

*Trends and Functions of Tax Reforms in LDCs:  
Some Limiting Factors*

Fuat M. Andic

Ramón J. Cao-García

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### **Introduction**

Fiscal reform is a subject which does not cease to fascinate the profession and its history is almost as old as the history of economic thought (Schumpeter: 1954 pp.201 ff.). The mercantilists, as a group, truly began the tradition by proposing, among other things, a fiscal package in which indirect taxes (general turnover tax -- alcavala in Spain) figured predominantly, because the otherwise untouchable nobility and the Church could only be made to pay if taxes were indirect (Loc. cit., pp. 201-2). The mercantilists were followed by the physiocrats with an entirely new economic model which also incorporated a fiscal reform recipe: "l'impôt unique" (Loc. cit., p. 239). Adam Smith emerged with his economic theory and its accompanying proposals for fiscal reform, the principles of which have survived until now (Smith, Book V). From then on the literature grew in leaps and bounds, both for the developed as well as the developing countries, and analyses of the problems of economic development began to include a growing number of studies of the systems of public finance.

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\*. Professor of Economics, University of Puerto Rico, Río Piedras Campus.

\*\*.. Assistant Professor of Economics, University of Puerto Rico, Río Piedras Campus.

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The post-war and the post-colonial experience of the LDCs suggest that strengthening the fiscal systems is indispensable for the achievement of an adequate rate of growth. In the past, fiscal weakness having resulted in chronic government deficits which have led to inflation, had impeded the expansion of economic activities, especially of infrastructure building and of vital social programs. In addition to or concomitantly with fiscal weaknesses, the LDCs have been plagued with some or all combinations of the following ills: low growth rates, serious balance of payments difficulties, persistent unemployment, and a very uneven distribution of income.

Given the tools of economic analyses at hand, postwar economists have searched for methods and policy measures by which these ills could be eliminated or corrected. This simply meant an expanded role for the public sector. Hence the budget came to acquire an important role as policy instrument. And so, during the past two decades many LDCs have tried to take the bull by the horns and tackle the task of reforming the budget by reforming taxes (and even sometimes expenditures) in such a way that the public sector would in fact become the effective tool for development that it was meant to be. These efforts have marked the birth of fiscal proposals and the abundant inflow of international missions, advisory groups, consultant of all types, and international organizations who surveyed the situation time and again and made recommendations for changes; or reforms within the scope of the limited or panoscopic objectives which they aimed to reach (Andic & Andic: 1978).<sup>1</sup>

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1. We shall refrain from enumerating the countries which have implemented fiscal reforms or the studies which have advocated or blueprinted such reforms. The bibliographical information is vast. For a brief survey the reader is referred to Andic and Andic: 1978.

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Opinions diverge in the literature as to what the optimal tax rules should; be nevertheless, there is consensus of opinion that the basic goals of public sector activity are to promote equity and efficiency. These goals are sometimes seen as conflicting, and much effort has been spent to define trade offs among them. The outcome of such efforts has unfortunately not been an agreement as to the design and structure of the most desirable fiscal system. But, in all fairness, one has to recognize that at least some basic principles have been worked out, and most students of public finance have accepted them as goals that ought to be satisfied by a well-behaving fiscal system. The basic purpose of fiscal reform is, therefore, to implement such goals in a society, transforming the fiscal system into one that satisfies the criteria of fiscal equity and efficiency.

### **The “How” of the Fiscal Reform**

The “why” of the fiscal reform should not occupy us here very much. It is now a very much accepted tenet. More relevant is the “how” of a fiscal reform (or tax reform). For, despite all the efforts of the economists, societies insist stubbornly on preserving “undesirable” taxes. Governments hire respected professionals to examine and analyze their tax systems and to come up with concrete reform recommendations and proposals; but the prescribed changes hardly get to be implemented, and the reports end up enlarging the evergrowing literature on tax reform. In the meantime taxpayers revolt, but their anger is usually directed against “good” taxes (such as income and property taxes); the result is a further displacement of the tax system in the “wrong” direction; in other words, away from the goals that economists have established as desirable for a fiscal system.

Given this dismal state of affairs, many members of the profession have adopted a different strategy in their research. Instead of continuing to explore desirable fiscal rules, inquiries are directed towards discovering the most effective way to implement fiscal reforms. Since societies insist on paying no attention to reform proposals, it is of no use to try to develop new prescriptions for the improvement of equity and efficiency through public sector activities, unless attention is also paid to the strategies for the implementation of such prescriptions. To the endeavors of the fiscal reform strategists we owe the literature on “overall” versus “piecemeal” tax reform.

The “overall” reform has been defended as a bulldozer method of opening up the necessary channels for economic development. It is the big-push counterpart of development theory in introducing the required drastic changes in conformity with the goals of the society. It is a once-and-for-all remedy for the ailing system at the particular time according to the particular circumstances of a country.<sup>2</sup>

The “piecemeal” approach advocates changes in the tax system on a reform-as-you-go basis; it is an alternative to the bulldozer approach, especially because of expediency reasons. Those who argue in favor of this approach point out that the administrative staff of the relevant ministries may be too limited and insufficiently skilled to carry out a reform on a large scale. Moreover, great effort is required to obtain the necessary information and to reach the “right” decision, and such effort may be either too costly or not sufficiently available to enable the evaluation of the effects of individual measures. In addition, a

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2. A good example of this approach can be found in Fiscal Reform for Colombia. Final Report and staff papers of the Colombian Commission on Tax Reform, (Musgrave: 1971).

piecemeal reform might be politically and socially less upsetting if the vested interests are not that uprooted to warrant bulldozer tactics (Bird: 1970, pp. 405 ff.).

### **The Limiting Factors**

It is not the purpose of this paper to discuss whether or not these two strategies are incompatible or complementary (Andic: 1972, pp. 314-315 and Shoup: 1970, pp. 245-252). But the fact remains that the politicians do not appear to be willing to pay too much attention to the strategic proposals of the economists, although many governments go out of their way to pay, many times rather handsomely at that, for such economists to write fiscal reform proposals. Why, then, do many societies insist on ignoring many such proposals formulated by distinguished and well-meaning members of a respectable profession?

This paper addresses itself to this question in an attempt to provide at least a partial answer. The inquiry is directed to some pitfalls in fiscal reform literature that may be responsible for the formulation of proposals which are unacceptable or inapplicable to political societies. The pitfalls arise from ignoring the factors which limit the implementation of reforms. This paper emphasizes two such limiting factors, neither of which is economic *per se*. One is political; the other stems from the natural resource endowments.

More precisely, the interest of this paper is to inquire first into the limitations that a particular political system can impose on the success of (or even intention of) a tax reform. The question that needs to be answered is: Is a democracy or a dictatorship more conducive to tax reform, irrespective whether such reform is implemented through a once-and-for-change or in a piecemeal fashion?

The second factor limiting tax reform is the relative endowment with natural resources. If a country is rich in mineral resources, say oil or bauxite, from which royalties accrue to the budget which constitute a large portion of total government revenue, irrespective of how much reform is needed or how ready the government machinery is, the reform chances are altogether different than in one where such endowment is lacking. This second limiting factor can be expressed in the terms that under certain circumstances taxes become exportable and hence public activities are financed by those who are not members of a given political society.

We can sum up our argument as follows: the common denominator in the existing literature of fiscal reform is the attempt to formulate or implement certain optimal fiscal rules, i.e. rules that maximize social welfare. The welfare function is assumed to be a general one which includes all of the members of the society and the public sector is seen as an institution organized to finance and provide special types of goods and services. We introduce two qualifications to this state of affairs:

1. For one, it is quite possible that a society's "relevant" welfare function does not include all the members of the collectivity, but only a subset of them. Which persons' preferences are to be included into the relevant welfare function is related to the political system that prevails in the society. This variable has been largely ignored in the literature.
2. Secondly, the usual assumption is that a public sector is organized to provide certain services, and it is the people themselves that organize the public sector that-finance, in varying amounts, the provision of the services. But,

under certain circumstances, the financing of the provision can be transferred to others that remain outside the society.

We now turn to these two points.

**A. Limiting Factor No, 1: Political Systems**

Societies adopt different sets of political institutions to organize their public sector activities. Differences in such institutional settings produce different fiscal outcomes. It is of interest to ask why a collectivity prefers one set of political institutions over others and which fiscal rules are consistent with a particular set of political institutions. It is this latter question which is of direct relevance for fiscal reform, for any reform proposal which is not consistent with the political system in society will not have any chance of being implemented.

The scope of this paper is limited to the polar cases of democracy and dictatorship. A democracy is here defined as the situation that prevails when collective decisions are reached through a voting process; where all the citizens have the franchise to vote, and periodically they have the alternative of electing their representatives, from among competing politicians, in free elections;<sup>3</sup> under a rule of at least plurality; and where the elected representatives reach public decisions by voting under at least a majority rule. A dictatorship occurs when there is no electoral process, and the collective decisions are taken by an

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3. This implies that under democratic institutions citizens can explicitly express their preferences with respect to the competing politicians and their respective platforms. It does not imply, however, that through an electoral process a citizen can always express his whole set of preferences, their specific ranking or their relative intensities. It merely implies that, whatever the individual is able to express through a voting process, it is expressed in an explicit form.



individual or his chosen representatives, without the explicit consent of the other members of the society.<sup>4</sup>

The emergence of one or another type of political organization depends on the level of uncertainty that, prevails in the society at the time that the political constitution is being designed. If the conditions are such that no individual is able to predict with any degree of certainty what his relative socio-economic condition will be in the, future,-then “... the individual will be *uncertain* us to what his own precise role will be in any one of the whole chain of later collective choices that will actually have to be made. For this reason he is considered not to have a particular and distinguishable interest separate and apart from his fellows... He cannot predict whether he is more likely to be in a winning or losing coalition on any specific issue” (Buchanan and Tullock: 1965 p. 78).

The existence, of perfect uncertainty makes for absolute equality among all the individual members of the society, because the interests of each are not distinguishable from the interests of his fellow members. This equality restricts the set of permanent fiscal rules to only those alternatives which do not consistently make worse off a sector, of' society while benefiting another. No discriminatorial rule of this sort will ever be proposed at the constitutional moment, because no member of the collectivity is in a position to propose such a rule, since no individual can predict in which subset he is more likely to be at any moment

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4. This does not imply that a dictator's decision could not enjoy the explicit approval of the majority, or even of all, of the members of the society. It only means that, under dictatorial institutions, the common citizen cannot register his evaluation of the behavior of the politician in office in an explicit flay, as it occurs in democracies as a consequence of the electoral process.

of time.<sup>5</sup> This implies that democratic constitutional institutions of taxation will tend to be based on general taxes, since general taxation protects against discriminatory confiscations.

The main distinction of dictatorial constitutions from democratic ones is that they are formulated under conditions where the dominant coalition enjoys a higher degree of knowledge about its future relative socio-economic position in society. The dictator and his supporting coalition thus have political hegemony during the constitutional period; and it could be assumed that they are interested in maintaining their privileges (Buchanan and Tullock, *op cit*, p.80).

This situation contrasts sharply with the case of democratic constitutions where the political rules are to maintain mobility in society and assure that no group will have control over the collectivity in the long run. In other words, a democratic constitution aims to establish rules and institutions which allow for changes in the membership of political coalitions; a dictatorial constitution, in contrast, tries to perpetuate the status quo of dictatorial certainty, establishing barriers for change in the membership of political coalitions. If so, the benefits to be derived from the outcomes of the institutional rules will be asymptotically biased in favor of the supporting coalition, asking for permanent discrimination among the different members of the collectivity. Under such conditions the benefits of general taxation diminish, and dictatorial regimes can be expected to rely less on general taxes than do democracies.

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5. No discriminatory rules imply that the expected value of the public sector benefits will tend to be the same for every member of the society; while their distribution is expected to have a positive variance (Cao García: 1979, pp. 48-49). It should be noted that the nondiscriminatory feature of democratic constitutions does not guarantee mobility in society, which is the basic source of political equality.

Two obvious hypotheses follow for fiscal reform not only can it be expected that general taxes will be more prevalent in democracies, but fiscal changes in this direction are also more-likely in such systems than dictatorships (Toyle: 1978, Introduction, pp. 9-10.).

### **B. Limiting Factor No. 2: Tax Exportability**

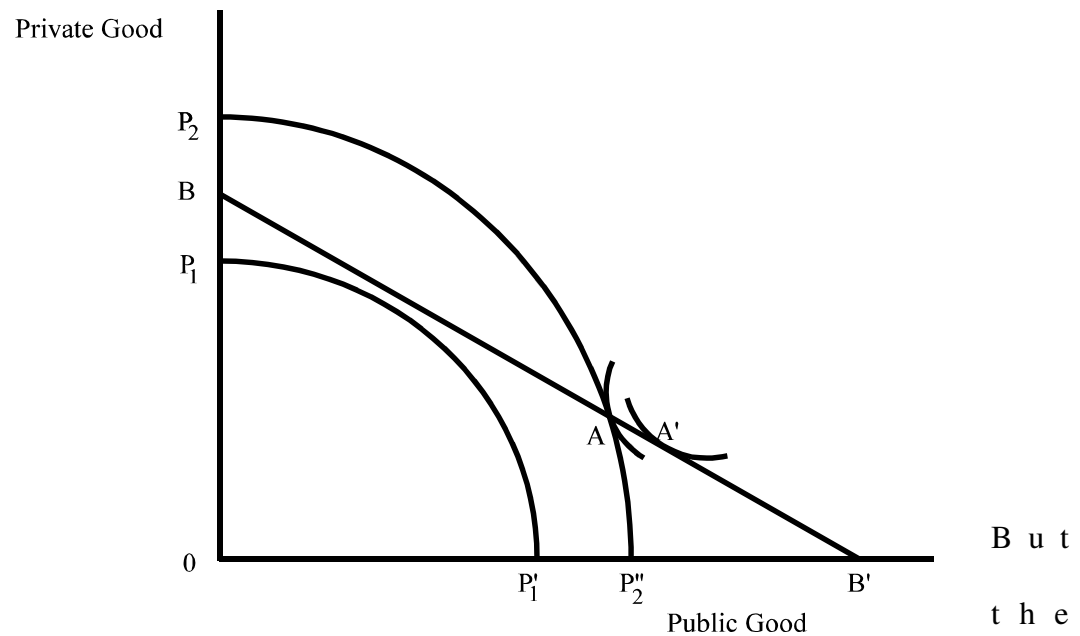
It is obvious from the previous discussion that under certain conditions a dominant-coalition can, and is willing to, set fiscal rules which allow the shifting of the cost of consuming certain goods to other members of the same society. But this shifting need not remain within the boundaries of the given society; this holds true especially when scarce resources with inelastic demands are exported under non-competitive conditions. Then, part of the burden of the tax on the exports can be shifted onto the foreign purchasers of the resources in question.

The option for such a country is to enact a severance tax through which it will export abroad part of its own public sector burden. The income effect of the tax export is represented in Figure 1 by the upward shift of the production possibilities frontier from  $P_1 P_1'$  to  $P_2 P_2''$ . The analysis assumes that the resource exporting country has sufficiently large resources so that exporting part of these does not affect its ability to produce other goods<sup>6</sup> (Morgan and Shelton: 1978). Under these circumstances the effect of the income transfer will be for the country to be at a point like A, where the marginal rate of transformation between private and public goods is equal to the individuals' marginal rate of substitution between the two goods.

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6. This is a simplifying assumption which changes neither the reasoning nor the conclusions of the analysis. For an analysis of the production effects on the exporting and importing regions under conditions of factor mobility among borders (Morgan and Shelton: 1978, pp. 207-222).

Figure 1



tax export has the additional effect of preventing the taxpayers from perceiving the total cost of the public sector activities. In other words, the tax export introduces a fiscal illusion in that the cost of the public good appears to be relatively less expensive than what it would be at point A. This is so, because the citizen does not pay for the public goods directly, but does so indirectly, since the government retains part of the income transfer, thereby curtailing the consumption of private goods. The result is that the slope of the budget constraint, as perceived by the taxpayer, does not necessarily coincide with the slope of the production possibilities frontier. It could be, for example, the line  $BB'$  in figure 1. If so, the citizen will prefer to be at a point like  $A'$ , which clearly is unattainable.

To change the citizen's demand for private and public goods from  $A'$  to  $A$  requires a compensating distortion in the model. One way of achieving this distortion is to redesign the tax system in a way to shift it further towards taxes with "negative" fiscal illusion, i.e. towards those taxes whose perceived burden is higher than their actual burden. But the enactment of such taxes will not be a popular policy and may risk taxpayer revolts. Another alternative would be to pass all such income transfers to the citizens and then tax them for the cost of government activities; but politically such an alternative is not advantageous, nor is it technically feasible to implement.

Thus, fiscal reform faces the difficult dilemma that levying fiscal illusion corrective taxes tends to generate instability, while not levying them implies the existence of a politically unstable situation. Under such circumstances, although the politician in power will be searching for alternatives, the fiscal reformers will be unable to come up with viable choices. Hence, the easier taxes can be exported and the greater the share of exportable taxes in total revenue, the more difficult it is to have a reformed tax system.

### **Some Empirical Results**

The previous discussion yields two hypotheses with respect to the influence on the tax structure of the LDCs of the two limiting factors, namely the political set-up and endowment with natural resources (tax exportability):

1. The ratio of general taxes to total government revenue (in other words equity and efficiency) should be high in democratic countries and low in dictatorships.

2. The ratio of general taxes to total government revenue should be low in countries with high mineral exports than in those with low or no mineral exports. No doubt, the combination of a dictatorial regime; with high mineral exports should accentuate the situation.

To test the hypotheses empirically we have selected 18LDC on the basis of the availability of published data.<sup>7</sup> Table 1 summarizes our findings. Column (1) is the ratio of general taxes to total government recurrent revenue. General taxes consist of the income tax (individual and corporate), property taxes, general sales tax, the value added tax (wherever-applicable), and wealth taxes. Recurrent revenue is total tax revenue plus revenue out of non-tax sources. Column (2) identifies the political system of the countries either as a democracy or a dictatorship. The differentiation between the two types of political systems is based simply on whether or not the countries in question had elected legislatures through due process of voting. If no elections were held, the system was designated as a dictatorship.

The results are classified into boxes in figure 2. Four democratic countries with high natural resource endowment (Mexico, Colombia, Venezuela, and Malaysia) have high ratios of general taxes to government revenue. These are indicated in the upper left hand box. Two dictatorial countries also with mineral production (Bolivia and Iran) have a low ratio. The opposite polar case of Taiwan and Honduras with no mineral production but a political system characterized by dictatorship fall into the lower right hand box with low ratio of general taxes to total revenue. Dictatorial countries like Korea, Panama, Nicaragua, and Paraguay with no mineral production have average ratios which are slightly on the high side

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7. Our sources are IMF, Government Finance Statistics Yearbook and International Financial Statistics.

of the average, while democracies like Costa Rica, El Salvador, and Guatemala have averages ratios which are slightly be the low side.

Table 1  
Ratio of General Taxes to Total Government Revenue,  
Political Index, and Oil Production (1975)

Country	Ratio of General Taxes of Total Revenue	Political System	Natural Resource Endowment
Bolivia	.1546	Dictatorship	Yes
Colombia	.4998	Democracy	Yes
Costa Rica	.3300	Democracy	No
Ecuador	.3678	Dictatorship	Yes
El Salvador	.3823	Democracy	No
Guatemala	.3227	Democracy	No
Honduras	.3078	Dictatorship	No
Mexico	.6667	Democracy	Yes
Nicaragua	.3877	Dictatorship	No
Panama	.3970	Dictatorship	No
Paraguay	.3607	Dictatorship	No
Dominican Republic	.2168	Democracy	No
Venezuela	.6435	Democracy	Yes
Chile	.5884	Dictatorship	Yes
Malaysia	.4337	Democracy	Yes
Iran	.1111	Dictatorship	Yes
South Korea	.4010	Dictatorship	No
Taiwan	.1667	Dictatorship	No

Source: Cols. 1 and 3: IMF, Government Finance Statistics Yearbook, Vol. II, 1978; and International Financial Statistics.

Col. 2 Organización de los Estados Americanos, América en Cifras 1972, Washington, D.C. 1972 The Stateman's Yearbook, London 1977; The International Yearbook and Statemen's Who is Who, Kelly's Directory Publications, 1978.

The important characteristic of figure 2, however, is that the upper right hand and the lower left hand boxes are empty. This gives full support to our analysis and the hypotheses derived therefrom. There are two countries which are totally out of place: Chile and the Dominican Republic,. Nevertheless, their cases can be explained The Dominican Republic has had a long tradition of dictatorship; it is only recently that it is moving very slowly into the democratic rank. Chile, today classified as a dictatorship, has had a long tradition of democracy, though during the period under study we had to give it a political index of 1.

Dictatorships with average general tax ratios are close to the average ratio, and democracies like Costa Rica, E1 Salvador, and Guatemala are also close to the average ratio.

Figure 2  
General Tax Share in Government Revenue

		With Natural Resource Endowment		Without Natural Resource Endowment	
		Democratic	Dictatorial	Democratic	Dictatorial
High					
$\bar{x} + 1/3^0$		Mexico Venezuela Colombia Malaysia	Chile		
Average					
$\bar{x} + 1/3^0$			Ecuador	El Salvador Costa Rica Guatemala	Korea Panama Nicaragua Paraguay
Low					
			Bolivia Iran	Dom. Republic	Honduras Taiwan

$$\bar{x} = .3740 \quad 0 = .1521; \quad X^2 = 15.8480$$

Note: The  $X^2$  was significant at 0.05 level which indicates that the distribution of the observations is not independent of the variables considered in the analysis.

To conclude our theoretical discussion and the empirical finding indicate that the constraints of the political system and natural endowment are operative in the LDCs. No analysis of fiscal record and no successful attempt to fiscal reform can afford to ignore their powerful impact.

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