EFFECTS OF REMOVING THE VAT DE MINIMIS ON E-COMMERCE IMPORTS

CLIENT: POSTEUROP

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Executive summary

In December 2016, the European Commission proposed to modernise VAT for cross-border B2C e-commerce. The proposal is **a bundle of policies**, each with distinct effects. The present study identifies the specific effect of one of these bundled policies, i.e. the removal of the de minimis VAT exemption – a long-established provision for importation of low value items (less than €10-22). The de minimis on VAT, in the EU as elsewhere in the world, is a relief given because of the relatively high transaction costs of tax collections on small value items.

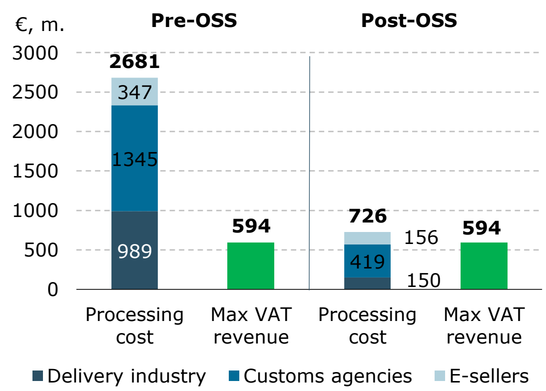
The key component of the Commission proposal is to extend the Mini One-Stop-Shop (MOSS – a solution for collecting VAT on digital services) into a new One-Stop-Shop (OSS), which will also cover online retail (i.e. e-commerce of goods). The OSS proposal is not per se the main focus of our analysis but is an important backdrop.

We find that the proposed removal of the VAT de minimis will **cause major and disproportionate costs on the delivery industry, on national customs administrations and on e-sellers** – costs that all flow towards **EU consumers**. Besides, the additional VAT revenue raised by removing this exemption is significantly smaller than the induced additional costs. Moreover, the Commission's IA finds negligible macro-economic benefits linked to a fully level playing field.

1. Unpacking the evidence relied upon by the Commission.

The analysis relied upon by the Commission evaluate multiple policies bundled together, thus failing to highlight the direct impact caused by the specific proposal to remove the de minimis. Our analysis relies on the very same evidence base that was before the Commission.

Figure 1 Impact of the VAT de minimis removal, based on the Commission analyses' assumptions



Source: Copenhagen Economics, based on Deloitte, EY

We find that **the cost impact of removing de minimis** is, **per year**, the following:

- Pre-OSS: €2.7 bn processing cost, compared to a max potential additional VAT revenue of €0.6 bn;
- Post-OSS: €0.7 bn processing cost, outweighing max potential additional VAT revenue of €0.6 bn.

The **delivery industry is significantly affected** and will face **additional processing cost of € 1 billion** (circa 40% of the total €2,7 billion in the current, pre-OSS situation, see Fig. 1). Within the delivery sector, traditionally the lion's share of low-value items is handled by **postal operators, facing a major cost impact**.

Customs agencies are public sector entities and the delivery industry includes several postal operators which are public owned. Thus the Commission's proposal to remove the de minimis imparts additional costs to the national taxpayers, as well as to industry, while the additional VAT revenue is much lower.

It is a principle of good regulation that only policies with a clear positive impact are introduced. Both the above findings show a negative impact assessment outcome and should induce a pause for reflection.

2. Even stronger concern from sensitivity test of key parameters assumed in the analyses relied upon by the Commission.

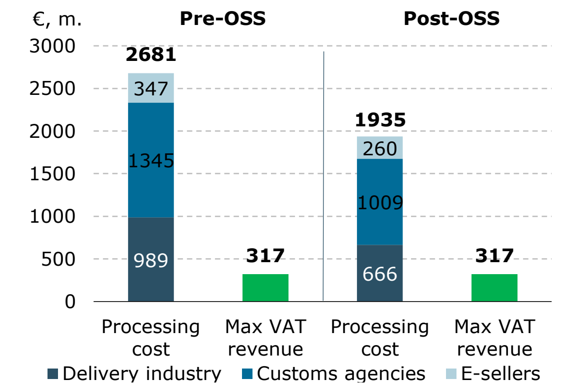
We identify three key parameters that affect dramatically the impact assessment outcome, yet these were not documented in detail in the analyses relied upon by the Commission or tested for sensitivity:

- % of import items adopting the voluntary OSS
- % of cost savings in VAT collection due to OSS
- Average value of low value items imported

We measure how the above assumptions affect the impact assessment and have set out transparently a sensitivity test based on different parameters. The sensitivity test shows that the impact assessment results are likely to yield a firmly negative range of results, as follows:

- Pre-OSS: €2.7 bn processing cost, compared to a max potential additional VAT revenue of €0.3 bn;
- Post-OSS: €1.9 bn processing cost, outweighing max potential additional VAT revenue of €0.3 bn.

Figure 2 Impact of the VAT de minimis removal, based on sensitivity test of key parameters



Source: Copenhagen Economics, based on Deloitte, EY

In a nutshell, the Commission proposals rely on a joint consideration of the impact of introducing OSS and removing the de minimis at once. By zooming onto the specific de minimis proposal, we identify that it has a significant negative impact.

Intuitively, the OSS, a digital technology, yields simplification and reduces the per-year processing costs. Yet, while the post-OSS cost impact is lower than pre-OSS, we find that also post-OSS, the cost impact of removing de minimis is major and outweighs the max potential additional VAT revenues.

In conclusion, we have established several negative consequences of removing the VAT de minimis. While we recognise and respect the policy objective of a fully level playing field, we have established that in practice this comes at a relatively great cost – questioning the efficiency of this specific proposal.

Further research could reasonably soon clarify whether the average value of low value items assumption, relied upon in the Commission IA, holds. Yet, for the two key parameters that refer to "the world with OSS", only introducing first the OSS – without changing the current de minimis rules – would allow to confirm whether these important assumptions hold. Hence, only by implementing OSS first, before considering any change in the de minimis, would the evidence base relied upon by the Commission be sufficiently established to clarify the impact of the specific de minimis proposal.

Introduction

In December 2016, the European Commission proposed to modernise VAT for cross-border B2C e-commerce. The proposal is a bundle of policies, each with distinct effects. Its stated four main objectives are to:[1]

- Minimise burdens attached to cross-border e-commerce from different VAT regimes which hamper intra-EU trade and unduly limit consumer choices;
- Provide a level playing field for EU businesses whether involved in the traditional economy, in domestic or cross-border e-commerce;
- Facilitate the monitoring of compliance and the fight against fraud for Member States' authorities, and;
- Ensure that VAT revenues accrue to the Member State of consumption.

The purpose of our study is to zoom in on the specific proposal to remove the VAT de minimis exemption.

In the first part of this study, we unpack the evidence in the impact assessment documents relied upon by the Commission. Based on this same evidence, we ask the question: what is the impact of removing de minimis? We do this twice, taking each time a different starting point:

- A baseline scenario pre-OSS (i.e. the current world), with the de minimis exemption in place
- A baseline scenario where OSS has been introduced, with the de minimis exemption in place

For each of the above scenarios we estimate the impact of removing the VAT de minimis, leaving unchanged the figures and assumptions included in the analyses relied upon by the Commission.

In the second part of this study, we review the key assumptions in the analyses relied upon by the Commission. We perform a sensitivity test, by varying these key parameters and then measuring the impact of removing the VAT de minimis. Once again, we do so taking as starting point both the pre-OSS and the post-OSS baseline scenarios.

1 The evidence in the Commission analyses proves the negative economic impact of removing the VAT de minimis

It is well known that, for low value items the cost of collecting VAT exceeds the collected revenue by a wide margin, since collecting VAT on these items is costly for custom authorities, delivery operators and businesses. This is why the de minimis was put in place to begin with and why similar policies have been introduced across the world. Hence, for low value items, the cost of collecting VAT today exceeds the collected revenue by a wide margin, and the removal of the de minimis would make it even worse (section 1.1). While OSS will reduce some costs, our analysis finds that, even when the OSS is fully implemented, the collection costs for low value items will still exceed the potential maximum VAT revenue (section 1.2). It is also important to remember that EU households will ultimately pay a large share of this new administrative burden, introduced by the removal of the de minimis (section 1.3). Besides, no clear benefits of removing the de minimis have been so far proven (section 1.4).

1.1 The cost of collecting VAT exceeds the collected revenue

For low-value items, the cost of collecting the VAT exceeds the tax revenues collected. This is because the collection of VAT for each item is associated with administrative costs, which do not vary with the value of the item. In fact, the tax revenue per item is proportional to the value of the good and can be, for low value goods, less than the costs. In order to cover the cost of collection, VAT should thus only be collected for goods with a value above a certain amount; this provides the basic intuition for a de minimis threshold. Stated differently, the borders and customs process includes significant frictions – as confirmed also by the analyses and discussions surrounding trade deals etc.

The impact assessment study for the Commission estimates that 144 million low-value items will become subject to VAT with the removal of the de minimis. This has the potential to bring in up to €594 m new VAT revenue.

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[1] European Commission (2016) Impact Assessment. SWD (2016) 382 final, p. 2.

The administrative cost of collecting VAT originally accrues to delivery operators, customs authorities and e-commerce businesses, and will in turn be passed down (in part or in full) to EU consumers and households. When a product is bought online from outside of the EU, the price generally does not include VAT. In many countries, when VAT is due (i.e. the value is above the de minimis), the delivery operator clears the item through customs, pre-pays the VAT duty for the consignee and then recovers it at the point of delivery.[2] Although the precise process can vary between member states the processing cost of collecting VAT is significant across all Member States. In particular, the processing cost of collecting the VAT from the consignee is time-consuming and can involve tasks such as contacting the consignee, paperwork before collection, money transfers and possibly returns (if the consignee is not reached).

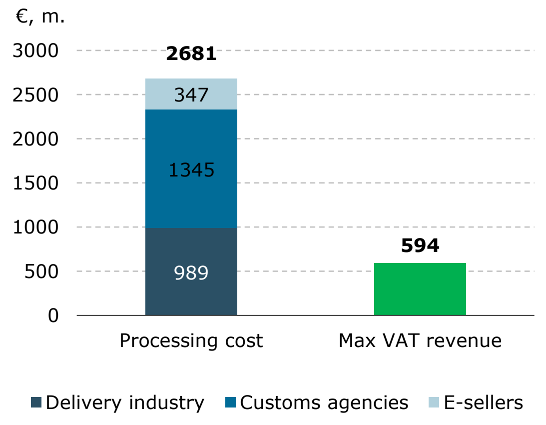
The impact assessment by the Commission finds that, with the current VAT processing system, removing the de minimis will cause a large administrative burden for delivery operators and customs authorities, see Box 1. The report states that "the removal of the small consignments exemption will increase substantially the number of packages which are required to be cleared by customs authorities"[3] and that:

> **the removal of the small consignments exemption will mean that [delivery operators] will have to process a significant larger number of packages through customs [... thus] an additional 150 million parcels will be subject to a VAT declaration, generating a total administrative cost of EUR 1.7 billion, instead of EUR 0.7 billion under the baseline scenario [today].**
>
> *Source: European Commission (2016) Impact Assessment. SWD (2016) 379 final, p. 30*

The evidence before the Commission thus confirmed that the Commission proposal imposes costs on delivery operators, to enable raising more tax revenues. This implies that the delivery operators (and their end-users) are de facto asked to subsidise the public budget. Most importantly, as shown below, the extra tax thus gained does not cover the costs imposed.

With the VAT processing system in place today, the collection of VAT is associated with large processing costs for delivery operators, customs administrations and businesses selling online.

Figure 3 Processing cost outweighs the VAT revenue when the de minimis is removed under the current system (pre-OSS)



Note: The figure illustrates the effect of removing the de minimis before the implementation of the OSS, i.e. we compare cost and VAT revenue with a baseline scenario with the current system; We show the VAT revenue at full compliance, i.e. the maximum VAT revenue for given parameters.
Source: Copenhagen Economics based on Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 2. See methodological annex for a detailed description.

Our analysis shows that, under the current system, removing the de minimis would lead to additional processing costs of €2,681 m. compared to a potential maximum VAT revenue of only €594 m (see Figure 3). This will ultimately lead to added costs for consumers.

[2] In alternative setups, the delivery operator takes the responsibility for VAT viz. the customs authority.

[3] European Commission (2016) Impact Assessment. SWD (2016) 382 final, p. 31.

If, as expected, the number of low-value items will continue growing, tracking the growth in e-commerce, the cost to society will increase as well.

Our results illustrate the potential VAT revenue that can be collected under full compliance, i.e. the maximum VAT revenue for given parameters (we opt for the most conservative approach to present these results). Since, as stated by Deloitte, compliance will decrease drastically with the removal of the de minimis, the additional VAT revenue will be lower than the amount we presented in Fig. 3. In other words, the findings in Deloitte portray an even more negative impact picture than what we have displayed in Fig. 3.

Box 1: Overall negative impact from removing the de minimis (pre-OSS)

The IA study prepared for the Commission includes evidence such that the removal of the de minimis has a negative overall impact under the current (pre-OSS) regime. To summarise, they find that removing the de minimis and distance selling thresholds implies that:

- EU consumers and households are likely to experience an overall negative impact, as consumer choice will decrease and prices increase due to higher administrative costs and increased taxation,
- The delivery operators will experience an increase from €0.7bn to 1.7bn in the administrative burden compared to today (+ €1bn, i.e. +143%), as an additional 150 million items will be subject to a VAT declaration,
- VAT revenues are expected to decrease by an estimated €0.05 bn due to more non-compliance,
- Cross-border e-commerce will decrease by 0.9% (€1.7 bn),
- E-commerce prices will go up by 0.5% and total quantity will decrease by 0.2%, and;
- non-EU businesses will be negatively affected (no specific estimate provided).

Source: European Commission (2016), SWD(2016) 379 final, p. 30-32.

Removing the de minimis comes at significant cost to the European economy

The current study corroborates previous literature in that the impact of removing the de minimis would be negative.

A known starting point is that the current de minimis at €22 is already lower than optimal. In fact, multiple studies indicate that the current de minimis in the EU should not be lowered but rather increased, in order to cover costs, see Table 1. In fact, empirical work by CBRA (2014, p.34), with data inputs from customs authorities and delivery operators, found that the cost-covering de minimis threshold for the EU is between €70-80. This follows from the fact that there are substantial costs involved in collecting VAT and these costs heavily outweigh the limited revenue collected on low-value items.

Table 1 Consensus in the literature in favour of higher de minimis thresholds

Author (Year)	Title	Conclusion
CBRA (2014)	The import VAT and duty de-minimis in the European Union – Where should they be and what will be the impact?	In the EU, the level of the de minimis that covers costs is between €70 and €80.
Laptiov et.al. (2016)	Rights of Passage: The Economic Effects of Raising the de minimis threshold in Canada	In Canada, the direct economic upside of raising the de minimis from CAD 20 to CAD 200 is estimated to between CAD 361-648 million.
Holloway & Rae (2012)	De minimis thresholds in APEC	For APEC-6 Economies, the net economic benefit of raising the de minimis to USD 200 is estimated to USD 6 bn.

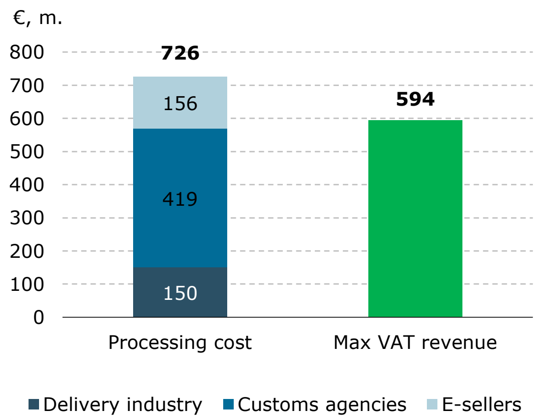
In other words, it is clear from the existing literature that the additional processing costs will outweigh the potential VAT revenue if the de minimis is removed.

1.2 Costs of collecting VAT to exceed collected revenues even when OSS is implemented

Simplifying measures can change the cost-benefit metric. However, the studies provided to the Commission present no convincing evidence to prove that introducing OSS will turn the impact of removing de minimis into a positive impact.

In fact, even though OSS will deliver some cost savings, this is outweighed by the substantial increase in the number of items that need to be VAT processed. This is a major factor, since the number of low-value items imported into the EU (below €22, currently VAT exempt) is 144m items, while those between €22 and €150 constitute 43m items per year. The number of low-value items (below €22) is thus over three times larger than items in the €22-€150 range. Therefore, it is unsurprising that, also post-OSS, removing de minimis, by causing extra processing activities over such a large number of additional items, yields a large cost impact for industry and public authorities.

Figure 4 Processing cost outweighs the VAT revenue when the de minimis is removed after the simplification measures (Post-OSS)



Note: The figure illustrates the effect of removing the de minimis after the implementation of the OSS, i.e. we compare cost and VAT revenue with a baseline scenario with the OSS, but when the de minimis still is place; We show the VAT revenue at full compliance, i.e. the maximum VAT revenue for given parameters.
Source: Copenhagen Economics based on Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 2. See methodological annex for a detailed description.

The additional processing costs of removing the de minimis after the implementation of the OSS is an estimated cost of €726 m., see Figure 4. This is conceptually akin to Figure 3 but we now incorporate cost reductions that follow from the introduction of the OSS. Our analysis show the VAT revenue based on full compliance for all items, both those that use the OSS and those that remain in the old system.

Indeed, the results of the impact study for the Commission confirm that removing the de minimis is likely to put a disproportionately large burden on both delivery operators and customs authorities, even if at the same time simplifying measures are fully implemented. In addition, policy makers should, of course, take account of the fact that implementation could imply transitional costs if the OSS is not fully up and running before the de minimis is removed.

The processing cost of administrating this collection depends on the extent to which non-EU sellers take up the option to clear items via the OSS or not. We evaluate the impact using the same assumptions as in the impact assessment study with high take-up of the OSS (75%) and extensive cost reductions both for items in the OSS (82% cost reduction) and not in the OSS (30% cost reduction). The result shows that the processing cost for industry and public authorities outweighs the VAT revenue, even based on the optimistic assumptions made in the studies prepared for the Commission. In part II we return to these results with a sensitivity test of the impact under arguably more realistic assumptions and find that the negative impact is likely to be much greater.

1.3 EU consumers will bear costs from the removal of the de minimis

The negative impact of removing the de minimis threshold will hurt European consumers and businesses. The increased administrative cost will result in higher prices for consumers or loss of profit for businesses, both to the disadvantage for European welfare. It will also be a disadvantage to third country e-sellers, however, the bulk of the additional costs are likely to be borne ultimately by European consumers.

The impact assessment study by Deloitte makes unsupported assumptions about the impact of the administrative cost of collecting VAT on small value items. They assume that the variable collection costs are fully passed on to the e-sellers in the third country. The background report by Deloitte states: "This cost is generally incurred by couriers and postal operators, and is assumed to be passed through to firms either as an explicit charge or as part of a shipping fee".[4]

The removal of the de minimis exemption is essentially an increase in the effective tax rate. As we have demonstrated, this tax is very costly to administrate, relative to the value of the items. A large part of the added cost is likely to be passed through to European consumers but there are several plausible scenarios for how this added administrative cost will affect European welfare.

One possible outcome is a shift to more goods being sold by European retailers (online or offline). In this scenario, the additional costs imposed on non-EU goods will induce consumers to stop buying goods from third-country e-seller and instead buy them from an EU-based seller. Without the de minimis, these goods will now be more expensive because of the introduction of a new tax and associated administration cost. The consumer – which previously favoured buying that item from a non-EU supplier – is now induced to buy the same product from the second-best option, e.g. from a European retailer. As a result, the consumer will be worse off than before the de minimis was removed. In economic terms, this implies lower consumer surplus. On the other hand, the European retailer now has more business and will be better off, i.e. higher producer surplus. This implies that part of the producer surplus gained by European businesses can be seen as a transfer from European consumers.

At the same time, some low-value goods will still be sold by third-country e-retailers to EU consumers. The price gap between non-EU and EU e-retailers could be significant enough to afford non-EU sellers a margin to raise prices after the de minims is removed, while still maintaining customers. In other words, non-EU sellers could therefore pass on some or all of the cost by raising the price to EU-consumers. The difference in price between the non-EU e-seller and its European competitor may in many cases be so large that even with a substantial price increase, the third country e-seller would still be the cheapest option. It is then plausible that any cost passed on to third country e-sellers may be passed through, in turn, to European consumers, who will then pay more for their goods. This will lead to higher prices on e-commerce goods, which will hurt European consumers.

Not only will European consumers pay this cost; if the cost is recovered on other products, it can spill-over on other product categories (i.e. items above €22). Multi-product e-sellers may choose to recover their cost on any of the products in their portfolio that best allow it. The low-value items may in this way be cross-subsidised by higher value goods, which may create spill-over effects across markets.

A further possible pattern is that only part of the cost incurred by delivery operators may be passed on to third-country e-sellers. The delivery operators may instead recover the rest of the cost elsewhere or lower their profit margin. The delivery operator may charge a fee directly to the European consumers, who will pay more for their good. The rest of the cost will either end up being a loss to the European delivery industry or recovered on other services.

For a more in-depth analysis of the effects on specific market agents, an analysis of pass-through of costs and taxes would have to be conducted. How much of a cost increase will be passed through to consumer prices depends on the incentive that firms have to respond to a cost increase by raising their prices. In general, pass-through of costs depends on three main factors:

1. The competitive structure of the market
2. Elasticity of supply
3. Elasticity of demand

The effect of competition on pass-through rates depend on whether there is substitution between those who experience the cost increase and those firms that do not. At the initial step, we expect all delivery operators to suffer increased administrative costs, i.e. the cost increase is industry-wide. In this case, we expect the pass-through to be strong, insofar as competition is also strong. The e-commerce marketplace for low-value goods seems – relative to other industries – quite competitive, due to the broad range of offers available online and relatively low entry barriers.

[4] Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 1, page 69

The sensitivity of firms (supply) is another important factor. As a simple example, consider a market with perfect competition and therefore prices at marginal cost. If firms are very sensitive (i.e. a flat supply curve) and if the marginal cost increases, the firm has no choice but to raise the minimum price at which it is happy to supply. Unlike cost variations, the variation in a tax is likely a shifter in the supply curve.

Elasticity of demand will depend on the relative value of these goods (at current prices), alternatives available and consumer reactions to a price increase. We do not see in the analytical documents upon by the Commission how these factors are assessed.

We conclude that several of the factors associated with a high pass-through are expected to be in place in this market, which is a strong indication that a large share of the costs arising from the Commission proposal to remove de minimis will flow through to EU consumers.

Insofar as the current analyses before the Commission do not quantify pass-through of costs to EU consumers, this is not consistent with the features of the market and leads to an imprecise assessment of impact.

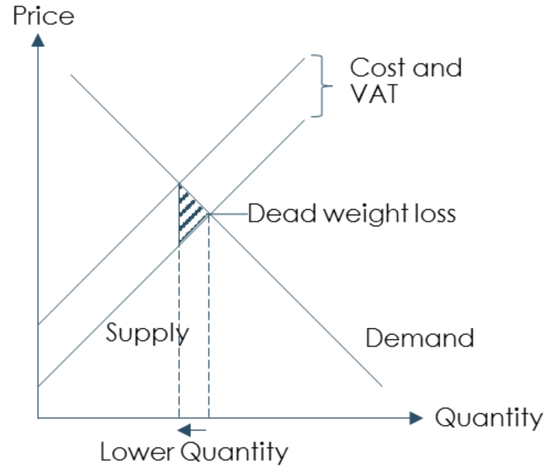
Unless new evidence is produced, we conclude that removing the VAT de minimis will result in significant costs passed through to EU consumers.

Supply and demand may not meet, in some cases, leading to lower social welfare

For some low-value goods, the VAT and the processing cost associated with the collection of VAT can even exceed the value of the goods. When the cost of collecting VAT is higher than the value of the goods, this may result in an unreasonably high price. Thus, some low-value items that are currently bought from outside the EU precisely because they were produced at a lower cost may not be sold at all anymore. The IA study predicts that removing the de minimis will result in a 0.2% decrease in the total quantity of e-commerce goods sold.

Thus, because of removing the de minimis, the quantity sold may be lower than what is socially optimal, since additional costs are introduced. In economic terms, removing the de minimis results in a so-called dead weight loss, which is a measure of foregone economic welfare, see Figure 5. The dead weight loss implies that society is suffering a loss in welfare as a result of market inefficiencies. Both a tax and an exogenous cost (e.g. the processing costs due to a tax) can result in deadweight loss.

Figure 5 Deadweight loss resulting from processing cost (and VAT)



Source: Copenhagen Economics

1.4 Benefits of removing the de minimis are unproven

The key stated objective of removing the de minimis is to create a fully level playing field for EU and non-EU e-sellers. Since there are large additional processing costs of removing the de minimis compared to the limited maximum VAT revenue (see section 1.1 and 1.2 above), the benefits that would motivate such a policy should arguably come from increased effectiveness, resulting from restoring competition between EU-businesses and non-EU competitors. However, the studies prepared for the Commission include:

- no finding that the removal of the de minimis contributes to the positive effect of the recommended package of policies;
- negligible macroeconomic benefit of removing the de minimis is negligible; and
- no benefits to be expected from lower non-compliance from removing de minimis (but the converse).

The positive impact is driven by simplifying measures (most noticeable the OSS), not the removal of the de minimis

The studies prepared for the Commission evaluate a range of policy options, and the removal of the de minimis is only one of many. Deloitte evaluates the impact through a sequential analysis whereby the policies are stacked on top of each other and the outcome is measured as the cumulative effect of all included policies. In other words, the different policies are not tested independently but only as bundles.

The impact assessment study finds a positive overall impact from the recommended bundle of policy actions, the fifth option. This option includes the abolition of the de minimis threshold, yet it is unclear if any individual, specific benefits result from the removal of the de minimis. The analysis does not isolate the effect of removing the de minimis, once the OSS is introduced. The different policy options evaluated by Deloitte are listed in Table 2.

The result of the sequential analysis is illustrated on the left-hand side of Figure 6. The figure illustrates how the incremental effect of the second option, the removal of the de minimis and the distance selling threshold, has a negative effect (this can be related to the result presented in Figure 3). In other words, it is demonstrated that the total net benefits are negative. It is not until the OSS is introduced that the overall economic impact (of the bundle of policies) becomes positive. Hence, the positive cumulative impact of the preferred option is driven by the simplifying measures, not the removal of the de minimis.

Clearly, one of the main ideas of the OSS is to reduce the administrative costs and this may affect the impact of the administrative burden resulting from the removal of the de minimis. A different and more appropriate analysis for evaluating the impact of removing the de minimis would be to change the order of the proposed options. If option 3, 4 and 5 where to be implemented, what is then the impact of removing the de minimis? We have illustrated this conceptually on the right hand side of Figure 6. This analysis was missing in the evidence put forward to the Commission. Figure 4 illustrates how the impact of removing the de minimis is negative even after the implementation of the OSS (a result previously shown in Figure 4).

The macroeconomic benefits of removing the de minimis are negligible

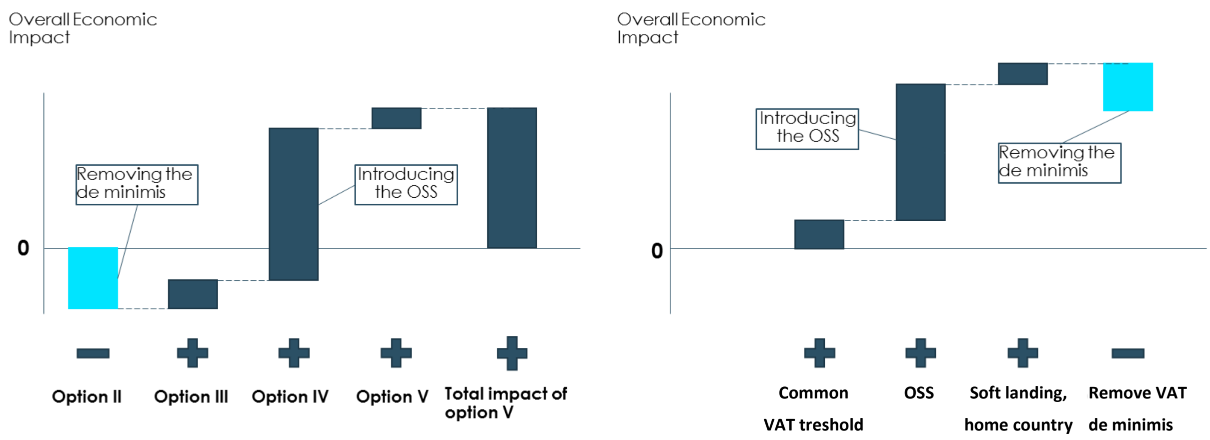
If there is a competitive distortion caused by the de minimis, removing such a distortion might in theory bring value for European businesses and consumers. Then we would expect that the evidence provided to the Commission would find this evidence and link the specific policy

Table 2 The proposed policy options

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Removal of distance selling threshold		✓	✓	✓	✓	✓
Removal of de minimis		✓	✓	✓	✓	✓
Introduction of common VAT threshold for EU cross-border sales			✓	✓	✓	✓
One Stop Shop (OSS)				✓	✓	✓
Soft landing regulation					✓	
Home country rule for the OSS					✓	
Fully harmonised EU rules for OSS						✓

Source: Copenhagen Economics based on European Commission (2016) Impact Assessment. SWD (2016) 382 final

Figure 6 The incremental impact of suggested policy options



Source: Copenhagen Economics based on European Commission (2016) Impact Assessment. SWD (2016) 382 final

proposal to the evidence of benefits. Yet, this is not occurring. Deloitte measures the macroeconomic impact based on a Computable General Equilibrium (CGE) model. It is a methodology designed to capture the overall macroeconomic reaction to a suggested policy. This may include competitive effects and the resulting impact on economic activity. The methodology builds a supply- and demand- model comprising different sectors and then simulates the effect from the proposed policies. This analysis is the only manner by which the impact assessment seeks to capture any benefits from the level playing field that removing the de minimis may allegedly bring.

Deloitte finds that the macroeconomic effects of policy Option 2 (de minimis removal) are negligible. Thus, the competitive effects that arise from a level playing field were not significant, according to the impact assessment. Hence, there is no evidence to suggest that a level playing field arising from removing the de minimis will contribute any significant economic benefits.

A potentially better approach – used in standard cost-benefit analysis – would be to conduct a total analysis of the net change in consumer and producer benefits.

Since there is no clear intuition as to why any other policies would increase the benefits of a level playing field, we should not expect the positive macroeconomic effects of policy Option 5 (a bundle of policies) to be a result of a level playing field. The impact assessment does not explain any such mechanism or quantify the benefits of a level playing field in isolation.

The results above highlight the fact that removing de minimis, by introducing additional tax burden, accompanied by disproportionate administrative costs, will increase prices and reduce the total quantity of e-commerce goods sold to EU consumers. This will hurt European consumers who will then not be able to take full advantage of the benefits of e-commerce. For the EU economy as a whole that would be beneficial only if Deloitte had established that the initial level of e-commerce was higher than optimal - yet this was not proven.

The IA study assumes that more e-commerce goods will be sold by European retailers, rather than coming from outside the EU. If this is correct, the effect on European value added is, however, likely to be small. In fact, e-commerce goods from outside the EU are still likely to be manufactured outside the EU after the removal of de minimis. In other words, much of the value added along the value chain will still accrue to non-EU businesses. The level playing field resulting from the removal of the de minimis may induce some consumers to purchase their goods from EU retailer (online or offline). However, these goods would likely still be manufactured outside of the EU and then shipped in bulk to be sold by retailers in the EU. The retail industry is known for its very low profit margins;[5] thus most of the producer surplus is still likely to remain outside Europe.

Any fraud reduction benefits are due to OSS and not per se caused by the change in de minimis

Deloitte also evaluates the impact on VAT compliance by firms. The positive effect of the recommended policy bundle (Option 5) from increased compliance does not come from the removal of the de minimis. Instead, these benefits arise entirely due to the OSS, and the removal of the de minimis does in fact have the opposite effect.

The removal of the de minimis implies a risk of increased tax fraud and levels of non-compliance. The Commission impact assessment states that:

> **as the volume of items subject to VAT increases, there is higher motivation for non-EU suppliers to undervalue and mislabel the items to reduce their VAT cost.**
>
> *Source: European Commission (2016) Impact Assessment. SWD (2016) 379 final, p. 31*

Thus, the removal of the de minimis will exacerbate the problem of non-compliance. The risk of higher levels of non-compliance is based on experience with goods that does not fall under the de minimis rule. For example, France does not apply the de minimis to mail order goods and the resulting level of non-compliance for mail order goods was established in a report of the French Senate.[6] The report concluded that these goods experienced more undervaluation and mislabelling than other goods.

2. Even stronger concern from sensitivity test of key parameters in the analyses used by the Commission

A quick read of the impact assessment provided to the Commission could leave the impression that, after OSS is considered, removing de minimis makes delivery operators better off. Yet this is far from being the case, as shown in Section 1.2 of the present study.

Indeed our sensitivity tests reveal that the cost of collecting VAT could potentially be much higher than concluded in the IA assessment, even under the OSS (section 2.1). Besides, delivery operators will face a burdensome impact due to considerations on the fixed costs associated with the OSS (section 2.2). In addition to the fact that the IA study applies a potentially complex tool, a CGE model, it does so in an over-simplistic way which relies on unjustified assumptions (section 2.3).

2.1 Sensitivity tests reveal that the negative impact of de minims could be much worse

First of all, what is the proposed OSS? From the point of view of policy, the new OSS on cross border trade in goods is similar to the MOSS scheme that allows businesses to supply within the EU digital services, e.g. telecommunication and broadcasting services, without registering in each Member State, thereby providing third country e-sellers with a single point of entry to the EU single market for VAT purposes. Businesses simply have to choose a Member State of identification.

However, from the point of view of those that have to comply, it is a new setup, since the firms selling goods are generally different from those supplying digital services. Furthermore, delivery operators are not involved in the transmission of services. Hence, all costs of complying with the new OSS are completely separate costs to the costs of the existing MOSS for digital services.

For the purpose of assessing sensitivity of the results provided to the Commission, with respect to key assumptions underpinning them, both reviewing assumptions of fixed costs and variable costs are relevant. We start by focusing on variable (i.e. running) costs, since they are be directly relevant to estimating the impact of removing the VAT de minimis, specifically.

The evidence basis relied upon by the Commission is characterised by gaps and significant uncertainty when it comes to the future variable costs for delivery operators. While there is little uncertainty about the fact that

[5] Investopedia (2017) and Damodaran (2017) confirms that a standard margin in the retail industry is as low as 3%.

[6] Commission des Finances (2016) Le E-commerce : Propositions Pour Une Tva PAYÉE à la Source

the number of items that need to be processed by delivery operator will increase dramatically if the de minimis is removed, it is less clear by how much the simplifying measures are going to cut costs. The impact assessment for the Commission argues that removing the de minimis and also introducing the OSS system and other simplifying measures will decrease variable costs (running costs) for delivery operators. In itself, this is reasonable but the crux is the extent to which variable costs will be reduced and the specific level of cost reduction backed in the studies provided to the Commission hinge on questionable assumptions:[7]

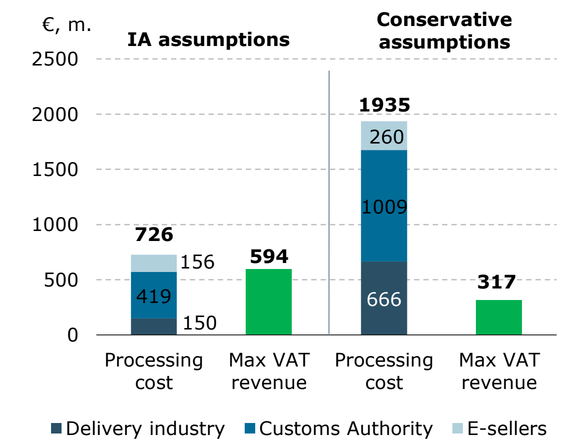
- More than 75% of small value items are assumed to be registered in the new OSS system. This seems high for a voluntary scheme where no sanctions are imposed on e-sellers opting out.
- The processing cost per item for packages not registered in the OSS system is assumed to decline by 30% for delivery operators due to other simplifying measures. The evidence for this decrease is unclear.
- It is assumed that processing costs for delivery operators will drop 82% for items registered in the OSS system compared to today.
- The average value of low-value items (all those below €22) is €20.6.

We have seen no justification for the above assumptions. If these assumptions do not hold, the future variable / running costs would look rather different, which would fundamentally affect the result of the cost-benefit assessment. Moreover, if the last assumption does not hold, then also the expected VAT revenue would drop.

To shine a light on this key dependency between the cost-benefit result and the cost assumptions made, we have conducted a sensitivity test – an analysis missing in the evidence base that the Commission relied upon. In order to arrive at a more appropriate and conservative estimate of the impact, we make a sensitivity analysis that is based on more conservative assumptions about take-up of the OSS, cost reductions under the OSS and the average value of low value items.

Our result shows that based on conservative assumptions overall, the total processing cost due to the removal of the de minimis post-OSS is €1.9 bn (see Figure 7) and €2.6 bn pre-OSS (see Fig. 2).[8]

Figure 7 Sensitivity test of the impact of removing de minimis (post-OSS)



Note: Left pane shows the IA scenario based on parameters assumed by Deloitte. Right pane shows the results applying our conservative assumptions on (i) the extent of processing cost savings due to OSS; and (ii) the average value of items.
Source: Copenhagen Economics based on Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 2. See methodological annex for a detailed description.

For the purpose of sensitivity testing, we assume that:

A. TAKE-UP: half of the low value items will be declared via the OSS, i.e. a 50% take-up of the OSS
B. COST SAVINGS: more conservative cost reductions following the implementation of the OSS:

  - for items via OSS, the cost will be reduced by 50%
  - for items not via OSS, the processing cost is assumed to be the same as with the de minimis.

[7] Based on table 3 in Deloitte (2016) VAT aspects of cross-border e-commerce – Options for modernisation, Lot 2, p. 12.
[8] See methodological annex for a detailed description.

C. COST SAVINGS, the same reductions in processing cost as in (B) apply for customs authorities and e-sellers
D. AVERAGE VALUE OF ITEMS, discussed below

On the revenue side we highlight that Deloitte assumes that the average value of value of low-value items stands at €20.6. The average value of low value items has a large impact on the expected additional VAT revenue. By logic, €20.6 seems to be a high average for items with values distributed in a range between € 0-22. Furthermore, it is unclear precisely how Deloitte arrived at this estimate and there are inconsistencies in the report concerning this central parameter.[9] Absent further information, we assume that the average value of a low value item between €0-22 is at the midpoint, i.e. €11.

Regardless of the average value of items, for simplicity we count all VAT additional revenue (i.e. at full compliance). We note that the IA assumes partial VAT compliance in the situation post-OSS (option 5). Thus this simplification approach in our sensitivity test leads us to over-estimate VAT intake compared to the IA study (thus we are being conservative in our findings).

The result of our sensitivity analysis have important implications. By applying conservative assumptions, the additional processing cost from removing de minimis heavily outweighs the additional potential VAT. Even without factoring in the processing cost borne by e-sellers, the costs still outweighs the additional maximum VAT revenue. In fact, the processing cost that falls on delivery operators alone is enough to outweigh the potential VAT revenue. This highlights how costly the decision to remove the de minimis could be, even post-OSS.

2.2 Additional considerations on costs post-OSS and burden on delivery operators

The impact assessment provided to the Commission acknowledges that implementing the proposed new OSS system will involve substantial fixed costs for customs authorities, delivery operators and e-sellers. However, the impact assessment study has made no attempts to quantify the one-off cost for delivery operators. Instead, it simply states "Providing a robust estimate of such one-off costs is difficult as for some operators it may only be a matter of making relatively minor adjustments to the existing systems for some but others may have to build an entirely new system"[10].

Table 3 Sensitivity testing of assumptions regarding take-up and cost reductions from the OSS

	IA assumptions			Sensitivity test: our conservative assumptions		
	In OSS	Not in OSS	Total	In OSS	Not in OSS	Total
Assumption A: Take-up of OSS, (%)	75%	25%	100%	50%	50%	
Assumption B: Reduction in cost, delivery and customs, (%)	-82%	-30%		-50%	0%	
Assumption C: Reduction in cost, e-sellers, (%)	-68%	-15%		-50%	0%	
Processing cost delivery operators, (€ m.)	0	150	150	172	494	666
Processing cost customs, (€ m.)	185	235	419	336	672	1009
Processing cost e-seller, (€ m.)	83	73	156	87	173	260
Total additional processing cost, (€ m.)			**726**			**1,935**
Assumption D: Average value of low value goods (those in the €0-22 range), (€)			20.6			11
Additional potential VAT revenue (€ m.)			**594**			**317**

Note: Both scenarios show the effect of removing the de minimis after the implementation of the OSS, i.e. we compare cost and VAT revenue with a baseline scenario with the OSS, but when the de minimis still is place, the difference is the assumptions about key parameters; We show the VAT revenue at full compliance, i.e. the maximum VAT revenue for given parameters.
Source: Copenhagen Economics based on Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 2. See methodological annex for a detailed description.

[9] See online methodological annex for a detailed discussion of these inconsistencies

[10] Deloitte (2016) VAT aspects of cross-border e-commerce – Options for modernisation, Lot 2, p. 12.

First, this statement ignores the fact that fixed IT costs are rarely one-off costs as regular maintenance and upgrading systems imply the deployment of fixed costs at regular intervals.

Second, any policy or business decision to invest in new, more efficient systems depends on a correct assessment of the trade-off between the burden of additional fixed costs and the gain from future reductions in variable costs. Thus, this displays a major gap in the evidence base that the Commission has relied upon, undermining its ability to obtain a meaningful cost-benefit analysis.

Fixed costs should be allocated to both customs and also VAT policies

The impact assessment is arguing that the new OSS system will be cheaper for delivery operators because of a prior decision to implement the Union Custom Code (UCC, henceforth) process, where delivery operators are obliged to provide security-related information to EU customs authorities in advance of customs clearance by 2021. It is argued that this will reduce the development costs associated with implementing the new OSS for delivery operators.[11]

However, if the new clearing system for both customs and VAT is now intended to serve two purposes, the costs of this investment should be attributed to both policy actions, i.e. it should bring down the costs of implementing the UCC process, but costs should also be allocated to the new OSS proposal.

A logical metric for allocating such costs between proposals could be to do so on a revenue basis. Thus, as VAT revenues may be much higher, most of the costs should be allocated to implementing the OSS system rather than assumed as “given”. The assumption that these costs are “given” is tantamount to assuming that the VAT process can free-ride completely on customs process, yet this is unjustified.

We provide an initial evidence base as to why it is likely that a larger than 50% share of future IT and process costs common to VAT and customs should be attributed to VAT – for two reasons, see Table 4. First, because all items will be VAT-liable, whereas some items will still be exempt of duty (we estimate that 84% of e-commerce value will be liable to import duty[12]). Second, because the average VAT rate is higher than the average import duty rate.

Table 4 Allocation of cost between proposals based on revenue

	VAT	Duty	Total
Share of e-commerce, which is liable	100%	84%	
Rate	20%	7,5%	
Relative revenue	0.20	0.06	0.26
Share of total	**76%**	**24%**	**100%**

Source: Copenhagen Economics based on CBRA (2014) and Deloitte (2016)

While the above consideration of fixed costs may not change the results of the approach we have adopted to estimate the specific impact of removing de minimis, yet it informs the effect of OSS itself and thus helps paint a comprehensive picture of the cost burden that the Commission proposals are placing on delivery operators and thus, ultimately, on EU consumers.

Substantial challenges for customs authorities in implementing the proposed OSS system

The new OSS system is envisioned by the Commission as an extension of the current MOSS system that applies to digital services. The impact assessment argues that as the new OSS is an evolution of an existing system, the IT setup costs for authorities are therefore not significant.[13]

However, this ignores substantial challenges for customs authorities. Going forward, customs authorities will have to overcome challenges associated with today’s systems, inter alia [14];

[11] European Commission (2016) Impact Assessment. SWD (2016) 379 final, p. 38.

[12] CBRA (2014) The import VAT and duty de-minimis in the European Union – Where should they be and what will be the impact?

[13] European Commission (2016) Impact Assessment. SWD (2016) 379 final, p. 39.

[14] Han Bosch (2017) E-commerce Challenges in VAT at EU Import. Presentation at the conference: E-commerce – Challenges in VAT at EU Import.

- The IT systems of customs and tax authorities are not connected
- There are no databases for OSS VAT ID
- No standard format for data collection
- There will be a substantial increase in the number of declarations
- Customs legislation remains fully applicable, thus links to VAT/OSS remain unclear
- The removal of the de minimis creates an increased incentive for undervaluation which might stretch customs' resources
- OSS is not mandatory, hence a new dual system will need to be developed, ultimately adding to complexity
- Exemption for C2C items creates further complexity
- Different models might be applicable to one shipment (B2B, B2C and C2C)

In order to overcome these challenges, customs authorities might have to make significant investments beyond the envisioned evolution of the current MOSS.

Conclusion: the OSS is a valuable yet incremental innovation

Furthermore, there are important differences between applying a digital clearing system within the area of taxation of services vs. goods.

When introduced to services, the MOSS has been quite an innovative contribution. Sellers that previously had to deal with a complex system and report VAT bills in all 28 member states now only had to declare VAT in one member state.

Instead, for goods, the sellers comply in a relatively easy way, while the receivers of the goods are responsible for VAT. The receiver, by definition, can only be located in one country and therefore does not face the same complexity. With the new system, the e-sellers still have to keep track and comply in each 28 member states, but only report VAT in one. Essentially, the OSS is a new channel for levying VAT, but it is not the same breakthrough as MOSS is for services.

2.3 The negative impact might be even higher as the IA study fails to account for key aspects

So far, we have demonstrated that the IA study for the Commission does, in fact, recognise the negative impact of removing the de minimis. We have shown how the reductions in processing cost with the OSS are highly uncertain and that the benefit of a level playing field are yet to be demonstrated. In this section, we review a further set of assumptions made in the IA study provided to the Commission.

The IA study applies a potentially complex tool, a CGE model, yet it does so in a way that is over-simplistic and relies on questionable assumptions. Several important aspects make the result of the IA study problematic. We highlight three key points worth mentioning and explain them in turn. These points could imply that the negative impact might be even higher than what is estimated in the IA study.

The IA study assumes the EU can be treated as a single region

In the impact assessment, the whole of the EU is treated as a single region. This implies that macroeconomic data used in the model are aggregated from across the EU-27, which is by no means unproblematic.

When the EU is treated as a single region, the model will fail to capture important internal barriers to trade within the EU. This implies that the positive impact on EU cross-border e-commerce is likely to be overestimated and that the impact on consumer choice and prices will be higher in countries that rely heavily on cross-border e-commerce. It also implies that it is impossible to evaluate the impact in each Member State. Generally, VAT rates differ across Member States which will ultimately affect VAT revenues from removing the de minimis. Furthermore, the cost of removing the de minimis will vary substantially for both custom authorities, delivery operators and businesses across the EU depending on the efficiency of current systems. This in turn implies that some Member States will suffer disproportionately from the removal of the de minimis.

Furthermore, the estimated total online retail trade in the EU is higher than other sources i.e. "In comparison to Ecommerce Europe, the EU28 aggregate estimated by the consumer survey exceeds Ecommerce Europe's benchmark by 44%”.[15] This could potentially bias the results in the IA study, as the effects may be overstated.

The IA study fails to account for differences in trade barriers

The model used in the IA study does not evaluate where e-commerce is coming from. This is potentially problematic as barriers to trade differs substantially from country to country due to e.g. different trade agreements. If a large proportion of e-commerce is coming from specific regions with specific trade agreements, this should be reflected in the model and hence it is not appropriate to model the “rest of the world” as one region.

We also note that the IA study keeps the number of items static across policy scenarios when the processing cost is calculated, even if business models and trade flows may change significantly when these policies are implemented. However, this is not addressed in any of the analyses relied upon by the Commission.[16]

3. Concluding remarks

While promoting fair competition is a respected aim, the proposed removal of the de minimis does not seem to be supported by the impact assessment study put forward before the Commission. The concept of a fully level playing field is a good idea in theory, but problematic in practice, as the borders and customs processes mean that the market for imported e-commerce goods is full of frictions. The well-documented cost of removing the de minimis is disproportionately large compared to the undocumented benefits from a fully level playing field.

Furthermore, the OSS system potentially introduces significant implementation challenges for both custom authorities and delivery operators. This could result in substantial one-off costs that are largely undocumented in the impact assessment.

The evidence before the Commission already shows that costs outweigh benefits of removing the VAT de minimis. The present study corroborates the impact assessment and previous literature in that the costs of collecting VAT for low value items today outweigh the potential maximum VAT revenue. This is the intuition as to why a de minimis was implemented in the first place. This study highlights the fact that the costs of collecting VAT will increase if the de minimis is removed under the current regime, based on the assumptions made in the impact assessment.

With the assumptions made in the impact assessment study, the costs of collecting VAT will outweigh the collected revenue even when the OSS is fully implemented. It is also apparent that a large share of these additional costs will ultimately be passed down to EU consumers.

Furthermore, there is no evidence to suggest that the competitive benefits of a fully level playing field are proportionate to the high cost of implementing such a policy. In fact, the impact assessment shows that the macroeconomic effects of Option 2 (incl. de minimis removal) are negligible. Furthermore, any fraud-reduction benefits are due to OSS and not per se caused by the removal of the de minimis.

Our sensitivity test of assumptions found an even more negative outcome of the cost-benefit analysis of removing the VAT de minimis. The cost savings from introducing the OSS system are highly uncertain and depend not only on processing costs per item in the system but also on whether third country e-sellers opt-in or out and the average value of the items. These uncertainties could call for a more cautious way forward.

Given more conservative assumptions about the take-up of the OSS and cost reductions, we find that the costs of collecting VAT will outweigh the collected revenue substantially, even when assuming that the OSS will bring a 50% reduction in the costs of collecting VAT for items that suppliers opt to clear via the OSS platform.

Further misalignments between the Commission proposal and the evidence base provided to the Commission are identified throughout this report. Inter alia, we

[15] Deloitte (2016) VAT Aspects of cross-border e-commerce - Options for modernization, Lot 1, page 122

[16] For example, the UPU terminal dues system, by informing the shipment costs available to cross-border sellers, may affect business models and trade outcomes for e-commerce. It is unclear whether and how this is modelled in Deloitte’s treatment of the costs of cross-border trade..

highlight that, as stated in Deloitte study, the removal of the VAT de minimis exemption will likely generate a higher incentive for non-EU sellers to undervalue and mislabel shipments in order to reduce the VAT cost. In fact, with the Commission proposal this cost (which is currently the consumer's direct responsibility) will fall directly upon the non-EU sellers, altering incentives.

Besides, it is remarkable that customs agencies are public sector entities and the delivery industry includes several postal operators which are public owned. Thus the Commission's proposal to remove the de minimis imparts additional costs to the national taxpayers, as well as to private industry, while the additional VAT revenue is much lower. Regardless, while it may be expected that some of the VAT additional revenues could be used to cover (part but not all of) the additional costs caused to customs agencies, this is not likely to be the case for covering the costs incurred by delivery operators. The delivery industry, and in particular any postal operator, is clearly left worse off, due to the Commission proposal to remove the VAT de minimis.

In conclusion, the existing evidence unequivocally shows that removing the de minimis threshold would have large negative effects. European consumers are likely to suffer a significant loss due to higher prices, less choice and less efficient markets.

Further research is needed before the Commission can demonstrably and safely conclude that removing the VAT de minimis is justified on a cost-benefit basis.

Logically, only introducing first the OSS – without changing the current de minimis rules – would allow to confirm empirically whether the key assumptions on adoption of OSS and related cost savings hold. This is strictly necessary to establish clearly the impact of the specific de minimis proposal. Absent this information, the Commission has no supportive evidence available.

Documentation and calculations underpinning the present study, as well as supplementary analyses, are provided in a technical annex accompanying this study.

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