



"International Tropical Timber Organisation/European Commission"

"FLEGT Independent Market Monitoring" Notes on EU timber imports database

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Introduction

For the sake of transparency, and to facilitate analysis of EU trade flows by other agencies, the FLEGT Independent Market Monitoring (IMM) mechanism makes available the full EU timber imports database providing the basis for the IMM Baseline report and other IMM outputs. Use of this database will require some knowledge of MS Access or similar relational database software.

The database is supplied as an MS Access database file (.accdb). Data is compiled from the monthly COMEXT data available at the Eurostat bulk download facility¹. The database includes both the raw data published by Eurostat and data which has been "cleaned" (adjusted to remove apparent errors) using procedures developed by the IMM Lead Consultant over a period of several years.

It is expected that the data cleaning system used to prepare this database will be superseded by a new set of more sophisticated algorithms developed by the European Forest Institute during ongoing work to update the EFI Forest Products Trade Flow database, a project supported by IMM.

Content

Drawing on definitions contained in the EU Combined Nomenclature (CN) for designating goods and merchandise, the database includes all data from Chapters 44 (wood), 45 (cork), 47 (pulp), 48 (paper), 49 (printed papers), and 94 (furniture - including wood and comparable products in metal, plastic and bamboo, but excluding mattresses and lighting).

<u>Annual data</u> is provided for all 28 EU countries for all years 2004 to 2014 inclusive (note that data has been backdated to 2004 for all countries that acceded to the EU after 2004).

<u>Monthly data</u> from January 2011 to December 2014 is also provided to identify possible shorterterm trends in trade flows immediately before and after implementation of EUTR.

Data tables

Tables beginning *EU28_import_* contain all numerical data of type and for period specified in the table name.

All records in the data tables contain a unique combination of the following three fields, each of which links to a look up table:

- **<u>DECLARANT</u>** Eurostat numeric code of the EU Member State reporting the data. It links to Declarant_code in Lookup_declarants table.
- <u>COUNTRY</u> Eurostat numeric code of the partner trading countries. It links to Eurostat_partner_code in Lookup_countries tables.
- **<u>TTCN</u>** 8-digit EU Combined Nomenclature code. Links to TTCN in Lookup_products

Each table provides data for a single data type as follows:

<u>Value</u> - abbreviated "VAL" in column headings - nominal value (i.e. not adjusted for inflation) in 1000 euros².

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http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00118
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¹ http://ec.europa.eu/eurostat/estat-navtree-portlet-prod/BulkDownloadListing

² When reporting in value terms always best to convert nominal values to constant values using eurostat HICP inflation rate for euro area - can be obtained from

Tonnage - abbreviated "QNT" in column headings - refers to weight of products. Note that Eurostat provides both tonnage and supplementary unit data for extra-EU trade (i.e. imports from outside the EU). For intra-EU trade, tonnage data may not be reported for product groups for which supplementary data is reported.³

<u>RWE</u> - roundwood equivalent volume in cubic meters - this is calculated by IMM from the adjusted data (see below) using standard conversion factors. In some cases this required a two-step process, first converting from m3, m2, meters, or tonnes into cubic meters, then from this into roundwood equivalent volume. Far reaching assumptions were made at each stage, so this must be treated as a very rough estimate.

<u>Supp_unit</u> - abbreviated "SUP" in column headings – refers to supplementary unit reported by Eurostat - usually cubic meters, occasionally square meters, linear meters, kg or number of items depending on product. The unit relevant to each product group is identified in the Unit_Eurostat_supp field of Lookup_products table. Note that a supplementary unit is not reported for all product groups (e.g. fuelwood, chips, charcoal and paper products are excluded)

IMM adjusted - abbreviated "ADJ" or "AMD" (for "amended") in column headings - refers to volumetric (m3, m2, linear meters) data that has been "cleaned" by IMM by checking to ensure unit values are within reasonable (but still very broad) upper and lower bounds. Data is adjusted to remove outliers. If the unit value falls below the lower boundary, the volume is reduced so that unit value is equal to the lower boundary. If the unit value is above the upper boundary, volume is increased so that unit value is equal to the upper boundary. Note the assumption in the cleaning process is that the value data is accurate and does not need adjustment⁴.

In addition to "cleaned" volumetric data, <u>for product groups for which no volumetric data is</u> <u>reported by Eurostat</u>, the "IMM adjusted" table contains a rough estimate of m3 wood volume calculated from the tonnage data - these product groups include fuelwood, chips, wood waste, certain types of planed/sanded/finger-jointed sawn timber and veneer, some mouldings codes, poles, pallets and packaging, joinery products, tableware, kitchenware and marquetry, and wood furniture.

For wood-based pulp products, the "IMM adjusted" table reports unadjusted weight in kgs. For paper products, the table reports unadjusted weight data in tonnes.

When querying on the IMM adjusted table, <u>you must ensure that data is grouped by units identified</u> <u>in the Unit_IMM_adjusted field of Lookup_products table – otherwise data with different units will</u> <u>be aggregated</u>.

Data column names: these all take the same form e.g. "IRWEC200412" - from left to right: "I" is for "imports" (as opposed to "E" for "exports"); "RWE" is the data reported (here roundwood equivalent volume, in other tables will be "SUP", "VAL" etc); "C" means data is cumulative for the year to the end of the reporting month (the alternative is "A" which means actual monthly data is reported);

³ Several MS stopped recording tonnage for many CN Chpt 44 product categories after 2005, but then all with the exception of Belgium restarted reporting tonnage for all product groups from 2009. In 2014, Belgium was still not reporting tonnage for many product groups. To avoid uncertainty when querying data, it's best to assume that tonnage data is inaccurate for intra-EU trade in those product groups for which supplementary unit data (e.g. cubic meters, square meters etc) is also reported.

⁴ Long experience of using eurostat data suggests value data tends to be more consistent than volume data and is therefore assumed to be more reliable.

"2004" is the reporting year; and "12" is the reporting month. The annual tables provide cumulative data for the 12th month only. The monthly tables provide actual monthly data.

Lookup tables

The following lookup tables are provided:

Lookup declarant table – provides the name and 2 letter country code of the declarants (EU Member States)

Lookup_countries table

Gives the name of the partner country and provides the following fields for use in Access queries to summarise and group the data:

- <u>Forest zone short</u> countries are classified into 3 types: PRITEMP countries almost exclusively located in the temperate/boreal zone; PRITROP countries almost exclusively located in the moist tropical zone; PRIARIDMNT countries almost exclusively located in arid or mountainous zone (rarely important in timber trade); and TROP&TEMP countries that span a large section of both tropical and temperate forests only Brazil and China are included in this class since they are both large suppliers and export a significant mix of tropical and temperate products and therefore have to be handled separately.
- <u>EU</u> countries are classified into 5 types 0 = non-EU; 1 = EU15; 2 = 10 countries acceding on 1 May 2004; 3 = 2 countries acceding on 1 January 2007; 4 = Croatia acceded 1 July 2013.
- <u>Continent-detail</u> a detailed breakdown by continent
- <u>Continent</u> less detailed breakdown by continent
- VPA status of VPA Partner countries in years 2007 and 2011-2014

Lookup_products table

Summarises products using the 8 digit CN code as a unique key. Includes following fields:

- <u>Unit_IMM_adjusted</u> unit used to report data in the IMM_adjusted tables if no unit is provided then no IMM adjusted data is available.
- <u>Unit_Eurostat_supp</u> unit used to report data in the supp_unit_unadjusted table if no unit is provided then no Eurostat supplementary unit data is available.
- <u>Major_product_group</u> classifies products into wood (chpt 44), cork (chpt 45), furniture (chpt 94), pulp (chpt 47), paper (chpt 48 and 49), and bamboo (products identified as bamboo in all chapters).
- <u>Product</u> more detailed classification of products into types which are readily comprehensible to the forest products industries
- EUTR "yes" product is captured by EUTR, "no" product is not captured by EUTR
- <u>Non_wood</u> "yes" product is composed primarily of wood, "no" product is not composed primarily of wood useful when you want to exclude e.g. non-wood furniture and pulp types⁵.
- <u>Pulp_paper</u> "yes" products is pulp or paper, "no" product is not. Useful for when you want to either focus on pulp and paper or exclude it from the query.

⁵ If you're wondering why the database includes the data on metal and plastic furniture at all, it's so that some sense of the proportion of traded furniture which is composed of wood. Changes in this proportion might provide an indication of the extent to which policy measures like EUTR and VPA have the effect of driving substitution of wood for non-wood products

• <u>Composite</u> - "yes" product is likely to comprise a significant mix of wood species, "no" - product is likely to comprise a single species. A bit arbitrary but introduced because legality verification tends to be tougher for complex mixed products and might be interesting to monitor whether trade is moving towards more or less complex products.

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