How the VAT works

Value-added tax (VAT) is the core transaction tax for most countries. It involves every process of production and consumption along the value chain, and requires not only administrative capacity on behalf of the government entity (revenue authority), but also on the part of the private sector through accounting and reporting. As such, the implementation and structure of the VAT have direct implications on the business environment in which investors operate in terms of cost of compliance and formalization.

The VAT is one of three core tax instruments at the disposal of tax policymakers deciding how to deliver on their policy objectives. Alternative instruments (for example, turnover tax¹ and single-stage retail tax²) while widely used, tend to cause economic distortions and avoidable administrative burdens. By nature, turnover tax is unable to differentiate between consumption and investment; firms pay tax on the sale of both consumption and investment goods. “Cascading” occurs when a good is taxed more than once as it makes its way from production to final retail sale. As a result, firms tend to self-supply taxable goods and services rather than purchase taxable goods or outsource taxable services, since both activities give rise to irrecoverable VAT on inputs (Bird and Gendron 2005). In the case of single-stage retail tax, administering the system is challenging because the revenue authority must depend on the final seller to the public for tax collection—typically fragmented small businesses.

The VAT addresses these issues by withholding tax at each stage of production through a system of credits and refunds. Thus, it achieves the goal of taxing only consumption. In addition, if tax is evaded at the retail stage (the final stage of consumption), the VAT forgoes only that part of the potential tax base consisting of the retail investment climate

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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.
The VAT Across the Supply Chain

This example assumes a plastic factory is the beginning of the supply chain (that is, the factory does not make input purchases from other suppliers). It sells its product, malleable plastic, in bulk to a toy factory at a price of $100, plus $10 in VAT ($10 is owed to the government in tax).

The toy factory’s purchase price is $110 and sells it to a retail outlet for $300 plus $30 in VAT [in this case, only $20 is owed to the government in tax ($30 in VAT; $10 VAT credit for the tax paid on the input)].

The retail outlet’s purchase price is $330 and sells it to a consumer for $350 plus $35 in VAT [in this case only $5 is owed to the government in tax ($35 in VAT; $30 VAT credit for the tax paid on the input)].

<table>
<thead>
<tr>
<th></th>
<th>Plastic Factory</th>
<th>Toy Factory</th>
<th>Retail Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price</td>
<td>0</td>
<td>110</td>
<td>330</td>
</tr>
<tr>
<td>Sales Price</td>
<td>100</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>VAT*</td>
<td>10</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>VAT Credit</td>
<td>0</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>VAT payment to</td>
<td>10</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>government</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

At the end of the process, the companies have collected $75 in VAT on behalf of the government, but are able to recover any VAT they paid on their inputs; in this case, $40 in VAT credits. Accordingly, the net amount to the government of $35 represents the tax paid by the consumer—hence, the term consumption tax.


There is less incentive for firms to self-supply as value-added is no longer taxed multiple times. (See box, left).

One of the key principles behind the VAT is that it is a broad-based tax which is levied on multiple stages of production. The VAT is not a tax on production, but rather a tax on consumption; hence, VAT credits and returns play a critical role in the overall system. Companies can offset their VAT tax liability with VAT credits accrued when they pay for the inputs of their production. If credits exceed the liability (typically the case for exports, which are exempt from the VAT), a refund is provided.

The use of self-assessment, which requires that taxpayers determine their VAT credit or liability to the revenue authority, is critical for a VAT system to work effectively. To perform a self assessment, a firm must have the capacity to track its revenue and purchases and maintain financial records. In developing countries, many firms do not yet have this capacity.

How the private sector views the VAT

When any tax is introduced, it is natural for the private sector to be apprehensive. In the case of the VAT, the private sector is not only paying the tax, but also collects the tax on the government’s behalf. Thus, the private sector views the VAT as having multiple costs to business: i) the value of the tax itself; ii) the cost required to comply with VAT filing and returns; and, iii) the impact on firms’ working capital and cash flow.

These costs may lead firms to conclude that the only reason to participate in the process is to comply with the law. However, it has been suggested that because informal companies outside the VAT system are unable to claim VAT credits on their inputs, they have an incentive to formalize in order to reap this benefit (Bird 2005).

However, there is a “chicken or the egg” syndrome when talking about VAT credits as an incentive to formalize. For instance, the incentive for an individual firm comes into play only when a critical mass of firms actually comply with the system [that is, if the company providing the
inputs is not complying with the VAT, then there is much less incentive for the purchaser to comply as well. (See Figure 1.)

The implementation strategy should aim to ensure that the VAT does not push more firms into the informal sector, but rather acts as an incentive to formalize. This can be accomplished by focusing on the two opposite sides of the value chain spectrum (the initial input creators and exporters), as shown in the figure.

The VAT collection and payment system must be simple enough that there is an incentive (or rather a lack of disincentive) for the initial input creators to register and comply. At the other end of the value chain, the implementation team can use major exporters in building formal supply chains that will encourage their suppliers to also formalize.

**Addressing the challenges of introducing the VAT**

Not all countries are ready for the VAT, and for those that are, there is no universal approach to introducing this tax instrument. Challenges that arise in introducing a VAT system typically relate to three issues:

**Weak administrative procedures for a complex process.**
Due to the nature of the system, it is important to identify and address complex and unclear administrative procedures that provide opportunities for corruption. Ambiguous rules and procedures not only reduce the efficiency of the process itself, but lead to increased discretion on the part of tax administrators.

**The revenue authority honoring its side of the deal.**
The VAT refunds can be a point of friction between the private sector and the revenue authority. The revenue authority needs to provide timely refunds to the private sector, and the private sector needs to comply with the processes and present accurate and complete information.

**Misrepresentation on the part of the firms applying for refunds.**
Misrepresentation by firms takes many forms. It can be in the form of inflated refund claims, in which firms create fake invoices for purchases never made. Underreporting sales is also common, especially among smaller firms. Fictitious traders may be created by registering fake companies, which are used to submit export VAT refund claims. Domestic sales can be disguised as exports by firms using fake export invoices.

**Figure 1: Incentive to Formalize Across the Value Chain**

<table>
<thead>
<tr>
<th>Value chain:</th>
<th>Initial input creators (raw materials)</th>
<th>The rest of the supply chain (processing, packaging, manufacturing)</th>
<th>Exporters (finished goods)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive to formalize:</td>
<td>VAT credit is not a compelling reason to comply / formalize <em>(this is beginning of supply chain)</em></td>
<td>VAT credit is a reason to formalize, but only if the firm has “access” to formal inputs <em>(collect input VAT)</em></td>
<td>VAT credit is a significant reason to formalize <em>(will have substantial VAT credit to collect)</em></td>
</tr>
</tbody>
</table>

*Source: Author.*
These issues are addressed by improving the capacity of the revenue authority, and by clarifying and simplifying the procedures the private sector must follow. When introducing the VAT, it is important to assess both the revenue authority’s administrative capacity as well as the private sector’s capacity to comply with the VAT.

The role of revenue authority should be based on its current and future capacity to assist taxpayers in understanding their obligations and entitlements, identify non-compliers, and shift to a culture of trusting the taxpayer. Self-assessment is critical to successfully implementing the VAT, and convincing governments to change old habits can be difficult. The use of risk-based assessments for audits, which minimize the pool of companies that needs to be audited and allow the revenue authority to target high-risk companies, is a good way to free up and focus the audit function’s administrative capacity.

When assessing the private sector’s capacity to comply, there are two important questions to consider: To what extent does the average firm use bookkeeping and track financial records? Will compliance costs make up a significant amount of the firm’s cost, thus becoming an overwhelming burden? VAT registration thresholds (the criteria used to determine what firms should participate in the VAT system) should be at a level that can be realistically managed by the revenue authority and absorbed by the private sector. The weaker the capacity of the revenue authority and of small and medium firms to comply, then the higher the VAT registration threshold should be. A higher threshold reduces the number of firms participating in the system and accordingly, the administrative burden on the revenue authority. To help set an appropriate VAT registration threshold, the implementing team should provide a realistic assessment of the private sector’s and the government’s respective capacity to determine reasonable targets and longer-term goals. The targets are likely to be in the form of a phased road map that grows in complexity as capacity increases.

**Applying lessons learned to VAT implementation**

When rolling out the VAT, ensuring that good practices are adopted largely depends on: instituting simple and transparent laws and procedures; fostering a cooperative environment between the government and the private sector; and setting realistic timelines and targets. The following are examples of good VAT practices:

**Keep tax laws simple with limited exemptions, a zero rate for exports, and a high threshold.** Setting a higher VAT registration threshold relieves smaller firms, which represent a small portion of total VAT revenues, from the need to comply. A higher threshold also relieves the revenue authority from the cost of administering the tax. Good practice has been to set a high VAT registration level (how high is subject to the country context), and to allow voluntary VAT registration for businesses that are below the threshold so that they are able to participate and benefit from VAT refunds (Engelschalk 2007).

**Simplify filing, payment, and refund procedures.** Determining the appropriate filing frequency is important—the lower the filing frequency, the lower the compliance cost to the taxpayer (Engelschalk 2007). Reducing the number of VAT rates is a key step to simplifying the system. Good practice in VAT is that only one rate is applied to reduce compliance cost and uncertainty (Engelschalk 2007). This eliminates confusion on the part of the private sector, reduces the likelihood of incorrect VAT filing, and eliminates discretion on the part of tax officials.

VAT refunds are a key point of tension between the private sector and the government, largely a result of the low capacity of revenue authorities to make timely refund payments. Most VAT refund payments are made to large exporters (exports are typically zero rated and exempt from the VAT as the goods are consumed abroad). For instance, Lesotho has upfront refund payments for textile and garment exporters who are compliant and have monthly claims exceeding $15,000 (FIAS 2007).

**Map the detailed processes before streamlining them.** When launching VAT reforms, it is important to take stock of both the current processes that the taxpayer must follow to comply with the VAT as well as the back office procedures that tax officials apply. Mapping the process provides a baseline for discussion and a clear indication of where the
streamlining should focus (see Figure 2). In addition, once the government has a clear picture of the current processes, key decision-makers can take direct measures to streamline and develop an action plan for the short and medium term. After the streamlining has been completed, a re-map of the finalized processes provides a guide for tax officials in administering the new processes.

**Foster a cooperative environment.**
A strong sense of cooperation and commitment between the private sector and the government must be developed and maintained throughout the reform process. Reforms should include key government and private sector stakeholders’ contributions, and a culture of trust and compromise needs to be forged. Regular working groups and steering committees are useful in bringing the groups together to discuss key issues. Identifying “champions” for specific issues, tasks, and initiatives is a proven way to assign ownership and accountability.

Transparency is essential; the government should share pertinent information with the private sector early in the process in order to gather inputs, create trust, and encourage ownership among key stakeholders. Such was the case during the reform of Egypt’s income tax law. At various stages of the reform process, key articles, issues, and eventually the law itself were shared and discussed with business associations, accounting firms, and the media.

**Figure 2: A Process Map Before Streamlining**

*This figure illustrates a complex process across multiple “process owners” and its incremental time and cost for taxpayers.*

*Source: Author.*
Set realistic timelines and targets.
Setting realistic targets from the outset and phasing these targets along a timeline will maintain the momentum and prevent the government, stakeholders, and reform team from becoming overwhelmed with the size of the task. Phasing allows for i) quick wins, ii) gradual development of the revenue authority’s learning curve and expansion of its capacity, and, iii) mobilization of private sector resources to systematically address compliance issues. Also, the implementation team must set a clear exit strategy to ensure that the government follows through on the reform agenda after the VAT is introduced.

Conclusion

The VAT instrument has been successful in many countries, both in providing a key source of tax revenue and in shifting the tax burden from production to consumption. However, in some cases, governments have introduced the VAT without the support of the private sector, overlooked simplifying laws and procedures, or set unrealistic milestones and timelines that do not take into account the capacity of the revenue authority and private sector.

In order to successfully carry out VAT reforms, the implementation team needs to consider the dynamics of the current environment. Within this context, good practice can be applied to the overall strategy and target objectives to fit the plan, while taking into consideration the capacity of the revenue authority and the private sector. From a practical perspective, the process requires developing a solid client-advisor working relationship (with both the revenue authority and the private sector as key constituencies), filtering through the political economy and reality of the country, and aiming for tangible results. A typical outcome is the development of simplified laws and procedures that will help reduce the administrative burden on both the private sector and the revenue authority and maximize transparency of the process.

The benefits of a successfully functioning VAT system go beyond increasing tax revenue. Countries with a working VAT system have benefited from their improved ability to administer their income and personal tax regimes, a foundation for interaction between government and private sector, and the VAT’s positive impact on production (value-added) activities.
Endnotes

1 Turnover tax is a tax on revenue from the beginning to the end of the value chain.
2 Single-stage retail tax is a tax on all final retail goods (at the consumption stage).

References


IN PRACTICE

The IN PRACTICE note series is published by the Investment Climate Department (CIC) 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.

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CIC assists the governments of developing countries and transition economies in reforming their business environments, with emphasis on regulatory simplification and investment generation. CIC relies on close collaboration with its donors and World Bank Group partners—International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the World Bank—to leverage value and deliver tangible results for client governments. CIC is the operational center for IFC’s Business Enabling Environment Advisory Services and FIAS, the multi-donor investment climate advisory service of the World Bank Group.