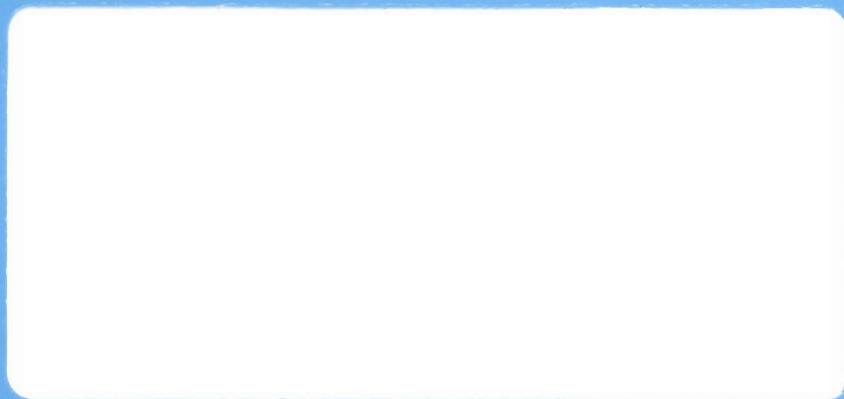




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TAX REFORM AND EQUITY IN ASIA:
THE EXPERIENCE OF THE 1980s

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The views expressed in this paper are those of the author and do not necessarily represent the views of the UNICEF International Child Development Centre.

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EXECUTIVE SUMMARY

At the beginning of the 1980s Asian tax systems presented a situation which varied according to both the structural conditions of economies and the differences in policy orientation. However, common administrative, legislative and political problems were evident in the effective operation of most Asian tax systems. These problems were leading to negative effects, including tax evasion, discrimination among taxpayers in the application of taxes, inordinate reliance on indirect taxes and insufficient tax effort. A general overhaul of the tax systems was therefore necessary.

The main principles of the tax reforms which were dominant elsewhere in the 1980s were only partly adopted in Asia. Some Southeast Asian countries seemed to be modifying their tax systems more drastically, while most of the South Asian countries applied only some segments of the more widely accepted tax reforms.

As a result, by the end of the 1980s Asian countries were relying more heavily on indirect taxes; tax ratios were stagnant, and tax efforts had declined. The efficiency gains were not obvious, and the empirical foundations of the initiatives were debatable.

Somehow, not only were the new tax principles apparently being applied superficially, but they also appeared not to be very appropriate to South Asian countries, especially in terms of equity. The application of value-added taxes (VATs) or any other form of broadly based consumption tax risked jeopardizing the quite complicated but fairly pro-poor indirect tax systems. On the other hand, the stagnation in direct taxes could not be easily tackled through conventional administrative measures, since tax administrations were constrained by structural bottlenecks such as the barriers to taxation in the agricultural sector.

A further aspect of the reforms of the 1980s was the emphasis placed on a broader set of options for raising revenue, such as nontax revenue. User fees in social sectors have also been analysed in particular in this paper, together with revenue, equity and efficiency considerations. The scope for the employment of these fees seems limited, at least in the Asian context, and they should eventually play a complementary role to taxes, which remain the principal source of financing for social services. Despite the problems in Asian tax systems already mentioned, the cost of taxation in terms of equity and efficiency seems likely to be lower than the cost of raising equivalent revenue through user fees in social sectors.

I. INTRODUCTION

During the 1980s fiscal policies changed substantially in both the developed and the developing world. Many factors can be considered responsible for this shift.

First and foremost, in developing countries internal and external imbalances, often exacerbated by the debt crisis and by "macro-pressures", forced these countries to adopt more restrictive fiscal policies which focused on a reduction in public expenditures and an increase in tax revenues or alternative types of government revenue.

Second, the necessity of undertaking a general overhaul of tax systems was recognized in the perspective of ensuring long-term fiscal balance and the greater compatibility of tax policy with other policies in the areas of trade, industry, pricing and economic liberalization.

In view of the inefficiencies, disparities and inadequate revenue generation of the tax systems, the need for radical tax reform was clearly felt. In contrast, limited attention seems to have been paid to vertical equity and the necessity to improve the welfare of the poor through tax policies.

The pursuit of equity through taxation has often been viewed as either conflicting with other objectives, such as efficiency and growth (the achievement of which is considered more important), or simply not feasible (assuming a reasonable degree of efficiency) due to the structural and administrative constraints faced by developing countries.

Given these policy premises, this paper is aimed at evaluating recent trends in taxation, with specific reference to the Asian context. Section II presents the situation of the tax systems at the beginning of the 1980s, while Section III attempts to identify the changes which occurred during that decade. In Section IV, the trends in taxation in the 1980s are assessed, with special reference to the equity implications, and alternative means of raising revenue, such as user fees, are explored. Conclusions are presented in Section V.

II. SOUTH ASIAN AND SOUTHEAST ASIAN TAX SYSTEMS: EARLY 1980s

Tax systems may be analysed from different perspectives and in various dimensions. This paper will first examine quantitative features, namely, tax levels and tax structures. Subsequently, the survey will appraise the particular equity implications of Asian tax systems at the beginning of the 1980s. Finally, the institutional conditions relevant to the tax systems will be considered, with a focus on administrative problems.

Tax and Nontax Levels

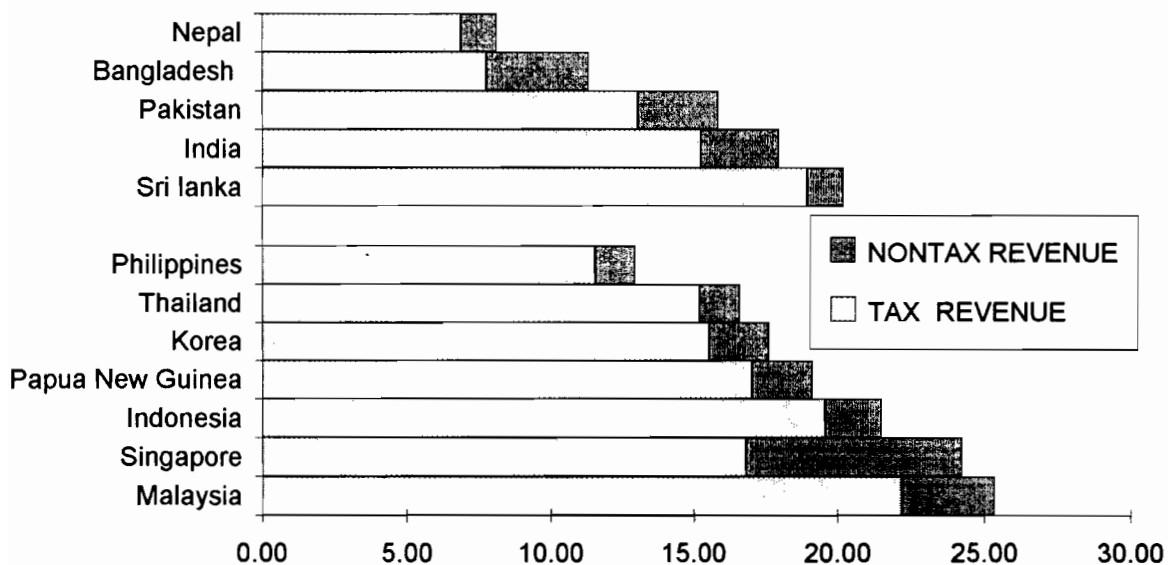
Tax levels were on average lower in Asia than they were in most other developing regions. In Asia, in fact, they reached on average to 15 percent, compared to about 17-18 percent in the Western Hemisphere and Africa and about 21 percent in the Middle East (Tanzi 1987).

A look at the sample of countries here reveals considerable intraregional variation (Figure 1; also see Table 1, page 5). Bangladesh, Nepal and the Philippines showed quite low tax ratios, well below the Asian average, the first two even going below 10 percent. On the other hand, India, Korea, Pakistan (where, if provincial tax revenue is considered, the tax ratio would be about 2 percent higher), Papua New Guinea, Singapore and Thailand were not far from the Asian average. Finally, Indonesia, Malaysia and Sri Lanka displayed quite high tax ratios.

Generally speaking, the East Asian countries appeared to sustain tax ratios which were higher than the ones in South Asia, although the Philippines, on the one hand, and Sri Lanka, on the other, were exceptions.

However, sources other than taxes also contribute to government revenue. These other

Figure 1: TAX AND NONTAX REVENUE
(As A Percent Of GDP, 1979/81)



Source: Calculated on the basis of IMF (1988).

components should be considered as well. Nontax revenue, capital revenue and grants were not negligible, despite their minor importance in comparison to taxes.

The ratio of nontax revenue to GDP for Singapore, 7.43 percent, was exceptional (Figure 1; also see Annex 1, page 49). Indeed, the absolute variations in this ratio in Asia were minor compared to the variations exhibited in the tax ratios. The values for all the other countries were, in fact, between 1 percent and 4 percent, with the lowest in Nepal and the highest in Bangladesh and Malaysia. Only Bangladesh was partly able to offset the "low" performance in taxation with relatively higher nontax revenue. In contrast, Nepal and the Philippines showed a "low" performance in this latter form of revenue generation as well. The "high" performance of Singapore, which was also the only country in the sample that displayed significant capital revenue (1.77 percent), was due to Singapore's special status as a city-state.

As concerns the composition of nontax revenue, the main revenue source was entrepreneurial and property income, which accounted on average for 1.54 percent of GDP in this group of countries (see Annex 1). This was more than one-half the total nontax revenue, which was 2.62 percent of GDP. Only in Indonesia and the Philippines was this revenue source relatively unimportant, amounting to 0.22 and 0.45 percent of GDP, respectively. The second main nontax revenue source was administrative fees and charges, which, however, represented on average a quite modest 0.67 percent.

Finally, grants from other governments or from international institutions were of some significance in Sri Lanka (3.26 percent), Bangladesh (2.31 percent), Nepal (3.02 percent)—these two latter displaying the lowest level of total revenue to GDP—and Papua New Guinea (9.79 percent), which had achieved independence from Australia only a few years earlier and was still receiving substantial budget aid.

Tax Effort and Tax Capacity

It would be interesting to interpret these differences in the light of policy orientations and tax performance. However, a direct comparison among country tax ratios as a measure of the ability to collect revenue would downplay the significance of the specific situation faced by each country.

First, the degree of development and peculiar economic structure of a country (the relative openness of the economy, the importance of mining and agriculture, the level of

monetization and urbanization, and so on) provide it with a unique set of "tax handles" and, therefore, of opportunities for the collection of taxes.

Second, social and historical factors are also responsible for constraints on taxation that determine tax "potential". The organization and constitutional setting of a state, the level of literacy of a population and the existence of a "pro-state culture" are all factors which bear on the level of tax compliance.

All the above factors can be classified as "objective" conditions which determine the ability to tax or the tax potential in a given country. What remains are those "policy factors" which can change over the short and medium term and which depend on government action.

Attention has been paid in the literature to disentangling the variance in tax ratios across countries that is due to differences in basic conditions (tax capacity) and the variance owing to policy (tax effort). This is known as the international tax comparisons approach which has been used mainly by the IMF (Bahl 1971, Chelliah 1975, Tait et al. 1979). Following this approach, the equation below has been worked out for a sample of 42 developing countries (including the 12 Asian countries under analysis here) for the period 1979/81. Combinations of variables that, a priori, may be relevant for an explanation of tax capacity have been examined. "GNP" had to be dropped, since it is too closely correlated with all the other variables and alone does not explain much of the variance. A dummy variable has been introduced in order to account for the fact that the average tax ratios in the Asian countries were low compared to those in other regions.

$$\ln T/GDP = 3.26 - 0.19 D - 0.109 \ln AGR + 0.212 \ln IMP + 0.0985 \ln MIN$$

(19.2)	(-2.26)	(-1.99)	(3.77)	(3.47)
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R-Squared = 0.565

R-Bar-Squared = 0.518

where:

T/GDP = tax ratio

D = dummy variable: "0" for non-Asian countries and "1" for Asian countries

AGR = share of agriculture in GNP

IMP = imports divided by GNP

MIN = share of mining in GNP

While the coefficients are quite significant (the values in parentheses represent the t-test), the equation explains more than one-half of the variance across tax ratios and offers an improved base of comparison for the tax ratios analysed.

Table 1 reports the actual tax ratios, "A", and the "fitted" ratios, "F" (tax capacity), together with the difference between the two and the ratio (tax effort index) of "A" to "F".

The South Asian countries, despite their lower actual tax ratios, ended up with a slightly "higher" tax effort than did the Southeast Asian countries. Also noteworthy is the fact that India and Sri Lanka, and in general all the South Asian countries, had a very "high" tax effort, despite their lower tax ratios. This means that lower tax capacity was very much responsible for a lower tax ratio. Despite very high actual tax ratios, Indonesia and Malaysia ranked below India.

On the other hand, Bangladesh, Nepal and the Philippines appeared to exhibit both low actual tax ratios and modest tax performances, even compared to the quite low tax capacity which accounted for the relatively unfavourable conditions in those countries.

It has finally to be remarked that a "low" tax effort does not always have negative implications. For instance, Singapore recorded the lowest tax effort index, but because of its status as a city-state, it was able to rely on considerable nontax revenue sources and largely meet expenditure needs.

Table 1: A CROSSCOUNTRY COMPARISON OF TAX RATES
AMONG SOUTH AND SOUTHEAST ASIAN COUNTRIES
(In Percentages, 1979/81)

	A*	F*	A-F	A/F
India	15.23	10.42	4.81	1.46
Sri Lanka	18.97	14.19	4.78	1.34
Indonesia	19.58	16.35	3.23	1.20
Pakistan	13.06	12.04	1.02	1.08
Thailand	15.19	14.32	0.87	1.06
Korea	15.52	14.62	0.90	1.06
Malaysia	22.19	21.06	1.13	1.05
Papua New Guinea	17.05	17.15	-0.10	0.99
Philippines	11.54	13.17	-1.63	0.88
Bangladesh	7.78	9.81	-2.03	0.79
Nepal	6.90	9.62	-2.72	0.72
Singapore	16.82	25.07	-8.25	0.67

Source: Calculated on the basis of IMF (1988), World Bank (1991).

* "A" = actual tax ratios; "F" = "fitted" tax ratios.

In this regard, the effect of nontax revenue on tax effort was statistically significant in the sample. Tax effort was negatively correlated with nontax revenue (logarithm), with a coefficient of -3.49 ($t = -3.23$) and R-Bar-Squared equal to 0.187.

Tax Structure

The tax structures in the South Asian and Southeast Asian countries in the early 1980s seemed to show some wide intercountry variations, as well as some differences with the tax structures in other developing regions.

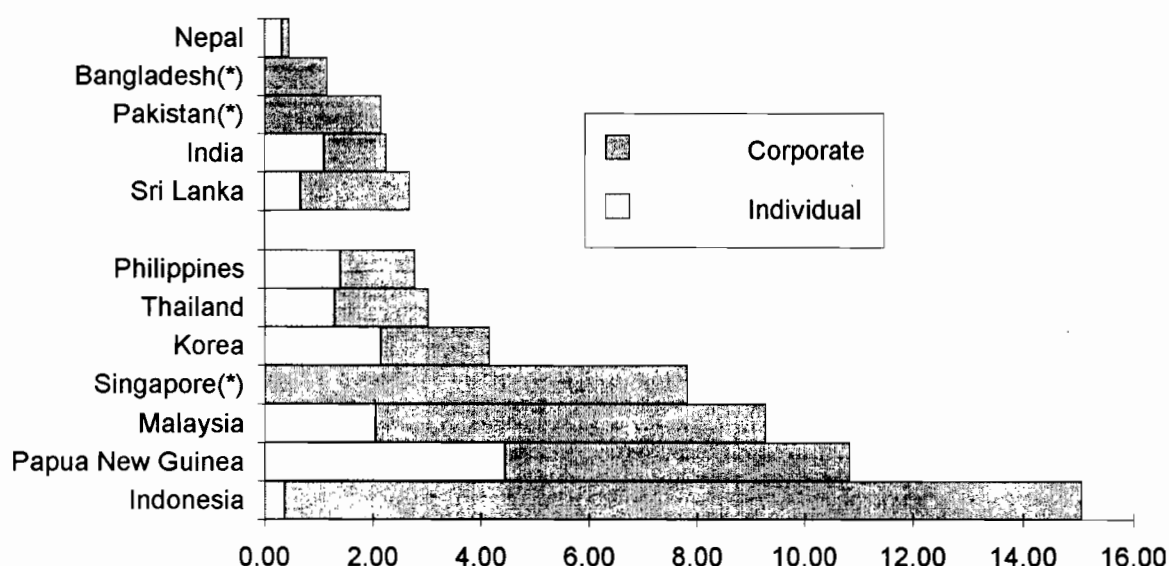
1. **Income taxation** in Asia accounted on average for 30.97 percent of tax revenue and 5.23 percent of GDP. These figures were almost equivalent to the corresponding ones for Africa and a bit higher than those for the Western Hemisphere, where, however, social security contributions accounted for a much higher share than they did in Asia or other developing regions.

The revenue share from income taxation is usually related to the degree of development of a country, although the statistical correlation with GDP, however significant, shows very low R-Squared and linear coefficients (Tanzi 1987, Burgess and Stern 1993). This implies that differences in income tax revenue across countries can be explained by a more articulated relation, probably the combination of a number of factors, some of them associated with policy and others with the structural characteristics of an economy. In this respect, the sectoral composition of GDP is very important. In terms of ease of collection, income taxes usually correlate positively with the share of mineral production in an economy and negatively with that of agriculture.

Mineral-producing economies were able to raise remarkable levels of income tax revenue, even higher levels than those in the newly industrialized countries, such as Korea and Singapore (Figure 2). All the other countries, including the South Asian ones, the Philippines and Thailand, recorded quite low levels of income tax revenue.

It is worth noting that the share of corporate income tax revenue was very high relative to that of personal income tax revenue (also a recurrent phenomenon in other developing regions such as Africa and in the Western Hemisphere) and very variable across countries, mainly because the corporate income tax was the main form of taxation falling on mineral incomes. Indeed, only Papua New Guinea also taxed mineral incomes through the personal income tax.

Figure 2: CORPORATE AND INDIVIDUAL INCOME TAX REVENUE
(As A Percent Of GDP, 1979/81)



Source: Calculated on the basis of IMF (1988).

* Total income tax.

2. **Other direct taxes.** *Social security contributions and payroll taxes* were applied only in Korea, Malaysia and Singapore and then at modest levels (see Annexes 1 and 2, pages 49-50). The average tax revenue under this heading (as a share of either GDP, or total tax revenue) was thus negligible in Asia, while in other developing countries such as the Middle East or in the Western Hemisphere this kind of tax played a relevant role (Tanzi 1987).

While the differences to be recorded across regions were not wide, in our Asian sample the average ratios of the revenue from *property taxes* to total tax revenue and GDP were 2.77 percent and 0.37 percent, respectively (see Annexes 1 and 2). These were lower than the corresponding ratios for the Middle East and the Western Hemisphere (Tanzi 1987). The averages in the Asian sample cover countries with negligible values for the property tax, as well as Nepal and Singapore, both of which relied heavily on this revenue source, for 8.83 and 14.57 percent of total tax revenue, respectively.

It thus seems that the Asian countries relied only very modestly on forms of direct taxation other than the income tax. However, accounting problems may have resulted in underestimates of the budget contribution of these other forms of direct tax. Social security

contributions and payroll taxes may have been recorded in extrabudgetary accounts, and property taxes in local or provincial government budgets, which often are not included in consolidated budgets.

3. **Domestic taxes on goods and services.** Domestic taxes on internal consumption accounted for 5.01 percent of GDP, a share which was higher than that for Africa and similar to that for the Western Hemisphere (Tanzi 1987). However, with respect to total tax revenue in Asia, domestic taxation on consumption represented a 35.93 percent share, the highest such proportion relative to all developed and developing regions in the world. In fact, the incidence of domestic taxation on consumption was quite high in most of Asia, excluding the mineral-producing economies and Singapore (see Annexes 1 and 2, pages 49-50).

The breakdown of domestic consumption taxation into subcategories shows that excise taxes played a more important role than did general sales taxes, representing, respectively, 2.26 percent and 1.61 percent of GDP, while in Africa general sales tax revenue was higher than that from excise taxes, and in the Western Hemisphere the revenue under the two subcategories was almost equivalent.

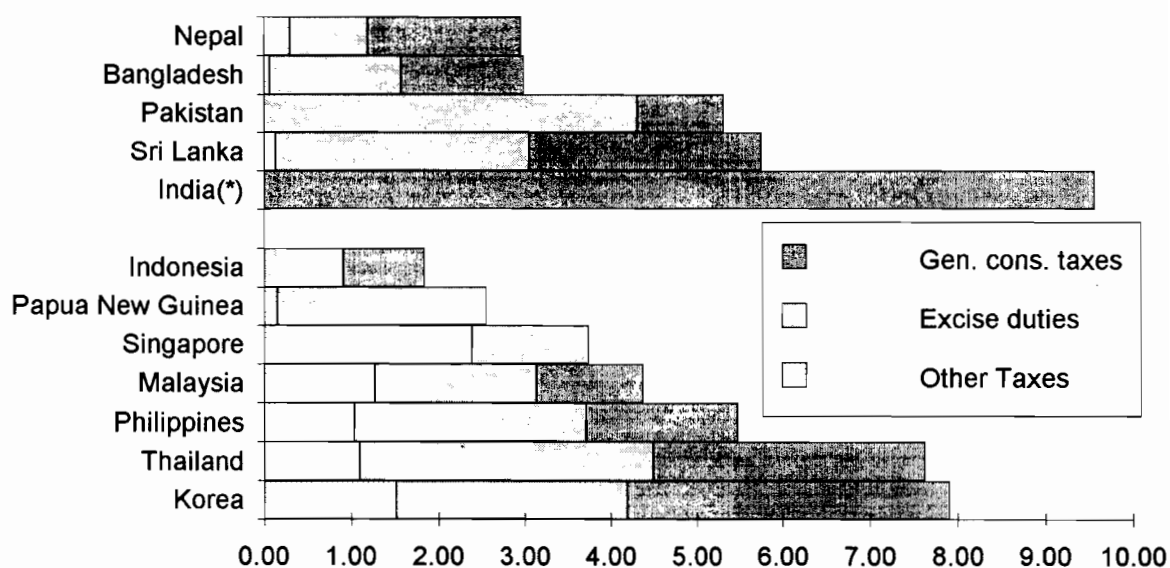
In the sample of countries here, except for Indonesia, Korea and Nepal, excise taxes accounted for more revenue than did sales taxes in all cases (Figure 3). This is not surprising, since, especially in South Asia, the coverage of excise systems is wider than is usual elsewhere. It includes not only "final" goods like tobacco, alcohol and fuel but also many intermediate goods and other consumption goods.

4. **External trade taxes** were quite important in Asia, as important as they were in the Western Hemisphere, although less so than they were in Africa. They accounted for an average of 4.07 percent of GDP and 28.31 percent of total tax revenue (Annexes 1 and 2).

The variations, however, were rather remarkable. First, export duties were applied at a significant level only in Malaysia and Sri Lanka. Second, import duties appeared to be higher in South Asia than they were in Southeast Asia (Figure 4). They accounted for almost 40 percent of total tax revenue in Bangladesh, Nepal and Pakistan. Such a high degree of reliance on import taxation was a cause of concern if it was interpreted as "revenue dependence". Thus, import regimes depended a great deal on revenue constraints, instead of being aimed at fulfilling industrial and trade policy objectives.

A comparison among countries of the composition of tax revenue according to the broad categories of direct taxes, domestic consumption taxes and international trade taxes is

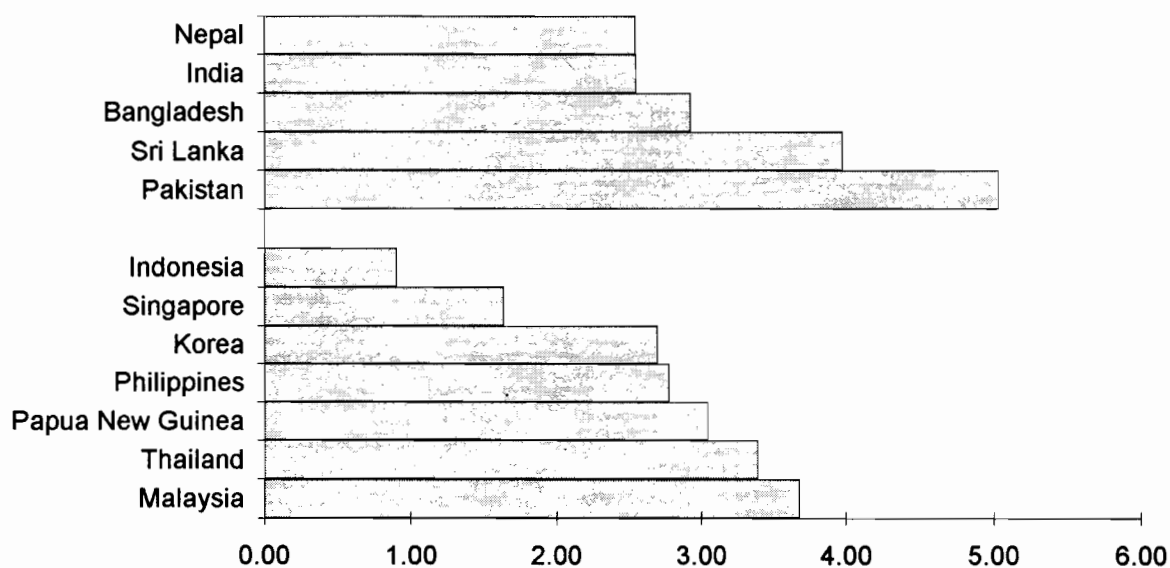
Figure 3: DOMESTIC CONSUMPTION TAXES BY MAIN CATEGORY
(As A Percent Of GDP, 1979/81)



Source: Calculated on the basis of IMF (1988).

* Total revenue from domestic consumption taxes.

Figure 4: IMPORT DUTIES
(As A Percent Of GDP, 1979/81)



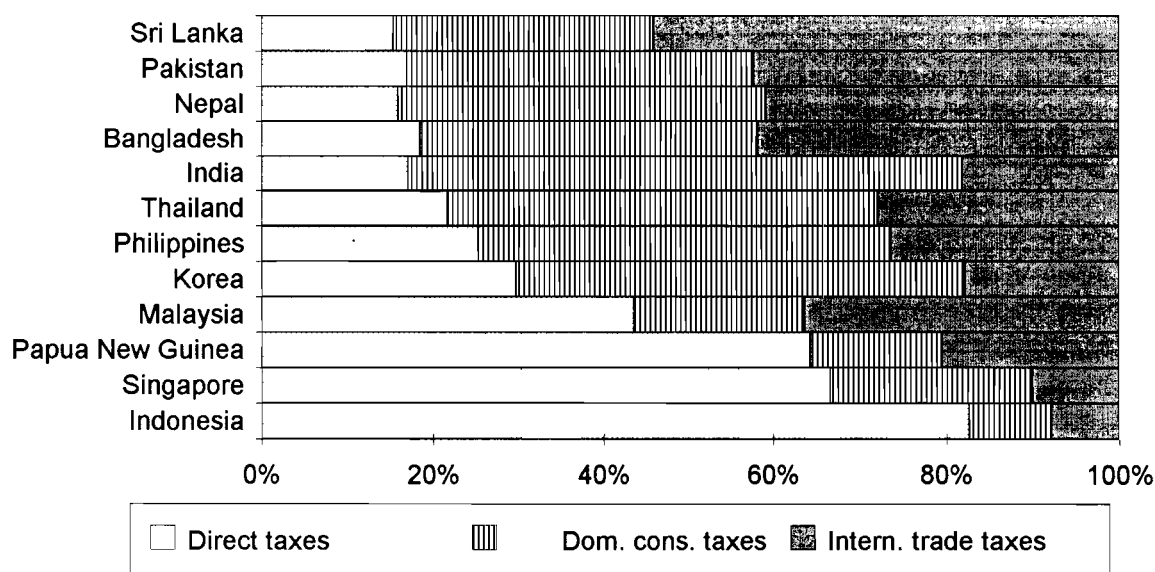
Source: Calculated on the basis of IMF (1988).

revealing. The variations in tax structure among countries were quite large. However, the share of direct tax revenue was "low" in all South Asian countries (the top portion of Figure 5), which were differentiated one from the other mainly in the varying proportion of domestic versus external commodity taxes. In contrast, in Southeast Asia (the bottom portion of Figure 5) direct taxes represented the tax category most responsible for country differences, which overall were wider than were those in South Asia.

The Empirical Evidence on Tax Incidence

As shown above, indirect taxation as opposed to direct taxation was largely prevalent in Asia. According to the conventional wisdom, one should expect that Asian tax systems were accomplishing very little in terms of income redistribution and may even have been worsening the situation. The idea that tax systems in developing countries were basically regressive was deeply rooted, since direct taxation, which was quite restricted and ineffective, was the only type of taxation seen as a redistributive tool (Toye 1989). However, this theoretical conviction did not meet with complete confirmation at the empirical level. Indeed,

Figure 5: THE COMPOSITION OF TAX REVENUE BY MAIN CATEGORY
(As A Percent Of GDP, 1979/81)



Source: Calculated on the basis of IMF (1988).

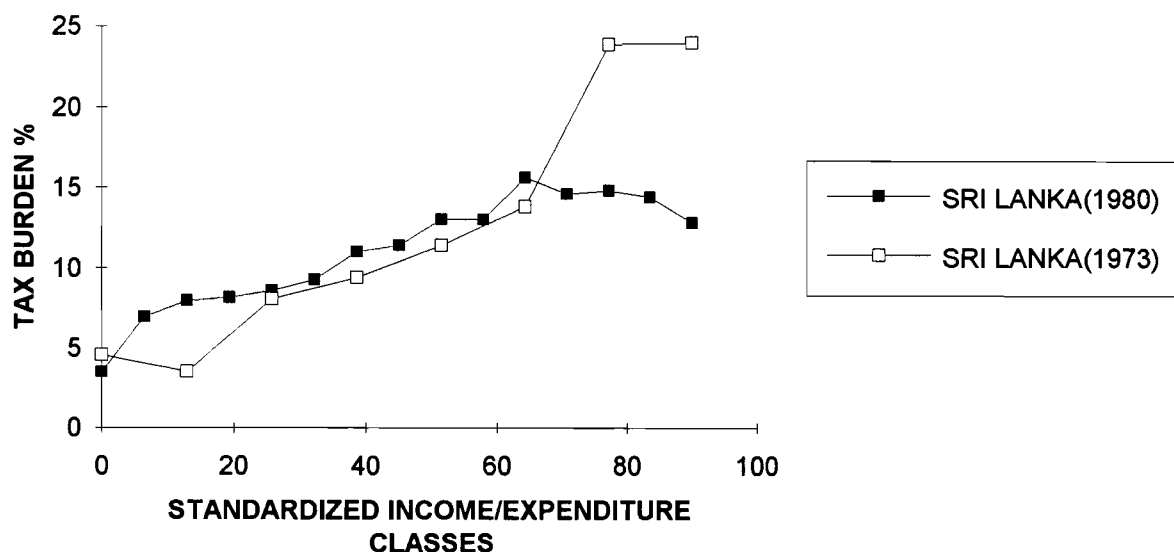
in his exhaustive review of the literature (44 studies and 22 countries), De Wulf (1975, page 71) found that, "the general impression left by the studies surveyed here is that the tax system in developing countries tends to burden the incomes of rich families relatively more than incomes of the poor."

This optimism was borne out somewhat in the case of Asia, especially South Asia (Figures 6 and 7). Sri Lanka in 1973 and 1980 (Alailima 1984), India in 1975/6 (Rao Divakara 1984) and to lesser extent Pakistan in 1978/9 (Malik and Saqib 1989) all exhibited a fairly progressive pattern of taxation.

As concerns tax incidence patterns in Southeast Asia, Korea in 1976 (Figure 8) exhibited a sort of "wandering proportionality" associated with some progressivity at the upper end of the income scale (top deciles), while the Philippines in 1960 (Figure 8) and Malaysia in 1968 and 1973 (Figure 9) displayed configurations which were more regressive than those in Korea. In any case, Malaysia and the Philippines exhibited some resurgence of progressivity at the upper end of the income scale.

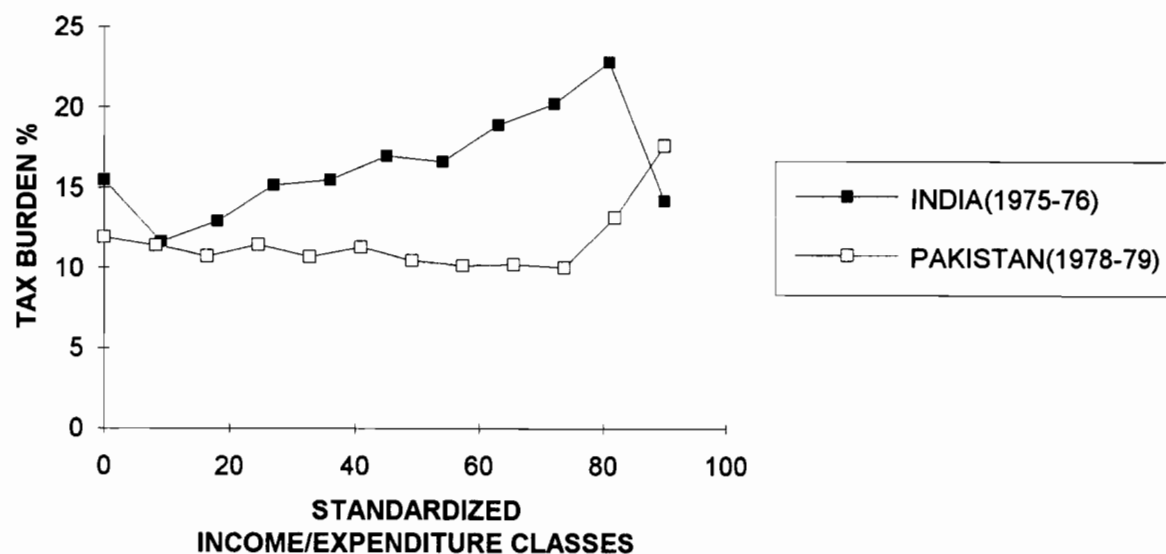
Tax incidence thus suggests the existence of various patterns in the distribution of the tax burden. In South Asia the progressivity seems to have been located mainly at the lower end of the income scale. In contrast, in Southeast Asia the tax patterns appear to have been

Figure 6: THE DISTRIBUTION OF THE TAX BURDEN IN SRI LANKA
(As A Percent Of Income, 1973 And 1980)



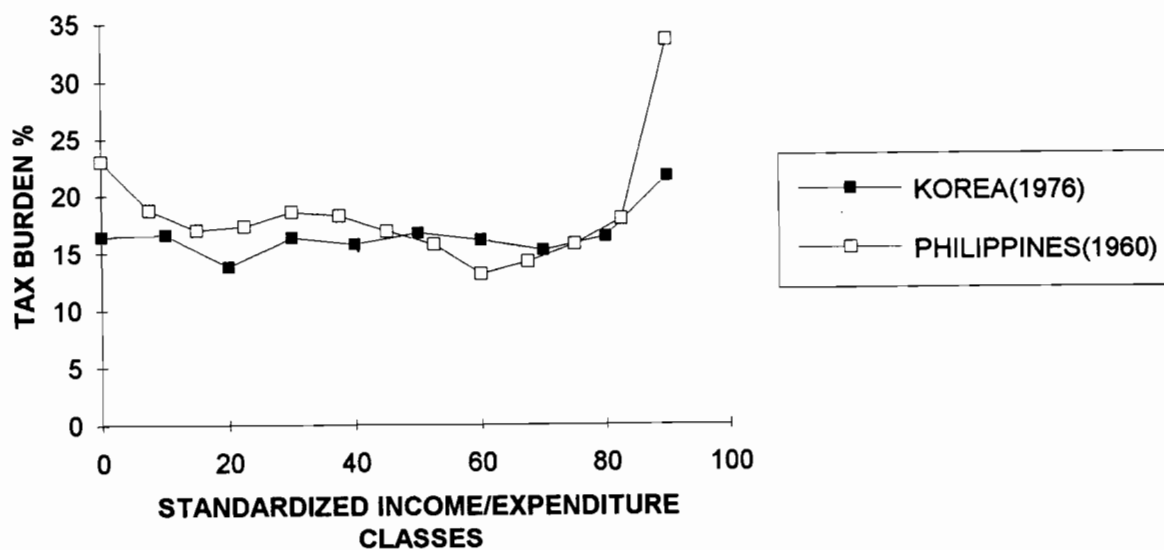
Source: Alailima (1984).

Figure 7: THE DISTRIBUTION OF THE TAX BURDEN IN INDIA AND PAKISTAN
(As A Percent Of Income, 1975/6 And 1978/9)



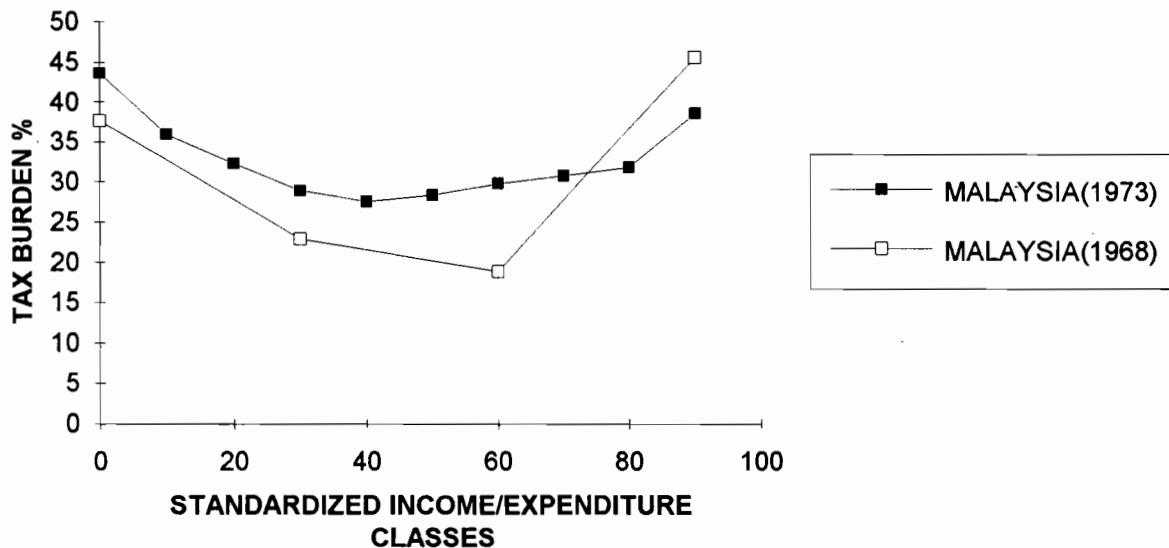
Sources: Rao Divakara (1984), Malik and Saqib (1989).

Figure 8: THE DISTRIBUTION OF THE TAX BURDEN IN KOREA AND THE PHILIPPINES
(As A Percent Of Income, 1960 And 1976)



Sources: De Wulf (1975), Heller (1981).

Figure 9: THE DISTRIBUTION OF THE TAX BURDEN IN MALAYSIA
(As A Percent Of Income, 1968 And 1973)



Sources: Salleh (1983), De Wulf (1975).

more regressive overall, and the distribution of the tax burden seems to have been progressive only at the top end of the scale.

The difference in incidence patterns between the South Asian and the Southeast Asian countries may have been due to the varying proportions and differing methods of application of indirect and direct taxes. Indirect taxes (in the way they are designed and administered) represent the main determinant of tax burden distribution among the poor and low- and middle-income groups, while direct taxes are the only form of taxation that can enforce progressivity on the rich above a certain level of income. The South Asian countries were able to maintain an indirect tax system which, coupled with the differences in consumption across income classes, generated quite a progressive distribution of the tax burden.

Chelliah and Lal (n.d.), whose study focused on indirect taxation, found that India in 1973/4 presented a progressive pattern of tax distribution in both the rural and the urban sectors, where the "central" excise taxes turned out to be the most progressive taxes. The breakdown by commodity in the overall indirect tax burden revealed a progressive pattern of incidence for most consumption items (Table 2).

However, the South Asian countries were not able to implement a very effective direct tax system so as to tax the affluent more heavily. Only Sri Lanka in 1973 (see Figure 6) was

Table 2: THE DISTRIBUTION OF THE TAX BURDEN FOR SELECTED COMMODITIES IN INDIA
(As A Percent Of Monthly Consumption Expenditure, 1973/4)

	Monthly Per Capita Expenditure Groups (in rupees)							
	0-15	15-28	28-43	43-55	55-75	75-100	100+	All
Foodgrains and atta	0.30	0.37	0.36	0.33	0.28	0.24	0.18	0.26
Sugar	0.61	0.46	0.60	0.55	0.54	0.51	0.38	0.47
Tea and coffee	--	0.05	0.14	0.15	0.22	0.33	0.28	0.23
Vegetable products, oils and fats	--	0.33	0.46	0.52	0.50	0.50	0.40	0.47
Kerosene oil	--	0.48	0.51	0.54	0.51	0.50	0.45	0.50
Drugs and medicines	--	0.09	0.17	0.23	0.28	0.36	0.52	0.36
Tobacco products	--	0.34	0.57	1.03	1.16	1.55	3.12	1.80
Liquor	--	0.13	0.02	0.20	0.16	0.74	2.46	1.03
Cotton fabrics	--	0.12	0.01	0.18	0.51	0.59	1.68	0.81
Art and rayon silk	--	--	--	0.02	0.15	0.25	1.31	0.52
Matches	--	0.05	0.07	0.10	0.09	0.06	0.05	0.07
Soap and detergents	--	0.08	0.11	0.11	0.12	0.12	0.11	0.11
Paper and paper products	--	0.03	0.03	0.09	0.21	0.20	0.31	0.22
Motor spirits	--	0.18	0.21	0.26	0.28	0.29	4.45	1.66
Refined diesel oil	--	0.33	0.35	0.52	0.73	0.79	1.36	0.88
Tires and tubes	0.61	0.10	0.10	0.13	0.16	0.17	0.39	0.23
Iron and steel	--	0.48	0.54	0.68	0.76	0.80	1.30	0.91
Total, all items listed	1.52	3.62	4.25	5.64	6.66	8.00	18.75	10.53
Total incidence, all indirect taxes	3.63	6.31	7.36	9.66	11.86	14.80	30.19	17.96

Source: Chelliah and Lal (n.d.).

able to impose a considerable share of the tax burden on the richest, but then in 1980 the progressivity at the upper end disappeared as a result of a decrease in direct taxation and a greater reliance on indirect tax revenue.

As regards direct taxation, it is interesting to analyse the division of the tax burden

between the rural and urban sectors. Compared to the urban sector, the rural sector seemed on the whole to be undertaxed in South Asia (Table 3). However, the minor tax burden borne by the rural sector benefited mostly the rural rich, so that within the sector the distribution of the tax burden showed quite a regressive pattern (Table 4). In fact, direct taxation had a redistributive impact almost exclusively in the urban sector because of tax exemptions for agricultural incomes and the lack of alternative forms of direct taxation such as a land tax.

Table 3: THE TAX BURDEN IN THE RURAL AND URBAN SECTORS IN SOUTH ASIA
(As A Percent Of Total Income Or Expenditure, 1966-80)

	Year	Rural	Urban
India*	1966-7/68-9	7.9	18.4
Mysore*	1968-9	6.7	11.4
Punjab*	1973-4	9.5	12.1
India	1975-6	11.3	17.8
Pakistan	1978-9	9.9	14.7
Sri Lanka	1980	9.9	12.0

Sources: De Wulf (1975), Malik and Saqib (1989), Alailima (1984), Rao Divakara (1984), Gupta (1983).

* The data refer to the agricultural and nonagricultural tax burdens.

Table 4: THE TAX BURDEN ON THE POOREST AND RICHEST IN URBAN AND RURAL AREAS
(In India And Pakistan, As A Percent Of Total Income, 1975-6 And 1978-9)

	Year	Rural Richest	Urban Richest	Rural Poorest	Urban Poorest
India	1975-6	2.3	55.5	9.6	17.3
Pakistan	1978-9	8.1	22.9	11.6	14.3

Sources: Malik and Saqib (1989), Rao Divakara (1984).

A different situation characterized Southeast Asia, where indirect taxes were quite regressive. Among the ASEAN countries, empirical evidence points to the regressivity of the general sales tax in Malaysia, Thailand and the Philippines, with the regressive pattern very strong in the last country (Asher and Booth 1983). Excise duties were also regressive in all

of these countries except Singapore. On the other hand, direct taxation was more effective and quantitatively more significant in Southeast Asia than it was in South Asia, so that the tax system could regain some progressivity at the top of the income scale, as is shown, in particular, by the "U" shape in the tax incidence pattern for Malaysia.

The Institutional Framework

The preceding sections have dealt with the quantitative features of tax systems, that is, the tax levels and tax structures. The quantitative aspects of a tax system are, in fact, those elements which can be readily compared and analysed. However, an analysis based on them would cover only some of the characteristics of a tax system. In particular, in order to understand why a certain tax structure and tax level have been established, or why a tax system does not meet objectives like equity and efficiency as it ought to do, one should consider institutional factors.

According to Shah and Whalley (1991) the institutional framework prevalent in most developing countries, Pakistan for example, can generate particular conditions in an economy that may invalidate the conventional assumptions of traditional tax incidence analysis on tax shifting, such as the forward-shifting of indirect taxes and the backward-shifting of direct taxes. Price controls, widespread blackmarketering, rural-urban migration, credit rationing and high levels of protection are believed to alter the situation so much that incidence studies based on the conventional assumptions might be completely contradicted. In particular, the tax incidence pattern might turn out to be much more progressive for indirect taxes and much more regressive for direct taxes. For example, the import duties in Pakistan may have been very progressive because of the existence of price controls (which fell on those holding import licences), while the personal income tax, in a pure and theoretical Harris-Todaro model, may have been quite regressive, since, because of urban-rural migration, it depressed rural wages. However provocative or tentative the assumptions and conclusions of Shah and Whalley, they have the merit of emphasizing the importance of the institutional features of an economy, features which would be relevant in any assessment of equity and efficiency.

The Institutions and the Administration of the Tax System

The institutional aspects of a tax system, such as the administrative, legislative and political

framework, require special attention, since they are directly linked to the tax "outcome". The way a tax system is administered is a particular focal point. As noted by Tanzi (1987), in developing countries, including those in Asia, the "statutory" tax system resembles only very slightly the "effective" one. The gap between the two can be very wide because of tax evasion, tax avoidance and the unbalanced application of laws.

1. **Administration.** During the period under study there were many problems in tax administration in Asian countries: lack of personnel, insufficient levels of training, deficiencies in coordination among the various units of tax administration, low collection rates and poor management of the information on taxpayers.

The most common problems occurred in the administration of direct taxes, particularly the individual income tax. In India (Kumar 1988) and Pakistan (Khan 1992) the administration of income taxes was neither efficient nor effective. Information was poorly managed; cross-checking among taxpayers and among departments was not carried out, and the organizational techniques and information technologies employed were backward. Thus, tax compliance was quite "low". In India the income actually declared represented only around 53.3 percent of assessable income in 1975/6 and just 41.9 percent in 1980/1 (Burgess and Stern 1993). In Pakistan the National Tax Reform Commissioner estimated that 72.4 percent of the income liable to taxation was not taxed in 1984-5.

The evasion of taxes was facilitated through widespread corruption. A confidential survey of chartered accountants carried out in India reported that 76 percent of all income tax officers accepted bribes. Sixty-eight percent of the individuals offering bribes paid an average bribe of 20 percent of the tax bill they were evading.

Countries exhibiting a "low" tax effort recorded similar problems with indirect taxes, which are supposed to be easier than income taxes to administer. Sales taxes, customs duties and excise taxes in Nepal were reportedly being administered by three separate departments, each staffed by nonspecialist civil servants, who all too often had been transferred from other departments of the central Government administration (World Bank 1988a). In Bangladesh widespread smuggling was occurring as a result of lax customs administration, which, deprived of the necessary resources, was unable to respond to the demands being made upon it (World Bank 1988b). Finally, an estimated 29 percent of all imports into the Philippines were smuggled, and quite often this smuggling merely consisted in the physical transport of undeclared or "underdeclared" goods right past customs (Burgess and Stern 1993).

While the administrative problems were quite serious in South Asia, Southeast Asia was also not immune (for example, the case of the Philippines just mentioned). Aside from Korea, where the tax administration was reputed to be relatively efficient (Asher 1989), almost all other countries recorded shortcomings.

In Indonesia before the tax reform, tax administration suffered from many problems, including limited information on taxpayers (coordination and the exchange of information among the various tax departments were nonexistent), no serious analysis of efficiency in tax collection (the revenue targets of tax collection units were even set on an ad hoc basis) and ratios of tax arrears to total taxes that reached a very high 50 percent (Conrad 1986). Compliance was very "low". Individuals filing tax returns or subject to withholding taxes on their wages represented less than 1 percent of all households in the country. Only 12 percent of all personal income taxes were paid by the self-employed, while fewer than 50 percent of all registered corporate taxpayers were considered "effective" in the sense that appropriate forms were being filed with the tax collection units. Meanwhile, corruption was so widespread in Indonesia that in 1985 the administration of customs duties was turned over to a private foreign firm.

Corruption was also very costly. It has been estimated that 47 percent of revenue in Thailand was being lost to corruption and tax evasion (Shah and Whalley 1991). However, losses in revenue were also due to weak enforcement. In Malaysia only 2 percent of the more than 20,000 corruption cases investigated resulted in convictions, while in India there were fewer than 30 convictions, although approximately 4.5 million tax returns were filed.

2. **Legislation.** That there were problems in the fair operation of tax systems in Asia was probably due to purely administrative shortcomings, but also to the fact that statutory tax systems (the tax legislation) were often inappropriate. The tax laws of some Asian countries were outdated and ill matched to the economic structure and stage of development of these countries. The wording of laws was often unclear or not sufficiently straightforward so that the laws could be applied, and complied with, through reasonable efforts by tax administrations. Laws which had been inherited from the colonial period were frequently modified by numerous ad hoc amendments, as in Bangladesh, India and Pakistan, creating norms which were difficult to apply even for the most diligent and honest tax administrators.

In both direct and indirect taxation, too many exceptions to basic principles were introduced. Concessions, incentives and exemptions were granted on the grounds not only of objective criteria, but also of subjective criteria, as, for example, in Pakistan (Ahmad and

Stern 1991, Khan 1992).

In addition to these problems, which were quite common to many other developing countries, the former British colonies, particularly India (Ahmad and Stern 1991), suffered from constitutional constraints on the various levels of government; these constraints were an obstacle to rationalization and a coordinated approach to indirect and direct taxation.

Likewise in Southeast Asia, despite the different historical traditions, tax legislation was either outdated or ill suited to the structure of the economy. The case of Indonesia is illustrative (Conrad 1986, Asher 1989). The Income Tax Ordinance was passed in 1944 and then amended several times in ways which resulted in many contradictions and much confusion. There were 19 marginal tax rates (from 10 to 50 percent); the taxation of income was "schedular", with large differences in the tax burden depending on the income source ("honoraria" and "rent", for example, were taxed at a flat rate of 10 percent), and withholding did not function as it should because no one seemed sure to which categories of income it could be applied. Similar uncertainties surrounded the Corporate Income Regulation, which was passed in 1925 and revised in 1970, because of the many incentives, the differences in treatment depending on numerous categories among enterprises (public companies, cooperatives, companies using public accounting services, etc.), the complicated rules for determining depreciation and so forth. The sales tax legislation was no exception in terms of uncertainties and administrative difficulties. Too many rates for too many categories of goods led to very "low" compliance and many loopholes for the evasion of taxes. There were also ambiguities in the rules for determining which entities, such as small firms, should benefit from exemptions, so that decisionmaking in these areas was often discretionary and therefore vulnerable to corruption. This generated an uneven pattern of taxation and considerable horizontal inequities.

Finally, in Southeast Asia many tax incentives were offered in order to attract foreign investment. As a result, the corporate tax base was reduced, and nominal marginal rates were rarely applied.

3. **Political economy.** It would be a great mistake to confine to the legislative and administrative levels an analysis of the uneven and ineffective application of tax laws. Often the "prime mover" behind the problems resides at the political level, while solutions are only possible if there is significant political backing.

Unfortunately, politicians are frequently influenced by lobbyists rather than by the general or collective interest. Sometimes the way tax instruments are implemented and

applied favours less "visible" forms of taxation like inflation tax or indirect levies. Taxation thus tends to develop wherever the balance between revenue yield on the one hand and political opposition and resistance on the other is more or less advantageous, rather than according to criteria of equity and efficiency.

A typical example of this kind of difficulty was offered by the taxation of land (or, more generally, the direct taxation of agriculture) in South Asia. Land tax revenue in Nepal was quite high in the 1950s and 60s, and then it declined until the beginning of the 1980s (Amatya 1986). In practice no other form of direct taxation on agriculture replaced it. While the decline may be explained in terms of inadequate administration (poor recordkeeping) and legislation (no adjustments for inflation), it cannot be easily denied that the political leadership bore some responsibility for the problem, and the pressure exerted on political leaders may have been the real reason behind the deterioration in revenue.

Similar examples are offered by the direct taxation of agriculture in Pakistan (Ahmad and Stern 1991) and India (Kumar 1988) and the taxation of urban property in the Philippines (World Bank 1988c). The political "bias" may also encourage tax evasion if those who are in power represent or share the interests of those who are seeking to evade taxes.

Summing Up

This analysis of Asian tax systems in the early 1980s has revealed that there was a marked focus on indirect taxation in South Asia and a set of differentiated situations in Southeast Asia. The mineral economies and to some extent the newly industrialized countries, such as Korea and Singapore, had more effective direct tax systems. In this respect, tax structure seemed to be affected by the structural features of an economy, such as the size of the share of the mining sector or the agricultural sector, although any negative influence exerted on tax structure because of the size of the agricultural sector tended to be reinforced by political (and not purely administrative) constraints. In any case, tax revenue levels appeared to be more flexible and pliable (only about one-half of the variance in tax ratios can be explained by structural factors) than tax structure simply because one tax could be used in place of another. For instance, India and Sri Lanka were able to raise significant revenue through indirect taxes alone.

As regards the equity effects of the tax systems, countries relying heavily on indirect taxes (like India and Sri Lanka) did not exhibit tax incidence patterns which were more

regressive than those in countries (like Malaysia) which favoured more powerful direct taxation. Rather, the difference between the two sets of tax incidence patterns depended more on where progressivity became apparent along the income scale, that is, whether at the bottom or at the top. The way indirect taxes were designed and administered was the main determinant of the tax burden falling on the poor and low-income groups, while direct taxes were probably the only means to achieve any redistribution which would also involve the richest. The relatively greater regressivity within the rural sector in South Asian countries like India and Pakistan indirectly supports this finding.

These considerations have been founded mainly on government budget data. Meanwhile, the institutional framework within which the tax systems developed was also clearly important, particularly in view of the gap between the "statutory" and the "effective" tax systems. While administrative shortcomings had a major share in the responsibility for this gap, inadequate laws and poor political leadership may also have been at fault. Furthermore, the existence of significant "asymmetries" between the statutory and the effective tax systems and the scope for discretionary and arbitrary decisionmaking may have favoured certain lobbyist groups or the more well-off, thereby leading to a loss in horizontal, as well as vertical, equity.

III. TAX REFORMS IN THE 1980s

The 1980s witnessed various tax reforms and changes in taxation in many developing countries. These changes were often initiated because of growing budget deficits and the perceived need to strengthen the noninflationary means of financing public budgets.

Macroeconomic pressures and fiscal imbalances were more manageable in most of the Asian countries throughout the decade than they were in other developing areas. These countries were therefore able, on average, to reduce fiscal deficits and inflation rates, while maintaining positive rates of growth. Despite this relatively favourable situation, the tax systems of the Southeast Asian countries, but especially the South Asian countries, still faced long-term problems, which were also crying out for thorough tax reform.

To a varying degree, changes in taxation were thus undertaken. While some of these changes were unique, responding as they did to country-specific situations, common trends in tax policy (or alternative revenue-raising instruments) during the 1980s can nonetheless

be identified, trends which were also coherent in some ways with the new perspectives on taxation prevalent in the developing world.

The New Perspectives on Taxation

The new approach toward taxation prevalent in developing countries may be interpreted as a result partly of a natural evolution in thinking deriving from the growing experience with tax matters and partly of a more profound shift in development perspectives, government economic interventions and the relative importance among the objectives being pursued through public policy.

One set of changes was represented by new procedures and methods involved in carrying out tax reform (Gillis 1988, Toye 1989). Based on an awareness that a true reform must be translated into application, as well as legislation, and that this is possible only if the administrative capacity and political will exist, the new tax reforms emphasized what is *feasible* over what is *desirable*. Sophisticated laws which resembled those in force in developed countries had become associated with ineffective tax systems, characterized by tax evasion, tax discrimination, very limited coverage, quantitative and qualitative deficiencies in the tax personnel available and so forth (see earlier).

While constraints must be offset, it has to be recognized that a tax administration cannot be changed overnight. Tax administration may, in fact, be viewed as a set of techniques that can be assimilated through a learning process, but only over a period of time, especially if, as in the case of tax reform, new tax instruments, new modes of organization, computerization and so on are being introduced.

In other words, the evolution of ideas on taxation and tax reform in developing countries has recently been enriched by a sort of realism that emphasizes the effective rather than the normative in the operation of a tax system. Thus, the constraints due to the economic, social, political and administrative environment in developing countries have been recognized and taken into consideration more readily in tax design.

Another set of changes revolved around the objectives to be attained and the tax instruments to be used. Among the objectives, there was a major emphasis on reducing the deadweight loss produced by each kind of tax (excluding lump-sum and poll taxes). Among the tax instruments, there was a certain focus placed on indirect taxation—more specifically, on consumption taxes rather than import duties or "cascading" taxes on production, so as to

avoid distortions in patterns of trade and in productive structures.

A comparison with the older approaches in the tax systems in developing countries during the 1950s and 60s is informative. For instance, Kaldor's approach was quite influential, at least in terms of the official intentions expressed by politicians in South Asia (Toye 1989). At that time consumption was still seen as the natural base of taxation in developing countries, while attention was also devoted to the effect of disincentives on private savings and investment. However, taxation had to be carried out through a coordinated set of direct taxes centred on the "expenditure" tax, in order to tax the "unproductive" consumption of the rich and reduce the high income gap, yet without discouraging investment. In contrast, small consideration was attached to indirect taxes, which were deemed to be invariably regressive.

Despite the common emphasis on the reduction of deadweight loss in the tax system and on reliance upon indirect taxes, two quite different and contrasting orientations emerged in defining the concrete norms to be followed:

1. **The administration-centred view**, according to which the administrative elements of the tax system are important features which ought to be considered in tax design and which should also form the foundation in any tax policy (World Bank 1988c). This view held that any kind of taxation, including indirect taxation, should be uniform, that is to say, it should aim at the broadest coverage at a single rate.

The advantages of this option lay in the simplicity of the system, which could be managed even by a poorly organized administration, and, since it would be based on only a few simple principles, it would be more difficult to manipulate and would thereby favour less tax evasion and less tax avoidance. Moreover, the propensity for uniform taxation (and therefore the rejection of any "fine-tuning") also seemed justified because of the practical difficulty in measuring (with reasonable precision) the demand elasticities of all the goods involved. Given the lack of understanding, or only very approximate knowledge, of the demand elasticities, any departure from uniformity seemed arbitrary.

2. **Optimal taxation theory**, according to which taxation should be differentiated among goods, precisely following the "inverse elasticity rule" or the "Ramsey rule". Goods for which the demand is less elastic should be taxed more heavily. In this way, for any given amount of tax revenue to be collected, the distortions in consumption patterns could be minimized (thereby also keeping the efficiency loss very "low").

This approach was developed and applied by Ahmad and Stern (1991) in countries

like India and Pakistan. However, along with the effort to minimize inefficiency, they also took distributional considerations into account. This was accomplished through the application of a set of welfare functions with varying degrees of "inequality aversion". The results were quite different from those which would have been achieved had efficiency been the only objective. For example, an approach aiming only at improved efficiency would probably involve the taxation of essential goods because of the inelastic demand for these goods. Yet, even a low level of inequality aversion would discourage the imposition of such taxation, or would indicate that subsidies would be optimal.

Trends in Legislation

While awareness of the shifts in economic thought and the perspectives on policy is important to any general understanding, it is nonetheless critical to examine carefully the concrete impact of these shifts, particularly in terms of legislation.

Thirsk (1990) analysed eight recent cases of tax reform, including the cases of Indonesia and Korea. He found six trends in taxation that were common to all the cases:

- Lower personal and corporate income tax rates.
- The alinement of corporate income tax rates with the personal income tax rates for top income brackets.
- Closer integration between personal and corporate income taxes.
- A broadening of the personal and income tax base.
- The introduction of a value-added tax (VAT).
- More extensive adjustments for inflation and the enhancement of administrative capabilities.

While these trends were more marked in reforming countries, they were often also evident in the more marginal changes in taxation in other countries. Thus, for example, VATs were also introduced in countries like India, Pakistan and Thailand that had not undertaken comprehensive tax reforms (Table 5).

VAT coverage varied among countries. In Indonesia and the Philippines it reached manufacturers, while in Korea it reached retailers. However, the agriculture and small business sectors were exempt in all countries.

In India a modified version of the VAT, called "Modvat", was employed. It was not designed to raise revenue but to "relieve" the inputs from central excise duties.

Table 5: VALUE-ADDED TAX RATES IN SELECTED ASIAN COUNTRIES*
(In Percentages)

	Month VAT Introduced or Proposed	VAT Rates at Introduction	VAT Rates on 21/2/92
Indonesia	April 1985	10	10
Korea	July 1977	10	2, 3, 5, 10
Pakistan	July 1990	12.5	12.5
Philippines	January 1988	10	10
Thailand	January 1992	7	--
India	March 1986	--	--

Source: IMF (1992).

* The so-called "standard" rates which are applied to goods not covered by other, especially high or low rates are shown in italics.

Meanwhile, nominal income tax rates were lowered, and the gap between the topmost nominal personal tax rate and the corporate tax rate was reduced, if not eliminated as in Indonesia (Tables 6 and 7).

Table 6: NOMINAL PERSONAL TAX RATES FOR THE TOP TAX BRACKETS
(In Percentages, Mid- And Late-1980s)

	1984-5	1989-90
Bangladesh	65	50
India	62	50
Indonesia	50 ^a	35
Korea	70.1	50
Malaysia	55	40
Nepal	55 ^b	50
Pakistan	60	45
Philippines	35-60 ^c	35
Singapore	40.5	33
Sri Lanka	61.5	40
Thailand	65	55

Sources: IBFD (various), Bagchi (1991), Amatya (1986), Conrad (1986), Sicat and Virmani (1988).

^a In 1983. ^b In 1982-3. ^c In 1985; the rate applied to business, trade and professional incomes.

Table 7: CORPORATE INCOME TAX RATES IN SOUTH AND SOUTHEAST ASIA
(In Percentages, 1984/5 And 1989/90)

	1984/5		1989/90	
	Minimum	Maximum	Minimum	Maximum
Bangladesh	45	60	40	55
India	55	65	50	60
Indonesia	--	50	15	35
Korea	--	60	20	33
Malaysia		40*		35*
Nepal	15	--		40*
Pakistan				30*
Philippines	25	35		35*
Singapore		40*		32*
Sri Lanka	--	--	40	50
Thailand	20	45	30	35

Sources: Asher (1989), Bagchi (1991), Thirsk (1990), IBFD (various).

* A single rate was applied.

Together with the reduction and unification of income tax rates, some countries undertook administrative and legislative changes so as to broaden the tax base, offset the revenue losses caused by nominal rate reductions and better achieve the objectives of efficiency and horizontal equity.

In *Indonesia* income tax law was reformed through radical limitations on tax incentives, exemptions and allowances (with a few unavoidable exceptions, such as the minimum-income exemptions) and an expansion in tax withholding.

Important steps were also taken at the administrative level. Taxpayer identification codes and a master file were developed for the computer-based tax information system so as to facilitate crosschecking among income tax and VAT records; forms were simplified, and individuals in the lowest tax bracket were no longer required to file returns. Meanwhile, tougher penalties were instituted for corruption among civil servants, and a new appeals process was established better to assure taxpayer rights and the payment of interest on tax refunds not disbursed promptly.

In *the Philippines* the income tax reforms included a move from a schedular to a global

approach (that is, the application of a single tax rate schedule on incomes which had previously been taxed separately, such as incomes from "compensation" and incomes from business, trade and professional activities) and an increase in the final withholding tax rate on interest income and on royalties from 17.5 and 15 percent, respectively, to a uniform 20 percent (Manasan 1990).

In *Thailand* many measures were taken to improve tax administration and broaden the tax base (Asher 1989). These included the taxation of interest income, an increase in the tax rate for nonprofit organizations, more use of "presumptive" taxation, movement toward the establishment of a pay-as-you-earn system for the collection of personal income taxes, and reductions in the timelags between the accrual of business and professional incomes and the payment of the tax liability on these incomes. Tax liability was now estimated on the basis of easily verifiable criteria, such as the type of business, the location of the business, the number of employees and so on.

Finally, in *Korea* the tax base was broadened thanks to the institution of global personal income taxation, in particular for capital income by way of a withholding tax on interest and dividends and capital gains taxes on real assets (Thirsk 1990, Asher 1989).

While these reform trends also seem to have been shared at least partially by nonreforming countries, the relevant changes appear to have been concentrated mainly in the area of income taxation and, among indirect taxes, in the use of VAT. Thus, despite the focus on indirect taxation among the new perspectives on reform, the long-term tax policy proposals which were presented in that area did not demonstrate much analytical variation but revolved mainly around a single, simple solution: the introduction of VAT.

The Changes in Taxation Involved in Adjustment Programmes

A different image—more revenue-oriented and more concerned with the revenue effects over the short run—is offered by the tax changes included in the adjustment programmes sponsored by the International Monetary Fund in South and East Asia during the first half of the 1980s (Table 8). Indeed, most of the changes in taxation agreed to through the programmes were in the areas of import duties and sales and excise taxes and were aimed at both boosting rates and broadening the tax base (in the case of import duties). In particular, since a major objective was to cut budget deficits, taxes which were more "buoyant", such as excise taxes and import duties, were chosen in order to raise additional

Table 8: FISCAL CHANGES IN 11 FUND PROGRAMMES IN SOUTH AND EAST ASIA
(1980-4)

	Bangladesh	India	Korea	Pakistan	Philippines	Sri Lanka	Thailand	Number	% of Programmes
<i>Income Tax</i>									
Reduce personal income tax	1		1					2	18.18
Increase/surcharge: personal income tax		1				1	1	3	27.27
Income tax reform/extension		1	1	1				3	27.27
Move from global to schedular income tax					1			1	9.09
<i>Corporate Tax</i>									
Modify/reduce income profit tax		1	2	1			1	5	45.45
Income tax surcharge						1		1	9.09
Shorten lag for corporate tax payment					1			1	9.09
<i>Property Tax</i>									
Introduce/raise land taxes	1							1	9.09
<i>Domestic Taxes on Goods and Services</i>									
Raise excise duty rates	1	1			2		2	6	54.55
Increase tax on petroleum products				1	2			3	27.27
Decrease tax on petroleum products			1					1	9.09
Raise/modify sales tax			1	1	1			3	27.27
<i>Import Duties</i>									
General/selective increase: customs duties	1						2	3	27.27
Increase petroleum import taxes			1					1	9.09
Reduce/eliminate selected import duties							1	1	9.09
Tariff reform (exemption)			1	1	1	1	2	6	54.55
Import duty surcharge					1	1		2	18.18
<i>Export Duties</i>									
Export compensation scheme				1				1	9.09
Other tariffs, fees, charges, etc.		1	1	1	1	1	1	6	54.55
Improve/reform tax administration	1		2	1	2	1	2	9	81.82
<i>Nonfinancial Public Enterprises (NPEs)</i>									
Improve NPE performance	1		2	1	1	1	2	8	72.73
a. Improve price structure	1		2	1		1	2	7	63.64
b. Partial/total privatization				1		1		2	18.18
Improve overall management/control			1	1	1	1	1	5	45.45
Reduce deficit as a % of GDP	1	1	2	1	1	1	2	9	81.82
Total fiscal changes	8	6	18	13	15	11	19	90	
Total programmes	1	1	3	1	2	1	2	11	

Source: IMF (1986).

revenue easily and quickly. Be that as it may, the most frequent tax measures in these adjustment packages involved enhancements in tax administration. Noteworthy finally is the fact that most of the adjustment programmes included fiscal changes on the nontax side that focused especially on improving price structures and increasing charges and fees.

Tax Reform without Taxation: The User Fee Option

The focus on efficiency, combined with the more serious budget constraints which emerged during the 1980s, encouraged a search for alternative sources of revenue. In particular, the set of options traditionally open to tax policy was widened, and more attention was paid to nontax sources of revenue such as user fees and public utility charges.

Pricing policies were therefore addressed, and prices in the social sectors were a subject of very considerable debate during the decade (Jimenez 1989, Colclough 1993). The World Bank became involved in diffusing the ideas behind the so-called "neoliberal approach". Likewise here, much emphasis was placed on the advantages of efficiency in view of the shortages in the resources available to the social sectors and other bottlenecks in the supply of social services. Meanwhile, subsidies to augment the supply of social services were judged to be a source of inefficiency because of the potential for excesses in demand and service overuse, overcrowding or rationing. According to the neoliberal approach, which took these assumptions as a point of departure, the revenue from new or expanded user fees for social services could be employed to extend service coverage or improve quality.

It is difficult to determine the extent to which these new ideas on pricing were translated into practice, or verify systematically the degree to which they were implemented at the macrolevel or at the international level. Nonetheless, in general, charges for the goods and services provided by the public sector were probably being increasingly considered as an option by the governments of many Asian countries. The generalized increase in nontax revenue that occurred in Asian countries during the 1980s (see later) suggests that there was a growing effort to mobilize resources through the implementation of pricing policies at state-owned enterprises and other public entities. (See Table 8, which shows that price structures for the goods and services provided by the public sector were frequent targets of the interventions linked to adjustment programmes.)

According to a study undertaken by the World Bank (1986) on education, it appears that, relative to other developing regions, Asia was able to recover a not insignificant portion

of the unit costs in secondary and higher education between the end of the 1970s and the beginning of the 80s (Table 9). However, this relatively high cost recovery may also have been due to the lower unit costs in education that were characteristic of Asia with respect to other developing regions, such as Africa (UNDP 1991).

Table 9: UNIT COSTS RECOVERED IN EDUCATION BY REGION
(In Percentages, Late 1970s And Early 1980s)

	Primary	Secondary	Higher
East Africa	6.3	16.6	2.6
West Africa	11.4	9.8	3.1
Asia	1.7	16.0	11.5
Latin America	0.9	1.7	6.6

Source: World Bank (1986).

A look at individual countries in Asia reveals that India and Korea were noteworthy in that they were able to recover a considerable portion of the unit costs (Table 10). However, evidence concerning a more recent period, the mid-1980s, shows more modest levels of cost recovery (Table 11).

Table 10: PERCENTAGE OF UNIT COSTS OF EDUCATION RECOVERED BY COUNTRY,
LATE 1970S AND EARLY 1980S

	Primary	Secondary	Higher
India	2.0	18.5	29.1
Indonesia	0	8.0	13.0
Korea	3.7	41.2	23.4
Malaysia	5.0	5.0	5.8
Pakistan	1.2	1.8	2.1
Philippines	--	--	3.7
Thailand	0	12.5	6.9

Source: World Bank (1986).

Table 11: PERCENTAGE OF UNIT COSTS OF EDUCATION RECOVERED BY COUNTRY, MID-1980s

	Primary	Secondary	Higher
India	--	11.6	4.9
Indonesia	7.1	27.4	18.9
Korea	0.0	34.2	45.9
Malaysia	3.7	4.0	5.8
Philippines	0.0	9.3	15.3
Thailand	0.1	18.3	5.0
Nepal	0.0	40.7	10.4
Papua New Guinea	8.7	39.8	0.0
Bangladesh	7.4	4.0	0.1
Sri Lanka	3.1	3.1	3.4

Source: UNDP (1991).

While the World Bank and UNDP data upon which the above findings are based may not be strictly comparable, the contribution of user fees definitely declined in education and health care in India, Pakistan and the Philippines (Table 12).

Table 12: THE REVENUE FROM USER CHARGES: A COMPARISON BETWEEN 1980 AND 1988
(In Percentages Of Government Expenditure)

	Education		Health Care	
	1980	1988	1980	1988
India	2.2	1.5	8.7	4.5
Pakistan	5.9	1.4	6.0	2.6
Philippines	4.1	1.1	7.7	2.5

Source: UNDP (1991).

IV. ASSESSMENT

Trends in Revenue

While the preceding section has dealt mainly with changes in tax legislation, the effects which these changes had on revenue, tax levels and tax structure will now be examined.

1. **Tax levels.** On average the ratio of tax revenue to GDP in the country sample was not subject to wide variation but only to a very slight one, -0.28 percent, which, however, was more than offset by a rise in nontax revenue (see Annexes 1 and 3, pages 49 and 51). Nonetheless, sharply declining tax ratios were displayed by countries such as Indonesia (-4.74 percent) and Malaysia (-3.58 percent), while relatively slight decreases occurred in Korea, Singapore and Sri Lanka. In contrast, rising ratios were registered in Bangladesh, India, Nepal, Pakistan, Papua New Guinea, the Philippines and Thailand (2.07 percent).

Clearly, the sharp variations in Indonesia and Malaysia were due to the drop in oil prices that reduced the corresponding tax revenue coming from the oil sector. This is confirmed by the plunge in the ratio of corporate tax to GDP in the two countries.

These data may be somewhat inaccurate, since they do not account for local government revenue, which may have exhibited a trend which counterbalanced that in central government revenue, particularly in cases where the taxing power had been progressively decentralized, creating a potential "substitution effect" between the tax effort at the central level and that at the local level.

To obtain a more comprehensive comparison among tax ratios, the regression for 1979/81 described earlier (see page 4) has been repeated over the same sample of 42 countries. Based on the specifications employed for 1979/81 but relying on updated data, the resulting equation once again matches better in terms of both the significance of the estimated coefficients and variations, although the "fit" is not quite as close as the one achieved for the earlier period.

$$\ln T/GDP = 3.15 - 0.19 D - 0.16 \ln AGR + 0.16 \ln IMP + 0.099 \ln MIN$$

(15.35)	(-1.95)	(-2.25)	(2.19)	(2.98)
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R-Squared = 0.403

R-Bar-Squared = 0.339

where the notations used are similar to those in the earlier equation (see page 4).

Only India and Sri Lanka exhibited actual tax ratios which were greater than the fitted ones (Table 13). The tax ratios recorded in all other Asian countries were below the "theoretical" capacity. While actual tax ratios did not vary much, tax capacity as measured by the equation increased in all countries. A possible interpretation of this may be that the Asian countries, compared to the other developing countries considered, benefited from more profound structural changes in the economy. These changes may have permitted higher tax ratios, but the Asian countries did not take adequate advantage of these extra tax handles.

Nonetheless, the relative rank in terms of tax effort among the Asian countries was quite similar to that in 1979/81. The most remarkable exception was the drop in the tax effort of Indonesia, the very country which had instituted one of the most significant tax reforms in Asia during the 1980s. It appears that the fall in the actual tax ratio of Indonesia was only partly due to a change in "exogenous" conditions. Indeed, the relative rank of Malaysia in tax effort among the Asian countries did not fall very much, despite the sharp decline in the tax ratio for that country.

2. **Nontax revenue.** On average the ratio of nontax revenue to GDP grew by 1.08 percent

Table 13: A CROSSCOUNTRY COMPARISON OF TAX RATES FOR ASIA
(At The End Of The 1980s)

	A*	F*	A-F	A/F
India	16.66	12.84	3.82	1.30
Sri Lanka	18.04	15.52	2.52	1.16
Thailand	17.26	17.89	-0.63	0.97
Pakistan	13.51	14.89	-1.38	0.91
Malaysia	18.61	20.87	-2.26	0.89
Papua New Guinea	17.75	20.01	-2.26	0.89
Korea	15.10	17.44	-2.34	0.87
Philippines	12.92	15.42	-2.50	0.84
Indonesia	14.75	17.81	-3.06	0.83
Nepal	8.19	11.29	-3.10	0.73
Bangladesh	7.72	11.01	-3.29	0.70
Singapore	14.89	23.19	-8.30	0.64

Source: Calculated on the basis of IMF (1988), World Bank (1991).

* A = actual tax ratios; F = "fitted" tax ratios.

during the 1980s (see Annexes 1 and 3, pages 49 and 51). Given the nearly constant average tax ratio, this resulted in a corresponding rise of 0.81 percent in the current revenue to GDP ratio. In countries like Malaysia, Singapore and Sri Lanka the increase in nontax revenue offset the drop in the tax ratio, thereby preventing a decrease in the total revenue ratio. Noticeable was the fall in nontax revenue in Bangladesh, from 3.58 to 2.03 percent of GDP.

The change in the magnitude of the ratio of nontax revenue was determined mainly by a "symmetric" variation in entrepreneurial and property income, while no significant change was recorded in administrative fees. Thus, while an exact interpretation would require more detailed knowledge of the breakdown of the nontax revenue category for each country, one might infer, as a general trend, that any rise in this category corresponded with a change in the management and pricing policies of state-owned enterprises. However, this conclusion must be viewed with caution, since the accounts covering the financial ties between state-owned enterprises and government budgets are often opaque. Some changes may only be apparent and due merely to changes in accounting methods.

3. **Changes in tax structure.** While the tax ratios remained broadly constant in the country sample analysed here, changes did occur in tax structure.

- *A decline in income taxation.* While corporate income tax revenue fell significantly on average, individual income tax revenue increased, though only very slightly (see Annexes 1 and 3). This composite change was differentiated across countries. The most notable variations were recorded in the Southeast Asian countries. Corporate tax revenue exhibited a remarkable decrease in mineral economies such as Indonesia, Malaysia and Papua New Guinea. On the other hand, Korea, the Philippines and Thailand succeeded in improving their performance in income taxation.

The South Asian countries showed a more homogenous trend. The collection of income taxes did not improve among these countries except in Nepal, where the improvement was only slight, and income tax revenue in South Asia remained at the lowest level relative to that in all other regions of the developing world.

Although it is difficult to disentangle the impact of changes in legislation and administration from other influences such as changes in internal conditions or changes in external factors like the drop in the international prices for minerals, it can fairly be said that in some countries the fluctuations in income taxation were the result of the combined effect of a tax rate reduction and the broadening of the tax base. This was probably the case in Thailand and Korea, where the broadening of the tax base was an explicit goal as part of an

effort to boost income taxation. On the other hand, the performance of Indonesia in this area was not entirely encouraging, since, although individual income tax revenue increased, the rise was not as significant as expected given the profound overhaul in the tax system and in tax administration.

In South Asia the reduction in the tax rate was not associated with a broadening of the tax base. This is clearly shown in the case of Pakistan (Khan 1992). However, growth in income taxation in South Asia was probably hampered by the high share of agricultural production in GDP, coupled with a very "low" tax effort or with tax exemptions for agricultural income. There are strong and increasingly convincing arguments for the taxation of agriculture in the region, especially through progressive direct levies.

In summary, it is interesting to observe that, while changes in nominal rates were evident in all countries in the sense of reductions and less "dispersion", the broadening of the tax base was not as widespread. This is demonstrated indirectly by the stagnation in the revenue collected.

- *Greater taxation on domestic consumption.* This shift was the most important change in tax policy during the last decade. The climb in this kind of tax was achieved mainly through a boost in excise taxes in South Asia and a rise in sales taxes in various countries of South Asia and Southeast Asia (Annexes 1 and 3).

The reliance on excise taxes as a source of extra revenue was also a fairly common approach in adjustment packages, since this type of tax is often levied on goods exhibiting inelastic demand, which induces quite high short- and medium-term buoyancy. However, the fact that the importance of excise taxes was growing mainly in South Asia leads to another interpretation of the phenomenon. In that region excise taxes have not traditionally been confined to alcohol, tobacco and fuel, as in the rest of the world, but cover some manufactured products and other goods as well.

Although in some cases the selective application of excise taxes can prove useful in meeting equity and efficiency objectives, a greater reliance on these taxes may also be viewed as a symptom of weakness in the revenue-raising capacity of a tax system.

The expanding role of general sales taxes, mainly in Southeast Asia, was noteworthy, but it is also interesting to examine the impact of the value-added tax, which was the pillar of most of the tax reforms of the 1980s. VAT is often considered to have a positive effect on the generation of tax revenue, since it is more broadly based than the taxes it replaces. In the long run a more broadly based tax may be more elastic with respect to GDP. A VAT also

generally entails a higher degree of compliance, since the tax liability of one taxpayer becomes the tax credit of another.

However, two observations in this regard can be made concerning the countries under analysis. First, among the countries which implemented a VAT and used it to replace other sales taxes, the results were conflicting. Second, the increase in general domestic consumption taxes (in Malaysia, Pakistan, Sri Lanka and Thailand) was accomplished by means of taxes other than the VAT.

The case of Indonesia seems to confirm the positive impact on revenue of VATs. The VAT there helped raise the level of sales tax revenue from 1.02 percent of GDP in 1982/4 to 3.18 percent in 1988/9. Even during the first year of the implementation of the VAT in Indonesia the revenue yield was higher than had been expected. However, such results cannot be anticipated for other countries. Indonesia had been laying the groundwork for the implementation of its VAT for quite some time, while the taxes the VAT replaced were quite modest. Thus, the increase in revenue was predictable.

In contrast, despite the broad coverage of its VAT regime, Korea witnessed a decrease in the taxation of domestic consumption, since the VAT and a special excise tax introduced concurrently (the entire package of changes must be considered) generated less revenue relative to GDP than the indirect taxes they replaced. Likewise, in the Philippines the VAT did not lead to additional revenue with respect to GDP.

Thus, the advantages of VAT (in terms of revenue) that stem from the VAT tax base (which is broader than that of any other turnover or sales tax) vary from country to country. For example, in a simulation for Pakistan, Ahmad and Stern (1991) found that the introduction of a two-tier VAT, with the "standard" rate set at 20 percent, but with a 10 percent rate for some basic goods, would have provided 6.6 percent more revenue. However, the principal rationale behind the introduction of a VAT remained the relatively minor impact on efficiency.

All the advantages of VATs in terms of revenue (as well as efficiency) depend heavily on the coverage, which often cannot be extended to the service and trading sectors, wholesale and retail, nor to the rural sector, especially if the latter is composed mainly of small family-based enterprises. Furthermore, full coverage, even by way of a scale of rates, may conflict with equity goals, since many basic goods would nonetheless be taxed.

Finally, however distortive the "cascading" effects may be, they help raise the level of effective taxation. (Moreover, the taxation is less apparent and thereby more politically

feasible.) The elimination of the cascading effects through the introduction of a VAT, if not offset by other changes, such as a considerable broadening in the tax base or an increase in nominal rates, obviously implies a loss in revenue.

- *An overall decrease in external trade taxes* (the result of a fall in export duties, along with an upturn in import duties). Export duties declined in countries like Malaysia and Sri Lanka partly because of unfavourable conditions in international markets. This meant the weakening of a not insignificant tax handle, which had to be replaced by other taxes if a drop in tax revenue was to be avoided. The export tax had been employed mainly to tax export crops. Its replacement by other taxes therefore implied a reduction in the tax burden borne by the agricultural sector.

The step toward greater taxation of imports was more marked in South Asia. However, Southeast Asian countries such as Papua New Guinea and Thailand also increased their reliance on import duties. In countries like India and Sri Lanka the rise in import tax revenue was accompanied by the dismantling of quotas and other kinds of quantitative restrictions (licences for example) and their replacement by import duties.

While the redesign of an entire import tax regime and the replacement of quantitative restrictions by tariff restrictions may be desirable so as to boost revenue, in the long run such a move may lead to an overreliance on import duties for revenue. This in turn makes it very difficult to cut these duties in line with changes in international trade and domestic industrial policy. During the 1980s Pakistan seems to have proceeded along this path.

- *Other changes.* Property taxes, social security contributions (together with payroll taxes) and "other taxes" showed an upward trend, although for the first two tax categories the rise was rather slight.

The increase in property tax revenue, from an average 2.77 to 3.02 percent of total tax revenue, was not very significant. Nonetheless, an analysis of the data on individual countries shows an interesting trend. Nepal and Singapore, the only countries where property taxes had exerted a relevant impact on revenue at the beginning of the 1980s, experienced a decline in this type of tax revenue, while Indonesia, Korea, Thailand and above all Sri Lanka witnessed a sharp jump, more than doubling the share of this tax revenue category.

The category "other taxes", consisting mainly of direct (mostly regressive) taxes, such as poll taxes and stamp fees, and personal expenditure taxes, registered a rather significant average gain, from 1.65 percent to 3.11 percent of total tax revenue. This is evidence of the attempt to diversify the tax base through this category of tax as well, although "other taxes"

are normally deemed "marginal" because of the usually modest revenue contribution and the limits on any potential increase.

Tax and Economic Efficiency

It is difficult to assess empirically the gains in efficiency targeted by the changes and reforms in taxation. Most of the changes were based on theoretical principles. At a theoretical level greater allocative efficiency can be achieved if the tax system reduces market distortions.

Greater uniformity (the shift from schedular to global income taxation), the simplification of administration and the realignment of corporate tax rates and the top personal income tax rates seem to have been positive aims in direct taxation from the perspective of both efficiency and horizontal equity. Tax discrimination caused by unbalanced application of the law, tax evasion and tax avoidance can alter significantly a tax incentive system and the rates of return on particular activities. A more uniform pattern of taxation is therefore likely to reduce inefficiency. Especially in this context, a reduction in nominal tax rates can help mitigate the differences in the ways taxpayers are treated.

However, while the theory behind the move toward more uniformity in income taxation was widely accepted, in practice the move seems to have been less unambiguous, especially as regards the goal of broadening the tax base while achieving not only more efficiency and equity but also more revenue. Thus, in South Asia the exemption of agricultural incomes from income taxation generated a bias in favour of rural capital and may have been indirectly responsible for some tax evasion. In Pakistan the tax exemption available for rural incomes was a source of considerable fraud which was aimed at making "urban" profits appear on "rural" balance sheets.

Furthermore, a problem to which Asian countries (mainly the East Asian ones) were quite sensitive was the impact of income taxation on foreign direct investment. A decrease in nominal tax rates should have exerted a positive impact. Nonetheless, the major role among the policies designed to attract foreign investment was played by tax incentives and allowances, among which there seems to have been a decreasing trend, at least in countries like Indonesia and Thailand.

However, the impact of tax incentives on foreign investment is also empirically controversial. The unwillingness in some East Asian countries to reduce incentives significantly suggests that either policymakers were convinced of the positive impact of the

incentives on investment and growth (an impact seen implicitly as more important than allocative efficiency or revenue effects), or interest groups were exerting more pressure in favour of the incentives. The longevity of tax incentives in most Asian countries—Malaysia, the Philippines and Singapore for example—may be seen as a constraint on broader and more uniform taxation. Given the competition for foreign capital among the ASEAN countries, it is unlikely that tax incentives will be removed by most of them.

Within indirect taxation, taxes on external trade and on intermediate goods with cascading effects are considered the most damaging to efficiency. The application of a numeric general equilibrium model reveals that import duties in the Philippines were much more costly in terms of welfare than were domestic commodity taxes, a gap which widened at higher tax rates (World Bank 1988c).

Assuming that there is a real desire for greater trade liberalization, some countries such as Bangladesh and Pakistan would find even a partial removal of import duties difficult, since these duties are relatively easy tax handles and are not costly to administer or collect. On the other hand, for countries like India and Sri Lanka that pursued protectionist policies through quantitative restrictions such as quotas, the imposition of import duties was accompanied by the dismantling of these quantitative protectionist barriers and therefore was a step toward a more liberalized trade regime.

Given the trend of the 1980s, it appears unlikely that there will be a sustained drop in import duties in the near future. The efficiency costs of these duties can be contained. For instance, in order to avoid the disincentive effects on exports inherent in its reliance on imported inputs, Korea zero-rated exports when it introduced its VAT. This represented a way to rationalize the reimbursements on the indirect tax burden (including import duties) to exporters. However, although indirect tax refunds showed an increase (from 0.06 percent of total exports in 1976 to 0.10 percent in 1982), it is difficult to believe that this was a determining factor in the development of exports in Korea. In any case, at least in theory, a VAT can help in rationalizing rebates on exports, and for this reason it becomes an option for those countries which favour indirect taxation and aim at promoting exports.

Another attempt to minimize the cost of taxation on inputs occurred in India, which relied heavily on domestic consumption taxation. India introduced Modvat mainly as a means of reducing cascading effects, but the tax was used only to consolidate the existing excise system. Nonetheless, the proper functioning of the VAT was hampered by difficulties due to the apportionment of the taxing power between the union and the states. This meant

that only "central" excise taxes could be reimbursed (and even then under restrictions).

For the Philippines, Manasan (1990) stated that, "VAT in the Philippine setting has resulted in a lower taxation of inputs and, consequently, in some improvement in production efficiency, but some distortions in production incentives still remain."

Thus, it seems that the efficiency problem in the taxation of inputs was felt by many countries. The use of VATs brought some advantages, which were, however, conditioned by a rather broad application of the VATs that, in turn, may have aggravated administrative and institutional constraints and been in conflict with equity objectives.

The Effects on Equity

While a "static" evaluation of incidence would be questionable, a dynamic analysis of incidence would be even more controversial. However, since the tools and methodologies now applied are not well developed, or, at least, have not yet produced results which are less disputable than those deriving from the traditional static and partial analysis, the conclusions here will be based on simple and straightforward considerations of the latter sort.

The only recent incidence analysis which makes a comparison based on different years (1987 and 1990) is found in Banuri et al. (1992). The study, which deals with the case of Pakistan, points toward a deterioration in the progressivity of the tax system at both the lower and the upper ends of the income scale (Table 14). While absolute shifts in tax incidence were quite small given the short timelag and the absence of relevant legislative and administrative changes, the incremental variations in the tax burden from 1987/8 to 1990/1 showed a clear regressive impact along the whole income scale.

This trend was the composite result of a rise in sales taxes (introduced under an IMF adjustment programme), a decrease in customs duties and stagnation in income taxes. Noteworthy was the regressive pattern of import duties over time that, together with the increase in a proportional tax (the sales tax) and the stagnation in a progressive tax (the income tax), rendered the overall tax system less progressive, with the deterioration concentrated at the lower end of the income scale.

Although this was only one country and although the time horizon was only four years, the case of Pakistan may be representative of the tendency in equity that emerged during the 1980s, particularly in the countries of South Asia. The stagnation in direct taxes in South Asia and the consequent reliance on indirect taxes may have led to a deterioration

Table 14: THE TAX BURDEN IN PAKISTAN
(In Percentages, 1987/8 And 1990/1)

Income Groups (rupees per month)	Tax Burden		Change
	1987/8	1990/1	
≤600	7.08	7.81	10.3
601-700	7.53	8.04	6.8
701-900	7.87	8.24	4.7
901-1,000	7.67	8.01	4.4
1,001-1,500	7.78	8.01	3.0
1,501-2,000	7.93	8.11	2.3
2,001-2,500	7.65	7.79	1.8
2,501-3,000	7.85	7.92	0.9
3,001-3,500	7.58	7.69	1.5
3,501-4,000	8.63	8.65	0.2
4,001-4,500	7.56	7.74	2.4
≥4,501	11.54	11.04	-4.3

Source: Banuri et al. (1992).

in the progressivity of the distribution of the tax burden. While the overall distribution of the indirect tax burden had been progressive in India and Sri Lanka at the end of the 1970s, the same may not have been true of the changes in the indirect tax burden at the margin, given the deteriorating condition of the tax systems. In such a situation, the viability of using selectivity and progressivity in the tax burden may have diminished as the tax base was "squeezed". At the margin even essentials and the other items consumed by the poor may become taxed more heavily, since, among other factors (such as the Ramsey rule, see earlier), the low price elasticity of these goods assures a healthy revenue "response".

On the other hand, the more uniform pattern of indirect taxation implied by the introduction of VATs and other types of reforms aimed at broadening the tax base may also have jeopardized the mild progressivity achieved by these countries through their avoidance of taxation on the poor (together with price reductions or subsidies for some essential goods).

An indirect example is offered by the application of optimal commodity taxation to the cases of India and Pakistan (Ahmad and Stern 1991). While different kinds of goods may

be identified as candidates for equitable taxation (the differences may be due to distinctive consumption patterns, as well as dissimilar productive structures, or differences in the mechanisms used to regulate taxes such as VATs and specific and ad valorem excise taxes), the differentiation between tax rates and goods is great. In Pakistan a somewhat equitable reform, including a shift to VAT, would require two rates and zero-rating in the VAT itself, numerous excise taxes, exemptions for essential goods and so on.

The urban-rural mix in the distribution of tax burdens in South Asia in the 1980s possessed worrying features because of the stagnation in direct taxes and the inability to apply these taxes in the agricultural sector. In the 1970s and at the beginning of the 80s the horizontal and vertical inequities between the rural and urban sectors had been partly offset by "implicit" taxation mechanisms (such as the overvaluation of exchange rates and policies aimed at keeping domestic food prices lower than international ones). During the 1980s all these mechanisms disappeared (along with export duties) and were not replaced by any other form of taxation. Thus, there is a strong suspicion that the vertical and horizontal inequities between and within the rural and urban sectors worsened during the 1980s, particularly at the expense of the urban poor and to the further advantage of the rural rich.

The situation was quite different in Southeast Asia, where the progressivity lay at the upper end of the income range and was mainly due to the redistributive effect of direct taxation. Within the region there was probably a loss of progressivity in the tax burden in all the mineral economies, which witnessed a significant decline in income taxes and an increase in indirect taxes. On the other hand, other Southeast Asian countries like Korea, the Philippines and Thailand were able to boost income taxation, probably because they were benefiting from a broadening of the tax base that more than compensated for the reduction in the tax rates, presumably with gains in vertical and horizontal equity.

Moreover, unlike South Asia, in Southeast Asia indirect taxes (especially excise taxes) were more regressive. Thus, the shift toward the more uniform taxation of consumption may not have harmed the progressivity of the tax system; indeed, it may even have improved progressivity, in terms of revenue targets as well. However, the evidence is contradictory. The VAT was regressive in Korea (Heller 1981). Only in the Philippines, where the tax base was not so broad, was there some improvement in equity, probably also because of the regressivity of the taxes which had been replaced (Manasan 1990). In any case, in both the Philippines and Korea the VAT did not raise additional revenue, so that the absolute tax burden (on the poor as well) did not increase.

The Scope for User Fees

Because user fees were proposed in the tax reforms of the 1980s as alternative sources of revenue (World Bank 1988c), it is important to analyse the efficiency and equity implications which may be relevant in an assessment of the "optimality" of a more intensive employment of user fees.

1. **Efficiency.** The "static" concept of efficiency often applied in the evaluation of the deadweight loss due to taxation is not very satisfactory for analogous considerations relative to user fees for social services. Indeed, if social services were considered as any other service or goods, the reduction or the elimination of subsidies (that is, the application of full cost recovery) should always be seen as an efficiency gain, since consumption choices, after the removal of the subsidies, would fall in line with production costs.

However, efficiency should really be considered mainly in dynamic terms. The impact of social services spreads out into the future through human capital, and it is subject to many external "economies". A drop in the demand for services translates into a decline in human capital formation and future growth perspectives. This is the reason particular attention has been devoted to the demand elasticities for social services.

In this regard, the available evidence is skewed and does not permit firm conclusions. A study on the Bicol region of the Philippines suggests that prices are not determinants of demand (Akin et al. 1986). Research on Malaysia reached the same result (de Ferranti 1985). However, these studies did not account for distinctions among various income groups. Creese (1991) has underlined the fact that, while the total drop in demand after a price increase may not be significant overall, within the composition of demand the richer people have taken the places of poorer ones. There is thus a loss in efficiency anyway, since the richer people, who could afford to use private services, are now using the public services to which the poorer people have lost access. Moreover, the efficiency loss in this case may even be larger, since the benefits among the poorer people from additional health care services would have been greater than are those among the richer people.

Indirect confirmation of this phenomenon is offered by the case of Indonesia, where the effects of Government health expenditure presented a very marked distribution in favour of the poor if the benefits are calculated in terms of health outcomes (Deolalikar 1992). A pattern of health expenditure that was less redistributive had been found by earlier studies based on empirical evidence, but involving estimates of the monetary subsidies included in

the provision of public health care services.

2. **Equity.** The equity effects following on the introduction of or an increase in user fees may depend on two basic factors: first, the extent to which the provision of social services is distributed progressively and, second, the extent to which user charges may be differentiated according to the income range of the beneficiaries.

The proponents of user fees say that most services benefit mainly the rich and that service prices will therefore fall to them. The poor, it is said, are excluded from the public provision of services both because of an urban bias in supply that works to the disadvantage of the rural poor (Jimenez 1989) and because of the indirect costs involved even in the consumption of a service provided free of charge. Scattered and fragmentary, the empirical evidence on Asia does not support this view, although it does not suggest a totally contrary view either.

Positive examples of a redistributive and progressive expenditure pattern in health care are offered by Malaysia (Meerman 1979) and Sri Lanka (Alailima 1984). For Indonesia, Meesook (1984) discovered a regressive distribution of health care subsidies in 1978. However, more recent evidence points to quite a significant improvement, with a provision of health care services that favours the poor, as a result of the development and greater use of primary health care centres in rural areas (Deolalikar 1992).

In contrast, for education, Mingat and Tan (1986) report a regressive distribution of subsidies (expenditure) that has been inferred from the distribution by "functional" socioeconomic group, such as farmers, manual labourers and traders, and whitecollar workers. According to their data, public education resources in Asia were being distributed disproportionately in favour of the children of whitecollar workers, while the share for the children of farmers was small.

On the other hand, studies such as the ones on Malaysia (Meerman 1979) and Sri Lanka (Alailima 1984) that use income or expenditure "classes" show a progressive pattern for education expenditure. Likewise, Indonesia seems overall to have exhibited a mild progressivity in the distribution of student subsidies that was the net result of a progressive pattern within primary and junior secondary education and a regressive pattern within senior secondary and university education (Meesook 1984).

Given a progressive pattern in expenditure, a structure of flat user charges that does not vary across income classes would generate a welfare loss which would fall disproportionately on the poor. A solution to this problem would be either to apply a

progressive structure of user charges, including exemptions for the poor, or to charge only for those services which are characterized by a regressive pattern of "appropriation".

The solution involving the design of a progressive structure of user fees would be limited to a certain extent by difficulties in administration, such as the determination of an individual's ability to pay, an operation which requires a well-established administrative structure, as does the collection of taxes. The evidence indicates that such a role, which is very important, has not been properly supported in the past.

In this respect, in an example of a choice between taxes and user fees at the local level, Bahl and Linn (1992) argue for the superiority a property tax would likely possess over water fees. Although it is possible in principle to design water fees based on rates adjusted according to consumption ("blocks") so as to meet equity concerns, in the example many poor families found themselves subjected to a proportionally heavier burden.

3. **Summing up.** The evidence indicates that cost recovery in health care and education was of modest importance in terms of revenue and that it did not increase during the 1980s. The importance of cost recovery in revenue generation in the 1980s seems to have been overemphasized. It is clear that administrative changes are necessary if user fees are to become a relevant source of revenue. However, even if administrative changes are engineered so as to create an effective collection system for user fees, there seem to be equity and efficiency considerations, as well as special conditions, that render a massive extension of cost recovery inopportune in the Asian countries.

Health care expenditure was relatively low in many countries in Asia (IMF 1991, Ebel 1991), where, apart from Sri Lanka, private health care services accounted for more than one-half of total health care expenditure (de Ferranti 1985). Indeed, while most of the effective demand for health care services that could have been expressed through market mechanisms had already been "captured" by the private sector, strong limits seem to have been imposed on the development of revenue from user fees in health care financing, given the probable "residual" nature of the demand going to the public sector.

There were probably more opportunities to raise resources in education. The distribution of subsidies for higher education was quite regressive, or at best proportional (Colclough 1993). In this case a flat user fee would therefore have boosted progressivity. However, this potential seems not to have been so significant in terms of revenue. First, in terms of absolute revenue the contribution of charges for higher education appear to have been quite limited, simply because expenditure in higher education was small compared to

total education expenditure, as for example in Indonesia (Meesook 1984). (This also explains why educational expenditure was progressive overall.) Second, efficiency and equity considerations require loan and scholarship schemes which may cut significantly into the revenue raised through user charges (Colclough 1993).

Finally, tax ratios and tax efforts were "lower" in Asia than they were in other developing regions. This suggests that there was some scope for increasing taxes. Overall taxation patterns were not regressive, although user charges in progressive expenditure areas (that is, most social sector expenditure in Asia) would likely have been regressive.

Thus, it seems that in the social sectors user fees did not represent an alternative to taxes in the Asian context. Perhaps they could have become complementary within a broader set of financing options for social services, a set of options that would have included other nontax sources, as well as tax revenue.

This was the case for the financing of health expenditure in Thailand, which offered free medical care to those identified as poor and created a health card fund and insurance schemes especially for those who were not poor enough to be exempt from charges but yet not rich enough to be able to afford to pay actual user fees (Kiranandana and Tontisirin 1992). However, the positive example of Thailand, where local financing was quite significant and successful, grew out of a context of mounting budget resources for the social sectors, mostly coming from tax collection, and relatively sound allocation of expenditure. There was no substitution effect between user charges and taxes.

V. CONCLUSIONS

The changes and reforms implemented in taxation in Asia during the 1980s were justified in view of the many administrative and legislative problems which had affected the tax systems of these countries in the early years of the decade. The focus of these reforms on administration was thus appropriate and welcome. It responded to real difficulties, which were hampering the basic operation of the tax systems and their proper overall performance in terms of revenue, equity, fairness and efficiency.

However, the extent to which administrative and institutional changes were undertaken seems to have been limited. Scattered information shows that significant reforms were initiated only in Southeast Asian countries such as Korea, the Philippines and Thailand,

where the shift toward broad-based indirect taxation was coupled with some legislative and administrative modifications which increased direct taxation. For example, in Korea and the Philippines the introduction of the VAT did not aim at raising revenue but at efficiency objectives. Indeed, revenue was increasingly being collected through income taxes. However, overall, the trends in taxation do not seem to have had healthy equity effects. In the remaining Asian countries tax revenue was stagnant (despite an expansion in tax capacity), and the tax burden was increasingly biased toward indirect taxation. Particularly in South Asia some of the elements of tax reform were unevenly or only partially introduced (nominal tax rates were lowered, but the tax base was not broadened; the attempts to introduce VATs were only halfhearted, and so on).

Nonetheless, even an improved application of the prevalent patterns in tax reform appears not to have been appropriate in the context of the South Asian countries. First, the uniformity in indirect taxation that would result from the implementation of a flat-rate VAT would have reduced most of the progressivity of these tax systems, since this progressivity was based on a very differentiated set of tax rates applied to goods.

Second, as regards direct taxation, the broadening of the tax base should become a priority objective in South Asia, but this should be pursued not only through conventional measures in tax administration and legislation, as has been done in other reforming countries, but also through a broader set of methods. The direct taxation of agriculture through land taxes may represent an example (see Ahmad and Stern 1991 on Pakistan).

In view of the stagnation in tax revenue that was evident in some Asian countries, alternative ways of financing public expenditure have also been analysed in this paper. Nontax revenue appeared to increase during the course of the 1980s. However, because of the "heterogeneous" nature of the components, it is difficult to gauge the potential of this revenue category and the effects in terms of equity and efficiency.

This paper has paid particular attention to user fees, because, among other factors, there is a direct link with social expenditure (health care and education), and user fees probably represent the area which has the greatest implications for equity. While there may be reasons, in theory, to establish pricing schemes for social services, the conditions which render a more extensive employment of user fees opportune were not present in South Asia or Southeast Asia, first, because social expenditure, apart from that for higher education, was distributed progressively; this means that user fees would likely have been regressive unless people had been charged according to their income. Second, social expenditure was already

low relative to the financial resources, because the private sector had an important role in the provision of health and educational services. Finally, the data currently available on cost recovery during the 1980s do not provide enough support for user fees in terms of revenue significance. This may be the result not only of an unwillingness to implement cost recovery, but also of an administrative inability to do so.

Annex 1: TOTAL REVENUE BY CATEGORY IN 1979/81
(In Percent Of GDP)

	Bangladesh	India	Indonesia	Korea	Malaysia	Nepal	Pakistan	Papua New Guinea	Philippines	Singapore	Sri Lanka	Thailand	Average
Tax revenue	7.78	15.23	19.58	15.52	22.19	6.90	13.06	17.05	11.54	16.82	18.97	15.19	14.99
Income, profit & capital gains taxes	1.17	2.33	15.93	4.17	9.30	0.47	2.17	10.85	2.76	7.83	2.70	3.05	5.23
Individual	1.14	1.09	0.37	2.15	2.05	0.32	0.46	4.44	1.39	--	0.66	1.28	1.40
Corporate	0.03	1.16	14.70	2.02	7.24	0.16	0.87	6.41	1.40	--	2.05	1.76	3.44
Other unallocated income taxes	0.00	0.07	0.86	0.00	0.00	0.00	0.00	0.00	-0.03	--	0.00	0.00	0.08
Social security & payroll taxes	0.00	0.00	0.00	0.19	0.11	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.06
Property taxes	0.22	0.19	0.19	0.11	0.12	0.61	0.04	0.00	0.11	2.44	0.19	0.21	0.37
Domestic taxes on goods & services	2.99	9.57	1.84	7.91	4.38	2.96	5.32	2.56	5.48	3.74	5.75	7.63	5.01
General sales & turnover taxes & VATs	1.42	--	0.93	3.72	1.25	1.76	1.02	0.00	1.77	0.00	2.70	3.14	1.61
Excise taxes	1.51	--	0.92	2.67	1.86	0.89	4.30	2.40	2.67	1.35	2.92	3.39	2.26
Other	0.07	--	0.00	1.52	1.27	0.30	0.00	0.15	1.04	2.39	0.13	1.10	0.73
Taxes on international trade	3.16	2.68	1.56	2.70	7.96	2.80	5.53	3.48	3.00	1.64	10.18	4.20	4.07
Import duties	2.93	2.56	0.91	2.70	3.68	2.55	5.04	3.05	2.78	1.64	3.98	3.40	2.93
Export duties	0.21	0.08	0.65	0.00	4.28	0.26	0.20	0.41	0.20	0.00	6.19	0.80	1.11
Other	0.02	0.04	0.00	0.00	0.00	0.00	0.29	0.03	0.01	0.00	0.00	0.00	0.03
Other taxes	0.24	0.46	0.07	0.44	0.32	0.05	0.00	0.16	0.20	0.73	0.15	0.10	0.24
Nontax revenue	3.58	2.77	1.94	2.13	3.19	1.25	2.85	2.11	1.42	7.43	1.28	1.43	2.62
Entrepreneurial & property income	2.78	1.19	0.22	1.16	2.08	0.45	2.21	1.23	0.45	5.12	0.74	0.85	1.54
Administration fees & nonindustrial sales	0.59	0.87	0.08	0.35	0.56	0.77	0.55	0.65	0.90	2.01	0.33	0.33	0.67
Other	0.21	0.01	1.18	0.62	0.55	0.03	0.08	0.23	0.06	0.00	0.21	0.25	0.29
Capital revenue	0.00	0.18	0.00	0.21	0.08	0.00	0.00	0.01	0.00	1.77	0.01	0.00	0.21
Grants	2.31	0.31	0.00	0.00	0.01	3.02	0.72	9.79	0.09	0.00	3.26	0.40	1.66
Total revenue & grants	13.67	18.49	21.52	17.86	25.47	11.17	16.62	28.96	13.05	26.02	23.53	17.02	19.45

Source: IMF (1988), (1990), (1991).

Annex 2: TAX REVENUE BY TYPE OF TAX IN 1979/81
(In Percent Of Total Tax Revenue)

	Bangladesh	India	Indonesia	Korea	Malaysia	Nepal	Pakistan	Papua New Guinea				Sri Lanka			Thailand	Average
								Guinea	Philippines	Singapore						
Income, profit & capital gains taxes	15.08	15.27	81.23	26.88	41.82	6.87	16.54	63.20	23.92	46.37		14.38	20.09		30.97	
Individual	14.69	7.17	1.89	13.84	9.37	4.60	3.55	26.10	12.03	--		3.51	8.45		9.56	
Corporate	0.38	7.63	74.94	13.04	32.43	2.27	6.73	37.09	12.13	--		10.87	11.64		19.01	
Other unallocated income taxes	0.00	0.48	4.40	0.00	0.02	0.00	—	0.02	-0.23	--		0.00	0.00		0.43	
Social security & payroll taxes	0.00	0.00	0.00	1.24	0.51	0.00	0.00	0.00	0.00	2.63		0.00	0.00		0.36	
Property taxes	2.80	1.25	0.97	0.70	0.52	8.83	0.28	0.01	0.92	14.57		1.05	1.38		2.77	
Domestic taxes on goods & services	38.50	62.82	9.43	50.97	19.83	42.89	40.80	15.25	47.44	22.33		30.69	50.25		35.93	
General sales & turnover taxes & VATs	18.20	--	4.74	23.99	5.63	25.54	7.82	0.00	15.31	0.00		14.75	20.70		12.43	
Excise taxes	19.38	--	4.69	17.21	8.44	12.97	32.98	14.29	23.09	8.07		15.24	22.34		16.24	
Other	0.92	--	0.00	9.77	5.77	4.38	0.00	0.96	9.04	14.26		0.70	7.21		4.82	
Taxes on international trade	40.57	17.64	8.03	17.40	35.89	40.65	42.38	20.61	25.95	9.82		53.13	27.61		28.31	
Import duties	37.62	16.83	4.64	17.40	16.58	36.93	38.65	18.01	24.11	9.82		20.96	22.33		21.99	
Export duties	2.74	0.53	3.39	0.00	19.32	3.72	1.49	2.45	1.75	0.00		32.10	5.25		6.06	
Other	0.21	0.29	0.00	0.00	0.00	0.00	2.24	0.15	0.09	0.00		0.02	0.03		0.25	
Other taxes	3.06	3.02	0.34	2.80	1.43	0.76	0.01	0.93	1.77	4.28		0.74	0.68		1.65	

Source: IMF (1988), (1990), (1991).

Annex 4: TAX REVENUE BY TYPE OF TAX AT THE END OF THE 1980s
(Three-Year Average, In Percent Of Total Tax Revenue)

	Papua New											Sri	
	Bangladesh	India	Indonesia	Korea	Malaysia	Nepal	Pakistan	Guinea	Philippines	Singapore	Lanka	Thailand	Average
Income, profit & capital gains taxes	12.59	12.29	62.81	37.16	42.09	12.44	13.22	52.17	30.90	39.13	11.92	23.44	29.18
Individual	2.48	5.81	5.84	18.57	11.26	8.88	--	31.09	9.46	--	4.52	10.01	9.81
Corporate	10.11	6.43	56.52	18.59	30.80	3.31	--	20.85	13.13	--	7.40	13.19	16.39
Other unallocated income taxes	0.00	0.05	0.45	0.00	0.02	0.26	--	0.22	8.31	--	0.00	--	0.85
Social security & payroll taxes	0.00	0.00	0.00	4.91	1.08	0.00	0.00	0.00	0.00	1.65	0.00	0.13	0.65
Property taxes	2.83	0.99	2.09	2.77	0.45	6.57	0.28	0.02	0.85	11.29	5.25	2.83	3.02
Domestic taxes on goods & services	36.65	60.46	27.46	38.63	29.09	43.57	44.92	14.54	36.76	33.95	49.14	48.32	38.62
General sales & turnover taxes & VATs	10.62	--	21.45	22.92	10.03	22.23	13.41	--	10.29	0.00	32.76	21.59	15.03
Excise taxes	25.67	--	6.01	12.23	9.99	14.23	31.51	13.22	20.41	7.04	12.63	23.44	16.03
Other	0.36	--	0.00	3.48	9.07	7.11	0.00	1.19	6.06	26.91	0.68	3.28	5.29
Taxes on international trade	36.61	23.62	6.44	13.29	24.15	37.38	41.58	31.07	28.32	4.53	33.70	24.37	25.42
Import duties	36.64	23.20	5.75	13.29	15.11	36.28	41.58	27.76	27.83	4.53	29.51	23.51	23.75
Export duties	0.10	0.17	0.69	0.00	9.04	1.10	0.00	3.15	0.00	0.00	4.19	0.69	1.59
Other	-0.14	0.24	0.00	0.00	0.00	0.00	0.00	0.16	0.49	0.00	0.00	0.16	0.08
Other taxes	11.32	2.65	1.20	3.23	3.15	0.04	0.00	2.21	3.17	9.45	0.00	0.92	3.11

Source: IMF (1988), (1990), (1991).

Annex 3: TOTAL REVENUE BY CATEGORY AT THE END OF THE 1980s
(Three-Year Average, In Percent Of GDP)

	Bangladesh	India	Indonesia	Korea	Malaysia	Nepal	Pakistan	Papua New Guinea	Philippines	Singapore	Sri Lanka	Thailand	Average
Tax revenue	8.02	16.66	14.84	15.10	18.61	8.19	13.51	17.75	12.92	15.64	18.04	17.26	14.71
Income, profit & capital gains taxes	1.00	2.05	9.32	5.60	7.82	1.02	1.79	9.26	4.00	6.12	2.14	4.07	4.52
Individual	0.20	0.97	0.87	2.81	2.10	0.73	--	5.51	1.23	--	0.82	1.73	1.54
Corporate	0.80	1.07	8.39	2.79	5.72	0.27	--	3.71	1.69	--	1.32	2.29	2.55
Other unallocated income taxes	0.00	0.01	0.07	0.00	0.00	0.02	--	0.04	1.09	--	0.00	--	0.11
Social security & payroll taxes	0.00	0.00	0.00	0.74	0.20	0.00	0.00	0.00	0.00	0.24	0.00	0.02	0.10
Property taxes	0.22	0.16	0.31	0.41	0.08	0.54	0.04	0.00	0.11	1.76	0.95	0.49	0.42
Domestic taxes on goods & services	2.92	10.07	4.07	5.84	5.45	3.57	6.07	2.58	4.73	5.29	8.88	8.31	5.65
General sales & turnover taxes & VATs	0.84	--	3.18	3.45	1.87	1.82	1.82	--	1.33	0.00	5.90	3.74	2.18
Excise taxes	2.05	--	0.89	1.85	1.85	1.17	4.25	2.34	2.62	1.10	2.28	4.02	2.22
Other	0.03	--	0.00	0.54	1.72	0.58	0.00	0.21	0.78	4.19	0.12	0.56	0.79
Taxes on international trade	2.93	3.94	0.96	2.02	4.48	3.06	5.62	5.51	3.67	0.70	6.07	4.20	3.60
Import duties	2.93	3.87	0.85	2.02	2.80	2.97	5.62	4.93	3.61	0.70	5.32	4.06	3.31
Export duties	0.01	0.03	0.10	0.00	1.68	0.09	0.00	0.56	0.00	0.00	0.75	0.11	0.28
Other	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.00	0.00	0.03	0.01
Other taxes	0.95	0.44	0.18	0.49	0.58	0.00	0.00	0.39	0.40	1.52	0.00	0.16	0.43
Nontax revenue	2.03	3.25	1.58	1.88	7.53	1.74	4.84	4.00	2.18	11.44	2.38	1.54	3.70
Entrepreneurial & property income	1.26	2.07	0.48	1.24	4.92	0.50	3.22	3.00	1.37	9.81	1.63	0.90	2.53
Administration fees & nonindustrial sales	0.59	1.17	0.22	0.37	0.81	1.16	1.63	0.41	0.63	1.39	0.45	0.30	0.76
Other	0.18	0.01	0.89	0.27	1.78	0.08	0.00	0.59	0.19	0.24	0.30	0.34	0.41
Capital revenue	0.00	0.21	0.00	0.31	0.05	0.03	0.00	0.04	0.53	1.93	0.05	0.00	0.26
Grants	--	0.16	0.00	0.00	0.01	2.41	0.80	6.80	0.22	0.00	2.53	0.37	1.21
Total revenue & grants	10.05	20.27	16.42	17.28	26.20	12.37	19.15	28.60	15.85	29.01	23.00	19.16	19.78

Source: IMF (1988), (1990), (1991).

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