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**The New Face of Latin America: Financial Flows,  
Markets, and Institutions in the 1990s**

by

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The gains and difficulties Latin American countries face from financial market development and liberalisation have received much attention in current economic literature. Nevertheless, several significant issues have received little or no attention, even though the success of these efforts depends upon them. The purpose of this paper is to explore the benefits from open and developed - I do not assume that they are necessarily synonymous - financial and capital markets in Latin America and possible important obstacles which will be faced in the remainder of the 1990s.

Despite the importance of financial liberalisation, trade liberalisation is the central policy of any liberalisation effort. Moreover, the usual arguments favoring financial liberalisation stem only from the benefits of this policy in and of itself.<sup>1</sup> The usual conclusion is that trade liberalisation leads capital account liberalisation. It is not fully appreciated that financial liberalisation and privatisation are not only complements, but necessary complements to trade liberalisation. One could (and should) write a number of volumes developing au rigor this proposition. Since this is beyond the scope of the present study, however, I will leave the motivation for the proposition at an intuitive level; in a liberalised environment, domestic tradable goods producers will be left at a comparative disadvantage if non-tradable inputs to production are not supplied efficiently. The first part of this paper presents some evidence of the gains in the

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<sup>1</sup>Sebastian Edwards, "On the Timing and Speed of Economic Liberalization in Developing Countries," in Michael Connolly and Claudio Gonzales-Vega, eds. (1987): Economic Reform and Stabilization in Latin America, (New York, 1987); Sebastian Edwards and Sweder Van Wijnbergen, "The Welfare Effects of Trade and Capital Market Liberalization," International Economic Review, Vol. 27, No. 1 (1986); and the country analyses contained in Demetris Papageorgiou, Michael Michaely, and Armeane M. Choksi, Liberalizing Foreign Trade, Vol. 1 and 4 (Cambridge, 1991).

efficiency of financial intermediation that a more liberal financial environment brings. The link between privatisation and liberalisation will be taken up later in the paper.

The recent moves toward economic opening comes not only at the end of a long period of failed real sector adjustment to the debt crisis, but even previous moves toward opening were failures. To understand why, however, we should examine not the real sector, but the financial sector. The debt crisis created a hinderance to liberalisation. In fact, the first reaction to the disappearance of external credit in the 1980s was to increase trade protection. It also put severe stress on domestic financial markets because of the increase in public sector borrowing requirements. I have argued elsewhere that this internal and external transfer problem presented a severe obstacle to financial and capital market opening.<sup>2</sup> The reduction of this burden through the long process through the Brady Plan restructurings has improved the prospects for further liberalisation of both trade and financial markets. One could argue that the debt burden itself was not important and that liberalisation has occurred because of the promise of debt relief. Either way, however, the Brady Plan has been critical to the opening taking place in Latin America.<sup>3</sup>

Will the current capital flow to Latin America end in a crisis like that of the

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<sup>2</sup>John H. Welch, "Debt Servicing and Its Impact on Financial Markets in Latin America," in Werner Baer and Donald V. Coes, eds., United States Policies and the Latin American Economies, (New York, 1990).

<sup>3</sup>This does not mean that internal adjustment such as fiscal reform and monetary policy to reduce inflation. These are central to Latin America's recovery. For more on this chronology, see Federal Reserve Bank of Dallas, "Economic Liberalization in the Americas," Federal Reserve Bank of Dallas 1991 Annual Report (Dallas, 1992).

1970s? Hopefully not. So far, Latin America's participation in international capital markets in the 1990s does not resemble that of the 1970s. The pattern of the new capital flows to Latin America no longer takes the exclusive form of bank loans. Securities, both stocks and bonds, figure importantly as instruments in the intermediation of this capital flow. Domestic and international investors are now interested in Latin American equities markets. The transformation which needs to take place in Latin America for this type of model to efficiently propel the Latin American economies into sustained recovery is nothing short of revolutionary. The nature of this transformation will be the main subject of this paper starting with a description of the current state of financial markets in Latin America.

#### **Financial Markets in Latin America in the 1980s**

Why did earlier liberalisation fail? Much has been made of the financial trauma which followed trade and financial liberalisations in the Southern Cone countries of Argentina, Chile, and Uruguay.<sup>4</sup> One explanation for the failures involved the lack of consistent fiscal adjustment, especially in the case of Argentina (Rodriguez 1982). If the government runs a fiscal deficit, it will have to finance it by printing money or by issuing bonds. Both tend to raise domestic interest rates which lead to unstable capital flows. If money growth finances the deficit, the consequent increase in inflation will put pressure

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<sup>4</sup>See Sebastian Edwards and Alejandra Cox-Edwards, Monetarism and Liberalization: The Chilean Experiment, (New York, 1987) and Vittorio Corbo, Jaime de Melo, and James Tybout, "What Went Wrong in the Southern Cone?" Economic Development and Cultural Change, Vol. 34, No. 3 (1985).

on the exchange rate. For these reasons, fiscal balance is seen as a precondition for financial liberalisation. Lack of fiscal reform, however, as an explanation for the liberalisation failures in the Southern Cone is clearly insufficient.<sup>5</sup> The liberalisation programme in Chile, for example, did not avoid a financial collapse in spite of the fact the central government budget had moved into surplus at the beginning of it liberalisation programme but a financial collapse still ensued.

Others focus on the lack of credibility the exchange rate regime. The exchange rate was used to bring down inflation by steadily decreasing the rate of crawl to zero and establishing a fixed exchange rate. The fixed exchange rate would then act as a nominal anchor for the price level. Lack of credibility in the exchange rate regime led to a consumption boom - so the story goes - , large capital inflows, a large real appreciation, and a large trade deficit. Because people believe that the government will fix the exchange rate only temporarily, they consume more goods - especially foreign goods - before the devaluation. Expectations of an impending devaluation then causes the capital inflow to reverse and a run on the central bank ensues. People protect themselves from the devaluation by moving en masse into dollar denominated assets. This explanation places heavy weight on the credibility of government macroeconomic policy and on strong intertemporal substitution in consumption - that people are sensitive to changes in the price of consuming now rather than later.<sup>6</sup> The latter is crucial to

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<sup>5</sup>Roque B. Fernandez, "The Expectations Management Approach to Stabilization in Argentina During 1976-1982," World Development, Vol. 13, No. 8, (August 1985).

<sup>6</sup>See Maurice Obstfeld "The Capital Inflows Problem Revisited: A Stylized Model of Southern Cone Disinflation," Review of Economic Studies, Vol. 52 (1985); Guillermo A.

generating a consumption-import boom and real appreciation.

The empirical evidence on the sensitivity of present consumption to the opportunity costs of consuming tomorrow is mixed. Although Giovannini found weak or no intertemporal substitution in consumption in Latin America, recent evidence in fact does.<sup>7</sup> Arrau and van Wijnbergen and Arrau present evidence of significant substitution in Chile and Mexico when changes in the real value of individual's assets are taken into account.<sup>8</sup> The overall evidence, however, does not clearly support lack of credibility of macroeconomic policy being the primal cause of the collapse of these programmes. But credibility, or lack thereof, is important to the success or failure in these and other stabilisation programmes in Latin America.

The neo-structuralist critique emphasised the importance of working capital costs due to high interest rates on short term loans on the supply side and the fact that black or "curb" markets could serve as more efficient allocators of credit than the formal

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Calvo and Carlos A. Végh, "Credibility and the Dynamics of Stabilization Policy: A Basic Framework," mimeo, International Monetary Fund, September 1986; and Darryl McLeod and John H. Welch, "Fixed Dollar Exchange Rates in Latin America: Costs and Benefits," mimeo, Federal Reserve Bank of Dallas, August 1992.

<sup>7</sup>Alberto Giovannini, "Saving and the Real Interest Rate in LDCs," Journal of Development Economics, Vol. 18 (1985).

<sup>8</sup>Patricio Arrau, "Intertemporal Substitution in a Monetary Framework: Evidence from Chile and Mexico," Working Paper 549, the World Bank, (December 1990) and Patricio Arrau and Sweder van Wijnbergen, "Intertemporal Substitution, Risk Aversion, and Private Savings in Mexico," Working Paper 682, the World Bank, (May 1991).

banking system.<sup>9</sup> Further, the existence of (required) reserves in the formal banking sector, under a programme of interest rate liberalisation, could cause a reduction in credit as individuals substituted curb market loans for bank deposits in their balance sheets. Banks would not be able to lend all of their new resources in loans because they had to keep a certain proportion in reserve at the central bank. Credit supply would fall and the rise in interest rates would raise the cost of working capital. Output would decline and to the extent that this interest cost increase could be passed on into higher prices, inflation would rise. Interest rate liberalisation could lead to higher inflation and lower output, the opposite of what McKinnon and Shaw had originally hypothesised.<sup>10</sup>

The conclusions of the neo-structuralists have been called into question. For example, Buffie shows that if financial markets are sufficiently open - if domestic residents can hold foreign bonds - the contractionary effects of interest rate liberalisation disappear because a shift from foreign bonds to deposits may increase credit supply.<sup>11</sup> More recently, Kapur has shown that the neo-structuralist models do not treat the role of

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<sup>9</sup>See Sweder van Wijnbergen, "Interest Rate Management in LDCs," Journal of Development Economics, Vol. 12 (1983). Also see James A. Hanson and Roberto de Rezende Rocha, "High Interest Rates, Spreads, and the Costs of Intermediation," World Bank Industry and Finance Paper No. 18 (1986), James A. Hanson and Craig R. Neal, "Interest Rate Policies in Selected Developing Countries," World Bank Industry and Finance Paper No. 14 (1986), and Sérgio Pereira Leite and V. Sundavarajan, "Issues in Interest Rate Management and Liberalization," IMF Staff Papers, Vol. 37, No. 4, (December 1990).

<sup>10</sup>Ronald I. McKinnon, Money and Capital in Economic Development (Washington D.C., 1973) and Edward S. Shaw, (1973): Financial Deepening in Economic Development, (New York, 1973).

<sup>11</sup>Edward F. Buffie, "Financial Repression, the New Structuralists, and Stabilization Policy in Semi-Industrialized Economies," Journal of Development Economics, Vol. 14 (1984).



bank reserves and the role of consumption loans correctly.<sup>12</sup> He shows that productive credit may increase because households accumulate bank deposits and decrease their demand for consumption loans as a result of higher formal sector interest rates. Kapur also establishes that financial liberalisation unambiguously increases welfare.

Overall, the evidence to date tends to favor the credibility arguments outlined above. Other structural reasons may explain the collapse, however. Cho, extending the work of Stiglitz and Weiss, feels that the problems of adverse selection and moral hazard in credit markets may have been a large contributor, especially when equities markets are small or do not exist.<sup>13</sup> When credit markets display adverse selection, increases in interest rates ration out safe projects from getting credit leaving only the riskiest projects. A rise in interest rates increases the riskiness of the loan portfolio of the consolidated financial system. Similarly, moral hazard problems increase the riskiness of the financial system. Moral hazard arises because deposit insurance or the fact that the government will intervene in financial institutions to save the value of deposits. Such situations lead bank managers to take on more risk.

The combination of these two effects can be devastating to a financial system undergoing liberalisation. According to Cho, the rise in interest rates leads to an

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<sup>12</sup>Basant K. Kapur, "Formal and Informal Financial Markets, and the Neo-Structuralist Critique of the Financial Liberalization Strategy in Less Developed Countries," Journal of Development Economics, Vol. 38 (1992).

<sup>13</sup>Yoon Je Cho, "Inefficiencies from Financial Liberalization in the Absence of Well-Functioning Equity Markets," Journal of Money, Credit, and Banking, Vol. 18, No. 2, (May 1986) and Joseph E. Stiglitz and Andrew Weiss (1981): "Credit Rationing in Markets with Imperfect Information," American Economic Review, Vol. 71, (June 1981).

increase in the riskiness of the loan profile of the banking system because safe borrowers are rationed out of the market. The financial system becomes very vulnerable to any type of shock, e.g. adverse terms of trade changes. Ironically, the liberalisation does not completely eliminate credit rationing because at sufficiently high interest rates, the additional risk causes banks' expected profits to be lower. This is compounded by the fact that firms have no alternative place to find capital resources for investment. Hence, Cho urges that stock markets be developed in along with the financial system.

Policymakers in Latin America seem to heeding this advise as stock markets have become a major focus. The problem with Cho's policy conclusions, however, is that stock markets are rarely used as primary sources of capital. Hence, stock markets are useful mainly as a market for corporate control and for conditioning the liability structure of corporations. In prior work, I looked at the structure of debt and equity financing in Latin America and its relevance to financial development.<sup>14</sup> I also described a scenario similar to Cho's but in one that explains why the stock market is underdeveloped; firms resist issuing equity for reasons discussed later. Financial liberalisation leads to an expansion financed mainly by debt, increasing debt equity ratios to dangerous levels. Any shocks leave the financial system in severe difficulties. I extend this discussion in order to examine the viability of the new revitalisation of Latin American financial systems which puts increasing emphasis on equities markets.

Before doing so, however, I will compare the state of financial markets in countries which pursued a more liberal financial strategy to those that have not.

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<sup>14</sup>Welch, 'Debt Servicing.'

Argentina Chile, Colombia, Uruguay, and Venezuela substantially liberalised their financial market in the late 1970s.<sup>15</sup> The reforms in Argentina, unlike the others - especially Chile, and Uruguay -, did not survive the financial turmoil of the early 1980s and the liberalisation programme was, for all intents and purposes, completely reversed starting in 1982. Also, attempts in the mid-1980s to reimpose interest rate controls in Colombia and Venezuela proved impossible to maintain and more liberal interest rate policy returned after 1989.<sup>16</sup>

Ecuador commenced on a gradual liberalisation of its financial system in 1982, first freeing interest rates and then decreasing the barriers to entry in the financial services sector in 1985.<sup>17</sup> Peru undertook modest liberalizing policies in the late 1970s and early 1980s especially with the creation of dollar denominated marketable bank certificates of deposit.<sup>18</sup> But the heterodox experiment after 1985 reintroduced a large

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<sup>15</sup>See Edwards and Cox-Edwards, Monetarism and Liberalisation, for Chile, Corbo et al, 'What Went Wrong?', for Argentina, Chile, and Uruguay, Jorge García García, (1991): "Colombia," in Demetris Papageorgiou,, Michael Michaely, and Armeane M. Choksi Liberalizing Foreign Trade, Volume 4 (Cambridge, 1991) and Rudolf Hommes, "Colombia," in John Williamson, Latin American Adjustment: How Much Has Happened? (Washington D.C.: 1990) for Colombia, and Ricardo Hausmann, "Venezuela," in John Williamson, Latin American Adjustment: How Much Has Happened? (Washington D.C., 1990) for Venezuela.

<sup>16</sup>Colombia maintained significant barriers to entry in financial services in the 1980s in spite of more or less market determined interest rates.

<sup>17</sup>See Alain de Janvry, Elizabeth Sadoulet, and André Fargeix, "Politically Feasible and Equitable Adjustment: Some Alternatives for Ecuador," World Development, Vol. 19, No. 11 (1991) and Alain de Janvry, Elizabeth Sadoulet, and André Fargeix, Adjustment and Equity in Ecuador. (Paris, 1991).

<sup>18</sup>See Paul Beckerman, "Inflation and Dollar Accounts in Peru's Banking System, 1970-82," World Development, Vol. 15, No. 8 (1987).

number of restrictions especially after the nationalisation of the banks in 1987.<sup>19</sup>

Bolivian financial markets, in spite of the strong orthodox stabilisation programme pursued in the mid-1980s and the opening of the capital account of the balance of payments, have not witnessed an increase in competition, a reduction in the spread between lending and borrowing rates, nor a substantial remonetisation of the economy.<sup>20</sup>

The financial system has yet to recover from the hyperinflation of 1984-85. Although interest rates were allowed to rise to positive levels in real terms in the 1980s, the market still remains substantially segmented.

Brazil combined an institution building approach with a moderately liberal financial policy through formal inflation indexation of financial assets starting in the late 1960s.<sup>21</sup> The difficulties financial indexation has created for the Brazilians are well known and are witnessed by the several failed attempts at de-indexation in the 1980s. Although Brazilian financial technology is very sophisticated, a severe lack of competition keeps the cost of intermediation high. Significant barriers to entry in financial services still exist. Further, one of the main sources of growth for the financial

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<sup>19</sup>For a good comparison of the two periods, see Manuel Pastor, Jr. and Carol Wise, "Peruvian Economic Policy in the 1980s: From Orthodoxy to Heterodoxy and Back," Latin American Research Review, Vol. 27, No. 2 (1992). Also see Daniel Schydłowsky, "The Peruvian Debacle: Economic Dynamics or Political Causes?", Mimeo. Boston University (1989).

<sup>20</sup>See Juan Antonio Morales, "The Transition from Stabilization to Sustained Growth in Bolivia," in Michael Bruno, et al, Lessons of Economic Stabilization and Its Aftermath. (Cambridge, 1991) and Felipe Morris, et al, "Latin America's Banking Systems in the 1980s: A Cross Country Comparison," World Bank Discussion Paper No. 81 (1990).

<sup>21</sup>See John H. Welch, Capital Markets and the Development Process: The Case of Brazil, (London, 1992).

system was the market for indexed government bonds. The large growth of the Brazilian government's internal debt and a liquidity confiscation and partial repudiation in 1990 - the so-called Collor Plan - have seriously hindered the efficiency of Brazilian financial institutions in allocating resources effectively.

Mexico's financial system developed in a relatively liberalised environment until the bank nationalisation in 1982. The bank nationalisation temporarily reversed the importance of universal banking, the major development of the 1970s, because of perceived abuses. The recent privatisation of the banks has necessarily dismantled some of the firewalls erected under government ownership. Universal banking once again is at the heart of the Mexican banking system. Although banks can own (or be owned by) brokerage houses and insurance companies, they still are not allowed to hold stocks in industrial firms. Further, Mexican authorities fully liberalised interest rates in 1989 and since have reduced reserve requirements and barriers to entry in money and capital markets. The planned opening of the market for financial services, especially in the North American Free Trade Agreement, will add dynamism to the already fervent activity in Mexican financial markets.<sup>22</sup>

Increasing evidence indicates that financial stance and inflation rates significantly determine the size and cost efficiency of financial systems. A larger degree of openness and low inflation rates are associated with larger and less costly financial systems. Table

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<sup>22</sup>See Banco de Mexico, The Mexican Economy, (Mexico City, 1992) and Marilyn E. Skiles, "Structural Change in Mexico and the Prospects for Financial Integration with the U.S.," paper presented at the 66<sup>th</sup> Annual Western Economic Association International Conference, Seattle (July 1991).

1 presents a common if flawed measure of financial market size - the ratio of  $M_2$  to gross domestic product (GDP). The more open financial markets of Chile, Colombia, Ecuador, Mexico, Peru, and Venezuela are larger than the more protected financial markets of Argentina, Brazil, and Bolivia.

Inflation rates (Table 2) also determine the size of the financial markets. The economies which suffered the highest inflation rates in the 1980s, Argentina, Brazil, and Bolivia, have the smallest financial markets compared to the more moderate inflation countries of Chile, Colombia, Ecuador, Mexico, Uruguay, and Venezuela.

The efficiency of these financial systems in terms of production of  $M_2$  services can be gauged somewhat by an index which appears in Table 3. The data are meant to indicate the cost of intermediation per unit of  $M_2$  by dividing  $M_2$  by the value added in financial services. The larger the indicator, the smaller the cost of intermediation and the more efficient the financial system. The countries which maintained a more liberalised financial environment and lower inflation rates such as Colombia, Chile, Ecuador, Mexico, Uruguay, and Venezuela, with the exception of Argentina, showed more efficient financial intermediation than Brazil, Bolivia, and Peru. I am suspicious of the meaning of both the exceedingly high number for Argentina and the low number for Brazil. The high number for Argentina is more a function of the low value added due to low profits and in many cases negative net worth of Argentine banks than of their efficiency. Brazil's low number reflects inefficiency and exorbitant profits of Brazilian intermediaries but is biased downward due to the large importance of non-monetary instruments in their financial system.

On the whole, these simple numbers point to a clear conclusion: countries that can weather the difficulties associated with financial liberalisation, difficulties even the United States could not avoid, will end up with a more efficient financial system.<sup>23</sup> A more important question, however, is: what difference does this make to growth and welfare?

No matter the unresolved issues surrounding financial liberalisation, market oriented financial markets increase financial saving. If increased intermediation between savings and investment decisions could increase the quality of investment by allocating scarce savings to their best uses, the improvement in growth could be substantial.

Recent theoretical and empirical evidence suggests financial "repression" could have large deleterious effects on output growth.<sup>24</sup> For example, Roubini and Sala-i-Martin build on recent endogenous growth models developed by Romer and Bencivenga and Smith by incorporating and testing whether financial repression hinders economic growth.<sup>25</sup> Interestingly, they find that financial repression in Latin America goes far in

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<sup>23</sup>I made this same point in Welch, 'Debt Servicing.'

<sup>24</sup>See World Bank, World Development Report 1989, (New York 1989), Nouriel Roubini and Xavier Sala-i-Martin, "Financial Development, the Trade Regime, and Economic Growth," NBER Working Paper No.3876 (October 1991), Nouriel Roubini and Xavier Sala-i-Martin, "A Growth Model of Inflation, Tax Evasion, and Financial Repression," NBER Working Paper No. 4062 (May 1992), Nouriel Roubini and Xavier Sala-i-Martin, "Financial Repression and Economic Growth," Journal of Development Economics, Vol. 39, No.1 (1992), and José de Gregorio, (1992): "Economic Growth in Latin America," Journal of Development Economics, Vol 39 (1992).

<sup>25</sup>Paul A. Romer, "Increasing Returns and Long Run Growth," Journal of Political Economy, Vol. 94 (1986); Paul A. Romer, "Endogenous Technological Change," Journal of Political Economy, Vol 68 (1990); and Valerie R. Bencivenga and Bruce D. Smith "Financial Intermediation and Endogenous Growth," Review of Economic Studies, Vol. 58 (1991).

explaining the slower growth rates in Latin America compared to those in Asia.

Does slower growth caused by financial repression necessarily mean lower welfare? The answer is "no" if one of the main causes of financial repression is to increase inflation tax revenue as Roubini and Sala-i-Martin argue. The argument that a repressed financial system may enhance welfare in spite of lower growth rests on the assumption that the inflation tax may be more efficient than income or excise taxes. In the context of moderate inflation, the inflation tax may be more similar to a lump sum tax than income or excise taxes in that it may not distort relative prices as much. However, high and variable inflation rates may cause large inflation and relative price instability so that at high levels of inflation, these arguments may carry less weight.

An important implication of Roubini and Sala-i-Martin's model, however, is that more financial repression will be associated with higher inflation and lower growth. Interestingly, the lower growth is not a direct outcome of higher inflation but of financial repression. Financial repression and higher inflation are then functions of the governments taste or ability for using the (non-distorting) inflation tax over income and excise taxes.

Empirical evidence, however, does not favor the public finance motive for inflationary finance.<sup>26</sup> On the other hand, the acceleration in inflation rates in Latin

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<sup>26</sup>Rudiger Dornbusch and Stanley Fischer, "Moderate Inflation," NBER Working Paper No. 3896 (November 1991) and Rudiger Dornbusch, Federico Sturzenegger, and Holger Wolf, "Extreme Inflation: Dynamics and Stabilization," Brookings Papers on Economic Activity, No. 2 (1990)..



America after the outbreak of the debt crisis in 1982 probably emanated from the need to finance external and internal obligations with internal resources, however, and that this provoked a strong contraction in the size and efficiency of financial systems.<sup>27</sup> The empirical analysis in Roubini and Sala-i-Martin is consistent with this description.

Nonetheless, financial development and the recovery of growth have required substantial fiscal adjustment and credible monetary and fiscal policies to reduce inflation. Not only does the degree of adjustment matter but also the credibility of the policies put into place. Credibility is a function of a number of variables and is an illusive commodity. The fact that adjustment in Chile and Mexico and more recently Argentina has achieved a mark of credibility laying the foundation for the region's return to the international financial scene.

### **The New Pattern of Capital Flows to Latin America**

Capital has begun to flow to Latin America. 1991 marked the beginning of Latin America's reappearance on international financial markets receiving around US\$40 billion in new funds (Table 4). Significant is the change in the instruments which intermediate this capital flow. A number of features of the data jump from these tables. The first is the minimal role commercial bank term lending is taking in financing these capital flows except perhaps in the case of Chile. The lack of commercial bank interest is natural given the decade long restructuring of Latin American bank debt which now

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<sup>27</sup>See Welch 'Debt Servicing,' and Dornbusch, Sturzenegger, and Wolf, 'Extreme Inflation.'

seems to be ending with Brazil's Brady Plan agreement.

The second salient feature of the capital flow is the importance of securities and stock issues. Bonds, commercial paper, and CD issues accounted for around 29% of the total capital flow in 1991 while American Depository Receipts (ADR) issues and direct portfolio investment in Latin American stocks accounted for a notable 16%. The participation of these securities was very important in all the countries listed above but to varying degrees. For example, ADRs and portfolio investment accounted for a whopping 28% of the total in Mexico and a more moderate but still large 16% in Argentina.

Brazil seems to be the only country to have significantly tapped the international commercial paper markets. Similarly, the use of trade financing was much larger in Brazil than in other countries. These developments can be explained by Brazil's lack of an agreement with international creditors so these highly collateralised instruments were the only avenues for Brazilian firms to raise capital. Such financing was limited to very large domestic and multinational corporations such as Petrobras, Aracruz Cellulose, Embratel, Alcoa, and IBM do Brazil.<sup>28</sup>

Direct foreign investment was also an important source of capital flows. Direct foreign investment through privatisation played significant roles in Argentina and Venezuela. Foreign participation in the privatisations in 1991 in Brazil and Mexico was

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<sup>28</sup>Salomon Brothers, "Private Capital Flows to Latin America: Volume Triples to US\$40 Billion in 1991," Sovereign Assessment Group: Emerging Markets, February 12 (1992) and CEPAL, "El Regreso de los Países Latino Americanos al Mercado Internacional de Capitales Privados: Nota Preliminar," Comercio Exterior, (January 1992).

non-existent while Chile's privatisation programme has more or less come to an end.

These data suggest that not only domestic financial systems will be called upon to be a source of investment funding but that now stock markets may be called to intermediate in the recovery of Latin America. But what can we expect from Latin American stock markets? What structural changes need to occur to allow stock markets to perform an important role? I now turn to these questions.

### **Stock Markets and the Control of Capital in Latin America**

Stock markets can perform three functions: 1) like other financial markets, stock markets transfer capital from savers to investors (the primary market), 2) provide liquidity to owners of fixed capital (the secondary market), and 3) improve the efficiency and performance of firms through the market for corporate control (the secondary market). This section will argue that stock markets, even in developed countries such as the United States and the United Kingdom, are not important in funding new investment. The liquidity of the stock market is determined as much by market access as by all the ingredients in making secondary a vigorous and effective market for corporate control. Stock markets in Latin America show a low degree of liquidity. Thus, by far the most important role which stock markets can play is to condition the investment decisions and performance of managers (3). Investigating how well Latin American markets for equities do this is the main purpose of this section.

Stock markets in Latin America, as measured by the ratio of capitalisation to GDP, tend to be small compared with developed countries as Table 5 shows. A number

of countries, however, have seen their stock markets grow substantially in size relative to their economies in recent years. The size of Chile's stock market relative to its economy is now larger than that of the United States or the United Kingdom. Mexico's has now reached 61% while Argentina's has reached 24%. Brazil's stock market, which used to be the largest stock market in Latin America, has contracted in recent years due to macroeconomic instability and remains severely undercapitalised.

Stock markets are not very important in transferring new capital resources to firms in either developed countries or in Latin America. Table 6 shows the value of new issues as a percentage of GDP while Table 7 presents them as a percentage of gross fixed investment. In all countries, the value of new issues is minor compared to the economy and plays a small role in financing investment. The size of primary markets for stocks is small but growing. If developed countries are a guide, however, the Latin American primary markets will not reach a size large enough to be considered a large source of investment resources.

Far more important will be the growth in the secondary market for stock. If these markets are to have a significant effect on efficiency and growth, then, these markets will have to become vigorous markets for corporate control. At issue is whether the value and performance of firms can be affected by the type of corporate control. Although the early literature focused on the relation between debt and equity financing more recent literature has focused on the agency problem in the modern corporate structure first

pointed to by Berle and Means.<sup>29</sup> As economies and equity markets develop, the distance between the owners of corporations (the principals) and the individuals who make the investment and corporate strategy decisions, the managers (the agents), widens. Hence, the development of common stock corporation creates a well-known principal-agent problem.

Corporate owners want to maximise profits but this may not be the main objective of management. If managers understand the firm's condition better than owners do, then managers may have an incentive to use this difference in information and lack of observability of their actions to their own benefit. For example, managers may have incentives to expand the firm's activities beyond its optimum size especially if their personal remuneration increases because of the expansion.<sup>30</sup> Consequently, firms may retain cash flow in excess of that required to fund all profitable projects. Corporate owners should have an incentive to monitor closely the actions of managers.

Such a latent demand, however, may not be translated into investment in monitoring. If ownership of a firm is widely dispersed, a free-rider problem exists.<sup>31</sup> If one owner invests in monitoring managers and is effective in disciplining management,

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<sup>29</sup>Franco Modigliani and Merton H. Miller, "The Cost of Capital, Corporate Finance, and the Theory of Investment," American Economic Review, Vol. 48, No. 3, (June 1958) and Adolf A. Berle and Gardiner C. Means, The Modern Corporation and Private Property. (New York, 1933).

<sup>30</sup>Michael C. Jensen, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," American Economic Review, Vol. 76, No. 2, (May 1986) and Michael C. Jensen, "Takeovers: Their Causes and Consequences," Journal of Economic Perspectives, Vol. 2, No. 2, (Winter 1988).

<sup>31</sup>Sanford J. Grossman and Oliver D. Hart, "Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation," The Bell Journal of Economics, (Spring 1980).

then all shareholders gain. Typically, the benefit to an individual shareholder, especially if the free-rider problem exists, per unit of monitoring is lower than the cost of monitoring and, hence, under-investment in monitoring will occur.

What could make a diffuse market for corporate control efficient in improving the performance of firms? If the market knows about the incentive for under-performance of certain firms, it will assign a low value their stock. The value of the firm could increase if a managerial reform took place and if one stockholder held enough stock to benefit from monitoring. If a firm's (low) value reflected diversionary behaviour of managers, then the firm would be a target for a takeover. The threat of takeover (or a contestable market), by creating the possibility of dismissal or reform of management, would create incentives for managers to maximise the value of their firms stock. If they did otherwise, they would lose their jobs.

Grossman and Hart however, show that contestability is not enough to ensure that managers maximise corporate value.<sup>32</sup> Existing shareholders can gain from a corporate raider's improvement of the corporation by not selling their shares thus limiting the raider's gains from the takeover. Jensen, however, suggests that if the raider can also bond free cash flow by increasing the leverage of the firm and increasing dividend payments to shareholders, the equilibrium increase in the value of the firm will compensate all shareholders.<sup>33</sup> Jensen cites much of his own empirical work to back his claim that target and raider corporations tend to benefit from (leveraged) takeovers.

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<sup>32</sup>Grossman and Hart, 'Takeover Bids.'

<sup>33</sup>Jensen, 'Agency Costs' and Jensen, 'Takeovers.'

Other ways to improve managerial performance include having managers and directors (insiders) own more of the firm. Then, the value of insiders wealth will depend upon the value of the firm mitigating the principal agent problem.

Another competing hypothesis, however, posits that too much concentration of ownership creates both entrenchment and moral hazard problems. Entrenchment problems arise when an insider garners enough voting stock to ensure the continuance of his employment and, with effective control, could divert resources in a way that does not maximise the value of the firm. Similarly, moral hazard problems arise in such a situation as the controlling insider interest can diffuse risk by issuing stock without significantly diluting effective control. Stiglitz and Greenwald, Stiglitz, and Weiss argue that this adverse signal explains why stock markets are not used anywhere as a major source of equity capital: high risk firms, especially those who are not able to obtain bank credit, will be most prone to issue stock. Hence, the cost of equity financing will be prohibitively high.<sup>34</sup>

McConnell and Servaes, building on work by Morck, Schleifer, and Vishny, present empirical evidence that there is a trade-off between the free-rider problem in monitoring managers and entrenchment of the controlling interest as reflected in the

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<sup>34</sup>Bruce Greenwald, Joseph E. Stiglitz, and Andrew Weiss, "Informational Imperfections in the Capital Market and Macroeconomic Fluctuations," American Economic Review, Vol. 74, No. 2, (May 1984); Joseph E. Stiglitz, "Credit Markets and the Control of Capital," Journal of Money, Credit, and Banking, Vol. 17, No. 2, (May 1985); Joseph E. Stiglitz, "Why Financial Structure Matters," Journal of Economic Perspectives, Vol. 2, No. 4, (Fall 1988); and Joseph E. Stiglitz, "Government, Financial Markets, and Economic Development," NBER Paper No. 3669, (April 1991).

value of the firm.<sup>35</sup> They find a non-linear relationship between Tobin's Q (the market value of the firm relative to book value) and the percentage of insider ownership. At low levels of insider ownership, monitoring problems are high and the value of the stock is low. As the percentage of insider ownership rises, the value of the firm rises until entrenchment sets in at around 40% to 50% insider ownership and the value of the stock begins to decline.<sup>36</sup>

Latin American equities markets suffer from two important problems in its corporate ownership structure: 1) corporate ownership is highly entrenched and 2) equities markets are not contestable. Private corporations are closed and family owned.<sup>37</sup> For example, Brito and Touriel show that in a sample of Brazilian firms, the controlling interest owns around 65% of the voting shares and that roughly 70% of the

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<sup>35</sup>John J. McConnell and Henri Servaes, "Additional Evidence on Equity Ownership and Corporate Value," Journal of Financial Economics, Vol. 27 (1990) and Randall Morck, Andrei Shleifer, and Robert W. Vishny, "Management Ownership and Market Valuation: An Empirical Analysis," Journal of Financial Economics, Vol. 20 (1988). Also see René Stulz, "Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control," Journal of Financial Economics, Vol. 20 (1988).

<sup>36</sup>One should note that Harold Demsetz and Kenneth Lehn, "The Structure of Corporate Ownership: Causes and Consequences," Journal of Political Economy, Vol. 93, No. 61, (December 1985), find no evidence the Berle and Means, The Modern Corporation proposition. Also see Margaret Blair, "Who's in Charge Here?: How Changes in Corporate Finance Are Shaping Corporate Governance," The Brookings Review, (Fall 1991), Harold Demsetz, "Corporate Control, Insider Trading, and Rates of Return," American Economic Review, Vol. 76, No. 2, (May 1986).

<sup>37</sup>This discussion is not meant to underestimate the abilities of private sector entrepreneurs in Latin America. Clearly, the private firms in Argentina, Brazil (especially in São Paulo), Chile and Mexico (especially in Monterrey) are among the most dynamic in the world. Their ownership structure, however, developed in a different context from the one envisioned in the reforms currently taking place. My arguments, therefore, concentrate on the importance of corporate structure in the new liberalization.



administration of the firms is comprised of members of the controlling interest.<sup>38</sup> These numbers are very high compared to data on U.S. companies. For example, in Demsetz and Lehn's sample of 511 U.S. corporations in 1980-81, the 20 largest shareholders control on average 37.66% of the firm and the variance of their holdings was high.<sup>39</sup> Also, in a sample of 1093 U.S. firms in 1986, McConnell and Servaes find that average inside ownership was 11.84% (median of 5%).<sup>40</sup> The type of tenure structure observed in Latin American corporations, however, makes sense in the context of large macroeconomic uncertainty common to the region. More uncertainty renders manager's activities less observable making a strong and concentrated ownership structure more efficient. More diffuse ownership is only possible in an environment of macroeconomic stability.

Still, current controlling interests in Latin America will likely resist opening their capital. Even after extensive policies in the Brazilian capital markets to broaden common (voting) stock ownership in the form of fiscal incentives, firms resisted diluting control.<sup>41</sup> Brazilian firms have also resisted protecting the interests of minority shareholders and divulging clear and honest information. I have argued elsewhere that such a view explains the large concentration in trading in state enterprise stocks on the

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<sup>38</sup>Ney O. Brito, and Hélio Touriel, "A Estrutura Empresarial Brasileira e a Atuação do BNDE no Mercado de Capitais," Revista de Administração, Vol. 15, No. 2, (June 1980).

<sup>39</sup>Demsetz and Lehn, 'The Structure of Corporate Ownership.'

<sup>40</sup>McConnell and Henri Servaes, 'Additional Evidence.'

<sup>41</sup>For a detailed discussion, see Welch Capital Markets, chapter 4.

Brazilian stock markets and why state owned corporations were the most successful open capital companies. These corporations protected minority shareholders rights and accounting statements were usually more reliable than private firms.<sup>42</sup> This advantage does not stem from being attached to the government's budget or from liquidity advantages. Ness and Novaes show, returns on state enterprise stock are commensurate with their risk level and have the same liquidity characteristics as private corporation stock.<sup>43</sup>

Rarely does one hear of a takeover in Latin American equity markets outside orchestrated mergers by governments of companies in receivership. One exception that comes to mind is Banco Garantia's takeover of a leading beverage company in Brazil, Brahma. Following the takeover, Brahma closed its capital by exchanging preferred stock without voting rights for the remaining common shares which have voting rights. Such an operation may have improved ownership control over managers at Brahma and enhanced its performance but did not help promote widespread ownership in the Brazilian equities markets. Aside some infrequent exceptions, Latin American equities markets cannot be characterised as active in takeover activity.

The prospects for efficient managerial discipline by equities markets as an

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<sup>42</sup>Notable exceptions are Paranapanema and Souza Cruz, two private sector companies who garner a significant share of the Brazilian Stock Market.

<sup>43</sup>Walter L. Ness, "A Empresa Estatal no Mercado de Capitais," Revista Brasileira de Mercado de Capitais, Vol. 4, No. 12, (September - December 1978) and Ana Dolores Novaes, "Rentabilidade e Risco: Empresas Estatais *Versus* Empresas Privadas," Revista Brasileira de Economia, Vol. 44., No. 1, (January - March 1990).

extension of the labor market for managers are not bright in the near term. Nonetheless, developing a vigorous market for control should be an objective of policy. Managers of Latin American companies appear not yet familiar with such discipline. Recently, Cementos Mexicanos (CEMEX) acquired shares in two Spanish cement concerns. The price of CEMEX ADRs plunged as U.S. and European stockholders claimed that they were not properly informed of such plans when the ADRs were issued earlier this year. Although CEMEX managers are being "punished" for their activities by ADR markets, the fall in their stock value does not necessarily make them a target for takeover as the percentage of stocks traded on exchanges in no way threatens the controlling interest.

What other vehicles can supplant an efficient market for corporate control? One possibility comes from the examples of Japan and Germany where banks hold stock in the firm. If the bank takes an ownership position in a firm, the bank will have an incentive to monitor the firm's managers over and above the monitoring that goes into loan contracts. This incentive increases the larger the bank's position. Lichtenberg and Pushner provide empirical evidence that in Japan bank holdings of corporate stock improve the performance of the firm as measured by total factor productivity.<sup>44</sup> They also show that a higher concentration of corporate ownership decreases productivity. Their conclusion is that equity ownership by banks effectively substitutes for a contestable market for corporate control. Hence, allowing banks to hold equity could

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<sup>44</sup>Frank R. Lichtenberg and George M. Pushner, "Ownership Structure and Corporate Performance in Japan," NBER Working Paper No. 4092, (June 1992).

effectively mitigate the shortcomings of equities markets in Latin America.

On the other hand, many feel that the fraud and over-lending to firms and individuals allied with banks was responsible in part for the Argentine, Brazilian, Chilean, Mexican, and Uruguayan financial collapses. Consequently, financial restructuring in Latin America in the 1980s included separation of banks from ownership. Thus, Latin American countries have far to go to create capital markets which will effectively discipline the performance of firms. This role will have to be fulfilled by product markets. The general conclusion which results is that the gains from trade and product market liberalisation will far outweigh the gains from stock market development. This does not mean that Latin America should not develop its equities markets. As these markets develop, they will complement the liberalisation process but only in a supporting role.

### **Privatisation, Liberalisation, and Capital Markets**

Privatisation of public enterprise through divestiture has also taken a central role in recent adjustment programmes. How can privatisation of a state owned firm improve its economic efficiency? The answers, oddly enough, are not clear, and depend upon what objectives government's have in taking an ownership position in enterprise. Depending on the character of internal control structures, divestiture may not necessarily eliminate the principal agent problem. It only changes it by changing the objective

function of the principal.<sup>45</sup>

If the government ownership of public enterprise leads to purely rent seeking activities in the firms strategies, privatisation can improve productive efficiency by making the principal's objective function profit maximizing.<sup>46</sup> Suppose, however, that rent seeking can be thought of as a cost of public ownership. The government may use an ownership position as an alternative to regulation in affecting prices and output in a highly concentrated industry to decrease monopoly rents. Consequently, allocative efficiency might suffer from privatisation. Hence, a possible trade-off may exist between allocative and productive efficiency in a divestiture programme depending on the structure of the market for the final good. If the industry is highly concentrated, an optimal level of public ownership will typically exist.<sup>47</sup>

It follows that if a market can be effectively liberalised to both domestic and foreign competition, the raison d'être of public enterprise disappears. Otherwise, a system of efficient regulation will have to supplant government ownership.

This line of argument also suggests that the sequencing of privatisation and liberalisation is important. It suggests that privatisation follows as a logical complement

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<sup>45</sup>For a review of privatization programs, see John Vickers and George Yarrow, "Economic Perspectives on Privatization," Journal of Economic Perspectives, Vol. 5, No. 2, (Spring 1991), John Vickers and George Yarrow, Privatization: An Economic Analysis, (Cambridge, 1988), and Robert P. McComb, "Privatization in LDCs," mimeo, Texas Tech University (1990).

<sup>46</sup>The case where the objective function includes employment targets, wage levels, and subsidized pricing of strategic inputs to production is also consistent with this conclusion. depending upon how society values the welfare of the beneficiaries of these policies.

<sup>47</sup>See Robert P. McComb and John H. Welch, "Public Enterprise and Privatization: The Importance of Differential Costs," Economia Mexicana: Nueva Epoca, forthcoming.

to liberalisation and deregulation of a sector of the economy. Hence, a sequence of liberalizing the economy then privatizing is a temporally consistent strategy.

Suppose, however, the government wants to maximise sales revenue in addition to improving productive and allocative efficiency. A trade-off exists between liberalisation and revenue maximisation as the price of the firm at sale will reflect expected future profits. An increase in the degree of openness in the sector will lead to a fall in expected profits. One can imagine, an optimal level of liberalisation which equates the marginal benefits to the government from revenue and productive and allocative efficiency. This policy is not time consistent as the government has the incentive to then liberalise after divestiture.<sup>48</sup>

The difference in sequencing of the reforms may have a bearing on the success of the whole programme. If liberalisation is achieved, the opposition to privatisation might diminish as the regulatory reasons for keeping firms in the public fold will be less. On the other hand, if privatisation precedes liberalisation, the newly privatised firm will constitute a strong lobby against further liberalisation. This could subvert the liberalisation component of the programme. Hence, a government implementing a liberalisation-*cum*-privatisation scheme would best liberalise first then privatise. In general, this is the route chosen by the Mexicans and has proceeded successfully. However, the Brazilian privatisation scheme has led the programme in a macroeconomic

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<sup>48</sup>A short formal discussion of this is available upon request.

sense although the first industries privatised were in competitive industries.<sup>49</sup> Such a Thatcherist approach may make liberalisation more difficult in the future.

These trade-offs are present in the recent bank privatisations in Mexico. The average price to book ratio of the privatisations was on the order of 3. Many have argued that these prices are reasonable as Mexican banks have a comparative advantage in creating liquidity in the illiquid Mexican stock markets, that the planned modernisation and investment programmes dictated a large increase in productivity, and that banks are much more valuable as going concerns than as separate assets.<sup>50</sup> All help explain these prices. However, they may also reflect some expected protection. Now that the banks have been sold, the Mexican government has a large incentive to open the financial system, especially under the North American Free Trade Agreement (NAFTA). The Mexican stock market has been discounting such a possibility since May but the text of the NAFTA does not give strong indications of whether the opening was larger than expected. Needless to say, Mexican bank stocks fell in mid-1992 and continued to fall after the announced NAFTA. However, I should not overstate the importance of the sequencing in the Mexican bank privatisation, however, because, as noted above, the privatisation programmes followed substantial liberalisation in product and financial

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<sup>49</sup>One should note how important the output market structure is in determining the performance of public enterprise in Brazil. Ironically, USIMINAS competed effectively in the world steel market as a public enterprise. Further, because of the competitive nature of this market, the price-book ratio was compared to some other privatisations.

<sup>50</sup>Peter M. Garber and Steven R. Weisbrod, "Opening the Financial Services Market in Mexico," mimeo, Brown University, (October 1991).

markets in the last half of the 1980s.

Privatisation, if designed correctly, could improve the performance of stock markets in that the sale can be structured to minimise entrenchment and also concentrate ownership (especially among managers) to leave a high level of monitoring. In such a scenario, firms which have been traditionally blue-chip should continue to be so after privatisation and an improvement in performance could increase interest in the market for equities from both the supply and demand sides. Finding the optimal structure, however, is a highly delicate and daunting task. Nevertheless, the privatisation programmes in Chile and Mexico have clearly incorporated these concerns in the design of the divestiture. So far the increase in interest, however, has been mainly on the demand side in secondary markets.

The lack of contestability in equities markets in Latin America will probably not lead to any further increases in productive efficiency over and above those generated by having owners which have interest closer to those of managers as a result of the privatisation programmes. Privatisation is important signal a government's commitment to a liberalisation programme. Trade liberalisation, however, will provide more immediate economic benefits than will programmes of divestiture of state owned enterprise.

### **Concluding Remarks**

In trying to touch on the important issues which will dictate the future role and performance of capital markets, I omitted a discussion of many of the institutional



reforms which need to take place. A proper treatment would address such topics as disclosure by firms, external audits, bank capital requirements, policy on writing down bad debt, and loan portfolio classification systems. Improvements in monitoring and regulation will improve the performance and growth of financial and equities markets. Certainly, all of these issues need to be addressed by the governments of Latin American countries but a full discussion is outside the scope of this paper and can be found elsewhere.<sup>51</sup> Suffice it to say that many Latin American countries, especially Chile and Mexico, have moved to improve the financial environment by improving information and regulation of the participants of the financial system. Still, I have endeavored to highlight the obstacles which fall outside of the regulatory realm facing Latin American countries in trying to make the markets for corporate control and credit dynamic and efficient in leading economic recovery.

At the heart of the discussion is the feeling that the corporate and financial structure of Latin American firms will have to change. Owners will have to be willing to dilute some control to increase their capital base. Regulators and firms will have to disseminate information efficiently and broadly to dispel any suspicion potential doubts about the running of the firma and the motives of management. The result will be a more dynamic productive structure which will assimilate new technologies as quickly as possible and better adapt to changes in macro and microeconomic structures. Progress in Mexico and in Chile is encouraging but is still dragging at the corporate level. As

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<sup>51</sup>For good treatments, see Morris et al, "Latin America's Banking Systems," and World Bank, World Development Report 1989.

these economies learn the implications of having an open economic structure, the better the private sector will lead Latin America's economic recovery.

**Table 1**  
**Latin America: M<sub>2</sub> as a Percent of GDP 1981-1990**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Avg.
<b>Argentina</b>	22.6%	22.2%	18.5%	16.1%	13.4%	11.5%	16.3%	16.8%	20.0%	12.0%	n.a.	16.9%
<b>Bolivia</b>	18.8%	19.1%	24.5%	19.2%	19.1%	12.3%	10.0%	12.7%	16.1%	18.0%	n.a.	17.0%
<b>Brazil</b>	17.0%	18.0%	17.6%	11.8%	14.5%	18.1%	22.2%	17.7%	13.8%	13.9%	6.9%	15.6%
<b>Chile</b>	21.0%	25.0%	34.0%	34.0%	35.0%	35.0%	37.0%	38.0%	38.0%	39.0%	39.0%	34.1%
<b>Colombia</b>	22.9%	25.8%	26.8%	26.8%	28.0%	28.1%	28.3%	27.5%	27.0%	26.0%	23.6%	26.4%
<b>Ecuador</b>	23.0%	22.0%	23.0%	21.0%	21.0%	20.0%	19.0%	21.0%	21.0%	17.0%	18.0%	20.5%
<b>Mexico</b>	30.0%	33.00%	32.0%	29.0%	29.0%	26.0%	27.0%	27.0%	11.0%	19.0%	33.3%	26.9%
<b>Peru</b>	21.0%	20.0%	21.0%	24.0%	26.0%	23.0%	10.0%	19.0%	29.0%	18.0%	n.a.	21.1%
<b>Uruguay</b>	40.0%	44.0%	56.0%	47.0%	49.0%	54.0%	49.0%	40.0%	48.0%	55.0%	n.a.	48.2%
<b>Venezuela</b>	36.0%	37.0%	39.0%	48.0%	41.0%	42.0%	43.0%	38.0%	34.0%	29.0%	33.0%	38.7%

Sources: Inter-American Development Bank, International Monetary Fund, World Bank, Banco Central do Brasil, Banco Central de Bolivia, Banco Central de Colombia

**Table 2**  
**Latin America: Average Annual Growth of Consumer Prices 1981-1990**

	1981-85	1986-90	1986	1987	1988	1989	1990p
<b>Argentina</b>	382.4	1,191.5	90.1	131.3	343.0	3,079.2	2,314.0
<b>Bolivia</b>	2,692.0	67.9	276.4	14.6	16.0	15.2	17.1
<b>Brazil</b>	153.8	1,062.4	145.2	229.7	682.3	1,278.0	2,968.0
<b>Chile</b>	21.5	19.4	19.5	19.9	14.7	17.0	26.1
<b>Columbia</b>	22.4	25.0	18.9	23.3	28.1	25.8	29.1
<b>Ecuador</b>	28.1	47.0	23.0	29.5	58.3	75.6	48.5
<b>Mexico</b>	62.4	75.8	86.2	131.8	114.2	20.0	26.7
<b>Peru</b>	104.9	2,342.2	78.0	86.0	666.2	3,398.9	7,481.7
<b>Uruguay</b>	46.0	79.0	76.4	63.6	62.2	80.5	112.5
<b>Venezuela</b>	11.1	38.8	11.5	28.1	29.5	84.2	40.8

Source: Inter-American Development Bank

**Table 3**  
**Latin America: M<sub>2</sub> Divided by Value Added in Financial Services**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Avg.
<b>Argentina</b>	3.84	3.39	3.25	2.71	1.79	2.60	8.20	3.72	2.15	n.a.	3.52
<b>Bolivia</b>	1.80	2.65	2.19	2.11	1.31	1.00	1.33	1.76	2.00	n.a.	1.80
<b>Brazil</b>	0.74	0.71	0.46	0.56	0.70	0.89	0.73	0.56	0.57	0.28	0.62
<b>Colombia</b>	1.39	2.00	2.25	2.28	2.38	2.52	2.61	2.65	2.75	2.75	2.36
<b>Chile</b>	1.43	1.58	1.77	1.82	1.91	1.93	1.89	1.88	1.83	1.66	1.78
<b>Ecuador</b>	4.50	4.75	4.31	4.33	4.15	4.06	4.19	4.47	3.57	3.80	4.21
<b>Mexico</b>	6.86	6.27	5.21	4.58	4.71	4.31	1.74	3.00	5.28	4.35	4.63
<b>Peru</b>	0.85	1.09	1.23	1.34	1.19	0.55	1.05	1.62	0.96	n.a.	1.10
<b>Uruguay</b>	8.56	9.86	7.80	7.93	8.60	8.23	7.08	8.51	9.84	n.a.	8.49
<b>Venezuela</b>	2.43	2.50	2.91	2.86	2.90	2.97	2.70	2.39	1.96	2.23	2.58

Sources: Inter-American Development Bank, International Monetary Fund, World Bank, Banco Central do Brasil, Banco Central de Bolivia, Banco Central de Colombia

**Table 4**  
**Latin America: Types of Private Capital Flows 1991 (U.S. Dollars in Millions)**

	Latin America		Argentina		Brazil		Chile		Mexico		Venezuela	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
<b>Borrowing</b>												
Bonds, Private	\$8,511.00	21.23%	\$1,104	21.65%	\$1,723	14.82%	\$200	5.43%	\$4,601	28.74%	\$883	18.41%
Commercial Paper	\$2,512.00	6.27%	\$0	0.00%	\$1,783	15.34%	\$0	0%	\$605	3.78%	\$124	2.58%
Certificates of Deposit	\$644.00	1.61%	\$175	3.43%	\$445	3.83%	\$0	0%	\$24	0.15%	\$0	0%
Trade Financing	\$1,668.90	4.16%	\$0	0.00%	\$1,098	9.44%	\$0	0%	\$570	3.57%	\$0	0%
Term Bank Lending	\$2,349.00	5.86%	\$98	1.92%	\$1,645	14.15%	\$322	8.75%	\$250	1.56%	\$34	0.7%
<b>Sub Total</b>	<b>\$15,684.90</b>	<b>39.12%</b>	<b>\$1,377</b>	<b>27.00%</b>	<b>\$6,694</b>	<b>57.58%</b>	<b>\$522</b>	<b>14.18%</b>	<b>\$6050</b>	<b>37.8%</b>	<b>\$1,041</b>	<b>21.7%</b>
<b>Total Portfolio</b>												
Funds	\$1,480.00	3.69%	\$110	2.16%	\$240	2.06%	\$51	1.39%	\$185	1.16%	\$0	0%
ADR's	\$4,927.20	12.29%	\$636	12.47%	\$0	0%	\$0	0%	\$4,291.2	26.81%	\$0	0%
<b>Sub Total</b>	<b>\$6,407.20</b>	<b>15.98%</b>	<b>\$746</b>	<b>14.63%</b>	<b>\$240</b>	<b>2.06%</b>	<b>\$51</b>	<b>1.39%</b>	<b>\$4,476.2</b>	<b>27.96%</b>	<b>\$0</b>	<b>0%</b>
<b>Direct Foreign</b>												
Cash Inflows	\$3,528.00	8.80%	1,379	27.04%	\$0	0%	\$0	0%	\$0	0%	\$2,149	44.8%
Other Direct	\$10,428.10	26.01%	\$954	18.71%	\$1,290.3	11.1%	\$3,108	84.43%	\$5,481	34.24%	\$1,607	33.5%
<b>Sub Total</b>	<b>\$13,956.10</b>	<b>34.81%</b>	<b>2,333</b>	<b>45.75%</b>	<b>\$1,290.3</b>	<b>11.1%</b>	<b>\$3,108</b>	<b>84.43%</b>	<b>\$5,481</b>	<b>34.24%</b>	<b>\$3,756</b>	<b>78.3%</b>
Other Capital			\$644	12.63%	\$3,402	26.26%	\$1,096	29.77%	\$0	0.0%	\$0	0%
<b>GRAND TOTAL</b>	<b>\$40,094.00</b>	<b>100.00%</b>	<b>5,100</b>	<b>100%</b>	<b>\$11,626.3</b>	<b>100%</b>	<b>\$4,777</b>	<b>100%</b>	<b>\$16,008.2</b>	<b>100%</b>	<b>\$4,797</b>	<b>100%</b>

Source: Salomon Brothers

**Table 5**  
**Latin American Equities: Market Capitalization, 1981-1991**  
**(as a percent of GDP)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991P	Avg.
<b>Argentina</b>	2.87%	1.38%	1.84%	1.53%	2.79%	2.06%	1.92%	2.64%	5.81%	4.51%	24.10%	4.68%
<b>Brazil</b>	5.93%	4.61%	6.77%	12.36%	16.90%	15.42%	5.99%	11.40%	15.23%	58.77%	15.13%	15.32%
<b>Chile</b>	35.24%	23.12%	13.48%	10.32%	9.68%	18.52%	23.01%	27.48%	34.99%	48.85%	94.48%	30.83%
<b>Colombia</b>	5.46%	4.77%	2.92%	2.50%	1.32%	2.45%	3.55%	3.10%	2.98%	0.36%	10.02%	3.58%
<b>Mexico</b>	8.12%	1.26%	2.22%	1.57%	2.65%	4.31%	5.95%	9.67%	15.28%	21.19%	61.31%	12.14%
<b>Uruguay</b>	0.87%	0.39%	0.15%	0.15%	0.25%	0.53%	0.56%	0.34%	n.a.	n.a.	0.60%	0.43%
<b>Venezuela</b>	5.62%	4.84%	5.71%	n/a	2.34%	2.95%	4.26%	3.19%	2.83%	15.32%	18.77%	6.58%
<b>U. K.</b>	34.85%	40.23%	49.08%	56.06%	71.05%	78.12%	98.53%	92.65%	99.07%	89.38%	n.a.	70.9%
<b>U. S.</b>	60.75%	62.12%	69.00%	61.04%	71.23%	76.41%	70.59%	70.56%	82.59%	69.24%	91.09%	71.33%

Source: International Finance Corporation and Inter-American Development Bank

**Table 6**  
**New Stock Issues, 1981-1991**  
**(as a percent of GDP)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Avg.
<b>U.S. (total)</b>	0.88%	1.01%	1.57%	0.62%	0.91%	1.66%	1.52%	1.22%	1.14%	0.76%	n.a.	1.13%
<b>Public Preferred</b>	0.06%	0.17%	0.22%	0.11%	0.17%	0.28%	0.23%	0.14%	0.12%	0.08%	0.32	0.16%
<b>Common</b>	0.81%	0.81%	1.35%	0.51%	0.75%	1.22%	0.99%	0.76%	0.51%	0.37%	0.88	0.82%
<b>Private Placement</b>	n.a.	n.a.	n.a.	n.a.	n.a.	0.16%	0.30%	0.33%	0.51%	0.31%	n.a.	0.32%
<b>Argentina</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.04%	n.a.	0.03%	0.28%	0.29	0.16%
<b>Brazil</b>	n.a.	n.a.	0.09%	0.19%	0.19%	0.37%	0.10%	0.12%	0.20%	1.91%	0.24	0.38%
<b>Chile</b>	0.57%	0.66%	0.65%	0.34%	0.55%	0.94%	3.39%	1.84%	0.85%	0.76%	0.52	1.04%
<b>Colombia</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.19%	n.a.	0.13%	0.01%	0.03	0.09%
<b>Mexico</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.90%	n.a.	0.30%	0.16%	2.65	1.00%
<b>Venezuela</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.02%	n.a.	0.03%	0.04%	0.34	0.11%

Source: International Finance Corporation and Inter-American Development Bank



**Table 7**  
**New Stock Issues, 1981-1991**  
**(as a percent of Gross Investment)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Avg.
<b>U.S. (total)</b>	5.16%	6.48%	10.51%	3.76%	5.62%	10.51%	9.91%	8.03%	7.79%	5.38%	7.31
Public	0.37%	1.08%	1.42%	0.68%	1.03%	1.77%	1.51%	0.91%	0.83%	0.54%	1.01
Common	4.79%	5.18%	8.71%	3.08%	4.59%	7.73%	6.44%	4.99%	3.50%	2.61%	5.16
Private	n.a.	n.a.	n.a.	n.a.	n.a.	1.01%	1.96%	2.13%	3.45%	2.24%	2.16
<b>Argentina</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.28%	n.a.	0.31%	3.30%	1.30
<b>Brazil</b>	n.a.	n.a.	0.46%	0.94%	0.89%	1.47%	0.41%	0.52%	0.88%	0.91%	0.81
<b>Chile</b>	1.87%	4.49%	5.50%	1.75%	3.53%	5.66%	17.69%	9.43%	3.70%	3.50%	5.71
<b>Colombia</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.89%	n.a.	0.64%	0.65%	0.73
<b>Mexico</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.26%	n.a.	0.16%	0.15%	0.19
<b>Venezuela</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.72%	n.a.	6.28%	3.79%	6.60

Source: International Finance Corporation and Inter-American Development Bank

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