**CAPITAL ACCOUNT REGULATIONS AND
MACROECONOMIC POLICY:
TWO LATIN AMERICAN EXPERIENCES**

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CAPITAL ACCOUNT REGULATIONS AND MACROECONOMIC POLICY: TWO LATIN AMERICAN EXPERIENCES

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Resumen

Las regulaciones que establecen límites a la integración financiera internacional han sido el centro de un reciente debate de política económica. Todo país en vías de desarrollo puede beneficiarse del desarrollo financiero, pero mayores grados de integración financiera internacional implica asumir mayores riesgos de inestabilidad macroeconómica. El enfoque que se ha privilegiado en Chile y Colombia consiste en una integración financiera limitada y gradual que busca incrementar la efectividad de las políticas monetaria y cambiaria. La reducción en el premio de riesgo demandado por inversionistas ha creado una presión a la caída sobre las tasas de interés reales domésticas, sin embargo tasas substancialmente más bajas podrían incrementar el gasto público, el nivel de precios y el déficit en cuenta corriente. Entre las políticas implementadas para ello, están los incrementos en la flexibilidad del tipo de cambio y los impuestos al financiamiento del exterior. Ambos países han tenido un exitoso desempeño macroeconómico, y deben su éxito, en parte, a las regulaciones de la cuenta de capitales. La efectividad de las regulaciones es demostrada por el hecho de que se ha evitado una apreciación violenta de la moneda que sea seguida por una tendencia a la depreciación y en que el déficit de cuenta corriente se ha mantenido a niveles sustentables. En otras palabras, las regulaciones sobre la cuenta de capitales han evitado la sobreapreciación del tipo de cambio real que hubiera ocurrido con grandes cantidades de entradas de capital de corto plazo. El uso de restricciones más fuertes, como sería el caso de restricciones cuantitativas, no solo crearían significativos costos microeconómicos y un desarrollo económico y financiero lento sino que, además, muy probablemente resultarían inefectivas.

Abstract

The regulations that limit international financial integration have been at the center of a recent policy debate. Any developing economy can benefit from financial development, but international financial integration implies the risk of macroeconomic instability. The approach that has been favored in Chile and Colombia is one of gradual and limited financial integration, attempting to increase the effectiveness of monetary and exchange rate policies. The reduction in the risk premium demanded by investors has created downward pressure on domestic real interest rates, however a lower interest rate would increase domestic expenditure, the price level and the current account deficit. Among the policies put into effect to deal with this problem are increasing exchange rate flexibility and taxing external financing. Both countries have registered a successful macroeconomic performance, with the success partly owing to effective capital account regulation. The effectiveness of the regulations is shown in that a once and for all currency appreciation followed by a depreciating trend has been avoided, and that the current account deficit has been kept at sustainable levels. In other words, capital account regulations have avoided the overshooting (over appreciation) of the real exchange rate that would have occurred with large amounts of short term capital inflows. Using stronger restrictions on capital flows, quantitative limits for example, would not only create very significant microeconomic costs and slow economic and financial developments, but also most likely would be ineffective.

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I. INTRODUCTION

A new policy debate has arisen in Latin American countries after international investors' recent re-awakening to opportunities in emerging markets. Two polar positions have been defined in this policy debate. On the one hand, the "integrationists" defend financial integration on the grounds that free market operation will always produce the best result for the developing economy. On the other, the "isolationists" consider financial integration dangerous for macroeconomic stability, and prefer a developing world without market-determined international capital movements. The regulations that limit international financial integration have been at the center of this policy debate, as they define the degree of financial integration and the distance between reality and these two polar positions.

The debate is in itself surprising. An international macro-economist from only five or ten years ago would be extremely puzzled to see that the external financing problems that some Latin American countries are struggling with today relate no longer to the lack, but rather to the excess, of external financing. Colombia and Chile were denied access to external financial markets operating on a voluntary basis during the second half of the 1980s. Many analysts back then considered that market-based external financing was not to be resumed anytime soon. But everything changes, and so did the lenders' perceptions of the risk involved in holding emerging market assets. In the mid-1990s, market-based external financing, including medium- and long-term debt, direct investment, and portfolio investment, have been abundant for both countries.

In our opinion the polar positions are both to be rejected. Any developing economy has the need for international financial integration, not only because of the external financing needs of a rapidly growing economy, but also because of the long term advantages that can be derived from financial development, including risk diversification and the efficient provision of financial services. Despite these advantages, the immediate and complete opening up of the capital account implies an increased volatility in variables such as the real exchange rate, domestic interest rates and stock prices. This increased volatility may induce an inadequate resource allocation process and discourage investment and international trade. Then the final effect is a worsening of welfare conditions coming from possible impacts on macro stability. In addition to effects caused by higher volatility, several experiences of the negative effects of excessive spending and external indebtedness prompted by private capital flows have already been recorded. Thus, the discussion that has been focused in terms of the convenience or inconvenience of opening the capital account should, we argue, instead be focused on the particular strategy for international financial integration.

The approach that has been favored in both Chile and Colombia is one of gradual and limited financial integration. Foreign exchange market regulations and capital account intervention (including regulations) have been used to limit the secondary effects of international financial integration and to deter interest-rate arbitrage, destabilizing speculation, bubbles and overshooting behavior of asset prices (including the real exchange rate). The strategies differ in the instruments used and in the emphasis of policies and objectives, but both place particular emphasis on neutralizing the disturbances to the current account and domestic prices caused by net capital inflows. The regulations are not exclusively based on macroeconomic policy considerations. In addition, they also relate to the potential problems derived from public insurance of the liabilities of financial institutions, and the need for monitoring and limiting their risk taking. Both deposit insurance and exchange rate guarantees may encourage over-intermediation of international funds by banks and an increase in systemic risk, expanding therefore the vulnerability of the banking system.¹

¹ See Le Fort 1994 for a discussion on this subject.

This paper describes and analyzes the policies followed in Chile and Colombia regarding their external capital accounts during the first half of the 90s. The policies are analyzed and assessed in the context of the macroeconomic and financial results obtained in the period. The first section of the paper deals with the main analytical issues relating to international financial integration, its costs and benefits, its implications for monetary and exchange rate policy, and the main limitations to financial integration. The second section of the paper describes the experience of regulated financial integration in Chile during the first half of the 90s, including a brief historical review, a review of the foreign exchange market regulations and the regulations on capital movements, and the results in the capital account and at the macroeconomic level. The third section of the paper is devoted to an analysis of the Colombian case, including a review of the main regulations and intervention schemes in the foreign exchange markets and the regulations for different types of capital movements, with special emphasis on their reserve requirement system, and the results obtained. The last section presents our concluding remarks.

II. MAIN ISSUES IN INTERNATIONAL FINANCIAL INTEGRATION

This section analyzes some important issues relating to the integration of the so-called emerging markets with the world's financial markets without making reference to specific countries. To some extent, this integration is the result of the change of views of investors regarding the risks represented by emerging markets, and to some extent it is the result of an explicit financial integration strategy pursued by developing countries during the first half of the 90s. The issues discussed include the benefits and costs of financial integration, the implications of integration for monetary and exchange rate policy, and the policy instruments used to limit international financial integration.

The limits imposed upon the international integration of financial markets should not be seen as, themselves, a macroeconomic policy objective, but rather as instrumental to more effective monetary and exchange rate policies. Given that these instruments have some shortcomings, they should be used only to a certain extent; the need for their use arises mainly as a result of concern about the effects of abundant external financing on the external current account and debt positions. This concern in general relates to the fact that large current account deficits and increasing external indebtedness erode the country's creditworthiness, rendering domestic macroeconomic stability vulnerable to external financial turbulence.

A. Benefits and Costs of Financial Integration

Benefits

An open capital account has important benefits for an economy that is developing an outward-oriented development strategy, characterized by the growth of the sectors in which the country has comparative advantages. In principle, and perhaps oversimplifying, it can be said that the opening up of the capital account can be associated with two types of benefits:

(i) Development of the financial services sector: A developing economy may have comparative advantage in the production of financial services; if that is the case, an export sector would develop after the elimination of restrictions to international financial integration. However, it is also possible that foreign competition may take control of this industry, and the country may become a net importer of financial services. In any case, international integration would imply lower costs and better quality for users of financial services. Financial integration then allows for a reduced cost of capital and more efficiently provided financial services to help in the intertemporal stabilization of consumption. Certain comparative advantages for financial development partly stem from the experiences derived from an earlier liberalization attempt, that allow for the development of regulatory framework that has operated

successfully, and the possibility of benefiting from the existence of scale economies. It must be stressed that in developing economies, capital account openness implies larger net capital inflows on a sustained basis, due to the higher productivity of capital because of labor abundance and the availability of natural resources. This capital inflows allows for a higher growth and implies a reduction in the cost of capital.

(ii) Integration allows for a greater diversification of the asset portfolio of domestic economic agents, by making the composition of domestic portfolios independent of the composition of domestic production. In a financially closed economy, the composition of domestic asset portfolios tends to be closely related to that of domestic output. After all, domestic financial assets represents rights to domestic income stream, basically determined by production. In a financially integrated economy, foreign securities that derive returns from external productive activities which are independent from those of domestic activities allow for greater domestic income stability through greater diversification. Income of domestic residents becomes more stable to the extent that their portfolios include assets that derive their returns from activities more or less independent from domestic exports. Such diversification may be used to compensate for the (often great) volatility of national income that affects open economies due to the variability of individual export prices.

iii) Finally, capital flows from abroad enable domestic residents to isolate their consumption decisions from domestic economic fluctuations. This enables to reach better welfare conditions through a stabilization of the consumption path.

Costs

Financial openness also, however, poses several costs, some of which are only valid during the transition to a fully integrated economy. Among these costs can be distinguished:

(i) Transitional costs: One way of looking at the process of financial integration is that it constitutes a way to overcome a stock imbalance. Financial liberalization allows stock adjustments, directing capital towards regions where the expected profitability of capital is greatest, or to where opportunities exist for risk diversification at a reasonable cost in terms of profitability. It is clear that in countries like Chile and Colombia, the returns to capital are typically higher than in the developed world, a condition that stimulates foreigners to invest and finance investments in them. Full integration implies a jump in asset prices within a relatively short period of time, and a massive inflow of foreign capital that lasts until the stock adjustment is completed and risk-adjusted domestic rates of return converge to the levels of foreign rates. If this process takes place in a short period of time, then a source of macroeconomic imbalances can be developed in the form of rapid growth in investment, wealth and consumption, real currency appreciation, inflationary pressures and a widening current account deficit. It can create destabilizing wealth and expenditure effects, resulting in confusing signals to domestic consumers with detrimental effects on domestic savings, exchange rate stability and the stability of the growth process.²

(ii) Policy costs: In a financially open economy monetary policy loses its ability to affect domestic macroeconomic conditions without modifying the external balance. In general, an increase in the real interest rate directed at controlling inflationary pressures will also result in an exchange rate appreciation, both of the nominal and real rates. The appreciation helps in reducing inflation, but may generate a larger current account deficit. In fact, under some conditions, in a financially open economy monetary authorities may be forced to choose between the inflationary target or the external balance objective. It is true that a tighter fiscal policy may be used in place of monetary restraint under these circumstances; however, real world fiscal policies lack the flexibility needed for short- or medium-term stabilization, particularly when the fiscal accounts are already in balance or in surplus.

(iii) Real costs: Financial integration leaves the economy exposed to the turbulence of international capital markets, adding a risk factor and volatility to the exchange market which may affect

² See Budnevich, 1994 for a model of this kind of transition.

macroeconomic balances. International capital markets can move very rapidly and almost without warning signals, from an optimistic lending phase in which funds are abundant and relatively cheap, to a pessimistic phase in which funds are not available and a sharp adjustment is forced. The recent case of Mexico and that of most Latin American countries in the 1980s come to mind in this respect.

(iv) Systemic risk costs: Economic agents tend to perceive the existence of publicly provided insurance to liabilities of financial institutions and institutional investors, whether or not it has been explicitly offered. This implicit or explicit insurance requires regulations that limit risk taking by those institutions. Full and unrestricted international financial integration allows portfolio selection from a wider set of assets, making it more difficult to control and monitor their risk-taking.

B. Financial Integration, and Monetary and Exchange Rate Policy

The perceptions of foreign investors of the risk and returns from investment in the Chilean and Colombian economies have changed significantly following institutional changes and the success of macroeconomic policy. This change has resulted in a very significant reduction in the risk premium demanded by investors in these countries, which in turn has resulted in sizable capital inflows that have modified the degree of integration of the domestic financial markets into the corresponding international markets. It can be said that in economies like Chile and Colombia, the risk-adjusted marginal efficiency of capital has increased to levels above those prevailing in the developed world. As a result, capital tends to move into these economies, reducing the domestic cost of capital and increasing the prices of domestic assets.

Financial integration implies that the integrating economy is fully open to financial arbitrage. Consequently domestic real interest rates are forced to reflect the external real interest rate and a country risk premium. Any deviation from this requirement of risk-adjusted international interest rate equalization implies changes in the opposite direction in the real exchange rate.³ However, the domestic interest rates required to generate domestic macroeconomic equilibrium may be higher than the rates forced by international arbitrage. In these conditions, when domestic interest rates are increased, in addition to the standard closed economy response in terms of a lower expansion of domestic expenditure, in the financially open economy, a real appreciation of the domestic currency takes place. The real exchange rate adjustment shifts demand towards the rest of the world, alleviating pressure on domestic output but also increasing the current account deficit.

The size and duration of the arbitrage effect of the domestic interest rate change on the real exchange rate depend on, among other factors, the horizon of planning of arbitrageurs and on the expected duration of the new interest rate differential. The shorter their horizon, the lower the impact on the real exchange rate. It also depends upon the effect on the country risk premium of the exchange rate appreciation. If the increase in the country risk premium brought about by the real appreciation of the currency is significant, then the impact on the exchange rate is minimized.

International arbitrage may imply that the real exchange rate becomes and remains, for significant periods of time, out of line with respect to the authorities' external equilibrium objective. Consequently, the current account deficit may exceed, on a medium-term basis, what is sustainable over a longer term, rendering the economy vulnerable to a forced external adjustment.⁴ This adjustment is

³ Throughout this paper we use the Latin American definition of the real exchange rate (RER); that is, the RER increases when the domestic currency depreciates in real terms.

⁴ It is also possible to explain the dynamics of capital inflows, with booms and busts, in terms of bandwagon effects, yet this model seems not appropriate for the Chilean reality of the 1990s. There is no evidence of a bubble in asset prices. Assets prices and the real exchange rate appear to be in line with fundamentals.

triggered if external creditors no longer consider it safe to continue lending to an addictive borrower. The market's automatic correction mechanism is the effect of the larger current account deficit on the country risk premium and on expectations of currency depreciation. If larger deficits make the market participants uneasy, then this by itself should stop or even reverse the capital inflows and thus correct the real exchange rate. However, it seems that market participants are not always very sensitive to this risk, and that they typically only react when it is too late, after the external conditions have worsened so much that a very large and painful domestic expenditure adjustment is needed.⁵

A first policy response to the real appreciation of the currency is to try to compensate for the effect of capital inflows on the exchange rate. This has been done through the intervention of the monetary authority in the foreign exchange market. However the purchase of foreign exchange by the Central Bank has thereby become the main source of domestic liquidity creation. To limit the effects of exchange market intervention on monetary conditions, the Central Banks have used different forms of sterilization, including the sale of bills or forcing the temporary holding of foreign currency certificates. However, this sterilization is costly for the Central Bank and losses arise from the international interest rate differential and the real currency appreciation: the Central Bank acquires assets that yield the international interest rate and that depreciate in real terms, while having to issue liabilities that pay the higher domestic interest rate and keep their real value. As a transitory mechanism, sterilized intervention works; however, on a longer-term basis, its effectiveness is impaired by the resulting financial losses.

A second alternative is to reduce the domestic interest rate. However, this reduction would create an increase in domestic expenditure that would put pressure on the price level, force a real currency appreciation and increase the current account deficit. An obvious solution is to reduce the interest rate and at the same time compensate for the effect on expenditure via a tighter fiscal policy. An austere fiscal policy directed at controlling the expansion of aggregate expenditure, limiting both public and private expenditure expansion, is a must for the final success of any stabilization effort. However, there are political limits to what fiscal policy can deliver, and thus restrictions or limitations to international financial integration may be required to preserve macroeconomic stability.

It is generally suggested that another way to compensate for capital inflows is by opening the economy to capital outflows, allowing domestic residents, firms, and financial institutions to hold assets abroad. Although a valid tool to favor the diversification of domestic portfolios, this is not effective as a tool to reduce net capital inflows. As domestic residents increase their holdings of foreign assets, they reduce the demand for domestic assets that they would otherwise be exercising. A lower demand for domestic assets, "ceteris paribus", is reflected in lower asset prices and higher asset returns, which act as additional attraction to foreign capital inflows.⁶

Furthermore, facilitating capital outflows reduces the risks faced by foreign investors by making easier the exit. (See Labán and Larrain, 1993.)

Limitations on international financial integration give additional degrees of freedom to monetary and exchange rate policies, allowing adjustments in domestic interest rates that cannot be arbitrated to the exchange rate. In practice, these restrictions give room for the use of monetary policy to gradually reduce domestic inflation, while keeping the current account deficit at reasonable levels.

⁵ Experiences of the lack of immediate response of market participants in the face of large external indebtedness include the Mexican crisis of the 1990s and the Chilean financial crisis of the 1980s. In both cases, financing was abundant up to a point at which a large adjustment was needed. (See Arellano, 1983; Budnevich and Cifuentes, 1993.)

⁶ Institutional investors and banks are subject to regulations and supervision of their investments abroad because of the systemic risk and public insurance problem. These restrictions are not related to the regulation of capital flows to preserve macroeconomic stability. It is important to mention that there are regulatory restrictions that limit bank exposures to foreign currency.

The problem created by capital inflows for the effectiveness of monetary policy is better dealt with by a flexible exchange rate. In this connection, exchange rate stability is costly because it facilitates the international arbitrage of interest rates. If the Central Bank tries to actively provide exchange rate stability, it faces additional costs in terms of higher reserve purchases, and at the end is forced to accept a more appreciated currency. In this sense, avoiding rules for official intervention, increasing the width of the exchange rate band, and using a basket of currencies rather than a single currency to peg the reference rate are measures that increase the effectiveness of monetary policy, by helping to insulate against excessive capital inflows. The ex ante volatility of the exchange rate also tends to deter short-run capital inflows as it removes exchange rate "guarantees" and thus helps to support a higher real exchange rate.⁷

C. Limitations to Financial Integration

In order to reduce the need for sterilized intervention, several limitations to international financial integration have been used. These restrictions, by limiting the possibilities of financial arbitrage, have given some room for the operation of monetary policy as it seeks to achieve domestic macro balance. In most cases the restrictions to capital transactions introduce registration procedures for international capital transactions. These procedures can be important sources of information for measuring the external accounts, and also for the tax authorities; but they also involve obvious administrative costs.

The first type of restriction is the use of dual foreign exchange markets. One market, the formal, is used for current account transactions and authorized capital flows, and the other, the informal, is used for other financial flows. In this scheme, financial arbitrage takes place in the informal market, permitting this secondary exchange rate to deviate from the authorities' target rate. Since the formal market is not subject to arbitrage, the current account is isolated from exchange rate volatility. During the days of scarce foreign financing, the informal rate reflected a more depreciated domestic currency than the rate in the formal market. The opposite should be the case under abundant external flows.

The dual exchange rate scheme has one serious shortcoming -- the existence of leaks that allow for arbitraging the differential between the exchange rates in the two markets. These leaks not only render the exchange restrictions ineffective, creating pressure towards the equalization of the exchange rates, but also imply significant costs. The leaks include the over-and under-invoicing of current account flows, and they tend to increase in importance as the absolute value of the premium becomes larger. The leaks, in general, result in quasi-fiscal losses and transfer of resources from the Central Bank to those agents that discover ways to buy foreign exchange in one market and sell it in the other at a premium. Additional costs of the leaks are the regulations and administrative costs incurred in the effort of preventing them.

A second type of restriction is the imposition of reserve requirements or other more direct measures that increase the marginal cost of external financing. The reserve requirements increase the cost of foreign financing since they demand the use of additional resources to finance the required deposit in the Central Bank. The reserve requirements may relate to all forms of foreign financial flows; however, in practice, they have not generally affected direct investment and other forms of equity financing, suppliers' credits on imports, or advanced export returns.⁸

⁷ This point is developed in G. Sanhueza, 1995.

⁸ An exception to this rule is the reserve requirement imposed on secondary ADR inflows in Chile.