to other Latin American economies and as a proportion of aggregate capital inflows into the respective countries (especially Mexico and Argentina, both of which have allowed for largely unfettered capital flows). With relatively lower levels of external indebtedness - which is a key criteria determining the potential vulnerability of an economy to a currency and financial crisis (Rajan, 1998a) - and a sound financial system, the Chilean economy has been much less impacted by the Tequila crisis of 1994-95, than other Latin American economies[20]. More generally, Chile has generally enjoyed faster and steadier growth (both in terms of being less variable and less inflationary) compared to either Mexico or Argentina (Neuhas et al., 1998)[21].

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[20] Arguably, Chile's success in terms of being able to avoid the Tequila crisis, may have been responsible for a general bullishness in the economy. Paradoxically, the enthusiasm to invest in the economy may consequently have led to the erosion of the effectiveness of capital restraints, as participants searched for and found channels of evasion. Thus, the very effectiveness of capital restraints in ensuring relative stability in an economy in the short-term, could have been the reason for their eventual ineffectiveness over the medium and longer- terms. In fact, it has been found in Chile that a 1 percent increase in the (implicit) tax has a greater impact when trend economic growth is low than when high (Larrain et al., 1997).

[21] Some would argue that it is exactly the sound macro fundamentals and robust financial system that have been key to Chile's success, and not the capital controls. The point remains though that the benefits of free capital mobility are hitherto far from certain. Insofar as that is the case, as noted by Rodrik (1998, p.57), "where knowledge is limited, the rule for policymakers should be, first, do no harm...(C)apital-account convertibility...is an idea whose time has not yet come". Stiglitz (1998b) seems to draw a broadly similar conclusion.

The Chilean experience in the active management of capital inflows is therefore increasingly being 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 flows. Specifically, trade credits are also subjected to the implicit tax (thus acting as a trade barrier), because with this exemption, there could be non-negligible evasion under the guise of trade credit. The result of this has been that Chilean's international trade has been somewhat adversely impacted, thus being welfare-reducing. In other words, controls on inflows have by no means been an unmitigated blessing[22].

## 8. The Malaysian Case

The Malaysian experience with capital controls may be broadly divided into two episodes. In the <u>first period</u>, in 1994, it was faced with massive surges in capital inflows. This in turn may be attributed to a combination of factors, including:

a) the economy's sustained, high and non-inflationary growth (economic growth hovering at around 8-9 percent and inflation at between 3-4 percent since 1990);

b) the interest premium offered by Malaysia (of about 4 to 5 percent over US one month LIBOR rate); and

c) the stable bilateral exchange rate relative to the US$[23].

In response, the monetary authorities (Bank Negara) implemented a series of *selective*, *temporary* measures to limit 'speculative' *inflows* (Table 4)[24]. Controls on inflows included banks being subject to a ceiling on non-trade or non-investment

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[22] 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 (and more broadly, current account) transactions (Mathieson and Rojas-Suarez, 1993).

[23] Data from Rajan (1998a) and Quirk et al. (1995)

[24] There were also some restrictions on capital *outflows* detailed in Fane (1998a,b).

related external liabilities and a ban on the sale of Malaysian monetary instruments by residents to non-residents and limits on external debt accumulation in 'non-productive' activities by Malaysian banks[25]. 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 (Rajan 1998a).

**Table 4**
**Restrictions on Capital *Inflows* into Malaysia, January-August 1994**

| Type of Restriction |
|---|
| Banks subjected to ceiling on non-trade or non-investment related external liabilities. |
| Residents prohibited from selling short-term monetary instruments to non-residents. |
| Commercial banks required to deposit with Bank Negara the ringgit funds of foreign banking institutions (Vostro accounts) held in non-interest bearing accounts. |
| Commercial banks not allowed to undertake non-trade related swap and outright forward transactions on the bid side with foreign customers. |

**Source**: Reinhart and Todd Smith (1997) and Quirk et al. (1995)

In the <u>second and latest period</u>, on September 1, 1998, Malaysia announced a package of wide-ranging and *selective exchange* and *capital* (i.e. on portfolio and deposit accounts) quantitative restraints on *outflows*[26]. At the time of writing, it

[25] To the extent that residents were limited in foreign currency borrowings from Malaysian banks, implicitly, the above regulation has been binding on all residents (bank and non-bank).

[26] According to press reports, the Malaysian authorities threatened the imposition of *temporary* and *selective* controls on *forex* and share trading during the height of the crisis in August 1997 to prevent capital *outflows* (Wong, 1998).This only seemed to intensify the short-selling of the Malaysian ringgit and other regional currencies. Taking this argument further, the parallels between the Latin American Tequila crisis and the East Asian Tom-Yam (contagion effect) one is intriguing. In the former, Brazil was relatively less impacted than Mexico and Argentina, arguably because most of the debt in Brazil was domestic in nature (unlike the short-term external debt of the other two economies). Similarly, in the case of East Asia, Malaysia's debt has been predominantly domestic, unlike the cases of Thailand, Indonesia and Korea.

remains unclear as to whether the controls are to be *temporary* or *permanent* (see footnote 30). Table 5 summarises the controls announced. While exact details may change as the restrictions are implemented and modified, key among the measures announced thus far, include the forced liquidation of offshore ringgit accounts by residents and non-residents, a ban on the provision of credit facilities to non-residents, and the one year holding period requirement prior to the sale of Malaysian securities.

**Table 5**

**Restrictions on Capital *Outflows* by Malaysia as of September 1, 1998**

| **Type of Restriction** |
|---|
| External Accounts<br>Transfers of between external accounts would require prior approval for any amount. Transfers to resident accounts in Malaysian banks are permitted until Sept 30, 1998. Thereafter, such transfers require approval.<br>Sources of funding the external account are limited to:<br>- Proceeds from sale of ringgit instruments, securities registered in Malaysia or other assets in Malaysia;<br>- Salaries, wages, commissions, interest, dividend;<br>- Sale of foreign currency.<br>Use of funds in the account is limited to the purchase of ringgit assets in Malaysia. |
| General Payments<br>Generally residents are freely allowed to make payments to non-residents for any purpose up to RM10,0000 or its equivalent in foreign currency (reduction in amount), except for all payment for imports of goods and services.<br>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. |
| Export of Goods<br>Prescribed manner of payment for exports in foreign currency only, other than currencies of Israel, Serbia and Montenegro. |
| Credit Facilities to Non-Residents<br>Domestic credit facilities to non-resident correspondent banks and non-resident stockbroking companies are no longer allowed. |
| Investments Abroad<br>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.<br>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. |
| Foreign Currency Credit Facilities and Ringgit Credit Facilities from Non-residents<br>Residents are not allowed to obtain ringgit credit facilities from any non-resident individuals. |
| Securities<br>Ringgit securities are required to be deposited with authorized depositories.<br>Ringgit securities held by non-residents must be transacted through an authorized depository for good delivery.<br>All payments by non-residents for any security registered in Malaysia must be made in foreign currency or in ringgit from an external account.<br>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:<br>- converted immediately to foreign currency;<br>- or credited to the external account.<br>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.<br>A resident traveller is permitted to import:<br>- ringgit notes up to RM1,000 only; and<br>- any amount of foreign currencies.<br>A resident traveller is permitted to export:<br>- ringgit notes up to RM1,000 only; and<br>- any amount of foreign currencies up to the equivalent of RM10,000.<br>A non-resident traveller is permitted to import:<br>- ringgit notes up to RM1,000 only; and<br>- any amount of foreign currencies.<br>A non-resident traveller is permitted to export:<br>- ringgit notes up to RM1,000 only and<br>- foreign currencies up to the amount of the foreign currencies brought into Malaysia.<br>Prior approval is required for the import and export of ringgit notes and the export of foreign currency notes, other than as permitted above.<br><br>[Transitional Provision: Up to Sept 30, permission is given to a traveller (resident and non-resident) to import any amount of ringgit on his person or in his baggage.] |

**Source**: Bank of Negara (as reported in Business Times, September 2, 1998 and Straits Times, Singapore, September 2, 1998)

Malaysia's measures highlight the difficulties in solely restraining capital outflows without hindering trade and broader current account transactions, particularly when exchange controls are the primary instrument. For instance, there exist forex rules against exports and imports, with all trade transactions needing to be undertaken in foreign currencies. Further, tourists are limited to traveling in and out of

Malaysia with a maximum of RM1,000. While no limit exists on such transactions in foreign currencies for non-residents and residents coming back into Malaysia, residents are limited to an equivalent of RM10,000 when leaving the country. While these controls may be needed to minimise evasion of the capital controls through these channels, the point is that these transactions are all current account ones. There is also the related question of whether such measures are IMF-legal[27].

The *economic* motivation for the measures announced and implemented by the Malaysian authorities is broadly twofold:

<u>First</u>, as noted in section 6, the aim is to regain monetary autonomy, thus allowing Malaysia to pursue a low interest rate policy to stimulate growth in the recession-hit economy[28], without it having significant downward pressure on the currency[29].

<u>Second</u>, by forcing the liquidation of external/offshore accounts, - which are roughly estimated at between RM20-25 million - the intention is to preclude speculative attacks on the currency, without impacting FDI flows.

It is obviously too soon to determine whether the policy option pursued by the Malaysian authorities will succeed. Suffice it to note here that, apart from the potential drawbacks of exchange controls referred to in section 6, to the extent that the Malaysian authorities have not been upfront or explicit about how long the controls are to be in place (either in terms of time period or an objective criteria of economic

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[27] All the crises-affected East Asian economies have accepted the obligations of the IMF Article VIII, which requires free current account convertibility. Specifically, Malaysia did so way back in 1968, Indonesia and Korea did so in 1988 and Thailand in 1990. Even China and India have recently accepted the obligations of the Article VIII status.

[28] Malaysia's economy shrank 2.8 and 6.8 percent in the first and second quarters of 1998 respectively. This is its first recession (defined as two consecutive quarters of negative growth) in 13 years and the second in more than 40 years (Sopiee, 1998).

[29] Indeed, 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, raised fiscal spending by 20 percent and fixed the ringgit to 3.8 per US$. The authorities also announced a substantial loosening of the criterion used for defining non-performing loans (double the global standard of three months).

performance to be attained before lifting of the controls), this has added an additional dimension to market uncertainty[30].

## 9. Conclusion

This 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 their economic rationale. To this end, a categorisation 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 flows may be divided into control on capital account transactions per se (*capital controls*) and controls on foreign exchange transactions (*exchange controls*). It has been emphasised that when analysing curbs on capital flows, the three key features to keep in mind are whether they are *comprehensive* or *selective*; whether they are meant to be *temporary* or *permanent;* and whether they are imposed on *outflows* or *inflows*. Two specific country experiences with restraining capital flows, viz. Chile and Malaysia have been highlighted and discussed, as have the recent and much-publicised proposal for exchange controls by Paul Krugman and the Tobin tax.

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 East Asian crises have, rightly or wrongly, given renewed and unprecedented vigour to proponents of restraining cross-border capital flows. Importantly, the current turmoil has visibly won

[30] For instance, the Malaysian Prime Minister was quoted as saying of the capital controls that they "can be permanent. But on the other hand, if the international community agrees that currency trading must be regulated and that the range that currency can fluctuate is limited...then we will return to the free-exchange rate system" (see interview in the Straits Times, Singapore, September 2, 1998, p.7).

over many more supporters, including some distinguished, 'main stream' economists and an increasing number of policy-makers in Asia and elsewhere.

In some senses, we have as close to a 'laboratory experiment' as one might hope for in economics, with the Malaysian dirigiste approach to stabilisation and recovery at one end and countries that have - at least thus far - remained under the auspices of the IMF prescriptions (Indonesia, Korea, but particularly Thailand, given its relatively greater comparability to Malaysia) on the other[31]. If the Malaysian strategy is perceived as working and being more successful than countries following the formula mandated by the IMF, other countries may well be tempted to emulate the Malaysian example. It warrants keeping in mind though, that Malaysia's is but one possible model or approach to curbing capital flows, which could take any number of guises.

[31] Admittedly, a full analysis/comparison of the strategies to cope with and recover from the regional crises by Malaysia and the other countries, needs to include the political dimensions in each of the countries. These issues are necessarily beyond the scope of this paper. Suffice it to note that the issues to be tackled include, for instance, the May riots in Indonesia and the resulting stepping-down by President Suharto, and the sacking of the Deputy Prime Minister, Anwar Ibrahim in Malaysia. This apart, a cynic might argue that it is in the strategic interest of the IMF-Treasury combine (a la Bhagwati, 1998) to see that Malaysia's policy experiment - which is completely contrary to what they have been advocating for the region and emerging markets in general - does not succeed.

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