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How to Approach Comprehensive Tax Reform: Have the Rules of the Game Changed?

Roy W. Bahl

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1. INTRODUCTION

Tax reform is not so easily defined. Tax reform could be taken to mean any change in the structure of taxes. These changes could have to do with rate, base, special treatments, etc. One usually does not think of the term "reform" as pejorative in this context, i.e., the fact is that tax reforms can be pretty bad, as well as pretty good. By this definition, every issue of *Tax Notes International* is full of descriptive material on tax reforms.

Comprehensive tax reform is, or should be, a very different concept. It is a term loosely used to refer to bigger tax reforms, and in particular, to tax changes that involve more than one piece of the tax structure. In its broadest form, it might be thought of as a questioning of the existing tax system that

- Puts every piece of the tax structure on the table for review, and puts each at risk in terms of being a candidate for reform,
- Asks how the tax system fits together as a whole to achieve desired objectives vs. subjecting one tax for scrutiny against desirable norms, and
- Includes considerations of administration, implementation and monitoring.

Whether tax reform or comprehensive tax reform, careful study ought to precede recommendation for action. The issue under consideration in this volume, and in this paper, is whether "careful study" means something different now, and whether the questions are different? Should countries be advised to design their comprehensive reform studies in different ways, and should international advisors think differently about how to structure their advice?

Some of the answers to these questions might be found in what has actually happened to taxation around the world over the past 25 years, i.e., have there been marked changes in the level and structure of taxes? Is there something different about the actual tax choices being made by countries? Accordingly, in the first section of this paper, we describe tax change over the past three decades, and attempt to identify its determinants. The focus is on developing countries.

The main objective of this paper, addressed in the second section, is more normative and is pointed toward the issue of whether there are some universal "rules" that might guide the next round of comprehensive tax reform efforts in developing countries. Based on the international experience, a set of propositions about how to do a comprehensive tax reform is offered.
2. HAVE THE LEVEL AND STRUCTURE OF TAXES CHANGED?

There has been almost continuous tax change since the 1970s, all over the world. Most of these were piecemeal changes, probably driven by the need for revenue enhancement. Sometimes these changes were backed up by solid analysis of the reform options, and sometimes they were not. In some cases, these tax changes were the product of truly comprehensive reforms. Arguably some of the best work ever on public finance in developing countries is included in the studies that led to these reforms. What were the results of these two routes to tax reform? Are tax structures, and the claim of taxes on GDP, markedly different now than 25 years ago?

It is not feasible to track through all rate and base changes for every country over a long period of time. And, if a critic argued that this is where the real meat of tax reform lies, he would be right. What we can do is second best. We can examine the pattern of changes in the level and structure of taxes, to indirectly gain a picture of the anatomy of change, and then attempt to identify the country characteristics that are most likely to be associated with such changes. The goal would be to identify the general direction of tax reform over the past quarter-century.

2.1 The Level of Taxation

The most common measure of the level of taxation is the ratio of tax revenue to GDP. This is a simple calculation that reflects the average tax rate in a country. It is meant to answer the question, "what percent of total national output is diverted to government purposes through the tax system." Using data from the IMF’s Government Finance Statistics (2003), we have computed averages of the ratio of tax revenue to GDP for the 1970s, 1980s and 1990s. The IMF data are the best comparative information available for developing countries, but there are shortcomings in these data. Among these shortcomings are missing data for some years, misclassification of certain revenues, inadequate disaggregation by type of tax, and the failure to report all subnational government revenues.

In Table 1, we show the average level of the ratio of taxes to GDP using three groupings of countries: industrialized, developing and transition. Social security taxes are included in this computation. The results for industrialized countries show that there was an increase in the average tax share, from 30 to about 35 percent over this 30 year period. In the case of the developing countries, however, the tax share of output increased only slightly during this period (by about one percent) and since the 1980s has actually declined. In the case of the transition countries, there was the expected decline in the tax share since the 1980s, because of the continuing realignment of public-private expenditure responsibilities. By the end of the century, the tax ratio in industrialized countries was about twice that in developing countries, a larger difference than was the case in the 1970s.

Of course there is a considerable variation across countries in this change in the tax ratio.

Can we find a pattern to this change? A number of hypotheses are plausible to explain why some countries increased their tax ratio more than others.

1. The tax ratio is driven by the growth in per capita GDP which signals both an increase in the capacity to tax and possibly an increase in the demand for public services. Per capita GDP is measured here in the $US.
2. An increased demand for public expenditures to improve the prospects for economic development could drive the increase in the tax ratio, and could spur a tax reform effort that would produce such an increase. In this analysis, we proxy the demand for economic services by the share of government expenditures on economic services.

3. It is plausible that the increase in the tax ratio is determined in significant part by the demand for increased social service expenditures, whose benefits may accrue heavily to low income families. To measure this effect, we use the share of government expenditures on social services.

4. The tax ratio in developing countries may be driven by a reliance on indirect taxation. In general, tax administration difficulties make the indirect tax system more revenue productive than income taxes in less developed countries. This is true for both the VAT and for some selective excises. The buoyancy of indirect taxes in developing countries has been markedly higher than that for income taxes over the past quarter century. We measure the reliance on indirect taxes in terms of their share of total tax revenues, and expect a positive association with the tax ratio.

5. The tax ratio is dampened by corruption. The null hypothesis is that corruption and taxation are substitutes.

Table 1. Tax Revenues as a Percent of GDP

<table>
<thead>
<tr>
<th>Country Groups</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrialized</td>
<td>30.1 (8.3)</td>
<td>33.7 (8.4)</td>
<td>35.5 (8.5)</td>
<td>33.4 (8.4)</td>
</tr>
<tr>
<td>Developing</td>
<td>16.2 (7.6)</td>
<td>17.3 (8.3)</td>
<td>17.0 (7.7)</td>
<td>17.0 (7.9)</td>
</tr>
<tr>
<td>Transition</td>
<td>47.7 (9.7)</td>
<td>29.6 (11.0)</td>
<td>29.1 (9.0)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.8 (9.9)</td>
<td>21.6 (11.3)</td>
<td>22.6 (11.5)</td>
<td>21.8 (10.4)</td>
</tr>
</tbody>
</table>


Note: Standard deviations are shown in parentheses

a) Only limited data are available.

To test these hypotheses, we estimate the empirical relationship among a number of variables using a (unbalanced) pooled panel of data for up to 166 countries for the 1972-2001 period, estimated with a two-way fixed effects model. The statistical results are presented in Table 2. In all specifications we find that higher levels of per capita GDP drive up the tax ratio. We get this significant result whether the sample is all countries or is limited to less developed countries. The estimated elasticity is stable across different specifications and different sample compositions.

An increasing share of government spending in the economic services is not significantly associated with an increased tax ratio, either for all countries or for developing countries. However, in the LDC sample, an increased share of expenditures for social services is negatively associated with the share of taxes in total output. One implication that might be drawn from this finding is that countries that spend heavily on redistribution services, or even general quality-of-life services, do not get as much support for a higher average tax rate as do countries that do not. Based on these results, we cannot accept the hypothesis that the demand for more spending for social or economic services has been a key determinant of tax level increases in developing countries.
Table 2: Pooled Cross-Section Times Series Estimates\(^a\) of the Determinants of the Ratio of Tax Revenue to GDP: For 1972 - 2001

<table>
<thead>
<tr>
<th></th>
<th>Equation 1</th>
<th>Equation 1a</th>
<th>Equation 2</th>
<th>Equation 2a</th>
<th>Equation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant(^b)</td>
<td>1.3780</td>
<td>1.4517</td>
<td>1.3785</td>
<td>1.6756</td>
<td>1.5890</td>
</tr>
<tr>
<td>Per capita GDP(^c)</td>
<td>0.2433 (8.17)</td>
<td>0.2301 (6.20)</td>
<td>0.2406 (8.05)</td>
<td>0.2381 (6.43)</td>
<td>0.2202 (6.84)</td>
</tr>
<tr>
<td>Percent of total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expenditures on</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>economic services</td>
<td>-0.0011 (1.62)</td>
<td>-0.0008 (-1.01)</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Percent of total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expenditure on</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>social services</td>
<td>...</td>
<td></td>
<td>-0.0047 (0.19)</td>
<td>-0.0823 (-2.48)</td>
<td>...</td>
</tr>
<tr>
<td>Percent of Taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.0016 (-2.02)</td>
</tr>
<tr>
<td>Raised from Indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.89</td>
<td>0.83</td>
<td>0.89</td>
<td>0.83</td>
<td>0.83</td>
</tr>
<tr>
<td>Sample</td>
<td>All Countries</td>
<td>LDCs</td>
<td>All Countries</td>
<td>LDCs</td>
<td>LDCs</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>163</td>
<td>116</td>
<td>163</td>
<td>116</td>
<td>128</td>
</tr>
</tbody>
</table>

Note:

- a) \(t\)-values are shown in parentheses below the regression coefficient
- b) two-way fixed effects
- c) in logarithms

In equation 3, we report the results of a regression of per capita GDP and the share of indirect taxes on the tax ratio. This analysis is carried out for only developing economies. The results show that places with a greater share of indirect taxes in total taxes, cet. par., did not generate a significantly higher tax ratio during the 1972-2001 period. The coefficient in fact is negative when per capita GDP is held constant. This finding is not supportive of the null hypothesis. In any case, we can conclude that the determinants of the size of the tax ratio and its change go much further than simply the level of reliance on the VAT.

We do not have data on corruption for all years in this sample. We do make use of data provided by Transparency International for 1999. To test the corruption hypothesis, we compare the average increase in the tax ratio between the 15 "most corrupt" developing countries for which we have data, and other developing countries. The results show that the tax ratio increased by an average of 2.0 percent in the
most corrupt countries and 3.1 percent in the 16 others, in those years for which we have data. The willingness to accept tax increases would appear to be greater in non-corrupt countries.

What we can say from this empirical analysis is that the ratio of taxes to GDP did not increase by very much in the developing countries over the past 30 years. Developing countries that did increase taxes did so largely in response to an increase in GDP. The increased reliance on indirect taxes did not seem to drive this increase, and emphasis on social service spending tended to dampen it. The choice to spend more for economic services did not seem to matter, and there is some support for the argument that corruption and taxation are substitutes.

On average during this period, tax reforms that targeted revenue neutrality with respect to the tax-GDP ratio would have been about on the mark. Though there is much variation across countries, the average developing economy seems to have been content with a level of taxes roughly equivalent to 17 percent of GDP.

2.2 The Structure of Taxation

The average level of taxes in developing economies has not changed much. This leads us to ask whether there has been significant change in the mix of taxes, i.e., structural reform. To measure the structure of taxation, we use the IMF dis-aggregation of taxes. In Table 3 we report the changing share of total taxes attributable to three of these categories, further broken out by industrialized, developing and transition countries, for the period from 1970 to the present.

The results for industrialized countries show an upward drift in reliance on income taxes, mostly due to increase in revenues from the individual income tax and revenues from payroll taxes to finance social security. The corporate income tax share held up during this period, despite significant rate reductions (Keen and Simone, 2004). There was an increase in dependence on indirect taxes, particularly general sales taxes, but a declining reliance on taxes on international trade. The growth of the VAT and trade liberalization explain this pattern. Most of the change in tax structure over this 30 year period appears to be marginal. While there may be major changes in rate and base structure beneath these averages, comprehensive reform that led to big changes in the tax structure does not appear to have been dominant in the industrialized economies in this period. The five point run-up in the ratio of tax revenue to GDP during this period may explain the absence of structural reform.

The tax structure shifts in the developing countries appear to have been more pronounced. The reliance on indirect taxes increased from about 25 percent of total taxes in the 1970s to about 35 percent by the end of the 1990s. Over the same period, the reliance on international trade taxes fell from about 32 percent to about 25 percent. Trade liberalization during the late 20th century was obviously a driving force in tax reform in the developing countries. So was the growing tendency to adopt the value added tax and improve upon its administration. For the developing economies, there was little reported change in the use of income taxes, though there has been a declining reliance on the company income tax. As Keen and Simone (2004) have argued, revenues from the corporate income tax have fallen because of a combination of rate reductions and base narrowing due to incentive polices. More generally with respect to the income tax, the story is the continued inability of the tax administration in less developed countries to assess and collect the income tax base. Apparently, the improved ability to capture
information from the public, and the design of new presumptive methods has not been enough to shift emphasis toward income taxes in these countries.

Table 3. Tax Structure Changes (percent of total taxes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrialized</td>
<td>35.5</td>
<td>37.8</td>
<td>38.6</td>
<td>53.8</td>
</tr>
<tr>
<td></td>
<td>(15.1)</td>
<td>(13.7)</td>
<td>(10.9)</td>
<td>(8.1)</td>
</tr>
<tr>
<td>Developing</td>
<td>29.6</td>
<td>28.6</td>
<td>27.6</td>
<td>28.3</td>
</tr>
<tr>
<td></td>
<td>(19.5)</td>
<td>(19.1)</td>
<td>(16.5)</td>
<td>(17.8)</td>
</tr>
<tr>
<td>Transition</td>
<td>12.3</td>
<td>16.5</td>
<td>26.7</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>(14.4)</td>
<td>(13.8)</td>
<td>(9.6)</td>
<td>(6.5)</td>
</tr>
<tr>
<td>Total</td>
<td>30.7</td>
<td>30.2</td>
<td>29.7</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>(18.8)</td>
<td>(18.5)</td>
<td>(15.4)</td>
<td>(16.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect Taxes</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrialized</td>
<td>27.2</td>
<td>29.4</td>
<td>30.5</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>(10.1)</td>
<td>(9.0)</td>
<td>(10.1)</td>
<td>(10.7)</td>
</tr>
<tr>
<td>Developing</td>
<td>25.2</td>
<td>29.3</td>
<td>34.9</td>
<td>40.1</td>
</tr>
<tr>
<td></td>
<td>(14.3)</td>
<td>(17.3)</td>
<td>(17.7)</td>
<td>(17.8)</td>
</tr>
<tr>
<td>Transition</td>
<td>10.5</td>
<td>21.8</td>
<td>37.9</td>
<td>42.1</td>
</tr>
<tr>
<td></td>
<td>(11.1)</td>
<td>(14.4)</td>
<td>(12.3)</td>
<td>(9.6)</td>
</tr>
<tr>
<td>Total</td>
<td>25.3</td>
<td>28.9</td>
<td>34.2</td>
<td>39.0</td>
</tr>
<tr>
<td></td>
<td>(13.5)</td>
<td>(15.8)</td>
<td>(15.9)</td>
<td>(16.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxes on International Trade</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrialized</td>
<td>4.6</td>
<td>2.8</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>(5.8)</td>
<td>(4.3)</td>
<td>(2.0)</td>
<td>(0.6)</td>
</tr>
<tr>
<td>Developing</td>
<td>32.4</td>
<td>30.7</td>
<td>25.6</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>(18.4)</td>
<td>(20.2)</td>
<td>(18.9)</td>
<td>(18.0)</td>
</tr>
<tr>
<td>Transition</td>
<td>7.7</td>
<td>5.2</td>
<td>7.6</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>(8.2)</td>
<td>(3.8)</td>
<td>(7.3)</td>
<td>(5.5)</td>
</tr>
<tr>
<td>Total</td>
<td>25.2</td>
<td>23.8</td>
<td>18.2</td>
<td>14.1</td>
</tr>
<tr>
<td></td>
<td>(20.2)</td>
<td>(21.4)</td>
<td>(18.9)</td>
<td>(16.5)</td>
</tr>
</tbody>
</table>


*Note:* Standard deviations are shown in parentheses

1. Only limited data are available.

The standard deviations reported in Table 3 suggest a large variation among countries in tax structure choices, especially among developing countries. Is there a pattern to the inter-country variations in these tax structure changes? Three hypotheses might be offered to explain these structure shifts in the less developed countries.

1. The growth in GDP has created more "tax handles." These are primarily in the business sector and are susceptible to capture by the VAT and other general indirect taxes. One would also expect a positive relationship between the growth in income and the share of income taxes in the total revenue mix, because the income tax base is more easily captured as economies modernize. We would expect a negative relationship between GDP and trade taxes, because countries that are modernizing are likely in a mode of reducing tax rates on imports and eliminating taxes on exports.
2. The decline in reliance on taxes on international trade is attributable to trade liberalization. Two factors are at work here. The "openness" ratio (imports plus exports divided by GDP) suggests a broadening of the tax base on international trade and the possibility of an increased reliance on taxes on international trade. However, increased openness also suggests more pressure to move the taxation of imports to the domestic side and reduce the taxation of international trade.

3. There should be a relationship between tax structure and expenditure structure. If a country is egalitarian in its expenditure choices, e.g., a heavier share of expenditures on social services, then one might expect a similar set of choices on the tax side. That is, one would expect a heavier concentration of income taxes in the revenue structure. By the same token, one might expect that a heavier concentration of expenditures on economic services would be associated with a heavier reliance on the taxes that impose less of a burden on the return of capital and on entrepreneurship. On the other hand, this may be outweighed by a tax base effect, i.e., increased spending on economic services in the longer run may lead to more investment, a stronger company and individual income tax base, and a greater share of income taxes in the revenue mix.

The analysis of the pooled data and the statistical results presented in Table 4 supports some, but not all of these hypotheses. The share of total taxes raised from taxes on international trade fell significantly as income level increased over this period, but it increased with openness, i.e., with increases in the size of the foreign trade sector. The tax handles hypothesis gets strong support in the income tax equation. Per capita GDP is a significant determinant of the income tax share for both developing and developed countries. However, per capita GDP is not significantly related to the growth in the indirect tax share.

Finally, there is only weak evidence that there is a linkage between expenditure structure and revenue structure. The indirect tax share is not related to the share of the budget spent on social services in developing countries. Nor is it significantly related to the share spent on economic services. Neither is the social services spending share related to the reliance on income taxes. These findings seem more consistent with an explanation that the tastes for public expenditures and the tastes for various forms of taxes are independent. There is evidence of an income tax base effect associated with spending for economic services. This is consistent with the hypothesis that countries might, over time, build their income tax base by investing in economic development infrastructure.

In sum, there would appear to be evidence that reforms of tax systems in developing countries have taken place in the past 30 years. The decline of reliance on taxes on international trade can be linked to trade liberalization. We can also attribute the modest growth in income tax shares to GDP growth and to the relatively easier time of assessing and collecting income taxes in modernizing economies. The growth in the indirect tax share – the big change in developing country revenue structures-seems to have taken place independent of either income growth or the growth in the foreign trade sector.

<table>
<thead>
<tr>
<th></th>
<th>Income Tax Share of Total Taxes</th>
<th>Indirect Tax Share of Total Taxes</th>
<th>Taxes on International Trade as a Share of Total Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-3.9059 (-3.4959)</td>
<td>47.3832 (41.6770)</td>
<td>69.7286 (78.8930)</td>
</tr>
<tr>
<td>Per Capita GDP&lt;sup&gt;c&lt;/sup&gt;</td>
<td>7.4278 (7.95) 7.524 (7.98)</td>
<td>-1.4520 (1.63) -0.8045 (0.78)</td>
<td>-9.5516 (11.17) -11.1702 (10.46)</td>
</tr>
<tr>
<td>Openness</td>
<td>...</td>
<td>...</td>
<td>0.0354 (3.13) 0.0378 (2.59)</td>
</tr>
<tr>
<td>Percent of expenditures on economic services</td>
<td>0.1104 (5.07)</td>
<td>-0.0555 (2.66)</td>
<td>-0.0269 (1.07)</td>
</tr>
<tr>
<td>Percent of Expenditures on Social Services</td>
<td>0.0664 (2.68)</td>
<td>-0.0470 (1.36)</td>
<td>0.0241 (1.02)</td>
</tr>
<tr>
<td>R²</td>
<td>0.89</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>Sample</td>
<td>All Countries LDCs</td>
<td>All Countries LDCs</td>
<td>All Countries LDCs</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>163 115</td>
<td>163 115</td>
<td>172 125</td>
</tr>
</tbody>
</table>

Note:

a) t-values are shown in parentheses below regression coefficient
b) includes individual income tax, company income tax, payroll tax and social security tax.
c) in logarithms

If the tax structures of developing countries are evolving toward those of industrialized countries, there is substantial structural change in the future for low income countries. The reliance on international trade taxes will continue to fall and the reliance on income taxes will increase as fast as tax administration capabilities will permit. And though it is not shown by these aggregate statistics, there will be significant base broadening. This suggests a future for comprehensive tax reform in developing countries. The question to which we now turn is whether there are some principles or rules that can govern such comprehensive reform in this setting.
3. THE APPROACH TO COMPREHENSIVE TAX REFORM

There are not hard and fast rules about the best way to do a comprehensive reform. Numerous experts and international institutions have led tax reforms and in some cases, the lessons learned have been written down. Examples are Goode (1984), Gillis (1989), Harberger (1989), Bahl (1991), Thirsk (1991), McLure and Zodrow (1997), and World Bank (1991). It should come as no surprise that there is not complete agreement on the best way to do comprehensive tax reform. While the thinking about the elements of good tax structure design has not changed all that much, the setting in which comprehensive tax reform must be packaged has changed quite a lot.

In large part, this volume is about the new setting and this paper is about whether the rules ought to be different because of this new setting. In the discussion below, we offer a set of rules for reform that would seem to fit this new setting.

3.1. The New Setting

The new setting for comprehensive tax reform may cause different thinking about the options for tax reform. There are four factors that will shape tax choices in different ways.

First, the future should hold increases in the average share of taxes in GDP in the developing nations. The more or less constant tax share of about 17 percent of GDP is not likely to hold in the future given the needs for infrastructure and pro-poor services, and the pressures from urbanization and debt repayment. Second, the next round of reform of the value added tax will be much more focused on adjustments in the tax base. This can be a difficult sell. The big revenue hits from the initial introduction of the VAT will not be repeated, as base broadening will be a more slow going strategy for revenue enhancement.

Third, tax reform choices will be more limited because of the new setting International competition will likely push LDCs away from trying to expand reliance on the company income tax, and in fact, it may push them towards more use of tax incentives. Increased taxes on imports and exports are probably not in the future as a major revenue option. More likely will be continued reduction of the tax rates on imports, the simplification of effective rates of tax on import duties, and revenue reduction from trade taxes as a result of external factors such as compliance with WTO rules and joining trade agreements such as the proposed Free Trade Agreement of the Americas.

Finally, with tax options more limited, LDC tax planners may finally begin to take a closer look at their tax expenditure budgets. The opportunities for revenue enhancement and efficiency gains by moving away from tax preferences are considerable.

In this new context, some of the longstanding ideas about the best route to tax reform might be rethought and possibly some priorities might be changed. The following six propositions are suggestions of this rethinking.
PROPOSITION 1: A COMPREHENSIVE REFORM CAN SUCCEED IN A CRISIS FISCAL SETTING.

The call to do a comprehensive tax reform might be made at a time when bad times have befallen the economy and there is need to adopt bold new actions. Or, it might happen when a new political leadership has taken hold and wants to make a shift in economic policy. Or, it might happen as part of an attempt to resolve a fiscal crisis, e.g., big deficits, a taxpayer revolt and a compliance crisis, or a need to ratchet up (or down) the size of government. In rare cases, it might be prompted by having to make a decision about how to dispose of a significant fiscal surplus. One can think of examples of all of these settings. Rarely will the professional staff have enough influence to call the timing of comprehensive reform. If the timing is not forced by a donor or creditor, it will be determined by a political clock.

One might even question whether comprehensive tax reform should be on the policy menu for developing countries. After all, low income countries are often plagued by budget deficits, significant debt overhangs, inflated public employment rolls and slow growing output. Infrastructure levels are deficient, and poverty levels are often severe, placing pressure on the current budget and forcing government fiscal planners to think only about getting through the current fiscal year. In such a setting, something as high-minded as finding the "right tax structure" which will have only long term payoffs, may seem too costly.

In fact, it might be argued that the best time to do a comprehensive reform of the tax structure is when the economy and the revenue structure are performing poorly (Bahl, 1991). There is a sense that something must be done and tax policy is one area where the government can take aggressive action. The developing country setting might be most appropriate for a comprehensive reform, and policy changes are more likely to be enacted because big changes will be more acceptable. This may be more true now than in the past. There will be more pressure to increase revenue mobilization, a realignment of taxes due to trade liberalization and international competition will be driving government to take another look at their tax structure, and the easy money from a new VAT is a thing of the past for many countries.

To make a good comprehensive reform happen in a developing country, it is necessary to get the key decision-makers thinking beyond the current-year revenue issue to thinking about the overall impact of the tax system on the economy. This is arguably more easily done when the present system is failing. In such times, it is easier to focus the attention of policy makers on the structural problems with the entire tax system and to think through the ways in which the tax system may be retarding economic growth. The same inefficiencies that are so visible when the economy is not going well tend to become invisible in periods of economic growth. Consequently, when the economy is growing, the attention of tax reformers shifts to piecemeal adjustments that are "popular" or that appear to improve vertical equity, and to administrative improvements. The attention of politicians shifts to the expenditure side of the budget during periods of economic growth.

Comprehensive tax reform can be successful if undertaken during a period of fiscal crisis, but only if the goals of the comprehensive reform are kept separate from the goals of the short term revenue fix. Not to keep these separate poses significant risks. As Gillis (1989, p. 506) notes, tax reforms have usually failed when enacted in response to acute fiscal crisis. The fiscal architecture of the deficit reduction reform is built in too much of a hurry, and the fixes are too short term.
The potential pitfall to doing tax reform during a time of poor economic performance is that the government’s interest and the energies of the project will be siphoned away to deal with the exigencies of each year’s fiscal crisis. A comprehensive reform may be underway precisely because budget deficits are large and growing, but these deficits may be the main impediment to implementing a comprehensive reform. There is great pressure to move the budget toward balance. But quick revenue fixes are often at odds with good structural reform. "Raise the rate" is more often the watchword in revenue enhancement programs than is "broaden the base."

An important but often overlooked issue is that there may be transition costs associated with a structural reform. For example, the reduction in import duty rates in favor of taxing imported goods under the VAT may involve a revenue loss for the period until trade volume increases enough to make up the slack. Or, removing certain deductions from the personal income tax might be a long run revenue winner, but the administration might not be able to capture the new base immediately. So, there are pressures in the early years of a comprehensive reform that might compromise either income distribution objectives or the budget deficit, and these may require interim adjustments.

There clearly are important constraints to trying to build a comprehensive reform during a time of budget crisis. But these can be managed by separating short term and perhaps temporary fixes from long term structural reforms. Most important is that the comprehensive reform exercise be identified with long term strategy that is clearly separated from the short term, stop gap measures (Martinez-Vazquez and McNab, 2000). The fact is that the fiscal crisis itself gives the rationale for comprehensive reform and may be a key element of selling any new structural program.

PROPOSITION 2: COMPREHENSIVE TAX REFORM SHOULD BE DESIGNED AS BIG-BANG VS. PIECEMEAL.

The conventional wisdom probably favors an incremental approach to tax reform, i.e., it argues that if the existing system is shocked too much, the success of the proposed reform will be compromised. In fact, Goode (1984) made the argument that a reason for the failure of tax reform programs was the insistence by the framers that the entire package of reforms should be accepted as a one off proposition. More recent observers can point to the case of Colombia, where tax reform has been a case study in gradualism over the past two decades (Bird, 2004).

There are good reasons to argue for gradualism. Individuals and businesses have become accustomed to the present system and even to its shortcomings, they understand how it works and how they may comply with its provisions, and they have long since capitalized many of its features. To shock the economy with anything more than an incremental reform will impose significant transition costs as firms, individuals and the government try to adjust to new administrative burdens and to the new distribution of tax burdens. These adjustments will almost certainly lead to political controversy and diminish the probability that the reform will be implemented and/or will succeed. In developing countries In developing countries, there is the additional hard question of how much the tax administration system can absorb.

The strong counter argument is that comprehensive reform can take place only if the system is shocked. There are two principal supporting arguments. The first is that the reform must bring enough of a change
for the taxpayer to see a package of gains and losses. This is opposed to a change in a single tax, where there is a clear division between "winners" and "losers." To illustrate, consider the following:

- A shift from a progressive to a flat rate individual income tax would be more acceptable to working class taxpayers (who would be losers under an equal yield reform program) if it is accompanied by a tightening of the deductions and credit policy that are seen to favor the higher income.
- Elimination of exemptions, holidays and other preferential treatments under the company income tax would be more acceptable if accompanied by an overall rate reduction. Some companies would at the same time win from the lower rate and lose from the withdrawal of preferential tax treatment.
- The elimination of some exempt categories of goods under the VAT would be more acceptable to consumers if the overall VAT rate were reduced.
- A "packaged" tax reform that includes changes in income and consumption taxes produces an outcome where virtually all sectors see an increase in the burden for some taxes and a reduction for others. Such a scenario may be seen by the taxpaying public as coming close to satisfying the maxim of fairness in taxation.

When political leaders can mix and match tax reform components, the prospects for negotiating an acceptable reform package will be enhanced. There should be a little pleasure and a little pain in the new tax package for nearly everyone.

The second supporting argument for a comprehensive approach is that the response of saving, investment, work effort and compliance with a tax rate change may be quite small. Most empirical work in developing countries has found low price elasticities\(^5\). Therefore, a big change in effective tax rates will be required if there is to be any significant impact on resource allocation. If a driving reason behind the tax reform is to stimulate economic activity by changing the choices made by economic agents. The comprehensive approach would seem preferable to the approach that produces less of a shock to the system.

**Proposition 3: The Objective of Vertical Equity Cannot Drive a Comprehensive Tax Reform.**

There is no question but that the discussion of the effects of tax reform on the vertical equity of the tax system will be a central part of the debate about the “right” reform package. And, in fact, much of the firestorm around any proposal will center on it regressivity or lack of progressivity. A “burden study” will almost always be part of the comprehensive program of background studies.

In truth, policy makers and politicians are not usually so concerned with the impacts on the distribution of effective tax rates across all income groups. The tax burden distributions are often hard to read and understand, and their estimation is often subject to some heroic assumptions and severe data limitations. More likely the focus of policymakers will be on the impacts on particular population groups, e.g., the bottom 20 percent of income earners in the population, or the top 5 percent of income earners.

Some who have done comprehensive reform studies believe that vertical equity cannot be the driving force behind a comprehensive tax reform program in a developing country (Bahl, 1991). In part, this is because developing countries cannot implement progressive tax systems, and in part it is because the
costs of moving to a higher level of vertical equity are very high. These costs might include the revenue loss due to exemption of low income families from tax, the efficiency costs associated with the higher rates imposed elsewhere to make up for the revenue loss, and possibly the displacement effects that might result from the introduction of "progressive" measures such as high marginal personal income tax rates.

Tax policy design often mis-steps when it comes to building equity features into the tax structure. The following are features that often find their way into the discussion of comprehensive tax reform, in the name of enhancing vertical equity. As noted, such obvious equity-enhancing measures may not have the desired effects.

- Graduated rate income tax structures have the feel of giving a progressive distribution of burdens, but in fact the level of evasion and avoidance in developing countries often negates this outcome. Moreover, the introduction of progressive rates is often accompanied by the introduction of new deductions and other loopholes for the higher income. Usually, a proportional distribution of burdens is about as good as can be expected.
- Company income taxes are popular measures to place burdens on the wealthy, but the real distribution of burdens may be much less progressive. International competition may lead to a reduction in the tax, and part of the burden may be shifted backward to labor.
- A popular notion is that in the name of progressivity, the property tax on structures should be raised relative to that on land. In fact, this may reduce the progressivity of the distribution of property tax burdens.¹⁰

Probably the best that can be done in a comprehensive reform program is to argue that the burden on the lowest income classes should not be worsened. Some tax reform programs have been successful in doing this, largely by exempting essential consumption items from indirect taxes (Gillis, 1989). However, such adjustments may be more difficult in good, comprehensive tax reforms in the future. For example, exemptions and zero rating under the existing VAT may be ill advised and pruned out as the next round of VAT reforms is focused on base-broadening. Moreover, the goal of protecting the poor from taxation may have also led to protection of the non-poor, and suggests other targets for reform, e.g., low taxes on petroleum products, low charges for electricity, the exemption of "essential" consumption items, and high individual income tax thresholds.

Some will come to the conclusion that vertical equity can best be handled on the expenditure side of the budget, and that taxation is too blunt an instrument to do much about the distribution of income. Bird (1992, chapter 5) argues that this is too simplistic a conclusion, because too little is known about the impact of either taxes or expenditures on poverty reduction.

PROPOSITION 4: THE EFFECTS OF TAXES ON ECONOMIC DECISIONS WILL PLAY A MORE IMPORTANT ROLE IN THE DESIGN OF COMPREHENSIVE REFORM THAN IN THE PAST.

If there is a new political economy of tax reform, it is mostly about emphasizing the effects of taxes on the economy. Some of this new emphasis is imposed by external factors, e.g., WTO rules or international competition. And some of this is recognition by governments that leveling the playing field for investors is probably the best route to faster economic growth. In most cases, however, developing countries are
still in a mode of targeting favored sectors with preferential tax treatments. Some examples of the major preferences that might become under more scrutiny in comprehensive tax reform are the following:

- Exemptions and targeted incentives under the corporation income tax might be replaced by lower tax rates.
- Tariff structures may become more uniform and replace the system of wide variations in effective tariff rates that exists in many developing countries today.
- Extensive lists of exemptions and zero rated goods may be reduced dramatically in the next round of VAT reforms, as may unnecessary rate differentiation.
- As tax administration capabilities improve, this disparity may be reduced.

Perhaps the most difficult selling job to political leadership will be arguing that distortions to economic choices should be removed because they impose an excess burden on the economy.

PROPOSITION 5: FIRST POLICY, THEN ADMINISTRATION.

Most students of taxation recognize that the tax administration in developing countries is a major problem. Most leaders in the fiscal reform movement have recited a major lesson from comprehensive reform studies: policy change without administrative improvement will likely doom a tax reform program to failure. International agencies and bi-lateral donors have ongoing programs of technical assistance to improve tax administration practices and to upgrade the capacity of the staff who administer the tax system. These efforts add value by improving the collection rate and the fairness of the tax system. But still, in the case of comprehensive reform, the question might be raised as to which should come first: an improved tax structure, or an improved tax administration?

A reasonable proposition about the best sequencing of policy and administration is to get the policy right and then deal with the administrative problems. Many will disagree with this. The consumers (and sponsors) of a reform often cannot see beneath a plethora of administrative problems to the real issue, which may well be a badly structured tax. How many times is it said "... what is the sense in creating a new tax structure when the old one is not properly administered?" Too often the call for technical assistance in tax administration from the IRS or from one of the international agencies is premature.

There are two good reasons why it is appropriate for a comprehensive reform to put policy change ahead of administrative overhaul in the sequencing. First, administrative improvements can often generate a quick revenue impact, and of course this may have considerable value. But it may also divert attention away from the real problem which may have to do with structure. Because this may satisfy some of the urgency about revenue needs, the government may lose its enthusiasm about rethinking its tax structure. If the reform goes no further than administration, the government will not even go through the exercise of questioning whether the tax system is affecting the economy in ways that reinforce or offset government objectives.

Second, the true, underlying administrative problem may be with the tax structure. The tax system may be so complicated as to be beyond the capacity of the government to properly administer, or it may be so unfair that payment of taxes will be resisted no matter how much the administration improves. It
makes little sense to invest heavily in an administrative infrastructure to assess and collect a tax that is not likely to be in the picture in the long run, at least in its present form. Examples that support this argument include some individual income taxes that are riddled with credits and deductions and would require significant investment to improve administrative practices; or VAT thresholds that are set so low that they require significant administrative effort to capture small taxpayers.

The maxim of "policy first" does not mean that administration improvements cannot begin to march forward until a good structure is in place. Administrative improvements should be a continuing process and there are a wealth of activities that can be undertaken quite independent of structural reform, e.g., training, some basic procedures of audit and assessment, accounting and reporting, and certain EDP improvements.

PROPOSITION 6: FISCAL REFORM IS PROBABLY BETTER THAN TAX REFORM.

Arguably, there are two approaches to comprehensive reform. One is to look only at the tax side of the budget. Usually, the approach is to target a revenue neutral structural reform. The analytic framework is differential incidence, and the expenditure side of the budget is ignored. This approach has the advantage of being manageable in terms of resources required to do the study, and in terms of the time needed to get the work done.

The differential incidence approach, while perhaps the most feasible approach leaves much to be desired. For one thing, it often does not include all elements of financing, e.g., a review of all user charges is rarely part of the study. But more important, it may ignore the fact that Government may be forced to introduce the tax reform at the same time it introduces revenue-enhancing measures to address a revenue shortfall. In short, it leaves out the expenditure side.

It might be the time to ask the broader question about fiscal reform, i.e., one that also includes consideration of the expenditure side of the budget. This would be a more difficult job, would require more resources and time, and will raise many more controversial issues, but it will allow the government to get a better picture of the overall implications of the financing reform under consideration. If one believes the old adage in public finance, that finance follows function, then he or she will be an advocate of the comprehensive fiscal approach.

What would be the advantages of this approach? Certainly it would open the door for a far-ranging analysis and for considering many more reform options. A few examples of the broader questions that might be asked are:

- The vertical equity question could be broadened to consider both tax burdens and expenditure benefits. The differential tax incidence approach to comprehensive reform often leaves the issue at a statement such as "the distributional effects are better corrected on the expenditure side of the budget." The comprehensive fiscal reform would build this directly into the analysis.
- The revenue target of the financing reform could be identified in terms of the projected elasticity of desired expenditures. This would be a far better method of defining "revenue neutrality," which differential incidence analysis usually defines revenue neutrality as the yield of the present system.
4. **CONCLUSION: HOW TO GET SUCCESSFUL IMPLEMENTATION**

Of course the goal of government is to get its comprehensive reform plan from the bookshelf to implementation. Are there some principles that might be followed to maximize the chances of this happening? Four guidelines might be considered for getting a comprehensive reform program to implementation.

First, the government must see the project as its own and not that of a donor or even that of a technical assistance research team (Bahl 1991; Gillis, 1989). There must be a champion for the reform, and clearly the champion ought to be a power bloc within the government. The advocates should include the Ministry of Finance, and in most cases the final recommendations of the comprehensive reform effort should come from the Ministry. Ideally, the Ministry would be advised by an appointed, representative private sector group that is commissioned to work with the technical team and form its own recommendations. The theory here is for ownership of the program to rest jointly with the government who will impose the tax and bear the political risk, and with the private sector who will ultimately comply with the new tax system. The technical team should assist the government and the private sector commission in developing recommendations, but should not offer independent views.

Second, the technical assistance team should have the right mix of skills and experience, and above all, should have expert credentials. There is something powerful about drawing on the international experience, and the technical assistance team should have the ability to bring this experience to the discussion a relevant way. Most countries have little desire to copy another tax structure, but there is great comfort in getting a thorough assessment of what has worked elsewhere and what has not. The technical assistance team can also bring hard data analysis to the discussion, and in that way, much of the mythology associated with critiques of various components of the tax system can be discredited. Modern tax reforms make use of quantitative tax burden studies based on the modern incidence assumptions, micro-simulation modeling to estimate revenue impacts associated with various rate and base changes, CGE modeling to develop estimates of tax structure change on the economy, etc.

Third, tax reform should not be hurried. It takes time to get the technical proposals properly in place, and the public debate needs time. Comprehensive tax reform often requires new thinking about tax structures. Governments, and the population at large are not good at reacting quickly to such big changes in policy. Sometimes after a debate of several months, what was a radical sounding idea when first introduced becomes a regular part of the discourse. The hope of most tax reformers is that the sequence involves a completed study, then recommendations, then implementation of the reform program shortly thereafter. Usually this does not happen because it takes time for new ideas to be absorbed. The implementation of a major tax structure revision may not take place until years after the initial seeds were planted. It is necessary for a blueprint for comprehensive tax reform to be developed, but political and administrative constraints may mean that it is implemented over a period of time. As Gillis (1989, p. 510) has so properly documented, "Delayed reform is not necessarily lost reform."
While one cannot hurry a comprehensive tax reform, one also cannot dawdle. Governments are not willing to be associated indefinitely with tax reform, even good tax reform. Comprehensive reform tends to be associated with a particular administration and there is need to get on with it while the power is in place and while there is still enthusiasm for the reform program. Even the best of tax reform programs carries unfavorable connotations for most citizens and politicians, and the zeal for even so noble a goal as "getting the prices right" wanes as time goes by and the next election year draws close.

Finally, education about tax reform is important. The staff papers of a reform study should be written in a popular version and should be made available to the interested public. Public hearings also are a good idea, and placing technical material in university and think tank libraries is an important part of selling a tax reform and keeping the ideas in play (McLure and Zodrow, 1997). So too is some education of the press, who are capable of destroying a reform program without fully understanding it. Finally, involving local tax experts as consultants to the program is an important ingredient of local ownership.

Notes

1 Professor of Economics, Andrew Young School of Policy Studies, Georgia State University. Bayar Tumennasan provided valuable research assistance for this paper.
2 Some of the early and very good comprehensive tax reform work in Latin America is Musgrave (1981), Musgrave and Gillis (1971), and Shoup (1959). In the last quarter century, comprehensive reform programs of note include those for Jamaica (Bahl 1991) and Indonesia (Gillis, 1989a).
3 For an interesting review, see Bird (2004).
4 The calculation rule used throughout this paper is to compute the mean value for the ratio for all of those years in a decade for which data are available. In some cases, all years will be available and in others only some years will be available. We ignore those years not available. We report but do not emphasize the results for the 2000s, both because there are only a few years available, and because the number of countries whose data are reported for those years is limited. Only 36 countries were reported for at least one of the years, 2000-2002 in the 2003 data file. These included 5 OECD countries, 19 transition countries, and 12 developing countries.
5 In this comparison, we use an unbalanced sample based on available data (see footnote 2). Keen and Simone (2004a) make a similar comparison using a common sample of countries, and reach the same conclusion.
6 This of course oversimplifies. A more egalitarian set of taxing choices might also involve exemption of essential consumption goods from the VAT, or a high income tax threshold.
7 A useful handbook on tax policy design is Shome (1995) and a good discussion of the issues is in Bird (1992).
8 In their sample of developing countries, Keen and Simone (2004a, page 16) report about 30 percent had a VAT in 1990, but that by 2000 this number had risen to about 75 percent.
9 See, for example, Gandhi (1987), Bahl (1991), and Stepanyan (2003).
10 This happens because the increased tax on structures may discourage investment in housing consumption.
References


Keen, Michael and Alejandro Simone (2004), "Is Tax Harmonization Harming Developing Countries more than Developed?", *Tax Notes International*, June, pp. 1317-1329.


