VAT and Cross-Border Trade: Do Border Adjustments Make VAT a Fair Tax?

By Bert Mesdom

Bert Mesdom is a senior manager with PricewaterhouseCoopers in Belgium. The views expressed in this article are those of the author and should not be attributed to others. This article does not constitute professional advice.

Although the VAT is relatively easy to administer, it becomes more complicated when businesses operate across borders. In those situations, more than one jurisdiction may impose its VAT rules. If those rules don’t permit border adjustments, double taxation or non-taxation may occur.

One of the most important principles in VAT design is whether the tax operates on an origin or destination basis. That has a significant impact on the avoidance of double taxation and the equal treatment of imports compared with locally produced goods or services.

An origin-based VAT is imposed in the jurisdiction where the goods or services come from. That means an exporter has to levy VAT on the same basis, and at the same rate, as a local supplier. The principle assumes that imports in the country of destination are not subject to VAT.

A destination-based VAT is imposed in the jurisdiction where the goods or services go. That means an exporter does not have to levy VAT on his or her supply, because it is assumed the supply will be subject to VAT in the country of destination. The destination principle puts imports and locally consumed goods on equal footing and achieves neutrality in cross-border trade.

The destination principle is in line with WTO rules and isn’t considered a prohibited export subsidy. The WTO Agreement on Subsidies and Countervailing Measures states in footnote 1:

the exemption of an exported product from duties or taxes borne by the like product when destined for domestic
consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy.¹

This article will explain how border adjustments work from a technical perspective, the outcome if there were no border adjustments, and some key focus points regarding application of border adjustments. The purpose is not to dwell on technical details, but to show the reader how VAT operates in cross-border situations and how that may influence trade.

**Border Adjustments for Goods**

In most jurisdictions, goods are defined as tangible property. It is relatively easy to follow trade in tangible property, and VAT legislation often relies, when possible, on customs rules and documentation. Intangible property is much more difficult to follow and will be discussed later.

The best way to explain how the cross-border trade of goods is treated from a VAT perspective is to use an example in which we will describe the different moments when VAT comes into play. We will use two examples to illustrate how border adjustments guarantee a fair VAT result.

**Exports by U.S. Companies**

Let’s assume a U.S. company produces information technology hardware. The company buys raw materials in the U.S. for $1,000 and then uses its staff to assemble and market the hardware for a price of $2,000. The U.S. company sells both domestically and internationally (for example, to Belgium). Now imagine that the U.S. Congress introduces a VAT regime. How would the transactions in the supply chain of the IT hardware be treated from a VAT perspective? The overview below illustrates the relevant transactions.

**Transaction 1: Domestic Purchase of Raw Materials**

Assume the domestic purchase of the raw materials is subject to VAT. The transaction would be subject to U.S. VAT under both

US Supplier → USD 1,000 + USD 50 VAT → US Co → USD 2,000 + USD 100 VAT → US Customer

4. 21% VAT on import value (assume: 21% of USD 2,000 = USD 420)

US → Belgium

Int'l Customer → USD 2,000 + USD 0 VAT
the origin and destination principles. That is because the goods come from the U.S. and are consumed there. If we assume a VAT rate of 5 percent, the U.S. company must pay a total price of $1,050 to the supplier of the raw materials (the $1,000 sales price plus $50 VAT). The supplier will remit the $50 to the government.

Transaction 2: Domestic Sale of IT Hardware
The domestic sale of the IT hardware would, under both the origin and destination principles, be subject to U.S. VAT. That’s because the goods come from the U.S. and stay there. If we assume a VAT rate of 5 percent, the customer must pay a total price of $2,100 to the U.S. company (the $2,000 sales price plus $100 VAT). The U.S. company will remit the $100 VAT to the government. However, it could net the $100 VAT due against the $50 VAT paid on the purchase of raw materials described in Transaction 1. On balance, the U.S. company would pay $50 to the government. Depending on whether the customer performs activities that give him the right to deduct the VAT, it might be able to deduct the $100 VAT later.

Transaction 3: International Sale of IT Hardware
The international sale of the IT hardware will be treated differently depending on which principle applies. Under the origin principle, the transaction would be subject to U.S. VAT because the goods originate from the United States. That means the Belgian customer must pay $2,100 to the U.S. company (the $2,000 sales price plus $100 VAT). The U.S. company will remit the $100 VAT to the government and credit the $50 paid on the purchase of the raw materials described in Transaction 1.

Depending on whether the Belgian customer performs activities that result in a right to deduct input VAT, he might be able to deduct the $100 VAT paid. However, if the customer is not registered for VAT purposes in the U.S., he would be unable to deduct the tax via a VAT return. Instead it would have to recover the VAT through an alternate refund process that is often cumbersome. In any event, the Belgian customer will also have to pay Belgian VAT on the import of the goods in Belgium (see transaction 4).

Under the destination principle, the outcome is different. The export transaction would not be subject to U.S. VAT because
goods leave the U.S. for delivery in Belgium. That means the Belgian customer has to pay only $2,000 to the U.S. company (the $2,000 price and no VAT). The transaction, as an export, would be zero rated from the U.S. perspective — that is, treated as exempt with a right to deduct input VAT. The U.S. company would not have to remit any VAT to the government, but it would still be entitled to deduct the input VAT paid on the purchase or raw materials in Transaction 1. Otherwise the U.S. company would incur an economic disadvantage of $50. Because there is no VAT on this export transaction, the Belgian customer does not have to reclaim U.S. VAT, because none was paid.

Transaction 4: The Import of IT Hardware in Belgium

Belgium, as a member of the European Union, applies the destination principle for VAT. Consequently, it makes the import of goods subject to VAT irrespective of which approach (origin or destination) is chosen by the country where the goods came from. Goods imported into Belgium will be subject to Belgian VAT. That puts imported goods on equal footing with goods produced, sold, and delivered by domestic suppliers.

To calculate the VAT due on the import, Belgian VAT rules refer to the customs legislation and stipulate that the starting point for the taxable basis of the imported goods is the customs value, as adjusted for some items. For the sake of simplicity, we will assume that the customs value of the IT hardware is the same as the sales price: $2,000. Because Belgium has a VAT rate of 21 percent, the import will be subject to VAT in the amount of $420. This amount will be borne by the customer. In principle, it will always be the customer who must pay the import VAT to the government.

Note that if the U.S. adhered to an origin-based VAT, while Belgium adhered to a destination-based VAT, the customer would be taxed twice: once in the U.S. and once in Belgium. If the customer has no right to deduct input VAT, it would pay $520

---

2Different jurisdictions use different terminology, but the VAT logic remains the same.
3The VAT amounts to be paid on the importation will be calculated in euros. However, to make the example simple, we will continue to use dollar amounts.
VAT ($100 in the U.S. and $420 in Belgium) on products coming from the United States. That would lead to double taxation and would give the U.S. company a competitive disadvantage compared with Belgian suppliers — or suppliers from any third country that operates on the destination principle. Even if the customer had the right to deduct the input VAT, it would have to go through a cumbersome refund process to recover the $100 VAT, which might easily discourage purchase of U.S. products even where double taxation is avoided.

This example illustrates that the only solution that ensures equal treatment of exporters and domestic suppliers is the destination principle, under which the exports are zero rated for VAT purposes.

**Import by Foreign Companies**

We will again explain the impact of border adjustments using an example.

Two companies sell picture frames through an online catalog. Customers buy goods online, and after payment the picture frames are shipped to the home address of the customer. Company A is established in the U.S. and ships from a warehouse there. Company B is established in the European Union and ships from a warehouse in an EU member state. Both companies are active in the U.S. consumer market.

Company A will have to charge U.S. VAT on the sale of its products shipped from its U.S. warehouse. Without a border adjustment (that is, under an origin-based VAT), Company B has an incentive to ship goods from a country that applies a destination-based VAT and zero-rates exports. By doing so, it could bring goods into the U.S. free from VAT (because the importation in the U.S. would not be made subject to VAT). That would give the importer a competitive advantage over the domestic businesses.

To eliminate this distortion of competition, the import should be subject to VAT in line with the destination principle. If the import is subject to VAT at the same rate as domestic sales, both domestic and foreign products are treated equally from a VAT perspective. For that reason all imports, whether done by businesses or private individuals, should be subject to VAT.
Otherwise a private individual would have an incentive to shop in a country with a low VAT rate and bring the goods to the U.S. using either his or her personal luggage or a commercial carrier to ship them. To make this rule administrable, many jurisdictions have thresholds for private individuals to report and pay VAT on their imports. For example, a DVD costing $20 would not be subject to import VAT, but a flat-screen television or a watch costing $2,000 would be subject to import VAT.

Focus Points
Besides explaining the basic principles, it’s useful to highlight some of the key focus points regarding border adjustments. We will limit ourselves to the two most important issues from a business perspective.

The first point is that a destination-based VAT is vulnerable to fraud because exports are zero rated. Therefore it’s necessary to require sufficient proof of exportation. Usually that is done by relying on customs documentation.

If the U.S. introduced a VAT with different rates among the states, it would have to use a system like that in the EU to create export and import transactions. (In the EU those are called intra-Community supplies and intra-Community acquisitions.) The main difference with the country-to-country scenario is that one cannot rely on customs documentation, because the transactions take place within the same national customs zone. The problems with these transactions are the lack of proof of exportation and the inability to promptly spot fraudulent transactions.

VAT fraudsters exploit the fact that the country of dispatch (which zero-rates the intra-Community supply) and the country of arrival (which requires the recipient to report and pay VAT on the intra-Community acquisition) do not exchange information on a real-time basis. By the time the country of arrival has discovered that VAT on the intra-Community acquisition has not been paid, the supplier in the country of dispatch has already

---

4There are multiple other differences, such as the fact that private individuals are obliged to report and pay VAT on an intracommunity acquisition in only some circumstances. However, in this article we focus on the most important difference that causes problems regarding border adjustments.
recovered the VAT on the purchase of the goods that were subsequently sold without VAT as an intra-Community supply. This is one of the reasons why a federal VAT would be preferred over a state-by-state VAT.

The second point is how the import VAT is paid and by whom. Different parties can be held liable for a VAT payment: the customer, the supplier, or the person who holds possession of the goods (for example, toll manufacturers or lessees).

VAT rules may require the person liable for VAT to pay the tax directly to the customs authorities when the goods physically enter the country. The VAT paid can then later be reclaimed via the VAT return or refund procedure, assuming the importer of record has the right to deduct the VAT. Another option is that VAT would not be paid at the border, but later via a VAT return. In that case, the importer of record may report the VAT as both payable and deductible in the same VAT return.

Experience shows that whenever possible, foreign persons should not be required to pay VAT on imports if another party can do so. Rather, taxable persons who regularly file VAT returns should have to pay VAT on importation. The table below shows the EU member states that allow payment of the tax on imports via a VAT return.

**Border Adjustments for Services**

In theory, the VAT treatment of cross-border services should be exactly the same as for tangible goods. The principles and issues are the same. However, because services are intangible and can cross borders without customs control, it’s much harder to identify and control the destination of the service.

To achieve a fair VAT system, jurisdictions take different approaches. In the EU, the destination is applied under the place of supply rules (that is, the place of taxation). In a business-to-business (B2B) transaction in the EU, the general rule is now that the place of supply (the place of taxation) is the location where the customer is established. That means that a Belgian company that sells online software to a U.S. business would not have to charge Belgian VAT, because the supply “takes place” in the United States. One must then look at the rules in the U.S. to determine whether the supply is subject to U.S. VAT and at what
<table>
<thead>
<tr>
<th>Country</th>
<th>Can the payment of VAT due upon importation be deferred to the VAT return?</th>
<th>Is there a license necessary?</th>
<th>Is a cash deposit required (advance payment) to be allowed to defer the payment of import VAT to the VAT return?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, advance payment</td>
</tr>
<tr>
<td>BG</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CY</td>
<td>No</td>
<td>Not Applicable (N/A)</td>
<td>N/A</td>
</tr>
<tr>
<td>CZ</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>DK</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ET</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>FI</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FR</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DE</td>
<td>Yes</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
<tr>
<td>GR</td>
<td>No*</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HU</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>IE</td>
<td>Yes*</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
<tr>
<td>IT</td>
<td>No (but other deferral scheme)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>LV</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>LT</td>
<td>No*</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>LU</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>MT</td>
<td>Yes*</td>
<td>Yes</td>
<td>No (bank guarantee)</td>
</tr>
<tr>
<td>NL</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

*Note: The table reflects the VAT deferral rules for various countries. The abbreviations in the first column represent different countries.
<table>
<thead>
<tr>
<th>Country</th>
<th>Can the payment of VAT due upon importation be deferred to the VAT return?</th>
<th>Is there a license necessary?</th>
<th>Is a cash deposit required (advance payment) to be allowed to defer the payment of import VAT to the VAT return</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL</td>
<td>Yes^b</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>PT</td>
<td>No (but other deferral scheme)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>RO</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>SK</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SI</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ES</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SE</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>UK</td>
<td>No (but other deferral scheme)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: PricewaterhouseCoopers — A Guide to VAT in the 27 EU Member States, Norway and Switzerland — edition 2010

Legend:
- = positive for business
- = less positive for business
^Yes in case of major investment projects
^Certain conditions
^Yes in case importation of investment goods by companies specifically mentioned in the law
^Certain conditions
^Yes in case of non-current assets and certain goods (crude oil, LPG, CNG and others)
^Provided that the importer is VAT registered in Luxembourg
^On application and on a case by case basis
^If the importation is governed by the simplified customs procedure
^Payment of the VAT due on importation can be deferred if the goods are placed:
  - in temporary storage according to customs regulations;
  - in a free zone or in a free warehouse according to customs regulations;
  - under customs warehousing arrangements or inward processing arrangements according to customs regulations.
rate. Other jurisdictions have VAT rules providing that the transaction takes place where the supplier is established but is zero rated if the sale is made for a customer established abroad, similar to the export treatment mentioned above.

The attentive reader will have noted that the EU legislation uses the establishment of the business customer as a proxy to determine the destination of the service. Usually that gives a correct and fair VAT result, and the rule is relatively easy to administer for businesses.

Sometimes, however, the establishment of the customer (or any other proxy) is not where the services are used. Typical examples are telephone services and real estate. A customer established in the U.S. may be able to use his cellphone all over the world, and a customer doesn’t necessarily have to be established in the country where he rents a hotel room or buys a second home. One can see different VAT results depending on the proxies that are chosen. And it’s clear that it is sometimes very difficult for a supplier or customer to determine where services are used and whether they are subject to VAT in the country where they are used.

Because a proxy does not always help identify a correct destination for service, some countries have introduced so-called use-and-enjoyment rules. These rules override the proxy and make a service taxable for VAT purposes where it is effectively used and enjoyed. In principle, this would lead to the fairest results, but experience shows that it’s difficult to apply use-and-enjoyment rules, either because the supplier does not always know where the customer uses and enjoys a service, or because the rule relies on practical interpretations that may vary among jurisdictions.

Given the different ways to determine the VAT treatment of cross-border services, a more harmonized approach would reduce a lot of issues. The OECD is doing interesting work in this field and in 2010 published draft guidance for public consultation on the VAT treatment of internationally traded services and

---

5 See www.oecd.org: Guidelines on the application of VAT/GST to international trade in services and intangibles.
intangibles. A task force is working on guidelines to achieve fair but administrable results. If a VAT is introduced in the U.S., that draft guidance would be worth reviewing.

Conclusion

Border adjustments are necessary to design a fair destination-based VAT. Otherwise, local businesses may face unfair competition both domestically and internationally. That is true both for businesses that sell tangible goods and businesses that provide services. Border adjustments are easier to administer for tangible goods than for services. To achieve fair results, some proxies for services will be necessary. The OECD’s work can offer useful guidance on these important design features.