

Earnings Management During Antidumping Investigations In Europe: Sample-Wide And Cross-  
Sectional Evidence

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Compliance with Data Policy for the *Journal of Accounting Research*

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*1. A description of which author(s) handled the data and conducted the analyses.*

Zhang performed the analysis of the data. Godsell and Welker performed and oversaw the manual collection of data as described below.

*2. A detailed description of how the raw data were obtained or generated, including data sources, the date(s) on which data were downloaded or obtained, and the instrument used to generate the data (e.g., for surveys or experiments). We recommend that more than one author is able to vouch for the stated source of the raw data.*

We obtained the list of antidumping cases in the European Union (EU) from the Global Antidumping Database (GAD) provided by the World Bank.<sup>1</sup> We used the September 2013 version in our study. We obtained firm-level fundamental data from the Orbis database provided by Bureau van Dijk. Please refer to our responses to Question #2 for data acquisition and Question #4 for details of processing the Orbis data, respectively. In addition, we manually collected the following data from various sources. We provide details below.

Injury-based duty partition data

We obtained the percentage of injury-based duties by tracing each case's preliminary and final investigation report document number in the GAD to its corresponding investigation files hosted at URL: <http://eur-lex.europa.eu/oj/direct-access.html> (accessed December 2013 - June 2014). For example, CASE\_ID EUN-AD723 in the GAD is linked to preliminary report file 2011-L275-1 and

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<sup>1</sup> This database is maintained by Dr. Chad Bown. The updated link (last accessed January 2, 2017) for the Global Antidumping Database is located at:  
<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTTRADERESEARCH/0,,contentMDK:22571408~pagePK:64168182~piPK:64168060~theSitePK:544849,00.html>

final report file 2012-L106-1. We entered these file numbers into the search engine available at the aforementioned URL and after retrieving the investigation documents we systematically confirmed data available in the GAD and collected additional data not tabulated in the GAD. For example, we confirmed the initiation date recorded in the GAD and further captured and recorded the investigation period, the names of the investigation's plaintiffs and defendants, the type of evidence cited by the EU Commission indicating economic injury and the outcome of the investigation including the antidumping duty awarded, if any, and its nature (either injury-based or dumping-based). Often there were multiple defendants and we recorded the proportion of defendants subject to injury elimination margin and used these data to partition our firms into our high and low injury-based duty partitions. This data collection was performed by Queen's undergraduate students Rafi Saeed and Devon MacMurray under the supervision of Godsell and Welker.

#### Geographic proximity data

We captured the city and country of the investigation plaintiffs' headquarters. Where investigations have more than two sample plaintiffs we measure distance as the sum of the distances between all plaintiffs in the case. We used the minimum driving distance between the two cities as our measure of distance. Driving distance between two cities is drawn from Google Maps (accessed June - September 2015).

#### Retaliation capacity data (import-export cross-border trade data)

We captured the retaliation capacity of defendant firms' countries by measuring the economic value of plaintiff firm exports to the defendant firm country(ies). We draw on the Correlates of War Bilateral Trade (v3.0) data panel available at URL: <http://www.correlatesofwar.org/datasets/bilateral-trade> (accessed December 2014 - February 2015). We first calculate the total exports from the country that is home to each petitioning firm in our sample during event year 0 for that firm. We then calculate the proportion of these total exports that go to each country named in the petition as a country allegedly dumping goods in the EU. If there is more than one country named in the petition as a country allegedly dumping goods in the EU, we sum the proportion of exports going to all such countries to create a measure of the cumulative retaliation capability of the defendant countries.

All authors vouch for the stated sources of the raw data.

*3. If the data are obtained from an organization on a proprietary basis, the authors should privately provide the editors with contact information for a representative of the organization who can confirm data were obtained by the authors. The editors would not make this information publicly available. The authors should also provide information to the editors about the data sharing agreement with*

*the organization (e.g., non-disclosure agreement, any restrictions imposed by the organization on the authors with respect to publishing certain results).*

We initially contracted with Bureau Van Dijk to obtain access to Amadeus data. When we discovered that Amadeus does not retain data for dead firms, we negotiated access to Orbis data instead. Bureau Van Dijk was very accommodating of this request. Our records indicate that a new contract for access to Orbis data was not provided, so the terms of the original contract for access to Amadeus data would govern our use of Orbis data. Since both Amadeus and Orbis are proprietary databases owned and distributed for commercial gain by Bureau Van Dijk (BvD), it is not surprising that our contract contains a “No Assignment” clause that prohibits us from making the data available to any other party. Specifically, that clause reads:

“THE CUSTOMER may not assign, sublicense or transfer this agreement or its rights or obligations under this agreement, and any attempted assignment, sublicensing or transfer shall be null and void ab initio.”

We had two different account representatives with BvD during our data acquisition negotiations. We initially dealt with Samuel Vreeland (email: Vreeland, Samuel [samuel.vreeland@bvdinfo.com](mailto:samuel.vreeland@bvdinfo.com)) and then with Dave Harvey (email: Harvey, Dave [dave.harvey@bvdinfo.com](mailto:dave.harvey@bvdinfo.com)). We have not had contact with either in some time.

*4. A complete description of the steps necessary to collect and process the data used in the final analyses reported in the paper. For experimental papers, we require information about subject eligibility and/or selection, as well as any exclusion criteria.*

We explain our data construction in the sample selection section of the paper. We provide additional step-by-step details that are helpful for readers below. We perform all the automatic data cleaning in SAS and perform all the manual data inspection in Excel 2013. We extracted Orbis data from two sources. The most recent 10 years up to 2012 was extracted from the Orbis web interface and data for an earlier 10 years was provided to us on CDs.

- We cleaned the web-extracted Orbis data for the most recent ten years up to 2012.<sup>2</sup> All firm-level variables are quoted in USD and are expressed in millions. Due to a file export constraint in Orbis (i.e., in each data inquiry, we were only allowed to extract up to 1,883 rows), we extracted 1,443 separate files in this step. This download was performed in

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<sup>2</sup> The updated link (accessed January 2, 2017) for this is located at: <https://orbis.bvdinfo.com/version-20161215/home.serv?product=orbisneo>.

November 2013 by two undergraduate research assistants: Yining Zhang and Yilan Cai at Queen’s University. We then compiled the 1,443 individual files and transposed the raw Orbis data into a Compustat-like file. We also renamed variables using Compustat conventions (e.g., *Total\_assets\_mil\_USD\_* was renamed *AT*).

- We cleaned the CD-based Orbis data for the earlier ten years (1993-2002). We obtained the CD in the form of Blu-ray media in November 2013. Note that the raw CD-based Orbis data does not directly specify the fiscal year of each variable (i.e., the account name is not indexed by the fiscal year, like *Total\_assets\_mil\_USD\_2000*). Instead, in the database, all variables are referenced to the last year (i.e., *Total\_assets\_mil\_last\_avail\_year*, *Total\_assets\_mil\_last\_avail\_year-1*, *Total\_assets\_mil\_last\_avail\_year-2*, etc.). Therefore, we needed to use the variable *last available year* for each firm to determine the values for the remaining fiscal years. To do so, we used the computer to automatically identify firms with the last available year in 2002, 2001, 2000, etc., and produced individual files for each *last available year* which we labelled CD2002, CD2001, CD2000, etc. Then, for each CDYear file, we manually renamed variables into Accountnameyear. For example, for the CD2002 file, *Total\_assets\_mil\_last\_avail\_year* is then renamed *AT2002*. We used the Compustat conventions when we renamed the variables. Finally, similar to the last step, in this step, we also transposed the raw Orbis data downloaded from CDs into a Compustat-like file.
- From our private communication with BvD, we were advised that BvD uses different firm IDs (i.e., the BvDID variable) for a subset of firms between the CD-based data and the web-extracted data. To fix this problem, we sent our list of firm IDs to BvD and obtained a translation file between the old firm IDs and the new firm IDs. We then replaced the old BvDID with the new BvDID.
- We assembled the CD-based Orbis data and the web-extracted Orbis together to form a panel database.
- We calculate the accruals as well as additional firm characteristics using this sample which we labelled EUUniverse.
- We applied the matching software provided by BvD to find the firm ID in the Orbis database. Specifically, we entered the firm names and country names specified in the World Bank data and used the matching software to search for the potential matches with the closest firm names in Orbis from the specified country. The matching software returned potential matches with a matching quality variable that takes a value from “A” (the best quality) to “E” (the poorest quality). We initially retained all matches.
- We attached the trade investigation initiation dates to all matches from the last step. We then entered these matches (i.e., investigation initiation date-firm ID combinations) into the

EUUniverse database to find the event-year firm's fundamental financial characteristics. Keep in mind that at this stage we have retained all matches from quality "A" (the best quality) to "E" (the poorest quality).

- We assessed the matching quality by manually inspecting the file generated in the last step. We compared the firm names reported in the World Bank file with the firm names reported in the Orbis data. When a match was ambiguous or there were multiple potential matches, we performed key word searches in google to verify the products manufactured by the chosen event firm matched the products of interest in the corresponding import relief investigation.
- We inserted additional hand collected variables into the file resulting from the last step (i.e., the percentage of injury-implied duty; the geographic distance; the retaliation intensity). Refer to our response to Question #2 for details.
- We separated the EUUniverse into two groups: petitioning firms and potential control firms (all other firms).
- We performed the matching algorithm suggested in Ecker, Francis, Olsson and Schipper (2013) that is described in the paper.
- We identified the years around the trade investigation year as Event year -3 to Event year +3.
- We constructed one of our control variables *Return* as the median contemporaneous annual excess stock return (annual raw return minus the market index return) for all public firms from the same Fama-French 30 industry from the country that is home to the petitioning firm. We utilized the Worldscope database for these return data. The raw output file downloaded from Worldscope was similar to the raw output from the Orbis database. We used a similar strategy to clean the data (i.e., transpose and rename the variables, etc.).
- We calculated necessary control variables using Orbis data. We also included all fixed effects (year, industry, country).
- Finally, we winsorized all continuous variables at the 1% and 99% percentiles to remove the effect of outliers. We exported our final data to Stata to execute the analysis and tabulate regression results.

*5. Prior to final acceptance of the paper, the computer program used to convert the raw data into the dataset used in the analysis plus a brief description that enables other researchers to use this program. Instead of the program, researchers can provide a detailed step-by- step description that enables other researchers to arrive at the same dataset used in the analysis. The purpose of this requirement is to facilitate replication and to help other researchers understand in detail how the sample was formed, including the treatment of outliers, winsorization, truncation, etc. This programming is in most circumstances not proprietary. However, we recognize that some parts of*

*the data generation process may indeed be proprietary or otherwise cannot be made publicly available. In such cases, the authors should inform the editors upon submission, so that the editors can consider an exemption from this requirement.*

We include the computer program used to convert raw data into the database used in the analysis in our final submission to the journal. The computer program was written in SAS 9.3. The program contains all the steps explained in our response to Question #4. We have also included the program to generate the sample summary statistics.

*6. Data and programs should be maintained by at least one author (usually the corresponding author) for at least six years, consistent with National Science Foundation guidelines.*

The authors will maintain all data and programs for at least six years.