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## A Decade of Structural Reforms in Latin America: What Has Been Reformed and How to Measure It

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**A Decade of Structural Reforms in Latin America:**

**What Has Been Reformed and How to Measure It**

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## **A Decade of Structural Reforms in Latin America:**

### **What Has Been Reformed and How to Measure It**

#### **Executive Summary**

During the past decade, structural policies in the region have been aimed increasingly at improving economic efficiency and reducing government interference in economic decisions. The effects of this shift have not yet been accurately evaluated due to the lack of systematic measurements of the magnitude of structural reforms. The aim of this document is to summarize the most characteristic features of the reform process during the past decade and to propose a method for quantifying the state of structural policies by areas and by groups of countries over time.

The deepest reforms have occurred in the realm of trade and finance policies. Average tariffs throughout the region have fallen from 44.6% in the pre-reform years to 13.1% currently; the permits and non-tariff restrictions that used to affect 33.8% of imports now cover no more than 11.4%. In the area of finance, liberalization measures have led to the elimination of interest rate controls, the dismantling of targeted credit systems, and the reduction of reserve requirement ratios to under 20% in most countries. Regulation procedures have been strengthened, but there are still significant weaknesses in supervision for assuring that financial systems are stable and sound.

In the tax area, the reforms have had the effect of replacing taxes on foreign trade with domestic taxes, as the value-added tax has spread and the extreme marginal rates that some countries applied to personal and company income taxes have been lowered. Nevertheless, the effectiveness of taxes in most countries in the region remains weak due to exclusions in tax bases and problems of evasion and administration.

Although Latin America has led the world in privatization in the 1990s, the process has been quite concentrated in a few countries and there is still much to do: only eight countries have had privatizations averaging over 1% of GDP a year during the 1990s.

Changes in labor policies have been even more limited. Only five countries have carried out reforms of some significance, aimed primarily at moderating costs of hiring and dismissing workers. But a number of countries maintain excessive dismissal costs and fourteen restrict temporary employment in some fashion. No country has reduced payroll taxes, even though in some cases they reach extremes that are a disincentive to employment generation in the formal sectors.

In this study the main aspects of structural policies have been combined into an index that reflects the degree of neutrality of policies, under the assumption that the primary objective of the structural reforms in the economic domain has been the search for greater efficiency in the allocation of productive resources by eliminating or reducing the distortions caused by policies that limit the functioning of markets or that impose costs on transactions or on productive activities. On a scale from 0 to 1 the index rises from 0.34 in 1985 to 0.60 in 1995, which indicates that although considerable progress has been made, there is still a great deal of room for furthering economic efficiency.

According to the values taken by the indices at the beginning and end of the 1985-1995 period, the countries of the region may be classified into four groups: (i) early reformers: Argentina, Chile, and Jamaica; (ii) gradual reformers: Colombia and Uruguay; (iii) recent reformers: Bolivia, El Salvador, Nicaragua, Paraguay, Peru, and the Dominican Republic, and (IV) slow reformers: Brazil, Costa Rica, Ecuador, Honduras, Mexico, and Venezuela.

## A Decade of Structural Reforms in Latin America:

### What Has Been Reformed and How to Measure It

Since the mid 1980s, the region's structural policies have shifted directions. The development model based on

protecting national markets and state intervention

has been replaced by a set of policies aimed primarily

at improving efficiency, easing market functioning,

and reducing the distorting effects of government

intervention in economic activity. Despite the

importance of the reforms, thus far there has been

no systematic attempt to measure what has been

reformed, or what still remains to be reformed in the

various structural policy areas. The lack of direct

measurements of structural policies has been a

hindrance to making an adequate evaluation of the

effects of the reforms and assigning priorities to the

various areas of reform. As indicators of structural

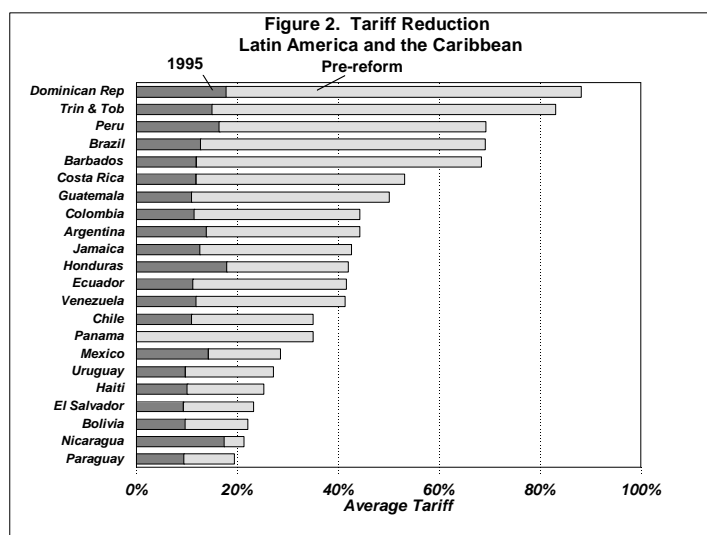
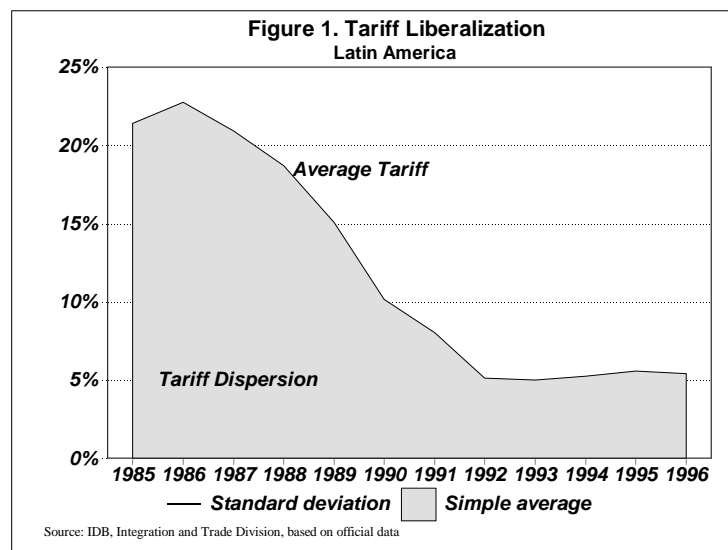
policies, the few studies that have sought to analyze

the effects of the body of reforms have used outcome

variables, such as the rate of foreign trade of the

economy, the size of public spending or financial

depth.<sup>1</sup>



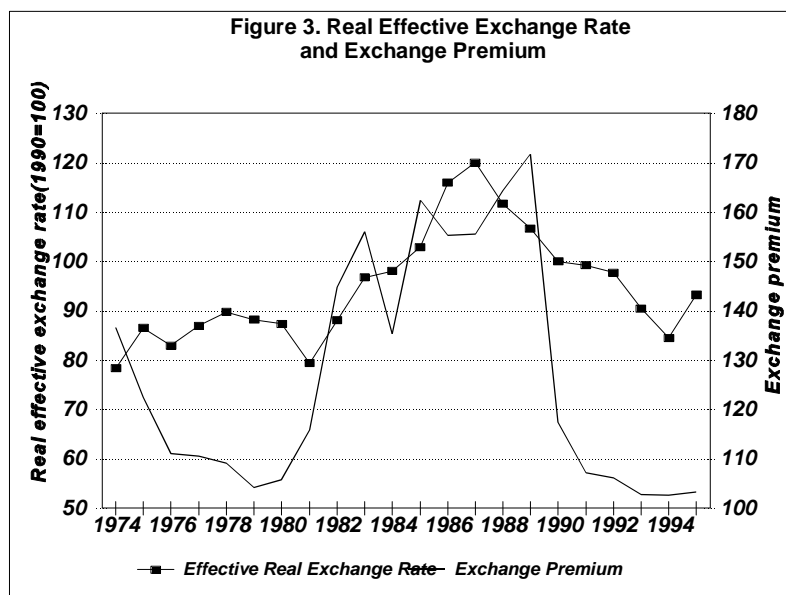
Source: IDB, Integration and Trade Division, based on official data. The figure for Panama represents that country's agreements with the WTO for 1996.

This document seeks to fill this vacuum by

constructing a structural policies index synthesizing the state of progress on policies in the areas of trade, taxes,

<sup>1</sup> These are some of the indicators used by Easterly, Loayza, and Montiel (1996) in the most recent evaluation study on the effects that reforms have had on growth.

finance, privatization, and labor; that index is used in separate documents analyzing the effects of structural reforms on growth, stability, and equity in Latin America.<sup>2</sup> The index is based directly on policy variables, such as tariffs, taxation rates, or required reserve ratios, and not on outcome variables which may or may not reflect the state of the policies. The index makes it possible to compare the state of the



various policy areas within a single country or of each policy between countries. On a scale of 0 to 1 the average index for all the countries and all structural policy areas stood at 0.34 in 1985. Ten years later it has reached to 0.60. This change implies noteworthy progress, but it also indicates that a significant potential remains to be realized.

The first sections of this document are devoted to describing the most important advances made during the past decade in the various areas of reform noted above.<sup>3</sup> The last section of the document presents the methodology for constructing the index and displays its overall trends in each of the areas over time, and by groups of countries in the region.

<sup>2</sup> See Fernández-Arias and Montiel (1997), Gavin (1997), Londoño and Székely (1997), and Lora and Barrera (1997).

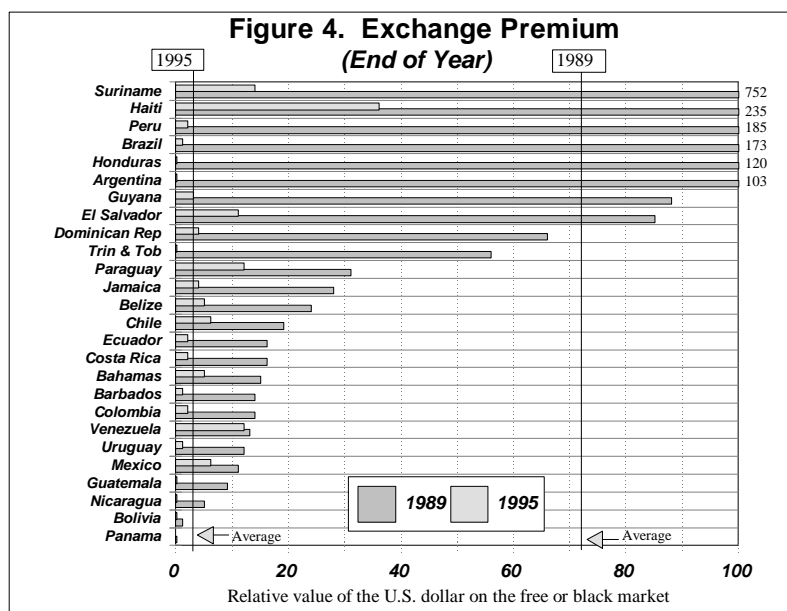
<sup>3</sup> For a more detailed description see BID (1996), part Two.

## Opening of Trade and Foreign Exchange

Between 1985 and 1991 practically all countries began significant programs to lift controls over their trade systems. Average tariffs declined from levels of 41.6% in the pre-reform years to 13.7% in 1995, and maximum tariffs were lowered from an average of 83.7% to 41%, and thus the spread was significantly reduced (Figure 1). Currently, only seven countries (of the 26 IDB borrowers) have average tariffs of over 15% and only two apply maximum tariffs of over 100% to a small number of articles (Figure 2). Non-tariff restrictions, which used to affect 37.6% of imports during the pre-reform period, today cover only 6.3% (for eleven countries on which information is available).

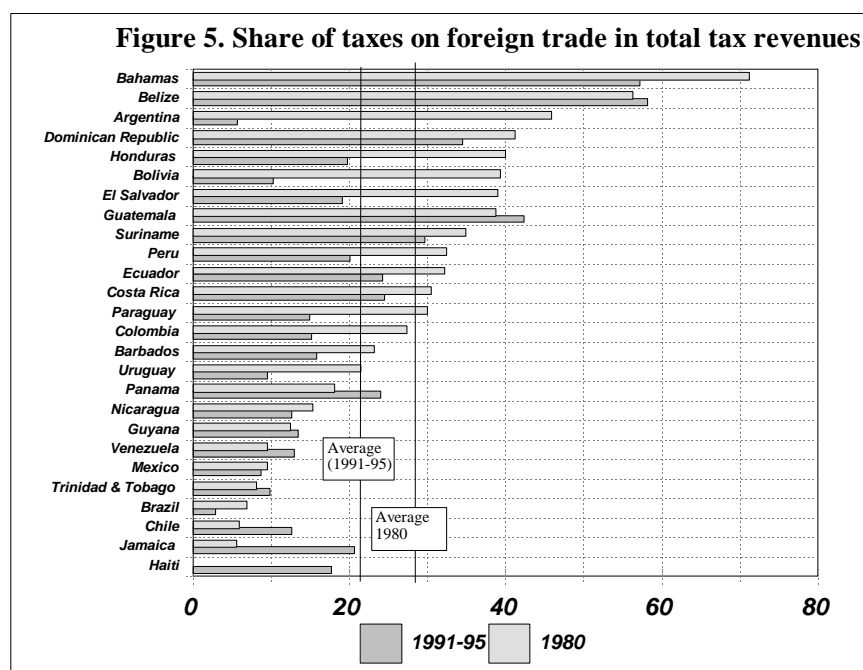
By the mid-1980s, multiple exchange rates had spread to most countries, and all without exception had established restrictions on capital outflows and requirements on the repatriation of export revenues. Sometimes surcharges on imports and prepayment deposits had been imposed. After the recent wave of exchange rate liberalizations, these restrictions have been dismantled. Today multiple exchange rate systems are the exception. Despite the difficulties that

Argentina and Mexico experienced in 1995, they have not made use of this device. Venezuela alone went backward in the exchange rate liberalization process, doing so temporarily in 1994. In fourteen countries there is no longer any kind of restriction on payment for current account transactions and in most the conditions for capital transactions have been dismantled or notably softened. In some countries current restrictions on capital movements are no longer aimed at preventing capital outflows but at moderating revenues. As evidence of the process of exchange rate unification and deregulation, it may be noted that in 1995 the differential between the average market price of foreign exchange (including transaction costs and exchange taxes) and the official rate was



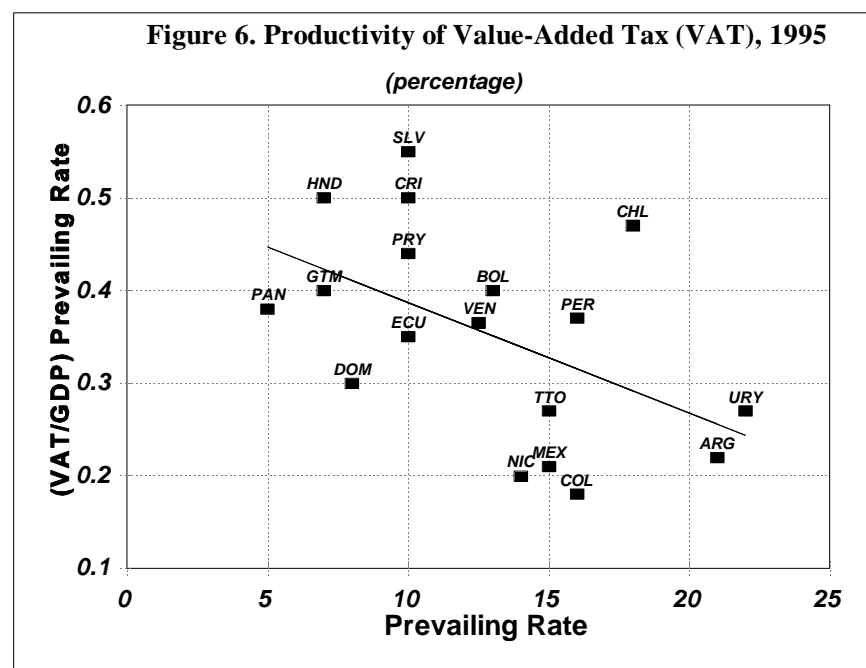
Source: IDB, Integration and Trade Division, computed based on official data and on data supplied by Currency Data & Intelligence, Inc. Averages are weighted by the trade value, excluding Nicaragua and Suriname.

on average only 2%, as compared to 72% in 1989. In sixteen countries the exchange differential is zero or less than 3%, and only in five was it over 10% in 1995. It is well to note, however, that the exchange differential is affected not only by exchange rate systems but also by macro factors that affect the real exchange rate, such as inflationary pressures and entry of foreign capital (Figures 3 and 4).



## Tax Reforms

Reforms in the tax area have also been deep, and their most common features have been the pursuit of neutrality, legal and administrative simplification, and greater collection. Taxes on foreign trade, which in 1980 represented 29.9% of the average country in the region, were partially replaced by greater domestic collection, and currently generate only



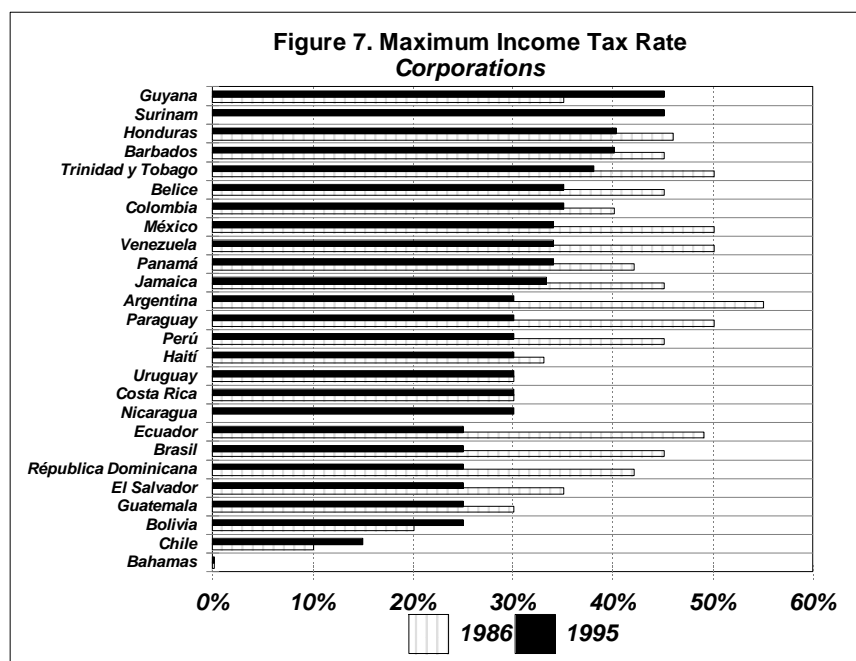
16.6% the amount collected (Figure 5). In order to moderate the distorting effects of tax collection on production and saving decisions, twenty-one countries have adopted value-added tax systems so as to tax consumption, and two more will do so between 1996 and 1997. However, VAT collection rates are far lower than their statutory rates, due to the exclusion of many final goods and services from the tax bases and problems with management and control, all of which still limits the neutrality of this tax (Figure 6). The extreme marginal rates applied in the past

to corporate profits have been reduced and only in three countries are they higher than the highest marginal rate in the United States (39.6%, see Figure 7). For reasons of equity, wider differential rates have been maintained on personal incomes, although they are still lower than those in effect in previous decades (Figure 8).

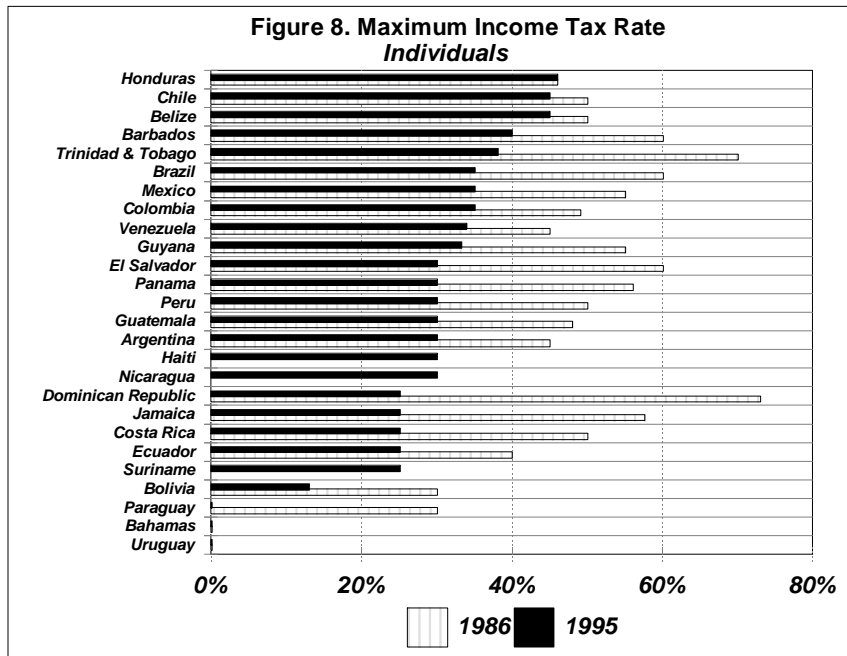
Greater neutrality and tax simplification have moderated the discrepancies of effective taxation among the various economic sectors, since burdens have been reduced for the most productive activities and may have risen for the less productive which used to enjoy exemptions and special treatment. Thus the distortions for capital allocation that used to interfere with investment decisions have been reduced. However, the same has not occurred on the side of labor, as we shall see.

### Financial Liberalization

The financial reforms adopted in the countries of the region since the mid-1980s have been focused on reducing or eliminating targeted credit programs, decontrolling interest rates, reducing legal reserve ratios, and establishing modern banking regulation systems. These reforms represent a noteworthy advance toward liberalizing the operation of the financial market and putting into place an adequate regulation system. The following



indicators sum up the state of financial liberalization policies (see Table I)



**Table 1. Financial Reforms**

Country	Initial Year of Reform	Were interest rates liberalized?		Did cash reserves diminish? (Very much is 20 points or more)	Were targeted credits eliminated (at least by half)?	Was capital market legisla-tion modern-ized?	Was banking legisla-tion modern-ized?
		Deposit rates	Lending rates				
Argentina	1992	---*	---**	Much	Yes	Yes	Yes
Bahamas	1994	---*	---	Some	Never	Yes	No †
Barbados	1995	---	Yes	No	Totally	No †	Yes
Belize	1995	Yes**	Yes	No	No	No	Yes
Bolivia	1990	Yes	Yes	Some	Yes	No	Yes
Brazil	1988	Yes*	Yes**	No	Yes	Yes	No
Chile	1989	---	---**	No	Were none	Yes	No †
Colombia	1990	Yes	---	Much	Yes	Yes	Yes
Costa Rica	1988	Yes	Yes**	No	Yes	No	Yes
Dom. Rep.	1991	Yes	Yes	Some	Yes	No	Yes
Ecuador	1992	Yes	Yes	Some	No	Yes	Yes
El Salvador	1990	Yes	Yes	Some	Yes	Yes	Yes
Guatemala	1991	Yes	Yes	Some	Yes	No	Yes
Guyana	1988	Yes*	Yes	Some	Yes	No	Yes
Haiti	1995	---	Yes	No	Never	No	No
Honduras	1991	---	Yes	No	Yes	No	Yes
Jamaica	1992	---**	---**	Some	Yes	Yes	No
Mexico	1989	---	Yes	Much	Yes	Yes	No
Nicaragua	1990	Yes*	Yes*	Much	Yes	Yes	Yes
Panama	--	---	---	No		No	No
Paraguay	1988	Yes	Yes	Some	No	Yes, but <sup>1/</sup>	No
Peru	1990	Yes	Yes	Much	Yes	Yes	Yes
Suriname	--	---***	---***	No		No	No
Trin & Tob	1990	---	---	No	Yes	Yes	Yes
Uruguay	1985	---	---	Much	Totally	No	Yes
Venezuela	1989	Yes	Yes	Much	Yes	No	No

Notes:

\* They were already liberalized. \*\* A few rates are controlled. \*\*\* Controls are widespread.

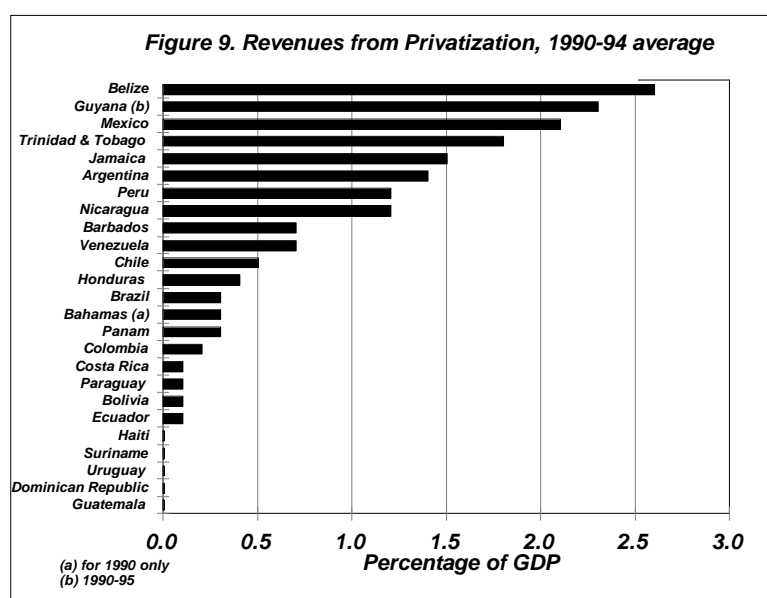
1. There is a law, but it regulates nothing, because there is no real capital market. No equity transactions were recorded, only money market instruments.

† Indicates that a modern capital market or a banking legislation (or a set of regulations) already regulated the market prior to the financial reform period.

- ! Eighteen countries have eliminated or substantially reduced targeted credit programs. Two countries have completely eliminated such programs and the rest have cut them by at least half.
- ! Fourteen countries have dismantled administrative controls on some or all deposit rates and seventeen countries have lifted all controls on interest rates on loans. Currently, in eighteen countries all interest rates on deposits and loans are governed by the market and only one country retains overall controls on interest rates.<sup>4</sup>
- ! Required reserve ratios have been lowered in sixteen countries, and in seven of them the reductions have been by 20 points or more. Consequently, fifteen countries have required reserve ratios on demand deposits no higher than 20%.
- ! The establishment of modern bank regulation and capital market systems has extended to most of the countries in this wave of financial reforms in the region. Currently fourteen countries have a regulation and supervision system that can be regarded as reasonable for the level of development of their financial activities.

Financial liberalization has facilitated the adjustment processes for firms, and to a lesser extent for families, by making the use of credit resources more available and allowing greater discretionary leeway over them as well as broadening the variety of financial services. However, the dismantling of targeted credit programs has reduced access to credit resources for small producers and companies, and in some countries, it has broken down the mortgage

loan systems that were essential for financing middle and lower class housing. Hence the reforms have not assured a balanced development of the different financial markets.



Source: IDB, Report on Economic and Social progress, Part Two, Chapter 5: based on statistics from the World Bank and other official sources.

<sup>4</sup> In Argentina and Chile mechanisms for restricting some lending rates apply to very small segments of the credit market.

## Privatization

Major progress has recently been made in the field of privatization, although it is quite uneven between countries. Indeed, as a region Latin America has led the world in privatization in the 1990s. The 669 sales made between 1990 and 1994 represent more than half the value of privatization transactions in developing countries. The amounts privatized in Mexico and Argentina have been the largest: US\$24 billion and US\$18 billion respectively, which represents 2% and 1.2% of the GDP during those years. In six more countries privatization efforts have been similar in terms of size of their economies, and a total of fourteen countries have carried out privatizations of more than 1% of their GDP in at least one year (Table 9).

Forty-three percent of privatizations in the region in terms of value have occurred in the area of utilities which were traditionally closed to private participation and where the potential for achieving gains of productivity and efficiency gains is greater. A further 23% has come from the sale of banks and similar institutions, thereby furthering tendencies toward financial reform.

One of the most favorable and tangible effects of privatization, has been increased foreign investment in the region. Foreign investment aimed at privatization has represented an average of 21% of direct foreign investment. Privatization has also led to other foreign investment aimed at capitalizing privatized companies or investing in complementary activities that privatization has made more attractive. It is estimated that for each dollar of direct foreign investment in privatization, 88 cents more has been received in foreign investment.<sup>5</sup>

In short, reform has been deep and rapid in the areas of trade, exchange, finance, tax, and privatization policy (although it is more concentrated in some countries in this last case). As Dani Rodrik observes, a number of countries in Latin America have adopted more trade and finance liberalization policies and carried out more privatization in a short time than the East Asian countries did over three decades.<sup>6</sup>

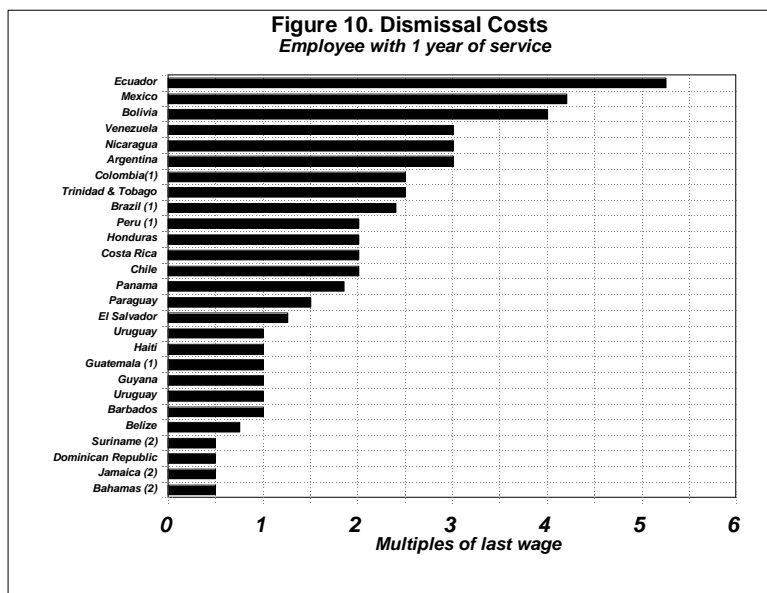
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<sup>5</sup> See Sader (1993).

<sup>6</sup> See Rodrik (1996).

## Labor Reforms

In contrast to the foregoing, reforms in the labor area have been few and lesser in scope. While 23 countries (out of a total of 26) have carried out profound trade reforms, 24 notably liberalized their financial sectors, and 14 carried out privatizations that in some year exceeded 1% of GDP, only five countries have made substantial labor reforms since the mid-1980s: Argentina (1991), Colombia (1990), Guatemala (1990), Panama (1995), and Peru (1991).



(1) The companies deposit an annual amount in an account in the employee's name.

(2) Dismissal compensation is part of the negotiation between the employee and employer. The law does not stipulate any fixed amount in this regard.

Source: Ministries of Labor of the region, legislation in force in 1995

Reforms in the area of labor have been focussed on moderating the costs of hiring and dismissing and on facilitating to hire workers temporarily. Given the lack of universal welfare systems in most countries in the region, the legislation that has traditionally governed labor activity was enacted with the intention of assuring labor stability and protecting workers from the risks inherent in unemployment, illness, and old age, and so forth. However, these objectives have not always been met, because these restrictions have led to excessive labor turnover, have encouraged informality and increased unemployment.<sup>7</sup>

In most countries of the region, the cost of dismissing a worker after a year of work is over a month's pay, and in six countries it is at least three months (Figure 10). With ten years seniority the costs of dismissal are even greater; at least six months pay in most countries, and over twelve months in eight countries (Figure 11). The five countries that carried out reforms changed the norms regulating dismissal costs. In Argentina an upper limit was set for compensation for dismissal and the prior notification period was lowered to a month, regardless of the

<sup>7</sup> See Schaffner (1996) on the effect of labor rigidity on turnover in the case of Colombia, and IDB (1996), Part Two, Chapter 6 on the relationship between payroll taxes and informal economic activity in thirteen countries in Latin America.

worker's seniority. In Colombia, Guatemala, and Peru, annual payments were established to replace compensation in the event that labor contracts were terminated, which was calculated on the basis of the number of years worked and the most recent nominal wage paid to the worker. In Colombia and Peru, the right to be rehired held by workers with a certain seniority when companies could not prove just cause for firing was abolished. The new norms have thus sought to reduce the uncertainty and the amount of dismissal costs.

The same can be said of restrictions on temporary hiring. In order to encourage stable employment, fourteen countries have traditionally placed restrictions on temporary hiring, severely limiting or completely prohibiting this type of labor relationship, thereby restricting the labor flexibility that certain types of companies may need in view of the unstable characteristics of their demand or their production processes. Only four countries (Argentina, Colombia, Ecuador, and Peru) have introduced partial correctives to this situation.

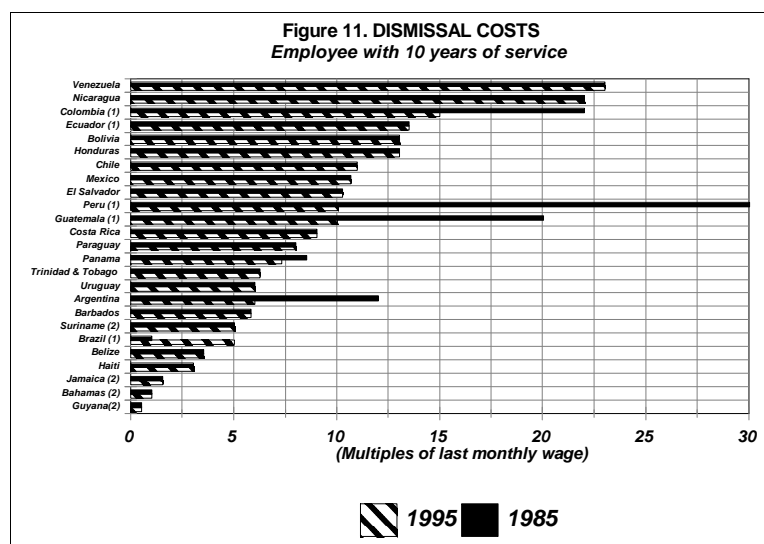
In most countries in the region, non-salary costs arising out of contributions charged to companies and workers for various social security, health, family compensation, and unemployment programs (besides other non-salary costs for contributions to education or training programs or payments for vacations, fringe benefits, bonuses, etc.) have been very high. In Argentina, Brazil, Colombia, and Uruguay, the costs of contributions to these programs is over 30% of direct salary cost, and in eight other countries it is between 15% and 30%. No country has introduced profound corrections into this situation recently.<sup>8</sup>

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<sup>8</sup> Uruguay has created partial exemptions from social security contributions for some activities.

## Pension Reforms

Most pension systems in the region were created as public pay-as-you-go benefit-defined systems which were initially sustainable because of the rapid growth of the work force in the formal sectors of the economy and the age structure of the population. With the passing of time, these advantages have disappeared, and the systems have been plagued with financial and operating deficiencies. On average, in the countries of the region, pension systems



(1) The companies deposit an annual amount in an account in the employee's name.

(2) Dismissal compensation is part of the negotiation between employer and employee. The law does not stipulate any specific figure in this regard.

Dismissal costs include the notice of dismissal.

SOURCE: Ministers of Labor of the region

cover only 38% of the economically active population and provide pensions to no more than 31% of those over 60. Most of them are dependent on tax revenues and do not have long term financial viability or adequate incentive mechanisms to assure efficient use of the funds received nor to induce workers to pay their contributions on time, since the benefits that they offer have little relationship to individual contributions.<sup>9</sup> In order to deal with this situation, Argentina (1991), Colombia (1993), Mexico (1997), Peru (1993), and Uruguay (1996) have adopted or are in the process of implementing recently approved pension reforms. Their common element is the creation of private funds based on a principle of individual capitalization, drawing inspiration from the profound reform in Chile in 1981. In order to respect already acquired pension obligations and to guarantee basic or minimum pensions, these countries have chosen different ways of relating the new capitalization systems to the former pay-as-you-go systems, ranging from competition in the cases of Peru and Colombia, complementarity between the two systems in the cases of Argentina and Uruguay, and the replacement of the pay-as-you-go system in the case of Mexico. All these reforms have also envisioned reducing the imbalances between benefits and contributions in the traditional system, whether by raising retirement ages, adjusting contribution rates, or placing greater restrictions

<sup>9</sup> An excellent overview of the situation and the challenges to pension systems around the world is World Bank (1993). For Latin America see IDB, (1996), Part Two, Chapter 7.

on access to pensions. In this fashion, the reforms have at least partially corrected the financial imbalances of the traditional systems, and by establishing new pension funds, they have opened a new channel for broadening real and financial saving.

### **An Index of Structural Policies**

Various studies have sought to analyze the effects of structural reforms on growth, investment, and other economic variables.<sup>10</sup> The main difficulty that they have encountered has been how to measure the magnitude of the reforms. This is because available economic statistics measure economic outcomes, such as growth, inflation, or foreign trade, and not the policies that have an impact on these results. In fact, the variables that are generally regarded as policy indicators, such as the fiscal deficit or the financial depth of the economy, are really outcome variables that are influenced not only by policy decisions but also by a variety of other domestic and foreign factors, such as the economic cycle, terms of trade, and foreign interest rates. The area where the greatest efforts have been made to directly measure policy variables has been that of import and export systems.<sup>11</sup> Paradoxically, as we will see, this is the area where the greatest difficulties in obtaining adequate series of the relevant policy variables are encountered.

The lack of precise information on the magnitude of reforms have prevented an assessment of the relative importance of the various reform areas, and of making distinctions among the effects of the structural reforms properly so-called and those flowing from macroeconomic stabilization. Because of these deficiencies, empirical studies are often not able to offer sufficiently precise recommendations about matters so controversial and crucial as the sequence and pace of reforms or on the complementarity between the distinct areas of reforms and between the latter and macroeconomic stability.

With a view to overcoming such deficiencies, in this study we calculate a structural policy index for each year since 1985 for most countries in Latin America. It reflects trends in the following reform areas: (i) trade

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<sup>10</sup> The most recent study for Latin America is Easterly, Loayza, and Montiel (1996). Other recent works on a world level are Sachs and Warner (1995) and Thomas and Wang (1995). Many studies have focused on how trade liberalization affects growth. See for example, Dollar (1992), Lee (1993), Edwards (1993), and Easterly et al. (1993). Edwards (1995) discusses different areas of reform in Latin America and summarizes the research evaluating their main effects.

<sup>11</sup> See for example, Dollar (1992), Lee (1993), Edwards (1993), Easterly et al. (1993), and Sachs and Warner (1995).

policy, (ii) tax policy, (iii) financial policy, (iv) privatization, and (v) labor legislation. The index seeks to reflect the degree of neutrality of economic policies in these five areas on a scale of from 0 to 1 for each policy variable (usually there is more than one policy variable in each of the areas) utilizing the worst and the best observations of this variable in the entire sample of countries and years.<sup>12</sup> The total structural policy index is the simple average of the indices of the five areas, which are in turn the simple average of the indices for the policy variables in question.

It should be noted that the index only seeks to measure the neutrality of policies under the assumption that the primary objective of the structural reforms in the economic domain has been to seek greater efficiency in the allocation of productive resources by eliminating or reducing the distortions caused by policies that obstruct the functioning of markets or that impose costs on transactions or productive activities. The index does not seek to measure other aspects of the quality of economic policies. For example, it does not consider that labor legislation may be intended to provide protection and stability, or that tax policies may pursue aims of redistribution. Only in the area of finance policy are aspects of supervision and regulation considered, because, as is generally acknowledged, such types of government intervention are required to avoid, or at least moderate, the inefficiencies that may occur as the result of an inadequately monitored financial system.

The policy variables that have been considered in each of the areas are the following (for greater detail see Appendix 1):

**Trade policy:** the two indicators used in this area are average tariffs (including surcharges) and tariff dispersion. As has been noted, this is a problematic area because there are no adequate measures on non-tariff trade restrictions.<sup>13</sup> There is information on exchange differentials which show the relationship between parallel or market exchange rates and the average official rate, and which could be used as an indicator of non-tariff and exchange restrictions. We have nonetheless preferred not to include this variable, since, as was already noted, it is

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<sup>12</sup> Similar methods for constructing indices (of policies or other variables) have been used recently, by Thomas and Wang (1995) and by Hall and Jones (1996) among others.

<sup>13</sup> In addition to some gaps in information (see Appendix).

an indicator of outcomes, not policies, and it is strongly connected to macroeconomic variations and to external shocks.<sup>14</sup>

**Tax policy:** This area combines the following policy indicators (i) maximum marginal corporate income tax rate, (ii) maximum marginal personal income tax rate, (iii) basic value-added tax rate, and for countries on which information is available, (iv) productivity of value added tax (defined as the relationship between the basic tax and amount collected expressed as a percentage of GDP). We have chosen the maximum rather than the average tax rates because it is the former that influence labor and investment decisions. We consider the VAT productivity rate because this indicator measures to what extent the effective indirect tax system deviates from the principle of neutrality between economic activities .

**Financial policy:** This area combines four indicators: (i) market-determined rates on deposits (on a discrete scale ranging from 0 to 2), (ii) market-determined interest rates on loans (idem), (iii) real reserve ratio level of bank deposits, and (iv) quality of banking and financing supervision (on a discrete and subjective scale of from 0 to 2).

**Privatization:** The only indicator used in this area is the privatization effort measured as the cumulative revenues from privatization (since 1988) as a proportion of average public investment between 1985 and 1987. We take cumulative privatization and not the flow, because we are interested in measuring the size of the field that has been opened to private initiative, just as, for example, in the tariff area we have taken tariff levels rather than changes in them. The ideal measure would be the percentage of physical assets of a country that are owned or operated by the private sector, but that information is not available. That is why we take privatizations as a ratio of public investment in previous years, because presumably this variable tells us how much capital stock the public sector held when the process began.

**Labor legislation:** in this area the flexibility of the legislation is considered under five aspects, each of which is rated with objective criteria on a discrete 0 to 2 scale: (i) hiring, (ii) costs of dismissal after one year of

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<sup>14</sup> A wider discussion of the relationships between exchange differentials and other macro variables in the context of economic growth functions is found in Easterly (1993) and Fischer (1991).

work, (iii) costs of dismissal after ten years of work, (iv) extra costs for overtime pay, and (v) social security contributions.

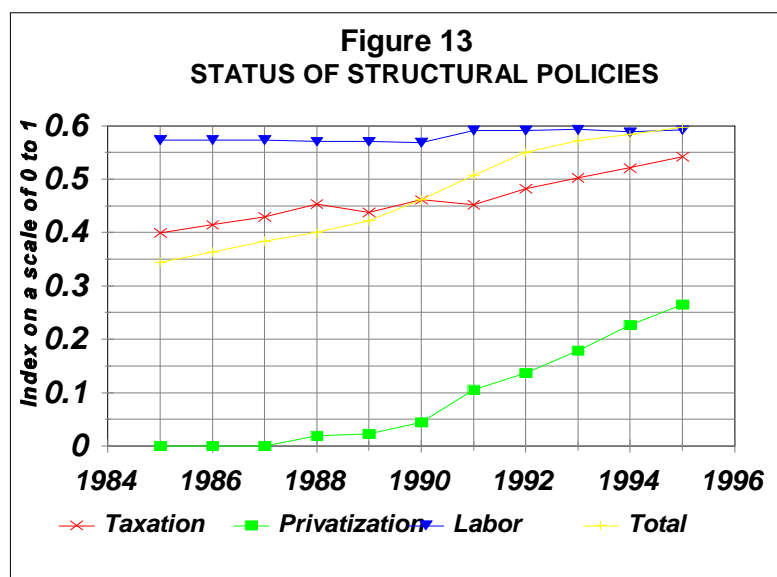
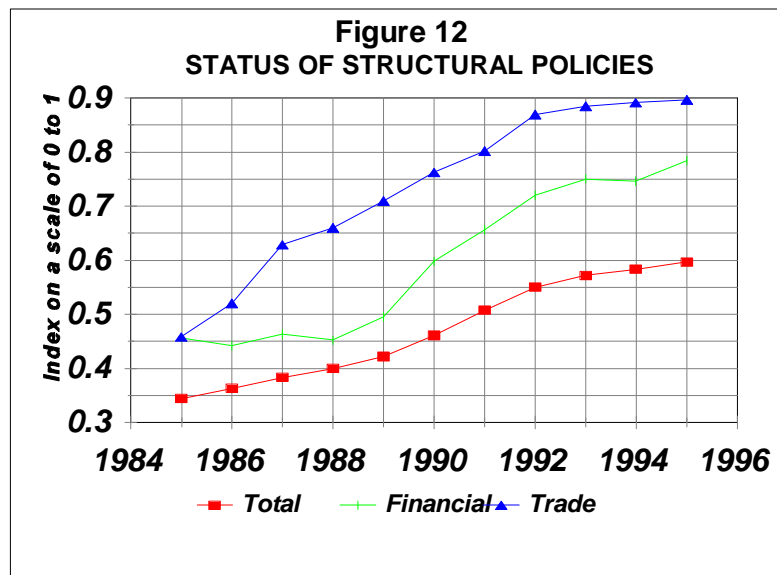
Figures 12 and 13 show the trends of the total index and by policy areas for Latin America (as averages of the indices of 19 countries). It should be borne in mind that the indices do not measure how many reforms have been carried but the level of the policies (from the efficiency standpoint) or, if one prefers, how many reforms are needed.

The total index indicates a steady improvement, although at a modest pace, given the 0 to 1 scale in which all the basic indicators used can move. It rises from an initial level of 0.34 in 1985 to 0.60 ten years later, which suggests that there is still relatively a great deal of room for improving the region's structural policies in terms of both policy areas and countries.

The most outstanding advances have been made in the areas of trade policy and financial reform. The trade policy index has gradually approached the value of 0.9, which suggests that tariff structures in the region are very uniform. Very marked progress has

been made in the financial area since 1990. Recent levels of close to 0.8 are the result of the complete extension of liberalization policies, while advances in the area of supervision are more uneven.

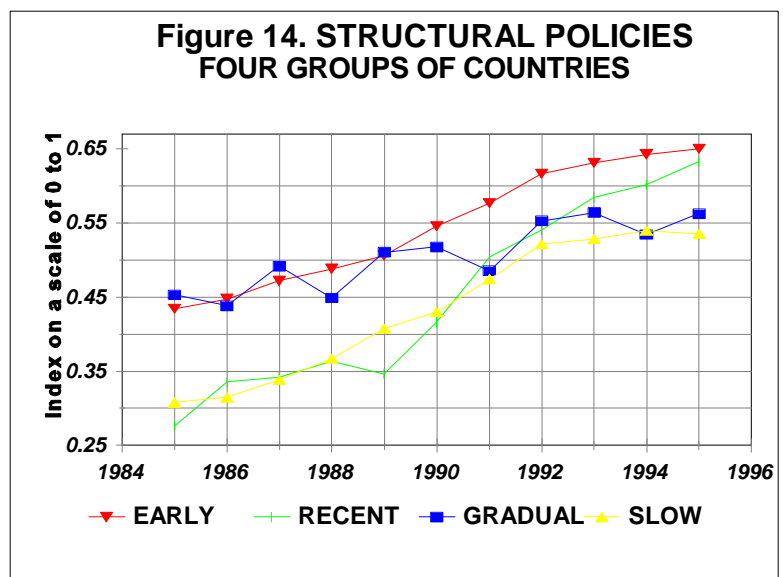
Progress is much more limited in other areas of structural policy. In the



realm of taxes, the index has only risen from 0.40 to 0.54, despite many tax reforms in the region. Due to the heterogeneity of some aspects of the countries' tax structures<sup>15</sup> and the different needs for tax resources in the various countries for historic reasons or because of the existence of other sources of fiscal resources, it is difficult to achieve in this index a progress comparable to that made in trade and financial policies. The main room for future progress lies in making collection more effective and in broadening the bases of some taxes, which may enable some countries to also reduce their current tax rates.

Given the availability of information, the privatization index begins to move only in 1988. It reaches an average level of only 0.26 by 1995, reflecting the fact that efforts in this area have been very concentrated: in 1995 only the indices for Argentina, Bolivia and Mexico are over 0.7, while nine countries have indices of under 0.1.

Finally, the index on the efficiency of labor legislation remains practically unchanged. This adequately reflects the fact that not only have there been very few labor reforms, but that generally they have been quite marginal. Because there is large spread between the different areas of labor legislation between countries, and indeed between the degree of flexibility in the various areas of labor legislation in each country, the index takes a value close to 0.5, with a slight improvement since 1990.



In 1995 all countries in the region without exception display structural policies indices that are higher than those of ten years previously. However, the time and pace of the reforms has varied from country to country. Table 2 classifies the countries into four groups, according to their initial and final situation in relation to the regional average. The early and sustained reformers are those with indices above the average at the beginning and at the end of the ten-year period: Argentina, Chile, and Jamaica. The gradual reformers—Colombia and

<sup>15</sup> For example, with regard to the maximum personal income tax, the highest level is 73% (Dominican Republic in the 1980s) and the lowest is zero (Paraguay and Uruguay currently) while the mode is 30%.

Uruguay—also initially had above average indices but have registered a slower reform process than the earlier reformers. The countries in these two groups had begun the reform process prior to the debt crisis of the 1980s,<sup>16</sup> and they continued with it after 1985. By contrast, the group of recent reformers had carried out few reforms until the mid-1980s, but then went on to profoundly transform their structural policies in the last ten years. There are six countries in this group, including Bolivia, Nicaragua, and Peru, which were plagued by distortions caused by very inefficient policies at the outset of the period. Finally there are the slow reformers, whose main feature is that they display lower than average indices at both the beginning and the end. This is the most heterogeneous of the four groups, since some of the countries included here have carried out major reforms. This category includes seven countries. Figure 14 presents the trends of average indices for each of these groups.

**Table 2.**  
**Timing and Speed of Reforms**  
(Countries classified according to their  
policy efficiency index in 1985 and 1995)

		Index Level in 1995	
		Above average	Below average
Index Level in 1985	Above average	<b>Early reformers:</b> Argentina Chile Jamaica	<b>Gradual reformers:</b> Colombia Uruguay
	Below average	<b>Recent reformers:</b> Bolivia El Salvador Nicaragua Paraguay Peru Dominican Republic	<b>Slow reformers:</b> Brasil Costa Rica Ecuador Guatemala Honduras Mexico Venezuela

## Conclusion

The aim of this document has been to synthesize progress in the main areas of reform during the past decade and to propose an index that quantifies the state of structural policies from the standpoint of efficiency. According to this indicator, the reforms have made it possible to appreciably raise the quality of policies, but there are still

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<sup>16</sup> On this point see Calvo (1986), Corbo, de Melo, and Tybout (1986), Edwards (1985), Edwards (1995), and Foxley (1983).

significant possibilities for further reform, especially in the domains of tax, labor, and privatization policies.

Inasmuch as the depth and pace of reforms has varied not only between areas of structural policy, but also between countries, this new information can serve as a basis for discerning the effects that the various reforms have had from country to country.

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## APPENDIX I

### SOURCES OF THE POLICY INDEX

The *structural policy efficiency index* is a simple average of the policy indices of the following five areas: (i) trade policy, (ii) tax policy, (iii) finance policy, (iv) privatization, and (v) labor legislation. One or more basic indices may be involved in each of these areas, which are then averaged. Each of the basic indices may move on a scale of 0 to 1, where 0 corresponds to the worst figure registered for any year and any country within the period and countries considered and 1 is the best. The basic indices that make up each area have been numbered in the text. The sources of information used were as follows:

**Trade.** Information on average tariffs (including surcharges) and their dispersion for eleven countries (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela) comes from research now being conducted in the OAS under the direction of Juan José Echavarría covering the years, 1986, 1988, 1990, 1992, 1994, and 1995. The years between were interpolated. For the eight remaining countries (Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Dominican Republic and Trinidad and Tobago) the information used came from the IDB, Department of Integration and Regional Programs, obtained from national sources and various studies (see IDB, 1996, Part Two Chapter 2). In some of these countries in which recent information covered only the year of greatest trade liberalization identified by this source and 1995, a non-linear interpolation between both points was used, assuming that each year tariff reduction was two-thirds of that achieved until the following observation. The tariff dispersion for these eight countries was calculated on the basis of a non-linear estimate using the data from the eleven countries with this information.

**Taxes.** For the 1990-1995 period the basic source was the ICTA (Inter-American Centre for Tax Administrators), *Estructura y Administración de los Impuestos sobre Rentas y Ventas en Países Miembros del CIAT* and its accompanying CD-rom. For previous years, Coopers and Lybrand, *International Tax Summaries*, various issues; and Price Waterhouse, *Individual Taxes: A World Wide Summary*, and *Corporate Taxes: A World Wide Summary*, various issues. The VAT productivity indicator was calculated on the basis of *Government Finance Statistics Yearbook*, International Monetary Fund, and “Recent Economic Developments,” published by this same agency.

**Finance.** Indicators in this area come from IDB, *Informe de Progreso Económico y Social*, 1996, Part Two, Chapter 4, and Glenn Westley, “Financial Reforms in Latin America: Where Have We Been, Where Are We Going”“, IDB, OCE, 1995.

**Privatization.** Privatization indices in dollars come from the data base of the Department of International Economics of the World Bank. The cumulative value of privatizations as a percentage of GDP was divided by the average public investment rate as a percentage of GDP between 1985 and 1987, calculated from *Government Finance Statistics Yearbook*, International Monetary Fund.

**Labor.** The indicators used to measure labor legislation flexibility come from IDB, *Economic and Social Progress Report 1996*, Part Two, Chapter 6, compiled entirely on the basis of information provided by national officials, except for the social security contributions indicator, which comes from several issues of *Social Security Programs Throughout the World*, U.S. Department of Health and Human Services.