Patterns of Taxation in Latin America and East Asia*

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Summary: 1. Introduction; 2. Tax structures in Latin America and East Asia; 3. Investment and taxation; 4. Taxation, poverty, and income distribution; 5. Concluding remarks.
Key words: taxation; Latin America; East Asia; tax structures; investment incentives; income distribution.

This paper investigates the patterns of taxation in Latin America and East Asia from a comparative perspective, in order to explain the different growth patterns i those regions. It surveys taxation in both regions, emphasizing the linkages among tax structures, efficiency, and equity issues related to tax policies.

Este artigo realiza uma investigação comparativa dos padrões de taxação na América Latina e no Leste Asiático, com o objetivo de buscar as razões das disparidades no crescimento dessas regiões. O artigo destaca as ligações entre questões de estruturas de impostos, eficiência e eqüidade relacionadas a políticas tarifárias.

1. Introduction

In recent years, a recurrent question in economic development is why Latin America, formerly an extremely dynamic region, lagged behind the so-called Asian tigers in terms of economic performance. Whereas the East Asian countries presented high growth rates, Latin America could not maintain its previous pace and, during the 80's, faced one of the most severe crisis of its contemporaneous history. Different answers were suggested to explain this divergent growth pattern.[1] Among them, the role of the public sector was naturally mentioned. Early explanations, based on the assumption that Latin America was characterized by a much higher degree of government intervention, are by now largely dismissed. There is now an ample consensus on the fact that, in both

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[1] Chin-Yuan Lin, 1985; Gereffi & Wyman, 1990; Naya et alii, 1989, and Mahon, 1992, among others.

regions, the State was the leading agent in the development process. In Latin America, as well as in East Asia, the action of the government was crucial to guarantee economic growth through the production of the public goods indispensable to the development of the private sector. With respect to revenues, in both regions, the government undertook tax reforms in order to ensure the resources required to finance public spending and increase the level of efficiency in the economy.

Nevertheless, the similarities between those regions are limited to the general role of the State. There are clear indications that in Latin America and East Asia the public sector presents distinct characteristics that deserve to be carefully examined. According to Tanzi and Shome (1992), in East Asia "the governments role was limited to its traditional functions, namely, the provision of social and economic infrastructure, the maintenance of a stable macroeconomic framework and the promotion of growth". In Latin America, the action of the State was clearly extended beyond those limits. The typical Latin American State, pressed by a skewed income distribution and motivated by a strong populist tradition, has systematically adopted economic policies that emphasize economic growth and distributive issues and minimize the risks of inflationary pressures.[2]

One of the aspects in which governments' strategies differ between East Asia and Latin America has been tax policies. This is not a minor difference. Indeed, tax policies are supposed to influence the overall economic performance.[3] Such an influence exists at different levels: in the short run, through its impact on public finance, and in the long run, through the effect of taxation on savings and investment, important determinants of the rate of economic growth. Hence, appropriate tax policies are important, particularly when macroeconomic stability is achieved. In such a context, distortions in the tax systems may lead to substantial losses in terms of economic efficiency.[4]

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[2] *Various studies have shown that populist policies have been extremely inefficient to reduce the social inequalities that characterize Latin America. An excellent analysis of economic populism in Latin America can be found in Dornbusch & Edwards (1991). See also Alesina & Rodrik (1994).*

[3] *There is an extensive literature on the role of taxation in development. See Burgess & Stern, 1993; Asher, 1989; Shome, 1986; Bird, 1992, among others.*

[4] *Of course, we do not want to imply that in periods of chronic macroeconomic instability one should use inadequate tax policies. However, in presence of great macroecomic desequilibria, it is probably better to cope with a distorted tax system that will guarantee a balanced budget, than accept higher levels of fiscal deficits.*

This paper investigates the patterns of taxation in Latin America and East Asia from a comparative perspective. It will elaborate a survey of taxation in the two regions. Emphasis will be given to the linkages among tax structure, efficiency, and equity issues related to tax policies. The influence of taxation on investment will also be analyzed. The paper is organized as follows. Section 2 presents and discusses tax structures in Latin America and East Asia. Section 3 discusses the effects of tax issues on investment. Section 4 states the relation between taxation and income distribution. Finally, section 5 draws some lessons and conclusions from the experience of these countries.

2. Tax Structures in Latin America and East Asia

This section compares the structure of taxation in Latin America and in East Asia. Tables 1 and 2 summarize the main characteristics of the tax system in those countries and, henceforth, will be used as reference.

2.1 Fiscal and tax burden in Latin America and East Asia

Table 1 shows the tax burden in Latin America and East Asia for the periods 1975-80, 1981-85, and 1986-92. Notice that the data presented covers only central government revenues. Considering the information provided by this table, we arrive to some conclusions.

First, there is a wide variation in the tax ratio (total revenue/GDP) among the countries analyzed, in both regions. Thus, in the period 1986-92, this ratio for Chile, the country with the highest rate in Latin America, was almost three times that of Peru, the country with the lowest ratio of the region. In East Asia, Singapore had a ratio that was more than double of the Philippines.

Second, trends in the level of this ratio have also varied a lot among countries in Latin America. Chile, Peru and Venezuela presented a clear decline in total revenue to GDP ratio during the 80s. Following an opposite tendency, Colombia, Costa Rica, Ecuador and Uruguay definitely increased the tax ratio. In East Asia we do not observe such large variations, this ratio being slightly increasing or rather stable across countries. The exception is the Philippines, a country where we observe a sharp decline of the tax/GDP ratio during the period 1981-85. This was due to a generous policy of fiscal incentives that included a myriad of exemptions not only concerning income

Table 1
Tax structure in percent of GDP in selected countries of Latin America and East Asia

Country	Sample size	Total revenue	Tax revenue	Other revenue	Tax income, profits, and capital gains			Social security taxes	Payroll taxes	Domestic taxes on goods and services			International trade taxes			Property taxes
					Total	Individual	Corporate			Total	General sales turnover or VAT	Excises	Total	Import duties	Export duties	
Latin America																
Argentina	1975-80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1981-85	11.4	10.0	1.4	0.5	..	..	2.4	0.0	4.4	1.6	2.7	1.5	0.5	0.9	0.4
	1986-92	12.1	10.9	1.1	0.8	0.1	0.0	3.7	0.0	3.5	1.4	2.0	1.7	0.7	0.8	0.7
Bolivia	1975-80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1981-85	5.7	5.2	0.5	0.2	0.1	0.1	0.9	0.0	2.7	0.5	2.4	1.3	0.8	0.4	0.0
	1986-92	11.6	7.6	4.0	0.5	0.1	0.2	1.0	0.0	3.9	1.9	1.9	1.2	1.0	0.1	0.6
Brazil	1975-80	14.3	14.3	3.4	2.6	..	0.8	7.1	0.4	4.5	0.3	4.0	1.0	1.0	0.0	0.0
	1981-85	25.7	17.9	7.7	4.0	0.2	1.3	6.2	1.2	5.8	0.4	3.7	0.8	0.4	0.0	0.0
	1986-92	25.9	16.0	9.8	4.2	0.2	1.2	5.9	1.0	4.4	1.0	2.5	0.5	0.5	0.1	0.0
Chile	1975-80	24.0	24.0	7.6	4.5	2.7	1.6	4.1	0.0	11.2	8.0	2.5	2.1	2.1	0.0	0.7
	1981-85	29.4	23.0	6.3	4.3	2.1	2.2	2.7	0.0	11.8	9.4	2.4	2.1	2.0	0.0	0.6
	1986-92	26.1	20.5	5.6	4.1	..	..	1.9	0.0	10.9	8.4	2.4	2.6	..	..	0.1
Colombia	1975-80	11.7	10.7	1.0	3.5	1.6	1.9	1.5	0.4	2.6	1.8	0.7	2.4	1.4	0.0	0.0
	1981-85	11.5	9.5	1.9	2.7	1.5	1.2	1.1	0.6	3.2	2.4	0.8	1.7	1.5	0.2	0.0
	1986-92	12.8	11.4	1.3	3.4	1.6	1.7	1.4	0.5	3.5	2.8	0.7	2.4	2.2	0.2	0.0
Costa Rica	1975-80	16.4	16.4	1.4	2.7	2.7	0.0	4.2	0.0	5.4	1.6	3.7	3.7	2.0	1.7	0.1
	1981-85	20.0	18.6	1.4	3.0	2.7	0.2	5.0	0.0	5.8	2.6	3.1	4.8	1.8	2.5	0.1
	1986-92	23.8	20.4	3.4	2.3	1.8	0.4	6.6	0.0	5.7	2.7	2.6	6.1	4.1	1.9	0.1
Ecuador	1975-80	10.2	10.2	0.6	3.3	0.0	2.0	..	0.0	2.0	1.3	0.7	4.4	3.4	0.8	n.a.
	1981-85	12.5	12.2	0.3	6.9	0.0	5.6	..	0.0	2.2	1.5	0.7	2.8	2.3	0.3	n.a.
	1986-92	14.6	14.3	0.3	7.7	0.0	6.3	..	0.0	3.4	2.7	0.6	2.6	2.4	0.0	n.a.
Mexico	1975-80	13.5	12.7	0.8	5.3	2.4	2.8	2.3	0.1	4.9	2.3	2.0	1.9	0.9	1.1	0.0
	1981-85	16.2	14.6	1.5	4.4	2.1	2.3	2.1	0.1	8.6	2.8	1.9	2.3	0.7	1.7	0.0
	1986-92	16.6	14.4	2.2	4.8	2.2	2.5	2.0	0.1	9.6	3.2	2.3	0.8	0.8	0.0	0.0
Paraguay	1975-80	11.6	10.5	1.1	1.5	0.0	1.2	1.4	0.1	2.3	0.6	1.5	2.9	2.0	0.1	0.8
	1981-85	10.3	8.7	1.6	1.4	0.0	1.4	1.4	0.1	2.2	0.5	1.4	1.5	1.1	0.0	0.9
	1986-92	10.6	8.7	2.0	1.2	0.0	1.2	0.8	0.1	2.5	0.8	1.6	1.6	1.2	0.0	1.0
Peru	1975-80	15.7	14.1	1.5	2.9	0.6	2.2	..	0.5	6.3	4.5	1.7	4.0	2.4	1.5	0.7
	1981-85	14.0	12.3	1.7	1.7	0.3	1.9	..	0.6	6.7	3.6	3.0	3.2	2.7	0.5	0.5
	1986-92	9.6	8.8	0.8	1.5	0.2	0.7	..	0.0	5.1	1.8	3.3	1.4	1.4	0.1	0.5

Table 1 (continuation)
Tax structure in percent of GDP in selected countries of Latin America and East Asia

Country	Sample size	Total revenue	Tax revenue	Other revenue	Tax income, Profits, and capital gains			Social security taxes	Payroll taxes	Domestic taxes on goods and services			International trade taxes			Property taxes
					Total	Individual	Corporate			Total	General sales turnover or VAT	Excises	Total	Import duties	Export duties	
East Asia																
Indonesia	1975-80	20.1	18.7	1.4	14.0	0.5	12.6	0.0	0.0	2.4	1.4	0.9	2.0	1.3	0.7	0.3
	1981-85	21.2	18.5	2.7	15.1	0.5	13.9	0.0	0.0	2.3	1.3	1.0	0.9	0.7	0.1	0.2
	1986-92	19.0	16.2	2.8	10.1	0.8	9.1	0.0	0.0	4.4	3.3	1.0	0.1	0.9	0.2	0.3
Korea	1975-80	16.7	15.0	1.8	4.1	2.1	1.8	0.2	0.0	7.1	2.8	3.0	2.6	2.6	0.0	0.2
	1981-85	17.8	15.5	2.3	4.2	2.2	2.0	0.2	0.0	7.9	3.8	2.4	2.6	2.6	0.0	0.2
	1986-92	17.8	15.7	2.1	5.5	3.0	2.4	0.7	0.0	6.4	3.8	2.0	2.2	2.2	0.0	0.3
Malaysia	1975-80	23.5	21.1	2.4	8.5	..	6.1	0.1	0.0	4.7	1.2	2.1	7.5	3.5	3.9	0.1
	1981-85	27.3	22.2	5.1	10.3	2.3	8.0	0.1	0.0	4.7	1.5	1.8	6.5	3.6	2.9	0.1
	1986-92	27.1	19.2	8.0	8.7	2.2	6.5	0.2	0.0	5.0	1.7	1.9	4.6	2.8	1.8	0.1
Philippines	1975-80	13.6	11.8	1.8	2.9	1.5	1.4	0.0	0.0	4.8	1.9	2.4	3.8	3.3	0.5	0.1
	1981-85	11.9	10.6	1.3	2.6	1.1	1.4	0.0	0.0	4.6	1.3	2.2	3.0	2.8	0.2	0.1
	1986-92	15.7	13.2	2.5	4.1	1.3	1.3	0.0	0.0	4.8	1.4	2.5	3.8	3.8	0.0	0.1
Singapore	1975-80	24.9	16.8	8.1	7.9	..	..	0.0	0.4	3.7	0.0	1.6	1.9	1.9	0.0	2.5
	1981-85	31.9	18.5	13.4	9.1	..	..	0.0	0.5	3.9	0.0	1.5	1.3	1.3	0.0	2.9
	1986-92	33.0	15.8	17.2	6.5	..	..	0.0	0.2	5.0	0.0	1.1	0.7	0.7	0.0	1.8
Thailand	1975-80	13.0	11.8	1.2	2.2	1.0	1.3	0.0	0.0	6.0	2.6	2.4	3.4	2.8	0.5	0.2
	1981-85	15.4	13.9	1.5	3.1	1.5	1.5	0.0	0.0	7.2	2.8	3.7	3.3	2.9	0.4	0.2
	1986-92	17.1	15.6	1.5	3.6	1.7	1.9	0.0	0.0	7.9	3.2	4.1	3.6	3.5	0.1	0.4
OECD																
United States	1975-80	18.9	17.5	1.4	10.3	8.2	2.6	5.3	0.0	0.9	0.0	0.7	0.3	0.3	0.0	0.3
	1981-85	20.0	18.0	2.0	10.3	8.7	1.5	6.2	0.0	1.1	0.0	1.0	0.3	0.3	0.0	0.2
	1986-92	19.7	18.0	1.6	10.1	8.3	1.8	6.7	0.0	0.7	0.0	0.6	0.3	0.3	0.0	0.2
Japan	1975-80	10.5	10.1	0.4	7.3	3.9	3.3	0.0	0.0	2.4	0.0	1.9	0.3	0.3	0.0	0.3
	1981-85	12.3	11.6	0.7	8.3	4.7	3.5	0.0	0.0	2.4	0.0	1.9	0.2	0.2	0.0	0.4
	1986-92	13.7	12.9	0.8	9.3	4.9	4.4	0.0	0.0	2.0	0.0	1.8	0.2	0.2	0.0	0.9

Sources: IMF, *Government Finance Statistics* and *International Financial Statistics.*

taxes but domestic sales taxes and tariffs as well. In the subsequent period (1986-92), as a result of tax reforms, this situation changed and the ratio was recovered.

Regarding tax revenues, in most countries the evolution of this category follows very closely the tendency of total revenues. The notable exception is Singapore where, recently, there has been a clear decline of tax revenues while total revenues present a steady growth. As for nontax revenues, there is also a large variety of patterns across countries and regions. Singapore's highest ranking for total revenue to GDP ratio is due to the unusual importance of nontax revenue. So, in the period 1986-92, the share of nontax revenues is as high as 17%. Since 1968, continuous budget surpluses resulted in accumulated balances which provided large investment incomes (Asher, 1989). Malaysia presents the next highest nontax revenue ratio due to the contribution of its oil sector. Other oil producers such as Venezuela and Ecuador also collect a significant share of revenues from nontax sources. Finally, in Brazil the sharp increase in this category is due to inflation receipts whose magnitude is linked to the inflation rate.[5]

2.2 Income taxes

In spite of the fact that direct taxes are considered a more modern form of taxation, in poor countries they represent only a very small share of government revenues. This result could be explained basically by tax evasion, generous exemptions and administration problems very common in the developing world. This is rather disappointing, as those taxes are traditionally considered an important instrument for income redistribution. In particular, individual income taxes are thought to be a major tool for correcting income disparities.

Furthermore, in developing countries, income tax is often a tax on employees, both of the public sector and large enterprises. This virtually eliminates its role on correcting income disparities. Here, the important question is to what extent those patterns apply to Latin America and East Asia. Do they follow the same tendency, or, if they deviate from this rule, which factors are responsible for such behavior? In East Asia, a historically more egalitarian

[5] *See Afonso (1994). With the reduction of inflation since the introduction of the Real Plan those revenues are expected to be significantly reduced.*

income distribution could have contributed to a greater efficiency of direct taxes? Or, as it seems to occur in Latin America, this form of taxation fits in the model established by Tanzi?[6]

Table 2 helps to answer these questions. First, let us examine the revenue share of income tax across regions. In Latin America, this category dominates the revenue structure of Ecuador, Mexico and Venezuela. In East Asia, income taxes are a very important source of revenues to Indonesia and, to a lesser extent, to Malaysia and Singapore. Except for Singapore, in all countries cited above, this dominance is due to the importance of the corporate petroleum income tax. Here, we find a common pattern between Latin America and East Asia: the importance of the corporate income tax for oil-producing countries. The sharp decrease of the share of the corporate income tax for Indonesia and Venezuela during the two last periods most probably reflects the decline of oil prices on international markets. For Indonesia, the successful tax reform of 1983-86 also helps to explain this result. Regarding Singapore, the reason is quite different as this country approaches the pattern of more developed countries. High per capita income, rapid growth, a high degree of urbanization and a relatively efficient tax administration explain the importance of this type of tax for revenue collections.

Let us now turn to the examination of the personal income tax systems used in the two regions. Table 1 helps to give useful insights into the importance of this tax. In a clear contrast with the pattern observed in industrial countries, in both regions personal income taxes account only for a small fraction of GDP. Here, the highest shares of this tax in GDP do not exceed 3%. Singapore and Costa Rica present the highest rates, while in the OCDE countries this share is around 8%. Yet, in East Asia the importance of the personal income tax is increasing, while in Latin America it tends to be stable or decreasing.

Concerning the rate structure of personal income taxes, rates are lower in Latin America than in East Asia. In this region, personal income is consistently more taxed and approaches the pattern of more developed countries. For instance, before the 1989 reform, in Korea the top marginal rate was as high as 70% — one of the highest in the world. Even by now, Korean rates are

[6] *Tanzi (1987a) showed that fiscal revenue coming from these taxes is systematically higher in the rich countries than in the poor ones.*

Table 2

Tax structure in percent of total tax revenue in selected countries of Latin America and East Asia

Country	Sample size	Total revenue	Tax revenue	Tax income, profits, and capital gains			Social security taxes	Payroll taxes	Domestic taxes on goods and services			International trade taxes			Property taxes
				Total	Individual	Corporate			Total	General sales turnover or VAT	Excises	Total	Import duties	Export duties	
Latin America															
Argentina	1975-80	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1981-85	115.3	100.0	4.9	..	..	23.1	0.0	45.1	16.4	27.7	15.0	5.5	8.5	4.3
	1986-92	110.4	100.0	6.7	0.7	0.1	35.2	0.0	30.3	11.7	17.2	16.4	6.4	7.9	6.6
Bolivia	1975-80	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1981-85	111.7	100.0	2.8	1.2	1.6	21.8	0.0	40.2	6.2	36.5	27.6	15.3	5.2	0.6
	1986-92	152.9	100.0	6.7	0.8	2.7	12.7	0.0	51.5	27.6	23.1	14.6	13.1	1.2	8.7
Brazil	1975-80	121.4	100.0	14.7	..	4.3	54.1	2.4	30.2	1.7	27.1	5.9	5.9	0.0	0.0
	1981-85	144.1	100.0	22.5	1.1	7.5	34.6	6.5	32.2	2.2	20.2	4.3	2.3	2.0	0.0
	1986-92	161.1	100.0	26.4	1.5	7.5	36.5	6.2	27.4	6.3	15.5	3.4	2.8	0.6	0.1
Chile	1975-80	132.0	100.0	18.8	11.4	6.3	17.2	0.0	46.8	33.5	10.6	8.7	8.7	0.0	3.0
	1981-85	127.7	100.0	18.5	9.0	9.4	11.5	0.0	51.5	40.9	10.4	9.3	8.7	0.0	2.5
	1986-92	127.2	100.0	20.0	..	..	9.1	0.0	53.2	41.3	11.8	12.7	..	..	0.3
Colombia	1975-80	109.8	100.0	32.5	14.6	17.8	13.7	3.5	23.9	17.2	6.4	22.9	13.2	9.6	0.5
	1981-85	120.6	100.0	28.4	16.2	12.3	11.8	5.8	33.9	24.7	8.7	18.0	15.3	2.5	0.4
	1986-92	111.5	100.0	29.6	14.3	15.3	12.3	4.7	30.8	24.5	6.0	21.0	19.1	1.6	0.2
Costa Rica	1975-80	108.6	100.0	16.8	16.7	0.1	25.5	0.0	33.1	9.9	22.4	22.6	12.3	10.9	0.8
	1981-85	107.4	100.0	16.0	14.8	0.9	26.6	0.0	30.8	13.7	16.7	26.0	9.9	13.9	0.5
	1986-92	116.9	100.0	11.2	8.9	1.8	32.4	0.0	28.1	13.6	13.0	29.8	20.1	9.2	0.6
Ecuador	1975-80	106.2	100.0	31.7	0.0	19.3	..	0.0	20.0	13.0	6.5	43.9	34.0	8.2	1.6
	1981-85	102.7	100.0	55.9	0.0	44.6	..	0.0	18.6	12.4	6.0	23.2	19.3	2.3	1.7
	1986-92	102.3	100.0	53.6	0.0	43.8	..	0.0	24.1	19.2	4.3	18.4	17.1	0.0	1.6
Mexico	1975-80	106.1	100.0	41.3	19.0	21.8	18.1	1.2	39.3	18.1	16.1	14.7	6.8	7.9	0.1
	1981-85	110.4	100.0	30.5	14.2	15.8	14.2	0.8	58.0	19.2	12.8	16.5	4.6	11.8	0.1
	1986-92	114.8	100.0	33.3	14.7	17.1	13.7	0.8	66.4	22.0	15.6	5.4	5.3	0.1	0.0
Paraguay	1975-80	111.0	100.0	13.9	0.3	11.6	13.8	1.0	22.3	5.5	14.7	27.9	19.3	1.1	7.2
	1981-85	119.1	100.0	16.1	0.0	15.6	15.6	1.1	25.5	6.1	16.5	16.6	12.6	0.4	10.7
	1986-92	122.3	100.0	14.3	0.0	14.3	9.1	1.2	28.5	9.1	18.3	18.8	17.7	0.0	11.1
Peru	1975-80	110.8	100.0	20.5	4.0	15.4	..	3.6	44.9	31.7	12.4	28.1	17.0	10.7	4.7
	1981-85	113.5	100.0	13.8	2.2	14.5	..	5.1	54.9	29.2	24.5	26.1	22.1	4.0	3.8
	1986-92	109.3	100.0	16.6	2.0	8.1	..	0.0	58.8	21.1	37.0	16.3	15.6	0.7	5.6

Table 2 (continuation)
Tax structure in percent of total tax revenue in selected countries of Latin America and East Asia

Country	Sample size	Total revenue	Tax revenue	Tax income, profits, and capital gains			Social security taxes	Payroll taxes	Domestic taxes on goods and services			International trade taxes			Property taxes
				Total	Individual	Corporate			Total	General sales turnover or VAT	Excises	Total	Import duties	Export duties	
Uruguay	1975-80	105.0	100.0	8.7	2.3	6.0	29.3	0.1	44.6	23.0	18.0	10.8	10.6	0.2	4.1
	1981-85	108.2	100.0	7.7	1.7	5.8	27.1	0.4	46.3	26.8	18.6	12.7	10.2	1.7	4.4
	1986-92	105.9	100.0	7.8	2.5	4.6	29.2	0.6	42.9	27.6	14.6	11.2	8.7	0.5	5.0
Venezuela	1975-80	127.5	100.0	77.2	3.3	73.2	5.3	1.2	5.8	0.0	4.2	9.0	8.4	0.0	1.0
	1981-85	117.3	100.0	73.2	4.3	66.6	4.5	1.0	5.4	0.0	5.1	14.9	6.5	0.0	0.8
	1986-92	127.1	100.0	70.7	..	59.2	5.6	0.2	7.4	0.0	7.3	14.2	11.6	0.0	0.8
East Asia															
Indonesia	1975-80	107.7	100.0	74.6	2.7	66.8	0.0	0.0	12.9	7.7	5.1	10.6	7.1	3.5	1.5
	1981-85	114.5	100.0	81.4	2.8	75.2	0.0	0.0	12.3	7.1	5.3	4.6	4.0	0.7	1.1
	1986-92	118.2	100.0	62.3	5.1	55.9	0.0	0.0	27.6	20.5	6.0	7.2	5.8	1.3	1.9
Korea	1975-80	111.8	100.0	27.1	14.1	12.2	1.1	0.0	49.3	18.9	20.1	17.6	17.6	0.0	1.5
	1981-85	115.1	100.0	26.9	14.2	12.7	1.4	0.0	50.9	24.5	15.4	16.5	16.5	0.0	1.0
	1986-92	113.6	100.0	34.8	19.2	15.4	4.2	0.0	40.7	23.9	12.5	13.8	13.8	0.0	1.8
Malaysia	1975-80	111.3	100.0	40.0	..	28.9	0.5	0.0	22.4	5.7	9.8	35.4	16.8	18.5	0.6
	1981-85	122.8	100.0	46.4	10.3	36.1	0.7	0.0	21.1	6.9	8.0	29.3	16.2	13.1	0.6
	1986-92	141.3	100.0	45.4	11.5	33.9	1.1	0.0	26.5	9.3	9.9	23.6	14.7	8.9	0.5
Philippines	1975-80	114.9	100.0	24.3	12.5	11.7	0.0	0.0	40.5	15.9	20.3	31.9	28.0	4.0	1.2
	1981-85	112.8	100.0	25.0	10.3	13.5	0.0	0.0	43.3	12.5	21.3	28.5	26.1	1.5	0.9
	1986-92	119.5	100.0	30.5	9.8	13.6	0.0	0.0	37.4	10.5	19.7	28.6	28.0	0.1	0.6
Singapore	1975-80	148.2	100.0	46.7	..	..	0.0	2.6	22.0	0.0	9.3	11.1	11.1	0.0	14.7
	1981-85	174.1	100.0	48.8	..	..	0.0	2.9	21.1	0.0	7.9	7.2	7.2	0.0	15.5
	1986-92	212.9	100.0	41.1	..	..	0.0	1.4	31.5	0.0	7.4	4.6	4.6	0.0	11.7
Thailand	1975-80	110.2	100.0	18.8	8.2	10.6	0.2	0.0	50.4	22.4	20.6	28.6	24.1	4.5	1.4
	1981-85	110.8	100.0	22.0	11.0	11.0	0.2	0.0	51.9	20.3	26.4	23.8	20.5	3.1	1.4
	1986-92	110.1	100.0	24.6	10.7	13.5	0.4	0.0	49.6	20.8	25.3	22.2	21.3	0.7	2.3
OECD															
United States	1975-80	108.0	100.0	61.3	46.6	14.7	30.3	0.0	5.1	0.0	4.2	1.7	1.7	0.0	1.6
	1981-85	111.2	100.0	57.0	48.4	8.5	34.4	0.0	6.0	0.0	5.4	1.6	1.6	0.0	1.1
	1986-92	109.1	100.0	55.9	46.1	9.8	37.4	0.0	3.9	0.0	3.2	1.8	1.8	0.0	1.0
Japan	1975-80	104.0	100.0	72.0	39.1	32.9	0.0	0.0	23.6	0.0	18.5	2.9	2.8	0.0	2.7
	1981-85	105.7	100.0	71.1	40.7	30.4	0.0	0.0	20.5	0.0	16.1	2.1	2.0	0.0	3.6
	1986-92	106.0	100.0	72.0	38.8	32.2	0.0	0.0	16.1	1.9	12.9	1.4	1.4	0.0	6.7

Sources: IMF, *Government Finance Statistics* and *International Financial Statistics.*

still among the highest in the region. Singapore presents also high rates. On the opposite side, we find Hong Kong, where rates for personal as well as for corporate income tax are low, resulting in low tax revenues under this heading.

Recently, countries in both regions have followed the international tendency to reduce maximum rates and simplify tax structures. Bolivia adopted a flat rate of 10% and Uruguay only recently reintroduced a tax on personal income. The notable exception to this tendency is Singapore. This country has not followed the current trend towards a more simplified taxation. Its personal income tax system has a large number of tax rates. Furthermore, in Latin America there was no preoccupation with increasing minimum rates neither there was a concern for surtaxing the richer. Consequently, revenues from this source are shrinking in the region.

Nevertheless, statutory tax rates — particularly the highest ones — do not give full information about the economic distortions produced by taxation. Tax evasion, deductions and credits may dramatically change those impacts, as they offer substantial opportunities for rent-seeking behavior. Such factors affect the magnitude of the income tax base and erode the effectiveness of the nominal rates; therefore, they should be taken into account when analyzing the overall disincentives created by the tax system.

Table 3 contains the relevant information on the above mentioned factors. Let us first examine the tax threshold index presented in column 1. It shows to what extent exemptions, credits, and other standard deductions are allowed by the tax system. If this index is 0, all income is taxable. The larger the exemptions and deductions are the greater this index value and the smaller the tax base.[7] Comparing Latin America and East Asia with respect to that index, we find the following:

a) in East Asia, except for Indonesia, the value for the threshold index is below 0.5, which means that families with income of less than half FGDP — five times GDP per capita — still pay income taxes; in Singapore virtually all income is taxable — the value for the index is close to 0 — suggesting that this country has an almost universal income tax base; Hong Kong and Korea also show a broad coverage, as their tax threshold indexes are 0.37 and 0.39 respectively;

[7] *Details about the calculations shown in table 3 can be found in Sicat & Virmani (1988), and Easterly & Rebelo (1993).*

Table 3
Selected characteristics of the personal income tax rate structure
and tax base in Latin America and East Asia
(1984/85)

Countries	Tax threshold Index (Y/FGDP)* (1)	Statutory tax rates (%) Lowest (2)	Statutory tax rates (%) Highest (3)	Average marginal tax rates** (%) (4)	Ratio of highest bracket to FGDP (5)
Latin America					
Argentina	1.16	6.4	54.0	6.11e-4	7.90
Brazil	0.59	5.0	60.0	8.52	7.36
Chile	0.95	8.0	54.0	4.79	11.15
Colombia	0.06	7.0	49.0	5.02	12.14
Ecuador	0.35	8.0	46.0	-	9.99
Guatemala	1.26	5.0	48.0	1.37	87.33
Mexico	0.14	3.1	55.0	5.89	11.16
Peru	0.82	2.0	65.0	0.48	14.24
East Asia					
Indonesia	1.29	15.0	35.0	4.41	22.43
Hong Kong	0.37	5.0	25.0	-	0.21
Korea	0.39	7.1	70.1	8.78	8.06
Malaysia	0.47	6.0	55.0	8.93	4.41
Philippines	0.44	1.0	35.0	3.27	13.65
Singapore	0.08	3.6	40.5	22.15	10.66
Thailand	0.47	7.0	65.0	7.28	21.35
Japan	0.11	14.5	84.0	20.47	6.93
United States	0.12	11.0	50.0	23.63	2.34

Source: Sicat & Virmani (1988:128-29) and Easterly & Rebelo (1993:414-15).

*Y = Threshold income or maximum nontaxable income level; FGDP = family per capita GDP (five times GDP per capita).

**The income-weighted average marginal tax rates used in table 3 are defined as follow: $\Omega_y = 1/Y \int_0^\infty \varphi(y) y \tau'(y) dy$, where Y denotes per capita income defined as $Y = \int_0^\infty \varphi(y) y \, dy$. Household income is given by y, $\varphi(y)$ is the distribution of pre-tax income and $\tau'(y)$ is the marginal tax rate for household. Ω_y can be computed using individual data on income and taxes. More computational details can be obtained in Easterly & Rebelo (1993).

b) in Latin America, except for Colombia and Mexico, the value of this index is much higher; for Argentina and Guatemala, the sum of all deductions and exemptions exceed FGDP by 16% and 26% respectively; the corresponding index values for Chile and Peru are close to unity; Colombia and Mexico did surprisingly well; such a large tax coverage is very probably linked to their continuous process of tax reform.[8]

Comparing columns (2) and (3) with column (4) we see that, for both regions, marginal tax rates are significantly lower than statutory rates. Indeed, income increases create new opportunities for deductions, credits and tax avoidance, and therefore reduce the taxes effectively paid by the individuals. Yet, here we find a clearly differentiated pattern across regions. East Asia presents rates much higher than the ones applying to Latin American countries, indicating that the scope for tax avoidance is more important in the former region. Notice that for Singapore, the magnitude of the average marginal tax rates is in the range of two developed countries, namely Japan and United States.

Finally, column 5 on table 3 presents the income levels — measured relative to FGDP — at which the highest statutory income tax rates apply. This indicator provides a basis to assess the effectiveness of such tax rate because it indicates the potential collection associated with this rate. Let us take the case of Guatemala to illustrate this point. In this country, the highest statutory rate applies only to families whose income is 87.33 times FGDP. Considering the strong income inequalities that characterize Guatemala, this high rate is very ineffective because only a handful of individuals earns such high income and then could become potential taxpayers. Consequently, collections from this rate are negligible. Column 5 shows that the degree of effectiveness varies largely across countries in both regions. In Hong Kong, the highest rate (the lowest of the sample) applies almost to every household. Indeed, it becomes applicable to families earning only 0.21 of FGDP. Statutory tax rates, in view of the low values shown in column 5 of table 3, are also very meaningful in Malaysia, Brazil and Korea.

[8] *See Sampaio de Sousa (1996). Notice that the size of the country should also be taken into account when analyzing the effectiveness of the tax system. Large countries, highly populated, tend to have high administrative costs which function as an incentive for tax evasion. Consequently, frequently they have a relatively narrower tax base. This point should be taken into account when comparing the regions.*

Table 4
Characteristics of corporate tax systems in selected countries (1995)

Country	Corporate income tax (%)			Withholding taxes - Nontreaty countries (%)			Treaty countries			Capital gains
	CIT	Special	Surcharge	Dividends	Interest	Royalties	Dividends	Interest	Royalties	
Latin America										
Argentina	30.0	-	-	0	12	18-24	0	10-12	5-24	Taxed
Bolivia	30.0	Oil - 40	-	12.5	12.5	12.5	12.5	12.5	12.5	Exempt
Brazil	25.0	-	-	15	25	25	15-25	10-25	10-25	Taxed
Chile	15.0	-	-	35	35	35	-	-	-	Taxed
Colombia	30.0	-	-	10	30	30	-	-	-	Taxed
Costa Rica	30.0	-	-	15	15	25	-	-	-	n.a
Ecuador	34.0	Oil - 44.4	-	25	-	33	-	-	-	n.a.
Mexico	30.0	Agri. - 25	-	0	5-35	15-35	5-15	10-15	10	Taxed
Paraguay	30.0	-	-	0-5	0-35	0-35	-	-	-	n.a.
Peru	30.0	-	-	0	0-30	10-30	-	-	-	Exempt
Uruguay	30.0	-	-	-	-	30	-	-	-	Taxed
Venezuela	30.0	Mining - 60 Oil - 67.7	-	0	5.0	3-20	0	5-10	5-10	Exempt
East Asia										
Hong Kong	17.5	-	-							Exempt
Indonesia	30.0	-	-	20	20	20	15-20	0-20	10-20	Taxed
Korea	32.0	-	7.5	25	25	25	5-20	5-15	0-15	Taxed
Malaysia	32.0	Oil - 40	-	0	0-15	10	0	0-15	0-10	Exempt
Philippines	35.0	Education -10-35	-	30-35	30-35	30-35	15-25	0-25	10-25	Taxed
Singapore	27.0	-	-	-	20	20	0	0-25	0-27	Exempt
Taiwan	25.0	-	-	5-35	20	20	-	-	-	Taxed
Thailand	30.0	-	-	10	15	15	10	3-15	5-15	Taxed

Source: Boadway & Shah (1995:103-9, tables 1A-1 and 1A-2).

Note: n.a. = not available.

Let us now consider briefly corporate tax issues in Latin America and East Asia. As already pointed out, except for Singapore, in both regions revenues from corporate income tax are systematically higher than those collected from individuals. Thus, both regions fit the pattern of developing economies and sharply differ from the typical situation in richer countries, where personal taxation prevails over corporate taxation. Table 4 shows selected characteristics of the corporate tax systems in Latin America and East Asia. With respect to that form of taxation, both regions, following worldwide trends, reduced rates and tried to enlarge the tax base. Only Brazil did not follow this trend. The Brazilian corporate income tax rate increased between 1980 and the earlier 90s[9] and this country has also maintained a myriad of tax incentives. By now, we observe a convergence on tax rates across regions and countries. Most countries fixed their rates around 30%. Exceptions are Chile and Hong Kong, where rates are much lower: respectively 15% and 17.5%. Oil, as previously noted, is heavily taxed in both regions.

Concerning withholding taxes, there are significant differences across and within regions. In Latin America rates vary greatly, ranging from 0 to 35%. At the top, Chile applies a high and uniform rate on dividends, interests and royalties. Moreover, this country does not have preferential rates for particular — treaty — countries. At the bottom, Argentina and Venezuela exempt dividends and apply relatively low rates for interests. In East Asia, Hong Kong, following its tradition as a successful financial center, does not have withholding taxes. Notice that rates are more differentiated in Latin America. Only Chile and Bolivia use uniform rates, whereas in East Asia the variability of tax rates is much lower than in Latin America.

No full integration scheme is applied in any of the countries, either from Latin America or East Asia. In the latter region, partial integration of personal and corporate income taxes is adopted by Malaysia and Singapore. Profits are taxed at the corporate level, but credit is provided for the corporate tax paid if profits are distributed to shareholders. Indonesia, Philippines, and Thailand use the principle of separate taxation, thus incurring in double taxation. In Latin America, only Chile and Mexico integrate the withholding tax on dividends with the corporate income tax.[10]

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[9] *The corporate tax rate in Brazil includes a general rate of tax, a surcharge, a state capital income tax surcharge and a contribution to the social security system. The total corporate tax rate in 1992 was over 50% (including the withholding tax).*

[10] *In January 1996, Brazil introduced a form of integration.*

Up to now, our discussion was centered around nominal rates. Nevertheless, the relevant information on the tax burden may not be adequately reflected by such rates. Distortions present in the economy may drive a wedge between nominal rates and the ones effectively applied. For instance, a highly distortionary indirect tax system reduces potential profits, increases the corporate tax burden and thus hinders investment. Also, tax incentives may strongly affect the company's tax liabilities. Hence they should be taken into account for a more accurate assessment of effective taxation on capital. To take into account all these factors, effective tax rates should be used instead of nominal rates. Effective tax rates indicate to what extent the after-tax rate of return on capital differs from a given before-tax rate of return. This point will be discussed in detail in section 3, in connection with the analysis of tax incentives.

2.3 Indirect taxation

Until recently, the predominance of indirect taxes over tax on incomes and profits was considered as one more characteristic of underdevelopment. It was expected that during the growth process the share of public revenue raised through those taxes would be reduced. Yet, recent developments in tax theory pointed out to an opposite tendency and attributed a new role to indirect taxation (Bird, 1987; Browning, 1978; Gandhi et alii, 1987; Tanzi, 1987; Whalley, 1984). Renewed concern with economic growth explains why the advantages of consumption over income taxes were emphasized by those researchers. Lately, even the regressivity of this kind of tax — major argument against its use in poor countries — has been increasingly questioned. Some studies show that, in presence of strong income inequalities, appropriated indirect taxation may improve the welfare level in the economy and contribute to attenuate income inequalities (Ahmad & Stern, 1987; Sampaio de Sousa, 1994). Moreover, indirect taxes are not only welfare-improving. They can also play a significant role in correcting externalities and have the additional advantage of being easy to collect, thus reducing the risks of tax evasion.

To what extent the structure of indirect taxes in these regions follows the pattern of taxation in developing countries? A number of angles deserve to be examined, such as:

a) How significant is the degree of tax differentiation and which rationale is behind the setting of tax rates?

b) Could we identify in Latin America a clear tendency towards the utilization of tax systems excessively differentiated with East Asia presenting a lower dispersion of tax rates?

c) To what extent the efficiency of the tax system is linked to the structure of indirect taxes?

With the help of tables 1, 2, and 5, the main aspects of the indirect tax structure in the regions will be analyzed.

Domestic taxes on goods and services

As tables 1 and 2 point out, this category is a very important revenue generator in both regions. In that sense, Latin America and East Asia have a pattern consistent with those of the developing nations and clearly diverge from the pattern typically followed by the developed countries. Nevertheless, this result is much more marked in Latin America than in East Asia. For instance, in Mexico, Bolivia, Peru, Chile, and Uruguay domestic taxes on goods and services dominate the tax structure.[11] As for East Asia, two points are worth to notice. First, the decline of the share of these taxes in GDP in Korea and, second, the sharp increase of the corresponding ratio in Indonesia. For this country, the high ratio is explained by the introduction of a value added tax as a result of the 1983-86 reforms. Concerning Korea, the reason is probably the more advanced diversification of the Korean tax system.

Finally, there is an increasing tendency in Latin America to rely more heavily on indirect taxes for collecting revenues. Table 2 reveals that, except for Uruguay and Costa Rica,[12] all the other countries increased substantially the share of consumption taxes on total revenues between 1975 and 1992. This movement also appears in East Asia, but is not as marked and widespread as in Latin America.

[11] *The same is true for Brazil and Argentina. The ratios presented are rather low due to the fact that these taxes are also levied at state and local levels and thus are not included in central government accounts.*

[12] *Brazil and Argentina also increased the share of this tax. The reason for the low percentages presented here have been already explained in the above footnote.*

Value added taxation

The value-added tax (VAT) is by now adopted by about 100 nations. All over the world, the replacement of the old and cumbersome sales taxes by the VAT is considered one of the most important innovations of contemporaneous tax systems. The introduction of this tax has constituted one of the crucial elements for successful tax reforms. In the last generation, almost every episode of comprehensive tax reform involved the adoption of a VAT.[13]

In this context Latin America and East Asia are no exceptions. By now, the VAT is widespread in both regions. Table 5 shows the date of introduction and position in mid-1995 of the rate structure of VATs in Latin America and East Asia. The first obvious comment is that, as a rule, the VAT was introduced in Latin America much earlier than in East Asia. Brazil was the first country to introduce this type of taxation.[14] Among the different types of VATs the one based on the invoice type were introduced in Latin America in the late 1960s and have been adopted by West European and developing countries. Only very recently, the East Asian countries adopted a VAT. Except for Korea, which adopted the VAT in 1977, East Asian countries introduced this tax during the late 80s and in the 90s. The last country among the surveyed to adopt the VAT was Singapore, in 1994.

Comparing VAT rates, one notes that rates are consistently higher and more differentiated in Latin America than in East Asia. From inception, the rate structure was much more differentiated within the former region. Of course, this may reflect the fact that the latecomers benefit from the experience — including the mistakes — of the pioneers. Thus, East Asia tends to follow the international trend that calls for moderate rates applied to a broad base. There is also a tendency in that region to adopt more uniform rates. In Latin America, the multiple rate structure seems to be the political price which was paid for raising the basic VAT rate above 10%.

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[13] *One of the exceptions is the successful 1974 Colombian reform, which emphasized income taxation.*

[14] *This country was the world pioneer in implementing value-added tax through the retail level in January 1967. Denmark closely followed Brazil by introducing the VAT in July of the same year. Indeed, this tax was first enacted for the Japanese prefectures in 1950 but was never implemented (Gillis, 1989).*

Table 5

Value-added tax rates in Latin America and East Asia

Countries	VAT introduction date	At introduction	July 1995
Latin America			
Argentina	Jan. 1975	**16**	**21**[b], 27
Bolivia	Oct. 1973	5, **10**, 15	**14.92**[c]
Brazil[d]	Jan. 1967	**15**	9, **11**
Brazil[e]	Jan. 1967	**15**	**17**
Chile	Mar. 1975	8, **20**	**18**
Colombia	Jan. 1975	4, 6, **10**	8, **14**, 15[f]
Mexico	Jan. 1980	**10**	**15**, 10[g]
Peru	July 1976	3, **20**, 40	**18**[h]
Uruguay	Jan. 1968	5, **14**	14, **23**
Venezuela	Oct. 1993	**10**	10, **12.5**, 20[i]
East Asia			
Indonesia	Apr. 1985	**10**	**10**, 20, 35
Korea	July 1977	**10**	2, 3, 5, **10**
Philippines	Jan. 1988	**10**	**10**
Singapore	Apr. 1994	**3**	—
Taiwan	Apr. 1986	**5**	**5**, 15, 25
Thailand	Jan. 1992	**7**	**7**

Source: Alan A. Tait, IMF/FAD.

[a] Rates shown in **bold type** are the so called effective standard rates (tax exclusive) applied to goods and services not covered by other specially high or low taxes.

[b] In force for one year starting on April 1st, 1995; supplementary VAT rates of 8% and 9% on noncapital imports.

[c] Effective rate; legislated rate is 13%.

[d] On interstate transactions depending on region.

[e] On intrastate transactions.

[f] The 15% rate is applied to insurance acquired abroad to cover goods, transportation risks, ships, aircrafts, and vehicles registered in the country, provided this service is not encumbered in the country of origin.

[g] Starting on April 1st, 1995, the general rate is maintained at 10% in border areas, except in the sale of real estate which is subject to 15%.

[h] The 18% rate includes a 2% rate of the municipal promotion tax.

[i] Venezuela applies additional rates of 10% and 20% on the consumption of luxury goods.

Equity considerations may also partly explain the differentiation and the great number of exemptions that characterize the VAT structure in Latin America. The more non-egalitarian income distribution in Latin America, together with a lack of a comprehensive income tax and transfer system, led to the use of indirect taxes as an instrument for redistribution.[15] Yet, it should be noticed that if a VAT is riddled with many rates and exemptions it may not offer many advantages over a turnover tax. East Asia, with a better income distribution, thus having no pressing need to emphasize equity considerations, was able to prioritize efficiency aspects of the indirect tax system.

Latin America is by now running against the international tendency of reducing rates and broadening the tax base. Indeed, except for Peru and Chile, Latin American countries increased the basic VAT rate between the introduction date and July 1995. Such increases may have been prompted by the need to increase tax revenues corroded by a high rate of base erosion due to evasion and a plethora of tax privileges and exemptions.

In most countries of both regions, the VAT functions also as an incentive to trade. Exports and capital goods are usually excluded from the base of this tax. By not exporting taxes and by facilitating the transfer of technology, these countries are able to improve their competitivity in international markets.

Excise taxes

Following the tendency observed in industrial countries, the share of excises in GDP is stable or decreasing in most of the countries of both regions. The exceptions are Peru, Paraguay, Venezuela, and Indonesia. Regarding the structure of excise taxes, we cannot identify clear different patterns between Latin American and East Asian countries. In both regions excises proved to be a very important revenue collector. Following the international trend, excises are levied on inelastic goods and luxuries. Almost all countries complement VATs with selective taxes on a limited number of commodities, mainly alcohol, tobacco, petroleum, electricity, and luxury goods. These taxes are a reliable source of revenue for governments, as they are well known and easy to collect. Thailand has the highest ratio of excise taxes to GDP, followed by Peru, Uruguay, Costa Rica, and the Philippines.

[15] *Indeed, exempting basic commodities could make a significant contribution to the progressivity of the indirect tax system (Bird, 1987).*

The structure of trade taxes

Trade taxes are supposed to be positively related to the degree of openness of the economy and negatively influenced by the level of income per capita and by the country's reliance on domestic taxes on goods and services (Tanzi, 1987). Looking at tables 1 and 2 we see that Latin America and East Asia are no exception to this rule. Indeed, this pattern seems to apply to both regions:

a) in East Asia, the existence of two clusters is evident; Malaysia, the Philippines, Thailand, Taiwan, and Korea rely more heavily on trade taxes; in the period 1986-92 this tax category accounted for 4 to 5% of GDP (20 to 30% of total tax revenues); Singapore, Indonesia, and Hong Kong are much less dependent on such taxes; notice that Singapore and Indonesia present a similar and very low ratio (around 1% of the GDP); yet, the reasons for such a result are quite different for these two countries; for Singapore, the export orientation, together with the open nature of its economy, explains why the contribution of trade taxes to total tax revenue is negligible; regarding Indonesia, this low ratio is due to the existence of massive nontariff barriers and other import restricting devices;

b) in Latin America, Costa Rica, following the tradition of small countries extensively uses trade taxes to collect revenues; the share of these taxes in GDP is around 6%; next to Costa Rica, come Ecuador and Peru; the widespread use of nontariff barriers, together with the fact that the statutory tariff rates used to be exceptionally high, explains the low ratio of import taxes to GDP in countries like Brazil and Mexico; hence, this should not be erroneously taken as the only effect of trade liberalization, even if recently this policy has been part of most of the economic packages in these countries (Sachs & Warner, 1995).

Both regions follow the international trend to reduce the importance of export taxes. Except for Costa Rica and Malaysia, no country derives more than 1% of the GDP from export taxes. Costa Rica exports basically agricultural products and cannot rely on corporate income taxes to collect revenue. Thus, this country has no better alternative than to tax agricultural production through export taxes. Indeed, export taxes in Costa Rica are a proxy for a land tax Malaysia taxes both agricultural and oil exports.

Finally, it is worthy to note that East Asia accepted the discipline of international trade much earlier than Latin America. Even relatively closed

countries like Korea and Indonesia opened to trade long before the typical Latin American country (Sachs & Warner, 1995). This fact may have compelled East Asia to design a more efficient tax system in order to maintain international competitivity. As for Latin America, its relative economic isolation precluded the existence of significant pressures to adopt less distortionary tax systems.

2.4 Payroll and social security taxes

A major difference between tax structures in the analyzed regions concerns social security and payroll taxes. This form of taxation is prevalent in Latin America, whereas it is virtually nonexistent in East Asia. Latin America's share of payroll and social security taxes in total revenue is close to the correspondent one in developed countries (tables 1 and 2). For instance, in Brazil they represent as much as 43% of central government revenues (and 6% of the GDP). These taxes are also very important for Argentina, Costa Rica, and Uruguay. The corresponding ratios are respectively, 3.7, 6.6 and 7% of the GDP. Due to a successful reform of its social security system, Chile reduced sharply the importance of these taxes during the period analyzed. In Latin America, as in industrial countries, these taxes are used to finance social security programs.

Tables 6 and 7 show the main characteristics of social protection in Latin America and East Asia. Table 6 confirms the striking differences across regions. In Latin America, the combined contributions of workers, employers and governments represent more than 30% of the wage bill in many countries. This imposes a serious constraint on the financing of social security, as further increases in payroll and social security taxes are difficult to implement. Excessively high contribution rates lead to evasion and encourage the development of informal labor markets. The possibility of increasing coverage to augment the contribution rate relative to liabilities is limited, since coverage is already very high in many countries (table 7). Moreover, most of the pension plans are financed on a pay-as-you-go basis in which current contributions pay

Table 6
Social insurance and social security financing in selected countries of Latin America and East Asia (1983, 1987)

Country	Legal contribution as a percentage of salary (1987)			Contribution as a percentage of total revenues (1983)			Surplus as percentage of receipts
	Worker	Employer	Govern.	Worker	Employer	Govern. and taxes[a]	
Latin America							
Argentina	11.0	12.5-15.0	7.8-10.6	34.5	27.2	36.0	3
Bolivia	1.5	1.5	1.5	25.5	34.8	24.2	23
Brazil	8.5-10.0	10.0-19.2	c	15.2	74.7	8.0	1.0
Chile (old)	19.1-20.0	0	c	-	-	-	d
Chile (new)	13.3-13.6	0	0[d]	29.9	2.0	47.1	14
Colombia	2.2	4.3	0.3	25.2	54.1	11.8	4
Costa Rica	2.5	4.8-7.3	0.3	28.4	47.0	18.6	31
Mexico	1.5	4.2	c	21.7	57.5	8.1	10
Uruguay	10.0-13.0	12.0-20.0	c	76.6	7.6	14.9	12
East Asia							
Malaysia	9.5	11.5	0	24.3	45.3	0.6	71[b]
Singapore	0-25.0	10.0	0	38.9	40.9	0.1	49
Thailand	n.a	n.a	n.a	0	93.1	0.7	12

Source: Ahmad (1991). The data are for salaried employees.

[a] Includes public health care in countries with national health systems.

[b] Surplus is defined as the excess of legal contributions and receipts over expenditures expressed as a percentage of receipts. In most cases, it is difficult to disentangle those payments made on behalf of public sector employees and those in which a deficit is financed through additional taxes on general revenues. Only unambiguous deficit coverage is indicated by (d).

[c] Budget contributions: taxes and subsides.

[d] Deficit coverages.

for current benefits.[16] Any difference between those values is to be met by reserves or transfer from other governmental sources.[17] Such a system puts a lot of pressure on fiscal equilibrium in Latin merica.[18] This is specially true in countries where the coverage is extensive and the dependency ratio is high, as is the case of Argentina and Uruguay. Not surprisingly, reform in the social security programs is currently on the agenda of most Latin American governments.

Table 7 shows that all Latin American countries have old-age pension schemes, sickness-maternity health plans and disability schemes. A few countries have also unemployment plans. Coverage of these different social security programs varies greatly across countries. By 1980, such coverage was as high as 95.6% of the economically active population in Brazil but the correspondent figure was only 11.6% for Guatemala (Mackenzie, 1988).[19] However, on average, a substantial part of the Latin American population benefits from some kind of social protection.

In East Asia, as a rule, there is an absence of the social insurance principle, at least on the form of taxation. When it does exist, it takes the form of forced savings. Singapore, Malaysia, and the Philippines use extensively the funded principle for financing social security expenses. This contrasts sharply with the Latin American experience. Instead of constituting a burden to government finances, in East Asia social security schemes encouraged savings and contributed to stabilize the long-run development of financial markets. Indeed, as Shome (1986) pointed out, in those countries, social security funds have been a major financier of government debt.

It is important to understand the reasons behind such a divergent behavior. As the basis of these taxes is wages and as the share of wages in national income rises with per capita income, we could expect to find a re-

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[16] *At first, most Latin American countries offered full-funding of social insurance through trust funds. Subsequently, the increase of the number of retirees and the practice of cross-subsiding the health care system with surpluses from retirement accounts, together with an inappropriate investment policy, depleted the trusts.*

[17] *In 1994, Colombia replaced its state-run, pay-as-you go pension system with a privately-run, fully funded scheme.*

[18] *For a detailed analysis of Latin American Social Security System see Mackenzie (1988).*

[19] *Of course, those figures apply mainly to the formal sector. Yet, in some countries informal employment may be very significant, and those employees are outside the social protection system.*

lationship between these taxes and per capita income.[20] Yet, this variable is not the only determinant of the importance of such taxes, as it becomes clear when we compare Latin America and East Asia. Socio-political factors are probably equally important. The strong populist tradition in Latin America very likely played a significant role in the development of this kind of taxation. Indeed, one of the main characteristics of populism in Latin America was an early development of a relatively strong labor movement. The social demands of labor unions included the implementation of a better system of social security along the lines followed by more developed countries (Deyo, 1990). Such a phenomenon was more marked among the prosperous countries of the southern cone. Uruguay, with its highly sophisticated and developed welfare-state, was the typical example of such a tendency. Furthermore, the political instability of the continent created the necessity to develop alliances and guarantee supporters for the country's political leaders. Consequently, social benefits were extended to various labor categories.

Table 7
Selected characteristics of social security in Latin America (1983)

Countries	Expenditure (% of the GDP)	Revenues (% of the GDP)	Coverage pensions	Dependency ratio*	Adm. costs (% of the GDP)
Argentina	8.6	6.4	69.1	26.3	4,3
Bolivia	2.1	2.2	18.5	13.2	19.3
Brazil	5.7	5.3	95.6	13.8	9.9
Colombia	2.2	2.3	22.4	16.7	12.4
Costa Rica	6.3	8.8	68.3	12.9	6.9
Chile	14.4	8.7	61.7	12.6	6.2
Ecuador	4.2	5.4	23.2	13.4	23.7
Mexico	2.8	1.3	42.0	11.9	13.3
Uruguay	11.0	6.7	81.2	32.9	6.4
Venezuela	1.5	1.5	49.8	11.4	13.8

Source: Mackenzie (1988).

*Percentage of the population aged 60 or more in the population aged between 20-59.

In East Asia, the situation was quite different. In this region, with the probable exception of Korea, social unrest was much lower and the workforce

[20] *The correlation coefficient between the ratio of social security taxes to GDP and per capita income is around 0.4 (Tanzi, 1987).*

much less demand-oriented. Due to multiple reasons, including the absence of widespread populism and the adoption of a successful labor-intensive development strategy that resulted in higher wages, labor movements were less strong and had less to say in the East Asian nations.[21] These arguments also go the other way around. Weak labor movements in East Asia help to explain the absence of leftist and populist coalitions that would have supported nationalistic economic policies. Hence, the State was able to impose relatively free labor markets, keeping wage pressures down, thus contributing to raise profits, and increase managerial flexibility and employment. In such a context, there was no pressing need for government intervention in the labor markets to guarantee worker welfare, as was the case in Latin America, and no need to provide social benefits to a discontented population. Consequently, there was no pressure to finance the corresponding expenditures through specific taxation. Finally, external political conditions may also have played a significant role in keeping down labor demands in East Asia, thus limiting demand for social protection. As argued by Haggard (1990), "because of their adverse external political situation — divided countries facing communist adversaries — little ideological or organizational space was allowed for socialist, leftist or populist forces, nor was labor allowed in independent voice". Labor markets were relatively free from trade union's interference. Governments guaranteed labor peace and seriously restrained labor claims including those linked to social security benefits.

Summarizing, the question of social programs and its financing involves ultimately the relationship between social protection financed by specific taxation and the availability of funds — public and private — for investment. Recent studies seem to corroborate Feldsteins hypothesis according to which private savings are negatively affected by the existence of public social security programs.[22] Lately, a negative relationship was found between private savings and the expected social security benefits for Latin America (Edwards, 1995). In East Asia, as noted above, the absence of tax-based social security schemes may have contributed to increase domestic savings and spur investment. These

[21] *Even when labor movements were apparently strong, they played a minor role in the process of setting the relationship between trade unions, government and management. Good discussions of labor relations in East Asia can be found in Freeman (1994) and Chen & Taira (1995).*

[22] *See, for instance, Edwards (1995) and Feldstein (1984, 1994). In fact, there is a strong controversy about the presumed effects of public social security on savings. Yet, the empirical evidence seems to favor Feldstein's hypothesis.*

results suggest an important link between taxation and development. Social security programs financed by specific taxation may depress private savings and thus reduce investment and slow economic growth. This helps to understand the way tax policy affected the growth pattern in East Asia and Latin America.

2.5 Property taxes

Tables 1 and 2 show taxes on immovable property: property taxes on buildings and land. Revenues collected from these taxes are negligible both in Latin America and in East Asia.[23] Yet, a few countries use extensively this type of taxation to collect revenues and limit speculation. These exceptions are found in East Asia: Singapore, Taiwan, and Hong Kong. In these countries, property and wealth taxes account for a significant share of total revenues; they are levied on land as well as on dwellings. In the late 80's these taxes represented 21, 10, and 17% of total revenues in Taiwan, Hong Kong, and Singapore respectively.

Taiwan implemented a unique property tax called LVIT — land value incremental tax —, levied at increasing rates on the net increment of the land value. This increase in land value is calculated taking into account the growth of the economy and the provisions of public services. Hence, this tax contributed significantly to revenue generation and to improve the equity of the tax system. Moreover, by discouraging unproductive landholding, this tax directs financial resources toward more productive investment and thus contributes to spur economic growth.

As for the other East Asian countries, revenues collected from property tax are negligible. Yet, Korea is making a serious effort to develop property and wealth taxation. Recently, in this country, a major concern for tax reform is to increase and diversify property-based taxes, thus meeting the compelling demands for a more equitable tax system.

In Latin America, the situation is rather different. In particular, land taxation has been historically very difficult to implement in this region and, too often, the debate over wealth and property taxes turn out to be ideologically charged. Attempts to levy a presumptive tax on farmers in Uruguay

[23] *In fact, the share of property taxes in the GDP, as shown in table 2 is underestimated, since the data presented refer only to central government and an important part of these taxes is collected by local or state government.*

and Colombia failed because of political pressures (Harberger, 1989; Urrutia, 1989). Similar efforts also failed in other Latin American countries. Here, as a rule, property related taxes are negligible in practical terms. Except for Paraguay and Uruguay, no country derives more than 1% of the GDP from such taxes. This fact is the most obvious evidence that they did not fulfill their role as income redistributors, neither were able to redirect financial resources to productive investment. It is true that most property taxes are levied at state and local levels and thus are not included in the central government finances. Therefore, the figures presented should be used with caution. However, even making allowance for that, the potential of property taxation as a source of government revenues has not yet been fully utilized.

3. Investment and Taxation

This section examines the relationship between taxation and investment in East Asia and Latin America. Rather than discussing the multiple aspects of such relationship, the analysis concentrates on the role played by fiscal incentives and the stability of the tax system on spurring investment.

3.1 The role of investment incentives

Latin America, as well as East Asia, uses an extensive system of fiscal incentives to promote investment and accelerate economic growth. More recently, particularly in Latin America, there is a clear tendency towards the reduction of this kind of instrument. It is thought to be inefficient and propitious to create rent-seeking behavior. Nevertheless, East Asian countries, specially Korea, Taiwan and Singapore, continue to use fiscal incentives in a quite efficient way (Kwack, 1990; Shome, 1986; Tanzi, 1987b). Authors agree that Taiwan and South Korea's remarkable economic growth was largely due to increased investment opportunities. Tax incentives, among other factors, certainly played a significant role in the creation and development of such opportunities.[24] An important question is what pecularities in those countries could explain this higher efficiency in the use of fiscal incentives. Why in

[24] *For instance, by 1968 in Taiwan, tax credits and reimbursements as a share of the relevant tax base were as high as 17% (Rodrik, 1995).*

East Asia these instruments contributed to enhance the comparative advantage, whereas in Latin America they caused large fiscal deficits and induced undesired intersectoral income distribution effects?

To address these questions one needs to examine tax incentive policies in East Asia.[25] Compared to Latin America, tax incentives were much more fine-tuned, at least in countries that were successful in using those instruments. Taiwan, Singapore, and Korea clearly succeeded in changing their current comparative advantage by concentrating tax incentives on high technology export-based activities. The orientation of such incentives toward domestic or foreign investment differed across countries. Korea, for example, directed its tax incentive policy toward domestic industrial investment rather than toward investment from abroad. On the other extreme, Singapore is known for its extremely receptive environment for foreign investment. Indeed, of all countries, it is the one with the least restraints on foreign investment (IMF, 1990). Furthermore, tax incentive policies were coupled with a consistent educational policy, strongly biased towards technological fields. This widespread technical knowledge permitted a very efficient absorption of modern technology so that, starting with simple technologies, the country was able to master rapidly more sophisticated production processes.

The other East Asian countries under review were not very successful with tax incentive policies. Indonesia simply eliminated most of them during the 1983-86 reforms. Thailand, Malaysia, and the Philippines were unable to give a proper direction to these policies. They were used to solve a variety of problems, such as investment, exports and labor utilization. This extreme diversification, coupled with little monitoring, prevented those instruments from achieving their multiple purposes. Consequently, the only clear result was a decline of fiscal revenues.

The limited success of the incentive policies in Latin America was due to reasons similar to those of East Asian countries. Tax incentives were used to cover a wide variety of objectives. They were attributed quite indiscriminately, and the fine-tuning was poor. Consider, for instance, tax holidays, one of the most popular form of tax incentives. Latin America gives tax privileges during more years and puts less restriction on the types of activities than did the good performers of East Asia. At the extreme case, Brazil granted tax

[25] *For a detailed description of tax incentives in East Asia and Latin America, see Sampaio de Sousa (1996).*

holiday incentives to any investment company for an unlimited period of time.

To complete the analysis of tax incentives, it is convenient to have a condensed indicator of the effectiveness of tax incentives that could be compared across regions. As discussed earlier, a summary measure of the overall corporate tax burden is given by the effective tax rate on investment. This indicator combines the effects of various aspects of tax laws and the behavior of taxpayers into a single number that represents total taxation on investment. Table 8 compiles effective corporate tax rates for selected countries of Latin America and East Asia.[26] As a rule, effective taxation is higher in Latin America. The rates presented for that region are all positive and over 10%. Even with incentives, the taxation of capital is still too high. Brazil's rates are particularly so. With such a fiscal burden, the low levels of investment that characterize the Brazilian economy are hardly surprising. On the opposite side, in East Asia, Korea presents rates particularly low. Under realistic assumptions, in this country effective corporate income rates are negative. Subsidies are enlarged when generous tax preferences are available (Kun-Yang, 1992).

The key source of such divergence seems to be the structure of indirect taxation. Indeed, for Brazil, the elimination of indirect taxes provokes a substantial reduction of effective rates. This result applies to other countries in the two regions. Particularly, in Latin America distortions caused by indirect taxation virtually eliminate the effectiveness of tax incentive policies. Recent empirical evidence strongly supports this view. Mintz & Tsiopoulos (1996) calculated effective corporate income tax rates for six Latin American economies under different hypothesis. Their results are reproduced in table 9. When we consider all the distortions (base case, column 2) effective rates are largely superior to nominal rates in Argentina, Brazil, and Chile. On the opposite direction, Venezuela's effective rates are much lower than the nominal ones. For Colombia and Mexico, statutory rates are good proxies for the real capital taxation. The most remarkable point here is the contribution of indirect taxes to capital taxation. When they are removed, effective rates fall dramatically for all six countries. Hence, in Latin America, indirect taxes, not corporate income taxes, are the most effective source of capital taxation. They greatly reduce the effectiveness of tax incentives, as their distortionary

[26] *Derivations of effective rates are found in Mintz & Tsiopoulos (1996) and Boadway & Shah (1995), among others.*

Table 8
Marginal effective corporate tax rates for machinery (%)

Countries	Financing	
	Debt	New shares issues/ retained earnings
Brazil (1989)		
Base case	55.0	68.1
Excluding indirect taxes	10.4	42.6
Regional investment funds	55.9	66.2
Zona Franca de Manaus	47.4	35.2
Accelerated depreciation	48.1	62.4
Colombia (1988)		
Manufacturing:		
Individuals	32.5	33.97
Tax exempt institutions	-10.0[a]	23.19
Foreigners	-	38.55/26.07
Mexico (1994)		
Maquiladoran firms:		
Without exemptions	28.9	-
With exemptions	10.4	-
Venezuela(1994)		
Excluding investment tax credits	49.0	-
Including investment tax credits	37.5	-
Malaysia (1987)		
Profit-making nonpionner firm	-0.0308	0.0091
Profit-making pioneer firm	-0.0436	-0.0112
Korea (1989)		
No incentives	-8.0[b]; 5.2[c]	-
Special depreciation (30%)	-13.9[b]; 0.3[c]	-
Investment tax credits	-17.02; -3.32[c]	-
Taiwan (1984-86)		
Foreign firms with tax holidays	11.26	-
All domestic and foreign firms with tax holidays	13.31	-
Thailand		
OCDE (1983)	11.0	32.5

Source: Latin America, Mintz & Tsiopoulos (1996); East Asia, Shah (1995), Kun-Young (1992), Chang & Cheng (1990), McLure & Zodrow (1991).

[a] Including foreigners.

[b] Effective corporate tax rate.

[c] Comprehensive effective tax rate, corporate and withholding taxes.

effects are extremely large (Shah, 1995). By creating large intersectoral variations in investment distortions, they penalize the export sector and provide a net subsidy to import competing industries. This undermines the country's international competitiveness and hinders growth.

Table 9
Statutory and effective corporate tax rates in selected Latin American Countries — Manufacturing — 1994
(%)

	Statutory rates	Effective rates		
		Base case	Excluding capital tariff taxes	Excluding all other taxes
Argentina	33	56.2	26.8	11.3
Brazil	46.0*	60.8	35.1	10.3
Chile	15	36.2	21.8	1.4
Colombia	37.5	30.4	21.9	9.5
Mexico	34	33.3	17.9	12.2
Venezuela	54	37.5	23.8	21.1

Source: Mintz & Tsiopoulos (1996: table 3).

*Computed as the standard rate (30%) and surcharges: federal rate (10%), state rate (5 or 40%), social contribution rate and correction for reduced rate on export profits (6%).

3.2 The stability of the tax system

Another aspect of the relationship between investment and taxation concerns the stability of the tax system. Indeed, a predictable and stable tax system may be considered as the highest incentive to investment decisions. Dramatic changes over a short period discourage potential investors and reduce growth expectations. Here, the analyzed regions present a clearly distinct pattern: Latin America has experienced wide fluctuations in tax levels in relatively short periods of time, whereas in East Asia those movements were much less dramatic. For instance, Argentina and Bolivia exhibit very strong variations in the level of taxation in the period.[27] On the other extreme, Hong Kong has a remarkably stable tax system. Its main tax — the tax on earnings and profits, EPT — has not been modified since the mid-50's.

This point can be better understood with the help of table 10. It shows

[27] *In Argentina the tax ratio fell from almost 20% in 1974 to 13% in 1975; it rose to over 23% of the GDP in 1980 and fell again to 17% in 1983, and rose again to 23% in 1986. Bolivia has a similar record, as well as many of the countries in the continent.*

the variance of the total revenue/GDP and tax/GDP ratios for the period 1975-92.[28] As a rule, the variance is much higher for Latin American countries than for the East Asian ones. The notable exception in East Asia is Singapore, which presents a very high variance for this ratio, comparable to the highest rates in Latin America. Yet, the reasons behind those patterns are quite different. For Singapore, this higher variance is explained by increases in nontax revenues, whereas for the Latin American countries such changes could be attributed to the connection between taxation and macroeconomic policies (Tanzi, 1989). Overvalued exchange rates and higher inflation levels, among other factors, affect tax revenues and create uncertainty that hinders domestic as well as foreign investment. Acute fiscal crises that restrict reform efforts to ad hoc changes — usually rate increases and creation of new taxes — stimulate evasion, hinder the transparency of the tax system, and make revenue collections unpredictable. Undoubtedly, those factors are much more present in Latin American than in East Asian economies. In particular, under high inflation, the existence of collection lags for tax payments may affect substantially tax collection and lead the government to alter the tax structure to maintain revenues.[29]

Results shown in table 10 also suggest that frequent adjustments contribute to maintain the stability of the tax system. Countries which frequently adapt their tax structure to new economic circumstances tend to present a lower variance in the level of taxation, expressed as a percentage of the GDP. This seems to be true, in Latin America as well in East Asia. For example, Korea, with its fine-tuning policies, has the lowest sample variance. In Latin America, Colombia and Mexico have the more stable levels of taxation thanks to their frequent and coordinated tax system changes. On the opposite side, Brazil presents the highest variance, which probably reflects the fact that since 1967 there was no significant reform of its tax system.[30]

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[28] *For Argentina, the period covered was 1975-89.*

[29] *Tanzi (1978) has shown that losses in tax revenues for a country with a ratio of tax revenue to the GDP equal to 20% and a rate of inflation of 40% a year will lose 1,1% of the GDP if the lag collection is two months, and 2,1% if the lag is four months.*

[30] *If a country frequently undertakes fine-tuning adjustments in its tax system, there will be no need to make radical changes. Such drastic simplifications are costly to implement and tend to be more difficult to sustain thus creating an unstable pattern that hinders the credibility of reform and undermines the confidence in the tax system.*

Table 10
Variability of government revenues in selected countries of Latin America and East Asia
(1975-92)

Countries	Variability of government revenues as a percent of the GDP			
	Total government revenues		Tax revenues	
	Variance	Rank	Variance	Rank
Latin America				
Argentina	13.79	5	2.59	10
Bolivia	6.14	7	3.06	9
Brazil	19.75	1	5.99	3
Chile	15.66	2	1.66	13
Colombia	1.29	16	0.16	17
Costa Rica	5.62	9	3.48	8
Ecuador	4.35	12	4.52	6
Mexico	2.29	14	0.53	16
Peru	14.12	3	8.30	2
Uruguay	5.27	11	0.79	14
Venezuela	9.76	6	18.43	1
East Asia				
Indonesia	4.00	13	4.90	5
Korea	0.29	17	0.69	15
Malaysia	5.74	8	5.32	4
Philippines	5.58	10	1.75	12
Singapore	14.12	4	4.37	7
Thailand	2.10	15	2.30	11

Source: Author's calculations.

4. Taxation, Poverty, and Income Distribution

In Latin America, the deepening of the import-substitution process led to fiscal policies that discriminated strongly against labor, stimulating capital utilization. Through the use of tax and subsidies, such policies distorted the wage-rental ratio making the private cost of capital much lower than its social cost. This bias in favor of capital contributed to the aggravation of the problem of chronic unemployment and probably explains the persistence of high levels of poverty in Latin American countries. On the opposite side, in East Asia, wage policies were much more conservative (Deyo, 1990). Also, adopted tax policies practically exempted labor so that this factor became much more competitive than capital (Tanzi & Shome, 1992). Therefore, East Asian countries seem to have followed better tax policies concerning the wage-rental ratio,

given its relatively abundant labor force. Consequently, the cutback of the distortions between the social and private costs of productive factors may have contributed to stimulate labor utilization and decrease poverty in East Asia.

Concerning the redistributive role of taxation, there is a marked difference between Latin America and East Asia. In Latin America, attempts to redistribute income rely heavily on tax policy (Bird & de Wulf, 1978). However, the results of such attempts are extremely disappointing. The adoption of complex tax systems that aimed at reducing social disparities did not significantly change income distribution. The difficulties of administering these nominal tax systems, presumed to be more progressive, produced the opposite effect. Very often, this form of taxation turned out to be highly regressive because its complexity encouraged tax evasion. Governments reacted to the shrinking of its revenue by imposing higher tax rates. Thus additional incentives for tax evasion were created generating perverse distributive effects.

In East Asia it seems that efficiency rather than equity considerations predominated on the determination of the tax system. Thus, the tax system was able to generate revenues required by the expansion of public expenditure policies. Such policies have been quite efficient and played an important role in the advent of a more equitable economic growth. Public spending with basic education — an important determinant of income distribution — were above the average of developing countries, contributing to increase the supply of skilled labor. Consequently, productivity gains associated to a very efficient absorption of modern technology increased wages and employment, thus reducing poverty and attenuating income disparities.

In the light of the new evidence, East Asia seems to have made a better choice. Indeed, policies of public spending appear to be more efficient than tax policy in attenuating income disparities and reducing poverty levels. Several studies have shown that taxation is a very poor device to correct income disparities generated by market imperfections and successive interventionist policies.[31] On the other hand, promoting equality by augmenting the availability of public goods is a very promising route as recent studies have shown that the potential of public spending to reduce economic inequalities have been underestimated.[32]

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[31] *See the excellent survey by Bird & de Wulf (1978) on the Latin American case, as well as Andic (1977) and Snodgrass (1977).*

[32] *Haberger, 1977; Goode, 1984; Cornes, 1982, among others.*

Finally, the regressive nature of the inflation tax and its negative impact on poverty and income distribution should not be neglected. In Latin America, the tradition of government financing through inflation surely represents an additional burden on the poor, as it can be seen from table 11. Indeed, tax revenue from seigniorage is much higher in Latin America than in East Asia. Even in a highly indexed country as Brazil was until recently, the inflation tax paid by the lowest quintile as a share of their income reached 1.6% in 1990 (Cardoso, 1992). For Latin American countries which do not have a sophisticated indexation system, this tax could be much higher.

Table 11
Tax revenue from seigniorage in selected countries of Latin America and East Asia (1984)

Countries	Tax revenue from seigniorage — 1984	
	% of the GDP	% of current revenue
Latin America		
Argentina	7.4	46.5
Brazil[1]	2.5	9.1
Chile	0.9	2.7
Mexico	7.2	41.9
Peru[1]	8.7	58.0
Venezuela	1.5	5.7
East Asia		
Indonesia	0.7	6.2
Korea[3]	0.1	1.4
Malaysia[2]	0.1	0.5
Philippines	2.4	22.1
Thailand	0.2	1.3

Source: Tanzi (1996).
[1] 1985; [2] 1986; [3] 1987.

5. Concluding Remarks

This paper reviewed the main features of tax systems in Latin America and East Asia. The objective was to identify the characteristics of tax structures that could, ultimately, explain their divergent growth pattern. After a detailed analysis, we found clear and significant differences among tax patterns, particularly regarding income, social security, and property taxes. Moreover, there were significant differences concerning rate structure and tax differentiation. Below, the main findings are summarized.

First, the role of indirect taxes will probably continue to be more important in Latin America than in East Asia. Strong income inequalities coupled with a highly unstable political system are serious obstacles for extending the role of direct taxes in a near future. Besides, there is also a rationale for the increasing role of indirect taxation in Latin America. Indeed, this could be the only effective way to tax the agricultural sector. This point represents a major advantage of indirect taxes over other taxes as, compared to East Asia, the Latin American rural sector generates a large share of domestic production.

Another marked difference between the tax structures concerns social security and payroll taxes. The differences found cannot be attributed uniquely to economic variables. Sociopolitical factors help to understand why Latin America presents a pattern more closely resembling that of advanced countries whereas in East Asia this form of taxation is virtually nonexistent.

There is also a clear tendency in Latin America towards relying on highly differentiated tax systems while East Asia presents a lower dispersion in tax rates. This is a clear shortcoming of Latin American tax systems. Overall simplicity in the rate structure, avoiding excessive tax differentiation not only makes taxes easier to collect but also prevents evasion. It certainly improves the potential of attracting foreign investment and thus may contribute to promote growth.

Indexation is also one of the characteristics that distinguish Latin American tax systems from those found in East Asia. By now, most countries in the former region have introduced some kind of inflation-adjustment to their tax system, whereas in East Asia such an adjustment is not widespread. This is hardly surprising, as Latin America inflation rates, historically, have been much higher than those prevailing in East Asia.

Last but not least, it should be noted that many problems detected in the fiscal systems in Latin America are consequence of the macroeconomic instability that characterizes the region. The need to preserve the precarious stability recently acquired should induce governments to be cautious with fiscal policy. In the new context of lower inflation and stable exchange rates, tax policy could be a powerful instrument to promote and guide economic development. In particular, tax incentives should be carefully redesigned in order to discourage rent-seeking behavior and truly foster the development of efficient economic activities.

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