

## Combating corruption in the revenue service: the case of VAT refunds in Bolivia

A recent and relatively successful anti-corruption strategy on value added tax refunds conducted in Bolivia, applied a process flow approach that appears to be powerful in preventing corruption in tax administration. This approach identifies corruption vulnerabilities, generates measurable indicators and helps design remedial efforts, and it may well be replicated elsewhere. This U4 Brief summarizes the experiences from Bolivia, highlighting how improved inspection control contributed to reducing corruption in the National Tax Service and stemmed the loss of public funds.

### Tax evasion and corruption in revenue administration

Broadly speaking, the distinction between tax evasion and corruption can be characterised as follows: tax evasion (e.g. taxable income and or transactions that are not reported or underreported) is confined to taxpayers, while corruption (e.g. VAT fraud) relates to actions of a number of distinct stakeholders (e.g. taxpayers, tax officers, fictitious companies, etc.). There are, however, no clear-cut boundaries between the two concepts since tax evasion may turn out to be sustained by corruption (for instance, tax officers may ignore or underreport taxable income in exchange for a bribe). This is consistent with Hodgson and Jiang's (2007) definition of "organizational corruption", namely an action involving both collusion and the violation of organizational rules. In the above example, tax officers are corrupt because they collude with taxpayers to undermine the tax administration's ability to fulfil its objectives (i.e. to collect taxes).

Corruption in tax administration is among others influenced by the legal, regulatory, and policy framework that governs the tax system. Typically, the operation of the tax system is defined in a tax code, which in many cases is a cumbersome and complex instrument that creates both incentives and opportunities for corrupt activities by the different stakeholders.

### The political economy of reforms

Typically, an important challenge for reforms in public administration is to overcome the resistance of vested interests, while at the same time lacking broad public support. On the one hand, reform efforts in the revenue administration often imply the reduction of rents for corrupt officers and evasive taxpayers, who will naturally oppose reform. Moreover, rent reductions may be seen and

felt as unfair because the beneficiaries of the reform are others, who will not usually bear the costs of reform due to rent reduction. On the other hand, the beneficiaries of the reforms are much less aware of the benefits and, for that reason, will be less willing to support them. In other words, while increased revenue collection due to reform may imply more funding for social projects directed at the poor, this doesn't in return guarantee broad public support. This is because those groups are usually not fully integrated into the economy and pay little taxes, and they may even perceive the reform as a threat to their way of living. This is particularly relevant in developing countries with large informal sectors, as these are typically not included when initiating reform efforts. In this context, broad-based reforms may be possible only under the perception of a crisis that, for all actors, undeniably would require change and action. However, the timing of the reform can also be influenced by political leadership to the extent that it manages to reflect a perception of the need for change. In any event, governments should move ahead in areas where the ground for reform has been best prepared.

When designing anti-corruption reforms for tax administration, it is worth looking at the effects of three key factors: the **rule of law, management and human resources, and capacity constraints**.

1. A successful anti-corruption strategy in the revenue service requires not only an adequate regulatory framework, but also the enforcement of laws and the prosecution of offenders. This pertains to the

justice system and constitutes an external condition for reform.

2. Tax officials do not only need competitive wages but also career development opportunities and incentives (including merit-based recruitment and promotion), support systems, and sufficient funds and skills to perform their tasks. To provide these conditions, many developing countries (mostly in Africa and Latin America) have transferred the revenue service function from the Ministry of Finance to a semi-autonomous revenue authority (SARA)<sup>1</sup>, mainly because: (i) governments were disappointed with the low levels of efficiency and tax collections in the revenue agencies, (ii) perceptions of widespread corruption and tax evasion, together with high taxpayer compliance costs, led to demands for reform in the revenue service, and (iii) international aid donors promised support for additional administrative reforms once the new agency was in place. However, while SARAs can achieve major improvements in combating corruption and attaining important efficiency gains, they may not be sufficient on their own.
3. Reform requires managerial skills and leadership, reengineering work processes, effective monitoring and supervision systems, organizational changes to capture the gains of information and communication technology (ICT), rewards for good work, and effective oversight of the administration, as well as placing more emphasis on direct and progressive income and property taxes. Hence, a major challenge in tax reform is to develop a more strategic, historical, and politically informed knowledge base for promoting tax reforms, taking the country context and level of development into account (Zuleta et al 2007, p 363).

## Bolivia's environment for reform

Bolivia underwent a series of reforms throughout the 1990s. In particular, since the successful macroeconomic stabilization in the mid 1980s, successive governments had made several efforts to improve the public sector. In the beginning of the 1990s, a new legal framework for government financial management and control (SAFCO Law) was established and several attempts were made to introduce a civil service reform. However, these actions accomplished little, and by mid-1997, a high level of informality still characterized both financial and personnel management. Against this background, the government that took office in August 1997

made a commitment to implement a comprehensive public sector reform including anti-corruption measures. With help from the World Bank and bilateral donors (Denmark, The Netherlands, Sweden, and Germany), an ambitious Institutional Reform Project (IRP) was elaborated to put into effect the most important parts of the government's National Integrity Plan (NIP) (see Box 1).

The IRP recognized the important advances already made in different areas of the public administration, and built on the existing institutional framework. Simultaneously, it identified conditions that were essential to an effective institution-building process, including new legislation for certain areas.

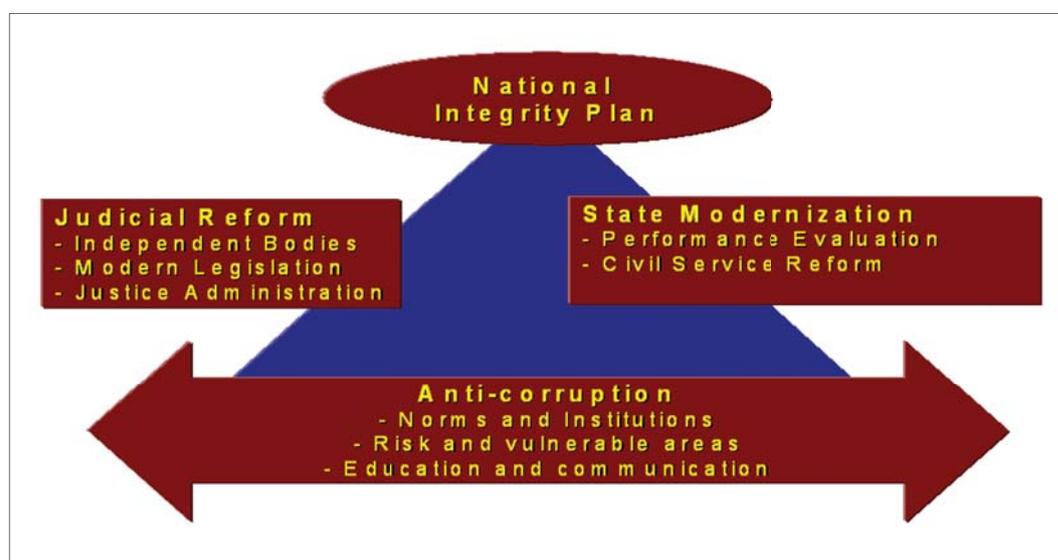
The project supported different "horizontal reforms" to establish a general normative and institutional framework for core public administration functions (e.g. personnel management, budget management, procurement reforms), with a view to gradual implementation through "vertical reforms" in selected pilot public agencies: the Ministry of Finance (including Customs and Revenue Service), the Ministry of Housing and Basic Utilities, the Ministry of Sustainable Development, the Ministry of Agriculture, the Ministry of Education, and the Prefecture of Oruro.

## Implementing reforms

### A process flow approach to prevent corruption

In general, the analysis of corruption has been limited to a discussion of causes and effects, while little effort has been made to develop operational mechanisms to prevent corruption. Zuleta et al (2007) have recently suggested a process flow approach to combat corruption in revenue administration<sup>2</sup>. In essence, this methodology includes identifying the core business processes and sub-processes of an organization along with their vulnerabilities to corruption, some early warning indicators that corruption is present, and remedial measures to address the problems. This approach was applied in the case of the National Tax Service (NTS) of Bolivia. The methodology consisted of four main steps:

### Box 1: The National Integrity Plan



<sup>1</sup> The emergence of SARAs, however, should not ignore the need for an effective integration and coordination with the Ministry of Finance to ensure full consistency with the tax policy environment.

<sup>2</sup> For a previous version of this article see: <http://www1.worldbank.org/publicsector/TaxCorruptionCase.doc>.

1. Three core business processes were identified, namely: (i) tax service and voluntary compliance, (ii) revenue service control, and (iii) tax refutation, recuperation and charging.
2. Each core business process was separated into its different sub-processes.
3. For each sub-process the vulnerability to, or risk of, corruption was assessed.
4. For each vulnerability to, or risk of, corruption a potential early warning indicator and a possible remedial measure were determined. The table in Box 2 shows the procedure, including examples for each core business process of the organization.

The positive results obtained in testing this approach in Bolivia suggest its considerable potential as a tool for locating vulnerabilities to corruption in the revenue service and other institutions, and identifying appropriate measures to combat it.

Regarding the table below, it is useful to note that the different remedial measures noted in the fourth column of the matrix can be thought of as a minimum anti-corruption programme in the revenue service addressing both

motives/incentives and opportunities for corruption. As it is shown in the table, different incentive and opportunity structures require different responses. For instance, tackling corruption in the tax service and voluntary compliance requires organizational and regulatory measures ranging from streamlining procedures to simplifying sub-processes through automation, all of which can be viewed as reducing opportunities for corruption. On the other hand, addressing corruption in revenue service control involves installing smart controls and automated random checks, as well as providing incentives for high performance, sanctions for corrupt behaviour, career development potential, and competitive salaries, all of which amount to looking at both opportunities and motives for corruption. Finally, confronting corruption in tax refutation, recuperation and charging requires reforms in the area of human resource management, which amounts to more emphasis on the motives for corruption. Interestingly enough, *automation* appears to be key (both as an efficiency instrument and an anti-corruption measure), primarily in the first core business process and to a lesser extent in the second. *Human resource development*, on the other hand, seems to be central in addressing efficiency and corruption in the third, and to a lesser extent in the second process.

**Box 2: Process flow matrix for core business processes in tax administration**

Processes/subprocesses	Vulnerabilities to or Risks of Corruption	Potential "early warning" indicators	Possible remedial measures
<b>1. Taxpayer service and voluntary compliance</b>			
1.1 Pretaxpayer education	.....	.....	.....
1.2 Taxpayer identification	.....	.....	.....
1.3 Approval of fiscal invoices	.....	.....	.....
1.4 Taxpayer operations	.....	.....	.....
1.5 Taxpayer operations registration	.....	.....	.....
1.6 Sworn Tax Statement (STS)	Provide assistance to fill out complicated forms in exchange for a bribe	Taxpayers perceptions of the quality of the service	Simplification of forms made readily available to everyone, automation
1.7 Payment of taxes	.....	.....	.....
<b>2. Revenue service control</b>			
2.1 Taxpayer identification control	.....	.....	.....
2.2 Taxpayer operations control	.....	.....	.....
2.3 STS Control	Ignore STS submission after deadline in exchange for a bribe	Data inconsistencies above a given threshold (for example, set a certain acceptable deviation from historical data, say 5% above which there is reason to worry about corruption)	Automated random checks to detect anomalies; self-assessment
2.4 Control of consistency between STS and taxpayer payment	.....	.....	.....
2.5 Intensive control	Ignore tax sanction in exchange for a bribe	Number of tax sanctions falls below a given threshold	Incentives for high performance; sanctions for corrupt behavior; career development; competitive salaries
<b>3. Tax Refutation, recuperation and charging</b>			
3.1 Lawsuits and litigations	.....	.....	.....
3.2 Recuperation of and charging taxpayer debts	Postpone recuperation of and charging debts without justification	Percentage of debt recuperation and charging falls below a given range	Incentives for high performance; sanctions for corrupt behavior; career development; competitive salaries

## Concrete reform steps

On December 22, 2000, following the promulgation of Law No. 2166, the old National Service for Internal Taxes (NSIT) was transformed into the new NTS. The reform strategy focused on three fundamental pillars: a) human resource development, b) streamlining rules and procedures, and c) improvement of inspection and control processes as well as fiscal intelligence. Taking into account what has been said earlier about reforms under perception of a crisis, it is interesting to note, that this comprehensive reform was implemented in the middle of an economic crisis<sup>3</sup>.

### Human resource development

After a series of adjustments to the organizational structure to ensure an ideal staff payroll with a more technical profile, the tax agency embarked on a comprehensive merit-based hiring process through specialized external consulting firms aimed at renewing more than 80% of the management and front-line staff. An induction and training programme of at least 80 hours of training per public servant was implemented.

### Streamlining rules and procedures

A new tax code enacted in August 2005 enabled the submission of sworn tax statements via internet as well as notifications by e-mail. In this context, starting in January 2005, the so-called 'large taxpayers' (amounting to approximately 75% of total tax collections) were able to submit their sworn tax statements through the internet. This contributed not only to strengthening inspection and control functions, but also to establishing new guidelines to improve the services provided to taxpayers. In addition, it constituted a basis for the development of new procedures and the improvement of existing ones. Likewise, in January 2005 a new centralized information system was implemented, which included a new online tax collection system through the commercial bank network.

Additionally, in order to improve control functions and services to taxpayers, a new registry of taxpayers was put in place. Previously, approximately 50% of taxpayers had not submitted sworn tax statements or had an unknown residence, making it difficult or impossible to apply inspection and control procedures. The new registry was heavily supported by information technology systems and linked to a broader tax identification number (TIN) applied to larger parts of the population.

### Improving inspection and controls

A new approach to inspection was implemented, which included the definition of taxpayer selection methods through fiscal intelligence and an intensive use of information technology. As of June 2005 approximately 80% of the cases subject to inspection were selected through automatic methods without the participation of tax officers.

The most important automatic fiscal intelligence processes currently applied in NTS include the following:

1. Comparison of declared sales versus informed purchases, whereby sales declared by a supplier are

compared with the aggregation of purchases declared by his/her clients.

2. Transaction verification processes, for taxpayers who sold merchandise or services via credit card for an amount greater than declared, for taxpayers adhering to the *simplified regime*<sup>4</sup> who sold with credit cards, and for taxpayers with expired TINs who continued to sell via credit cards.
3. Automatic sanctions for taxpayers who did not submit purchase- and sales-books as required by the tax administration.
4. Identification of duplicate invoices utilized by more than one taxpayer for fiscal credit.

In addition, beginning August 2005, a new *fedatario* (notary) unit was introduced on a national scale to identify evasion through simulated purchasing procedures.

## Anti-corruption and VAT refunds for exports

For a better appreciation of the reforms and their link to outcomes, it is helpful to look at a particular segment in more detail. The process of value added tax (VAT) refunds for exports was selected on the basis of its relative importance, particularly in developing countries.

### Rationale for VAT refunds

VAT refunding is defined as the process of reimbursement of taxes paid by exporters to obtain the export product and is based on the general international trade principle that "countries should not export taxes". Specifically, tax refunds for exports are accepted as an international norm because: (i) taxes should be charged only to final consumers in the importing country in order to avoid double taxation on capital goods, inputs, services, and other necessary expenditures actually made by exporters, and (ii) taxes are an important component of merchandise and therefore of its competitiveness.

Although three taxes are subject to refunding under Bolivian law – namely, the VAT, the specific consumption tax, and the customs duty – VAT refunds make practically all of the refund claims in the country. VAT refunds are made for up to 13 % of the value of the merchandise, free on board, considering the maximum fiscal credit generated by the purchases and in proportion to exports versus internal sales, which are not subject to tax refunds. In addition, VAT refunds can also be sold to third parties, who can use them to pay their own taxes. Finally, verification of exporters' requests prior to issuance of VAT refund securities can be either *ex ante* or *ex post*<sup>5</sup>.

4 The so-called *simplified regime* was created in Bolivia to facilitate payment of taxes by artisans, small traders and sutlers. To be part of this tax category, taxpayers must demonstrate they hold a capital within the range 1,602 - 4,940 U.S. Dollars. Once this has been established, taxpayers are accountable for bimonthly tax payments of 6,27-26,70 U.S. Dollars. In practice, this tax regime has been a way to evade paying taxes by many large businesses that are "camouflaged" as small or negligible. As of 2006, the *simplified regime* accounted for only 0,03 % of total tax collection. This finding related to Bolivia having one of the largest informal sectors of Latin America.

5 In the case of *ex ante* requests a review of documentation and tax facts precedes delivery of VAT refund certificates, while in the case of *ex post* requests VAT refunds are granted once exporters present a guarantee for an amount equal

3 During the period 1999-2003, on average and in constant 1990 prices, the Bolivian economy grew at 1.97 % whereas during the period 1993-1998 growth had been 4.74 % <http://www.ine.gov.bo>

## The corruption risk map before the reform

The inspection and control processes and procedures applied to VAT refunds before the reform were extremely complex, with heavy reliance on programming mechanisms and discretionary methods of verification, as well as scant use of IT systems. As a result, they were prone to corruption. The corruption risk map in Box 3 identifies the vulnerable points of the procedure.

Note that the entire procedure was executed by two tax officers – the VAT refund officer and the inspection officer – giving them substantial discretionary power.

## The fraud and corruption chain

To receive a VAT refund, under both the old and the new system, exporters must obtain the corresponding fiscal invoices for acquisition of inputs, raw materials, or services necessary for the merchandise being exported. Based on a number of inspection processes, the NTS identified four different types of fraudulent invoices. While the first type – false and cloned invoices – is not authorized by NTS, the other three types of invoices are. However, when used for fraudulent activities, these invoices come from different sources: (i) fictitious suppliers<sup>6</sup>, (ii) false or nonexistent suppliers<sup>7</sup>, and (iii) registered suppliers. In addition, exporting may or may not have taken place, or the actual volume or quality of the merchandise

to the requested reimbursement, and inspection or auditing and control activities take place within 120 days of issuing the VAT refund certificates.

6 Fictitious suppliers are persons of generally low economic condition who obtain a tax identification number under the pretense of being a supplier, receive authorized invoices from the tax administration, and sell or give them to fraudulent exporters.

7 False or nonexistent suppliers are persons with false identity in the tax registry who receive authorized invoices from the tax administration, and use them for fraudulent activities.

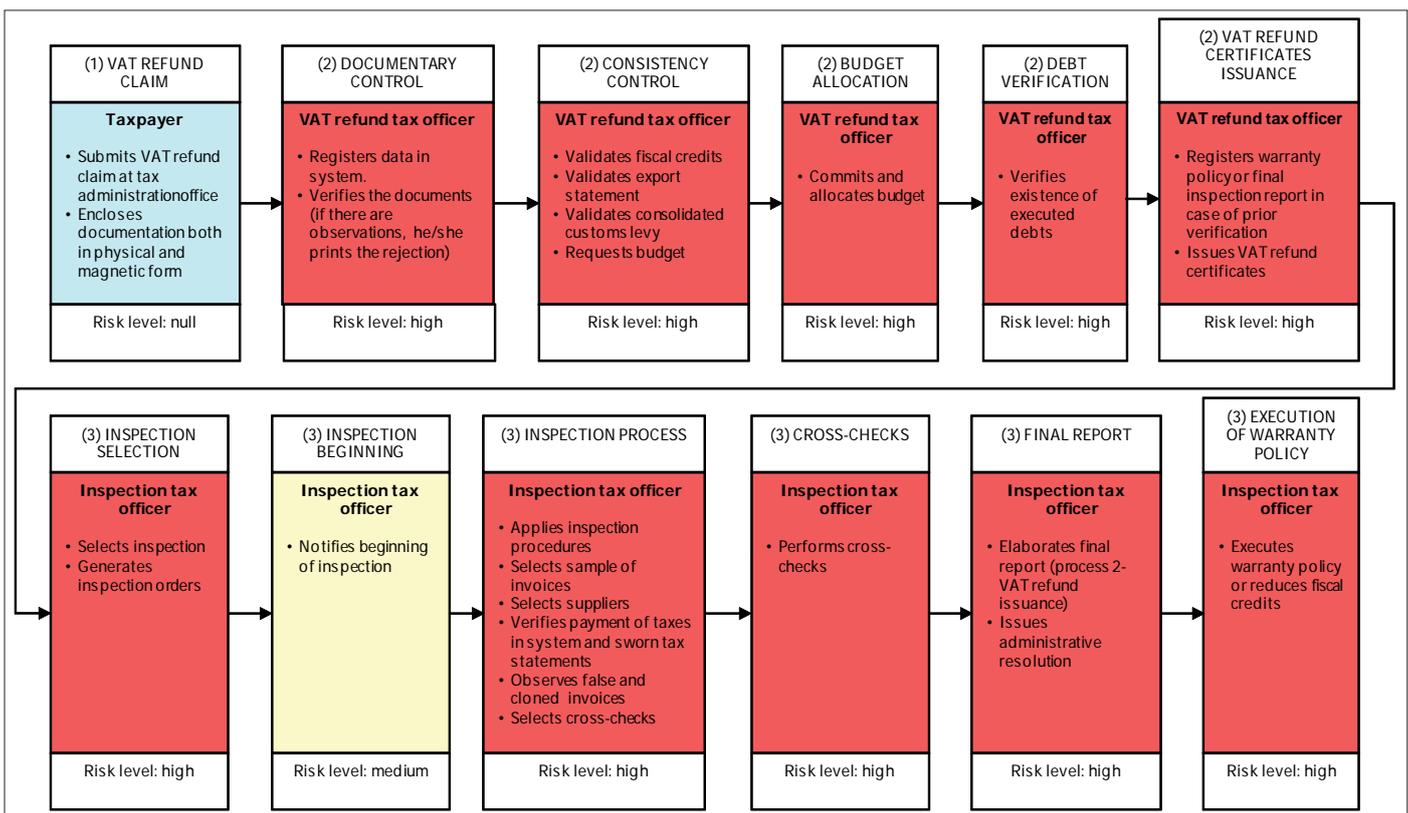
exported may have been lower and the value of the merchandise therefore smaller than the value registered in the export statement. Finally, an exporting company could be fictitious. Given these potential distortions, at least three different types of VAT refund fraud can arise with the collusion of unscrupulous tax officials, as the figure in Box 4 illustrates:

1. A fictitious company may obtain false or authorized invoices from false, nonexistent, or fictitious suppliers, which are then used to request and obtain VAT refunds even though the company has not exported anything at all.
2. A real company can purchase inputs or services without any invoices and thus avoid making any tax payment on these inputs, then use false invoices or authorized invoices from false, nonexistent, or fictitious suppliers to request and obtain VAT refunds.
3. A real company may buy goods or services with an authorized invoice, but sell those goods or services in the domestic market instead of using them for exporting, while nevertheless using the invoices to request and obtain VAT refunds.

## The corruption risk map after the reform

During the first years of the reform, the revenue administration learned from past experiences and developed new processes and procedures for VAT refunds. They were much simpler, more reliable, and heavily supported by information technology and systems. These measures reduced personal contact between tax officials and taxpayers and made operations much more transparent. As the figure in Box 5 illustrates, under the new procedure there are less vulnerable points. Now, an automated system replaces a number of processes previously controlled by just one or two officials,

**Box 3: Corruption risk map of VAT refunds procedure before the reform**



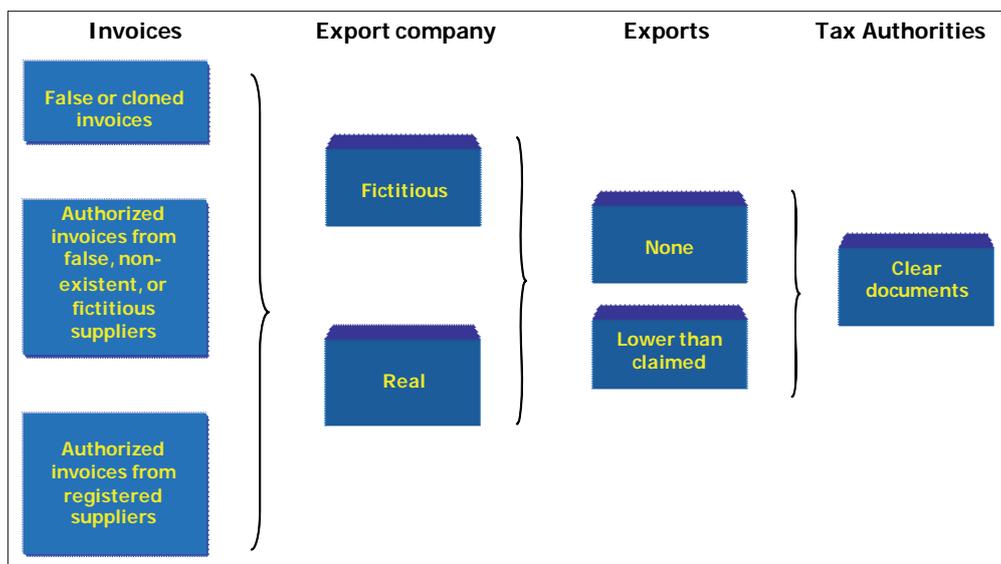
inspections and cross-checks are performed by different tax officers, and discretionary activities are drastically limited.

Nevertheless, despite the progress made, some vulnerabilities to corruption persist in the new VAT refund process. The table in Box 6 presents the process flow matrix for VAT refunds after the reform.

### Impacts of the reforms on VAT refunds for exports

The graph in Box 7 shows the results of the reform in terms of tax collection. All but two taxes collected by the revenue service reflect an outstanding performance. Moreover, a closer look at the sum of all taxes which are impacted by tax officers' operations also displayed positive annual variation rates, ranging from 9.61% to 20.23%. This outcome should not be surprising given all the advances described above. The findings are further reinforced by VAT evasion figures – a better indicator of efficacy of a tax administration – that show a notable downward trend: 42% in 2001, 39% in 2002, 35% in 2003 and 29% in 2004<sup>8</sup>. In general, the changes in processes and procedures for VAT refunds have had a significant positive impact during the institutional reform period. Unlike exports, which showed a clear upward

### Box 4: The corruption chain in VAT refunds



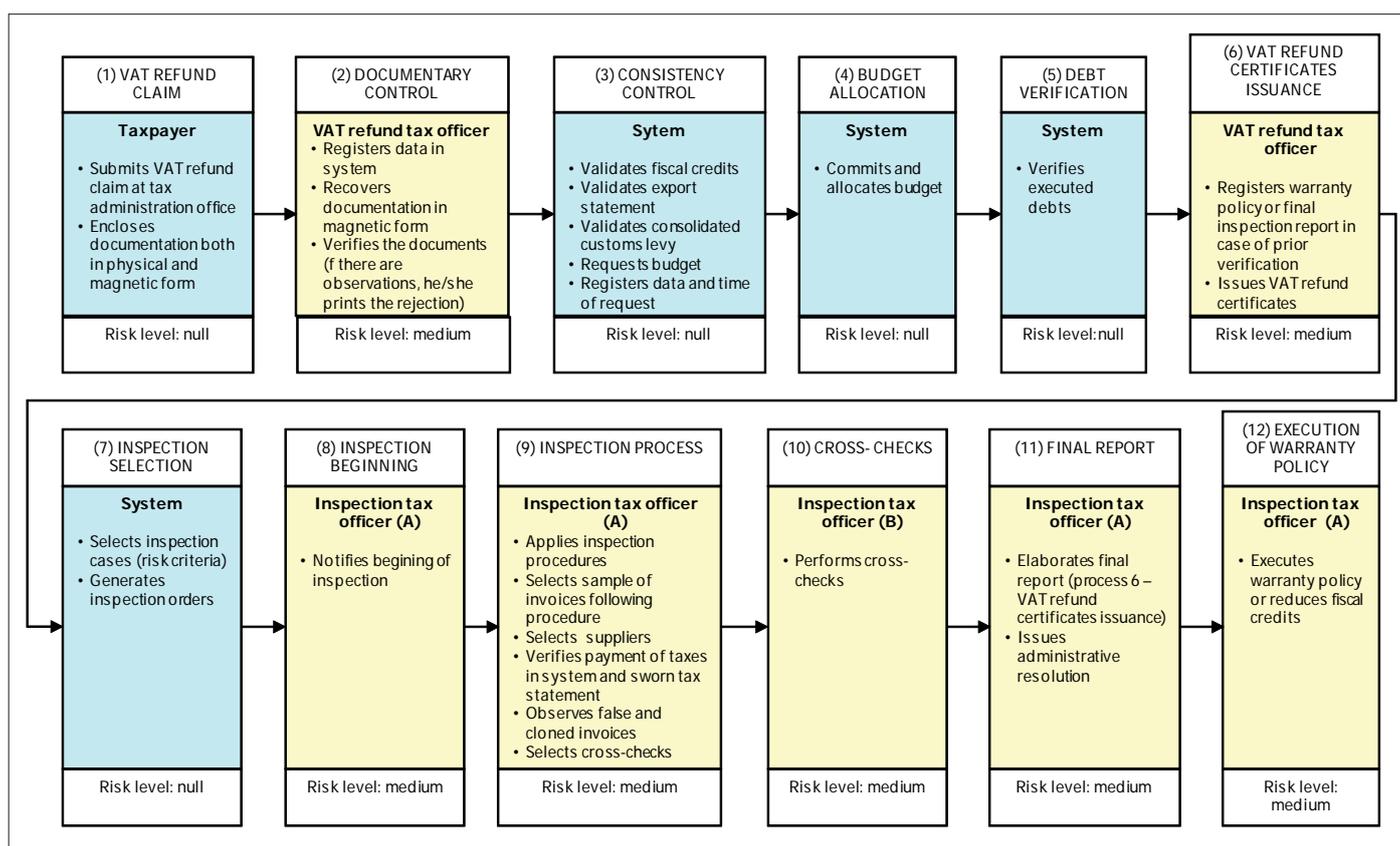
trend, VAT refunds remained rather stable, while at the same time the growth of VAT refunds as a percentage of exports dropped significantly, VAT refunds as a percentage of VAT collections fell, and VAT refunds as a percentage of the amount of taxes collected likewise declined. All these results suggest that unwarranted VAT refunds have been curtailed, and that by implication, corruption in the VAT refund process has also been reduced.

Two additional factors appear to have played a major role in this outcome, namely leadership and support from the IRP. First, the head of the agency was highly motivated and remained in the post for most of the reform process. Second, despite a lack of political will<sup>9</sup> throughout the

8 <http://www.impuestos.gov.bo>

9 In the beginning of the reform there was a minimum political will to

### Box 5: Corruption risk map of VAT refund procedure after the reform



execution period of the reform (August 2002 – December 2005), the technical unit of the IRP managed to provide effective continuing assistance to the NTS. In this context, competitive hiring and incremental salaries were crucial for a successful institutional change: for example, the coefficient of correlation between data on taxes heavily dependent on NTS operation and numbers of competitively hired personnel during the same period was found to be

relatively high (72 %).

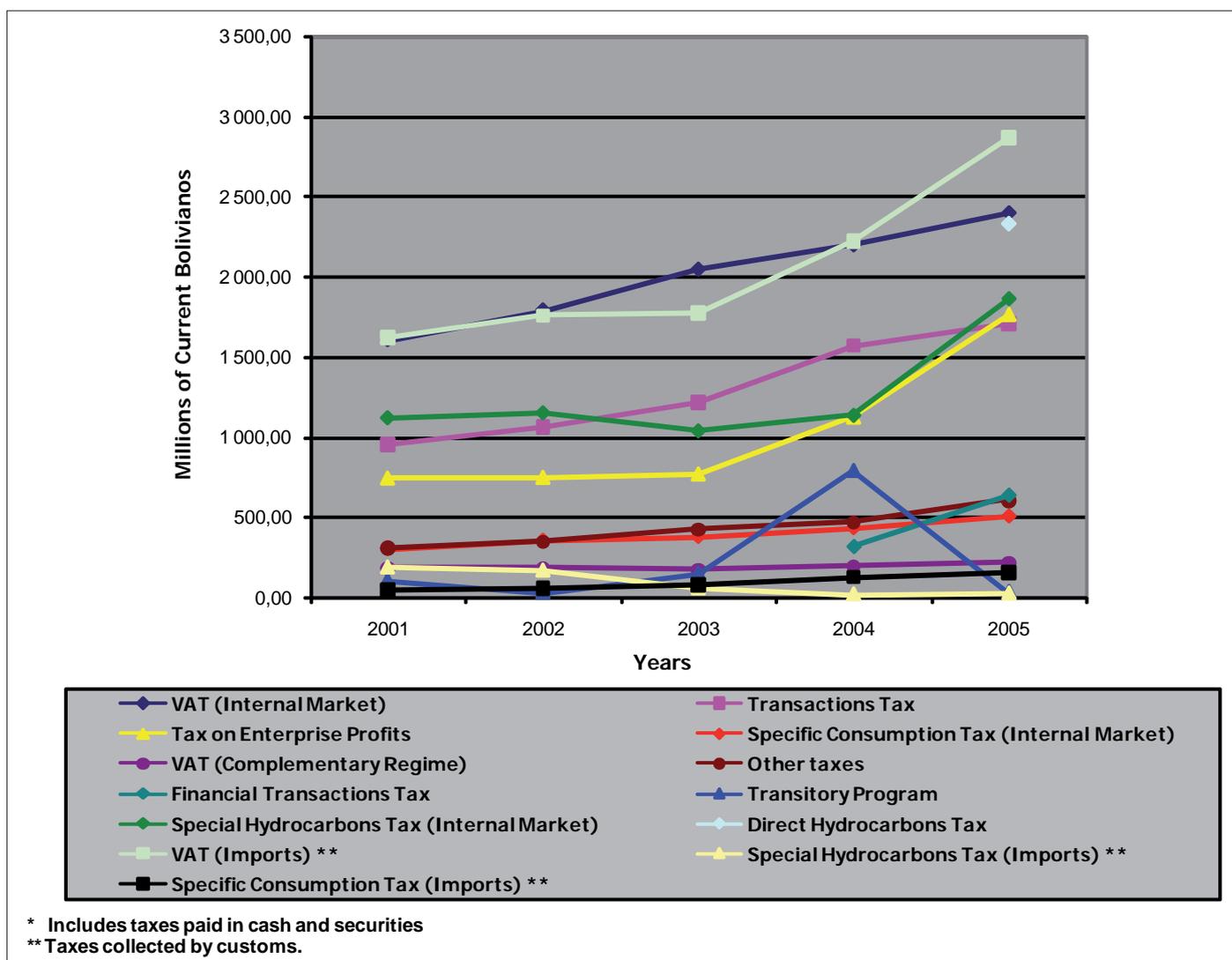
Despite this significant progress, fundamental constraints to and weaknesses of the reforms persist. The most important constraints pertain to current rules and regulations applied to VAT refunding, which provide incentives to commit fraud and corruption. The principal weaknesses, however, have to do with the still precarious coordination with Customs, even though most cases of fraud and corruption identified in this case study come from situations in which no real exportation occurs.

initiate the institutional change, but this could not be sustained mainly because of four changes of government within five years in Bolivia.

### Box 6: Process flow matrix for VAT refunds after the reform

Stages in VAT refund process	Vulnerabilities to or risks of corruption	Potential "early warning" indicators	Possible remedial measures
<b>1. VAT refund claim</b> <b>Taxpayer:</b> 1.1 Submits VAT refund claim at tax administration office 1.2 Encloses documentation both in physical and magnetic form	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> </ul>
<b>2. Documentary control</b> <b>VAT refund tax officer:</b> 1.1 Registers data in system  1.1 Recovers documentation in magnetic form 1.2 Verifies the documents (if there are observations; he/she prints the rejection).	<ul style="list-style-type: none"> <li>➤ Accelerates registration of data in the system in exchange for a bribe</li> <li>➤ Ignores errors or lack of documentation for a bribe</li> <li>➤ Ignores observations in documents for a bribe</li> </ul>	<ul style="list-style-type: none"> <li>➤ Perception of corruption increases over a certain range</li> <li>➤ Data inconsistencies above a given threshold</li> <li>➤ Data inconsistencies above a given threshold</li> </ul>	<ul style="list-style-type: none"> <li>➤ Automation to speed up data registration in the system</li> <li>➤ Automated random checks to detect anomalies; self –assessment</li> <li>➤ Automated random checks to detect anomalies; self –assessment</li> </ul>
<b>3. Consistency control</b> <b>System:</b> 1.1 Validates fiscal credits 1.2 Validates export statement 1.3 Validates consolidated customs levy 1.4 Requests budget 1.5 Registers data and time of request	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> <li>➤ None</li> </ul>
<b>4. Budget allocation</b> <b>System:</b> 4.1 Commits and allocates budget	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>
<b>5. Debt verification</b> <b>System:</b> 1.1 Verifies executed debts.	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>
<b>6. VAT refund certificates issuance</b> <b>VAT refund tax officer:</b> 1.1 Registers warranty policy or final inspection report in case of prior verification 1.2 Issues VAT refund certificates	<ul style="list-style-type: none"> <li>➤ Accelerates registration of warranty policy or final inspection report for a bribe</li> <li>➤ Accelerates issuance of VAT refund certificates for a bribe</li> </ul>	<ul style="list-style-type: none"> <li>➤ Perception of corruption increases over a certain range; number of refund claims increases over a given range</li> <li>➤ Perception of corruption increases over a certain range; issuance of VAT refund certificates increases over a given range</li> </ul>	<ul style="list-style-type: none"> <li>➤ Automation to speed up registration of warranty policy or final report</li> <li>➤ Automation to speed up issuance of VAT refund certificates</li> </ul>
<b>7. Inspection selection</b> <b>System:</b> 7.1 Selects inspection cases under risk criteria	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>	<ul style="list-style-type: none"> <li>➤ None</li> </ul>
<b>8. Inspection beginning</b> <b>Inspection tax officer (A):</b> 8.1 Notifies beginning of inspection	<ul style="list-style-type: none"> <li>➤ Delays beginning of inspection for a bribe</li> </ul>	<ul style="list-style-type: none"> <li>➤ Number of days before inspection takes place after VAT refund certificates are issued, number of refund claims increases over a given range</li> </ul>	<ul style="list-style-type: none"> <li>➤ Automation to notify beginning of inspection</li> </ul>
<b>9. Inspection process</b> <b>Inspection tax officer (A):</b> 1.1 Applies inspection procedures  1.2 Selects sample of invoices following procedure 1.3 Selects suppliers  1.4 Verifies payment of taxes in system and STS 1.5 Observes false and cloned invoices 1.6 Selects cross-checks	<ul style="list-style-type: none"> <li>➤ Overrides inspection procedures for a bribe</li> <li>➤ Overrides procedure for selecting sample of invoices for a bribe</li> <li>➤ Overrides procedure for selecting suppliers for a bribe</li> <li>➤ Ignores verification for a bribe</li> <li>➤ Ignores false and cloned invoices for a bribe</li> <li>➤ Overrides inspection procedures for selecting cross-checks for a bribe</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ex post review determines deviation over a given threshold</li> <li>➤ Ex post review determines deviation over a given threshold</li> <li>➤ Ex post review determines deviation over a given threshold</li> <li>➤ Data inconsistencies above a given threshold</li> <li>➤ Data inconsistencies above a given threshold</li> <li>➤ Ex post review determines deviation over a given threshold</li> </ul>	<ul style="list-style-type: none"> <li>➤ Compliance of inspection procedures is subject to ex post review</li> <li>➤ Compliance of sample selection procedure is subject to ex post review</li> <li>➤ Compliance of suppliers selection procedure is subject to ex post review</li> <li>➤ Automation to verify payment of taxes in system and STS</li> <li>➤ Automation of random checks to detect anomalies</li> <li>➤ Compliance with cross-checks selection procedure is subject to ex post review</li> </ul>
<b>10. Cross-checks</b> <b>Inspection tax officer (B):</b> 10.1 Performs cross-checks	<ul style="list-style-type: none"> <li>➤ Overrides inspection procedures for performing cross-checks for a bribe</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ex post review determines deviation over a given threshold</li> </ul>	<ul style="list-style-type: none"> <li>➤ Compliance with cross-checks selection procedure is subject to ex post review</li> </ul>
<b>11. Final report</b> <b>Inspection tax officer (A):</b> 1.1 Drafts final report  1.2 Issues Administrative Resolution	<ul style="list-style-type: none"> <li>➤ Recommends issuance of tax refund certificates without justification</li> </ul>	<ul style="list-style-type: none"> <li>➤ Amount of tax refund increases over a given range<sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>➤ Incentives for high performance, sanctions for corrupt behavior, career development, competitive salaries, automation</li> </ul>
<b>12. Execution of warranty policy</b> <b>Inspection tax officer (A):</b> 12.1 Executes warranty policy or reduces fiscal credit	<ul style="list-style-type: none"> <li>➤ Ignores expiration dates of warranty policy or refrains from reducing fiscal credit for a bribe.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Number of executed warranty policies decreases over a given range</li> </ul>	<ul style="list-style-type: none"> <li>➤ Incentives for high performance, sanctions for corrupt behavior, career development, competitive salaries. Automation</li> </ul>

**Box 7: Tax collections by type of taxes\* (in millions of current Bolivianos)**



## Conclusions

The following conclusions can be drawn from the above analysis:

1. By reducing the amounts of unwarranted VAT refunds paid to exporters, the institutional reform of the NTS contributed to reducing corruption in this process.
2. An anti-corruption strategy can only be successful within the context of a broader institutional reform of tax administration.
3. The process flow approach appears to be an effective tool in locating the risks and designing measures to prevent corruption in the revenue service.
4. Improvements in VAT refunding procedures require the intensive use of information technology, which can reduce the discretion of tax officials and enhance transparency in VAT refund processes.
5. To maximize its effectiveness, an anti-corruption programme must engage all major stakeholders (i.e. the judiciary, the Ministry of Finance and Customs).
6. A sound legal framework, together with institutional arrangements for appointment of senior NTS authorities to prevent capture by political or economic interests,

and professionalization of civil servants may play a role in sustaining the reform but may prove insufficient in the absence of political will. Hence, the only element to keep momentum and commitment to reform will be the continual delivery of critical results. ■

*All tables and graphs were originally published in Zuleta et al (2007).*

## Bibliography

Hodgson, G., and Jiang, S., (2007) "The Economics of Corruption and the Corruption of Economics: An Institutional Perspective", *Journal of Economic Issues*, 41.4, December.

Zuleta, J. C., Leyton, A., and Fanta, E., (2007) "Combating Corruption in Revenue Administration: The Case of VAT Refunds in Bolivia" in "The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level", edited by Campos, J. E., and Pradhan, S., The World Bank.