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LESSONS OF TAX REFORM

(From The Experience of Uruguay, Indonesia and Chile)

Arnold C. Harberger

University of California, Los Angeles

and

University of Chicago

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I. INTRODUCTION

This has been a difficult paper to write. Its original aim was to take its readers behind the veil of appearances and give them a taste of what it is really like to be "on the inside" of a process of tax reform. As I went around and interviewed participants, I thought that stories would appear that would surprise readers, give them new insights into and understanding of what it's all about. Maybe even it could serve to sharpen the perceptions of those who would engineer new reforms (perhaps in other countries), alerting them to dangers otherwise unseen, calling their attention to critical details that might easily be overlooked, stamping in their minds the key requirements of a successful strategy.

The actual result was far from what I had anticipated. To be sure, a few vignettes were generated, a few perhaps surprising anecdotes. But the bulk of the message was almost the opposite of what I had planned. Taking readers to the inside of the process of tax reform was not going to open their eyes to new marvels, nor strike them with lightning bolts of new wisdom. Instead it was going to pound home incessantly the importance of things we knew about all along: a) clarity of conception in designing a reform, b) professional-level attention to detail in converting that conception into laws, regulations and procedures, c) administrative machinery for implementing the reform efficiently and fairly, and above all for the long run. These lessons, on the whole, were not exciting -- more like "how to be a good public accountant" than like how to be a star in the movies or in the opera or on the football field.

Studying the history of these three countries' tax reforms also reinforced my longstanding belief in the importance of appropriate timing. I do not mean timing in a very refined sense -- it is not the day nor the month nor the season that matters, maybe not even the specific year. But there are times when the public at large, and/or the legislative assemblies, and/or even the government authorities (e.g., the president and the cabinet) themselves are more likely, other times when they are less likely, to be receptive to the idea of tax reform. It is important for those who engineer a reform to be sensitive to this general receptivity, so as not to cast their seeds on barren ground.

Sometimes the term "opportunity" fits better than "receptivity". This is particularly true when the pre-existing system has generally broken down, betraying its own bankruptcy and at the same time yielding almost an open field to those who create its replacement. Opportunity may also come as a byproduct of some external crisis that calls for the generation of substantial new revenues in a relatively short period of time. In either type of opportunity, there is a void that somehow is going to be filled -- at worst by the inflation tax or by ill-conceived measures spawned by demagogy.

When opportunity strikes, the need is for someone to be ready with a well-conceived professional solution. Rarely will a solution drawn intact from the professional literature do the trick -- careful tailoring will be needed to adapt it to local conditions and to the specific nature of the crisis. This task can be hard enough, even when the country's policy professionals have done a lot of prior work and are in that sense quite prepared to meet the crisis. If they are unprepared, or simply not alert to the emerging situation, the opportunity represented by the crisis is likely to pass, with the void being filled by somebody else, and with the country's economy for years to come paying the cost of an inferior solution.

II. URUGUAY

The main thrust of my story is well represented by Uruguay's case. I was somewhat familiar with the situation because I had served as a consultant on several occasions over a period of about three years in the mid-1970s. Unfortunately in a sense my consulting missions always entailed intensive work on one or two topics -- e.g., the social opportunity cost of capital, the role of fiscal factors in Uruguay's inflation, the treatment of the financial sector under the value added tax. My appreciation of the broad outlines of the country's tax system came, as it were, by osmosis -- by contact with tax officials and other professionals, by references and summaries found in the general economic and tax literature, etc. From these contacts and sources I was impressed by two particular vignettes. First was that fact that in their tax reform effort of 1974 and 1975 the Uruguayan authorities had abolished the personal income tax. This came as a shock and a surprise; I really did not know what to think. Was I in favor of such a drastic measure of against it? What were the pros and the cons? Without knowing where I myself stood on the matter, the one thing I felt surest about was my admiration for the political courage it surely took to engineer such a drastic move.

The second item that impressed me was a tax called IMPROME -- a tax on agricultural income based on the potential productivity of the soil. As originally described to me, IMPROME was an economist's dream tax. For each of some 15 regions of the country, the land was divided into four or five quality groups. In each region-quality category, the most likely cropping pattern was adduced. Each pattern was described by a set of outputs per hectare, together with the inputs that "normally" would be applied to achieve those outputs. Inputs (F_j) and outputs (X_i) were then priced (at average prices w_j and p_i) for each year, and imputed income $(\Sigma X_i P_i - \Sigma F_j w_j)$ was then computed as the base on which IMPROME was levied. When a relevant output price went up, the tax would automatically increase, when an input price rose, the tax would fall. But when the farmer leveled his land, introduced new varieties, applied fertilizer more scientifically, undertook fencing and drainage works, etc., the tax did not change a bit. Each farmer was the sole beneficiary of such advances and improvements.

It is easy, I think, for readers to visualize how impressed I was by the daring (if not audacity) revealed by the income-tax abolition, and by the professional refinement epitomized by IMPROME. Time and again I urged that these experiences be studied in depth, so as to reveal their secrets and their lessons. So, needless to say, when I agreed to write this paper for this conference, a deeper look into both these experiences came high on my agenda. So I went to Uruguay, I inquired, I looked, I studied, and I came away disheartened. In each case the truth belied the image. The search led to no secrets to be treasured, no major insights for future tax reforms.

In the case of the income tax, its abolition came only twelve years after its introduction. The tax had never really taken root, no effective enforcement machinery had ever been developed, and no important revenue had ever been generated (receipts never reached as high as one percent of GDP). Moreover, the tax that was abolished was really only the tip of the iceberg. It stood within a system of category taxation as the specific component striking (at progressive rates) the comprehensive income of individuals. After its abolition, the following taxes remain today:

a. A tax on the income from industry and commerce (30 percent maximum rate).

b. Taxes on agricultural income, either actual or imputed (30 percent maximum rate).

c. Social security contributions (employers' contribution of 12 percent plus employees' contribution of 13 percent).

d. Value added tax (20 percent rate, subtraction method).

e. Selective excise taxes, falling mainly in fuels, tobacco products, alcoholic beverages and electricity.

In the case of the taxes on agriculture, my disillusionment came from another angle. The much vaunted IMPROME, far from calibrating cropping patterns to the region and quality of the soil, as its underlying concept would have dictated, instead imputed income on the assumption that everybody produced just two products -- meat and wool. Soil quality came into play by classifying different region/soil groups as having land that was a specified fraction or multiple of the national average land quality.

Uruguay's concentration on the production of meat and wool is sufficient so that one cannot condemn the IMPROME procedure as outright absurd. Yet the blanket imputation of taxable income on the basis of cattle and sheep raising must have raised the hackles of truck farmers, orchard owners, poultry raisers and the like. They did indeed complain, with the result that today all taxpayers with net receipts above a critical amount must pay a regular agricultural income tax (IRA) in their actual net income.

Smaller agricultural enterprises now can opt for the IRA system or for an imputed system (IMAGRO) which in 1979 replaced the earlier IMPROME system. IMAGRO did not change the IMPROME imputation significantly, however. Today the standard hectare's production pattern is still based on cattle and sheep raising, with any given hectare's imputed income being a fraction or multiple (depending on soil quality) of that of a standard or average hectare.

The virtues of the Uruguayan tax system are thus not to be found in either of the two aspects that so intrigued me and other professional observers. What, then, were the merits of the Uruguayan tax reform? Without any doubt, the answer is tax simplification. In July of 1974, when Alejandro Vegh Villegas assumed the post of finance minister, Uruguay was plagued with a myriad of little taxes. These had been imposed to begin with in response to pressure groups (on the whole very small ones with tightly defined special interests), and as ad hoc devices to garner new sources of revenue to finance new expenditures as they were approved.

Vegh's tax simplification effort centered largely on a computerized system, identifying each tax separately, together with its recent revenue history. The procedure by which taxes were then eliminated was extraordinarily simple and clear. After the taxes had been ranked in descending order of their revenue yields, those at the bottom of the computerized list were repealed en masse. In the first step, the budget law of 1975 eliminated about 50 taxes; then in a second step in late 1975 another 80 or so fell under the axe. The keys to the success of this procedure were its "objectivity" and "automaticity". If the taxes had been taken one-by-one, or just a few at a time, endless pleading and debate would have ensued as each affected interest group mobilized its spokesmen and its allies. The frontal assault on many tiny taxes all at once gave the advantage to the fiscal authorities. The automaticity helped too, in that it was hard for opponents to question the broad principle of eliminating dozens upon dozens of tiny "nuisance" taxes. Whatever merit could be claimed by its supporters for any one such tax, it was certainly not its contribution to the fiscal till.

A second major element of simplification was the elimination of the stamp tax (impuesto de sellos). This tax had tentacles reaching into all sorts of activities and transactions -- it struck bills, loans receipts, checks, virtually any document that had a legal status that might be subject to a complaint of lawsuit. The stamp tax spawned compliance and efficiency costs in all directions, and was loathed by the business and commercial community. At the time of its elimination, the stamp tax was the most important single revenue source in the entire system.

The third important tax that was eliminated was a sales tax striking gross receipts (entradas brutas). It functioned as a cascade tax, generating layer upon layer of distortions as goods passed through different productive stages.

Finally, there was a single stage tax on final sales.

All the above taxes were eliminated and folded into the evolving value added tax, which quickly became the major revenue raiser of the system.

A final key feature of Uruguay's tax reform was the elimination of export taxes (retenciones) on beef and wool. These taxes had been significant revenue sources, but their most important effect was to deter international trade. Partly as a consequence, Uruguay's exports jumped from an average of about $200 million in 1968-72 to over $600 million in 1977-78 and over a billion dollars in 1980-82. In terms of the generalized purchasing power of the dollar over tradable goods, Uruguay's exports were 500 to

600 million 1980 dollars in 1968-72, about 900 million such dollars in 1977-78, and over a billion such dollars in 1980-83.[1] Further discussion of these trade tax changes, along with the substantial liberalization of import restrictions that occurred in the late 1970s and early 1980s, is set to one side, as being beyond my self-imposed limits as to the scope of the present paper.

III. INDONESIA

The HIID Project

The outstanding feature of the Indonesian tax reform of 1983 was the degree of care that went into its preparation. It surely has few equals in this regard, one of them being the work of the Canadian Royal Commission on Taxation in the late 1960s. The preparation in the Indonesian case worked on three levels -- professional-technical, political, and administrative.

The cornerstone of the Indonesian reform effort was a contractual arrangement with the Harvard Institute for International Development (HIID), led by Professor Malcolm Gillis. Under this arrangement, more than two dozen experts from six countries undertook basic studies of the existing Indonesian system and the potential for reform. The study period extended over more than two years and covered nearly every aspect of the tax system and its potential reform. (Tariffs and other trade taxes were perhaps the most important, but quite conscious omission.) Working side-by-side with the foreign experts were Indonesian cadres, many of whom in the process became local experts on the particular areas in which they worked.

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[1]These figures are the dollar value of Uruguay's exports as given in International Financial Statistics, deflated by the SDR-WPI, a dollar price index based on the wholesale price levels of France, Germany, Japan, the United Kingdom, and the United States, with weights equal to those used since January 1981 in the calculating of Special Treasury Rights at the International Monetary Fund.

The political side of the story was represented by two features of the HIID effort. First, the entire operation was placed under a steering committee of senior government officials, drawn from all parts of the Finance Ministry. This committee took part in all decisions that dealt with key policy matters. It is important to realize that in the Indonesian context the high-level bureaucracy is probably the most important focus of political forces and pressures. It is they who receive the complaints as well as the self-serving proposals of a myriad of interest groups. It is they who come to sense what is politically trivial at one extreme, politically untouchable at another. Their presence throughout the reform operation thus helped on the one hand to guarantee that the initiatives taken would not be totally out of line with Indonesian political reality, and on the other to ensure that the final product would stand a reasonable chance of approval and implementation.

The second political feature of the HIID enterprise was its emphasis on carrying its recommendations all the way to the point of draft legislation. A team of lawyers from Indonesia and abroad started work at about the midpoint of the HIID project's term, and by the end was engaged in an all-out effort to transform the team's technical papers and proposals into draft laws.

On the administrative side one had not only the counterpart cadres of Indonesian officials who worked with the foreign experts, but also a program (at first within the HIID project, later continued on its own) for the training abroad of new cadres of officials. In addition the project included technical studies of administrative issues, and produced as one of its important outputs a new computerized taxpayer identification system that was to prove a great boon to the implementation of the reformed tax system.

Tax Simplification

Simplification is the term that most aptly covers the many aspects of the Indonesian reform effort. It is no surprise that the cornerstone of this effort, on the side of indirect taxes, was the conversion from an old and poorly administered turnover tax (which in addition had a very low yield) to a modern value added tax. The notion of simplification even explains why the value added tax was confined to the manufacturers' level (including imports, mining and construction). To extend it either back to the agricultural stage or forward to the wholesale and retail stage would require huge administrative effort with little prospective increment in yield. Agriculture's remaining out of the system had the added consequence that unprocessed food products reached the consumer without paying any tax (except that embodied in purchased inputs into farm operations). This carried political benefits since such items bulk large in the consumption baskets of the lower income strata in Indonesia.

The second great simplification in the Indonesian reform was the elimination of a plethora of tax incentives. Incentives covered a Pandora's box of activities -- cooperatives, public accountants, natural resource exploration, technology transfer, regional investments, exports, so-called priority sectors, etc. Tax holidays and tax credits (both notoriously non-neutral in their impact on projects of different gestation periods and time profiles) were among the principal instruments by which incentives were granted. The new Indonesian law swept away the old incentive schemes, putting in their place a uniform 35 percent tax rate (as compared with a 45 percent rate previously).

Simplification on the income tax side came through broadening the base and reducing the rate structure, with the maximum marginal rate falling from

50 to 35 percent. The income tax replaced a total of four different taxes, perhaps best described as a crude sort of category income tax system. Simplification in the detail of the tax took the form of eliminating fringe benefits from income subject to personal tax, but at the same time eliminating their deductibility by businesses. Similarly, depreciation accounting for tax purposes was greatly simplified by using declining balance depreciation covering four major categories, and withholding was generalized to cover payments of dividends, interest, and rents as well as wages and salaries.

The final key element of simplification was the taxpayer identification system itself. This system creates the possibility of cross-checking of returns by different firms, and as between the income tax and the VAT. In addition it makes much more feasible the depersonalization of tax administration, selecting returns for audit on the basis of objective criteria, and minimizing the possibility of collusion between taxpayers and officials.

IV. CHILE

Of the countries here considered, Chile had the deepest and most far-reaching tax reform process. This is partly due to the circumstances created by the military coup of 1973, which ousted the government of Salvador Allende. In the opinion of many observers (myself included) the coup would never have taken place had it not been for the virtual breakdown of the economic system. Inflation came to exceed 400 percent a year (even 1000 percent if monthly rates are put on a yearly basis); production in virtually all areas was stagnant or falling; trade was grossly distorted by restrictions and by a Byzantine multiple exchange rate system.

These circumstances created a whole array of opportunities for policy reform. Fortunately, technicians were present who had thought at length about a number of the areas of opportunity. In relatively short order most price controls were released, the dozen or more multiple exchange rates were reduced to a single official rate plus a not very distant unofficial parallel market rate. Early tax reforms (in 1974 and 1975) included the introduction of a value added tax, the reform of the personal income tax, the integration (for Chilean taxpayers) of the corporation and personal income taxes, the indexation of the tax system. Alongside of these, a massive trade liberalization effort was set in motion in 1974, which culminated in a 10 percent uniform import tariff by 1979. (Today the uniform rate is 15 percent.)

The fiscal deficit, which was vast at the beginning of this process, was brought under control in the late 1970s. This was the key to the gradual reduction of the inflation rate (of the GDP deflator) from over 600 percent in 1974 to less than 15 percent in 1981. It also created the fiscal circumstances for one of the crowning achievements of Chilean policy in these years -- the complete revamping of the social security system, turning it from a deficit-ridden pay-as-you-go scheme into an essentially privatized system wherein each individual has his own vested retirement account, which he is free to move from one fund to the other.

Indirect Taxes

Like Uruguay, Chile had in the early 1970s a plethora of small indirect taxes and a cascade style sales tax. These were all abolished when the value added tax was introduced in 1975.

Transition problems dominated the discussion at the time. As a first step to the introduction of the value added tax, the sales tax was modified so as to eliminate the discrimination in rates between imported goods (12%) and domestic sales (8%). Once this had been done, the stage was set for the introduction of the value added tax. One issue that came up concerned transition credits (i.e., whether the tax on inputs purchased under the turnover tax scheme could be deducted from a firm's liability under the value added tax). The decision here was to give no transition credits to anybody. Firms received credit for inputs purchased on or after January 1, 1975, when the VAT became effective. All 1974 purchases were treated under the old system.

Other transition aspects had to do with coverage. Agriculture was initially left out of the VAT system, as were all hydrocarbons, electricity, water, and gas. Many services were also initially not taxed. In 1976, however, a major consolidation move was made, incorporating agriculture, fuels, public utilities and most of the left out services.

Indexation

The indexation of the Chilean tax system is built around the concept of the Unidad Tributaria (UT). Income for tax purposes is measured monthly in these units. Withholding on wages and salaries had always taken place contemporaneously, and under the Allende government the sums withheld were required to be remitted each month to the Treasury. Now business firms were also required to pay each month on their own estimated income. One way to visualize the UT system is as a monthly readjustment of all income tax brackets in accordance with a price index; thus, the same real wage or other income would lead to the same real tax, regardless of when it was received.

The accounting problems of business were handled deftly in the Chilean income tax law. Three simple rules are all it takes to handle the potentially highly complex problems associated with the presence, side-by-side, of real assets and nominal assets, real liabilities and nominal liabilities. The rules are:

i) all real or indexed assets are written up by the relevant inflation percentages, and the amount that is written up is introduced as a profit item on the profit and loss statement.

ii) all real or indexed liabilities (including capital and surplus) are written up by the inflation percentage and the written up amount is introduced as a loss item on the profit and loss statement.

iii) depreciation is taken on the written up value of depreciable assets.

It is one of the minimarvels of our era that such a simple system of inflation accounting was found to exist. The key to its simplicity lies in recognizing that correcting for inflation entails correcting for just <u>one</u> price index movement in each period. In this sense inflation accounting is at the opposite extreme from replacement cost depreciation, which follows the price of each individual asset class.

Perhaps the most important attribute of Chile's indexation of the tax system was its effect on arrears. Whereas previously, as in many other inflationary countries, it genuinely paid the taxpayer to postpone payments as long as possible, now any delays were automatically indexed, and subject in addition to interest and (where applicable) penalties. One cannot exaggerate the importance of indexation in making possible the increase in real receipts which, in turn, was the key element in the gradual reduction of rate of inflation itself in the late 1970s and early 1980s.

<u>Integration</u>

The story of the integration of corporate and personal income taxation in Chile is a curious blend of advance and retreat. Without a doubt the boldest step came first. Modeling their system after that recommended by the Royal Commission on Taxation in Canada (the so-called Carter Commission), the Chileans initially implemented a full imputation to each resident shareholder of the corporate income corresponding to his shares. This income was to be declared as personal income by him, regardless of whether it was retained in the corporation or paid out as dividends. The taxes paid at the corporate level on these shares were treated in the same way as the taxes withheld on wage and salary payments. The individual, at tax time, could claim full credit for the taxes paid on his account.

I do not have a clear sense of the reason why a step backward from full integration was taken in 1985. At this time Chile reverted to what I conceive of as essentially a European system of integration based on dividends alone. That is to say, the system became in effect one of simple withholding on dividend income, with dividends being grossed up by individuals as they declared their personal income subject to tax.

The present system, indeed, has two separate tax operations at the corporate level. One is a 10 percent tax on enterprise income, which is not integrated in any way with the personal income tax. The second is the withholding of an amount equal to 4/5 of dividends actually paid out. It is this amount which individuals have to add to their dividend receipts as they declare their income. At the same time the withheld amount is in the end taken by individuals against the tax that is due.

In the shift from the earlier (full-integration) to the present (dividend-withholding) system, a certain conceptual elegance was lost. I infer that the move was taken mainly for administrative convenience, and was perhaps rendered less controversial by the fact that the enterprise tax itself was at this time only ten percent.

<u>Social Security</u>

Americans familiar with the system of Individual Retirement Accounts (IRAs) will have no trouble understanding the new Chilean social security system. As far as I can see the two systems are virtually identical, the major difference being that the Chilean system places greater restrictions on the entities (called AFPs, or administrators of pension funds) that handle the retirement accounts. This is perhaps reasonable in that contribution to one or another such fund of an amount equal to 10 percent of one's income (up to a certain limit) is mandatory, and in addition the State introduces a sort of safety net in the event that a private AFP portfolio falls short of providing a certain minimum rate of return.[2] Rate of return has not, however, been a problem to date. From their inception in July of 1981 up to November of 1987 the pension funds have yielded an average cumulative real rate of return of 14.4 percent. The separate cumulative real rates of the twelve funds now in operation ranged from a low of 13.1 percent to a high of 15.2 percent. Another testimony to the success of Chile's new social security system is the fact that in the period indicated above, total investment assets of close to $3 billion (or about 15 percent of 1987's GDP) have been accumulated.

Obviously, a contributory pension scheme is in itself not a difficult thing to establish (insurance and annuity companies do it every day). The problem in the Chilean case resided in the disastrous financial state and general disorganization of the previous system. Under that system different categories of employees had different retirement funds. There was one for public salaried workers, another for private salaried workers, yet another

[2] Actually, each AFP must generate an average yield on its portfolio which is at least half the average yield of all the AFPs taken together. The AFPs are required to build a reserve against such shortfalls by setting aside specified amounts whenever they earn more than the average yield. When a Fund has a prolonged shortfall in its rate of return, and cannot cover it out of its capital and reserves, the government provides the funds to bring the rate of return up to the required minimum, but the AFP must then be dissolved, its assets being transferred to such other AFPs as its participants choose.

for blue-collar workers. Separate funds existed for certain industry groups -- one for bank employees, one for racetrack workers (!!), etc. Most of these funds had started out on a sound actuarial basis, but had deteriorated into pay-as-you-go systems by the 1950s and 1960s. Successive Chilean governments had wrestled with the problem of social security reform, but all such schemes had foundered due to inadequate fiscal resources.

The key, therefore, to the success with which the AFP system was implanted in Chile thus lies fundamentally in the capacity of the government to handle the problem of transition. For the transition, everyone was given the option of staying with the old system or of entering the new. For those who chose to join the new system, the government assumed a liability (given to the new AFP in the form of an indexed "recognition bond") approximately equal to the capital value of the individual's own past contributions to the old system. Since on the whole the participants in the old system could not expect ultimate benefits equal to the capital value of their past contributions, this itself provided the incentive to join the new system.

Thus it is no surprise that more than two thirds of the labor force chose to join the new system right away. The armed forces, which enjoyed a pension scheme based on 50 percent of their actual salaries, were simply left out of the new system (as a price for its adoption, as it were). Also left out were those whose retirement under the old system was less than five years away.

The seeds of the new system were due to Miguel Kast, a rising planning office official who later became, in sequence, Minister of Planning and of Labor. Other key figures in the process were Herman Büchi, Martin Costabal, Maria Teresa Infante, Luis Larrain, José Pinera and Alfonso Serrano. This small group of technical people formed the nucleus in which the idea of the social security reform incubated and from which it was ultimately spawned. The road was difficult, as initially the top government leaders (all military men) were not enthusiastic. An important early convert among them was Fernando Matthei, whose prime consideration was that "my dignity does not accept that my children should have to pay for my pension". Ultimately, at the highest levels of government, this was the argument that determined the demise of the pay-as-you-go system.

Administration

Economists have for too long tended to overlook the importance of administration in any successful tax performance. In my mind, there is little doubt that something close to half the total credit for Chile's accomplishments has to be assigned to the administrative side. What began as an antiquated internal revenue service, badly conceived, inefficient, and with overtones of corruption, was in a relatively short span of time converted into a service that ranks very high by international standards.

The old system had many weaknesses. Its information system was terrible; even the old returns of a given taxpayer were not at the disposal of inspectors; inspectors were assigned to give area and tasks, and remained with them for long periods of time (augmenting the possibilities of conspiracy with the taxpayer).

The new system tried to improve on each of these lines. First, the link between inspectors and sectors was broken. Each day or week, inspectors would be assigned to new, very specific tasks. In the beginning these consisted mainly simply of getting additional information from given taxpayers, and bringing them to a central office.

Much effort went into the development of an information system. Data were gathered on all types of ratios -- what should wages be relative to sales in the bakery? What should inputs be relative to outputs in a textile mill? What should profits be relative to sales in a pharmacy? Several pages of summary relations of this type were developed, and returns that deviated significantly from the guideline rates were closely scrutinized. Value added and income tax supervision were done simultaneously for business firms.

For individuals, the internal revenue service got records of purchases of most high-cost items. Those who bought cars and houses were asked to show where the money came from. Firms were required to list payments to individuals in accordance with their taxpayer number. Farmers' production mix was identified by aerial surveys that distinguished between 14 different crops. Also, trucks were inspected on major highways in farming regions.

On the whole, inspectors were relegated to the tasks of bringing in answers to specific questions. Many older employees were retired, and after a few years the system was largely staffed by new, mostly younger people who had been especially trained within the system.

This reform did not require great increases in budget, simply because of the huge amount of waste that had characterized the old administrative system. In the end many unnecessary bureaucratic operations were abandoned, staff in many sections was reduced, and those that remained received significant increases in their real salaries.

The final and most important aspect of administrative reform in Chile was the cultivation of a clear sense that the law was being enforced even-handedly. The use of objective criteria (ratios, etc.) to decide on whom to audit was an important step in this direction. But perhaps most significant of all were cases of VIPs who were not able to use their influence to escape the tax net. One such case concerned the mayor of a town, who was also owner of a drug store. Tax discipline called for the drug store to be closed, but how could that be done if the mayor still was running his town? The solution: the drug store was closed and the mayor was fired from his (appointive) job.

The most celebrated case concerned the President's brother, who owned a discotheque. When his data called for his being given a summons, the case went to the head of the Internal Revenue Service (Felipe Lamarca). He in turn called the President, who said that the same law and procedures should apply to his brother as to anyone else. Lamarca avers that in six years (1978-84) as Director of Internal Revenue, neither the President of the republic nor any cabinet minister ever interfered with his pursuit of an evenhanded tax administration (ley pareja).

The simplification of the law is recognized by the Chilean administrators as an important factor in their own success. The introduction of the value added tax not only helped because it replaced scores of little excises; it also proved a boon in the administration of personal and corporation income taxes. The new income tax law was also easier to administer than the old.

Collection procedures were also improved. Whereas previously an income tax declaration could be forwarded intact, with the Treasury cashier tearing up his copy and keeping the money (or splitting it with the taxpayer), now the money has stayed with the declaration all through the procedure. Most payments are now made directly to banks, which serve as collection agents and directly credit the government's account. (Banks do not charge directly for this service, because they get the use of the "flat" for a few days.)

V. CONCLUSIONS

The country reviews in the preceding sections reflect what I meant in saying that tax reform had more in common with learning to be a public accountant than with becoming a movie star. Solid preparation, with due attention to local institutions and political realities, was a big lesson from Indonesia; the importance of effective administration was a key lesson from Chile. Simplification was the watchword of all three reforms. This was in each case represented by a modern value added tax taking over from a pre-existing old-fashioned turnover tax. In addition the simplification extended to an integration of income tax and value added tax administration and (at least in Indonesia and Chile) the substantial computerization and depersonalization of administrative procedures. The only truly dramatic reform that is covered here is the new Chilean social security system, and even that is perhaps only dramatic because of the degree to which such systems all around the world have deteriorated to a pay-as-you-go basis (or even to chronic deficits that have to be financed from general revenue). Once it is recalled that most social security systems started out on something like an actuarial basis, the only truly novel attribute of the Chilean system becomes its use of private AFPs for its administration.

Seeking an analogy with which to wrap up the main messages of this paper, I can come up with nothing better than the old-fashioned vision of marriage. The idea is that the partners spend a long time (while still single) learning the skills they will need in their future roles. This corresponds to the need for serious investment in study and research and preparation of a tax reform. Then, once married, they have to work continually to overcome the frictions and crises of conjugal life. This corresponds to the need to build robust systems of administration, capable of minimizing the number of problems and at the same time of surmounting those that do emerge. Finally, there is the sense of seizing opportunities, of knowing the right moment to act. On the Victorian marriage scene, this meant a sense of alertness, by bride and swain alike, to recognize and seize the critical moment when the "right person" came along. This, too, has its counterpart in tax reform, as testified by the tome upon tome of tax studies and commission reports that end up on library shelves and in archives, without the slightest step of implementation. Opportunity presented itself in all three cases, less so initially in Indonesia (where the foresight of future problems was the stimulus to the HIID project), but even there in the final analysis, as falling oil revenues perforce dictated some sort of tax policy move.

A high level of professionalism reflected throughout the three stages of preparation, adoption, and implementation, is the final key to the success of these three tax reform efforts.

PRINCIPAL PERSONS CONSULTED

A. URUGUAY

Jorge Caumont, Ministry of Planning

Mario Soto, Tax Consultant

Carlos Steneri, Ministry of Planning

Alejandro Vegh Villegas, former Minister of Finance

Luis Viana, Central Bank of Uruguay

B. INDONESIA

Malcolm Gillis, Duke University

Glenn P. Jenkins, HIID (Harvard University)

C. CHILE

Eduardo Aninat, Aninat & Mendez

Jorge Cauas, former Minister of Finance

Hernan Cheyre, University of Chile

Martin Costabal, former Budget Director

Felipe Lamarca, former Director of Internal Revenue

Juan Carlos Mendez, former Budget Director

D. GENERAL

Vito Tanzi, International Monetary Fund

SELECTED BIBLIOGRAPHY

Cheyre, Hernan, "Reformas Tributarias, 1974-88," _Estudios Publicos_, no. 21 (Summer 1986), pp. 141-83.

Gillis, Malcolm, "Micro and Macroeconomics of Tax Reform," _Journal of Development Economics_, 19 (1985), pp. 221-254.

Harberger, Arnold C., "Tax Policy in a Small, Open Developing Economy," in Michael Connolly and John McDermott, ed., _The Economics of the Caribbean Basin_ (New York: Praeger, 1985), pp. 1-11.

Tanzi, Vito, "A Review of Major Tax Policy Missions in Developing Countries," in _The Relevance of Public Finance for Policy-Making_, Proceedings of the 42st Congress of the International Institute of Public Finance, Madrid, 1985, pp. 225-36.

__________, "Tax System and Policy Objectives in Developing Countries: General Principles and Diagnostic Test," _Tax Administration Review_, 3 (Jan. 1987), pp. 23-34.