# OPENING THE CAPITAL ACCOUNT OF DEVELOPING COUNTRIES: SOME POLICY ISSUES\*

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#### **ABSTRACT**

In the late eighties, many developing countries followed the example of the most advanced countries and opened their capital account (K.A.) in an attempt to reap new gains from increased integration with the world economy. Currently, after the wave of financial and currency crises that hurt the global economy in the last decade, enthusiasm about K.A. liberalization has much faded. Firstly, the relationship between development and capital account liberalization did not come out to be as solid as initially expected; secondly, the greater capital mobility has brought about new forms of financial instability. This paper points to some risks associated to the undifferentiated deregulation of international movements of capital by developing economies. It argues in favor of proper sequencing: liberalization should proceed in step with progress in macroeconomic stability, building market competition and creation of a sound internal financial system. A special section analyses this issue in the special context of transition economies.

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#### 1. INTRODUCTION

In the aftermath of the WW2, the world economy underwent a comprehensive process of trade liberalization. The conclusion in 1994 of the Uruguay Round and the creation of the World Trade Organization (WTO) can be interpreted as marking remarkable progress towards the achievement of a global commodity market, where goods can freely circulate across national boundaries. The start of a new round of multilateral trade negotiations at Doha in November 2001 signaled many countries' willingness to widen and deepen commodity trade liberalization.

The process of liberalizing capital flows was much slower to take off. In a way, this is not surprising, since the architects of the Bretton Woods arrangements in 1944 decided that the much-needed international trade integration was incompatible with the erratic movement of exchange rates and cross-border capital flows. Influential policymakers, as John Maynard Keynes and Harry D. White, urged the newly created International Monetary Fund (IMF) to require member states to set-up controls on capital flows, such as to prevent a misuse of its credits and to support monetary policy autonomy in the fixed exchange rate environment. Bretton Woods arrangements are now history. The multilateral fixed exchange rates regime collapsed in the late sixties. Under the influence of the liberalization *Zeitgeist* echoed by political leaders in the United States and the United Kingdom in the early eighties, by 1990 industrialized countries have lifted most of their controls on capital flows and set the basis for a global capital market.

In the European Union, member countries perceived the widening, deepening and integration of their capital markets as a basic precondition for better resource allocation and growth. A unified capital market is also expected to support intra-European cross-border mergers and acquisitions, leading to creation of large pan-European firms able to reap economies of scope and scale and to successfully compete with Asian and American rivals. Efficient management of monetary policy in the Euro zone also required an integrated capital and money market. It should be emphasised that competition policy and K.A. liberalisation are related processes, and that more freedom in the later field was, in Europe, backed by increased vigilance in the former.

Under the influence of main international and financial organizations (IMF, The World Bank, OECD), the US Treasury, etc., many emerging economies embraced this trend and gradually removed restrictions on international capital flows like taxes, administrative restrictions and prohibitions either on transfer of funds or the exchange rate. Two factors have contributed to the growing migration of capital between the developed and the developing world. First of all, a majority of developing countries, decided to develop and open their internal financial systems and break with a lasting period of almost exclusively public financing of large investment projects. Concerning the banking sector, today, most emerging countries have a (more or less) independent central bank and a two-tier banking system. Many emerging countries faced the challenge to build a capital market from scratch. Firms were allowed to issue shares and bonds, and a market for financial assets was set up. Asian and Latin American countries undertook this process in the sixties, while transition economies from Central and Eastern Europe started it only in the early nineties. In general, this process was associated to large privatization programs, which converted former state-owned firms into corporate firms. Simultaneously, as progress with capital market creation and development of the banking sector went on, emerging countries allowed for increasing participation of foreign capital to financing domestic investment projects, via the two channels: through intermediaries like banks or directly trough the capital market. Especially in the privatization process, many governments chose to rely heavily on foreign investors.

Nowadays, enthusiasm about liberalizing the capital account of developing countries has much faded. This is not surprising. After 1994, currency and financial crises occurred one after the other. All these crises featured large reversals in the flows of foreign funding and sharp depreciations/devaluations of the local currencies. Contrary to economist consensus, developing economies with open trade were also prone to instability. It came out that the recently increased capital mobility has played a major rule in all these crises: large capital inflows were reported in periods of boom, and massive capital flight in periods of bust. Of course, country specific factors should not be underemphasized. Yet regularities could be observed during these crises and lead to an

<sup>&</sup>lt;sup>1</sup> Edwards (2001) infer from the data that countries that reduced capital controls during the eighties also recorded higher capital inflows.

overwhelming conclusion: increased capital mobility paved the way for new forms of financial instability, which both challenge traditional theories of financial crises and call for appropriate diagnosis and policy response.

This paper takes stock of existing literature on these issues to draw some lessons concerning the optimal capital account liberalization strategy in emerging economies. This is a highly topical issue for transition economies that (applied to) become a member of the European Union (EU), given that the European Commission asks them for opening of the K.A. prior to accession. In particular, the study focuses on the problem of the last in the row to accession transition countries, and puts forward the need for proper sequencing. Although the frontrunner (Poland, Hungary, the Czech Republic, Slovenia, etc) had recently implemented ambitious K.A. liberalization programs, the reading of this study may be interesting, as it points to some major risks that may have been underestimated when such programs were devised.

#### 2. GAINS AND RISKS ASSOCIATED TO K. A. LIBERALIZATION

# 2.1. The long run balance

Today, when the myth of central planning collapsed almost everywhere, governments throughout the world support the creation of an efficient internal capital market. The very rationale for this trend can be traced back to fundamental work by Irving Fisher (1930), who demonstrated why allowing for capital market to develop and work properly improves the intertemporal allocation of resources and thus enhances social welfare. While all governments in the developing countries that decided to implement a market economy agree on the usefulness of building a financial and banking system, they still have to decide whether and how this financial system should be integrated with the global economy. If they opt for opening their K.A., the question of sequencing becomes essential. By *sequencing* we understand the design of a contingent plan, where removal of one barrier in the capital market must be conditioned upon fulfillment of appropriate macroeconomic and structural conditions.

In the early 1990s, all emerging countries followed the same commandment as did the developed countries ten year before: "thou shalt open your capital market as much and as fast as possible" Why so? Because in the elementary neoclassical world where all markets are perfectly competitive, the "invisible hand" is expected to drive resources there where they are most productive. Hence, capital should flee from regions where it is abundant and marginal return on investment is low to those regions where capital is in scarce supply and marginal return on investment is high. Owners of capital gain as they obtain a better return. If foreign savings (capital inflows) do not crowd out entirely domestic savings, the process is beneficial to the recipient country: jobs are created if technology implies complementarity between labor and capital inputs, local worker productivity increases as capital deepens and workers learn the better management and production techniques, the state collects more taxes (or privatization proceeds) and may provide more public goods (infrastructure, health services and education); in general, growth is enhanced and poverty is fought back. In addition, opening the capital account would set additional discipline on the internal capital market, by providing useful benchmarks for different prices and increasing competition in the banking sector. Financial portfolio theory also points at the scope for better diversification in a global capital market.

Yet real economies depart from the neoclassical axioms. Even if for the time being we leave aside the problem of imperfect information (which is more a short-term issue), many structural deviations can be put forward: sometimes the goods market in the recipient country is dominated by monopolistic structures, wages are sticky, corruption and rent seeking impose a high tax on the productive sector, and so on. Depending on the strength of these strains, the favorable impact expected from capital account opening may not be at work, or even worse, liberalizing the capital account may bring about a perverse effect. As mentioned by Eichengreen (2001), in developing countries there is a constellation of distortions to free allocation of resources and removing one of them (that is, liberalizing cross-border flows of capital) would not necessarily bring about improved welfare, at least not before some other distortions are removed. This basic idea points at the vital need for appropriate sequencing of liberalization decisions.

Also, remark that if free movements of capital between equally developed countries lead in general to creation of multinational firms owned and managed by residents of the countries involved in the process, when an emerging market opens its K.A., in general many domestic firms will be transferred into the hands of foreign

residents. By itself, this would pose no major problem if the state is strong enough to monitor and sanction the would-be abuses of market power. Unfortunately, most often, in these countries competition policy is weak; furthermore, antitrust decisions appear more difficult to enforce face to foreign multinationals as compared to local firms (the former being better equipped to lobby and carry on expensive trials).

All in all, if benefits from liberalizing the K.A. exceed related costs, in the long run there should be a noticeable positive relationship between the degree of K.A. openness and growth rates, and vice-versa. So far, evidence about a positive relationship between output growth and capital account opening has been inconclusive (Edison et al., 2002; Eichengreen and Leblang, 2002).<sup>2</sup>

Moreover, long run consequences from opening the K.A. may differ drastically for a developing country as compared with a developed country. In an empirical study, Edwards (2001) shows that the effect of capital account opening on growth is the stronger the more developed is the country and, conversely, that in the (very) low GDP countries, this effect might be negative. Edison et al. (2002) also bring some evidence in favor of a positive relationship between growth and K.A. liberalization. They show that less developed countries (non-OECD in their sample) seem to benefit the most from opening their capital account. Such opposite results only point to the fact that more empirical analyses should be carried out before a clear cut conclusion might be drawn.

#### 2.2. The short-term risks

Considering now short-term fluctuations, there is increasing empirical evidence that removal of restrictions on international movement of capital has brought about increased global financial instability (Eichengreen, Rose and Wyplosz, 1995; Rossi, 1999; Demirgüç-Kunt and Detragiache, 1998). In a recent panel data analysis of 8 developed countries and 19 developing ones in the interval 1977-1999, Wyplosz (2002) found that a standard K.A. openness index has a significant impact on the exchange

<sup>&</sup>lt;sup>2</sup> See the reference studies by Quinn (1997), who finds a positive relationship and Rodrick (1998) who finds no relationship. See also IMF (1999).

market pressure index, which, in his view, is a good proxy for financial instability.<sup>3</sup> While in the framework of the contemporary financial system, instability may easily spread throughout the globe, the most significant financial disruptions of the nineties directly affected the developing world: Mexico (1994), then Thailand, the Philippines, Indonesia, Korea and Malaysia (1997), Bulgaria (1997) and Russia (1998), Turkey (2000), and Argentina (2001-2002).

Crises that hit the developing world in the 1980s were mainly sovereign debt crises related to official capital flows. Today, with the development of internal capital markets and the opening of capital accounts, the private sector (corporate and banks) in emerging countries can act as a borrower on its own in the global capital market. At difference with public debt which is placed under the direct control of a central authority, the accumulation of private debt is driven by decentralized non-cooperative strategies, where every firms decides on the optimal debt level taking as given the debt decision of its rivals. In absence of public regulation of private borrowing, in equilibrium, the total amount of debt may prove to be collectively unsustainable. Furthermore, many developing countries turned the process of capital market deregulation into an opportunity to build large dollar-denominated stocks of debt (Rogoff, 1999). These structural changes bring about major differences in the way financial crises take off.

If capital inflows were the counterpart of valuable investment projects, one can only advocate in favor of unrestricted capital inflows. In a perfect world, rational investors should be able to assess correctly the net present value of project and invest their money in the best places. In general, assessing the fundamental value of an investment project in a developing (transition) country involves much uncertainty, given the newness of the relationship between foreign investors and the economic environment of the target country. In the presence of imperfect information about the latter (e.g., about demand size, quality and reliability of suppliers, workers and local managers, legal environment, officials corruption, macroeconomic policies, etc.) investors may orient

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<sup>&</sup>lt;sup>3</sup> Capital inflows would be associated to currency appreciation if the exchange rate regime is flexible, and to increases in the reserves of foreign exchange in a fixed exchange rate regime. To have a uniform measure of external pressure within a country, whatever the exchange rate regime, the EMP indicator sums up variations in the exchange rate and in reserves, weighted by the inverse of their respective standard deviations.

their decision in keeping with information unrelated to the fundamental value of the project, like the decision of a rival, or the future expected price. As a consequence, bubbles in financial asset prices and herding behavior might proliferate. Also, models with imperfect information often exhibit multiple equilibria. Let us take a trivial example: if national income is a random variable, foreign investors cannot rule out the possibility that the developing country may default on its foreign debt at the next period; they then ask for a high interest rate, and, given its limited income, the country will actually default, while it would never have been forced to default if investors had asked for a smaller (risk-free) interest rate. In all these contexts, the shift from the favorable equilibrium to the unfavorable one, or the revision of an asset price that deviates from its fundamentals may entail large fluctuations in economic activity and significant social costs.

In particular, short-term dollar-denominated debt (public or private) may provide for an extremely dangerous way of financing the developing world (in the context of a high mobility of capital). To be more specific, let us consider the case of a small developing country that sees its currency sharply depreciating. As a consequence, local firms and banks balance sheets mechanically deteriorate, as the debt in local currency edges up and net worth declines. Firms would reduce investment (and banks would reduce lending), with adverse consequences on global demand and growth. The most fragile companies will go bankrupt. Faced with reduced profitability, international investors would refuse to roll-over debt, and further aggravated the crisis. In turn, this will set additional strain on the international value of the local currency. According to Mishkin (1999) and Krugman (2000), this multiple equilibria story fits well to the 1997 Asian crisis, where the sharp devaluation of their currencies was immediately followed by massive capital outflows.<sup>4</sup> (While in 1996, the 5-big Asian countries received a net inflow of 66 billion US dollars, in 1997, some 20 billions US dollars fled out the region.)

As put forward by Rogoff (1999), the going international financial system provides strong incentives in favor of debt financing. If foreign capital serves to finance equity rather than debt, the crisis story would write differently. Depreciation would bring about a decline in the stock market, but the balance sheet effect would not occur. One may surmise that the economic activity decline would work out through the more traditional wealth effect.

#### 3. IMPLEMENTING K.A. LIBERALIZATION: ELEMENTS OF A DIAGNOSIS

K.A. liberalization provided to be beneficial for the developed countries (or, for the skeptics, at least did not provoke major disruptions). However, since the developing countries have idiosyncratic economic structures, their growth prospects may be adversely affected if they open their capital account rapidly and in an undifferentiated way. The process of liberalizing capital movements by a developing country has two components: a long-run, universal tendency, associated to integration with the world economy, and the short run management of the KA liberalization process, associated to economic fluctuations and which should take into account the specific realities.

In the following, emphasis is set on this second dimension. Leaving aside the general principles, whenever a country decides to implement such a major reform like the liberalization of external capital movements, policy makers should asses the impact of this measure given a set of well-defined country characteristics. For the sake of clarity, we gather the essential characteristics for policy design into three groups, but we emphasize that they should be considered as a whole.

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<sup>&</sup>lt;sup>4</sup> This multiple equilibria explanation builds on a "second generation" model, as pioneered by Obstfeld (1986). Its main characteristic is a focus on self-fulfilling prophecies, at difference with "first generation models" which emphasize the role of deteriorating fundamentals (Krugman, 1979; Flood and Garber, 1984). See also the survey by Flood and Marion (1999).

# 3.1. Macroeconomic stability and opening the capital account

When countries where capital is relatively scarce open their capital account, they should face massive inflows of capital guided by the neo-classical principle of equalizing marginal returns. More precisely, in the industrial countries where capital is abundant, its rate of return has declined over time, as capital per worker has increased. In developing countries, the stock of capital per worker is small and marginal returns on investment should be large. Such net inflows of capital are accompanied by the real appreciation of the developing country currency. In other terms, the capital account deficit net of changes in reserves has as a counterpart the deficit of the trade account (and maybe the public deficit).

It should be noticed that real appreciation cannot be avoided, whatever the exchange rate mechanism. Under a fixed exchange rate, capital inflows lead to an increase in reserves of foreign exchange, as the central bank is obliged to buy the excess foreign exchange. Then the money stock increases, prices go up and the currency appreciates in real terms. Of course, for some time, the central bank may resort to sterilized interventions in the foreign exchange market, but this policy cannot be sustained in the long run (firstly, the central bank will run out of domestic assets; it will then resort to borrowing deposits from ordinary banks, but the cost of this operation would soon become prohibitive). Under a flexible exchange rates regime, the monetary base is insulated, but capital inflows entail a higher demand for the national currency, which appreciates in nominal terms, thus, for a partial pass-through effect, this leads to real appreciation too.

Appropriate fiscal policy may help tempering real appreciation coming with large capital inflows: tight deficits should put downward pressure on interest rates and thus limit the scope for capital inflows. These are medium run adjustments. It would be difficult to adjust fiscal policy rapidly enough to such as to counter a sharp surge in

<sup>&</sup>lt;sup>5</sup> In practice, many factors explain why return on capital is not necessarily higher in developing countries: shortage of basic skills, lack of education and infrastructure, corruption and economic disorganization, all can be seen as additional costs.

capital inflows. Moreover, fiscal austerity may be quite impossible to implement when unemployment is high. As a basic requirement, countries that expect large capital inflows should not completely deregulate the international movements of capital before they set their fiscal stance in good shape. In particular, they should set up efficient tax collection systems and control spending strictly. The higher the public deficit, the higher export crowding out and the offsetting capital inflows.

The objective of attracting foreign capital should be weighted against other policy goals. In general, countries that adopted some kind of fixed exchange rate regime found the task of maintaining the parity extremely difficult. One should however think of why these countries adopted fixed exchange rate regimes in the first place. Some of them (Argentina and Bulgaria first come to mind) were very high inflation countries, which resorted to pegs in order to get a nominal anchor and effectively carry out macrostabilization programs. Most of them kept in force some capital controls as a safeguard against currency attacks (Leblang, 1999; Eichengreen, 2001). Once that inflation is brought within reasonable bounds (e.g., below the two digits psychological norm), softer inflation-control instruments can be successfully implemented, like a monetary target. Empirical analyses showed that, in general, the money demand function is stable for low inflation rates, but not for high rates.

The drop of the peg in favor of floating exchange rates is then consistent with an autonomous monetary policy, directly aiming at price stability. That does not imply that all risks associated to capital mobility vanish under floating. Large fluctuations in the nominal exchange rate can occur and harm dollar borrowers, be them public or private. In this context, full capital liberalization may take place only if the contribution of foreign capital to total liabilities is week, such that a sharp depreciation associated to reversal in capital flows does not deteriorate balance sheets, with all the perverse effect above mentioned. In general, the excessive volatility of the exchange rate specific to floating may put additional strain on the real sector.

<sup>&</sup>lt;sup>6</sup> Some other countries resorted to fixed exchange rates as they considered them more supportive of international trade, and mainly exports. As experience of developed countries shows, this other goal can be achieved as well in the context of flexible exchange rates.

To sum up, long before a country decides to fully open its capital account, it should have solved two major and sometimes related problems: inflation and large public deficits. There should be a strict monitoring of external indebtedness (public and private) put in place as well. And, even if this may sound trivial, risks associated to K.A. liberalization are much lower if foreign capital represents only a small proportion of total liabilities of a given country and vice-versa. In general risks associated to foreign direct investment and even to portfolio investment seem lower than those associated to debt financing.

# 3.2. Market competition and opening the capital account

In general, the goods-producing sector in developing countries and most of transition economies is dominated by a bunch of monopolistic businesses, often supported by the state. Most of the time, the banking sector is organized as an unregulated (or poorly regulated) oligopolisitic market. In this context, massive and unregulated flows of foreign capital may do more harm than good. While positive effects can be easily identified, sometimes, lack of experience of the analysts themselves with such "bizarre" economies lead to difficulties in assessing the perverse effects (Stiglitz, 2002).

Let us take a hypothetical example. The most competitive firms in a given developing country would find easy ways to finance their development in the international capital market (issuing shares or through bank credits at the best rates). These firms will grow, to the disadvantage of less competitive rivals, which will be gradually pulled out of the market. Is this "foreign capital hand" the same as Adam Smith's invisible one? Not necessarily. If at the end of the story this market becomes, or gets more, monopolistic (or oligopolistic), with only one (or a few) survivor(s) in place, the initial competitiveness has converted in lasting market power, with adverse consequences for consumer welfare (but also with large gains for the international capital that worked out this transformation).

It a basic fact of life that, in general, foreign capital chiefly targets monopoly firms (in particular, natural monopolies). This process is favored if the developing country implements a privatization program. In this context, it should be emphasized that foreign capital is not a substitute for appropriate regulation. To the contrary, the regulatory body may face increased resistance if the monopoly gets foreign-owned.

We conclude that capital account liberalization should be baked by development of powerful antitrust policy and regulatory institutions. International assistance in this field should become a priority on the development agenda.

# 3.3. Weak financial systems and opening the capital account

The financial system in developing countries is in an incipient stage of maturity. Their capital markets are neither liquid nor deep enough, bank prudential regulations and supervision are weak, management practices in the banking sector are unusual, there is a shortage of qualified staff, and so on. Such financial systems are particularly badly equipped to manage risks, and often banks are saddled with bad debts and worthless assets. In this framework, opening the capital account may be quite a risky measure. If during the "optimistic" period, credit expands and private firms can raise large amounts of money easily, the reversal can also be dramatic. In the crisis period, many firms that may be solvent, face bankruptcy given that they do not have the capacity to shift rapidly to new markets or suppliers, when their traditional suppliers or buyers become insolvent, or they face sky-rocketing borrowing costs.<sup>7</sup>

Macroeconomic rigueur, effective antitrust policy, strong financial institutions are basic points that should be addressed by countries considering the liberalization of capital

the capital account.

<sup>&</sup>lt;sup>7</sup> Mishkin (1999) claims that a major responsibility for the Asian crisis rests with their weak financial regulation and supervision. Ishii and Habermeier (2002) point to the Korean experience; this country was subject to a major crisis in 1997 despite its sound macroeconomic fundamentals, due essentially to structural weaknesses in the financial and corporate sectors and, quite likely, to a premature opening of

movements. Moreover, international advisers and policymakers sometimes tend to overlook the systemic strain and disorganization specific to developing and transition countries.8 One perspective of analyzing this issue is macroeconomic and it focuses on the capacity for quick adjustment (resource reallocation) following abrupt changes in relative prices. Another perspective looks at economic structures and institutions: the juridical and legal basis, and the nexus of economic relationships and norms at work in the given country. In the recent years, many intellectual efforts were devoted to a better understanding of the consequences of corruption and poorly defined property rights, as well as the weakness of law enforcement on economic development.

Given the idiosyncratic economic structure of developing economies, restrictions on capital movements may provide for a second-best solution, to be maintained until constraints inherited from the past are removed.

# 4. CAPITAL CONTROLS DURING TRANSITION TO A MATURE MARKET **ECONOMY**

# 4.1. Basic rationale for capital controls

After many years of activism, when governments in the developed countries and main international financial institutions pushed toward universal liberalization of the capital account, the possibility of maintaining some capital controls on a unilateral basis is no longer dismissed by economists. Paul Krugman, who, in several press articles in 1998, advocated in favor of selective capital controls, initiated the break with the "orthodox" thinking and joined the group of other critical thinkers like Rodrick (1997) and Bhagwati (1998). An important change took place within the IMF, where many economists agree now upon the idea that countries cannot fully liberalize their capital account before they fulfill some basic requirements in terms of macroeconomics stability and institutional strength (see the special IMF (1999) report on capital controls and the several IMF Occasional Papers quoted in this document). Contemporary consensus on

<sup>&</sup>lt;sup>8</sup> What Daianu called *structural strain* (1994, 1997). The term of *disorganisation* was introduced by

capital controls is well summarized by Lipschitz, Lane and Mourmouras (2002): "even though capital controls distort the intertemporal allocation of resources, are subject to evasion, and could be used as a pretext to relax macroeconomic discipline, they could provide emerging market countries a temporary shield from volatile capital flows like interbank lending and portfolio investment". Another generally accepted policy principle is stated in a study by Barry Johnston: "A comprehensive liberalization of capital transactions and transfers does not signify an abandonment of all rules and regulations connected to foreign exchange transactions. Countries that have opened their capital account have to strengthen their regulations in certain area" (Johnston, 1998, p.5).

According to IMF (1999), during the period 1993-1997, there were 106 instances where new capital controls had been implemented, most of them restricting open positions by banks in transactions with non residents and credit controls. The range of motivations varies from maintaining monetary policy autonomy within a fixed exchange rate regime, industrial policy or limiting volatility in the financial market (this time, in the context of flexible exchange rate regimes).

Various studies have shown that effectiveness of capital controls is limited in time, as private agents find methods of circumventing them (Johnston, 1998). The more developed is the financial system, the easier is for financial intermediaries to by-pass a given control. Peter Garber (1998) documents on the risks for capital and prudential controls avoidance against the background of an ever-growing market for derivatives. He argues that if a uniform tax is placed on all gross inflows, gross transactions will move off-shores and the tax will finally bite only the net inflow. Also, "if differential controls are imposed allowing for equity investment but limiting short-term, fixed interest inflows, the flows will enter through the least restrictive door".

Quite often, developing countries opt for a fixed exchange rate in order to fight inflation, as they take the currency price as nominal anchor. This policy choice comes with its own risks, which capital controls may help containing. In the specific context of a fixed exchange rate regime, capital controls either intend on improving monetary policy effectiveness or preventing speculative attacks.

# 4.2. Fixed exchange rates and capital controls

In the traditional Mundellian framework, controls that limit capital mobility allow the central bank to regain *monetary policy autonomy* in the context of a fixed exchange rate (see also Johnston, 1998; Edison and Reinhart, 2001). The cost of moving capital between the host country and the rest of the world drives a wedge between the home and world interest rates. In particular, during a standard aggregate demand-driven crisis, if restrictions on capital outflows are in place, the central bank may maintain, at least for a while, lower than world interest rates. Conversely, a central banker who wants to limit capital inflows in an overheating economy would restrain (tax) capital inflows, such that it can target a higher interest rate than required by the interest rate parity condition.

In the context of a fixed exchange rate, controls may aim at preventing *speculative attacks*. It is well known that this exchange rate arrangement is highly vulnerable to speculators' attacks. During speculative crises, speculators borrow domestic currency (for a short period) and trade it against dollars (or other "strong" currency). Incentives to attack a currency are huge: if the attack fails and the central bank manages to defend the parity (e.g., by selling dollars), the speculator loses no more than the interest rate over the period; in the opposite, if the currency is devaluated, the profits may be quite large.

Such a currency attack may succeed even if there is no misalignment of the exchange rate and economic fundamentals are sound. Of course, if a currency is overvalued, chances that it will be the next target increase. Furthermore, if several major investors all agree to simultaneously speculate against a currency, chances that many others follow the move are huge. In this context of self-fulfilling prophecies, popular blame of international funds managers who bet against Asian currencies for destabilizing these economies is not without logic. If there is such a thing as an ethic for economic conduct, administrative restrictions on capital outflows are acceptable if they prevent investors from making a mistake by taking their money off the country. If the capital flight is not motivated by a deterioration in the country fundamentals, but owes to some "irrational" mood, capital controls may be an efficient way to "buy time" for restoring trust.

To contain currency attacks, or to limit the damages in the advent of the attack, governments may set some ceilings on short-term loans by resident banks to non-

residents and limit their interventions in the forward market. They may also put some limits on exports of foreign currency. Offshore markets in the domestic currency, which in general escape from supervision of the central bank, should be closed. These are emergency or "desperate" measures, as opposed to "prudential" measures that oppose currency appreciation during normal times (Edison and Reinhart, 2001).

The most popular case study is provided by Malaysia. During the Asian crisis, this country faced successive waves of speculative attacks over the ringgit and massive outflows of capital. In September 1998, the government decided to curb capital outflow by outright regulation. The controls made possible a temporary relaxation in fiscal and monetary policy that might have alleviated the crisis. (See for further details about the Malaysian experiment with "emergency" capital controls Ötker-Robe, 2000; Zainal-Abidin, 2000; Edison and Reinhart, 2001). According to an empirical study by Eichengreen and Leblang (2002), those countries which in periods of distress imposed capital controls, have recovered faster.

# 4.3. Flexible exchange rates and capital controls

In general, in recent years, many experts have claimed that flexible exchange rates are to be preferred to fixed exchange rates, as the monetary authority regains control over the monetary policy and currency attacks have no reason to exist (the time opportunity-window collapses to zero). However, when the exchange rate is freely determined by market forces, it may be subject to large volatility, in particular in the context of developing countries which feature a narrow trade portofolio. We also know that in absence of capital controls, private businesses tend to resort extensively to dollar-denominated debt, as they have to pay lower interest rates. Then exchange rate volatility may lead to large real activity fluctuations, channeled via the balance sheet effect. As a corollary, instability may be limited if such dollar-denominated debts were restricted in an administrative way.

In general, fluctuations in macroeconomic variables are associated to losses; by imposing some cost on short-term capital inflows and outflows in the context of a flexible exchange rate, one may achieve more stable capital flows. Yet there are non negligible

risks that reduced volatility in flows may bring about increased volatility in asset prices (exchange rate, stocks). Probably, capital controls shift the burden of adjustment from quantity toward prices (Calvo and Rodriguez, 1979; Reinhart, 2000; Edison and Reinhart, 2001).

If monetary policy is strictly devoted to maintain price stability, the country can rely only on fiscal policy to counter a negative demand shock. However, according to traditional Mundellian analysis, under perfect capital mobility and a flexible exchange rate, fiscal policy of a small open economy is ineffective: any increase in public spending pushes up interest rates and the currency appreciates; in turn, investment and respectively net exports are crowded out. In this context, a tax on capital inflows will limit the volume of capital inflows, limit the currency appreciation and may back counter-cyclical fiscal policies.

## 4.4. Capital controls and the time pattern of external funding

As already mentioned, whatever the exchange rate regime, massive capital inflows bring about real appreciation of the currency (via the nominal exchange rate in a flexible regime, or via the monetary base and prices in the fixed one). Net capital inflows have as a counterpart a trade (current account) deficit; currency appreciation is in fact the consequence in the adjustment in relative international prices so as restore equilibrium of the balance of payments. If the trade deficit serves to finance positive net discounted value projects, there should be no reason to worry. Instead, if foreign savings serve to finance the public deficit, consumption of foreign produced goods or speculative investment in real estate, things may be quite different. As the two destinations cannot be disentangled (and even if they could, financial intermediaries would find easy ways to by-pass them), it is very difficult to design efficient selective capital controls. One would like to prevent "speculative" capital flows, but to support "good" investment projects.

In general, economists who carried out empirical work, tend to agree that controls aiming at reducing the aggregate capital inflow were not very effective, but contributed to modify the structure of foreign funds in favor of long-term financing (see Montiel and Reinhart, 1999). These are good news: recent currency and financial crises pointed to the

major instability risks that can be associated with *short-term capital investment*. Policy measures that tend to put some breaks on this type of investment look today quite appealing. Either a Tobin-tax or a requirement to create a one-year non-remunerated deposit for any investment in the country may discriminate against short-term funding. If short term borrowing becomes more costly, other forms of financing like long term funding or FDI become more attractive.

Faced with massive capital inflows, in June 1991, Chilean authorities decided to implement a 20% one-year unremunerated reserve requirement on foreign borrowing. Initially, only foreign loans were considered, but afterwards, the scheme was extended to non debt (portfolio) investment and even to some forms of FDI. The scheme was abandoned in 1998 when the flow of foreign capital declined following the Asian crisis. Most economists who studied the empirical evidence in general agreed that the capital controls had only a modest and short term lived impact on reducing total capital inflows (Laurens, 2000). However, by altering the structure of funding in favor of long-term investment, Chile found itself in a much better position to face the risks of net flow reversal in the aftermath of the Asian crisis. As Rogoff (1999) put forward, Chilean-type controls must be very comprehensive to be effective. The Chilean government was compelled to gradually extend the scheme of non interest bearing deposits to wider categories of investment, from private lending, to portfolio and even FDI, as financial intermediaries found ways to by-pass them.

Capital account liberalization was undertaken in many countries around the globe; ways to do it were diverse, and results were mixed. Various experiences with K.A liberalization throughout the world show that there is no simple rule for the proper conducting of K.A. liberalization. As mentioned in Section 3, the schedule of liberalization should take into account individual countries' characteristics, mainly in terms of macroeconomic fundamentals, of market structure and of financial system's

<sup>&</sup>lt;sup>9</sup> He gives as an example the situation where by the intermediary of cleverly tailored offshore derivative swap contracts, a Chilean bank may appear to be the holder of long term debt, while in reality, it owns only short term loans with a foreign bank

deepening, supervision and risk assessment (see also on this important topic, Ishii and Habermeier, 2002). In particular, the program of K.A. liberalization *cannot* be devised as a pre-determined time schedule ("do this ... until"); it should take the form of as a contingent plan, where suppression of various barriers should be conditional upon fulfillment of various criteria, what we call *sequencing* (do this ... if that ...).

# 5. TRANSITION ECONOMIES: CHALLENGES AND RISKS ASSOCIATED TO K.A. LIBERALIZATION

## 5.1. EU criteria for membership and the K.A. liberalization

From 1988, the EU undertook a large offensive of liberalizing capital markets within its frontiers. The removal of barriers in financial markets is expected to allow capital to become more mobile and move to the location with the highest return.<sup>10</sup>

Much progress has been achieved since, maybe the most spectacular step being the adoption in 1999 of a single currency by eleven (now twelve) of the fifteen EU member countries. Of course, integration of their money markets (financial assets with a maturity inferior to one year) was a basic precondition for efficient management of monetary policy in the Euro Zone and was achieved prior to monetary unification. While many barriers have been abolished since, some are still in force: in particular, cross border take-overs and mergers are still hard to implement, and, for not very clear reasons (perhaps related to the quality of information), investors still seem to prefer domestic assets. Foreign banks and insurance companies keep on facing a number of difficulties in setting up affiliates abroad, and cross-border transfers of funds still involve high costs. However, the European Commission resolutely pushes towards further liberalization of movements of capital and creation of a genuine capital market in the European region. We should therefore expect that cross-border ownership will further diffuse in the future.

 $<sup>^{10}\;</sup>See:\;Capital\;market\;liberalization,\;1996,\;europa.eu.int/comm/internal\_market/studies/stud9.htm.$ 

As a main consequence, we might expect that more pan-European firms should appear in the years to come.

In general, EU members must accept the 80000 pages of laws and regulations which make up the *Acquis Communautaire*. In particular, they should mutually recognize bank licenses and pursue the objective of harmonization of their financial sectors. In the enlargement context, the EU calls that candidate countries should proceed to an orderly liberalization of capital movements, to be completed by the date of accession at the latest. There is no formal sequencing requested by the EU; suggestions are that, in a first stage, candidate country should liberalize long and medium term flows. Short term flows should be liberalized only in a second stage (Busch and Hanschel, 2000). Nonetheless, there is the possibility to apply for a temporary derogation regarding certain types of capital flows during the early stages of membership; such derogation apply to inward direct investment in "sensitive" sectors or acquisition of some types of real estate.

Rather surprisingly, one can observe no clear correspondence between the status of liberalization and the choice of monetary and exchange rate policy. Thus, Estonia and Bulgaria have super-fixed exchange rate backed by a currency board, without stringent capital controls, Latvia pegs its currency without exchange controls. Hungary applies a crawling peg while Poland decided to float the zloty, both countries maintaining some controls over short-term flows. The Czech Republic floats its currency without exchange controls, while Slovenia applies a managed float with full exchange controls (Ems, 2000). Romania runs a managed float, and decided to lift most capital controls by 2004.

# 5.2. Real appreciation and the control of capital inflows

Compared to other regions, transition economies from Central and Eastern Europe are in a relatively good position to attract capital from the EU, as their labor force is rather skilled and they are geographically close to the EU market. As these countries resolutely progress toward a market economy integrated with the EU and the Rest of the World, it is highly probable that more and more capital will set up there. The main flow of capital throughout the 1990s towards the transition economies took the form of FDI,

countries, Composite Paper and Emil Ems (2000).

<sup>&</sup>lt;sup>11</sup> See: European Commission, 1998, Reports on progress toward accession by each of the candidate

while other private capital flows (mainly trade and short-term lending) were negative. The region as a whole was a net recipient of funds throughout period.

As a basis for a rough calculation, Lipschitz et al. (2002) estimated that in 2000, the marginal product of capital in transition economies should be somewhere between 8.5 to 23 times the marginal product of Germany. Hence, in absence of adjustment costs, one should have observed a one-shot massive capital inflow to Eastern Europe (and almost no new investment in Western Europe), so that capital per worker in this region becomes equal to capital per worker in the EU countries. The theoretical amount of capital is ten to twenty times higher than the actual amount of capital that really went into these economies in the 1990s. According to these economists, so far something has blocked capital inflows, and that we may expect a significant inflow once that these blocking factors are removed. Transition economies that lead the process of integration with the EU have benefited from the largest share of portfolio and FDI investment. Their currency is general subject to appreciation pressures. In this context, it might be tempting to try to limit capital inflows, in order to "protect" the exporting sector. However, experience of other countries that tried to implement such measures is not very encouraging, since such controls did not appear to be very effective.

To the contrary, a selective set of market-based controls, limited in scope and strength, aiming at discriminating against short-term financing may be interesting. In particular, a Chile-type policy of one-year non-remunerated reserve requirement for any capital inflow, by imposing a non-linear cost on capital inflows may help favoring long-term investment and provide for a better external capital structure. We know that countries that rely more on short-term lending are more vulnerable to liquidity crises. This policy does not come without a cost, as investors may require a larger risk premium for long-term lending. So there is a clear trade-off between the amount of foreign capital need for investment projects and the risks associated with sudden reversal in investors' expectations and possible capital outflows.

# 5.3. Short-term risks from K.A. liberalization specific to transition economies

According to going regulation, new and future EU member countries should join the Euro-zone at some further moment. However, they will be first asked to comply with additional requirements. In particular, would-be euro candidates should maintain the parity of their currencies against the euro within a  $\pm 15\%$  fluctuation band for at least two years, in the framework of the New Exchange Rate Mechanism (ERM2). 12

As far as this obligation applies to transition economies, it clearly conflicts with the EU requirement of free movement of capital between the candidate country and the EU. The impossibility of maintaining the currency within a band if speculators bet against is the main lesson from the 1992-1993 EMS crisis, when the British pound and the Italian lira were forced out of the exchange rate mechanism. French experience during the "strong" franc period (1986-1999) is also significant: despite its sound financial position, the country could not convince investors that the devaluation risk is nil, thus had to bear a premium over interest rates as compared with German ones; in addition, when Germany had to increase interest rates to finance the reunification, the French were obliged to follow and suffer a sharp output contraction and rise in unemployment (in 1993). Transition economies are subject to the same risks: once admitted into the ERM2, their Central banks will strive to build up much needed credibility and defend the central parity with the euro. This may be a difficult task if the euro appreciates against the currencies of major trade partners. Also, remark that, on a strictly legal ground, the euro candidate will have the right to devalue their currency prior to accession (up to 15%): hence, if information about the priorities of the central bank is imperfect, the devaluation risk cannot be zero and may harm growth and employment (Besancenot et al. 2000). The devaluation premium would be lowered if transition economies were allowed to maintain some form of controls during the test period. Another possibility, advocated by several economists (Begg et al., 2003) would be unilateral euroization, but this policy has been so far strongly opposed by the European Commission and the ECB.

In particular, transition economies that, for one reason or another, decide to set up some kind of a fixed exchange rate regime, should dispose of efficient capital controls able to block a currency attack. It should be noticed that disposing of controls does not mean that these controls should ever be utilized. Indeed, if investors know that the

<sup>&</sup>lt;sup>12</sup> "Exchange rate policies in the accession process", speech by Eugenio D. Solans, delivered at the conference on "Alternative Exchange Rate Regimes in the Globalised World", June 2002, www.ecb.int/key/02/sp020611.htm

country disposes of a powerful arsenal to limit capital outflows and currency devaluation, they will never target this currency, thus controls would never be called upon. This is a virtual loop of self-fulfilling prophecies. Furthermore, is should be noticed that devising controls before a crisis is not the same thing as creating and implementing controls in the advent of the crisis. In this second scenario, not only the attack cannot be avoided (even if its consequences may be dumped by the controls), but, as Malaysia did, it had to a heavy cost in terms of credibility, as investors, critical of opportunistic behavior, restrain themselves for a while from investing there.

One should be aware of the risk that foreign capital will provide a reliable source of financing only for the best firms, thus accelerating the rhythm of market concentration. Creating and reinforcing market power is beneficial for these firms and for foreign investors, who see their profits increasing, but highly detrimental for consumer welfare. A country should not open its K.A. until it implements a powerful competition policy. In particular, one government should be very careful in the privatization process, by avoiding privatization of quasi-monopolistic firms unless there is an effective regulatory (anti-monopoly) framework put in place. Transferring such monopolies into the hands of foreign investors may further limit the state's capacity to monitor the abuses of market power.

Some of the transition countries that consider the issue of liberalizing the K.A. still have an inflation problem. For instance, Romania is undertaking a gradual process of reducing inflation. But falling inflation is often associated to over-consumption, as individuals and firms carry on consumption or investment plans on lower than actual real interest rates (as they expect larger than actual inflation to occur). Over-consumption and over-investment may translate into an excessive demand for capital inflows, which comes out with utility losses at the moment true inflation is unveiled. Restraining the capital inflows may also help tempering excessive spending in countries that reduce inflation.

Finally, it may reasonably be assumed that foreign capital is more mobile than domestic capital. This is a matter of information: big foreign banks are better informed about worldwide opportunities than domestic banks. Thus, in the advent of a crisis, foreign capital would flee much faster to other destinations than domestic capital. According to Lamfalussy (2000, p.132), difficulties to control capital movements

"increase exponentially if foreign ownership becomes dominant in financial services and, in particular, banks". Hence, an indirect way to throw some sand into the wheels of global capital markets is to favor domestic financing of the banking sector. This was the way chosen by Hungary, whose government decided to sell its largest bank (NSB, some 29% of the market) through the stock market and not through a call for bids procedure along the lines of their main privatization strategy.

#### 6. CONCLUSION

In the last decade, the developing countries followed a trend initiated by the Western countries and decided to open their capital accounts. On the one hand, this move opened new opportunities for foreign savers to invest in these economies. Yet empirical evidence on the relationship between capital openness and growth has been, so far, inconclusive. On the other hand, increased capital mobility brought about new forms of instability that challenged both policymakers and economists. A combination of large dollar denominated-debt, not only public but also private, of short-term financing, weak financial systems, inappropriate exchange rate regimes and policies, were present in most recent crises. All these structural changes should be analyzed within the framework of modern economic theory, wherein imperfect information and bounded rationality play a major role. The challenge is to provide for policy recommendations that limit financial instability in this new context.

In the aftermath of the Asian crisis, a wide consensus developed among economists: an emerging country should not liberalize the capital account if several basic conditions were not fulfilled. This is a major difference with the wisdom of liberalizing trade in goods and services, which are welfare enhancing in the long-run; open trade would lead to better utilization of inputs, foster competition in the internal market and curbs monopoly power. Liberalizing capital account may lead to opposite effect, increasing market concentration and market power of some firms. It also may put the seeds for increased economic instability, where periods of enthusiasm and rapid development are followed by major crises and stagnation.

As basic rules, a developing country should not proceed to the comprehensive opening of the K.A. before it:

- manages to successfully fight inflation, stabilize exchange rates and builds up international economic credibility;
- keeps the public deficit and public debt below reasonable limits;
- maintains a reasonable degree of foreign indebtedness (public and private); contains foreign-denominated liabilities;
- develops the financial system and implements efficient prudential rules;
- sets up a powerful competition policy;
- implements an efficient statistical and information system;
- fights corruption, crime, illegal businesses and money laundering.

The design of a proper sequencing plan for K.A. liberalization should consider in the first place the type of exchange rate regime at work. If the country opts for a flexible exchange rate regime, its fiscal policy will become ineffective. In addition, those countries which issued dollar-denominated debt will face additional risks associated to the balance sheet effect. A country that opts for a fixed exchange rate regime becomes automatically highly vulnerable to currency attacks in the context of full K.A. liberalization. Whatever the exchange rate regime, crisis of trust are highly probable under unrestricted movements of capital. While they may be self-fulfilling, such crises are more probable in countries with poor macroeconomic fundamentals. This explains why capital account liberalization should wait until these fundamentals are set in good order.

Transition economies from Central and Eastern Europe have already faced significant net capital inflows. They may expect a significant increase of these inflows, in pace with internal development and progress with EU integration. The EU imposes on all candidates to open their capital account prior to integration. For the most advanced transition countries like Hungary, Poland or the Czech Republic, this is a matter of two or three years. Most of them have made important progress in the fields of macroeconomic stabilization, structural reform and in the particular domain of creating a sound financial system. For them, the risks associated to opening the K.A. seem reduced. Other transition

economies, like Romania and Bulgaria, have yet to overcome significant difficulties. In this context, opening the K.A. rapidly and in a non-discriminating way may bring about major disruptions.

Arguably, the least advanced transition economies, might consider the case for some selective capital controls. Of particular interest might be a Chile-type non remunerated short-term reserve requirement for capital inflows, such as to favor long-term investment. This rule should also be able to prevent a run on their currency, in particular if their central bank targets the exchange rate. Therefore, a set of controls on sharp and massive capital outflows may be devised, even if they may never be called upon. This is essentially a signaling issue. Finally, one may wish to put some limits on the degree of penetration of foreign capital into the banking sector, such as to reduce the mobility of capital outflows in the advent of a crisis. Anyway, in the process of privatization, massive inflows of capital should not be allowed to target would-be monopolies. Competition policy should be strong enough to prevent this outcome, prior to liberalizing transactions of capital.

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