

Tax Administration Reform in Bolivia and Uruguay

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This study describes two different experiences in the area of tax administration. Each was successful: each brought about a significant increase in the effectiveness of tax administration and, consequently, a rise in the collection of internal revenue.

I. Background

In Bolivia the increase in tax receipts was spectacular: it rose from approximately 1 percent of GDP in 1985 to 7.4 percent in 1990. For Uruguay the increase was more modest, climbing from approximately 11 percent of GDP in 1984 to 13.5 percent in 1990. Nevertheless, in real terms, collection grew by 40 percent during the period. This difference in results may be explained by several factors. The heavier the tax burden, the harder it is to increase the effectiveness of tax administration. Likewise, the higher the tax rate, the greater the enforcement difficulties faced by the tax administration. The value-added tax (VAT) rate is 10 percent in Bolivia and 21 percent in Uruguay.¹ Further, it is particularly difficult to evaluate the Uruguayan experience in terms of collection results because, during the period under review, there were not only changes in the tax system but important variations in the rate of inflation and economic growth as well.

No single set of prescriptions for improving tax administration applies universally. The most appropriate strategy depends on the particular circumstances of each case. In Bolivia, the change was drastic, both in the tax system and in the tax administration. In Uruguay, the change was gradual and focused only on the tax administration. The choice of strategy could perhaps be explained by the fact that in 1985 Bolivia

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¹In March 1990, on a temporary basis, it was raised to 22 percent.

was in a critical situation in which tax receipts had fallen to about 1 percent of GDP. In Uruguay, on the other hand, an attitude of extreme opposition to change, coupled with a state of affairs that was not too critical, may explain why a strategy of gradual change was selected.

Elements Common to Both Countries

Designing a General Strategy

In both countries, the reforms were carried out within the same time frame (1985–90). In both cases, the first step was to design a general strategy that specified with precision the goals to be attained and the means to be employed. In addition, the overall strategy was reflected in a work program: general guidelines for developing information systems were defined and a timetable for the key stages was planned.

Another common feature was that several international organizations supported the projects. In Uruguay, the participating agencies were the IMF, the Inter-American Development Bank (IDB), and the Centro Interamericano de Administradores Tributarios (CIAT). In Bolivia, the supporting organizations included the IMF, the IDB, the World Bank, and the United Nations Development Program. Although the assistance of these agencies was essential, it is important to stress that these efforts would never have been successful if the authorities in each country had not displayed the strongest will to see the changes through.

Simplicity of Procedures

In both countries, simplicity was the guiding principle in the design of procedures. In Bolivia, administrative reform was preceded by a drastic simplification of the tax system. A near-obsession with simplicity resulted in very simple tax returns that called for only essential data. Furthermore, tax return forms were designed to be used also as payment forms. Since the same form was used to record the debit (resulting from the tax return) and the credit (the amount actually paid), the processing burden was lightened because certain data, such as those identifying the taxpayer and the tax period, did not need to be entered twice (once to record the debit and again to record the credit). The quality of the information was also improved because using a single form simultaneously as a tax return and as a payment form eliminated the typical problems of charging credits against debits.

Records Storage

Another feature common to both countries was the method used to store the returns filed by taxpayers. Traditionally, tax administrations in Bolivia and Uruguay had kept all tax returns received from each taxpayer in a separate folder. This system required substantial use of staff resources and, worse, meant that the quality of the work was not (nor could ever be) good, because the number of returns to be placed in the files was so large. Consequently, when it came to reviewing the file of a taxpayer, the absence of a return could mean one of three things: (1) the taxpayer had not filed a return; (2) the taxpayer had filed a return but the return had not yet found its way into the folder; and (3) the taxpayer had filed a return but the return had been erroneously placed in the folder of another taxpayer or had been mislaid in some other way. The tax administration was thus unable to determine by checking the contents of a file whether a taxpayer had, for instance, failed to file a return or was delinquent. Thus, the administration was compelled to rely on documents in the hands of taxpayers to establish whether they had discharged such elementary obligations as filing a tax return and paying the reported tax.

Priorities

The highest priority under the work program was accorded to activities related to taxpayer registration and the processing of data recorded on the tax return/tax payment form. Special attention was paid to the validation of the data, to ensure that the information entered in the computer accurately reflected the information reported by taxpayers. This made it possible, as a first step, to exercise a reasonable measure of control over nonfiling and delinquent taxpayers.

Auditing

Auditing was a second priority in both countries. More therefore remains to be done in that area than in any other, because its development has only just begun. Basically, the proposed audit strategy consisted of the following: (1) Selecting the taxpayers to be audited according to objective criteria; computer analysis of the markup (that is, the ratio of sales to purchases) reported by taxpayers played a fundamental role in this respect. (2) Cross-checking information in order to detect unreported sales and purchases improperly deducted from the VAT. (3) Making quick checks (covering only a few items) designed to encom-

pass a large number of taxpayers. (4) Applying extensively the penalty of temporary closure of establishments for failure to comply with certain provisions of the VAT or the tax code.

Time Required for Change

Both experiences clearly show that for any significant change to take place, a reasonable length of time is required to come up with ideas, to develop them, and to put them into practice. The Governments of both countries must be credited with knowing that this length of time was needed, because attempts to hasten matters might have led to failure.

Data Bank

In each case, it was possible to gather high-quality and timely data, resulting in the establishment of a data bank that permits simulations, economic and financial analysis, more accurate diagnoses, and better decision making.

Differences Between the Two Countries

Scope of the Project

As mentioned above, in Bolivia, a total structural change was made, ranging from reform of the tax system to changes in its administration. In addition, when new procedures were introduced they were made applicable to all taxpayers. In Uruguay, the changes in procedures were gradual. In the beginning the new procedures applied only to the VAT and to the 2,700 largest taxpayers who accounted for 70 percent of total tax receipts. Once the system was operating adequately, other taxes were included, and the number of taxpayers required to report and pay their taxes under the new procedures rose. The system will continue to expand until it covers some 15,000 taxpayers, who together account for over 95 percent of all tax revenues.

Features of the Project

In Bolivia, all tax collection takes place through banks and all data are batch-processed. In Uruguay, payments from taxpayers covered

by the new system are received by tellers at the Dirección General Impositiva—DGI (Internal Revenue Service) and the information is processed on-line when the tax return is filed. Taxpayers who are not covered by the new system pay their taxes at the Banco de la República Oriental del Uruguay (BROU) and their tax returns are batch-processed.

Conclusion

Even leaving aside the increase in tax receipts mentioned at the beginning of this paper, these two experiences may be considered successful because they laid the foundation for deep structural changes in tax administration. In neither case is the work finished. Nevertheless, the changes made to date clearly constitute steps in the right direction, and these two tax administrations will increasingly have available more and better information to improve their effectiveness.

II. Bolivia

Introduction

The Situation at the Outset

In 1985, the President of Bolivia, Hernan Siles Suazo, decided to cut short his term of office because of the serious political and economic situation facing the country. After an early presidential election, he turned the government over to his successor, Victor Paz Estenssoro, one year ahead of time, in August 1985. On an annual basis, the inflation rate was then about 23,500 percent.

The enactment of Supreme Decree No. 21060 in August 1985 launched what is known as the new economic policy. This decree freed most economic variables from official controls, with the exception of the prices of fuel, public services, and pharmaceutical products. In addition, public sector salaries were frozen until December 31, 1985.

The tax system was chaotic, with more than 400 separate national, departmental, and municipal taxes. Tax administration was largely ineffective. Taxpayer registers were completely out of date, and tax collection record keeping was extremely delayed—in some departments the time lag was as long as 16 months. Data processing was virtually nonexistent. As mentioned earlier, the tax burden in 1985 had dropped to the very low level of 1 percent of GDP. It was in this situation that the tax reform described below was introduced.

General Strategy

Once the reform was enacted, the great challenge lay in reorganizing tax administration. A comprehensive plan was drawn up for this purpose. The plan included restructuring the tax administration; the design, development, and implementation of its principal systems; and the training of personnel to operate those systems. To attain these ends, the Government relied mainly on the following:

(1) A temporary Ministry of Tax Collection was established. This ministry was charged both with drafting regulations to cover all taxes enacted under the Tax Reform Law and with leading the whole process of change in tax administration. Under this ministry were placed the Tax Collection Undersecretariat and, through the latter, the General Bureau of Internal Revenue (DGRI) and the General Bureau of Customs (DGA).

(2) A team of international consultants, some specialized in tax administration and others in computer systems, was hired to design, develop, and put in place new systems to be operated by the DGRI. This team, which at one point was made up of 25 persons, worked in a very close and fluid manner with the new ministry. The project was financed by the UNDP, the IDB, and the World Bank. The IMF also participated in the technical assistance side of the project.

(3) The Government adopted political decisions with firmness and abided by the deadlines set for developing the systems and making them operational. Wisely, it waited out the allotted time without becoming impatient or resorting to quick-fix solutions that could have set back progress with the reform of the basic structure of tax administration.

(4) The Government ensured that the resources needed for the team of consultants to do their job effectively were delivered on time.

The task at hand was not simple. Aside from the complexity of the work, it was necessary to fight against the proposals of some government officials. It had to be demonstrated, for instance, that the proposal to establish a new tax administration with completely new personnel, while gradually phasing out the old administration, was not advisable. Under that proposal, the salaries of the staff of the old administration would have continued to be paid for a specified length of time, while they did no work at all.²

²About 25 percent of the staff of the old tax administration were fired. They were replaced by better qualified staff, and the total number of staff was kept at roughly the same level. In 1986 the DGRI had 1,120 employees, compared with 1,130 employees in 1990.

The arguments that led to dismissal of the idea of establishing a new tax administration and dissolving the old one were as follows:

(1) In an agency with approximately 1,000 employees not all were inefficient and unreliable. Waiting a reasonable length of time would make it possible to detect the good employees—and this in fact is what happened.

(2) A new agency would require new buildings and these were not available; nor were there any resources available to construct new buildings.

(3) Paying salaries to employees who were assigned no work would cause political and labor union problems.

(4) Searching for and hiring such a large number of new staff would prove very difficult; in addition, such recruitment would take a long time, and essential tasks had to be carried out without interruption.

Increase in Collection

In 1987, the first calendar year after the reform went into effect, tax collection rose from the previous year by 111 percent in constant values.³ The tax burden increased from 1 percent of GDP in 1985 to 7.4 percent in 1990, including only the taxes administered by the DGRI.

Tax Structure Reform

General Characteristics of the New Taxes

After the new economic policy was launched, the focus shifted to devising a tax system capable of replenishing government coffers. The choice fell on a simple system, with moderate rates, that would not distort the allocation of resources within the economy. It was decided to introduce seven new taxes, repealing at the same time all previous tax legislation except for taxes established in the General Law on Hydrocarbons, those in the mining code, and those levied on the production and marketing of rubber and wood.

A basic feature of the new legislation is that it does not include income taxes in their traditional form. The seven new taxes are as follows:

³See Table 4 in Annex III.

Taxes on income and assets

- (1) Special tax on tax regularization (tax amnesty).
- (2) Tax on presumed corporate income.
- (3) Tax on presumed income of property owners, which includes tax on motor vehicles, motor boats, and aircraft; tax on urban real property; and tax on rural property.

Taxes on transfers of goods and services

- (4) VAT.
- (5) Tax on transactions.
- (6) Tax on specific consumption.

Income tax

- (7) VAT supplementary system.

The tax reform was enacted on May 20, 1986; it is described more fully in Annex I. Subsequent to this reform, two new taxes of minor significance were introduced: the gift tax and the tax on foreign travel.

In relation to GDP, the contribution from each tax in 1990 is illustrated in Table 1.

Table 1. Bolivia: Revenues from the Main Taxes, 1990¹

Tax	Collection as a Percentage of GDP
Value-added tax	3.72
Tax on transactions	1.28
Tax on specific consumption	0.89
VAT supplementary system	0.46
Tax on presumed corporate income	0.54
Tax on presumed income of property owners	0.46
Total	7.35

Source: Statistics Section of the DGRI.

¹Changes in total tax receipts over time are shown in Tables 3 and 4 in Annex III.

Amendment of the Tax Code

The Tax Reform Law also amended the tax code. The most important changes were the following:

(1) Introduction of a fine ranging from 50 percent to 100 percent of the unpaid taxes when tax fraud is committed.

(2) Provision of jail terms for tax fraud.

(3) Cancellation of registration in public registers when tax fraud is committed.

(4) Introduction of the penalty of temporary closure of establishments where tax fraud has been committed.

(5) Provision for automatic indexing, in line with changes in the official exchange rate of the U.S. dollar, of outstanding tax debts as well as of credits in favor of the taxpayer. (Fines for failure to comply with formal tax obligations are indexed in the same manner.)

(6) Provision for interest on delinquent amounts to accrue automatically from the moment the unpaid tax is due, without any need for proceedings of any kind on the part of the tax administration.

Special Systems

Much of the population in Bolivia is engaged in small commercial and service activities at the retail level (that is, the informal economy). As a rule, these people have no shops of their own; they carry out their activities on sidewalks or by means of makeshift stands that are put up and taken down daily. In addition, there is a high level of illiteracy.

In order to bring this part of the population into the tax system, decrees were issued establishing three special systems, each providing for several categories or levels of taxpayers.

A taxpayer who opts for one of these systems complies with a set of taxes (VAT, VAT supplementary system, tax on transactions, and tax on presumed corporate income) in a very simple manner. He must go to any bank, show his taxpayer card, and purchase the proper tax form bearing the pre-established value applicable to the category under which he is registered. He does not need to fill out any forms.⁴

Reform of the Tax Administration

After enacting the Tax Reform Law, the Government turned its attention to two fundamental tasks: (1) regulating the new taxes by issuing decrees and administrative resolutions; and (2) the comprehensive reform of the tax administration.

⁴Table 5 in Annex III shows the changes over time in taxpayer registration under the various systems.

With these ends in mind, as mentioned earlier, a Ministry of Tax Collection was established and a team of experts in tax administration and computer systems was hired. One main reason for the success of this process was that the team was made up of like-minded specialists, selected by the people in charge of the programs to revamp the tax administration without any interference from the Government or from the international agencies financing the programs.

Each consultant was aware that his assignment included the installation and start-up of the systems to be designed, and that, consequently, the scope of his work went well beyond simply defining systems and submitting the plans to the Government for approval and implementation. For example, if a new form was to be designed, the consultant had to make sure that he had defined with precision every characteristic of that form (size, copies, weight of the paper, color, quantity, delivery deadlines, and so on) before the purchase order could be processed. In addition, the consultant had to take part in the national or international search for companies capable of manufacturing the form, visit local companies to make sure that their machinery could produce the form in the required manner and time, check the galley proofs of the form, and so forth. This style of work, illustrated here by reference to one form, was also applied to all procurement, whether of office space, special equipment, or software. The attitude of the consultant at all times was that he had to be the driving force behind the procurement of the required resources, because his mission ended only when the system was in place and the personnel had been trained.

This frame of mind, coupled with total dedication to the work in hand by all concerned—for instance, during the first two years work continued through Saturdays and nearly all holidays—was one of the keys to obtaining within a short length of time the results discussed here.

Basic Systems and Procedures

Single national register of taxpayers

Because the *Padrón de Contribuyentes* (taxpayer register) was so out of date it was decided to launch a general registration of taxpayers. The initial goal was to register 190,000 taxpayers. When the job of checking addresses was finished in April 1987, registered taxpayers totaled about 240,000. By December 1990 registered taxpayers numbered 365,559.⁵

⁵See Table 5 in Annex III.

Collection through banks

Since May 1987 taxpayers file their returns and make their payments only at banks that are part of the system. Simple returns have been designed for each tax, with the size of each form never exceeding one sheet of paper (two pages). Tax returns serve as payment forms as well. Banks receive them, distribute the money collected, enter and validate the data set out in each return, and deliver the supporting disks and relevant documents to the DGRI. All these activities are governed by an agreement between banks and the Tax Collection Undersecretariat.

This procedure constituted an important step forward in tax administration. It freed the DGRI from the heavy work load of receiving payments and tax returns and solved the problem of processing them. The monthly average of tax returns and payments processed by this system is about 190,000.⁶

Using securities to pay taxes

The system keeps a record of and controls all documents issued by the Government that may be used for paying taxes, such as customs rebate certificates, treasury credit notes, redeemable tax bonds, and negotiable credit notes. It also keeps a record of documents issued by the DGRI or by the Central Bank and controls the proper use of these documents by the taxpayer.

Control of tax returns filed

This system detects taxpayers who have not discharged their obligation to file returns and enables the tax administration to make a selection among them according to various criteria (by region, tax, taxable period, presumed tax importance, and so on). In this way, any action by the DGRI can be concentrated on taxpayers who will supposedly yield higher tax revenues. The system issues the orders to file the missing tax returns, each supplied with a return stub for notice of delivery, so that the post office can return evidence of delivery to the DGRI.

This system began operating in December 1987. At that time, 109,885 orders were issued (45,222 for La Paz and 64,663 for the rest of the country). One of the factors limiting the effectiveness of this system is the mail service, with which a special arrangement was made to

⁶See Annex II.

distribute letters from the DGRI. Although the postal system undertook to add vehicles and mailmen in order to do this work, the service is not yet efficient.

Demand for partial payment when no tax return has been filed

Taxpayers who persist in not filing a return, after being ordered to do so in the manner described above, may be compelled by law to make a partial payment in an amount similar to the largest tax reported or determined in the immediately preceding 12 months. This system makes the necessary checks and issues through its computers a form showing the amount that the taxpayer must pay as partial payment if he wishes to avoid enforced collection of the debt.

Review of tax returns

This system reviews each tax return and determines whether the arithmetical calculations of the taxpayer are correct and whether any applicable fines have been included in the event of a late filing. If there is a computation error or if the appropriate fine has been omitted, the system's computers issue the proper demand for payment with its payment form. Later, the system checks to make sure that payment has been made. In the first processing of tax returns for the whole country, in January 1989, errors were detected in 22.6 percent of all tax returns filed. By March 1991 this percentage had dropped to about 9 percent.

Control of taxes paid in installments

The only tax that may be paid in installments is the tax on presumed corporate income. The supreme decree that regulates this tax provides that 30 percent of it may be paid as a down payment and the balance would be due in up to ten equal consecutive monthly installments. These regulations were later supplemented by an administrative ruling regulating the reasons that would void the payment plan. The system watches over the strict observance of this administrative ruling, reporting which plans are behind in their payments, which should be voided, and supplying the information needed to obtain payment through enforced collection.

Control of partial tax payments deducted on tax returns

The system verifies that credits deducted by taxpayers on their tax returns (carryovers from the preceding tax period, payments on account, negotiable credit notes, payments made with securities, and so on) have been actually collected.

Control of large taxpayers

The system makes it possible to monitor tax compliance by the largest taxpayers almost immediately after their taxes are due. All systems and procedures needed to obtain quick results have been adopted with a view to exercising this control.⁷

Audit of taxpayers

Two kinds of basic procedures were developed for audit: (1) the general audit procedure laying down overall audit guidelines; and (2) specific procedures for each "audit plan," for instance, the VAT sales/purchases ratio and tax returns showing no transactions or an overall credit position.

The choice of cases to be audited was always made objectively, and rarely was there any discretionary selection. The new tax audit system began operating in December 1988. Unfortunately, as of June 1991, the expectations generated by its introduction have not been fulfilled, primarily because of problems related to personnel and to the heads of departments responsible for control. These problems remain unsolved.

Tax statistics

The system generates statistical files intended for the use of government agencies that request them.⁸ In addition, a special module produces the relevant statistics for the tax administration itself.

Related Activities

The activities described below supplement the basic systems and procedures and are essential to ensure adequate operation.

⁷See Annex II.

⁸Annex IV shows in detail the format of some of the statistics produced.

Determining the size of the data processing department

When reform began, the DGRI did not have a computerized data processing department. The first task in this area was to make a comprehensive evaluation of needs projected over a period of five years, so as to define the requirement for computer equipment in light of available resources and investment possibilities. Also projected were the required staff resources.

Special records and invoicing rules

Regulations were issued on the formalities to be met by invoices before they can be considered valid tax notes that allow taxpayers to claim VAT credits. A prerequisite for the invoice to qualify as a tax note is that it must be validated with a seal by the DGRI before being used by the party making the sale. The manner in which purchases and sales were to be recorded, in cases where the taxpayer failed to keep adequate records, was also regulated.

Restructuring the tax administration

The organizational structure of the DGRI was inappropriate. A new organizational chart, a manual of duties and responsibilities, and operational profiles of positions in the first and second tiers of the organization were prepared. Key officials in the first and second tiers of the new organization were selected, and minimum staffing requirements were established. To select the new staff, public notices were published, directed in particular at persons under 35 years of age who had completed most program requirements or were graduates in the fields of accounting, economics, business administration, or law. The candidates hired were those who successfully completed a personal interview and passed a technical exam and a psycho-technical test.

Proposal to amend the tax code

The Bolivian tax code was enacted on July 2, 1970. The Tax Reform Law of May 20, 1986 introduced some changes in it, but further modifications are needed.

The most important changes expected to be introduced in the near future concern the following:

- The use of computers, by validating procedures related to this technology (the use of a facsimile signature, automatic computation of fines, and so on).
- The manner in which notices may be served, including the possibility of using private mail services.
- The system of fines, imposing more severe penalties than those now in effect.
- Ex officio assessments (refinement of the procedure).
- Enforced collection (refinement of the procedure).
- Assessments based on presumptions (procedures are being added with respect to estimated sales, differences in assets, and inventory differences).
- The system for temporary closure of businesses, which will spell out the procedures needed for its application (now governed by DGRI rulings).

Control of tax payments on the import of goods

Imports of goods are subject not only to customs duties but also to the VAT and the tax on specific consumption. Responsibility for assessment and payment rested primarily with the DGA, which did not always do an effective job. Of total VAT revenues about 50 percent pertain to imports of goods. In the case of the tax on specific consumption, the tax levied on imports accounts for about 25 percent of total revenues from this tax.

In view of these figures, a new system was established to process a redesigned import declaration form. The new form, along with payment, was processed through banks, similar to the DGRI system, and subject to a system of automatic verification. This procedure ensures control of tax receipts and the early availability of computerized data connected with imports. The system includes a control for the release of goods from customs warehouses, in which the form is checked to make sure it has been canceled.

Control of the tax on presumed income of property owners

The tax on presumed income of property owners is a tax on registered property.⁹ From the standpoint of tax administration, its characteristics

⁹See Annex I.

prevent it from being grouped with other taxes because the persons who owe this tax are under no obligation to register with the single national register of taxpayers and because its enforcement is in the hands of other government agencies (municipal governments, for instance). Special systems were therefore designed for its control. A system was developed for monitoring the tax on motor vehicles, motor boats, aircraft, and urban real property, and another system was developed for controlling the tax on rural property. In both cases, the general system of collection through banks is used. For the taxes mentioned, tax return forms are sometimes distributed along with major newspapers in each city.

Special operations to increase tax collection

Throughout the period when tax reform was being implemented, a series of special programs, broadly known as "operations," were conducted for increasing tax collection. The main operations carried out were as follows:

- Control of taxpayers subject to the tax on specific consumption.
- Control of public companies, public agencies, and municipalities.
- Control of compliance with the VAT and the tax on specific consumption at customs (carried out before the new import permits were introduced).
- Control of tax compliance by banks (filing of tax returns and payment).
- Control of payments made by taxpayers under the simplified system.
- Making sure that public and private companies correctly withheld amounts due under the VAT supplementary system.
- Cross-checking of tax notes (checking invoices for significant amounts deducted under the VAT supplementary system).
- Control of tax return filing and payment by self-employed professionals.
- Control of relevant economic transactions (grouping of purchases made by major taxpayers, so as to verify whether they were reported by the sellers).
- Temporary closure of business establishments.

The temporary closure of business establishments was the most spectacular operation of all. It consisted of shutting down for a minimum of seven days establishments that did not issue a proper invoice to

buyers. The operation was carried out by groups of two inspectors from the DGRI and two policemen, who asked persons coming out of stores to show them the invoice for their purchases. If an invoice had not been issued, the group entered the establishment and made a record of it. An order shutting down the establishment followed, and when the time ran out for the taxpayer to appeal this decision, the business was shut down. The front of the establishment was taped up with strips proclaiming in red letters that the business had been shut down on account of tax violations.

At first this operation ran into problems because politicians and high officials would intercede in favor of the violators. The firm attitude adopted by the Minister of Tax Collection and by the President of the Republic himself served to counter this pressure, and the operation was carried out with complete success. The first operation took place all over the country between October 8, 1987 and March 5, 1988. A total of 13,605 inspections were carried out and 1,374 establishments were ordered closed, of which 890 had been shut down by the relevant closing date and 484 remained pending, awaiting the expiration of the deadline for appeal to which every violator is entitled. By September 30, 1989, actual closings totaled 1,540, a very high number indeed in a country where this kind of action had never been taken.

Operational timetable and progress control

To control the progress of the work, an "operational timetable" was drawn up detailing all important activities to be carried out. Such a timetable makes it possible to monitor progress effectively. A system was also introduced to coordinate the work of area bureaus (units that provide advisory services to the General Bureau and develop and control systems) and regional administrations (operational units).

Assistance for advisory and operational areas

Once the main systems and the new structure of the DGRI had been put in place, an intensive program was carried out to assist the officials responsible for consolidating the installation of the new structure and operating the systems. This program was very useful because it helped to resolve specific operational problems. Furthermore, as a result of dealing with unforeseen situations, adjustments were made in the systems and officials were provided with the support they needed to improve the operation of those systems. In some cases this assistance lasted several months. That was the case in the regional administrations

of La Paz, Santa Cruz, and Cochabamba and in the advisory areas for technical and legal affairs, collection, control regulations, and automatic data processing.

Training

Training courses were held for all systems and operations. In some cases, for various reasons, some of the training courses were repeated. The new structure of the DGRI includes a specialized training area.

Dissemination of information and advertising

Using the media deemed most suitable in each case (television, radio, newspapers, booklets, and so on), intensive publicity campaigns were conducted. The following areas were covered:

- Motivational area (explaining why taxes must be paid).
- Information area (telling how to do it), especially when taxes fell due.
- Enforcement area (describing what happens to those who fail to pay their taxes), especially in connection with closings of establishments and with control activities.

Spending on publicity between 1987 and 1990 was roughly US\$2.1 million, which accounted for about 10 percent of all tax administration expenses.

Conclusions

There is no doubt that the approach used in Bolivia was successful. It brought together a comprehensive tax reform providing for very simple tax administration, a government that was firmly committed to attaining its goals, and a team of technicians with sound knowledge of tax administration and total dedication to the task. As mentioned earlier, the outcome was impressive: the tax burden increased from 1 percent of GDP in 1985 to 7.4 percent in 1990 and is likely to continue climbing, as indicated by figures for the early months of 1991.

Not all systems were equally successful, however. For instance, the audit system that was put in place has yet to be evaluated, and, if necessary, altered. As noted above, personnel and supervisory problems are the reason for this delay.

Some elements had a negative impact, such as low salaries and a high rate of personnel turnover, particularly among managers. The subject of salaries is now being worked on for finding a lasting solution. The idea is to supplement the budget through a fund that would be financed with revenues that exceed established goals. Thirty percent of this surplus would be earmarked for raising the compensation of employees, consistently with their performance. Ten percent of the surplus would go to improving office infrastructure and equipment.

Much has been accomplished, but much remains to be done. The next set of activities envisaged by the program are as follows:

- Continuing direct assistance to advisory areas and regional administrations in connection with systems already in place.
- Assisting the officials involved in the development of new systems, particularly in the audit area.
- Improving the quality of the staff.
- Improving lines of communication with the taxpayer and strengthening the image of the DGRI.
- Repeating training modules, particularly in light of the changes that have taken place at management levels.

In the reform of tax administration, each country needs to take stock of the existing situation and to plot the most desirable and practicable course. Bolivia set ambitious goals for itself. Even so, because of its political resolve and the proper use of technical tools, it has largely managed to attain those goals, perhaps to an even greater degree than was foreseeable when the work began.

III. Uruguay

Conditions Prevailing at the Outset

In 1985 the Dirección General Impositiva—DGI (Internal Revenue Service) of Uruguay was not effective in the task of ensuring tax compliance. Antiquated methods were being used and nearly all procedures were carried out manually.

Organizational Structure of the Tax Administration

The organization of the DGI reflected a functional approach. Collection, auditing, and technical-legal functions were well defined at the

management level. In addition, there was an Administration Department and a Systems Support Department. The latter dealt, among other functions, with data processing, training, statistics, and the single register of taxpayers.

One unusual feature of the DGI was that, under the Collection Department, it had a special unit for the control of large taxpayers called Control Especial de Contribuyentes—CEDE (Special Control of Taxpayers). This unit was supposed to control filing and payment of the 2,700 largest taxpayers in the country, who accounted for nearly 70 percent of all DGI tax receipts. Control systems were manual, and this unit basically followed the same procedures employed for small and medium-sized taxpayers.

The main problems in the organizational structure of the DGI were (1) the structure of the DGI did not explicitly provide for planning and coordination functions, and responsibility for these was spread out among the various departments; and (2) regional offices in the interior of the country had very limited autonomy and reported directly to the Collection Department.

Staff Resources

One of the most important problems faced by the DGI was the lack of qualified staff. Having to compete with the private sector and even with other government agencies, the DGI found it hard to hire and retain personnel with the needed technical qualifications. The difficulty was compounded by a steady decline in the budget of the DGI. Furthermore, the whole organization operated with marked slowness, and there was great resistance to the introduction of changes in procedures. Sixty percent of the staff had served more than 20 years, and 25 percent of them had worked more than 30 years.

The Single Register of Taxpayers

The taxpayer register was made up of some 120,000 taxpayers, of whom approximately 40,000 were inactive (that is, they filed no tax returns and paid no taxes). In addition, some 20,000 taxpayers who regularly filed returns or paid taxes were not registered in the single register of taxpayers.

Forms

Taxpayer forms were excessively complex and asked for too much information. The DGI was incapable of processing the information it

received. Tax return forms were neither suitable for automatic data processing nor had been designed to serve as payment forms at the same time. When taxes fell due, the taxpayers had to fill out two forms, a tax return and a payment receipt, both of which had to be received and processed.

Collection Lags

From the standpoint of revenues, one major problem was the lag in the established deadlines for payment of taxes. The VAT, for example, was payable as much as 85 days after the taxable transaction. Significant delays occurred as well in the area of the tax on income from industry and commerce, excises, and the taxes on assets. In light of the high rate of inflation, these collection lags significantly reduced real tax revenues.

Data Processing

The DGI received very limited support from its data processing center. Data processing was virtually confined to pre-printing (name and taxpayer identification number) payment receipts and processing them afterward. The data processing function was largely discredited. Indeed, in 1981 the authorities decided to disconnect the computer equipment because they did not find it very useful. Like other employees of the DGI, technicians working in the data processing center earned salaries that were far below market levels and even lower than the salaries paid by other government agencies.

Systems for Controlling Tax Compliance

Tax delinquency was controlled in two ways. First, the taxpayer was required to present his tax records every time he filed a tax return. These tax records had to include copies of payment receipts for any partial payments or payments on account made by the taxpayer, as well as copies of previous tax returns filed by him. The official responsible for taking delivery of these documents checked the information in the tax return against the copies of payment receipts and determined whether the taxpayer was delinquent.

The second means of control was the issuance of a certificate of tax clearance that was good for one year. Production of this certificate was a prerequisite for certain procedures. The certificate was issued only

to taxpayers who were current with the DGI. To apply for the certificate the taxpayer had to show copies of tax returns and payment receipts.

Relations with Taxpayers

A major difficulty was the manner in which the tax administration related to taxpayers. All controls were based on the personal contact of a DGI employee with taxpayers or their agents. If a problem was not detected when the taxpayer was waited on at the counter, that is to say, in the presence of the taxpayer, it was never detected or resolved. There was no system for subsequent review. Incorrect information submitted by taxpayers was never corrected unless the mistakes happened to be detected at the counter. There was great resistance to contacting taxpayers by mail, and if the mail was used there was no follow-up to make sure that the mailing had been actually delivered. The postal service was considered inefficient. However, a study based on documents mailed to large taxpayers showed that a major portion of the returned mail was due to errors in taxpayer addresses that the DGI had in its records, rather than because of postal inefficiency.

Resistance to Change

The DGI staff strongly resisted any changes. They were ready to discuss proposals for change, but problems arose when time came to implement them. The organization was accustomed to using its traditional manual procedures, and the staff distrusted computer systems. The idea of giving the computer control over taxpayers was opposed, even though this meant that control would no longer need to be exercised on the basis of copies of payment receipts and tax returns provided by taxpayers. This distrust arose from earlier, unsuccessful efforts at maintaining computer records of taxpayer accounts. The DGI staff felt that these attempts had only resulted in an increase in their own work load and had never helped them in any way.

Tax Legislation

The main taxes administered by the DGI were as follows:

- *Taxes on assets*, including (1) a tax on personal assets; (2) a tax on corporate assets; and (3) a tax on bank assets.
- *Taxes on the transfer of goods and services*, including (1) the VAT, a broad-based monthly tax at the basic rate of 21 percent and a reduced

(minimum) rate of 12 percent on unprocessed food products; and (2) excises, applying in particular to fuel, tobacco, beverages, and motor vehicles.

- *Income taxes*,¹⁰ including (1) a tax on income from industry and commerce; (2) a farming tax on agricultural activities on the basis of estimated net income; (3) a tax on farm income, applicable to agricultural income based on real net income; and (4) a tax on the transfer of farming property.

- *Other*, including a tax on sales of foreign currency.

In terms of GDP, the contribution made by each of these taxes in 1989 is shown in Table 2.

Table 2. Uruguay: Revenues from the Main Taxes, 1989¹

Tax	Collection as a Percentage of GDP
Value-added tax	6.6
Excises	3.5
Tax on income from industry and commerce	0.9
Farming tax, tax on the transfer of farming property, and tax on farm income	0.2
Tax on assets	0.7
Tax on bank assets	0.3
Tax on sales of foreign currency	0.4
Total	12.6

Source: Dirección General Impositiva.

¹Changes over time in the composition of tax revenues are shown in Annex V.

Reform of the Tax Administration

General Strategy

The main idea was to separate the problems encountered in tax administration into parts and to try to make gradual progress. It was decided to design a program whose initial goal would be to monitor the filing and payment of the 2,700 largest taxpayers through a highly automated system.

¹⁰Uruguay has no income tax on individuals. Individuals, if employed, are subject to a social security contribution that equals nearly 26 percent of the salary received. Half of that contribution is paid by the employer.

The purpose of this program was to demonstrate that, despite adverse conditions (a staff that was advanced in age, the resistance to change, the low salaries, and so forth), it was still possible to bring about a major change. If the program proved successful, which was the expectation, the project provided for increasing to as many as 5,000 the number of taxpayers that would be monitored through the new system. This was estimated to be the maximum number that the operational unit known as Special Control of Taxpayers (CEDE 1) could handle. Later, another unit would be established, CEDE 2, with equipment and procedures identical to those of CEDE 1. CEDE 2 would monitor the 5,000 taxpayers domiciled in Montevideo who were next in order of importance after those controlled by CEDE 1.

After fully implementing CEDE 1 and CEDE 2, five other CEDE units would be set up in the interior of the country to monitor some 1,000 taxpayers each. Actual tax receipts from taxpayers in the interior of the country were far below potential, accounting for approximately 12 percent of total receipts, even though the interior of the country accounted for 50 percent of all business establishments, 50 percent of the employed population, and 50 percent of the electricity consumed in Uruguay.

The work would begin with the VAT both because it was relatively simple to control using the new system and because it was of major importance to tax revenues. The experience gained with the VAT would be useful in overhauling the systems to deal with all the situations that had not been originally foreseen. Later, the new system would be expanded to bring under control the tax on income from industry and commerce, excises, and all other taxes payable by large taxpayers.

The System for Monitoring Large Taxpayers

In line with the proposed strategy, a computerized system was developed and implemented to monitor large taxpayers. This system has made it possible for CEDE 1 to exercise effective control over stopfiling and delinquent taxpayers. The plan to control the 5,000 largest taxpayers has already been completed successfully. The system, which is managed directly by its user, covers the following areas:

- Registration of taxpayers.
- Control and receipt of tax returns and payments.
- Control of failure to file tax returns (stopfilers).
- Control of outstanding balances (delinquent taxpayers).

The main characteristics of the system are as follows:

Operational autonomy

CEDE I, which monitors major taxpayers domiciled in Montevideo, has operational autonomy. It is responsible for entering the data, refining the information, and printing listings from printers installed within the unit itself. The operational dependency of CEDE I on the central data processing center is minimal. Although the terminals in CEDE I are connected to the central computer, the data processing center has no role in the operations of CEDE I. All it has to do is to leave the central computer switched on. This is a fundamental change. Prior to the introduction of the new system, the printing of a simple listing by the central computer could take more than a month. The new system fully applies the concept of operational decentralization. The user is the actual owner of his information and has total control over its use.

DGI tellers

One important feature of the Uruguayan model is that the DGI, unlike tax administrations in other Latin American countries, uses its own tellers to collect tax payments from large taxpayers. Although this was already the practice when the new system was introduced, it was decided at that time that only the large taxpayers would be allowed to pay at the DGI. All other taxpayers were required to pay at branches of the BROU. This change enabled the DGI to expand its capacity to receive payments from large taxpayers.

By law, the DGI may delegate the task of tax collection only to the BROU. This restriction has slowed the development of the system of collection through the bank network and has hampered the system because the BROU is not as effective or as technologically developed as most private banks in the country.

Another feature of the Uruguayan system is that taxes may be paid using various means of payment such as checks, cash, or a number of credit certificates issued by the DGI or by other official agencies.

The single register of taxpayers (SRT)

Prior to the introduction of the new procedures for the control of large taxpayers, a new version of the single register of taxpayers' system was introduced. This system operates on-line. It checks by computer,

in the presence of the taxpayer, the identification information supplied by the latter. Next the system issues, also on-line, the tax identification card (SRT card). The system operates out of the SRT unit, which, like CEDE I, enjoys total autonomy in its operations. Entry and validation of data, as well as the printing of listings, are all carried out under the direct supervision of the SRT unit, with virtually no involvement from the data processing center. This system applies to all taxpayers domiciled in Montevideo. A similar system, based on microcomputers, is being installed in the interior of the country.

The first step in introducing the new system for controlling large taxpayers was to clean up within the SRT the identification data on these taxpayers. This was done by asking large taxpayers to review the data available at the DGI and to report any errors found. Each large taxpayer was issued a computer printout setting out the information on record at the SRT. These printouts were handed to taxpayers when they came in to file their tax returns. As a result, nearly 60 percent of all taxpayers reported changes in their identification data. Most changes had to do with telephone numbers and addresses, but there were also changes in names, the taxes payable by the taxpayer, business activities, balance sheet dates, and the legal nature of the taxpayer. Following this editing of the data in the SRT, new tax identification cards were issued to large taxpayers.

New forms

Introduction of the new control system made it necessary to redesign all existing tax return forms. The new forms have several characteristics in common: they may be used simultaneously for filing the return and for paying the taxes; they have a standard letterhead, a preprinted number, and a box to indicate whether the form is being used as an amended return, with a space to show the serial number of the amended tax return. All information lines are numbered in sequence.

Receiving the tax returns

Large taxpayers must file their tax returns in three copies directly with the CEDE unit. A supervisor receives the return, briefly checks over the formalities, and passes the form on to a data-entry operator to key in the information.

The data in the tax returns are entered into the computer, in front of the taxpayer or his agent. A rigid validation routine was developed in order to keep to a minimum the possibility of entering erroneous

information into the system. Errors in tax identification numbers, arithmetic, and computation of rates or balance carryovers, among other mistakes, are shown on the screen operated by the person entering the data. If errors are detected, they are reported to the taxpayer and the tax return is rejected. When this happens, the taxpayer has the option of making a partial payment against the rejected tax return, thereby avoiding or reducing delinquency surcharges. At first, each return took two minutes to be entered into the computer; after three months of using the new system, this length of time was halved.

In order to distribute the work load more evenly, tax due dates have been spread out over five days. The due date for each taxpayer is determined by the last digit in the taxpayer's identification number. Taxpayers may go to the DGI with their tax return ahead of time in order to verify whether it contains any errors. If the taxpayer chooses to do this, the return is checked by the computer and, if found to be error-free, is accepted. Immediately thereafter the data in the tax return are filed within the system. Later, on the date when the tax is due, all that the taxpayer has to do is go directly to one of the DGI tellers and make the payment.

The reception area is equipped with ten terminals for entering data and one printer. Terminals are grouped in pairs. Each pair of terminals is assigned two keyboard operators and one supervisor.

The entry and validation of the data on-line before the return is accepted is one of the cornerstones of the Uruguayan system. It accounts in large measure for the high quality of the data available from the system, which has enabled the DGI to act in an effective and timely manner. After the data are entered, the CEDE unit keeps a copy of the tax return, stamps the other two copies and returns them to the taxpayer, who must then go to the collection unit to pay.

Receiving payment

The taxpayer goes to any teller station and shows the copy of the tax return filed.¹¹ The teller enters into the terminal the serial number on the form, to gain access to the data previously recorded in the system. The system displays on the teller's screen information on the amount to be paid and the means of payment that the taxpayer reported he would use. The information on the screen is checked against the means of payment now being tendered by the taxpayer. If there are no

¹¹The procedure is exactly the same whether the tax return is filed on the day payment is made or has been filed earlier.

discrepancies, payment is accepted. The teller then asks the system to print the amount on the tax return form. As the amount received is printed, the system automatically credits the payment to the account of the taxpayer. Finally, the teller gives back one copy of the return to the taxpayer and keeps one copy as a cashier's receipt.

The collection unit employs seven tellers to handle large taxpayers. Each station is equipped with a microcomputer connected, in a network, to the central data processing system. Each microcomputer has a special printer to print receipts for tax returns and payments.

Detecting stopfilers

The new system introduced an effective routine for detecting stopfilers (registered taxpayers who have not filed tax returns). Nearly 300 stopfiling taxpayers (about 11 percent of all large taxpayers monitored) were detected with this routine the first time it was used. Many of these 300 stopfilers were taxpayers who were not being adequately monitored under the old manual system.

Physical storage of tax returns

Tax return forms are stored in batches of 100 forms. These batches are numbered in the sequence in which they are received. In addition, inside each batch, the forms are numbered in sequence from 00 to 99. Each document that comes into the computer system is given a batch number and a sequence number. This number is connected with the other data in the form (the SRT number, the serial number, the tax number, the tax period number, and so on). In this way it becomes possible to learn the exact place where a particular form has been filed. All that is required is to enter into the system the SRT number, the tax year, or the serial number of a form, and in a few seconds the system reports the sequence number and the batch number in which the form is physically stored.

Modules that make up the system

The computer system used to keep track of large taxpayers was designed in modules so as to allow the inclusion of new taxes and new routines as they became necessary. As previously mentioned, the new system was first used with the VAT. Other taxes were subsequently added. The average time required to include a tax in the system, includ-

ing programming work, testing, and training, is less than one calendar month. The main modules are as follows:

- *Data entry.* This module deals with the on-line entry and validation of data set out in tax returns. Using the correct data the module updates the data base of reported information. The validation routine checks all fields in tax returns. The module uses validation tables (subroutines) that contain individualized validations for each item in each form checked by the system. This makes it easier to introduce changes when the validation rules for a particular item are altered or when tax return forms are amended. This module also processes amendments of previously filed returns. The criterion used in processing amendments is to logically (not physically) eliminate the entry being amended. That entry is replaced by a new entry, as long as the data common to the two returns are consistent.

- *Cashier.* This module controls the work of DGI tellers receiving payments from taxpayers. It provides access to the data in tax returns that have already been placed on record when received, and it records the payments received.

- *Closing balance.* This module helps the supervisor of tellers in the work connected with closing balances. It allows for partial closing of balances and provides totals for each of the various means of payment received.

- *Control of stopfilers.* This module produces notices to and listings of stopfilers. To generate these, all that the supervisor of the CEDE unit needs to do is to give the computer the appropriate command through his terminal. The resulting listings are printed directly at the CEDE unit. This module also produces statistics on the status of stopfiling taxpayers.

- *Control of balances.* This module processes partial payments, payments on account and payments made through tax returns, and reports any outstanding balances. It constitutes the current tax account of large taxpayers of the DGI and is also used to identify delinquent taxpayers.

Related Work

In addition to the development of the new system for controlling large taxpayers, a number of steps were taken to correct distortions:

Reducing the lag time in tax collection

Collection lags for the VAT and for partial payment of the tax on income from industry and commerce and the taxes on assets were

reduced by approximately 60 days. These taxes are now paid in the final business day of the month following that in which the sales take place. Collection lags for excises were shortened by anywhere from 10 days to 30 days. The number of partial payments against the tax on income from industry and commerce was increased from 11 to 12 a year. Tax returns for the VAT payable by large taxpayers, which were quarterly, became monthly. The returns of small taxpayers, which had been yearly now became half yearly, with monthly partial payments.

Improvements in organizational structure

The DGI introduced some organizational changes to improve its operations. For instance, a coordination unit for the interior was set up to supervise regional units in the interior of the country. Further, within the Systems Support Bureau, a unit was established and made formally responsible for planning and controlling the work of the DGI.

Key Factors in the Success of the Project

Success in attaining the goals set for the project was due primarily to the following:

- The project received strong support from several international organizations: the IMF, which laid down the general guidelines for the project and exercised technical supervision; the IDB, which provided the necessary financing; and CIAT, which served as the executing agency for the project.
- The support provided by the Ministry of Economy and Finance in bringing about the necessary legal changes.
- The on-time delivery by the Government of the resources needed to carry out the project in accordance with the established timetable.
- The approach used by CIAT in managing the project, similar to that used by the international supporting agencies in Bolivia, which gave the consultants overall responsibility for implementing the new systems, not just for developing them.
- The strategy followed to overcome resistance to change. The approach used was to begin by developing simple systems that resolved minor problems, successful implementation of which earned the confidence of the staff. This made it possible to involve the employees and gain their support when the time came to implement more complex systems.

Conclusions

The most important gain for the DGI is that it now has available timely information of excellent quality about its largest taxpayers. The system for control of stopfilers, for instance, will indicate with full precision one day after taxes are due which taxpayers have not filed their tax return or paid the tax. Another example is the support provided by this system to the audit area. Analyses of sales-to-purchases ratios, by economic sector, led to a selection for auditing purposes of taxpayers whose behavior was presumably evasive. In some of those cases it was found that phony purchase invoices had been deducted as credits.

Furthermore, several proposals for changing the tax system have been developed from econometric simulations based on data stored in the system. The information now available makes it possible to take more informed decisions. The effects of changes in tax policy and tax administration can be better forecast.

A key question facing the authorities when the project was first set in motion was whether change was possible at all. The DGI needed to learn how to work using information systems supported by computers. It had to be shown to the organization that it was possible to identify and monitor stopfiling and delinquent taxpayers without having to ask them to produce copies of the tax returns they had filed or the payments they had made. With the control system designed and put in place for large taxpayers, change was shown to be possible even without changing the staff which for decades had been using obsolete manual procedures.

Still to come is the opening of CEDE 2 that will control 5,000 taxpayers in Montevideo, as well as of the five CEDE units in the interior of the country, each of which will control about 1,000 taxpayers. If everything goes according to plan, this work will be completed within two years and the new system will cover some 15,000 taxpayers who together account for more than 95 percent of total tax revenues collected by the DGI.

ANNEX I

Bolivia: Summary Descriptions of Taxes

Taxes Introduced Under the Tax Reform Law (Law No. 843 of May 20, 1986)

Presumed Corporate Income

The presumed corporate income tax is levied on the net worth of companies. It is assessed annually. The initial rate was 1 percent and

the current rate is 3 percent. The tax exempts assets devoted to activities that are not commercial or industrial. It also exempts assets of the Government, savings and loan housing cooperatives, and public service cooperatives.

Presumed Income of Property Owners

The presumed income of property owners tax is a levy on the ownership of registered property (real estate, motor vehicles, motor boats, and aircraft). Its rates are moderately progressive. Payments of this tax made by companies are credited as partial payment of the presumed corporate income tax. It exempts property of the Central Government, the states (called "departments" in Bolivia) and municipal governments, public institutions, and diplomatic missions. This tax is subdivided into three chapters: chapter I, tax on rural property; chapter II, tax on urban real estate; and chapter III, tax on motor vehicles, motor boats, and aircraft. It is assessed and paid annually and may be paid in two installments.

VAT

The VAT taxes value added in primary production (cattle raising and farming), nearly all services, sales of personal property on a regular basis, the leasing of personal and real property, and imports. All stages of production and marketing are taxed. The nominal rate is 10 percent¹² and the actual rate is 11.11 percent, because the taxable net price includes the VAT itself. The VAT cannot be indicated separately on invoices. There are virtually no exemptions. The tax is assessed and paid on a monthly basis.

Tax on Transactions

The tax on transactions is a typical cascading tax. It taxes gross income from commerce, industry, liberal professions, trades, services, interest, and gifts. The tax is assessed and paid monthly. The initial rate was 1 percent and the current rate is 2 percent. It exempts the personal labor of employees as well as exports, services provided by the Government (except those supplied by private companies performing a public service), private education, diplomatic services, and interest from savings accounts, bank accounts, and fixed-term deposits.

¹²In March 1992, this rate was increased to 13 percent.

Tax on Specific Consumption

The tax on specific consumption is levied on the first sale or import of the following goods:

	Initial Rate (1986)	Current Rate (1991)
	<i>(In percent)</i>	
Product		
Beer	30	60
Cordials and liqueurs	10	15
Wines	7.5	10
Alcohol	30	30
Cigarettes	50	50
Perfumes and cosmetics	30	30
Jewelry and precious stones	50	50
Consumption of electric energy ¹	—	20
Bottled soft drinks ¹	—	20

¹Included subsequent to the tax reform.

The basis for computing this tax is the net sales price. Neither the VAT nor the tax on specific consumption is included in the base of the tax on specific consumption. The tax is assessed and paid monthly.

Value-Added Tax Supplementary System

The value-added tax supplementary system taxes the income of individuals and undistributed estates, such as the leasing of personal and real property; the yield of invested capital (interest, dividends, and profits distributed by partnerships and amounts withdrawn from solely owned companies); wages and salaries; fees earned by self-employed professionals; and royalties, patents, and trademarks.

Only Bolivian-source income is taxed. There is a withholding system with monthly assessments and payments. For taxpayers not subject to withholding, the assessment and payment period is quarterly. Employees benefit from a nontaxable allowance equal to two national minimum wages. The rate is 10 percent. A unique characteristic of this tax is that taxpayers can credit against it 10 percent of the sales amounts shown in VAT invoices received on purchases of consumer goods. When this tax was established there was little hope of being able to collect any significant amount. However, in 1990 the amount collected was equal to 0.46 percent of GDP. The purpose of this tax is to encour-

age taxpayers to ask for an invoice when they make a purchase, thereby stimulating payment of the VAT by sellers.

Tax Amnesty—Special Tax

A tax amnesty was granted from December 31, 1985, calling for a one-time filing of a tax return and payment of tax. The special tax was levied on the registered property (real estate, motor vehicles, and so on) of individuals and the assets of legal entities. Payment of the tax ruled out tax audits or tax bills for periods preceding December 31, 1985, unless final rulings had been issued by the date of publication of the law.

Taxes Introduced After the Tax Reform

Gift Tax

The gift tax applies to inheritances and to legal acts by which property is transferred free of charge. It is levied on personal property, real property, shares of stock, shares of capital, and rights subject to registration. Government agencies and nonprofit associations, foundations, and institutions are exempted from this tax. There are three rates: 1 percent, 10 percent, and 20 percent. The tax is assessed and paid within 90 days of the death of the decedent or within 5 business days following the event that gives rise to the tax. This tax was enacted on March 18, 1987.

Tax on Travel Abroad

The tax on travel abroad is levied on all air travel to foreign countries by persons residing in Bolivia. Diplomats and persons entitled to that status are exempted. The tax is Bs 100 (approximately US\$30) for travel to neighboring countries and Bs 150 (approximately US\$45) for all other countries. This tax was established in February 1990.

ANNEX II

Bolivia: Summary Description of the Basic Tax Systems and Procedures

Single Register of Taxpayers

The current registration system handles the following functions: registration number allotments; new registrations, cancellations, and

amendments; control of duplicate registrations; and data inquiries according to different headings and statistics.

Because of the high degree of decentralization of the registration process, and in order to avoid transcription errors, a form was designed with three sections: (1) registration application (to enter the information); (2) registration certificate (to be displayed on the premises where the taxpayer carries on his business); and (3) taxpayer card (for bank operations, processing of paperwork involving government agencies, and so forth).

When the form is filed, an adhesive label is placed on each section showing the registration number pre-stamped by the computer. Though simple, such labels were not produced in the country at the time the system was introduced and had to be bought abroad. This made their procurement more difficult, because of the processing involved in making an international purchase.

The registration code assigned to each taxpayer is fully numerical. It is made up of eight digits of which the last is a check digit. It includes no subcodes identifying special features such as type of taxpayer (individual or juridical), region, and so on. It is unique for each taxpayer, irrespective of the activities engaged in or the number of establishments or branches operated.

Registration was mandatory for all existing taxpayers liable for the taxes included in the tax reform and was carried out in February–April 1987. Following the closing of registration for existing taxpayers, inspections to verify registration were carried out in virtually all industrial, commercial, and services areas of the largest cities. To do this, university students were hired to work part-time. They were first assigned to verification teams (44,931 inspections were carried out) responsible for checking particular areas and were subsequently reassigned to teams that conducted a second verification, making sure that no person was assigned the same area as in the first operation (21,920 second verifications were conducted). A final control was done through sampling, without entering into direct contact with the taxpayers, to make sure that the single register of taxpayers certificate was being displayed.

Taxpayers could register under the following categories: (1) general system (of the VAT); (2) simplified tax system (special system); (3) comprehensive tax system (special system); and (4) unified rural tax system (special system).

New taxpayers are required to follow similar procedures. Changes in the number of taxpayers registered over time are set out in detail in Table 5 in Annex III.

Collection Through Banks

The system of collection through banks began operating on May 11, 1987, coinciding with the first due date for filing tax returns and paying taxes under the new tax reform provisions. Opposition to the introduction of the system came chiefly from the Bank Association (ASOBAN), which raised three basic concerns: (1) Banks might be held responsible for incorrect information provided by taxpayers in their tax returns. This was not true and the matter was duly cleared up. (2) Banks might experience delays in turning over tax receipts to the Government and might be liable to the penalties provided for in the proposed agreement. (3) Banks might make errors in the course of entering the data and might be fined on that account.

Opposition from ASOBAN reached such a pitch that only days before the first due date of May 11, 1987 the Government had to reaffirm its strong backing for the system as then developed and let ASOBAN know that a decision had been made to begin operations as planned, authorizing only the Banco del Estado (the State Bank), which had accepted the new system, to collect taxes.

The firmness demonstrated by the Government made the private banks reconsider their position and on May 7, 1987 they accepted the new procedures. The Government agreed to enforce the penalties stipulated in the accord only after it had been in force for six months, so that banks would have time to gain experience and to streamline their own internal procedures. The system began operating with ten banks that had a total of 250 branches throughout the country. A few banks, such as the Bank of Cochabamba, which had not signed the agreement initially, decided to join the system after it had been in operation for one year.

The basic structure of the collection system is as follows:

(1) Bank branches accept tax returns and payment of taxes directly from the taxpayers.

(2) At the end of each day, on the basis of a collection summary form, each bank branch transfers the proper amounts to the beneficiaries under the revenue sharing system: the Regional Development Corporation, the university, and the municipality (25 percent of tax receipts).

(3) The original summary is sent, along with the tax returns, to the head or central office of each bank in La Paz.

(4) This office then transcribes the documents onto magnetic media and validates by computer all the data recorded on the tax returns, issuing an order for a transfer from the account kept by each bank in the Central Bank to the account of the National Treasury. This order

is issued in the amount of the sum total of summaries prepared by bank branches (75 percent of tax receipts). In addition, each head or central office sends to the automatic data processing area of the DGRI a supporting disk containing (a) complete information on the transfer order; (b) complete information on each of the collection summaries that add up to the transfer order; and (c) complete information on each tax return included in each collection summary, as well as on those tax returns that show no tax payable or a balance in favor of the taxpayer.

(5) The DGRI, using computer controls, draws up and supplies to each head or central office a listing of all transfer orders not credited to the account of the National Treasury because they were never sent out. Likewise, it reports those transfers which have been credited by the Central Bank but for which the relevant documentation and supporting disks have not been received.

(6) The automatic data processing area of the DGRI checks the data processed by the banks and the documentation that the Central Bank has sent with its statements, including the validation process and supporting detailed data (tax returns and adjustments) sent by banks, and the reconciliation of the data sent by banks with the data in the statements received from the Central Bank.

(7) With the validated data, information on tax receipts is generated for various users. For example: performance charts, for the DGRI National Office; tabulations for the regional administrations; tabulations for control of bank reports filed late; information for beneficiary entities under the revenue sharing system; information for the accounting unit of the DGRI; information concerning bad checks; information on adjustments made by banks and awaiting cancellation; and distribution of bank commissions.

To ensure proper operation of the system, the following procedures were established: (a) delivery to banks of the software needed to retrieve information from tax returns and prepare collection summaries, generate transfer orders, validate data, and submit reports to the DGRI on magnetic media; (b) delivery of batches to test the system; and (c) supporting banks in the tasks of setting the collection system in motion, generating orders for the transfer of funds, and retrieving and validating data from tax returns.

Thanks to the system of collecting taxes through banks the DGRI can count on having, by the twentieth day of the following month, all of the previous month's tax receipts processed by computer. At that point the DGRI has all the information on the tax returns filed, with the sole exception of the presumed income of property owners tax, which is due twice a year and which, owing to its large volume, has a processing deadline of three months.

The system of collection through banks processes a total of about 190,000 tax returns every month.

Control of Large Taxpayers

A few months after the bank collection system went into effect computerized information was available on the amount of taxes paid and the monthly sales figures of each taxpayer. With this information a ranking was made from which it was seen that about 1,300 taxpayers throughout the country contributed more than 66 percent of all tax receipts. The decision was consequently made to monitor the largest taxpayers separately from all other taxpayers. Accordingly, there are now three sectors for monitoring large taxpayers:

(1) Since March 2, 1988, there is a sector for large taxpayers of the La Paz regional administration, which began operating with 602 taxpayers and now monitors 711 taxpayers.

(2) Since April 3, 1989, there is a sector for large taxpayers of the Santa Cruz regional administration, which began with 319 taxpayers and now controls 372 taxpayers.

(3) Since May 2, 1989, there is a sector for large taxpayers of the Cochabamba regional administration, which began with 317 taxpayers and now monitors 366 taxpayers.

Each sector is housed in a separate building of the regional administration to which it belongs, which also houses collection outlets of the Banco del Estado, where large taxpayers must file their tax returns and pay their taxes. The personnel of each of these sectors numbers between 30 and 40 persons, who are university graduates or students previously unassociated with the DGRI. Each sector performs, for the taxpayers under its jurisdiction, all the tasks assigned to the regional administration, with the sole exception of tax audits. Each sector has a computer to carry out all system operations.

When a large taxpayer wants to file a tax return and pay he goes to an office within the sector where the documents go through a first check (to make sure that all boxes have been filled in, especially the single register of taxpayers number and the tax period, and that the return is from a large taxpayer). If the return shows no errors detectable at first sight, it is passed on to the Banco del Estado cashiers for payment and acceptance. The Bank processes the documents and delivers a disk to the sector on the following day. Orders to file missing tax returns are drawn up within a maximum of three days and are then delivered to taxpayers in person by officials of the sector. Orders to pay taxes are delivered within a week, having been prepared by the tax return reassessment system.

The sector also makes preliminary checks to detect inconsistencies arising from a review of tax returns and special information requested from taxpayers. Such checks may raise suspicions of tax evasion, which in turn may prompt more formal and deeper tax audits.

The treatment accorded to large taxpayers is personalized and professional. The idea of creating a new DGRI, sponsored by some government officials, may be said to have become a reality in the large taxpayers sectors. Their staff have been especially selected and trained and are imbued with the esprit de corps they need to perform the task set before them. The first national meeting of large taxpayers sectors was held in February 1991 to discuss and seek solutions to their common problems.

ANNEX III

Table 3. Bolivia: Tax Receipts as a Percentage of GDP

1978	3.83
1979	3.59
1980	3.06
1981	3.09
1982	1.81
1983	1.39
1984	0.88
1985	1.12
1986	1.88
1987	4.91
1988	6.15
1989	6.59
1990	7.40

Source: Statistics Section of the DGRI.

Table 4. Bolivia: Tax Collections in Constant Values
(In bolivares of December 1990)

	Tax Collections (In millions of bolivares)	Increase over Preceding Year (In percent)
1986	346.4	—
1987	731.8	111.23
1988	939.8	28.13
1989	1,026.6	9.23
1990	1,190.9	16.00

Source: Statistics Section of the DGRI.

Table 5. Bolivia: Development of the Single National Register of Taxpayers

As in December	General System	Simplified Tax System	Comprehensive Tax System	Unified Rural Tax System	Total
1987	79,414	163,731	—	—	243,145
1988	105,403	188,237	10,455	—	304,095
1989	120,925	198,106	15,843	—	334,874
1990	138,759	203,748	15,987	7,065	365,559

Source: Statistics Section of the DGRI.

ANNEX IV**Bolivia: Statistics for the Use of Government Agencies**

Following is an outline of the statistical data included in the magnetic files produced for the use of government agencies (summary of the fields that make up the record):

(1) Monthly statistics (large taxpayers)

DGRI unit code

Processing month

Tax

Economic sector

Number of taxpayers per sector in the month

Amount collected

In the month

In the previous month

At historical values

At constant values

In the same month last year

At historical values

At constant values

Change in constant values

Collection this month versus last month

Relative

Absolute

Collection this month versus same month last year

Relative

Absolute

Total this heading

Country total by economic sector and heading

Total per agency and heading

(2) Annual statistics (all taxpayers)

Collections through bank network, broken down by tax and economic sector.

Collection through bank network, broken down by department and tax.

Data on particular tax reported, broken down by type of taxpayer and economic sector.

Data on balances in favor of the treasury and the taxpayer, broken down by economic sector (VAT).

Data on collection of presumed corporate income, broken down by agency and means of payment.

Collection through the bank network, broken down by tax, department, and economic sector.

ANNEX V

Table 6. Uruguay: Internal Taxes—Gross Receipts and Refunds
(In percent of total gross receipts)

Description	1985	1986	1987	1988	1989
Total gross receipts	100.0	100.0	100.0	100.0	100.0
Value-added tax	47.3	46.7	45.9	50.8	51.4
Excises	31.3	29.5	29.6	26.1	27.3
Tax on income from industry and commerce	6.5	6.2	7.1	8.1	7.1
IMPROME, ¹ farming tax, tax on the transfer of farming property, and tax on farm income	2.9	3.3	3.6	3.3	1.7
Tax on assets	6.9	7.2	6.9	6.2	5.8
Tax on bank assets	—	0.9	1.2	1.3	2.5
Tax on sales of foreign currency	4.4	5.1	4.4	2.9	2.7
Other taxes ²	0.4	0.4	0.3	0.3	0.6
Interest, surcharges, and fines	0.4	0.7	0.8	0.8	0.8
Tax refunds	-8.8	8.6	-8.5	-9.5	-8.9

Source: Dirección General Impositiva.

¹IMPROME is an earlier form of agricultural taxation.

²Includes the additional real property tax.

Comments

Ramiro Cabezas M.

Background—The Situation in Bolivia in August 1985

To operate with reasonable efficiency, all administrations require constant adjustment and updating. When this is not done and the corrections are carried out all at once, the process is generally known as "reform."

In instances where the situation is chaotic and desperate, the required change is more drastic and sweeping. This is what happened in Bolivia, not only in the areas of tax legislation and tax administration but also in the administration of government finances in general.

In Bolivia, structural change in tax legislation and administration was part of a much wider overall strategy. To understand this, it is necessary to be aware of the background against which it was introduced and the forces that drove it.

Until August 1985, when the Government changed, the Bolivian economy was subjected to stringent government regulations. For instance, prices of a large number of essential consumer goods were controlled and only belatedly adjusted, as the Government was reluctant to appear responsible for unpopular measures; a number of basic consumer goods were subsidized; wages in both the public and private sectors were fixed by the Government; no private sector employee could be dismissed; bank interest rates were fixed by the Government; and the Government held a monopoly over foreign exchange transactions, and private foreign exchange transactions were illegal. Further, the exchange rate was fixed by the Government, and the domestic currency was kept artificially overvalued in the hope of avoiding price increases. This policy had a serious effect on exports, as foreign exchange had to be surrendered at an artificial exchange rate. Domestic industry was overprotected through quantitative restrictions on imports, foreign exchange rationing, and high import tariffs.

With respect to public sector finances, the situation was as follows: Under pressure from the trade unions, there were constant wage increases, which overshot the budget; the heavy burden of subsidies was inadequately financed; the tax base suffered from dramatic erosion, aggravated by inflation; and there was disarray in public expenditure, coupled with low investment. As a consequence, the public sector

produced enormous fiscal deficits which were financed by credit from the Central Bank.

As was to be expected, such economic policies and the manner in which the public sector was administered led to a generally chaotic situation. Bolivia recorded the greatest hyperinflation ever known that did not arise from domestic conflict or foreign war. In August 1985, hyperinflation reached an annualized rate of approximately 23,500 percent; essential consumer goods could only be purchased on the black market; and international reserves were exhausted and Bolivia ceased to meet its external obligations.

Structural Changes in Economic Policy and in the Administration of Government Finances

In brief, Bolivia was in an intolerable situation. The Government was obliged to hold elections ahead of schedule. The new Government that took office in August 1985 was faced with the urgent need to take prompt, radical measures. These consisted of the following:

- All subsidies were eliminated.
- The economy was opened up by removing all restrictions on international trade and by drastically reducing customs tariffs.
- Prices were freed and made subject to market forces; domestic products were forced to compete with imports.
- Unrestricted employment and dismissal of workers was introduced; the obligation to pay social benefits for retirees was retained; and private sector salaries were to be negotiated between the parties, without government intervention, excepting in cases requiring arbitration. The Government, as employer, negotiated public sector salaries.
- Following a large initial devaluation, a floating official exchange rate was established, and private foreign exchange transactions became legal.
- Interest rates were made subject to market forces.

With regard to the administration of government finances, the Treasury's resources were rapidly increased through a tax on fuels; public spending was reduced to essential levels and public employee salaries were frozen for a six-month period; and, despite public spending cuts, the proportion of investment was increased. In addition, two laws were enacted for regulating the system of government finances: the Law on the Integrated System of Financial Administration and Control (SAFCO Law) and the Tax Reform Law.

Law on the Integrated System of Financial Administration and Control

The SAFCO Law was approved only in July 1990, under the Government that took office in August 1989. However, the previous Government began, to the extent possible within the framework of the laws then existing, to put into practice a large part of the law's content and philosophy. The SAFCO Law defines the characteristics of the following administrative systems: programming of operations, administrative organization, budget, personnel administration, administration of goods and services, treasury and public credit, government accounting, internal audits, and ex post external audits. The law establishes the relationship between the above-mentioned systems and those of planning and public investment. It also defines the institutional responsibilities of the Ministry of Finance, the Office of the Comptroller-General of the Republic, and the Central Bank, and sets out the responsibilities of individuals holding civil service positions.

Tax Reform Law and Its Application

The paper by Carlos Silvani and Alberto Radano on the Tax Reform Law enacted in May 1986 and on its implementation clearly describes essential aspects of the new law and the adjustments made in tax administration to provide for its implementation.

As I played a role in designing and drafting the new tax law and was responsible for implementing the reform during the first three years, I will take the liberty of expanding upon certain aspects of the reform.

To fully understand the reform, it is necessary to understand the main objectives that guided and characterized it.

The first objective was to increase tax collection, minimizing the distorting effects of taxes by applying low rates and broadening their base. We did not wish taxes to be a determining factor in the decision-making process of economic agents, and tried to keep taxes from becoming incentives or disincentives for any activity. On the other hand, by increasing the scope of their application, we hoped to increase tax collections and reduce the resistance that results from discriminatory treatment.

The second objective was to simplify the tax system so that taxes could be known and understood by taxpayers. Bolivia's level of development makes a broad common understanding of complex systems impossible. It was deemed preferable to disregard certain subtleties usually advocated in the name of tax "justice" or "equity" and instead

to develop simple systems, especially taking into account that the rates are low.

The third aim was to design the system in such a way that tax evasion and fraud were more difficult than under the previous system. This objective led, for example, to the elimination of the income tax on businesses and to its replacement by a tax on net wealth, which is harder to hide than income. In this way the work of tax administration was simplified as well.

The fourth objective was to avoid contact wherever possible between the taxpayer and the administrator; thus, the taxpayer's direct responsibility was clearer.

With regard to the general strategy for implementing the reform, the temporary creation of the Ministry of Tax Collection was intended to demonstrate the political support the Government accorded the reform and the significance it attached to the reform, as well as to enable a Minister of State to propose to the Cabinet, directly and swiftly, the series of regulations that were essential to get the reform under way. The creation of the ministry also made it possible to reap prompt benefits from external advice and permitted political decisions to be taken quickly.

Part of the strategy consisted of contracting the services of a core group of Bolivian professionals, some with experience in taxation, to work closely with foreign advisors and thus develop into a cohesive unit and afterward go on to occupy key positions in tax administration. The selection process was not easy, and retaining these professionals was particularly hard in view of the low level of salaries in public administration. In order to retain them, financial support from international organizations was obtained. This support was very important, but it also had its drawbacks. For example, the Minister was questioned in Parliament as to why he was paying a small number of civil servants more than the rest and was using resources that could have a damaging effect on national sovereignty or dignity.

I was convinced that, at least during the initial phase of a far-reaching reform, the utmost priority should be given to the development of tax awareness among the population. I clearly recall that the first impressive leap in tax collection occurred before audit systems and techniques were in operation.

To everyone's amazement, after having stood in long lines outside banks to pay their taxes and having been unable to do so within the timetable set, tens of thousands of taxpayers marched in public demonstrations urging the banks to remain open so that they could pay their taxes. Such demonstrations occurred on several occasions. There were

also, of course, public demonstrations against taxes, but these were to be expected.

A group of journalists, intrigued by the radical change in the attitude of the taxpayers, conducted a survey to find out the reason behind this remarkable change. The main questions were: You are now paying more taxes than before. Is this because you feel like a responsible citizen? Because you are confident that the Government administers your money well? Or because paying taxes helps control inflation?

Close to 70 percent of the taxpayers interviewed, even low-income taxpayers, responded that the payment of taxes helped to control inflation. This, among many others, was the message that had most captured the imagination of the people during the motivating and consciousness-raising campaign that was carried out.

Unfortunately, a taxpayer's spirit of responsibility does not continue unaided; it needs to be renewed through regular campaigns, and the taxpayer needs to be informed that the administration is able to keep an eye on him.

Immediate Results of the Structural Changes, the Administration of Public Spending, and the Tax Reform

To conclude, some of the immediate and most important results of the structural reforms, the administration of public spending, and the tax reform are summarized below:

- Prompt control of hyperinflation. In 1991, Bolivia had the lowest inflation rate in Latin America.
- The negative economic growth trend was reversed. Bolivia has now been growing for five years, though not yet satisfactorily.
- In general there is an abundance of consumer goods.
- The public sector deficit has been greatly reduced and is financed to a large extent with external resources. Central Bank financing of the public sector is now of little significance.
- The tax ratio has increased from 1.2 percent of GDP to approximately 7.5 percent of GDP.
- International reserves have reached reasonable levels and, because of skillful negotiations with its creditors, Bolivia is current in its external obligations.

The evolution of some of the key indicators of the Bolivian economy is shown in Table I.

Table 1. Key Indicators of the Changes in the Bolivian Economy
(In percent)

	1984	1985	1986	1987	1988	1989
Growth of GDP	-0.3	-0.15	-2.9	2.12	2.81	2.41
Ratio of nonfinancial public sector deficit to GDP	25.5	10.8	3.3	8.3	5.7	4.9
Percentage of deficit financed with money creation	89.5	79.5	— ¹	55.0	38.8	40.9
Ratio of investment expenditure to total expenditure	9.7	11.5	16.4	18.4	23.0	21.9
Ratio of internal taxes to GDP	1.4	1.3	2.7	5.1	6.3	7.5 ²
		Aug. 1985	Dec. 1986	Dec. 1987	Dec. 1988	Dec. 1989
Inflation		23.500	66.0	10.7	21.5	16.5

¹The availability of external resources to cover the deficit was greater in 1986 than the deficit itself.

²The tax ratio, including customs duties and taxes on hydrocarbons, reached 13 percent.