

Policy Space for Capital Controls and Macroeconomic Stability: Lessons from Emerging Economies

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I. Introduction

Foreign capital flows consist of movement of financial resources from one country to another. Capital inflows can help a developing country to fill resources gap where savings are inadequate to finance investment. Since the 1990s, there has been an increase in the volume of private capital flows to and from emerging market economies. This has been due to increasing financial openness and strong growth prospects and positive interest differentials in these economies (Mohan and Kapur, 2010). However, most sub-Saharan African countries which critically need foreign exchange have been relatively marginalised by foreign investors. While capital flows provide liquidity to recipient countries, they make monetary and exchange rate policy more challenging. Capital flows affect a wide variety of macroeconomic variables such as exchange rates, interest rates, external reserves, domestic savings and investment (Sumanjeet, 2009). In a world of increasingly integrated financial markets and high financial mobility, the volatility of capital flows and sudden loss of confidence have often resulted in severe financial crises with significant domestic and international effects.

Furthermore, capital inflows can involve the loss of local control over economic decision-making, for example, with respect to majority-owned foreign direct investment. A decline in capital inflows can slowdown growth rate or lead to loss of foreign reserves. Sustainable growth, low inflation, steady growth of employment, low levels of unemployment and a balanced public finance are usually regarded as the main indicators of macroeconomic stability. However, since the 2008-09 global financial crisis, the importance of the financial sector has been recognised. It is now realised that there is need to maintain financial and macroeconomic stability concurrently and these remain major policy challenges. How do capital controls contribute to achieving macroeconomic and financial stability?

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The 1990s witnessed a number of capital account crises in emerging market economies (EMEs). The crises which were a result of sudden reversals of capital inflows, occurred against the background of financial market deregulation, capital account liberalisation, and financial sector opening. While deregulation and liberalisation yielded benefits such as increased financial resource mobilisation for domestic investment and economic growth, it created new sources of macroeconomic vulnerabilities. The high frequency of crises in emerging economies (East Asia, Russia, Latin Americas) led policymakers in these countries to question the virtue of unrestricted capital mobility in an increasingly globalising and potentially volatile world economy. Therefore, large swings in foreign capital flows and their potential volatility necessitated measures to manage capital flows by emerging and developing countries.

Furthermore, as countries recovered from the recent global financial crisis, capital began to flow in and out of emerging market economies. Despite the benefits of capital flows, many EMEs are now concerned that the new surge in capital inflows, many of which are deemed transient, can cause problems for their economies. Their concern is that these massive capital inflows can lead to strong appreciations of their exchange rates and complicate economic management; inflate asset price bubbles which can amplify financial fragility and crisis risk (Ostry et al., 2011). After the crisis, policymakers are reconsidering the idea that unfettered capital flows are a fundamentally benign phenomenon and that all financial flows are a result of rational agents' decisions. There is increasing concern that foreign investors are subject to herd behaviour and suffer from excessive optimism and that capital flows can contribute to damage such as assets bubbles. Such concerns have led to renewed interest in capital controls (Ostry et al., 2011). With low interest rates likely to persist for some time in the advanced countries, emerging market economies are likely to attract capital inflows for some years; the rapid appreciation of interest rates has generated concern for potential "currency wars".

Many of the EMEs have accumulated increasing foreign reserves with the result that the external financial constraint of the 1990s is no longer an issue for them. Large capital inflows emerged as a problem in the years 2003-2007 for major EMEs and created new challenges for macroeconomic management and financial stability. Since the 1980s, about 15 per cent of episodes of large capital inflows have ended in crisis (Mohan and Kapur, 2010). Thus, to protect their economies from undue volatility, some EMEs have responded and adopted various measures to manage their capital accounts. Issues of interest in this paper include a review of the policy options for managing capital flows. What is the place and relevance of capital controls for addressing macroeconomic stability concerns in

an environment of increasing capital inflows? What policy space is available for adoption of capital controls in an environment of global financial market volatility? Does implementation of capital controls create policy space for independent monetary policy to address macroeconomic instability concerns? How have emerging market economies addressed the challenges?

Section two of the paper discusses the concept of policy space and the factors influencing policy space in developing economies. Section three addresses policy options for managing capital flows with focus on capital controls, it also discusses changing attitudes towards capital controls by researchers and agencies with emphasis on the International Monetary Fund (IMF). Section four discusses the experiences of a few emerging economies, their use of capital controls, with assessments of the impacts and effectiveness of capital controls, and raises lessons for other developing countries. Section five concludes the paper.

II. Conceptualising Policy Space

II.1 Financial Integration and Policy Space

A stable macroeconomic environment is regarded as being conducive to long-term growth. However, there is disagreement over whether price stability should be a central objective of macroeconomic policies or whether these policies should target broader development goals (Ocampo and Vos, 2008). Until the 1970s, macroeconomic policies in developing countries were mainly growth-oriented national development strategies. However, severe macroeconomic instability faced by many developing countries since the 1980s has narrowed the focus of macroeconomic policies to lowering inflation and the avoidance of major fiscal and external imbalances. Although many developing countries were able to reduce inflation and restore fiscal balance by applying such policies, many did not achieve sustained economic growth. This has called for a return to a broad developmental approach by macroeconomic policies. Proponents of this view argue that macroeconomic policies should be growth-centred with full employment as the ultimate objective (Ocampo and Vos, 2008). It is also argued that because of differences in development levels, quality of institutions, and degree of vulnerability to global macroeconomic and financial instability, the policy framework for developing countries should differ from that in advanced countries. Thus, a critical question is how much "policy space" do developing countries have to adopt autonomous and effective counter-cyclical macroeconomic policies which are consistent with their long-term development objectives? Many policy analysts are of the view that with increasing integration of global markets, developing countries have lost such policy space (Ocampo

and Vos, 2008). Small developing countries are often seen as “rule-takers” in the global economy (Molina, 2013). They have little influence in formulating the rules of international cooperation and often have little bargaining power within these rules, although some authors believe that despite these power imbalances, developing countries can find room to manoeuvre within global governance rules (Molina, 2013). What is “policy space” and why the concern with policy space?

II.2 What is Policy Space?

A number of authors have defined the concept of “policy space”. In Molina (2013, policy space is defined as “the degree of autonomy that states have to shape their development ends and means. This includes both *de jure* policy space (describing the language of multilateral agreements and treaties), and *de facto* policy space (as evidenced by room to maneuver within or outside existing rules). He added that not all multilateral policy rules affect a country's policy space.

According to Martinez-Diaz (2006), the concept of “policy space” is most often used in debates about how certain rules in the global economy, especially those emanating from the World Trade Organisation (WTO) and its subsidiary agreements, constrain countries' policy options for medium and long-term economic development. It refers to the need for poor countries to have enough space to craft their own economic policy and adequate room for policy autonomy and experimentation. Similarly, it could connote the freedom of developing countries to pursue among other things, the kinds of development policies used in the past by what today are the world's advanced economies. Koivusalo, et al. (2009) defined policy space as the “freedom, scope and mechanisms that governments have to choose, design and implement public policies to fulfil their aims”. Their concern was with how globalisation and the processes that comprise it are influencing the availability of such space. They added that concerns with policy space have been raised mainly in the context of economic, trade and development policies.

Although it did not define the concept of “policy space”, the United Nations Conference on Trade and Development also discussed the idea of policy space in its 2004 and 2008 Conferences. In its 2004 Conference, the Sao Paulo Consensus Document recognised that:

The increasing interdependence of national economies in a globalising world and the emergence of rule-based regimes for international economic relations have meant

that the space for national economic policy, i.e., the scope for domestic policies, especially in the areas of trade, investment and industrial development, is now often framed by international disciplines, commitments and global market considerations. It is for each Government to evaluate the trade-off between the benefits of accepting international rules and commitments and the constraints posed by the loss of policy space. It is particularly important for developing countries, bearing in mind development goals and objectives, that all countries take into account the need for appropriate balance between national policy space and international disciplines and commitments.

The 2006 UNCTAD Report states that:

There are widespread concerns that the international trade rules and regulations, which are emerging from multilateral trade negotiations and a rising number of regional and bilateral trade arrangements, could rule out the very policy measures that were instrumental in the development of today's mature economies and late industrialisers. This would imply a considerable reduction in the flexibility of national governments to pursue their development objectives. Another concern is that these rules and commitments, which in legal terms are equally binding for all countries, in economic terms might impose more binding constraints on developing than on developed countries, because of differences in their respective structural features and levels of industrial development.

The current debate on the role of national policies in economic development concerns the concept of "policy space", and focuses on the tension between international economic integration and the autonomy available to nation states to pursue policies that effectively support their development. He emphasised

that much of the debate on “policy space” is confined to trade policy and revolves around the Uruguay Round Agreements, especially as the UR agreements restrict sovereignty of nation states to make their own policy decisions. Thus international economic integration affects national policy space by reducing policy options available to policy makers. International economic integration weakens *de facto* control over national economic development by allowing foreign actions to influence national macroeconomic targets. Furthermore, multilateral rules and commitments reduce *de jure* policy control over policy instruments.

II.3 Constraints/Limits on National Policy Space

Constraints on national policy space arise from inequalities in resources and bargaining power between developing and industrialised countries. Major factors limiting policy space are:

- The multilaterally negotiated rules and obligations in trade and finance as embodied in various agreements in the World Trade Organisation,
- The Structural conditionality attached to lending by the Bretton Woods Institutions (BWIs) which constitutes the second most important source of multilateral constraints over development policy (Akyuz, 2007).
- In addition, for countries dependent on official financing, the policy space is also eroded by conditions attached to loans and grants by multilateral financial institutions and bilateral donors (Akyuz, 2007). Commitments made by developing countries in bilateral or regional agreements with major industrial countries not only extend WTO disciplines in industrial tariffs, services and intellectual property rights, they also add new obligations in areas left out of multilateral legislation such as capital account regimes, foreign direct investment and enforceable environment or labour standards (Akyuz, 2007). Hundreds of regional trade agreements (RTAs) and bilateral investment agreements are presently in place. Bilateral and regional agreements often try to incorporate intellectual property rights that go beyond those in WTO agreements (Koivusalo, et al., 2009).

Akyuz (2007) pointed out that in a world where national economies are closely integrated, multilateral rules and obligations are needed to contain negative externalities such as financial contagion and environmental degradation. They are also needed to prevent discriminatory and beggar-my-neighbour policies. While multilateralism is valuable to smaller and weaker countries, an appropriate balance should be struck between national policy space and international disciplines and commitments.

However, reviewing the WTO in particular, Akyuz (2007) observed that some trade agreements, for example, the General Agreement on Trade in Services (GATS) contain statements that recognise the rights of governments to make regulations aimed at achieving set objectives. He noted that although many of the policy instruments used by today's industrialised countries are no longer available to developing countries because of multilateral rules and obligations such as the WTO, these multilateral rules and practices permit wider policy space than is usually assumed, for example:

- Many areas of policy remain outside the multilateral disciplines, for example, no rules force a country to adopt a particular exchange rate or capital account regime. There are also no strict rules in areas such as foreign direct investment, trade in services and competition policy. Existing constraints in these areas are a result of loan conditionality by the Bretton Woods institutions as well as bilateral or regional agreements and multilateral commitments.
- Except for countries depending on official assistance, many constraints arise from deliberate policy choices or from domestic policy failures to resolve deep-seated structural problems.
- There is policy diversity among developing countries because of differences in willingness to fully adopt financial integration or to exploit the policy space allowed by existing multilateral rules and practices.

Contributing to the discussion on constraints to public space, Griffith-Jones and Stallings (1995) described the constraints on policy space created by financial markets as "implicit conditionality" as contrasted with "explicit conditionality" attached to loans from multilateral financial institutions. Such constraints are effective because countries are unwilling to incur penalties attached to non-compliance or risk while implementing policies they feel will be viewed negatively by sources of external finance.

Also of interest is the capacity to use available policy space effectively by better articulation of their domestic priorities within existing multilateral rules and commitments. To what extent is available policy space effectively utilised by policy makers? Furthermore, while the possibility of exit from multilateral agreements has been considered by some developing countries, such options are rarely exercised because of their relative weaknesses in bilateral relations with major economic and political powers (Akyuz, 2007).

III. Capital Controls For Macroeconomic Stability

III.1 Background - Financial Integration and Capital Account Management

At the 2013 annual IMF conference with the theme “Rethinking Macro Policy II: First Steps and Early Lessons”, De Gregorio (2013) in his presentation stated that international financial integration and capital account management have become central issues in policy discussions in recent years, although the issues are not new in emerging market economies. He added that some had disastrous experiences with financial crises which were often caused by poor management of financial integration and weak macroeconomic policies. Since the 1970s, the Bretton Woods Institutions had advocated the benefits of financial integration, - the liberalisation of capital flows across all borders. While some countries have gained significantly from capital inflows, several have encountered financial crises. This experience had encouraged the adoption of capital controls by some emerging and developing countries. Until recently, some economists, financial institutions and industrialised countries have been hostile to regulating capital movements. However, the IMF has now recognised that capital flows can be destabilizing – causing currency appreciation, asset bubbles, and volatility in developing countries (Gallagher, 2011). This change in attitude has been reflected in its recent annual meetings.

III.2 Capital Controls - Concepts and Debate

III.2.1 Concepts – Definitions, Types, and Objectives of Capital Controls

Ostry et al. (2010, 2011) discuss various macroeconomic policy measures for addressing surges in capital inflows, they include exchange rate appreciation, reserve accumulation, sterilisation, fiscal and monetary policy changes, and capital controls. Capital controls are now recognised as part of the policy toolkit for financial stability. According to Ostry et al. (2010, 2011), capital controls “limit the rights of residents or non-residents to enter into capital transactions or to effect the transfers and payments associated with these transactions”. They are, however, of the view that capital controls, because of their discriminatory nature, should only be used after other macroeconomic tools have been adjusted in response to the capital inflow surge.

Capital controls have been highly stigmatised and the IMF proposed a new nomenclature for capital controls, suggesting that they should be called “capital flow management measures” (Gallagher, 2011). Some others have also suggested the term “capital management techniques” (Ocampo, et al., 2008). “Capital management techniques” is a term used to describe a combination of

capital and exchange controls plus financial prudential regulations that indirectly affect these flows and their impacts (Epstein, 2009). Gallagher et al. (2011) referred to them as “capital account regulations” to underscore the fact that they belong to the broader family of financial regulations. What are capital controls?

Definitions of capital controls: Some authors define capital controls as “regulations on capital flows” (Gallagher et al., 2011). Capital controls are residency-based measures which limit the rights of residents or non-residents to enter into capital transactions or to effect transfers and payments associated with these transactions (Ostry, et al., 2011). They are limits on the level or composition of foreign private capital that can enter or leave a nation (Gallagher, 2011). Capital controls can be economy-wide, sector-specific, or industry-specific. Gallagher et al. (2011) emphasised that capital controls (capital account regulations) should be seen as an essential part of macroeconomic policy toolkit and not as a mere measure of last resort, they are part of policy options used to manage the capital account.

Types, Objectives and benefits of capital controls: Capital controls are often used to manage exchange rate volatility, avoid maturity mismatches, limit speculative activity in an economy, and provide the policy space for independent monetary policy (Gallagher, 2011).

In Engel (2011) four potential objectives of capital controls are identified as:

- Reduce the volume of capital flows,
- Alter the composition of capital flows towards longer maturities,
- Reduce real exchange rate pressures, and
- Allow for a more independent monetary policy.

Capital controls can target inflows or outflows of capital, they can be price or quantity based, direct or indirect. Petkovski and Georgieva (2012), also distinguished between permanent and temporary capital controls. Permanent controls are usually part of long-term development strategies while temporary measures are usually introduced in exceptional situations, for example, in situations of large inflows of “hot money”.

Price versus quantitative measures: Some controls work through price measures, for example, taxes on inflows or outflows. Other controls work through quantitative channels, for example, restrictions or caps on sales or purchase of assets, bans on sales of assets, limits on buying equity in some industries or shares in domestic firms, etc.

Direct versus indirect controls: We can also distinguish between regulations that impact directly on capital flows from those that impact indirectly. Direct measures aim at directly affecting the volume of cross-border financial transactions through outright prohibitions, quantitative limits, or government approval procedures. Indirect measures try to make cross border flows more costly, for example through reserve requirements (Anderson, 2009).

Arguments for capital controls: Arguments in favour of capital controls include the following:

- Capital controls can represent an optimal macro-prudential policy that reduces the risk of financial crises.
- Global economic growth was on average higher during the Bretton Woods period when capital controls were widely used.
- Capital controls which limit residents from owning foreign assets can ensure that domestic credit is available more cheaply than would otherwise be the case.
- Economic crises have been more frequent since the Bretton Woods capital controls were relaxed.

Disadvantages of capital controls: Petkovski and Georgieva (2012) identified some disadvantages of capital controls as:

- Capital controls limit free flows of capital and deny depositors from earning the best possible returns and firms from borrowing under the most favourable conditions. As a result, both savings and investment suffer with negative impacts on growth and long-term development.
- In emerging markets, outward capital controls are not very efficient during periods of crises as they can be evaded.
- Capital controls encourage corruption by government officials who allow domestic residents to take money out of the country for a kick-back.
- Sometimes, capital controls are used as substitute for other appropriate domestic policies for managing the financial system or financial crises.

Studies show that large uncontrolled capital inflows have often destabilised development in some countries by: causing appreciation of the domestic currency, contributed to rising inflation, and causing unsustainable economic booms which often precede financial crisis, that is, when there is a reversal of foreign inflows and capital flight out of the country.

Considerations in adopting capital controls

In the IMF Position Paper on capital controls, Ostry et al. (2010) highlighted some factors which should be considered in adopting capital controls, they are:

- Effectiveness: How effective will the capital control measures be? They are likely to be effective where the administrative apparatus to implement them is already in place. It will be easier to implement where countries have a substantially closed capital account, although such countries have less need of further capital controls.
- Controls on outflows: Although focus tends to be on inflows, controls on outflows can also have an impact on aggregate net inflows. For example, assurances that capital can be repatriated can make the country an attractive destination for investors.
- Multilateral considerations: Decisions to adopt capital controls need to take account of their multilateral implications. The concern is that widespread use of capital controls by emerging economies can have negative impacts on efficient allocation of investment across countries. Adoption by one country may lead others to follow in what is identified as a “beggar-my-neighbour” policy.

Overall, according to Ostry et al. (2010), during large capital inflows that can fuel credit booms, macroeconomic policies and prudential regulations can be complemented by appropriately designed capital controls, especially during temporary inflow surges.

III.3 Restrictions on Use of Capital Controls

As mentioned already, the major restrictions on capital controls are the various international, bilateral and other agreements which restrict the use of capital controls. These international arrangements erode the policy space provided for under the Articles of Agreement of the IMF. (see appendix 3 for details).

III.4 Evolution of Attitudes towards Capital Controls

Until recently, the Bretton Woods institutions were hostile to the use of capital controls. This was in spite of the fact that the Articles of Agreement establishing the IMF permitted the use of capital controls by member countries. Thus, Article VI, Section 3 of the IMF Articles of Agreement permitted the use of capital controls by member countries, it states that (IMF, 2011):

Members may exercise such controls as are necessary to regulate international capital movements, but no member country may exercise those controls in a manner which will restrict payment for current transactions, or which will unduly delay transfer of funds in settlement of commitments, except as provided in Article VII, Section 3(b) and Article XIV, Section 2.

The negotiations for the establishment of the IMF after World War II and the Great Depression were influenced by British economist John Maynard Keynes who stated that “*control of capital movements, both inward and outward, should be a permanent feature of the postwar system*”. Before World War I, the industrialised economies of Europe and the United States were characterised by a high degree of global financial integration, with a large role for markets (Epstein, 2009). Many countries’ financial systems were based on the gold standard. This system of free capital mobility collapsed, along with many economies, during the Great Depression. Studies showed that a major contributor to the collapse was the approach to markets which resulted in the accumulation of debts and highly speculative investments, many of which failed. International capital flows also contributed to worsening the crisis (Epstein, 2009). Thus, in creating the IMF after the Second World War, governments were allowed to adopt capital controls as advocated by John Maynard Keynes.

Over time, however, there was a relaxation of these financial controls and a return to global financial integration with free capital mobility. This era was marked by the frequency and severity of banking and financial crises which affected emerging and developing countries primarily such as the Asian financial crisis in 1997-98. This was followed by the Russian crisis in 1998. The Asian crisis affected many emerging economies such as Thailand, South Korea and Malaysia. In spite of this, the IMF continued to support and advocate financial liberalisation and the elimination of capital controls. During the Asian financial crisis, countries which imposed capital controls, such as China and India, were less negatively affected than countries which did not impose or had few capital controls (Epstein, 2009; Gallagher, 2011). In the 1990s, credit rating agencies would downgrade the credit ratings of nations that imposed capital controls, the concept of “capital controls” was stigmatised (Gallagher, 2011). In the 1990s, the IMF tried to amend the Article of Agreement to require nations to fully liberalise their capital accounts and only allowing capital controls as temporary safeguards under extreme circumstances (Gallagher, 2011). However, the recent Global Financial Crisis brought a change of attitude by the IMF towards the use of “capital controls”. First in 2011 and again in 2013, the IMF held its annual conferences with the theme “Rethinking Macroeconomics” where it was highlighted that the global financial crisis had shattered many of their preconceived views on macroeconomic policies.

At the 2013 IMF Conference, Subbarao (2013) in his presentation on capital account management noted that the change in capital account management is one of the most remarkable intellectual shifts arising from the 2008 Global Financial Crisis. He identified three big issues on which pre-crisis consensus had

dissolved, they are: movement towards a fully open capital account, the use of capital controls as a short-run stabilisation tool, and the desirability of foreign exchange intervention.

- Movement towards a fully open capital account: Before the crisis, the consensus was that all countries should move towards a fully open capital account, this consensus is now broken. Thus, although there is consensus that free trade in goods enhances welfare, opinion is now divided on the virtues of financial openness.
- Capital controls as a stabilisation tool: Before the crisis, consensus was that capital controls are not a desirable policy tool. The debate was on effectiveness of capital controls and whether price or quantity controls should be used.
- Foreign exchange interventions: The pre-crisis consensus at least among the advanced countries, was that intervention in the foreign exchange market is suboptimal. The consensus no longer holds.

In what has been described as the “end of an era in finance” by some economists (Rodrik, 2010; Gallagher, 2010), the about-face by the IMF was discussed. In 2010 the IMF published a staff position note which showed that capital controls not only work, they were also associated with avoiding some of the worst growth outcomes of the current financial crises (Gallagher, 2010). The paper concluded that the “use of capital controls – in addition to both prudential and macroeconomic policy – is justified as part of the policy toolkit”. One justification for imposing capital controls is to prevent massive inflows of “hot money” that can appreciate the exchange rate, undermine competitiveness and threaten macroeconomic stability (Gallagher, 2010; Rodrik, 2010).

The position paper noted that: *“if the economy is operating near potential, if the level of reserves is adequate, if the exchange rate is not undervalued, and if the flows are likely to be transitory, the use of capital controls is justified as one element of the policy toolkit to manage inflows”* (Ostry et al., 2010). Various studies conducted while preparing the position note showed that capital controls on inflows can make monetary policy more independent, alter the composition of capital flows and reduce real exchange rate pressures (Gallagher, 2011). The IMF (2011) in discussing policy tools for addressing capital inflow surges concluded that:

- Capital controls can be useful in addressing both macroeconomic and financial stability concerns in the face of inflow surges.
- Regardless of the purpose of capital controls, countries should first exhaust their macro policy options before implementing capital controls (or prudential measures that act as capital controls).
- Prudential regulations and capital controls can help to reduce distortions as well as create distortions, for example, by reducing good as well as bad financial flows.
- Capital control measures should target the specific risks at hand. A combination of prudential regulations and capital controls may be appropriate.
- There is no one-size-fits-all in designing capital controls, capital controls should be country-specific if they are to be efficient and effective.

The IMF (2011) suggests that capital controls should be: used as a last resort and as a temporary measure, only after a nation has accumulated sufficient reserves, adjusted her interest rates, and allowed the currency to appreciate. It also suggested that such controls should preferably be price-based, although quantity-based controls should be used in the face of uncertainty where price-based controls may be inappropriate (Gallagher, 2011). It has been pointed out that more important than setting out guidelines, the IMF should focus on helping nations to enforce such controls when they deem them appropriate (Gallagher, 2011). However, without the advice of the IMF, many emerging market economies have implemented capital controls as will be discussed in the next section.

IV. Policy Space for Capital Controls – Experience of Emerging Economies

IV.1 What are Emerging Economies?

In the 1970s, the term “less developed countries” (LDCs) was used to refer to markets that were less developed than the “developed” countries such as the United States, Japan, and countries in Western Europe, etc. The term “emerging markets” was coined in reference to countries undergoing rapid economic growth and industrialisation. Some authors use the term interchangeably with “emerging and developing countries”, while some use it to replace the term “emerging economies”. Several other definitions have been provided. For example, some reason that “Emerging market country is a society transitioning from a dictatorship to a free market-oriented economy, with increasing economic freedom, gradual integration with the global marketplace and with other members of the Global Emerging Market (GEM), an expanding

middle class, improving standards of living, social stability and tolerance, as well as an increase in cooperation with multilateral institutions”.

Emerging economies are sometimes deemed to have the following characteristics:

- *Intermediate income*: Its PPP (Purchasing Power Parity) per capita income lies between 10 per cent and 75 per cent of the average EU per capita income,
- *Catching-up growth*: During at least the last decade, it has experienced a brisk economic growth that has narrowed the income gap with advanced countries, and
- *Institutional transformation and economic opening*: During the same period, it has undertaken profound institutional transformation which has facilitated its integration more deeply into the world economy. Thus, emerging economies appear to be a by-product of the current industrialisation.

IV.2 Policy Space for Capital Controls – Emerging Economies’ Experience

Over the years, in spite of hostility by international financial institutions, many emerging economies have used various capital management techniques targeted at both capital inflows and outflows, especially in the wake of various financial crises they have experienced. Generally, in the aftermath of the Asian crisis, there has been increased support of controls on capital inflows to prevent future crises. Following the 1990s currency crisis, “the single most important factor leading to the troubles that several of the East Asian countries encountered in the late 1990s – the East Asian crisis – was the rapid liberalisation of financial and capital markets” (Anderson, 2009). Controls on inflows can protect emerging economies from international speculation and allow them to undertake an independent monetary policy (Edwards, 1999). A few country case studies are discussed here, they are: Chile, Malaysia, Colombia, Brazil and Thailand. Some others have been discussed in the literature; they include China, India, Croatia, and South Korea.

IV.2.1 Case Study: Malaysia

There were surges in capital inflows into Malaysia in the late 1980s reflecting Malaysia’s increasing attractiveness as a manufacturing centre in Asia. These surges posed several challenges: risk of the economy overheating, loss of monetary policy independence, appreciation of the ringgit, growth of bubbles in the asset market, and financial sector instability (Cordero and Montecino, 2010).

A number of policy tools have been utilised over the years to regain control over monetary policy and slow down capital inflows.

In the early phase, Malaysia used capital controls targeted at capital inflows. Since Malaysia started off with a low inflation rate, it was in a better position to discourage short-term inflows by loosening monetary policy and lowering the interest rate that was attracting the capital inflows. The measures adopted succeeded in reversing the volume of short-term flows. Malaysia's controls on inflows were designed to be short-term measures and were removed as soon as the objectives were achieved.

After the Asian financial crisis, by 1998, the Malaysian authorities were concerned with the adverse impacts of high interest rates on economic recovery. They adopted measures which would enable stabilisation of the exchange rate and reduction of interest rates to aid economic recovery. Thus, the controls adopted targeted capital outflows and were aimed at: facilitating economic expansion, defending the foreign exchange rate, reducing capital flight and preventing further drain on foreign reserves (Cordero and Montecino, 2010).

Overall, the controls were able to reduce the volatility of the interest rate and foreign exchange rates. The controls insulated Malaysia from some of the prevailing external shocks at the time and provided more policy space to pursue economic recovery (Cordero and Montecino, 2010). Furthermore the Malaysian experience with capital controls showed that controls on outflows can help to stabilise an economy during a crisis. In assessing the benefits of these controls to Malaysia during the Asian crisis, authors have concluded that the controls appeared to have helped Malaysia to avoid turning to the IMF as other Asian countries did, namely, South Korea, Indonesia, Thailand and the Philippines. At that time, the IMF was imposing all kinds of conditionality which some countries saw as intrusive and bad for their economic development. The implementation of capital controls enabled Malaysia to avoid making unwanted commitments to the IMF (Cordero and Montecino, 2010). It provided policy space for Malaysia to adopt independent policies to address national development objectives.

IV.2.2 Case Study – Colombia

1993-1998: During the 1990s, Colombia implemented various structural reforms – trade liberalisation, privatisation of public enterprises, etc. These reforms in addition to low interest rates in the developed countries encouraged capital inflows into Colombia. The surge in capital inflows put upward pressure on the exchange rate and raised concerns about export competitiveness. Initially,

sterilisation interventions were attempted, but these were insufficient to avoid currency appreciation. Starting in 1993, Colombia implemented the URR – unremunerated reserve requirements. This was applied to any foreign exchange credit with a maturity below 18 months. It was later extended to cover some trade credits (Ostry et al., 2010). Majority of the reviewers of the Colombian use of the URR conclude that the URR was effective only in increasing the independence of monetary authorities.

2007-08: During this period, Colombia again implemented the URR at the rate of 40 per cent on foreign borrowing and portfolio inflows. Limits were also imposed on the currency derivative positions of banks (500 per cent of capital). Reviews show that these were insufficient to reduce the volume of inflows, but were able to alter the composition of inflows (Ostry et al., 2010).

IV.2.3 Case Study – Chile

Chile's experience of capital controls has attracted attention from economists, policy advisers, it has been argued that Chile's use of capital controls has helped the country to achieve a remarkable record of growth and stability by discouraging short-term capital flows while attracting longer-term funds (Edwards, 1999).

Chile implemented controls on capital inflows in 1978-82 and 1991-98. Controls were first imposed in 1978 as a result of massive capital inflows leading to exchange rate appreciation. This phase ended when as a result of the Latin American debt crisis, capital began to move out of the country. Controls were reintroduced in June 1991 when there was a new surge in capital inflows partly due to reduction in the country risk premium at the end of Pinochet dictatorship. According to Edwards (1999), Ostry et al., (2010), and Cordero and Montecino (2010), the main capital control measures adopted during these two periods were:

- Prohibition of inflows with maturities below 24 months.
- URR for inflows with maturities between 24 to 66 months ranging from 10 to 25 per cent of the value of the inflows.
- FDI was regulated throughout the period. In 1990, minimum stay requirements and profits repatriation rates for FDI. In 1990, minimum stay requirement was set at three years, but was lowered to one year in 1992. Repatriation restrictions were eliminated in 1992.
- In 1991, URR rate of 20 per cent applied only to foreign loans and fixed income securities. The credits were to remain at the Chilean Central Bank for up to one year without remuneration.

- In 1992, the URR rate was raised to 30 per cent and was extended to trade credits and loans related to FDI.
- In 1995, the URR was extended to apply to bonds, Chilean stock traded in the New York Stock Exchange.
- In June 1998, to reduce the risk that capital flows to Chile would decline as part of contagion from the East Asian financial crisis, the URR rate was reduced to 10 per cent and reduced to zero in September.

Review of Chile's experience with capital controls suggests that controls on capital inflows were able to influence domestic interest rates. Controls on inflows enabled Chile to undertake a more independent monetary policy. However, rising domestic interest rates increased the cost of capital for domestic firms.

IV.2.4 Case Study – Thailand

Thailand has also implemented capital controls in the Asian financial crisis period as well as in the global crisis era (Ostry et al., 2010).

1995-96: Measures implemented include:

- Imposition of URR on banks' nonresident baht accounts.
- Introduction of asymmetric open-position limits to discourage foreign borrowing.
- Imposition of reporting requirements for banks on risk-control measures in foreign exchange and derivatives trading.

2006-08: The following measures were implemented:

- Imposition of URR of 30 per cent on foreign currencies sold or exchanged against baht with authorised financial institutions (except for FDI and amounts not exceeding US\$20,000).
- Equity investments in companies listed on the stock exchange were exempted from the URR.

Ostry et al., (2010) showed that the controls were effective in reducing inflows and changing their composition as well as reducing pressures on the real exchange rate..

IV.2.5 Case Study – Brazil

1993 – 1997: At the beginning of the 1990s, Brazil faced persistently high inflation and a large fiscal deficit. During the 1990s, Brazil regained access to international credit markets from which she was cut off during the debt crisis of the 1980s. There was a large surge of capital inflows desiring to take advantage of the interest

rate differential (between domestic and international rates). From 1992, the real effective exchange rate appreciated markedly while the composition of capital inflows was increasingly short-term. A number of measures were adopted (Ostry et al., 2010):

- Explicit tax on capital flows on stock market investments, foreign loans and some foreign exchange transactions.
- Administrative controls – outright prohibitions against or minimum maturity requirement for certain types of inflows.

2009 – 2011: In the post Global Financial Crisis era, Brazil experienced large capital inflows and strong appreciation pressures between 2009 and 2011. Various capital management techniques were implemented during this period as shown in Table 1 below.

Table 1: Brazil – Capital Management Techniques after Global Financial Crisis

Date	Type	Measure
October 2009	Capital controls	<ul style="list-style-type: none"> ▪ 2 per cent financial transactions tax on non-resident equity and fixed income portfolio inflows by the Ministry of Finance.
October 2010	Capital controls	<ul style="list-style-type: none"> ▪ Increase in financial transactions tax from 2 per cent to 4 per cent ▪ Introduction of limitations on foreign investors' ability to shift investment from equity to fixed income investments
January 2011	Prudential financial regulations	Noninterest reserve requirement equivalent to 60 per cent of banks' short dollar positions in the FX spot market that exceeds US\$3 billion or their capital base which- ever is smaller.
March 2011	Capital controls	Increase in financial transactions tax to 6 per cent on new foreign loans (banking loans and securities issued abroad) with maturity of up to one year
July 2011	Prudential financial regulation	Mandatory noninterest reserve requirement for amounts over US\$1 billion or their capital base, whichever is smaller
December 2011	Capital controls	Reduction of financial transactions tax on equity and fixed income portfolio inflows to 0 per cent

Source: Fritz and Prates (2013)

Reviews of the Brazil experience during the 1993-97 period suggest that capital controls were effective in reducing both the volume and composition of capital inflows (Ostry et al., 2010). In the post global crisis period, a combination of

prudential financial regulations and capital controls were used. In Brazil, prudential regulation emerged as a key instrument for addressing the main cause of external vulnerability and currency appreciation (Fritz and Prates, 2013).

IV.3 Lessons Learnt from Emerging Economies' Experience

The idea of restricting capital mobility as a means of reducing macroeconomic instability is not new to emerging economies. The literature contains several reviews of the use of capital controls by emerging economies since the 1970s. Despite hostility to capital controls by international financial institutions, emerging economies had gone ahead and implemented capital controls to address their vulnerability to financial crisis, especially Asian and Latin American countries which experienced the Latin American debt and the Asian financial crises. While in the 1990s, emphasis was on capital controls, in the post-global financial crisis and the change in attitude by the IMF, the focus is now on the new nomenclature – capital management techniques (measures) which combine capital controls and prudential financial regulations. What can we learn from the experiences of the emerging economies that have implemented capital controls? Is there policy space for adoption of capital controls?

In addition to the few case studies described above, several other emerging countries have also implemented capital controls; they include China, India, South Korea, Croatia, etc. What lessons can be learned from the experiences of emerging economies?

1. **Is there policy space for capital controls?** The IMF Articles of Agreement created the policy space for governments to implement capital controls, although the Bretton Woods institutions for decades promoted financial integration. Several emerging economies have implemented capital controls despite the stigma associated with it for several decades. The policy space has broadened since the turn-around by the IMF in 2010. The IMF has agreed that capital controls are a legitimate part of the toolkit for managing capital inflows in certain circumstances. That is, it is part of the policy options available to governments to counter the potential negative economic and financial effects of sudden surges in capital flows. However some bilateral agreements still restrict the policy space for use of capital controls, for example, bilateral agreements with the United States penalise the use of capital controls.
2. **Do capital controls expand policy space for independent policy making?** With respect to capital management measures, it has been argued by some authors that policy makers face what is referred to as *the impossible*

trinity (Sumanjeet, 2009). The argument is that it is impossible for a nation's economic policy to simultaneously deliver more than two of the following three desirable macroeconomic goals: a fixed exchange rate, an independent monetary policy, and free movement of capital. For example, monetary authorities may want to lower domestic interest rates to reduce cost of borrowing and increase investment and employment. At other times, they may want to raise interest rates to reduce inflation. Free capital mobility can undermine such policies because foreign investors will move capital away from countries with low interest rates to countries with higher interest rates. Thus lowering domestic interest rates may encourage capital flight, while raising interest rates may attract inflows of capital driving down interest rates, in both cases counteracting the domestic policy (Epstein, 2009). Reviews of the experiences of emerging economies showed that for many of them, capital controls provided the space for independent monetary policy. Malaysia was able to avoid going to the IMF for assistance and to pursue her independent development policy to meet her development objectives.

3. **Are capital controls effective?** One of the earlier arguments against capital controls is that they are ineffective. However, studies since the global financial crisis show that the use of capital controls helped countries to avoid some of the worst growth outcomes of the crisis. While capital controls did not always reduce the volume of capital inflows, they altered the composition of inflows away from shorter-term inflows.
4. **Capital controls and prudential regulations – are they stand-alone measures?:** In a majority of the countries reviewed in the literature, domestic financial stability concerns associated with large capital inflows have often been addressed by introducing prudential financial regulations in addition to capital controls, that is, by adopting capital management techniques instead of using either of them as stand-alone measures.
5. **Greater use of controls on capital inflows than on outflows:** Many of the capital controls have focused on capital inflows, some countries have also targeted capital outflows. Controls on outflows can be “preventive controls”, for example, taxes on funds remitted abroad or outright prohibition on transfers of funds abroad. Such measures are expected to reduce rundown of foreign reserves. In reality, these measures have often been ineffective as the private sector has found ways to circumvent them. It has sometimes led to outright corruption. In some cases where

controls on capital outflows were used, there had been an increase in capital flight after the controls were imposed. It is also suggested that if inflows are properly managed, there may be less need to target outflows although the IMF has supported controls on outflows in Iceland, Ukraine, and Latvia (Gallagher, 2011). In the post global crisis era, while conditions vary across emerging and developing economies, weaker growth and risks of capital outflows raise new policy challenges.

6. **Country-specific design of capital management techniques:** Studies show that design of capital controls and prudential regulations should be country-specific, there is no one-size-fits-all instrument for all countries. Countries have adopted measures that suited their situations. Although the URR (unremunerated reserve requirements) has been popular in many emerging economies, the coverage and rates have varied between countries, for example. Some countries have tightened their instruments to block loopholes and reduce evasion. Furthermore, the country experiences also showed that the effectiveness of capital controls and prudential regulations in terms of reducing inflows, altering their compositions, or achieving the desired macroeconomic objectives depend on country's implementation capacity.
7. **Are capital controls a last resort policy option?** The IMF had suggested that capital controls should be implemented only after a number of other policies have been implemented, that is, capital controls should be used as a last resort and should be temporary. However, the experiences of China and India during the 1990s East Asian crisis suggest that the two countries already had capital controls in place and were therefore able to avoid the worst consequences of the crisis. Similar studies of the recent global financial crisis also suggest that countries with capital controls in place before the crisis hit avoided the worst growth outcomes. This suggests that capital controls should not be imposed as a last resort measure but should be part of the policy options to be considered for addressing surges in capital inflows or outflows. They may be ineffective if introduced after the crisis has hit.
8. **Reducing evasion of capital controls:** Reviews of use of capital controls show that the private sector has always found ways to evade controls. Ways of doing this include over-invoicing of imports, under-invoicing of exports, mislabelling of the nature of the capital movement, resorting to illegal methods including bribery, etc. (Edwards, 1999). Some studies show that the effectiveness of capital controls diminishes over time as the

private sector invests in avoidance techniques. There will be need for effective supervision of financial institutions as well as revisions (tightening) of regulations to block loopholes which can be exploited by the private sector. This implies that the regulatory and supervisory frameworks in emerging economies may need to be strengthened.

V. Conclusion

Although the Article of Agreement of the International Monetary Fund allowed countries to impose capital controls, the IMF and the World Bank have been advocates of liberalisation of financial markets and until recently were hostile to the use of capital controls by emerging economies. However, despite this hostility, many emerging economies have utilised the policy space provided by the Articles of Agreement to impose capital controls to address the negative impacts of surges in capital movements in and out of their economies. Reviews of the use of capital controls have focused on the experiences of emerging market economies especially those in East Asia and Latin America which had experienced financial crisis – the Latin American debt crisis and the East Asian financial crisis respectively. The recent global financial crisis led to a rethinking on some long-held views relating to financial liberalisation and the use of capital controls. The IMF has now included capital controls as one of the policy options to address surges in capital movements, thus expanding the policy space for the use of capital controls as may be necessary. It proposed a new nomenclature for capital controls given the stigma associated with it in the past, suggesting that they be referred to as “capital flow management measures”. Thus the focus of recent reviews is on the use of capital management measures – capital controls plus prudential regulations – by emerging market economies. However, some bilateral agreements still restrict the use of capital controls to protect their investments.

Reviews of the emerging market experiences have shown that while capital controls may not reduce the volume of inflows, they have helped to alter the composition away from short-term flows towards longer-term and more stable flows. They also provide more leeway for authorities to implement independent monetary and other domestic policies that address other objectives of the government.

While the IMF's change of attitude towards capital controls was welcomed by emerging and developing countries, they were less receptive of the IMF guidelines regarding when capital controls should be used. Brazil's Finance Minister told an IMF Steering meeting – “We oppose any guidelines, frameworks or codes of conduct that attempt to constrain, directly or indirectly, policy

responses of countries facing surges in volatile capital inflows" (Gallagher, 2011). There is need to give countries the flexibility to deploy capital controls to prevent or mitigate crisis. This is important in the post global crisis era where growth has slowed down. The July 2013 IMF Survey showed that financial market volatility increased globally in May and June 2013 after a period of calm and emerging market economies have been the hardest hit. Some of the rise in volatility may reverse, however, if the underlying volatilities persist and financial market volatility remains high, it could lead to increase in capital outflows and lower growth in emerging economies. It is, therefore, important for emerging market economies to make adequate use of the existing policy space for capital controls to protect their economies from financial market volatilities which lead to macroeconomic instability. They should also pay greater attention to provisions of bilateral/multilateral agreements which restrict policy space for use of capital controls.

References

- Akyuz Y. (2007). "Global Rules and Markets: Constraints Over Policy Autonomy in Developing Countries", UNCTAD, Geneva, March
- Anderson S. (2009). "Policy Handcuffs in the Financial Crisis – How US Trade and Investment Policies Limit Government Power to Control Capital Flows", Institute for Policy Studies – IPS-DC.org. Washington DC
- Cordero J. A. and J. A. Montecino (2010). "Capital Controls and Monetary Policy in Developing Countries", Centre for Economic and Policy Research, Washington. April
- De Gregorio J. (2013). "Capital Flows and Capital Account Management", Paper presented at the "Rethinking Macro Policy II: First Steps and Early Lessons" Conference, IMF, Washington DC, April 16-17
- Edwards S. (1999). "How Effective are Capital Controls?", NBER Working Paper Series, Working Paper 7413, National Bureau of Economic Research, Cambridge, Massachusetts, November
- Engel C. (2011). "Capital controls: what have we learned", Address at the BIS-sponsored high-level panel "Responding to capital flows: what have we learned" at the LACEA Meetings, Santiago, Chile, November
- Epstein G. (2009). "Should Financial Flows be Regulated? Yes", DESA Working Paper No. 77, ST/ESA/2009/DWP/77.
- Fritz B. and D. Prates (2013). "The New IMF Approach to Capital Account Management and its Blind Spots – Lessons from Brazil and South Korea", DesiguALdades.net Working Paper Series, Working Paper No. 35
- Gabor D. (2011). "Paradigm Shift? A critique of the IMF's new approach to capital controls", Working Paper No. 1109, Department of Accounting, Economics and Finance, Bristol Business School, University of the West of England, Bristol, June
- Gallagher K. P. (2010). "Capital Controls Back in IMF Toolkit", The Guardian, March 1
- Gallagher K. P. (2011). "The IMF, Capital Controls and Developing Countries", Economic and Political Weekly, Vol. XLVI, No. 19, May 7
- Gallagher K. P., S. Griffith-Jones and J.A. Ocampo (2011). "Capital Account Regulations for Stability and Development: A New Approach", Issues in Brief, The Frederick S. Pardee Center for the Study of the Longer-Range Future
- Griffith-Jones S. and B. Stallings (1995). "New global financial trends: Implications for development", In B. Stallings (ed), *Global change, regional response: The new international context of development*, pp. 143 – 173. Cambridge: Cambridge University Press
- IMF (2011). Articles of Agreement of the International Monetary Fund. IMF, Washington DC

- Koivusalo M., T. Schrecker and R. Labonte (2009). "Globalisation and Policy Space for Health and Social Determinants of Health", WHO Commission on Social Determinants of Health. Globalisation and Health Knowledge Network Research Papers,
- Martinez-Diaz L. (2006). "Pathway through Financial Crisis: Indonesia", *Global Governance* 12, pp. 395-412. Global Economic Governance Programme at Oxford University
- Mohan R. and M. Kapur (2010). "Liberalisation and regulation of capital flows: Lessons for emerging market economies", Asian Development Bank Institute Working Paper Series, No. 186, January
- Molina G. G. (2013). "Global Government Exit: A Bolivian Case Study", GEG WP 2013/84, The Global Economic Governance (GEG) Programme, University College, Oxford
- Ocampo J. A. and R. Vos (2008). "Policy Space and the changing paradigm in conducting macroeconomic policies in developing countries", BIS Paper 136, Initiative for Policy Dialogue at Columbia University, February
- Ostry J. D., A. R. Ghosh, K. Habermeir, M. Chamon, M. S. Qureshi, and D. B. S. Reinhart (2010). "Capital Inflows: The Role of Controls", IMF Staff Position Note, February 19 SPN/10/04
- Ostry J. D., A. R. Ghosh, K. Habermeir, L. Laeven, M. Chamon, M. S. Qureshi, and A. Kokenye (2011). "Managing Capital Inflows: What Tools to Use?", IMF Staff Discussion Note, SDN/11/06. April 5
- Pasricha G. K. (2012). "Recent trends in measures to manage capital flows in emerging economies", *The North America Journal of Economics and Finance*, Vol. 23, Issue 3, pp. 286-309.
- Petkovski M. and V. Georgieva (2012). "The impact of capital controls on maintaining macroeconomic and financial stability in emerging market economies", Turkish Asian Centre for Strategic Studies, May 25
- Rodrik D. (2010). "The Era of an Era in Finance", March 11
- Subbarao D. (2013). "Capital Account Management". Paper presented at the "Rethinking Macro Policy II: First Steps and Early Lessons", Conference, IMF, Washington DC, April 16-17
- Suttle P., R. Koepe and J. Mazzacurati (2010). "Capital Flows to Emerging Countries", IIF Research Note, Institute of International Finance, October 4
- Sumanjeet (2009). "Foreign Capital Flows into India: Compositions, Regulations, Issues and Policy Options", Working Paper No. 155, Asia Research Centre.

Appendix 1: Objectives and Types of Capital Controls (Capital Management Measures)

	Objectives	Price Based	Quantity Based	Prudential
Inflows	<ul style="list-style-type: none"> • Keep a stable and competitive exchange rate • Limit excessive debt and maturity or locational mismatch to prevent financial instability. • Alter composition of inflows to attract desired inflows. • Limit foreign ownership of assets for sovereign purposes or to protect domestic industries 	<ul style="list-style-type: none"> • Tobin tax (tax on foreign exchange transactions). • Reserve requirements on inflows, for example, Unremunerated Reserve Requirements (URR). • Taxation of capital inflows. 	<ul style="list-style-type: none"> • Quantitative limits on foreign ownership of domestic companies' assets. • Reporting requirements and quantitative limits on borrowing from abroad. • Limits on ability to borrow from offshore entities. 	<ul style="list-style-type: none"> • Keynesian tax (tax on domestic financial transactions). • Reporting requirements and limitations on maturity structure on liabilities and assets. • Reserve requirements on deposits. • Capital requirements on assets and restrictions on off-balance sheet activities and derivatives contracts.
Outflows	<ul style="list-style-type: none"> • Protect tax base by reducing capital flight. • Maintain stability of exchange rate. • Preserve savings to finance investment. • Help in credit allocation mechanism in order to support industrial policy and investments for social objectives. • Enhance the autonomy of monetary policy in order to reduce inflation or expand employment and economic growth. 	<ul style="list-style-type: none"> • Tobin tax • Multiple exchange rates 	<ul style="list-style-type: none"> • Exchange controls. • Restrictions on purchase of foreign assets including foreign deposits. • Limits on currency convertibility. 	<ul style="list-style-type: none"> • Limits on asset acquisition. • Asset backed reserve requirements.

Source: Epstein (2009)

Appendix 2: Capital Account Management Measures

Inflows	Outflows
<ul style="list-style-type: none"> • Unremunerated reserve requirements (a proportion of new inflows are kept as reserve requirements in the Central Bank). • Taxes on new debt inflows, or on foreign exchange derivatives. • Limits or taxes on net liability position in foreign currency of financial intermediaries. • Restrictions on currency mismatches. • End use limitations: Borrowing abroad only allowed for investment and foreign trade. • Limits on domestic agents that can borrow abroad (e.g. only firms with net revenues in foreign currency). • Mandatory approvals for all or some capital transactions. • Minimum stay requirements. 	<ul style="list-style-type: none"> • Mandatory approval for domestic agents to invest abroad or hold bank accounts in foreign currency. • Mandatory requirements for domestic agents to report on foreign investments and transactions done with their foreign accounts. • Prohibitions or limits on sectors in which foreigners can invest. • Limits or approval on how much non-residents can invest, e.g., on portfolio investments. • Restrictions on amounts of principal or capital income that foreign investors can send abroad. • Limits on how much non-residents can borrow in the domestic market. • Taxes on capital outflows.

Source: Gallagher et al., (2011)

Appendix 3: International Arrangements Restricting the Scope for Capital Controls

Several countries have assumed legal obligations to liberalise capital movements under different international arrangements. These obligations may the country's ability to use capital controls. But prudential regulations that do not discriminate between residents and non-residents (and as such, do not constitute capital controls) may still be available.

World Trade Organisation/General Agreement on Trade and Services (WTO/GATS):

Members only incur obligations to remove restrictions on capital flows if they have made commitments in the financial services sector. But even then, these constraints are limited in scope, the commitments are subject to periodic rounds of negotiation, may be of a qualified nature, and there are prudential carve-outs. There is also a general balance-of-payments clause that allows the use of capital controls under specific circumstances.

Bilateral Investment Treaties (BITs) and Free Trade Agreements (FTAs): There are about 2,500 BITs as well as bilateral and regional trade agreements that provide legal protection for foreign investments. These agreements usually liberalise inward investments and provide for free repatriation of such investment. They typically include: "most-favoured-nation" clauses. Most BITs and FTAs either provide temporary safeguards on capital inflows and outflows to prevent or mitigate financial crises, or defer that matter to the host country's legislation. However, BITs and FTAs to which the United States is a party (with the exception of NAFTA) do not permit restrictions on either capital inflows or outflows.

Organisation for Economic Cooperation and Development (OECD): The OECD's *Code of Liberalisation of Capital Movements* is the only legally binding instrument focusing comprehensively and exclusively on international capital movements. It covers all types of capital flows, but its framework enables members to remove restrictions on capital movements in a progressive manner. The members are permitted to lodge reservations with respect to specific transactions at the time of joining the OECD (and in the case of a number of transactions considered short-term in nature, these reservations can be reintroduced at any time). The Code also provides a very broad level of temporary derogation for capital flows (for reasons arising from "serious economic and financial disturbances" and for balance of payment reasons).

European Union (EU): Members of the EU are prohibited from imposing any restrictions on cross-border movements of capital among EU members and third countries. There are safeguards that allow for the temporary imposition of restrictions. But once an EU member joins the currency union, these safeguards may only be imposed by the EU Council and are limited to nonmembers.

Source: Ostry et al., (2011)

Appendix 4: Lists of Emerging Economies by Different Agencies

Agency/Year	No. of countries	Names of Countries
IMF (July 2012)	22	Argentina, Brazil, Bulgaria, Chile, China, Estonia, Hungary, India, Indonesia, Latvia, Lithuania, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, Turkey, Ukraine, Venezuela
Emerging Market Global Players (EMGP) project at Columbia University (April, 2013)	16	Argentina, Brazil, Chile, China, Hungary, India, Israel, South Africa, South Korea, Mexico, Poland, Russia, Slovenia, Thailand, Taiwan, Turkey
FTSE Group:	22	Advanced Emerging Markets: Brazil, Czech Republic, Hungary, Malaysia, Mexico, Poland, South Africa, Taiwan, Thailand, Turkey Secondary Emerging Economies: Chile, China, Colombia, Egypt, India, Indonesia, Morocco, Pakistan, Peru, Philippines, Russia, United Arab Emirates
MSCI (June 2013)	19	Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Thailand, Turkey
The Economist	22	Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Thailand, Turkey, Hong, Singapore, Saudi Arabia
Standard and Poor's List	20	Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey (United Arab Emirates, Qatar, and Jordan under consideration)
Dow Jones list (September 2011)	22	Argentina, Brazil, Chile, Colombia, Mexico, Peru, China, India, Indonesia, Malaysia, Philippines, Thailand, Czech Republic, Hungary, Poland, Russia, Turkey, Egypt, Morocco, South Africa (Greece, South Korea and Taiwan are on the watchlist)
Frontier Strategy Group (F10) –	10	China, Brazil, India, Mexico, Russia, Indonesia, Colombia, Argentina, Chile, Turkey

July 2011		
Emerging and Growth Leading Economies (EAGLES)	9	China, India, Indonesia, South Korea, Taiwan, Brazil, Mexico, Russia, Turkey
NEST - Expected Incremental GDP	15	Argentina, Bangladesh, Chile, Colombia, Egypt, Mexico, Nigeria , Pakistan, Peru, Philippines, Poland, Thailand, South Africa, Ukraine, Vietnam
Next eleven	11	Bangladesh, Egypt, Iran, Mexico, Nigeria , Pakistan, Philippines, South Korea, Turkey, Vietnam
Other Emerging Markets	20	Bahrain, Bulgaria, Czech Republic, Estonia, Hungary, Kuwait, Latvia, Lithuania, Jordan, Mauritius, Morocco, Oman, Qatar, Romania, Slovakia, Sri Lanka, Sudan, Tunisia, United Arab Emirates, Venezuela
Emerging Markets Index (2008)	32	Argentina, Brazil, Bulgaria, Chile, China, Colombia, Dominican Republic, Ecuador, Egypt, Hungary, India, Indonesia, Kenya, Lebanon, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Romania, Russia, Senegal, South Africa, Thailand, Tunisia, Turkey, Ukraine, Uruguay, Venezuela, Vietnam

Appendix 5: Use of Capital Controls in Malaysia

Period	Policy Tools
1989-1995 Control on Capital Inflows	<ul style="list-style-type: none"> Ban on the sale of money market securities with a maturity of less than one year to foreigners Limits on domestic banks' foreign borrowing intended for portfolio and non-trade related investment An unremunerated reserve requirement (URR) which required that part of a foreign ringgit deposit would not receive interest. Prohibiting commercial banks from offering non-trade related forward or swap options in order to limit currency speculation. Ceilings on banks' net liability position Implementation of capital controls was supplemented by several prudential regulations
1998-2001 Controls on Capital Outflows	<ul style="list-style-type: none"> Closure of offshore ringgit market Prohibition of all ringgit credit to foreigners that are not related to trade or FDI 12 month moratorium on repatriation of foreign funds held in Malaysia Mandatory repatriation of all ringgit held abroad

Sources: Cordero and Montecino (2010) and Ostry et al., (2011).