

TenderHaven.EU: Where does your money go?

The methodology paper accompanying TenderHaven.EU.

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1 Introduction

The way government expenditures are spent is important. Every year public authorities in the EU spend around EUR 1.9 trillion or 14% of GDP on public procurement (European Commission, 2017). Less is known about the scale of both public procurement supplied by foreign-owned companies and how many of these companies are linked to tax havens. We fill in these two gaps by using a novel data set to arrive at findings that we are making accessible publicly at the TenderHaven.EU web application. First, the government tenders should in theory be supplied from the most suitable companies, regardless of their ownership structure, be it a domestic or a foreign one. We find that in practice there is no truly single market in public procurement in the EU and that in some countries only few per cents of tenders (weighted by their value) is supplied from other EU member states. Second, the companies supplying the tenders should in theory be required to adhere to the same standards of financial transparency. We find that in practice many suppliers are linked to tax havens and they can thus make use of the havens' excessively high financial secrecy. Overall, we see opportunities to internationalise public procurement within the EU and to reduce the financial secrecy risk exposure of public procurement due to tax havens. Our proposed recommendations should lead to more integrated and transparent public procurement market within the EU.

This is a methodology paper accompanying the TenderHaven.EU application in which we describe the data sources and our approach to identifying the ownership structure of companies that supply public procurement in the EU. We structure the rest of this paper in the following way. The following section describes the used data sources and their features. Section 3 details the methodology, Section 4 presents the results. Finally, in Section 5 we conclude by drawing policy recommendations and calling for further research in several areas.

2 Data

The primary source of our data on public procurement is the portal Opentender.eu which provides the best available cross-country public procurement data for the EU countries. It is a platform that allows to download, search and analyse tender data from 33 jurisdictions (28 EU member states, the EU institutions, Norway, Iceland, Switzerland, and Georgia). In addition, we also use public procurement and company data from Datlab's internal database sources, which is an extended database similar to Opentender.eu. These sources are of two kinds – EU-wide Tenders Electronic Daily (TED) which publishes information on public procurement above a given threshold, and other, country-specific, mostly national sources detailed in Table 1. We use data on tenders administered in time periods that vary across countries, as detailed in Table 1.

For companies supplying tenders, we use data about their ownership from Digiwhist's database sourced from Bureau van Dijk's Orbis. Orbis is the best available firm-level balance sheet data. It is provided as a commercial product by a private company, Bureau van Dijk. As described in detail by Janský (2018), at the level of individual companies this is the most extensive data set in the world. It has a good coverage since mid-2000s and information for some companies goes back to the 1980s. Orbis aims to contain both consolidated and unconsolidated data. Despite its detail and coverage, which is superior to any other comparable alternative, Orbis has important limitations. They are discussed, for example, by Cobham and Loretz (2014) and Clausen (2016). The coverage of individual firms is not universal and differs across countries - it is, for example, biased against tax havens and developing countries. Even when firms are included, how much information is available for them differs and is often limited.

Tørsløv, Wier, & Zucman (2018) show that only a weighted average of 17% of global profits is included in Orbis. Also, Orbis is not provided as open data and needs to be purchased. In response to these limitations of Orbis, we examined alternative data sources (including open data alternatives such as OpenCorporates), but Orbis is the preferred option that we rely on in the end.

We use the best available data on tenders and their suppliers in the form of a combination of tender and company information, but it is still imperfect. As Table 1 shows, the data availability on both tenders and company ownership differs across countries and because of some countries' low data availability, the presented results should be considered illustrative only. Indeed, even though we use the best available data, we call for their substantial improvement.

Table 1. Sources of public procurement and supplier data and their basic descriptive statistics

Country	Data source	Start year of data	End year of data	Approximate sum of all tenders (billion euro)	Number of tenders	Number of tenders with a supplier company information	Share of tenders with a supplier company information (%)
Macedonia	TED	2011	2018	2.5	76387	6	0.01
Bulgaria	TED	2011	2018	30.7	201671	49	0.02
Cyprus	TED	2011	2018	6.3	11257	25	0.22
Greece	TED	2011	2018	32.0	91799	357	0.39
Ireland	TED	2011	2018	29.5	27910	304	1.09
Malta	TED	2011	2018	1.5	5503	91	1.65
Hungary	TED	2011	2018	56.2	63934	3573	5.59
United Kingdom	TED	2011	2018	369.9	337862	20463	6.06
Latvia	TED	2011	2018	38.0	97190	6440	6.63
Portugal	TED	2011	2018	31.3	44872	3042	6.78
France	TED	2011	2018	520.4	1341535	97915	7.30
Romania	TED	2011	2018	78.8	549387	40960	7.46
Spain	TED	2011	2018	396.6	234528	18975	8.09
Luxembourg	TED	2011	2018	11.8	10251	844	8.23
Italy	TED	2011	2018	381.8	264195	24627	9.32
Lithuania	TED	2011	2018	17.9	182701	21519	11.78
Belgium	TED	2011	2018	73.7	108149	13209	12.21
Island	TED	2011	2018	0.3	1866	248	13.29
Finland	TED	2011	2018	54.2	66582	9128	13.71
Norway	TED	2011	2018	76.4	49627	7217	14.54
Austria	TED	2011	2018	31.0	40821	8629	21.14
Germany	TED	2011	2018	166.2	436769	99841	22.86
Poland	TED	2011	2018	231.6	1190980	295274	24.79
Denmark	TED	2011	2018	149.1	61598	16427	26.67
Sweden	TED	2011	2018	53.4	102697	31947	31.11
Estonia	TED	2011	2018	15.2	28417	9301	32.73
The Netherlands	TED	2011	2018	104.1	72060	24398	33.86
Czech Republic	TED	2011	2018	127.0	102878	39670	38.56
Switzerland	TED	2011	2018	34.0	30756	11897	38.68
Slovakia	TED	2011	2018	39.4	30082	15491	51.50

Slovenia	TED	2011	2018	14.9	79548	41987	52.78
Croatia	TED	2011	2018	15.8	41769	26390	63.18
Slovenia	Other	2007	2018	19.6	140417	528	0.4
United Kingdom	Other	2010	2018	262.6	162093	697	0.4
France	Other	2005	2017	269.0	2508306	22682	0.9
Poland	Other	2008	2017	120.8	3115240	92501	3.0
Latvia	Other	2011	2018	13.4	218995	9643	4.4
Norway	Other	2003	2017	80.6	207503	9926	4.8
The Netherlands	Other	2010	2017	53.3	56262	9021	16.0
Hungary	Other	2005	2018	269.2	150732	29718	19.7
Estonia	Other	2007	2018	32.0	182238	65433	35.9
Slovakia	Other	2009	2018	58.7	97957	37927	38.7
Spain	Other	2008	2017	78.8	228768	100957	44.1
Czech Republic	Other	2006	2018	197.3	276471	139868	50.6
Portugal	Other	2008	2017	110.2	1082769	586620	54.2
Romania	Other	2010	2016	85.3	195546	176730	90.4

Source: Authors

Notes: The information from EU-wide TED excludes below-threshold tenders, while that from country-specific sources includes below-threshold tenders.

In addition to these main data sources, we also use other data on aggregate information about public procurement and government expenditures as well as tax havens and financial secrecy. European Commission (2017) provides basic information about the international openness of public procurement across EU countries.

To classify tax havens, we use the EU's black and grey lists as the main lists of tax havens because of our focus on EU countries' public procurement. The version of the list that we use is described in detail by Janský, Meinzer, & Palanský (2018) and we use their description here. On December 5, 2017, after years of political pressures and negotiations, the European Commission published a blacklist of 17 non-cooperative jurisdictions (European Commission 2017b). The blacklist is a result of a screening process that has covered 92 jurisdictions. 72 of these were asked to address deficiencies, and 47 of them committed to "improve transparency, stop harmful tax practices, introduce substance requirements or implement OECD BEPS." (European Commission 2017b). Eight countries were given more time to address the deficiencies as they had recently been hit by natural disasters. Finally, the remaining 17 jurisdictions were blacklisted as non-cooperative. On January 23, 2018, the European Commission reduced the 17-country list to 9 following additional commitments from 8 countries (European Commission, 2018). On March 13, 2018, seven of the eight countries that had not been assessed were included in the evaluation, with three of them joining the blacklist and four joining the grey list. At the same time, Bahrain, Marshall Islands and Saint Lucia were moved from the blacklist to the grey list. Finally, on May 25, 2018, the Bahamas and Saint Kitts and Nevis were moved from the blacklist to the grey list, and the last country that had not been evaluated before, Turks and Caicos Islands, were added to the grey list. Here, we use the version of the lists as of May 25, 2018. As alternatives to identify tax havens, we use individual countries (e.g. Panama), indicators of tax haven characteristics (e.g. Financial Secrecy Index created by Tax Justice Network and financially supported by EU H2020 project COFFERS) and other lists of tax havens than the one by the EU described above.

3 Methodology

We use tools of descriptive statistics to show how much public procurement is supplied by foreign-owned companies and how many of these companies are linked to tax havens.

We determine which tenders are linked with which countries in the following way. For each tender in the data we observe the supplier company (or companies, if there are more of them) and its ultimate owners. The countries of the ultimate owners are then the countries with which we associate the percentage value of the tender that corresponds to the percentage of ultimate ownership in the supplier company. This ownership share method is our preferred method of associating countries with tenders. Alternatively, we associate the tender with any country of which there is any ownership link in the supplier company's ownership structure regardless of the percentage share. This method, which we call the ownership link method, is supplementary and useful when not only the ultimate ownership share, but the existence of any links might be of importance as in case of links to tax havens. Also, a combination of these approaches is possible – any link fulfilling the condition of minimum percentage (e.g. 10%) ownership would count for the owner's country to be associated with the tender.

We compute the share of the value of all tenders supplied to each EU member state i by firms $f = 1, \dots, F$ from foreign countries (either all other countries, other EU countries, tax havens or otherwise defined group) out of all tenders administered by country i and supplied by all firms $s = 1, \dots, S$:

$$\text{Share of foreign tenders}_i = \frac{\sum_{f=1}^F \text{Value of tenders}_{if}}{\sum_{s=1}^S \text{Value of tenders}_{is}}$$

The higher this share, the higher the overall value of tenders supplied by companies with owners from foreign countries.

We also compute the share of the value of all tenders supplied to each EU country i from another country c which belongs to group o out of all tenders supplied to country i from a group of other countries o :

$$\frac{\sum \text{Tenders}_{ic}}{\sum \text{Tenders}_{io}}$$

The higher this share, the higher the value of tenders supplied by companies with owners from country c relative to other countries in group o .

When absolute values rather than relative shares are needed, it is possible to multiply this by the value of all tenders (from other data sources) so that the scales are comparable across countries (to account for various sample sizes across countries due to data availability). Also, a number of tenders rather than their values can be substituted into the shares outlined above. Some of these above described options are going to be accessible at TenderHaven.EU only in the future.

4 Results

The results are publicly available at TenderHaven.EU.

5 Conclusions

5.1 Summary of findings

We have presented novel results on where money spent by EU governments on public procurement goes. There seems to be a high heterogeneity across countries and groups of countries. Some countries are relatively open to public procurement from other EU countries or from other foreign countries. EU member states exhibit varying levels of exposure to tax havens and financial secrecy – for some it seems a minor issue, while for others it might be a major concern. For example, some French public procurement is exposed to Cayman Islands, while Latvian tenders are often supplied by firms linked to Switzerland. In addition to Switzerland, we find that the tax havens of high importance to public procurement in the EU are Bermuda, United Arab Emirates and British Virgin Islands. Furthermore, companies from some countries that are not on the EU's grey- or black lists of tax havens supply much more tenders than would be proportionate to other measures of their economic activity, such as the GDP. In particular, the four EU member states of Cyprus, Austria, Luxembourg and the Netherlands have relatively small economies and high values of supplied tenders (which is why they could perhaps be dubbed the big four “tender havens”).

5.2 Further research

Further research should go from our current country-level findings to the more detailed tender and company levels. For example, we hypothesise that some of the tenders are rigged and that manifests itself in characteristics of both tenders (e.g. low number of bidders) and suppliers (e.g. companies linked to tax havens or countries with high financial secrecy). Also, a gravity model could be applied to the country-supplier relationships and the method could be used to test hypotheses about openness to bidders from abroad and tax havens.

We use the best available data, but they are imperfect and so another area of further research would be to check the robustness of our results with respect to the data imperfections (including the data coverage and potential selection bias). A natural and welcome development would be the emergence of even better data than the currently best available data we use here on both public procurement and company ownership, both ideally in the open data format and with a unique identifier for companies (e.g. the Legal Entity Identifier). Also, the data coverage of our data could be compared with other, perhaps more aggregate such as European Commission (2017) or OECD (2015), data sources on public procurement to determine for what share of all the public procurement there is publicly available information and how much we can actually access. With more reliable information on these shares we might be able to test the various motivations, if any, of governments to award tenders preferably to domestic companies (e.g. nationalistic, fiscal policy stimulus arguments).

We have so far not exploited the time dimension of the data, but it offers research opportunities for natural experiments especially for countries with good data coverage. A case in point is the Czech Republic, where companies bidding for tenders newly need to disclose their beneficial owners and bearer shares were outlawed recently (e.g. have the previously bearer shares owners moved to tax havens?). For public authorities with information on other than winning bidders, it is possible to ask whether domestic or foreign or tax haven owned-companies are more likely to win in the tenders and whether this probability changes by some other characteristics.

5.3 Policy

In terms of policy recommendations, the member states and the EU should work together to improve the integration of the procurement market and address their exposure to tax havens. There are a number of policy changes needed and further analysis and research in the future, in particular with improved data quality, should point to the most promising areas of policy change to make public procurement more internationalised and transparent. These policy changes will likely require revisions to the EU's directive on public procurement. The European Parliament's recent recommendations (in particular 51 and 126) and cities such as Helsinki or a group of 25 cities in Spain are making moves in the right direction. Here we highlight two crucial policy recommendations: more tenders in one place and public registers of beneficial ownership.

Specifically, on 13 December 2017 European Parliament (2017) adopted Recommendation following the inquiry on money laundering, tax avoidance and tax evasion, where it made clear asks with respect to public procurement and tax avoidance:

- “51. Calls on the Commission to put forward a revision of Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement, which includes measures to prevent public administrations from working with companies that use tax havens;”
- “126. Calls on the Member States to introduce disincentives for EU-based intermediaries to be active in jurisdictions listed in the EU list of non-cooperative tax jurisdictions and the EU list of countries with strategic deficiencies in their AML/CFT regimes, for example by way of excluding them from public procurement calls; calls furthermore on the Commission to carry out an impact assessment on the possibility of banning EU-based intermediaries from being active in jurisdictions included in the EU list of non-cooperative tax jurisdictions and the EU list of countries with strategic deficiencies in their AML/CFT regimes”.

To make public procurement more open to companies from other countries and thereby further integrate the EU markets, policy makers should consider lowering the threshold for the publication of tenders in

the official EU journal where government authorities publish procurement notices, known as Tenders Electronic Daily. This change would increase the number of tender notices that can be easily accessed by a wider range of potential suppliers. European companies could thus better exploit the currently little used opportunities of the single public procurement market within the EU.

To mitigate the financial secrecy risks of tax havens, the level playing field for all companies from all countries should be evened by requiring minimum public disclosure standards. A case in point is the requirement to make details of each company's beneficial ownership publicly available. Public registers of beneficial ownership are intended to eliminate secret ownership of assets. As recent leaks including the Panama Papers and Paradise Papers have powerfully demonstrated to the European and global public, financial secrecy lies at the heart of many criminal and corrupt practices, including those related to public procurement. Public registers of beneficial ownership are a crucial step towards making tenders and their suppliers more transparent.

6 References

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