BUSINESS TAXATION

Tax Compliance Cost Surveys
Using data to design targeted reforms

Businesses—especially small ones—often face heavy costs in the process of preparing, filing, and paying taxes in addition to the burden of tax payments. These compliance costs, added to fines, penalties, and the risks of onerous inspections and demands for bribes, often deter business creation and growth in developing and transition countries. A tax compliance cost survey can provide useful information for the design of reforms to reduce compliance costs and risks for small businesses. This note highlights key findings of tax compliance cost surveys conducted in South Africa, the Republic of Yemen, Ukraine, and Peru that measured the burdens on business. These surveys helped fine-tune the design of reforms to lower costs for businesses and improve their competitiveness.

While the fiscal tax burden on business (that is, the amount of taxes actually paid) is an obvious focus for potential reform, there is growing recognition that the costs to comply are also a burden, especially for smaller businesses. Costs to comply are measured both in financial terms (for instance, how much it costs to hire professional tax preparers or buy software for e-filing) and as the opportunity cost of staff time spent in preparing tax returns and related procedures.

Since compliance costs within most tax regimes are relatively fixed, the burden is usually highly regressive—a relatively minor cost for larger firms, but a very heavy burden for small businesses. For example, micro-enterprises in Ukraine that need to comply with profit tax, value-added tax (VAT), and payroll tax may face compliance costs equivalent to a turnover tax of up to 8 percent, which seriously hurts their competitiveness. Added to the burden of tax payments, compliance costs and related costs and risks are often the strongest deterrent to new business creation in many parts of the world.

Why measure tax compliance costs?

At the most basic level, if tax compliance costs are high in a country, policymakers need to know which taxes (profit tax, VAT, payroll taxes, or other taxes) and procedures (tax accounting, submission of tax returns, tax inspections) are causing most of the burden for businesses and should therefore be targeted for reform.

Jacqueline Coolidge

Jacqueline Coolidge (jcoolidge@worldbank.org) was Lead Investment Policy Officer in the World Bank Group from 2003 to 2008 and worked on tax administration reforms and removal of administrative barriers to investment from 1993 to 2008. She is an expert on compliance costs for businesses from taxes and regulations as well as on monitoring and evaluation of the impact of reforms to improve the investment climate. She is currently a consultant for the World Bank Group and other organizations.

This note and others in the series of IN PRACTICE notes on business taxation reform were developed as part of a joint program between the United Kingdom’s Department for International Development (DFID) and the World Bank Group’s Investment Climate Department (CIC). The program focuses on operational issues in tax reform, particularly those related to micro-enterprises and small businesses. The CIC business taxation product line helps governments implement effective tax systems to spur investment and economic growth.
Given the wide range of experiences, a tax compliance cost survey is often the best way to measure the costs and estimate the risks of tax compliance in developing and transition countries. Several studies of tax compliance costs have been carried out in OECD, and particularly anglophone, countries (Australia, Canada, New Zealand, the United Kingdom, the United States), which have documented the regressivity of tax compliance costs. But until recently, only a few small-scale studies had been conducted in developing countries (such as those in Croatia, India, and Malaysia).

The World Bank Group has recently completed some of the largest, most rigorous and comprehensive tax compliance cost surveys to date in developing and transition countries. In addition to quantifying the costs and risks mentioned above, these types of surveys can measure (i) business capacity for tax compliance (basic literacy and bookkeeping skills); (ii) perceptions about the availability of reliable information on tax compliance; (iii) attitudes about compliance and evasion as well as the competence and fairness of tax authorities; and (iv) the relative advantages and disadvantages of different tax regimes in a particular country.

Governments can use data collected from tax compliance cost surveys in multiple ways. Recent surveys of small businesses conducted in South Africa, the Republic of Yemen, Ukraine, and Peru help illustrate how the results can be used for three main types of objectives:

- To quantify specific compliance costs and pinpoint areas for reform;
- To test premises and provide empirical support for reforms;
- To monitor and evaluate reform progress.

**Box 1: South Africa’s New Tax Regime for Small Businesses**

The National Treasury of South Africa and the South Africa Revenue Service have initiated a number of reforms to small business taxation in order to improve efficiency, reduce unnecessary burdens, and improve compliance. While it is understood that micro-enterprises will not add much revenue, the government is interested in creating a culture of compliance and encouraging business growth, especially among previously disadvantaged ethnic groups.

Both anecdotal evidence and previous studies had suggested that small businesses were reluctant to pay taxes and concerned about the time and effort required to comply, the risk of making mistakes, and the penalties associated with such mistakes.

The National Treasury and the Revenue Service implemented a series of studies to gather more detailed information about the problem in order to design a new, optional simplified tax regime for small businesses. To account for the great diversity within South Africa, a set of surveys captured the costs of tax compliance among small businesses, involving: (i) professional tax practitioners; (ii) small and medium-sized business taxpayers; and (iii) informal firms. The information gathered through the surveys reinforced an earlier Foreign Investment Advisory Service (FIAS) recommendation, based on an analysis of the marginal effective tax rates, to raise the mandatory VAT threshold and offer a simpler tax regime for small and medium-sized businesses (SMEs).

The new regime, announced in the February 2009 Budget Address by the Minister of Finance, Trevor Manuel, raised the threshold for mandatory VAT registration from about $40,000 to $130,000. In addition, instead of paying corporate income tax based on profit, small businesses that opt for the new regime can pay a new turnover tax. This regime is expected to be roughly revenue neutral in terms of tax payments and revenue, but to significantly reduce the tax compliance burden for small businesses.

Small businesses that use the new regime should find it much easier to calculate their tax payments. In the past, many micro-enterprises struggled to fill out complicated tax forms and calculate taxable profits; the new regime allows for a simple calculation based primarily on annual turnover. The rate scale is progressive, and designed to ease and encourage graduation into the regular tax regime for businesses that grow beyond the threshold.

---

a. The South Africa business taxation reform program was supported by the World Bank Group and USAID. FIAS provided assistance in designing and supervising the three surveys and in developing three analytical notes based on the survey data.
compliance costs of small firms that grew enough to cross the threshold (see Figure 1).

While tax compliance costs for some micro-enterprises could be as high as 5 percent of turnover under the old system, the new simplified regime is expected to keep compliance costs below 2 percent of turnover for most small businesses. This should reduce the compliance burden and make tax returns simple enough for more small business owners to comply without outsourcing to expensive tax preparers. For smaller firms that outsource their tax preparation, the increase in the VAT threshold alone would save them almost $500 per year in tax compliance costs; for those who undertook VAT compliance in-house, it would save them roughly 45 to 70 hours per year.

Survey data can provide a high degree of detail to inform the design of specific business tax reforms. In the case of the Republic of Yemen, a key question is how to improve rates of voluntary formalization and compliance, taking into account constraints such as literacy and ability to keep basic accounts. The business tax regime for nearly all businesses (except those officially designated “large taxpayers”) has yet to move to self-assessment, although literacy rates have improved significantly over the years. Until reforms are enacted, any business that declares it is not keeping full accounts is taxed presumptively, and the great majority of businesses have opted for that system. In preparation for major reforms, the Yemeni government made a decision in principle to (i) exempt micro-enterprises from national-level taxation (but they may be subject to a small flat fee in lieu of regular income tax) (ii) require all other firms to use self-assessment, and (iii) create a new, “simplified turnover tax” regime for small businesses.

Thus in the Republic of Yemen, survey data were used to correlate turnover with number of employees and determine current capacity for bookkeeping by size of firm (see Box 2). More than three quarters of “small” firms (and two thirds of “micro” firms) indicated they keep at least minimal books. Survey data also confirmed that a majority of owners or employees of small firms had completed secondary school and could be expected to meet filing requirements for a turnover tax. The survey data were used to help define the parameters for the new simplified tax regime for small businesses.

Figure 1: Compliance Costs for Preparation of Tax Returns in South Africa

(Among SMEs that outsource tax compliance to professionals, 2007)

Note: X axis uses a modified scale to show the midpoints of firm segments based on turnover (converted to U.S. dollars from local currency).

As in most countries, tax compliance costs in South Africa were regressive, and therefore, a heavier burden for smaller firms than for medium-sized and large firms. Before 2009, the threshold for mandatory VAT registration was equivalent to about $40,000 in turnover per year.

Box 2: Using the Survey Data in the Republic of Yemen

The World Bank Group in the Republic of Yemen has been helping to design a new small business tax regime. The tax compliance cost surveys in the Republic of Yemen involved a representative sample of 950 businesses registered for tax in the six largest governorates, and 860 informal businesses in the same areas.

In addition to providing data for the design of the new tax regime, it is expected that the information and analysis can be put to use in other ways. For example, the data suggest that relatively more effort could be focused on large taxpayers, as the scale of evasion appears to be greater than that of medium-sized taxpayers. Although micro and small taxpayers also appear prone to evasion, the revenue yield from enhanced enforcement among such firms may not be worth the resources required to enforce their compliance.

The data can also be used in a public relations campaign, reminding informal firms of the costs and risks they face in the status quo and offering a comparison of the benefits of formalization, which may help encourage at least some firms to formalize.
Firms with annual turnover below the lower threshold might not have sufficient capacity to handle even a turnover tax (and would be subject to a flat, nominal “patent” tax), and those above an upper threshold could be expected to handle the regular regime.

If certain reforms are anticipated, then the questionnaire can be designed to collect the relevant data. For example, a survey can generate data that shed light on the business owner’s fundamental decisions: what legal form to choose; which sector; whether to grow larger or split a business into smaller pieces. Survey data can help correlate turnover, number of employees, and accounting capacity in determining the appropriate thresholds and other parameters associated with different tax instruments and regimes.

In Peru, where an optional simplified tax regime based on turnover has been available to many small businesses for several years, the authorities wondered why it was not more popular. A survey of professional tax practitioners inquired about the perceived advantages and disadvantages of the turnover tax versus the general tax regime. Survey responses suggested that the main reasons for lack of interest in the general tax regime were the upper threshold and resulting constraints on growth (see Figure 2).

**Testing premises and providing empirical support for reforms**

Many countries do not have a consensus among stakeholders (even within government) about the need for particular reforms. Survey data can often help tilt the balance. For example, tax compliance

---

**Figure 2: The Simplified Regime versus the General Regime in Peru**

(AMONG CERTIFIED PUBLIC ACCOUNTANTS, 2009)

---

**The simplified regime**

- Other reasons
- Do not know about this regime
- Requirements are too difficult to comply
- Client’s expectations to grow above S/500,000
- Fixed assets > S/126,000
- Net income > S/500,000
- Does not allow for client’s economic activity

**The general regime**

- Other reasons
- Allows to emit all invoices
- Lowest tax compliance cost
- The only regime that allows client to grow
- Only regime for which client is eligible
- Easiest regime to understand
- Did not advise

**Note:** Soles/3 = US$1. Multiple selection was allowed for both parts of this question.

**Source:** World Bank Group forthcoming.

**In the Peru survey, tax accountants were asked which reasons they give when advising clients (i) not to file under the simplified turnover tax regime, and (ii) to file under the general regime. Since the simplified regime was only allowed for businesses with annual turnover of S/500,000 (about $167,000), it is not intended for businesses that expect to grow beyond that size.**
cost surveys were used to argue the case for reforms in the Republic of Yemen and Ukraine.

In most developing countries, tax authorities are keenly interested in the prevalence of evasion, particularly in order to more effectively target their risk-based audits. While data on the degree of tax evasion are always suspect, some surveys have queried business taxpayers about how much income of “companies like yours” they believe is reported for tax purposes. This approach was used in the Republic of Yemen survey (see Figure 3).

At the time of the Yemen survey, anecdotal evidence suggested pervasive bribery in tax collection, yet substantiating data did not exist. The survey results suggested that more than half (54 percent) of the surveyed informal firms escape detection; the rest reported they had paid bribes to be left alone, provided free goods or services to tax collectors, or had to relocate or temporarily close to avoid detection (see Figure 4). Such information was a useful reminder that government officials may contribute to the problem of informality and that reforms could reduce opportunities for corruption.

In Ukraine, businesses were concerned about the burden of tax inspections. While official data said that barely 10 percent of businesses are inspected in any given year, anecdotal evidence suggested

---

**Figure 3: Estimated Profit Reported for Tax Purposes in the Republic of Yemen**

(among business taxpayers, 2008)

<table>
<thead>
<tr>
<th>Percent of respondents who believe most firms under-report profits (of a given percent)</th>
<th>Estimated percent of profits reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% or less</td>
<td>26–50%</td>
</tr>
<tr>
<td>46</td>
<td>27</td>
</tr>
<tr>
<td>53</td>
<td>30</td>
</tr>
<tr>
<td>26</td>
<td>46</td>
</tr>
<tr>
<td>53</td>
<td>17</td>
</tr>
<tr>
<td>48</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: FIAS 2008b.

Survey respondents were asked: “Having in mind businesses similar to yours (in the same line of this business, same size, and same area), . . . what percentage of their taxable profit would you estimate they usually report for tax purposes?” As shown in the figure, 48 percent of total respondents said that businesses like their own report 25 percent or less of their profits for tax purposes.

---

**Figure 4: Costs to Avoid Tax Payments and Remain Informal in the Republic of Yemen**

(among informal businesses, 2008)

<table>
<thead>
<tr>
<th>Percent of respondents who believe most firms under-report profits (of a given percent)</th>
<th>Estimated percent of profits reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% or less</td>
<td>26–50%</td>
</tr>
<tr>
<td>54%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Source: FIAS 2008b.

Survey respondents were asked: “Did your business experience any of the following problems [caused by the fact that it is not tax compliant]?”
inspections were much more common and the survey data confirmed the prevalence of visits from tax officials (see Figure 5). After correcting the basis of the official data to remove inactive companies, state-owned enterprises, and non-profits, the official data were somewhat more similar to the survey data, but a significant gap remained. Further investigation revealed that tax officials often make “control” visits to businesses for simple checks of cash registers, which are not considered by the tax authority as “official inspections.” However, firms see these control visits as formal inspections in terms of their disruption of normal business activities.

In this area, the findings of the Ukraine and South Africa surveys are in stark contrast. In South Africa, less than 5 percent of SMEs are subject to any kind of tax inspection or audit in a given year. South Africa uses risk-based audit selection to target its efforts on businesses most likely to evade significant amounts of tax, a much more efficient approach than subjecting most businesses to inspections on a regular basis.

Monitoring and evaluation of reform progress
The first round of tax compliance cost surveys conducted in a country collects baseline data that can be used to help design or fine-tune the reform agenda. Subsequent rounds may be used to monitor and evaluate the progress of reform. Ideally, a “panel” dataset captures responses from as many of the original respondents as possible. However, in most countries, the failure rate among many new businesses, especially among smaller firms, limits this option.

Distinguishing the effect of tax and related administrative reforms from overall economic development and other trends is one of many difficulties in measuring the impact of such reforms. In the ideal setting, the survey can incorporate quasi-experimental design with “treatment” and “control” groups. However, even the most advanced, reform-minded governments in countries with highly trained and capable civil servants may have difficulty carving out matched treatment and control groups. This is usually politically sensitive, but also may not be legally, fiscally, or technically possible. For example, discriminatory treatment in policy is unconstitutional in South Africa; any tax reform must be uniform and country-wide.

An option is to pair pilot regions for reforms a priori with similar regions, with selection of regions based on a predetermined set of socio-economic characteristics. However, the scope for such piloting may need to be confined to specific administrative procedures. In South Africa, for example, only relatively minor administrative reforms or outreach programs can be piloted. Given the sample sizes required for stable statistical comparisons, a rigorous quasi-experimental design and associated surveys to test the reform impacts may not be cost-effective for such minor efforts.

A more feasible alternative is a very detailed baseline survey and follow-up surveys with oversampling of certain groups within the general population that will deliver enough data for both cross-sectional and panel studies for future comparison. These surveys should be combined with improvements in the collection, analysis, and presentation of administrative tax statistics.

Lessons from tax compliance cost surveys
The tax compliance cost surveys completed in several different regions have proven their value in the usefulness of their data. Survey data were used in South Africa to help design a new, optional turnover tax regime for SMEs and to decide on the new

Figure 5: Businesses Inspected by the Tax Authority in Ukraine
(among legal entities, 2007)


Companies in Ukraine were asked: “Were there any inspections/audits (planned, unplanned, tax office documentary inspections/audits) at your enterprise conducted by the tax authorities, the pension fund and other social insurance funds in 2007?”

<table>
<thead>
<tr>
<th>Respondent firm turnover ($ thousands)</th>
<th>Percent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 37.5</td>
<td>33%</td>
</tr>
<tr>
<td>37.5–125</td>
<td>38%</td>
</tr>
<tr>
<td>125–625</td>
<td>48%</td>
</tr>
<tr>
<td>625–4,375</td>
<td>70%</td>
</tr>
<tr>
<td>Over 4,375</td>
<td>67%</td>
</tr>
</tbody>
</table>

In Practice Business Taxation
threshold for mandatory VAT registration. In the Republic of Yemen, the data were used to determine the parameters of the reformed tax regime, which in turn was intended to encourage self-assessment among small businesses. In Ukraine, the State Tax Committee expects to use the survey data to help inform and improve the system for risk-based audits. The Ministry of Finance in Peru plans to use the survey data to help improve the simplified regime for small business so it is more conducive to growth.

In addition to the basic survey reports, which present standard findings about tax compliance costs by size of company, sector, geographic region, and legal form, deeper statistical analysis can run regressions and test hypotheses to provide answers to more subtle questions. For instance, governments may want to know which informal businesses are most likely to formalize and how more can be encouraged to do so. Another question might target those firms outsourcing tax compliance work and determine whether it is more cost-effective than doing the work in house.

However, in order for the survey data to be accepted—whether in the design of tax reforms, to overcome resistance to reform, or to be used for monitoring and evaluation—the quality of the data must be particularly high in terms of statistical robustness. This requires scientific sampling and large sample sizes. It also requires very well-designed questionnaires that are tailored to the specifics of the tax regimes in each surveyed country and that avoid any ambiguity in respondents’ answers. Most important, delivering solid data requires an extremely high level of quality control and supervision of the survey companies and data analysis.

**Conclusion**

Tax compliance cost surveys in developing and transition countries can be used to provide richer detail about the tax compliance burden for businesses than might be available from standard international benchmarks such as the indicators measured by the Doing Business project. They can pinpoint a country’s problem areas—both technical and geographic—for reform priorities, such as individual taxes and procedures as well as tax offices in specific regions. This information can be extremely useful in designing appropriate tax reforms and monitoring their impact over time.


**Endnotes**

1 Organisation for Economic Co-operation and Development.

2 In most cases, firms are legally required to file tax returns completed by certified accountants.

3 This is particularly difficult for measuring changes in compliance versus evasion. See in particular OECD (2001).

4 “Experimental design” requires randomized assignment of subjects (usually individuals) to “treatment groups” (for example, those to receive a particular drug) and “control groups” (those to receive a placebo). “Quasi-experimental design” allows for non-random assignment, for instance, to matched jurisdictions (regions assigned to undertake reforms and similar regions assigned to maintain the status quo) in order to compare the outcomes.

**References**


**IN PRACTICE**

The Investment Climate IN PRACTICE note series is published by the Investment Climate Advisory Services of the World Bank Group. It discusses practical considerations and approaches for implementing reforms that aim to improve the business environment. The findings, interpretations, and conclusions included in this note are those of the author and do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent.

**About the Investment Climate Advisory Services**

The Investment Climate Advisory Services of the World Bank Group helps governments implement reforms to improve their business environments and encourage and retain investment, thus fostering competitive markets, growth, and job creation. Funding is provided by the World Bank Group (IFC, MIGA, and the World Bank) and over 15 donor partners working through the multidonor FIAS platform.

**IN PRACTICE BUSINESS TAXATION**


