

OBSERVATIONS ON TAX REFORM IN COLOMBIA

Arnold C. Harberger

University of California, Los Angeles

Comments On Política y Estructura Tributaria en Colombia:

A Report Prepared By The Contraloría General de la República,

Government of Colombia

August 2002

The heavy hand of history is an important source of the differences between the tax theory that economists write about in their treatises and discuss in their classrooms on the one hand, and the process of tax policy and tax reform that we observe in the real world on the other. Theorists may dream about one day having the opportunity of eliminating an old tax system in its entirety, and replacing it with a completely new system reflecting all the best tax theory, analysis and administrative principles that are known to our profession. But such dreams are unrealistic, even quixotic. Every new move in tax policy represents, to some degree, a step into the unknown. Levels of taxpayer compliance can be predicted reasonably well for existing tax frameworks, much less so for a new one. Similarly, the administrative problems of existing taxes can be quite readily identified, and often quantified; for a new tax system they can only be guessed at.

So there are good reasons why tax reforms should be spread out over time -- taken, as it were, in small bites so as to permit the system to digest each of them more easily. One wants to rely on whatever habits of taxpayers have led to the existing level of compliance, and whatever practices of

administrators have produced the existing levels of corrections. Both of these are always subject to improvement, but one must be careful not to allow grandiose new experiments to put at risk the gains that have been made over earlier years and decades.

Those of us who have been closest to the world of actual policy are quite aware of these realities. We have accordingly come to expect tax reform to be a process that is naturally and with good reason spread out over time, with major changes coming step-by-step over the years and decades, rather than in cataclysmic alterations of the entire tax structure.

Colombia is a wonderful example of this natural and desirable process of step-by-step reform. This study reports on a dozen reforms between 1974 and 2000, each of which changed the system somewhat, but left it as an easily recognizable relative of the immediately preceding structure. Yet the cumulative change over the entire period was very substantial. Few in 1974 would have been willing to predict such substantial changes as in fact occurred over the next quarter century. And I suspect that very few economists, administrators or even taxpayers would today see any advantage in going back to the tax system that prevailed in Colombia, say, in 1973.

On the whole, the Colombian tax system has had an evolution which followed worldwide trends over the same period. These trends were: a) from high tariffs with wide dispersion of rates to lower tariffs with much smaller dispersion of rates; b) from high maximum marginal rates of income tax (both personal and corporate) to significantly lower maximum marginal rates; c) toward increased integration between the personal income tax and that striking the income of business firms, and d) probably most

important of all as a worldwide phenomenon, a trend first toward the introduction of the value added tax, and then toward an increasing degree of reliance on it.

I believe that these trends deserve to be called healthy ones, both from the point of view of economic efficiency and from that of their potential for effective administration. On the whole, it is the present consensus of public finance economists that the world has come a long way in improving its tax systems over the last several decades. I believe that Colombia is no exception to this broad generalization.

The Value Added Tax: Consumption vs. Income Type

The most important reform that is now being proposed in this area is the conversion of the value added tax from the so-called “income type” to the “consumption type”. The consumption type of tax is to be preferred, partly from a theoretical point of view, but most importantly from that of administration. When the tax is of the income type, business firms receive immediate credit for the tax paid (at previous stages of production) on their current inputs of raw materials and semi-finished products, but the credit for the tax previously paid on their purchases of capital goods must be taken “drop by drop” over the economic life of each capital asset. This requires detailed record keeping by the taxpayers, and places great demands on the vigilance of the tax authorities.

Under the consumption type of tax, each taxpaying firm gets credits for the value added taxes paid on all its purchased inputs. There is no need to distinguish between current inputs and capital goods purchases, and obviously there is also no need to “distribute” the credit over the working lives of

capital assets. Compliance is thus made much simpler for the taxpayers, and at the same time the administration of the tax is made much easier for the authorities.

A second argument in favor of the consumption type of tax is that, unlike the income type, it does not discriminate against investment. This is fundamentally an argument in terms of economic efficiency. Here the case is probably a good one, but not so clearly as with the compliance and administrative advantages mentioned above. The problem is this: it is very easy to show that a consumption-type tax must be preferred, on efficiency grounds, to an income-type tax at the same rate. But an income-type tax at the same rate will raise more revenue than a consumption-type tax, making the comparison to that extent “unfair”. A fair comparison would juxtapose an income-type tax at, say, a 15% rate with a consumption-type tax of, say, 18% (if this is the rate that would yield equal revenue). My own analyses of this problem lead me to judge that in most cases the consumption-type tax will “win” over the income-type tax, on efficiency grounds, but the victory will be by a relatively narrow margin. It is surely not a theoretical certainty.

A Broader Base and a Uniform Rate of VAT

It is a matter of very wide consensus among experts, that a value added tax works best when it applies over a very broad base and at a uniform rate. Again the strongest arguments are on the administrative side. If bakeries pay a VAT of 5% on bread and of 15% on cakes, it is predictable that they will tend to overstate the proportion of their product that takes the form of bread. And administrators will have a terrible time trying to check up on their declarations. If they are subject to an uniform rate on all their output, bakers will not be able to evade tax by falsifying the proportions which

different products occupy in their total output. The above example also serves to show the wisdom of having a base broad enough so that all the products produced by most covered producers are included in the value added tax net. If some products are zero rated, this gives even more incentive than a 5% rate for firms to exaggerate their relative share. And even if products are excluded rather than zero rated, the incentive is much the same. (Since firms cannot take credit for taxes paid at earlier stages on products excluded from the VAT net, they would have an incentive to overstate the output of such goods but to understate the inputs they used in their production, assigning those inputs instead to products paying VAT, so that credit could be claimed.)

With respect to the broadening of the base, there is a general presumption that the efficiency cost of a tax will be lower, per dollar of revenue, the broader is its base.

The standard (simple) expression for the efficiency cost of a tax at the rate τ is $1/2 \eta \tau^2 v$, where η is the price elasticity of demand of the covered group, and v is the value of the tax base (value added in this case). Since the revenue from the tax is τv , the efficiency cost per peso of tax revenue would be $1/2 \eta \tau$. Now, as a broad generalization, the broader is the base of the tax (the sector "covered" by the VAT), the lower will be its elasticity of demand. Also, the broader is the base, the lower the tax rate τ needed to raise a given amount of revenue. Hence the presumption is that with a broader base, the efficiency cost per dollar of revenue will be smaller on both counts -- smaller η and smaller τ .

The above represents a reasonable presumption, however, and not a rigorous proof. An insight into "how" to broaden the base of a uniform rate VAT can be gained by thinking of the following

scenario. If we take a new commodity n and add it to the value-added net, the first-order efficiency cost will be $1/2 \eta_{nn} \tau^2 v_n$. But there will be an external effect equal to $\tau \eta_{on} v_o$. Here η_{nn} is the own-price elasticity of the “new” commodity (to be added to the VAT net) and η_{on} is the cross-elasticity of the old commodity with respect to the price of the new. So adding the new commodity is a better idea, the better a substitute it is for the products already in the net. It is not a good idea to add products that are complementary to those already in the net.

Thus, efficiency considerations lead tax technicians to unquestionably applaud broadening the base when the “new” commodities are strong substitutes for items already in the net, and to be skeptical about adding new commodities that are strong substitutes for those out of the net. A corollary is that in the latter case it is best to take a whole package of goods that are substitutes for each other, and move them from the “uncovered” to the “covered” sector (of the VAT).

The VAT As a Protective Instrument

I am unfamiliar with the precise way in which the VAT is administered in the aduanas of Colombia. The standard treatment is to apply the VAT to covered products equally, regardless of whether they are produced domestically or imported. In the first instance, then, this should ensure neutrality of treatment of products from the two sources. If they are final products, consumers pay the VAT in both cases. And if they are inputs into production a covered firm will receive credit in both cases, while an uncovered firm will be denied credit in both cases.

The document refers particularly to cases in which an “implicit VAT” is collected, on the importation of goods that are excluded from the tax when they are produced internally. As I see it, a

differential treatment is surely possible, but it does not necessarily work in one direction. If the good in question is a final consumption good, whose local production is excluded from the VAT net, then local consumers will pay the VAT embodied in that commodity's purchased inputs (a VAT which never receives a credit), but not in the value added of the exempt stage of final production. Hence they will pay VAT on part but not all of the price of the local product, while consumers of its imported counterpart pay the full VAT. In this case an element of protection is indeed present. However, if the good in question is itself an input into later stages of production, the purchasing firm will get full credit for the VAT embodied in the imported inputs but will get no credit for the (partial) VAT embodied in the domestically produced but VAT-excluded inputs. Thus a producing firm that is within the VAT system will end up paying more for the locally produced input than for the imported one. Here the bias runs in a distinctly anti-protectionist direction. But if that producing firm is itself outside the system, it will end up, like consumers, paying more VAT on the imported than from the domestically produced input.

There is no simple way around this problem, but it should be clear that the scope of the problem is reduced, the broader is the base of the VAT system, with the treatment of imported and domestically-produced goods being made as closely comparable as possible.

Mortgage Interest Deductions

Turning now to the personal income tax, the first proposal of the document is to eliminate the deductibility of mortgage interest payments. There can be no doubt that this is a sound recommendation, for the point of departure is that the implicit income that a person or family receives from owner-occupied housing is simply not counted as income for income tax purposes. If it were

declared, then the interest on mortgage loans should be deductible. But since the imputed income is not declared, there should be no deductibility of mortgage interest.

Equal Treatment of All Labor Income

The issue, here concerns: a) the exemption of 30% of wage and salary income, and b) the special treatment of honoraria and salarios integrales. While there may be administrative grounds for certain special treatments of labor income (e.g., when the taxes that are withheld at the source on wages and salaries become the definitive and final tax for workers and employees with no other income), it does not appear that these particular special treatments fit well into that category. The broad principle of a unitary income tax is that the same income should pay the same tax, regardless of its source. Moving toward that principle must therefore be considered a useful and positive step of tax reform.

Treatment of Pension Contributions and Pension Income

A simple principle can govern here: income should be fully taxable at one end or the other of the pension-fund tunnel. This amounts to converting a portion of the personal income tax into what can be called a quasi-consumption tax. There are many reasons for countries to modernize their pension systems, converting them to systems of individual accounts. Quasi-consumption tax treatment is achieved in such a modernization either by making contributions to pension funds deductible or by allowing withdrawals from the funds (in the pension-receiving phase) to be nontaxable. There is definitely no sound basis for having exemption at both ends of the tunnel.

Countries may decide to limit the extent of deductibility of contributions or of exemption of receipts (presumably to a given amount per year, which could vary depending on the taxpayer's

circumstances, family status, etc.) Not much can be said concerning the degree of such limitation.

What is generally true, however, is that the incomes earned do not pay tax while they remain within the pension fund; they thus accumulate tax free. I personally prefer the alternative in which contributions to pension funds are deductible (at least up to a limit), in which all interest, dividends and capital gains are non-taxable while in the fund, and in which all withdrawals are fully taxable as income (with a modest penalty for early withdrawal). This means that if there is a limit to the deductibility of contributions, it is easiest to have completely separate funds -- covered pension funds which only accept tax deductible contributions, and whose payouts are fully taxable, and "standard" funds which are subject to standard income-tax treatment.

Integration of Business and Personal Income Taxes

When a country has separate taxes on business and personal incomes, the discrimination against saving and investment can get to be extreme. In such cases one can have the income taxed before it is saved (and put into the enterprise as capital), then the income from that capital can be taxed again within the enterprise as business income, and finally the individual shareholders can be taxed yet again on the dividends and capital gains that are generated by their investment. This is triple, not double taxation, and it gives us a strong reason to want to avoid it, or at least limit its extent.

One way to do this is not to tax business income at all, and simply allow the ultimate owners of capital to declare the income it generates and pay taxes on that income. However, this can represent a significant loss of revenue for countries that already have a separate tax on business income. Moreover there are two considerations that deserve special mention in the cases of developing countries. First, a

significant fraction of business taxes is often paid by foreign or multinational companies. If these are exempted from tax, in a developing country, this often has little impact on their total tax bill, as they become liable for tax on the same income in their home countries. Reducing Colombia's tax in this case leads to a substantial transfer from Colombia's fisco to the treasuries of other countries.

The second ground for maintaining business income taxes is that some of business income represents monopoly profits. These tend to be more important, as a fraction of total profits, in small countries than in large ones, because the forces of competition grow stronger as market size increases. Reducing trade restrictions helps limit monopoly power as far as tradable goods are concerned, but nontradables remain a potential problem even under a liberalized trade regime. A business income tax does nothing to correct monopoly distortions, but it does ensure that the general public gets to benefit from part of such profits (i.e., the part that is paid in taxes).

For these and possibly other reasons, developing countries have not chosen to eliminate the business income tax. Where some degree of integration is instituted, it typically takes the form of reducing or eliminating the tax on dividends, when these are received by other taxable entities (individuals or firms) within the country. This allows the full tax to apply to dividends and other profit remittances sent abroad, and retains some degree of taxation of monopoly profits.

Readers should realize that integration of personal and business taxes on the basis of dividends is not full integration, but it does represent a viable approach (followed in many developed as well as developing countries) of mitigating the multiple taxation of income from capital.

The Taxation of Capital Gains

This area presents a series of conceptual and administrative problems, to which no “consensus solution” yet exists. If an income tax is to be a true income tax, it should indeed tax real capital gains (though not in principle “inflationary gains”) as part of total income. This gives rise to problems of when to tax these gains. Experts are close to unanimous in feeling that any attempt to tax capital gains as they accrue would create insurmountable problems, both for the national treasury and for the real economy as such. Thus, one is left with the taxation of such gains at the time they are realized. This poses few problems for countries with relatively moderate tax rates, but it gives rise to the advisability of averaging schemes if the tax structure is substantially progressive.

Some countries exempt certain classes of capital gains altogether. This treatment has only weak theoretical support. There is stronger support for what I earlier called “consumption tax treatment” as represented by qualified pension funds. Here the initial investment is deductible from income, and the result of the investment is fully taxable, but only as it is withdrawn.

One can emulate this treatment, for standard capital gains, by reconstructing the tax initially paid (assuming the investment was not deductible), and considering it as part of the “basis” above which the capital gain is calculated. This tax, like the basis itself, should be adjusted to correct for the intervening inflation. A more generous treatment would allow the imputed tax (though not the basis itself) to be carried forward at a relatively moderate (say 3%) real interest rate. But the resulting real capital gain would be fully taxable at normal income tax rates (subject to averaging if the rate structure is heavily progressive).

Indexing The Income Tax System

The study mentions the difficulties experienced by the Colombian tax authorities in administering an indexed income tax. I find this fully understandable, but I am inclined to put the blame, not on the idea of indexation as such, but on the particular way in which it was implemented in this particular case.

The big problem connected with indexation is that it is usually not present when it is most needed. Countries with low rates of inflation rarely index their tax systems. And countries that once had an indexed system often abandon it as they experience a period of price level stability. Then, when a financial crisis, a natural disaster, or some political turmoil produces a sudden spurt of inflation, the country finds itself without protection. Great losses in real revenues occur (owing to a variety of so-called *Tanzi effects*) in such inflationary spurts.

Indexing the tax system permanently is the proper answer. Indexing serves as an insurance policy against an inflationary spurt, in the same sense that fire insurance protects homeowners against huge losses from costly fires. One does not have to expect frequent fires in order to want to purchase fire insurance. Likewise, a country need not anticipate inflation to break out in the near future in order to have an indexed tax system in place.

It is not a good idea to attempt a piecemeal sort of indexing. Businessmen always argue in favor of writing up the cost basis of their capital assets, and calculating depreciation on the adjusted basis. They also always favor use of an inflation-adjusted basis when calculating profits (capital gains) on the sale of an asset. But they rarely if ever mention that the inflationary portion of the interest that they pay should not be deductible in their tax calculation. The reason is that the inflationary portion of interest

represents, in effect, the amortization of part of the original debt, and should be treated just like any standard amortization payment. It represents a reduction of an asset (cash) matched by a corresponding reduction of a liability (outstanding real debt), and is therefore not an “expense” in any real sense.

From my own experience, I believe that it is possible to have an indexed tax system that is simple and straightforward, and requires little or no more work, either by taxpayers or tax administrators, than a standard unindexed tax framework. The rules of such a system are: a) all real and indexed assets A_T , should be written up by the standard inflation factor (π), and the resulting adjustment πA_T should be added to taxable income; b) all real and indexed liabilities L_T (including patrimonio neto) should be written up by the same factor, with the resulting adjustment πL_T being subtracted from taxable income; and c) depreciation and capital gains should be calculated on the inflation-adjusted value of the corresponding assets.

There is nothing difficult about the application of the above rules. In most cases where people have complained about the complexity of inflation adjustment, it is not because of the above simple rules, but rather because the system of adjustment has been made more complicated.

One enormous conceptual mistake is to think that indexing for inflation is somehow similar to replacement cost accounting. This is emphatically not the case. As I see it the two concepts are at opposite poles. For inflation accounting there should be only one adjustment factor π ; for replacement cost accounting there are as many adjustment factors as there are different types of assets. Inflation accounting allows for relative prices to change as the market dictates, generating taxable profits or

losses for those concerned. The only correction is for the change in the general price level, not in particular prices.

Now it is natural that economic agents will try to press the authorities to allow for special adjustments for prices that have gone up, say, more than the average, but it is the duty of the authorities to resist these pressures, and hold to the principle of a single index for inflationary adjustment. So long as that is done, the system can be kept simple, with easy compliance and uncomplicated administration.

One of the areas where pressures for complicating the system of inflation indexation is that of inventories. What is important to recognize here is that inventories do not constitute the central core of the inflation adjustment problem. In general, the Colombian solution (as of the year 2000) of simply leaving inventories out of the inflation adjustment process should be considered a reasonable compromise, particularly so if the inventory accounting of firms is on a last-in-first-out (LIFO) basis.

Foreign exchange is another area which gives rise to pressures for complicating the system of indexing. The simplest solution here is to designate a "standard" foreign currency -- the dollar, the Euro or even a basket of leading currencies like the International Monetary Fund's SDR. Then foreign currency assets and liabilities would all be converted to standard (e.g., dollar) equivalents, with the resulting sums being treated as real assets using the standard inflation adjustment factor π .

The main message with respect to tax indexation is that it is a very positive element in a tax system, which can be designed in a simple, efficient way. Troublesome complications have indeed arisen in past experiences with indexation, but these have mainly come as a result of deviations from the simple indexation rules set out above.

The Tax on Net Worth (Patrimonio Neto)

As a foreigner, I feel I am not in a good position to comment on the merits and difficulties connected with Colombia's tax on net worth. From a theoretical point of view, it has the potential to be a positive element in an overall tax structure. It may also be a help in administering an income tax, possibly via the imputation of a certain rate of return on the value of net worth in any period, or possibly just through the help that a continuous inventory of assets and liabilities might provide to administrators in their fight against evasion.

The problems that I see are more practical than theoretical. Most of the cases I know of where such a tax was in place were characterized by widespread evasion. The evasion took three forms: a) underdeclaring, or failing to declare important assets; b) shifting assets outside the country (or other tax jurisdiction in question); and c) creating fictitious liabilities so as to reduce taxable net worth.

My guess is that it was problems of this type that led to the abandonment of the net worth tax in Colombia in the year 1992. If this is the case, it is clear that if the tax is to be reintroduced, special attention should be given to finding better ways of dealing with the problems than the country encountered in the past.

Indirect Taxation

It is an interesting question whether a system of luxury taxation (or more generally an attempt to build a degree of progression into a country's system of indirect taxation) should be implemented as part of the value added tax or separately from it. The standard method of implementing a value added tax of the consumption type permits the easy accommodation of different rates. Each producer pays the

corresponding rate on the products he produces, and gets back credits for the tax paid at the next earlier stage. The European countries have had long experiences with separate rates, and have not abandoned them. Nevertheless, there is no question that multiple rates open the doors to easier evasion and more difficult administration, as was pointed out above. Because of this I feel there is some advantage for Colombia to implement the progressive components of its indirect tax structure via a series of separate commodity taxes, rather than as an integral part of the VAT system.

Final Comments

Unfortunately, limitations of space and time make it impossible for me to comment in detail on all of the specific analyses and recommendations contained in the report. It is clear to me, however, that the report is the product of much serious work by a group of professionals of alta categoria. They deserve congratulations for their work, and I am confident that the end result of their efforts will be another significant step forward in the progressive reform and improvement of the Colombian tax system.