

The International Trade and Production Database for Estimation - Release 2025 (ITPD-E-R2025)

Mario Larch

Serge Shikher

Yoto V. Yotov

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Abstract

This paper introduces Release 2025 of the International Trade and Production Database for Estimation (ITPD-E-R2025). ITPD-E-R2025 covers the period 1986–2023 for 266 countries and 170 industries across four broad sectors: Agriculture, Mining and Energy, Manufacturing, and Services. The previous release was Release 03. Starting with this release, releases will be identified by their release year rather than release number. The new release introduces a new methodology for mirroring trade data for Forestry, Fishing, Mining and Energy, and Manufacturing, which results in more observations. The new release also includes an additional year of data. It has 87.5 million observations, compared to 83.5 million observations in Release 03, 72.5 million observations in Release 02, and 35.8 million in the original release. ITPD-E-R2025 can be downloaded for free from the USITC's Gravity Portal at <https://www.usitc.gov/data/gravity/itpde.htm>.

Mario Larch
University of Bayreuth, CEPII, ifo, CESifo, WIFO, GEP

Serge Shikher
Research Division, Office of Economics
U.S. International Trade Commission
gravity@usitc.gov

Yoto V. Yotov
Drexel University, CGPA, ifo, CESifo

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If you believe to have discovered a mistake in the database or that the database can be improved by incorporating additional or more reliable data, even if only for an individual country or industry, please let us know by writing to the USITC’s gravity portal e-mail address (gravity@usitc.gov). We will try to accommodate detection of errors, inconsistencies, and suggestions as soon as possible. Please visit [USITC’s gravity portal](#) for updates.

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1 Overview and Key Features

Our objective with the original release of ITPD-E was to create a database that had the following features: (i) consistently constructed international and domestic trade flows based on official data; (ii) detailed industry level; (iii) wide country coverage; (iv) long time-series coverage; and (v) comprehensive coverage of all broad sectors, i.e., full economy coverage. Therefore, in 2020, we released the *International Trade and Production Database for Estimation (ITPD-E)* (Borchert et al., 2021), which covered 243 countries, 170 industries, and 17 years (2000-2016). A key feature of the ITPD-E is that it is constructed using reported official data and intentionally does not estimate any data points by statistical techniques. Therefore, it is suitable for estimations. For example, it can be used for theory-consistent disaggregated gravity estimations with international and domestic trade flows (Borchert et al., 2022a).

Since its introduction, the ITPD-E has been a popular public good. Based on the number and distribution of downloads of the data, we conclude that the ITPD-E has been a useful resource for many scholars, researchers, and policy makers. In addition, we continue to receive many requests to update the database. Therefore, we release the fourth update to the ITPD-E. The previous release was R03. Starting with this release, releases will be identified by their release year rather than release number. Hence, the current release is labeled ITPD-E-R2025. The objective of this paper is to describe ITPD-E-R2025 and to compare it with its predecessor (ITPD-E-R03), while highlighting the key features and improvements in the updated database.

The current release of the ITPD-E includes 87,537,140 observations and covers the period 1986-2023 for 266 countries and 170 industries. The complete list of the industries covered in ITPD-E-R2025 is included in Table 1. Similar to ITPD-E releases 1–3, the disaggregated industries in ITPD-E-R2025 can be classified in 4 broad sectors: ‘*Agriculture*’, ‘*Mining & Energy*’, ‘*Manufacturing*’, and ‘*Services*’. The industrial classification in ITPD-E-R2025 is

unchanged from ITPD-E-R03.¹

Different broad sectors have different starting dates for coverage. Specifically, the ‘*Agriculture*’ sector in the ITPD-E-R2025 covers the period 1986-2023 for industries 1 to 26, and the period 1988-2023 for industries 27 and 28 (‘*Forestry*’ and ‘*Fishing*’). The ‘*Mining & Energy*’ sector in ITPD-E-R2025 covers the period 1988-2023 and includes 7 industries. The ‘*Manufacturing*’ sector in ITPD-E-R2025 covers the same period (1988-2023) and includes 118 industries. Finally, the ‘*Services*’ sector in ITPD-E-R2025 covers the period 2000-2023 and includes 17 industries.

In addition to the standard ISO3 country codes, Release 2025, as already Release 3, of the ITPD-E identifies countries by dynamic country codes, consistent with the USITC’s Dynamic Gravity Dataset (DGD) (Gurevich and Herman, 2018). The dynamic country codes are equal to the standard ISO3 codes, except in cases where a country or territory changed its geographic boundaries, but retained its ISO3 code. In those cases, a new dynamic country code, a modified ISO3 code, is assigned.² The complete list of the countries covered in ITPD-E-R2025 is included in Table 2. ITPD-E-R2025 covers 266 countries when unique dynamic ISO3 country codes are counted or 257 countries when unique static ISO3 country codes are counted.³

The following is a brief summary of the highlights of ITPD-E-R2025 relative to the previous releases of the ITPD-E:

- ***New naming convention for releases.*** ITPD-E releases are now named after the year in which they are made. Therefore, the current release is 2025. We hope that this

¹A reminder that the industrial classification had changed slightly between R01 and R02. Specifically, two industries were removed from manufacturing and two were added to agriculture. See Borchert et al. (2022b) for more information.

²For example, after unification of West and East Germany, the unified Germany retained the ISO3 code of West Germany, DEU. To keep track of this change in boundaries, DGD assigns the dynamic country code DEU.X to West Germany while reserving DEU for (unified) Germany.

³There are two cases, Romania in 2002 and The Democratic Republic of the Congo in 1998, when dynamic country codes changed even though country boundaries did not. See Gurevich and Herman (2018) for more details. Also, there are two countries, Cambodia and Samoa, that changed names, but not boundaries, ISO3 codes, or dynamic country codes.

naming convention would make it easier to find the latest release of the ITPD-E and to know the ‘age’ of each release.

- ***Data for recent years.*** Data for all sectors are extended from 2019 to 2023 in ITPD-E-R2025.
- ***More observations.*** The total number of observations in ITPD-E-R2025 is 87,537,140, which is 5% more relative to ITPD-E-R03, which had 83,503,326 observations, 21% more relative to ITPD-E-R02, which had 72,534,869 observations, and 127% more than ITPD-E-R01, which had 38,518,253 observations.
- ***Improved identification of problematic data points.*** Following the introduction of this step in ITPD-E-R03, administrative data are checked for anomalies. For example, in the original Comtrade data, there are instances where a country reports the same export or import value for all trade partners within the same year and product category. We did not use these observations. The problematic observations are now deleted in the early stages of data processing, so that they could be replaced by mirror data using our new mirroring procedure.
- ***New mirroring procedure in Forestry and Fishing, Mining and Energy, and Manufacturing broad sectors.*** Trade data is now mirrored at the HS product level rather than ITPD industry level in these broad sectors. As discussed in Sections 3 and 4, the new mirroring procedure, in combination with the updated procedure for identification of problematic data points, results in more observations. The new procedure also results in greater, and we hope more accurate, trade values for some observations.

The rest of the paper is organized as follows. Section 2 describes the variables and format of the ITPD-E-R2025 and how to download the database. Section 3 summarizes the methods used to construct the data and the administrative data sources. Section 4 compares ITPD-E-R2025 with the previous release, ITPD-E-R03, across several dimensions.

2 File Format, Access, and Variables

The ITPD-E databases are distributed as a comma-separated file, ITPD_E_RYEAR.csv, where “YEAR” is the release year. All releases are available for free download at <https://gravity.usitc.gov>. The following is a brief description of the main categories of variables in the database, and all variables are included in Table 3:

- The country identifiers on the exporter and importer side, respectively, include ISO 3-letter alpha codes (‘exporter_iso3’ and ‘importer_iso3’) and the corresponding country names (‘exporter_name’ and ‘importer_name’). In addition, ITPD-E-R2025 includes corresponding dynamic country identifiers (‘exporter_iso3_dynamic’ and ‘importer_iso3_dynamic’) that keep track of countries that alter their borders but do not receive a new ISO3 code. By design, the country coding in ITPD-E-R2025 is consistent with the country coding in the USITC’s “*Dynamic Gravity Database*” (DGD) of Gurevich and Herman (2018), which includes a series of useful bilateral and country-specific geography and economic variables and is especially suited for gravity estimations.
- The industry identifiers include industry codes and corresponding industry descriptions (‘industry_id’ and ‘industry_descr’, respectively). While the industrial classification is specific to ITPD-E, Tables 5-8 of this document include concordances that can be used to match ITPD-E with other databases. Finally, the broad sectors in ITPD-E-R2025 are described in the variable ‘broad_sector’.⁴
- The key variable in ITPD-E-R2025 is ‘trade’. Its values are expressed in millions of current United States dollars and include international and domestic trade. Trade is *international* when the export and the import countries are different. Trade is *domestic* when the importer and the exporter are the same country.
- Finally, ITPD-E-R2025 includes two flag variables. As explained in Section 3.1, ‘flag_mirror’ is an indicator variable that is greater than 0 for observations that are

⁴Note that the sector “Mining and Energy” was called “Mining_energy” in Release 1.

obtained using the mirror trade data, while ‘flag_zero’ shows whether the current observation contains zero or positive trade and, in case of zero, the origin of the zero.

3 Methods and Sources

In terms of methods and official data sources, we closely follow the steps and procedures used to construct the previous versions of the ITPD-E. The main methodological change in this release is the way we mirror trade data for Forestry, Fishing, Mining and Energy, and Manufacturing.

3.1 Methods

To construct ITPD-E-R2025, we follow the methods that we used to construct the original version of the data. As noted above, the main difference is that we mirror trade data for Forestry, Fishing, Mining and Energy, and Manufacturing at the HS6 level of aggregation (as opposed to the ITPD-E level of aggregation from the previous releases). We take the following steps to construct ITPD-E-R2025.

- *Construct international trade.* To take full advantage of all reported international trade data, we use a mirroring procedure. In our mirroring procedure for goods, we use exports reported by partner countries to fill in missing values for the corresponding import values. This is done for two reasons. First, from a practical perspective, import goods data are considered more reliable. Second, from a theory perspective, imports, which are reported CIF, are the theory-consistent trade variable. An important change in ITPD-E-R2025 is that we mirror the data in Forestry, Fishing, Mining and Energy, and Manufacturing at the most disaggregated level (HS6), while before it was mirrored at the ITPD-E industry level. Note that for the remaining agricultural industries and for services, the mirroring already happened at the most disaggregated level in earlier releases. For services, we use reported imports to fill in missing values of exports.

The main reason for this is that the export services data are more reliable because of the nature of payments for services and the accounting for them. Moreover, much of the services trade is not subject to freight charges and tariffs. To denote mirrored cases, the ITPD-E-R2025 includes a flag variable named *flag_mirror*, which is an indicator that takes a value greater than 1 if a trade flow observation is mirrored, and 0 otherwise. In this release, the value of this variable indicates the number of HS6 products that have mirrored data in a given ITPD industry.

- *Construct domestic trade.* Domestic trade is calculated as the difference between the (gross) value of total production and total exports for each product/industry. Total exports are constructed as the sum of bilateral trade for each exporting country. If we obtain a negative domestic trade value, we do not include this observation in the ITPD-E-R2025.

For more details on the common principles and steps to construct ITPD-E-R2025, we refer the reader to Borchert et al. (2021).

3.2 Data Sources

The raw/administrative data sources for the first release of the ITPD-E were selected according to the following guiding criteria: (i) they should provide clear documentation; (ii) they should contain data that were not estimated by statistical procedures; and (iii) they are regularly updated. Consistent with our objectives to ensure consistency, continuity, and reproducibility of ITPD-E, for the construction of ITPD-E-R2025, we relied on new versions of the same sources that we employed for the original version of the database. A summary of the administrative data sources across all broad sectors is provided in Table 4.

- *Agriculture.* The output and trade for all industries in Agriculture, besides Forestry and Fishing, are from the Food and Agriculture Organization of the United Nations

Statistics Division (FAOSTAT),⁵ which collects information on an annual basis for more than 245 countries. FAO obtains data from the UNSD, Eurostat, and other national authorities as needed. These data are checked for outliers and data on food aid are added to obtain total cross-border trade flows.⁶ FAOSTAT’s Detailed Trade Matrix reports information on agricultural bilateral trade quantities (in tons) and values (in thousands of US dollars). The data is stated to be last updated on December 19, 2024. The file is from March 3, 2025. The Value of Agricultural Production data from the FAO contains information for at least some years for 261 geographical “areas” (which include country groups) and 220 different FCL items. We use gross production values in current United States dollars (the relevant file is “Value of Agricultural Production”). The data is last updated on February 3, 2025.⁷

The original FAO data are classified according to the FAOSTAT Commodity List (FCL) which includes more than 600 items.⁸ We checked and compared the CPC and FAO codes. These are the two classifications for the items provided in FAOstat. Both contain the same values for trade. In the bulk download, both are contained (itemcode=FAO, itemcodecpc=CPC). Both have 559 distinct values for the international trade data. As we provide a database containing agriculture, mining, energy, manufacturing, and services, we have to carefully avoid double counting. For example, some of the FAO FCL items contain mining and manufacturing products, so we do not include these FCL items in ITPD’s agriculture industries. Specifically, we classify all industries between 1500 and 1601 of ISIC rev. 3 as manufacturing industries. Using the FCL to HS and HS to ISIC rev. 3 correspondence tables, we identify the FCL items

⁵<https://www.fao.org/faostat/en/#data>.

⁶<http://www.fao.org/faostat/en/#data/TM>. The information about the source data on this homepage under “Metadata” point “(17) Statistical process/Source data” is the following: “The main source is official country statistics compiled by UNSD and Eurostat. Other sources include: 1. INTERFAIS WFP food aid data base: This data source is used to capture the food aid data, which is sometimes excluded from commercial trade records and is thus not always included in UNSD data. 2. National web databases, national and international publications to update the trade data for the non-reporting countries which are missing from COMTRADE.”

⁷<https://www.fao.org/faostat/en/#data/QV>.

⁸<http://www.fao.org/economic/ess/ess-standards/commodity/en/>.

that are part of the manufacturing data.⁹ Note that these FCL items typically do not have matching production data in the FAO’s database. Some FCL items could not be uniquely matched to broad sectors. In these cases, we allocated FCL items according to the number of constituent HS lines.¹⁰ We also dropped industries we could not match to any ISIC or HS code¹¹ and industries with FCL item codes above 1296, which are aggregates and industries such as fertilizers, pesticides, and machinery, belonging to one of the other broad sectors. Table 5 includes the correspondence between ITPD-E agricultural industries and FCL items.

- In this release, we considered switching from FAO to COMTRADE as the official source for international trade data for agriculture, but decided against it. In order to construct domestic sales using the COMTRADE international trade data and value of agricultural output from FAO, we had to aggregate the international trade and the output data first to the ITPD-E level. This lead to substantially more negative domestic sales observation compared to our current procedure. Hence, we continue to use the output and international trade data provided by the FAO for agriculture.

Note, that the correlation of the international trade data from FAO and COMTRADE

⁹These are FCL items 16, 18, 19, 20, 21, 22, 23, 24, 26, 28, 29, 31, 32, 34, 36, 37, 38, 39, 41, 45, 46, 48, 49, 50, 51, 57, 58, 60, 61, 64, 66, 72, 76, 80, 82, 84, 86, 90, 95, 98, 104, 109, 110, 111, 113, 114, 115, 117, 118, 119, 121, 126, 127, 129, 150, 154, 155, 158, 159, 160, 162, 163, 164, 165, 166, 167, 168, 172, 173, 175, 212, 235, 237, 238, 239, 240, 241, 244, 245, 246, 247, 252, 253, 257, 258, 259, 261, 262, 264, 266, 268, 269, 271, 272, 273, 274, 276, 278, 281, 282, 290, 291, 293, 294, 295, 297, 298, 306, 307, 313, 314, 331, 332, 334, 335, 337, 338, 340, 341, 343, 390, 391, 392, 447, 448, 450, 451, 466, 469, 471, 472, 473, 474, 475, 476, 491, 492, 496, 498, 499, 509, 510, 513, 514, 517, 518, 519, 538, 539, 562, 563, 564, 565, 575, 576, 580, 583, 584, 622, 623, 624, 625, 626, 631, 632, 633, 634, 657, 658, 659, 660, 662, 664, 665, 666, 672, 737, 753, 768, 770, 773, 774, 828, 829, 831, 840, 841, 842, 843, 845, 849, 850, 851, 852, 853, 854, 855, 867, 869, 870, 871, 872, 873, 874, 875, 877, 878, 882, 883, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 903, 904, 905, 907, 908, 909, 910, 916, 917, 919, 920, 921, 922, 927, 928, 929, 930, 947, 949, 951, 952, 953, 954, 955, 957, 958, 959, 977, 979, 982, 983, 984, 985, 988, 994, 995, 996, 997, 998, 999, 1008, 1010, 1017, 1019, 1020, 1021, 1022, 1023, 1035, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1058, 1059, 1060, 1061, 1063, 1064, 1065, 1066, 1069, 1073, 1074, 1075, 1080, 1081, 1089, 1097, 1098, 1102, 1103, 1104, 1105, 1108, 1109, 1111, 1112, 1127, 1128, 1129, 1130, 1141, 1151, 1158, 1160, 1163, 1164, 1166, 1167, 1168, 1172, 1173, 1174, 1175, 1186, 1187, 1221, 1222, 1223, 1225, 1241, 1242, 1243, 1273, 1274, 1275, 1276, 1277, and 1296.

¹⁰This leads in dropping of industries with FCL items 653, 868, 948, 978, 1018, 1036, 1232, and 1259. We kept the following FCL items in agriculture: 667, 777, 780, 782, 826, 987, 1009, and 1293.

¹¹Specifically, we could not match FCL items 10, 30, 464, 944, 972, 1012, 1032, 1055, 1070, 1077, 1084, 1087, 1094, 1120, 1122, 1124, 1137, 1144, 1154, 1159, and 1161.

is very high (0.99), as the main source of the FAO data is the COMTRADE data.

- *Forestry and Fishing.* Even though they are part of the broad sector ‘*Agriculture*’, the data sources for these two industries are different from the data sources for the rest of industries in ‘*Agriculture*’. Since FAOSTAT, which is the main data source for ‘*Agriculture*’, does not cover ‘Forestry’ and ‘Fishing’, we had to look for other sources of data. Specifically, international trade data for ‘Forestry’ and ‘Fishing’ come from the United Nations’ Commodity Trade Statistics Database (COMTRADE),¹² while production data come from the UN National Accounts database (UNSNA); specifically, the SNA’s “Table 2.6 Output, gross value added and fixed assets by industries at current prices (ISIC Rev.4).”¹³ ‘Forestry’ corresponds to industry code A02, “Forestry and Logging”, in ISIC revisions 3 and 4. ‘Fishing’ corresponds to industry code A03, “Fishing and Aquaculture”, in ISIC revision 4 and industry code B05 in ISIC revision 3. Availability of trade data predetermined the first year of coverage for the ‘Forestry’ and ‘Fishing’ industries as 1988.
- *Mining & Energy.* International trade data for the ‘*Mining & Energy*’ sector come from COMTRADE, and were obtained at the HS6 level. Availability of trade data determined 1988 as the first year of coverage for ‘*Mining & Energy*’. Production data for ‘*Mining & Energy*’ come from the United Nations Industrial Statistics (INDSTAT) database and, to take full advantage of UN data and ensure maximum coverage in ITPD-E-R2025, we use the ISIC rev. 3 and ISIC rev. 4 versions of INDSTAT. The INDSTAT data was downloaded from <http://stat.unido.org> on August 6, 2025. According to the UN web site, the ISIC rev. 4 data has been updated on May 8, 2025, and the ISIC rev. 3 data has been updated on June 25, 2025. The raw ISIC rev. 3 data covers the years 1963-2023 and the ISIC rev. 4 data covers the years 1973-2022. A list of the ITPD-E mining and energy industries, together with the concordance that we

¹²As noted below, we rely on COMTRADE for international trade data in ‘*Mining & Energy*’ and ‘*Manufacturing*’ too. A description of COMTRADE can be found at <https://comtrade.un.org>.

¹³http://data.un.org/Data.aspx?d=SNA&f=group_code%3a206.

created between ISIC rev. 3, ISIC rev. 4, and ITPD-E-R2025 appear in Table 6.

- *Manufacturing.* International trade flows data come from COMTRADE, and were obtained at the HS6 level. Availability of trade data determined 1988 as the first year of coverage for ‘*Manufacturing*’. The source for manufacturing production data is the United Nations Industrial Statistics (INDSTAT) database, and the data come in two versions – ISIC rev. 3 and ISIC rev. 4.¹⁴ To ensure maximum coverage, we construct the manufacturing production data in two steps. First, for each revision of ISIC, we combine the output data at the 3-digit level with the data at the 4-digit level. Then, we combine the data from the two ISIC revisions by aggregating the 4-digit ISIC classifications up in order to ensure matching. The concordance that we created appears in Table 7.
- *Services.* For international trade data, we augment the WTO-UNCTAD-ITC Annual Trade in Services dataset¹⁵ with services trade statistics from the UN Trade in Services (UN-TSD) Database as incorporated into COMTRADE.¹⁶ As before, the reasons are twofold: first, to achieve comprehensive coverage of ITPD-E from the year 2000 onwards, since the WTO-UNCTAD-ITC dataset, as the main data source, only commences in 2005; and second, to supplement bilateral trade flow observation in overlapping years that are missing in the WTO-UNCTAD-ITC dataset.

Due to new trade flow and gross output data, the services part of the R2025 update exhibits nearly complete coverage of the recent years.¹⁷

About half of the data in WTO-UNCTAD-ITC are reported zeros, i.e., zero trade flows

¹⁴As noted earlier, the INDSTAT data was downloaded from <http://stat.unido.org> on August 6, 2025. According to the UN web site, the ISIC rev. 4 data has been updated on May 8, 2025, and the ISIC rev. 3 data has been updated on June 25, 2025. The raw ISIC rev. 3 data covers the years 1963-2023 and the ISIC rev. 4 data covers the years 1973-2022.

¹⁵http://stats.wto.org/assets/UserGuide/services_annual_dataset.zip. File downloaded on July 27, 2025.

¹⁶<https://comtrade.un.org/data/>.

¹⁷Information for years prior to 2000, potentially reaching back to 1981, is now included in the latest vintage of the WTO-UNCTAD-ITC dataset. However, these flows are not bilateral. Therefore, we disregard these flows for the ITPD-E.

are being captured systematically, and ‘true’ reported zero flows are identifiable in the data through a flag. At the same time, the WTO-UNCTAD-ITC dataset no longer contains information on the sources of the statistical information. By comparison, in the R01 release, the overwhelming majority of data had come from Eurostat (69%) and some 17% from the OECD.

The data contain both reported import flows and reported export flows, which opens up the possibility of an improved mirroring protocol. For both export and import flows, there is annual trade broken out by sector and partner starting in the year 2005. Data prior to 2005 is not broken out by partner. Since we discard the non-bilateral data, we expect that, as in the R01 and R02 releases, augmentation of the WTO-UNCTAD-ITC services trade data with the UN Trade in Services dataset will bring considerable benefits in terms of coverage and completeness for the period 2000-2010.

We obtain information on gross output at basic prices from the UN SNA dataset, namely “Table 2.6 Output, gross value added and fixed assets by industries at current prices (ISIC Rev.4).”¹⁸

A raw data problem has been identified with regard to domestic trade flows in Belarus (BLR), which initially appeared to be implausibly large prior to 2015. Upon investigation, we found that the Belarusian currency is subject to two different currency re-denomination (1:1000 prior to 2015 and 1:10000 from 2016 onwards). Since output figures in local currency (LCU) shrink by four decimals as of 2016, it appears as if the re-denomination has not been applied in earlier years (although presumably it should have) but has been applied as indicated commencing in 2016. The IMF exchange rate series for Belarus is smooth around 2015-16 and does not exhibit a jump by a factor of 10. In order to ensure consistency of the value of trade flows in R2025, as in R03, output data for Belarus have been discarded.

For a more detailed background on the data sources and their specific usage for the con-

¹⁸http://data.un.org/Data.aspx?d=SNA&f=group_code%3a206. Downloaded on August 20, 2025.

struction of ITPD-E-R2025, we refer the reader to Borchert et al. (2021).

4 A comparison of ITPD-E Release 2025 and Release 3

This section compares the latest ITPD-E release, Release 2025, with the previous one, Release 3. Tables 9-11 summarize the differences between the two releases across different dimensions. All three tables reflect the entirety of trade flows contained in each release, i.e., domestic and international trade.¹⁹ Table 9 compares the total number of observations in the two releases. As expected, Release 2025 has more observations, about 87.5 million, compared to 83.5 million in Release 3 (72.5 million in Release 2, and 38.5 million in Release 1). Most of the additional observations in R2025 come from the additional year covered by the latest release, however, a significant number of observations were added in 2022 as well. A smaller number of observations, about 436 thousand, was present in Release 3 but is no longer in Release 2025. These observations likely disappeared because they were reclassified to a different country, industry, or year in the original administrative data sources.

Table 10 compares the number of observations across Releases 2025 and 3 *by year*. It is apparent that most of the additional observations in Release 2025 arise from additional years now covered by Release 2025 relative to Release 3. In 1986 and 1987, only Agriculture industries 1-26 are covered, hence the low number of observations. Starting in 1988, all goods industries are covered. The number of observations increases between 1988 and mid-1990s as more and more countries report more data to the UN. The number of observations increases again in the year 2000 as services data become available. In that regard, one of the reasons why the value of reported trade exhibits a very substantial jump between 1999 and 2000—from 16.3 to 43.3 trillion—is that domestic trade in services is much larger than domestic trade in goods. We also note the increase (more than doubling) in value between the two releases in 2022. Comparing the number of observations in the years that are covered in

¹⁹Exceptions are industries IDs 154, 155, 161, 167 and 168, which are services industries with no domestic production equivalent. Hence, entries for these five industries reflect international trade only.

both Releases 3 and 2025 (i.e., 2000-2022), we see that Release 2025 has more observations per year. This is due to improved data coverage in the original data sources that we use.

Table 11 compares the number of observations across Releases 3 and 2025 *by industry*. The number of observations for each industry is greater in Release 2025. We also note the increase in the values in the new release. A possible explanation for Forestry, Fishing, Mining and Energy, and Manufacturing is the new mirroring procedure, which is at HS6 level. The largest industries by value tend to be concentrated in the Services sector, which reflects the fact that a substantial share of domestic value added typically is in services industries (up to 70-80% in advanced economies), combined with the fact that table entries include domestic trade flows. Outside services, the largest industries by value are 'Motor vehicles' (138) and 'Extraction of petroleum and gas' (31) and 'Refined petroleum products' (80), respectively.

5 Conclusions

With an additional year (2023), more data for earlier years, and more countries, Release 2025 of ITPD-E offers more observations for domestic and international trade compared to the previous release (87.5 million vs. 83.5 in Release 3, or an increase of 5%). It features global coverage and an unprecedented level of sectoral disaggregation, including domestic and international trade and covering all economic activity. We hope that ITPD-E R2025 will prove a useful resource for a wide range of econometric and policy analyses.

References

- Borchert, Ingo, Mario Larch, Serge Shikher, and Yoto V. Yotov.** 2021. “The International Trade and Production Database for Estimation (ITPD-E).” *International Economics*, 166: 140–166.
- Borchert, Ingo, Mario Larch, Serge Shikher, and Yoto V. Yotov.** 2022*a*. “Disaggregated Gravity: Benchmark Estimates and Stylized Facts from a New Database.” *Review of International Economics*, 30(1): 113–136.
- Borchert, Ingo, Mario Larch, Serge Shikher, and Yoto V. Yotov.** 2022*b*. “The International Trade and Production Database for Estimation – Release 2 (ITPD-E-R02).” *USITC Working Paper 2022–07–A*.
- Gurevich, Tamara, and Peter Herman.** 2018. “The Dynamic Gravity Dataset: 1948–2016.” *USITC Working Paper 2018-02-A*.
- Wettstein, Steen, Antonella Liberatore, Joscelyn Magdeleine, and Andreas Maurer.** 2019. “A Global Trade in Services Data Set by Sector and by Mode of Supply (TISMOS).” WTO. available from https://www.wto.org/english/res_e/statis_e/trade_datasets_e.htm.

Table 1: ITPD-E-R2025: Industry Coverage

ID	Industry Description	Broad Sector
1	Wheat	Agriculture
2	Rice (raw)	Agriculture
3	Corn	Agriculture
4	Other cereals	Agriculture
5	Cereal products	Agriculture
6	Soybeans	Agriculture
7	Other oilseeds (excluding peanuts)	Agriculture
8	Animal feed ingredients and pet foods	Agriculture
9	Raw and refined sugar and sugar crops	Agriculture
10	Other sweeteners	Agriculture
11	Pulses and legumes, dried, preserved	Agriculture
12	Fresh fruit	Agriculture
13	Fresh vegetables	Agriculture
14	Prepared fruits and fruit juices	Agriculture
15	Prepared vegetables	Agriculture
16	Nuts	Agriculture
17	Live Cattle	Agriculture
18	Live Swine	Agriculture
19	Eggs	Agriculture
20	Other meats, livestock products, and live animals	Agriculture
21	Cocoa and cocoa products	Agriculture
22	Beverages, nec	Agriculture
23	Cotton	Agriculture
24	Tobacco leaves and cigarettes	Agriculture
25	Spices	Agriculture
26	Other agricultural products, nec	Agriculture
27	Forestry	Agriculture
28	Fishing	Agriculture
29	Mining of hard coal	Mining and Energy
30	Mining of lignite	Mining and Energy
31	Extraction crude petroleum and natural gas	Mining and Energy
32	Mining of iron ores	Mining and Energy
33	Other mining and quarrying	Mining and Energy
34	Electricity production, collection, and distribution	Mining and Energy
35	Gas production and distribution	Mining and Energy
36	Processing/preserving of meat	Manufacturing
37	Processing/preserving of fish	Manufacturing
38	Processing/preserving of fruit & vegetables	Manufacturing
39	Vegetable and animal oils and fats	Manufacturing
40	Dairy products	Manufacturing
41	Grain mill products	Manufacturing
42	Starches and starch products	Manufacturing
43	Prepared animal feeds	Manufacturing
44	Bakery products	Manufacturing
45	Sugar	Manufacturing
46	Cocoa chocolate and sugar confectionery	Manufacturing
47	Macaroni noodles & similar products	Manufacturing
48	Other food products n.e.c.	Manufacturing
49	Distilling rectifying & blending of spirits	Manufacturing
50	Wines	Manufacturing
51	Malt liquors and malt	Manufacturing
52	Soft drinks; mineral waters	Manufacturing
53	Tobacco products	Manufacturing
54	Textile fibre preparation; textile weaving	Manufacturing
55	Made-up textile articles except apparel	Manufacturing
56	Carpets and rugs	Manufacturing
57	Cordage rope twine and netting	Manufacturing
58	Other textiles n.e.c.	Manufacturing
59	Knitted and crocheted fabrics and articles	Manufacturing
60	Wearing apparel except fur apparel	Manufacturing
61	Dressing & dyeing of fur; processing of fur	Manufacturing
62	Tanning and dressing of leather	Manufacturing
63	Luggage handbags etc.; saddlery & harness	Manufacturing
64	Footwear	Manufacturing
65	Sawmilling and planing of wood	Manufacturing
66	Veneer sheets plywood particle board etc.	Manufacturing
67	Builders' carpentry and joinery	Manufacturing
68	Wooden containers	Manufacturing
69	Other wood products; articles of cork/straw	Manufacturing
70	Pulp paper and paperboard	Manufacturing
71	Corrugated paper and paperboard	Manufacturing
72	Other articles of paper and paperboard	Manufacturing
73	Publishing of books and other publications	Manufacturing
74	Publishing of newspapers journals etc.	Manufacturing
75	Publishing of recorded media	Manufacturing
76	Other publishing	Manufacturing
77	Printing	Manufacturing
78	Service activities related to printing	Manufacturing
79	Coke oven products	Manufacturing
80	Refined petroleum products	Manufacturing
81	Processing of nuclear fuel	Manufacturing
82	Basic chemicals except fertilizers	Manufacturing
83	Fertilizers and nitrogen compounds	Manufacturing
84	Plastics in primary forms; synthetic rubber	Manufacturing
85	Pesticides and other agro-chemical products	Manufacturing
86	Paints varnishes printing ink and mastics	Manufacturing
87	Pharmaceuticals medicinal chemicals etc.	Manufacturing

Continued on next page

ID	Industry Description	Broad Sector
88	Soap cleaning & cosmetic preparations	Manufacturing
89	Other chemical products n.e.c.	Manufacturing
90	Man-made fibres	Manufacturing
91	Rubber tyres and tubes	Manufacturing
92	Other rubber products	Manufacturing
93	Plastic products	Manufacturing
94	Glass and glass products	Manufacturing
95	Pottery china and earthenware	Manufacturing
96	Refractory ceramic products	Manufacturing
97	Struct.non-refractory clay; ceramic products	Manufacturing
98	Cement lime and plaster	Manufacturing
99	Articles of concrete cement and plaster	Manufacturing
100	Cutting shaping & finishing of stone	Manufacturing
101	Other non-metallic mineral products n.e.c.	Manufacturing
102	Basic iron and steel	Manufacturing
103	Basic precious and non-ferrous metals	Manufacturing
104	Structural metal products	Manufacturing
105	Tanks reservoirs and containers of metal	Manufacturing
106	Steam generators	Manufacturing
107	Cutlery hand tools and general hardware	Manufacturing
108	Other fabricated metal products n.e.c.	Manufacturing
109	Engines & turbines (not for transport equipment)	Manufacturing
110	Pumps compressors taps and valves	Manufacturing
111	Bearings gears gearing & driving elements	Manufacturing
112	Ovens furnaces and furnace burners	Manufacturing
113	Lifting and handling equipment	Manufacturing
114	Other general purpose machinery	Manufacturing
115	Agricultural and forestry machinery	Manufacturing
116	Machine tools	Manufacturing
117	Machinery for metallurgy	Manufacturing
118	Machinery for mining & construction	Manufacturing
119	Food/beverage/tobacco processing machinery	Manufacturing
120	Machinery for textile apparel and leather	Manufacturing
121	Weapons and ammunition	Manufacturing
122	Other special purpose machinery	Manufacturing
123	Domestic appliances n.e.c.	Manufacturing
124	Office accounting and computing machinery	Manufacturing
125	Electric motors generators and transformers	Manufacturing
126	Electricity distribution & control apparatus	Manufacturing
127	Insulated wire and cable	Manufacturing
128	Accumulators primary cells and batteries	Manufacturing
129	Lighting equipment and electric lamps	Manufacturing
130	Other electrical equipment n.e.c.	Manufacturing
131	Electronic valves tubes etc.	Manufacturing
132	TV/radio transmitters; line comm. apparatus	Manufacturing
133	TV and radio receivers and associated goods	Manufacturing
134	Medical surgical and orthopaedic equipment	Manufacturing
135	Measuring/testing/navigating appliances etc.	Manufacturing
136	Optical instruments & photographic equipment	Manufacturing
137	Watches and clocks	Manufacturing
138	Motor vehicles	Manufacturing
139	Automobile bodies trailers & semi-trailers	Manufacturing
140	Parts/accessories for automobiles	Manufacturing
141	Building and repairing of ships	Manufacturing
142	Building/repairing of pleasure/sport. boats	Manufacturing
143	Railway/tramway locomotives & rolling stock	Manufacturing
144	Aircraft and spacecraft	Manufacturing
145	Motorcycles	Manufacturing
146	Bicycles and invalid carriages	Manufacturing
147	Other transport equipment n.e.c.	Manufacturing
148	Furniture	Manufacturing
149	Jewellery and related articles	Manufacturing
150	Musical instruments	Manufacturing
151	Sports goods	Manufacturing
152	Games and toys	Manufacturing
153	Other manufacturing n.e.c.	Manufacturing
154	Manufacturing services on physical inputs	Services
155	Maintenance and repair services n.i.e.	Services
156	Transport	Services
157	Travel	Services
158	Construction	Services
159	Insurance and pension services	Services
160	Financial services	Services
161	Charges for use of intellectual property	Services
162	Telecom, computer, information services	Services
163	Other business services	Services
164	Heritage and recreational services	Services
165	Health services	Services
166	Education services	Services
167	Government goods and services n.i.e.	Services
168	Services not allocated	Services
169	Trade-related services	Services
170	Other personal services	Services

Notes: This table lists the 170 industries in ITPD-E-R2025. Column (1) lists ITPD-E-R2025 ID codes for each of the industries. The corresponding industry descriptions are in Column (2). Column (3) includes the broad sectoral descriptions. See text for further details.

Table 2: ITPD-E-R2025: Country Coverage

Dynamic Country Code	Country Name
ABW	Aruba
AFG	Afghanistan
AGO	Angola
AIA	Anguilla
ALB	Albania
AND	Andorra
ANT.X	Netherlands Antilles
ARE	United Arab Emirates
ARG	Argentina
ARM	Armenia
ASM	American Samoa
ATA	Antarctica
ATF	French Southern Territories
ATG	Antigua and Barbuda
AUS	Australia
AUT	Austria
AZE	Azerbaijan
BDI	Burundi
BEL	Belgium
BEN	Benin
BES	Bonaire, Sint Eustatius and Saba
BFA	Burkina Faso
BGD	Bangladesh
BGR	Bulgaria
BHR	Bahrain
BHS	Bahamas, The
BIH	Bosnia and Herzegovina
BLM	Saint Barthelemy
BLR	Belarus
BLX	Belgium-Luxembourg
BLZ	Belize
BMU	Bermuda
BOL	Bolivia
BRA	Brazil
BRB	Barbados
BRN	Brunei
BTN	Bhutan
BUR	Burma
BVT	Bouvet Island
BWA	Botswana
CAF	Central African Republic
CAN	Canada
CKK	Cocos (Keeling) Islands
CHE	Switzerland
CHL	Chile
CHN	China
CIV	Cote d'Ivoire
CMR	Cameroon
COD	Congo, Democratic Republic of the
COG	Congo, Republic of the
COK	Cook Islands
COL	Colombia
COM	Comoros
CPV	Cape Verde
CRI	Costa Rica
CSK	Czechoslovakia
CUB	Cuba
CUW	Curacao
CXR	Christmas Island
CYM	Cayman Islands
CYP	Cyprus
CZE	Czech Republic
DDR	German Democratic Republic
DEU	Germany
DEU.X	West Germany
DJI	Djibouti
DMA	Dominica
DNK	Denmark
DOM	Dominican Republic
DZA	Algeria
ECU	Ecuador
EGY	Egypt, Arab Rep.
ERI	Eritrea
ESH	Western Sahara
ESP	Spain
EST	Estonia
ETF	Ethiopia (includes Eritrea)
ETH	Ethiopia (excludes Eritrea)
FIN	Finland
FJI	Fiji
FLK	Falkland Islands
FRA	France
FRE	Free Zones
FRO	Faeroe Islands
FSM	Micronesia, Federated States of
GAB	Gabon
GBR	United Kingdom

Continued on next page

Dynamic Country Code	Country Name
GEO	Georgia
GGY	Guernsey
GHA	Ghana
GIB	Gibraltar
GIN	Guinea
GLP	Guadeloupe
GMB	Gambia, The
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
GRC	Greece
GRD	Grenada
GRL	Greenland
GTM	Guatemala
GUF	French Guiana
GUM	Guam
GUY	Guyana
HKG	Hong Kong
HMD	Heard Island and McDonald Islands
HND	Honduras
HRV	Croatia
HTI	Haiti
HUN	Hungary
IDN	Indonesia
IMN	Isle of Man
IND	India
IOT	British Indian Ocean Ter.
IRL	Ireland
IRN	Iran
IRQ	Iraq
ISL	Iceland
ISR	Israel
ITA	Italy
JAM	Jamaica
JEY	Jersey
JOR	Jordan
JPN	Japan
KAZ	Kazakhstan
KEN	Kenya
KGZ	Kyrgyzstan
KHM	Cambodia
KHM	Kampuchea
KIR.X	Kiribati
KNA	Saint Kitts and Nevis
KOR	Korea, South
KWT	Kuwait
LAO	Laos
LBN	Lebanon
LBR	Liberia
LBY	Libya
LCA	Saint Lucia
LIE	Liechtenstein
LKA	Sri Lanka
LSO	Lesotho
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MAC	Macao
MAR	Morocco
MCO	Monaco
MDA	Moldova
MDG	Madagascar
MDV	Maldives
MEX	Mexico
MHL	Marshall Islands
MKD	Macedonia
MLI	Mali
MLT	Malta
MMR	Myanmar
MNE	Montenegro
MNG	Mongolia
MNP	Northern Marianas
MOZ	Mozambique
MRT	Mauritania
MSR	Montserrat
MTQ	Martinique
MUS	Mauritius
MWI	Malawi
MYS.Y	Malaysia
MYT	Mayotte
NAM	Namibia
NCL	New Caledonia
NER	Niger
NFK	Norfolk Island
NGA	Nigeria
NIC	Nicaragua
NIU	Niue
NLD	Netherlands
NOR	Norway
NPL	Nepal
NRU	Nauru

Continued on next page

Dynamic Country Code	Country Name
NTZ	Neutral Zone
NZL	New Zealand
OMN	Oman
PAK.X	Pakistan
PAN.X	Panama
PCN	Pitcairn
PER	Peru
PHL	Philippines
PLW	Palau
PNG	Papua New Guinea
POL	Poland
PRI	Puerto Rico
PRK	Korea, North
PRT	Portugal
PRY	Paraguay
PSE	Palestine
PYF	French Polynesia
QAT	Qatar
REU	Reunion
ROM	Romania
ROU	Romania
RUS	Russia
RWA	Rwanda
SAU	Saudi Arabia
SAU.X	Saudi Arabia
SCG	Serbia and Montenegro
SDN	Sudan
SDN.X	Sudan
SEN	Senegal
SGP	Singapore
SGS	South Georgia and South Sandwich Islands
SHN	Saint Helena, Ascension, and Tristan da Cunha
SLB	Solomon Islands
SLE	Sierra Leone
SLV	El Salvador
SMR	San Marino
SOM	Somalia
SPM	Saint Pierre and Miquelon
SRB	Serbia
SRB.X	Serbia
SSD	South Sudan
STP	Sao Tome and Principe
SUR	Suriname
SVK	Slovakia
SVN	Slovenia
SVU	Soviet Union
SWE	Sweden
SWZ	Swaziland
SXM	Sint Maarten
SYC	Seychelles
SYR	Syria
TCA	Turks and Caicos Islands
TCD	Chad
TGO	Togo
THA	Thailand
TJK	Tajikistan
TKL	Tokelau
TKM	Turkmenistan
TLS	East Timor
TON	Tonga
TTO	Trinidad and Tobago
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TWN	Taiwan
TZA	Tanzania
UGA	Uganda
UKR	Ukraine
UMI	U.S. Minor Outlying Islands
URY	Uruguay
USA	United States
UZB	Uzbekistan
VAT	Holy See
VCT	Saint Vincent and the Grenadines
VEN	Venezuela
VGB	British Virgin Islands
VIR	U.S. Virgin Islands
VNM.X	Vietnam
VUT	Vanuatu
WLF	Wallis and Futuna Islands
WSM	Samoa
WSM	Western Samoa
YEM.X	Yemen
YEM	Yemen, North
YMD	Yemen, South
YUG	Yugoslavia
ZAF	South Africa
ZAF.X	South Africa
ZAR	Zaire
ZMB	Zambia

Continued on next page

Dynamic Country Code	Country Name
ZWE	Zimbabwe

Notes: This table lists the 266 countries/regions covered in ITPD-E-R2025 (in Column 2), and their corresponding Dynamic Country Codes (in Column 1). Two countries in the table (Cambodia and Samoa) have changed their names between 1986 and 2019 while keeping the same Dynamic Country Code. They therefore appear twice in the list. Romania changed the country code from ROM to ROU in 2002. Hence, it appears with two country codes in the list. See text for further details.

Table 3: Variables in ITPD-E-R2025 – Data File Columns

Column name	Column description
exporter_iso3_dynamic	Dynamic alpha code of the exporter based on DGD
importer_iso3_dynamic	Dynamic alpha code of the importer based on DGD
exporter_iso3	ISO 3-letter alpha code of the exporter
importer_iso3	ISO 3-letter alpha code of the importer
exporter_name	Name of the exporter
importer_name	Name of the importer
year	Year
industry_id	ITPD industry code
industry_descr	ITPD industry description
broad_sector	Broad sector description
trade	Trade flows in million of current US dollars
flag_mirror	Flag indicator, >1 if trade mirror value is used
flag_zero	Flag indicator: 'p' if positive trade 'r' if the raw data contained zero 'u' missing (unknown, assigned zero)

Table 4: Data Sources

Broad sector	International trade	Production
Agriculture (industries 1-26)	FAOSTAT Detailed Trade Matrix	FAOSTAT Value of Agricultural Production
Agriculture (Forestry, Fishing)	COMTRADE (United Nations International Trade Statistics Database)	UN National Accounts Statistics
Mining and energy	COMTRADE	MINSTAT (Mining and Utilities Statistics Database) from UNIDO (United Nations Industrial Development Organization)
Manufacturing	COMTRADE	INDSTAT (Industrial Statistics Database) from UNIDO
Services	WTO-UNCTAD-ITC Annual Trade in Services Database UN TSD (Trade in Services Database) via COMTRADE	UN National Accounts Statistics

Notes: This table provides a summary of the various administrative data sources across the four broad sectors in the ITPD-E-R2025. Please see main text for further details.

Table 5: USITC Agricultural Classification

ITPD-E Code	ITPD-E Description	FCL Item Code	FCL Title
1	Wheat	15	Wheat
2	Rice (raw)	27	Rice, paddy
3	Corn	56	Maize
4	Other cereals	44	Barley
4	Other cereals	71	Rye
4	Other cereals	75	Oats
4	Other cereals	79	Millet
4	Other cereals	83	Sorghum
4	Other cereals	89	Buckwheat
4	Other cereals	92	Quinoa
4	Other cereals	94	Fonio
4	Other cereals	97	Triticale
4	Other cereals	101	Canary seed
4	Other cereals	103	Mixed grain
4	Other cereals	108	Cereals, nes
5	Cereal products	17	Bran of Wheat
5	Cereal products	59	Bran of Maize
5	Cereal products	81	Bran of Millet
5	Cereal products	85	Bran of Sorghum
5	Cereal products	91	Bran of Buckwheat
5	Cereal products	96	Bran of Fonio
6	Soybeans	236	Soybeans
7	Other oilseeds (exc. peanuts)	242	Groundnuts, in shell
7	Other oilseeds (exc. peanuts)	243	Groundnuts, Shelled
7	Other oilseeds (exc. peanuts)	249	Coconuts
7	Other oilseeds (exc. peanuts)	250	Coconuts, Desiccated
7	Other oilseeds (exc. peanuts)	251	Copra
7	Other oilseeds (exc. peanuts)	254	Oil palm fruit
7	Other oilseeds (exc. peanuts)	256	Palm kernels
7	Other oilseeds (exc. peanuts)	263	Karite Nuts (Sheanuts)
7	Other oilseeds (exc. peanuts)	265	Castor Beans
7	Other oilseeds (exc. peanuts)	267	Sunflower seed
7	Other oilseeds (exc. peanuts)	270	Rapeseed or colza seed
7	Other oilseeds (exc. peanuts)	275	Tung Nuts
7	Other oilseeds (exc. peanuts)	280	Safflower seed
7	Other oilseeds (exc. peanuts)	289	Sesame seed
7	Other oilseeds (exc. peanuts)	292	Mustard seed
7	Other oilseeds (exc. peanuts)	296	Poppy seed
7	Other oilseeds (exc. peanuts)	299	Melonseed
7	Other oilseeds (exc. peanuts)	310	Kapok fruit
7	Other oilseeds (exc. peanuts)	311	Kapokseed in shell
7	Other oilseeds (exc. peanuts)	312	Kapokseed, shelled
7	Other oilseeds (exc. peanuts)	328	Seed Cotton
7	Other oilseeds (exc. peanuts)	329	Cottonseed
7	Other oilseeds (exc. peanuts)	333	Linseed
7	Other oilseeds (exc. peanuts)	336	Hempseed
7	Other oilseeds (exc. peanuts)	339	Oilseeds nes
8	Animal feed ingredients & pet foods	169	Beet Pulp
8	Animal feed ingredients & pet foods	628	Pulp, Waste of Fruit for Feed
8	Animal feed ingredients & pet foods	630	Cane Tops
8	Animal feed ingredients & pet foods	635	Straw & Husks
8	Animal feed ingredients & pet foods	639	Grasses nes for forage
8	Animal feed ingredients & pet foods	640	Clover for forage
8	Animal feed ingredients & pet foods	643	Legumes for silage
8	Animal feed ingredients & pet foods	646	Turnips for fodder
8	Animal feed ingredients & pet foods	651	Forage Products nes
8	Animal feed ingredients & pet foods	652	Vegetable Products for Feed nes
8	Animal feed ingredients & pet foods	846	Gluten Feed & Meal
8	Animal feed ingredients & pet foods	858	Hay (Clover, Lucerne, etc.)
8	Animal feed ingredients & pet foods	859	Hay nes
8	Animal feed ingredients & pet foods	862	Alfalfa Meal & Pellets
9	Raw & refined sugar & sugar crops	156	Sugar cane
9	Raw & refined sugar & sugar crops	157	Sugar beet
10	Other sweeteners	161	Sugar crops nes
10	Other sweeteners	1182	Honey
11	Pulses & legumes(dried, preserved)	176	Beans, dry
11	Pulses & legumes(dried, preserved)	181	Broad beans, dry
11	Pulses & legumes(dried, preserved)	187	Peas, dry
11	Pulses & legumes(dried, preserved)	191	Chick-peas, dry
11	Pulses & legumes(dried, preserved)	195	Cow peas, dry
11	Pulses & legumes(dried, preserved)	197	Pigeon peas
11	Pulses & legumes(dried, preserved)	201	Lentils, dry
11	Pulses & legumes(dried, preserved)	203	Bambara beans
11	Pulses & legumes(dried, preserved)	205	Vetches
11	Pulses & legumes(dried, preserved)	210	Lupins
11	Pulses & legumes(dried, preserved)	211	Pulses nes
12	Fresh fruit	486	Bananas
12	Fresh fruit	489	Plantains
12	Fresh fruit	490	Oranges
12	Fresh fruit	495	Tangerines, mandarins, clementines, satsumas
12	Fresh fruit	497	Lemons & limes
12	Fresh fruit	507	Grapefruit & pomelo
12	Fresh fruit	512	Citrus fruit nes
12	Fresh fruit	515	Apples
12	Fresh fruit	521	Pears
12	Fresh fruit	523	Quinces
12	Fresh fruit	526	Apricots

Continued on next page

ITPD-E Code	ITPD-E Description	FCL Item Code	FCL Title
12	Fresh fruit	530	Sour cherries
12	Fresh fruit	531	Cherries
12	Fresh fruit	534	Peaches & nectarines
12	Fresh fruit	536	Plums
12	Fresh fruit	541	Stone fruit, fresh nes
12	Fresh fruit	542	Pome fruit nes
12	Fresh fruit	544	Strawberries
12	Fresh fruit	547	Raspberries
12	Fresh fruit	549	Gooseberries
12	Fresh fruit	550	Currants
12	Fresh fruit	552	Blueberries
12	Fresh fruit	554	Cranberries
12	Fresh fruit	558	Berries nes
12	Fresh fruit	560	Grapes
12	Fresh fruit	561	Raisins
12	Fresh fruit	567	Watermelons
12	Fresh fruit	568	Melons, Cantaloupes
12	Fresh fruit	569	Figs
12	Fresh fruit	571	Mangoes
12	Fresh fruit	572	Avocados
12	Fresh fruit	574	Pineapples
12	Fresh fruit	577	Dates
12	Fresh fruit	587	Persimmons
12	Fresh fruit	591	Cashewapple
12	Fresh fruit	592	Kiwi fruit
12	Fresh fruit	600	Papayas
12	Fresh fruit	603	Fruit, tropical (fresh) nes
12	Fresh fruit	619	Fruit, fresh nes
13	Fresh vegetables	116	Potatoes
13	Fresh vegetables	122	Sweet potatoes
13	Fresh vegetables	125	Cassava
13	Fresh vegetables	135	Yautia (Cocoyam)
13	Fresh vegetables	136	Taro (Cocoyam)
13	Fresh vegetables	137	Yams
13	Fresh vegetables	149	Roots & tubers nes
13	Fresh vegetables	260	Olives
13	Fresh vegetables	358	Cabbages
13	Fresh vegetables	366	Artichokes
13	Fresh vegetables	367	Asparagus
13	Fresh vegetables	372	Lettuce & chicory
13	Fresh vegetables	373	Spinach
13	Fresh vegetables	388	Tomatoes, fresh
13	Fresh vegetables	393	Cauliflowers & broccoli
13	Fresh vegetables	394	Pumpkins, squash & gourds
13	Fresh vegetables	397	Cucumbers & gherkins
13	Fresh vegetables	399	Eggplants
13	Fresh vegetables	401	Chillies & peppers (green)
13	Fresh vegetables	402	Onions, shallots (green)
13	Fresh vegetables	403	Onions, dry
13	Fresh vegetables	406	Garlic
13	Fresh vegetables	407	Leeks & other alliaceous vegetables
13	Fresh vegetables	414	Beans, green
13	Fresh vegetables	417	Peas, green
13	Fresh vegetables	420	Broad Beans, Green
13	Fresh vegetables	423	String Beans
13	Fresh vegetables	426	Carrot
13	Fresh vegetables	430	Okra
13	Fresh vegetables	446	Green Corn (Maize)
13	Fresh vegetables	449	Mushrooms
13	Fresh vegetables	459	Chicory roots
13	Fresh vegetables	463	Vegetables, Fresh n.e.s.
14	Prepared fruits, fruit juices	527	Apricots, Dried
14	Prepared fruits, fruit juices	537	Plums, dried
14	Prepared fruits, fruit juices	570	Figs, Dried
14	Prepared fruits, fruit juices	620	Fruit, dried nes
15	Prepared vegetables	120	Potato Offals
15	Prepared vegetables	128	Cassava, Dried
16	Nuts	216	Brazil nuts
16	Nuts	217	Cashew nuts
16	Nuts	220	Chestnuts
16	Nuts	221	Almonds
16	Nuts	222	Walnuts
16	Nuts	223	Pistachios
16	Nuts	224	Kolanuts
16	Nuts	225	Hazelnuts (Filberts)
16	Nuts	226	Areca nuts
16	Nuts	229	Brazil Nuts, Shelled
16	Nuts	230	Cashew Nuts, Shelled
16	Nuts	231	Almonds, Shelled
16	Nuts	232	Walnuts, Shelled
16	Nuts	233	Hazelnuts, Shelled
16	Nuts	234	Nuts nes
17	Live Cattle	866	Cattle
17	Live Swine	946	Buffaloes
18	Live Swine	1034	Pigs
19	Eggs	1062	Hen eggs
19	Eggs	1091	Eggs, exc. hen eggs
20	Other meats, livest. pr. live animals	976	Sheep
20	Other meats, livest. pr. live animals	987	Wool, Greasy
20	Other meats, livest. pr. live animals	1009	Wool, Hair Waste

Continued on next page

ITPD-E Code	ITPD-E Description	FCL Item Code	FCL Title
20	Other meats, livest. pr. live animals	1016	Goats
20	Other meats, livest. pr. live animals	1026	Skins, Wet-Salted (Goats)
20	Other meats, livest. pr. live animals	1031	Coarse goat hair
20	Other meats, livest. pr. live animals	1057	Chickens
20	Other meats, livest. pr. live animals	1068	Ducks
20	Other meats, livest. pr. live animals	1079	Turkeys
20	Other meats, livest. pr. live animals	1083	Pigeons and other birds
20	Other meats, livest. pr. live animals	1096	Horses
20	Other meats, livest. pr. live animals	1107	Asses
20	Other meats, livest. pr. live animals	1110	Mules
20	Other meats, livest. pr. live animals	1126	Camels
20	Other meats, livest. pr. live animals	1134	Hides, Wet-Salted (Camels)
20	Other meats, livest. pr. live animals	1136	Hides nes, Camels
20	Other meats, livest. pr. live animals	1140	Rabbits
20	Other meats, livest. pr. live animals	1150	Other rodents
20	Other meats, livest. pr. live animals	1157	Other camelids
20	Other meats, livest. pr. live animals	1169	Live animals, non food nes
20	Other meats, livest. pr. live animals	1171	Live animals nes
20	Other meats, livest. pr. live animals	1181	Bees
20	Other meats, livest. pr. live animals	1183	Beeswax
20	Other meats, livest. pr. live animals	1185	Cocoons, reelable
20	Other meats, livest. pr. live animals	1216	Hides nes
20	Other meats, livest. pr. live animals	1218	Hair, fine
21	Cocoa and cocoa products	661	Cocoa beans
22	Beverages, nec	656	Coffee green
22	Beverages, nec	667	Tea
22	Beverages, nec	671	Mate
23	Cotton	767	Cotton Lint
23	Cotton	769	Cotton Waste
24	Tobacco leaves & cigarettes	826	Tobacco leaves
25	Spices	687	Pepper
25	Spices	689	Pimento
25	Spices	692	Vanilla
25	Spices	693	Cinnamon (canella)
25	Spices	698	Cloves
25	Spices	702	Nutmeg, mace, cardamoms
25	Spices	711	Anise, badian, fennel
25	Spices	720	Ginger
25	Spices	723	Spices nes
26	Other ag. products, nec	460	Vegetable products, fresh or dry nes
26	Other ag. products, nec	461	Carobs
26	Other ag. products, nec	654	Dregs from brewing, distillation
26	Other ag. products, nec	677	Hops
26	Other ag. products, nec	748	Peppermint, Spearmint
26	Other ag. products, nec	754	Pyrethrum, dried flowers
26	Other ag. products, nec	755	Pyrethrum Extract
26	Other ag. products, nec	771	Flax, raw or retted
26	Other ag. products, nec	777	Hemp fibre and tow
26	Other ag. products, nec	778	Kapok fibre
26	Other ag. products, nec	780	Jute
26	Other ag. products, nec	782	Jute-like fibres
26	Other ag. products, nec	788	Ramie
26	Other ag. products, nec	789	Sisal
26	Other ag. products, nec	800	Agave fibres nes
26	Other ag. products, nec	809	Abaca manila hemp
26	Other ag. products, nec	813	Coir
26	Other ag. products, nec	821	Fibre crops nes
26	Other ag. products, nec	836	Natural rubber
26	Other ag. products, nec	837	Rubber, Natural (Dry)
26	Other ag. products, nec	839	Natural gums
26	Other ag. products, nec	1293	Crude Organic Materials nes

Notes: This table presents the concordance that we created between the ITPD-E agriculture classification and the FCL classification.

Table 6: Mining: ITPD-E-R2025 Classification and Concordances

ITPD-E-R2025 Code	ITPD-E-R2025 Description	ISIC3	ISIC rev. 3 Description	ISIC4	ISIC rev. 4 Description
29	Mining of hard coal	101	Mining and agglomeration of hard coal	51	Mining of hard coal
30	Mining of lignite	102	Mining and agglomeration of lignite	52	Mining of lignite
31	Extraction crude oil and gas	111	Extraction crude oil and gas	6	Extraction of crude oil and gas
32	Mining of iron ores	131	Iron ores	71	Mining of iron ores
33	Other mining and quarrying	190	C-(101+102+111+131)	90	B-(051+052+61+62+071)
34	Electricity prodcn, collen, and distr.	401	Electricity prodcn, collen, and distr.	351	Electric power generation, transmission
35	Gas production and distribution	402	Gas production and distribution	352	Manufacture of gas
Notes: This table presents the concordance between the ITPD-E-R2025 mining classification, the ISIC rev. 3 and ISIC rev. 4 classifications.					

Table 7: Manufacturing: ITPD-E-R2025 Classification and Concordances

ITPD-E-R2025 Code	ITPD-E-R2025 Description	ISIC3	ISIC4
36	Processing/preserving of meat	1511	1010
37	Processing/preserving of fish	1512	1020
38	Processing/preserving of fruit & vegetables	1513	1030
39	Vegetable and animal oils and fats	1514	1040
40	Dairy products	1520	1050
41	Grain mill products	1531	1061
42	Starches and starch products	1532	1062
43	Prepared animal feeds	1533	1080
44	Bakery products	1541	1071
45	Sugar	1542	1072
46	Cocoa chocolate and sugar confectionery	1543	1073
47	Macaroni noodles & similar products	1544	1074
48	Other food products n.e.c.	1549	1075+1079
49	Distilling rectifying & blending of spirits	1551	1101
50	Wines	1552	1102
51	Malt liquors and malt	1553	1103
52	Soft drinks; mineral waters	1554	1104
53	Tobacco products	1600	1200
54	Textile fibre preparation; textile weaving	1711	1311+1312
55	Made-up textile articles except apparel	1721	1392
56	Carpets and rugs	1722	1393
57	Cordage rope twine and netting	1723	1394
58	Other textiles n.e.c.	1729	1399
59	Knitted and crocheted fabrics and articles	1730	1430+1391
60	Wearing apparel except fur apparel	1810	1410
61	Dressing & dyeing of fur; processing of fur	1820	1420
62	Tanning and dressing of leather	1911	1511
63	Luggage handbags etc.; saddlery & harness	1912	1512
64	Footwear	1920	1520
65	Sawmilling and planing of wood	2010	1610
66	Veneer sheets plywood particle board etc.	2021	1621
67	Builders' carpentry and joinery	2022	1622
68	Wooden containers	2023	1623
69	Other wood products; articles of cork/straw	2029	1629
70	Pulp paper and paperboard	2101	1701
71	Corrugated paper and paperboard	2102	1702
72	Other articles of paper and paperboard	2109	1709
73	Publishing of books and other publications	2211	
74	Publishing of newspapers journals etc.	2212	
75	Publishing of recorded media	2213	
76	Other publishing	2219	
77	Printing	2221	1811
78	Service activities related to printing	2222	1812
79	Coke oven products	2310	1910
80	Refined petroleum products	2320	1920
81	Processing of nuclear fuel	2330	
82	Basic chemicals except fertilizers	2411	2011
83	Fertilizers and nitrogen compounds	2412	2012
84	Plastics in primary forms; synthetic rubber	2413	2013
85	Pesticides and other agro-chemical products	2421	2021
86	Paints varnishes printing ink and mastics	2422	2022
87	Pharmaceuticals medicinal chemicals etc.	2423	2100
88	Soap cleaning & cosmetic preparations	2424	2023
89	Other chemical products n.e.c.	2429	2029+2680
90	Man-made fibers	2430	2030
91	Rubber tires and tubes	2511	2211
92	Other rubber products	2519	2219
93	Plastic products	2520	2220
94	Glass and glass products	2610	2310
95	Pottery china and earthenware	2691	2393
96	Refractory ceramic products	2692	2391
97	Struct.non-refractory clay; ceramic products	2693	2392
98	Cement lime and plaster	2694	2394
99	Articles of concrete cement and plaster	2695	2395
100	Cutting shaping & finishing of stone	2696	2396
101	Other non-metallic mineral products n.e.c.	2699	2399
102	Basic iron and steel	2710	2410
103	Basic precious and non-ferrous metals	2720	2420
104	Structural metal products	2811	2511
105	Tanks reservoirs and containers of metal	2812	2512
106	Steam generators	2813	2513
107	Cutlery hand tools and general hardware	2893	2593
108	Other fabricated metal products n.e.c.	2899	2599
109	Engines & turbines (not for transport equipment)	2911	2811
110	Pumps compressors taps and valves	2912	2812+2813
111	Bearings gears gearing & driving elements	2913	2814
112	Ovens furnaces and furnace burners	2914	2815
113	Lifting and handling equipment	2915	2816
114	Other general purpose machinery	2919	2819
115	Agricultural and forestry machinery	2921	2821
116	Machine tools	2922	2818+2822
117	Machinery for metallurgy	2923	2823
118	Machinery for mining & construction	2924	2824
119	Food/beverage/tobacco processing machinery	2925	2825
120	Machinery for textile apparel and leather	2926	2826
121	Weapons and ammunition	2927	2520+3040
122	Other special purpose machinery	2929	2829

Continued on next page

ITPD-E-R2025 Code	ITPD-E-R2025 Description	ISIC3	ISIC4
123	Domestic appliances n.e.c.	2930	2750
124	Office accounting and computing machinery	3000	2620+2817
125	Electric motors generators and transformers	3110	2710
126	Electricity distribution & control apparatus	3120	2733
127	Insulated wire and cable	3130	2731+2732
128	Accumulators primary cells and batteries	3140	2720
129	Lighting equipment and electric lamps	3150	2740
130	Other electrical equipment n.e.c.	3190	2790
131	Electronic valves tubes etc.	3210	2610
132	TV/radio transmitters; line comm. apparatus	3220	2630
133	TV and radio receivers and associated goods	3230	2640
134	Medical surgical and orthopedic equipment	3311	2660+3250
135	Measuring/testing/navigating appliances and equipment	3312+3313	2651
136	Optical instruments & photographic equipment	3320	2670
137	Watches and clocks	3330	2652
138	Motor vehicles	3410	2910
139	Automobile bodies trailers & semi-trailers	3420	2920
140	Parts/accessories for automobiles	3430	2930
141	Building and repairing of ships	3511	3011
142	Building/repairing of pleasure/sport. boats	3512	3012
143	Railway/tramway locomotives & rolling stock	3520	3020
144	Aircraft and spacecraft	3530	3030
145	Motorcycles	3591	3091
146	Bicycles and invalid carriages	3592	3092
147	Other transport equipment n.e.c.	3599	3099
148	Furniture	3610	3100
149	Jewelry and related articles	3691	3211+3212
150	Musical instruments	3692	3220
151	Sports goods	3693	3230
152	Games and toys	3694	3240
153	Other manufacturing n.e.c.	3699	3290

Notes: This table presents the concordance between the ITPD-E-R2025 manufacturing classification, the ISIC rev. 3 and ISIC rev. 4 classifications.

Table 8: Services: EBOPS–ISIC–ITPD Concordance

ITPD-E Code	ITPD-E Description	EBOPS 2002	EBOPS 2010	ISIC Rev. 4
154	Manufacturing services on physical inputs owned by others	SA	SA	–
155	Maintenance and repair services n.i.e.		SB	–
156	Transport	205, 246	SC	H
157	Travel	237, 243	SDA + SDB3	I
158	Construction	249	SE	F
159	Insurance and pension services	253	SF	K (60%)
160	Financial services	260	SG	K (40%)
161	Charges for the use of intellectual property n.i.e.	266	SH	–
162	Telecommunications, computer, and information services	247, 262, 288	SI + SK1	J
163	Other business services	272, 273	SJ excl SJ34	M + N
164	Heritage and recreational services	–	SK23 ^a	R
165	Health services	241, 896	SDB1 + SK21	Q
166	Education services	242, 895	SDB2 + SK22	P
167	Government goods and services n.i.e.	291	SL	–
168	Services not allocated	982	SN	–
169	Trade-related services	271	SJ34	G
170	Other personal services	–	SK24 ^a	S

^a EBOPS codes SK23 and SK24 are new to BPM6 and have no backwards correspondence in BPM5.

The concordance in this table differs from (Wettstein et al., 2019, Table 14) in three respects:

- (¹) ISIC industry L is not concorded to ‘other business services’ (EBOPS SJ);
- (²) Rather than aggregating financial services and insurance services, respectively, we keep these two services products separate and split ISIC category K according to a fixed fraction;
- (³) We do not include EBOPS SW (trade margins of wholesalers and retailers) as part of SJ34 because this code is not included in the WTO-UNCTAD-ITC annual trade in services dataset.

Table 9: Comparison of the Total Number of Observations

	Number of observations
In ITPD-E R2025	87,537,140
In ITPD-E R03	83,503,326
In either version	87,972,854
In both versions	83,067,612
In ITPD-E R2025, but not in ITPD-E R03	4,469,528
In ITPD-E R03, but not in ITPD-E R2025	435,714

Table 10: Comparison of Number and Value of Trade Flows, By Year

Year	ITPD-E R03		ITPD-E R2025	
	Freq	Value	Freq	Value
1986	129,988	108	127,440	102
1987	131,303	115	128,868	108
1988	1,158,157	1,306	1,163,866	1,304
1989	1,336,500	1,935	1,345,548	1,941
1990	1,410,829	3,137	1,421,858	3,143
1991	1,519,538	4,214	1,532,287	4,238
1992	1,903,728	5,203	1,923,400	5,257
1993	2,078,141	5,837	2,100,664	5,893
1994	2,156,863	9,188	2,181,074	9,246
1995	2,195,173	11,533	2,221,081	11,608
1996	2,202,299	12,539	2,228,416	12,616
1997	2,255,191	15,675	2,282,475	15,758
1998	2,281,507	15,397	2,309,109	15,482
1999	2,324,613	16,201	2,353,165	16,268
2000	2,551,487	43,041	2,589,399	43,606
2001	2,558,829	42,385	2,597,085	42,856
2002	2,575,577	43,906	2,613,914	44,358
2003	2,593,295	50,804	2,630,793	51,256
2004	2,597,239	59,329	2,636,676	59,448
2005	2,609,908	63,880	2,647,478	64,291
2006	2,644,417	70,399	2,686,904	70,907
2007	2,650,389	79,665	2,691,421	80,171
2008	2,650,271	86,871	2,692,473	87,590
2009	2,651,354	77,921	2,692,199	78,618
2010	2,653,609	85,993	2,689,482	86,069
2011	2,649,389	99,160	2,688,160	99,282
2012	2,656,316	100,511	2,700,873	100,873
2013	2,653,740	103,583	2,703,801	104,233
2014	2,644,227	104,317	2,698,499	104,998
2015	2,644,473	96,603	2,700,186	97,208
2016	2,640,093	85,139	2,700,503	85,847
2017	2,640,958	88,817	2,701,960	89,780
2018	2,640,334	95,565	2,702,716	96,596
2019	2,636,622	93,408	2,700,391	94,635
2020	2,626,945	85,986	2,691,995	89,541
2021	2,633,407	91,283	2,700,662	98,994
2022	2,616,617	32,191	2,684,493	68,694
2023	nan	nan	2,675,826	37,378

Note: ‘Value’ is in billions of USD.

Table 11: Comparison of Number and Value of Trade Flows, By Industry

Industry ID	ITPD-E R03		ITPD-E R2025	
	Freq	Value	Freq	Value
1	184,348	3,719	190,586	3,945
2	310,345	5,948	322,662	6,166
3	220,900	4,822	230,275	5,144
4	227,374	1,353	236,937	1,443
5	128,222	37	132,990	39
6	131,075	2,299	137,148	2,442
7	412,113	3,012	428,421	3,202
8	314,820	436	327,463	452
9	47,749	1,700	50,880	1,733
10	200,886	120	208,721	123
11	342,544	613	355,020	631
12	520,505	7,615	540,863	8,121
13	435,625	10,767	450,990	11,464
14	262,090	60	273,244	64
15	48,292	47	50,119	48
16	310,083	1,015	322,387	1,003
17	85,256	224	88,210	231
18	40,287	93	41,349	95
19	167,222	2,007	173,288	2,155
20	479,964	689	495,476	711
21	116,386	248	121,695	261
22	468,477	1,345	484,376	1,382
23	255,935	445	262,653	457
24	255,452	475	262,029	485
25	455,024	263	472,493	280
26	638,097	1,760	658,594	1,831
27	429,227	517	448,072	547
28	400,695	379	457,815	657
29	160,844	7,396	169,984	7,750
30	44,420	431	46,423	449
31	201,111	42,383	211,908	45,239
32	98,162	4,705	104,019	5,109
33	670,732	16,880	702,543	17,981
34	43,453	34,619	45,991	41,794
35	20,380	4,660	36,636	5,382
36	582,078	16,179	608,145	17,004
37	670,192	4,091	704,126	4,433
38	714,684	5,348	752,578	5,603
39	600,281	6,943	631,803	7,342
40	541,936	10,540	575,584	11,106
41	595,166	4,683	625,361	4,851
42	403,020	1,165	423,718	1,205
43	381,768	5,411	402,752	5,628
44	555,537	6,195	584,160	6,406
45	420,870	2,102	442,149	2,210
46	619,232	2,994	650,868	3,113
47	410,112	1,097	433,452	1,133
48	795,629	8,666	834,347	8,990
49	553,302	2,325	584,233	2,428
50	466,823	1,553	490,181	1,618
51	395,931	2,895	416,211	2,986
52	552,240	4,141	581,254	4,281
53	470,039	5,697	494,423	6,360
54	749,974	7,603	782,581	7,891
55	854,337	2,169	893,167	2,278
56	589,005	868	617,102	899
57	509,181	218	534,476	229
58	661,824	1,852	692,893	1,942
59	803,864	3,392	896,011	3,920
60	1,072,252	10,823	1,110,066	11,074
61	287,143	168	301,697	174
62	378,325	1,021	398,698	1,078
63	802,363	1,461	841,585	1,559

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Industry ID	ITPD-E R03		ITPD-E R2025	
	Freq	Value	Freq	Value
64	826,992	3,795	866,406	3,993
65	519,801	3,395	537,338	3,505
66	489,242	2,811	511,941	2,911
67	442,476	2,667	462,794	2,751
68	411,296	642	431,600	670
69	714,242	1,077	746,980	1,111
70	636,409	8,487	662,922	8,750
71	606,454	5,071	636,781	5,221
72	749,099	3,135	785,873	3,270
73	808,551	1,115	844,333	1,134
74	376,938	1,707	393,163	1,710
75	400,209	432	592,818	560
76	707,423	465	737,743	374
77	740,359	6,921	745,388	7,003
78	223,364	778	233,182	790
79	118,111	1,150	123,513	1,179
80	671,142	38,253	704,210	40,804
81	172,233	468	180,293	528
82	790,150	21,378	823,302	22,519
83	442,518	3,969	464,351	4,228
84	641,978	11,280	672,078	11,808
85	475,147	1,605	498,119	1,674
86	635,580	3,677	665,908	3,796
87	824,484	22,124	862,212	23,358
88	853,647	6,719	896,100	7,002
89	893,360	9,192	936,739	9,529
90	396,339	2,152	415,402	2,225
91	593,124	3,230	619,142	3,368
92	838,988	3,043	880,525	3,154
93	1,026,009	21,051	1,073,756	22,103
94	801,579	4,380	837,964	4,559
95	706,212	1,160	738,348	1,202
96	351,213	895	368,578	920
97	437,340	1,804	457,118	1,860
98	362,839	3,614	378,781	3,671
99	417,311	6,093	437,353	6,279
100	420,610	1,122	440,936	1,156
101	599,677	2,401	628,102	2,486
102	792,179	30,912	816,022	32,163
103	706,963	22,960	725,467	24,981
104	619,676	9,334	648,134	9,672
105	476,478	1,484	492,471	1,523
106	314,012	1,113	328,418	1,136
107	904,351	3,646	930,713	3,628
108	1,020,778	10,112	1,070,914	10,686
109	490,942	3,552	513,917	3,719
110	891,347	6,461	932,690	6,790
111	744,097	2,930	780,568	3,063
112	491,073	886	441,880	609
113	665,400	4,453	698,088	4,670
114	937,461	9,141	982,402	9,558
115	537,231	3,039	563,504	3,176
116	739,980	4,228	773,951	4,450
117	258,186	1,076	270,636	1,103
118	718,041	5,370	751,074	5,575
119	556,296	1,243	582,888	1,302
120	582,252	1,210	609,081	1,274
121	324,969	912	340,098	995
122	789,609	8,431	830,244	8,665
123	800,928	6,069	838,640	6,352
124	949,489	15,893	986,270	16,355
125	848,174	8,706	887,543	9,178
126	873,427	5,805	914,917	6,093
127	740,032	4,421	773,765	4,584
128	618,292	1,998	648,991	2,222

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Industry ID	ITPD-E R03		ITPD-E R2025	
	Freq	Value	Freq	Value
129	762,763	2,400	797,840	2,489
130	829,936	6,061	869,269	5,678
131	767,817	24,535	802,898	26,463
132	813,632	12,698	863,398	13,916
133	885,197	8,228	923,323	8,269
134	772,640	6,763	809,504	7,192
135	912,238	7,886	953,585	8,268
136	701,251	2,874	735,426	3,415
137	590,462	1,078	617,921	1,181
138	785,621	42,547	819,542	44,693
139	546,380	2,788	574,254	2,891
140	908,005	22,842	952,792	23,707
141	384,868	4,284	402,934	4,789
142	334,271	532	350,538	570
143	272,372	1,952	286,073	2,044
144	556,808	9,835	584,405	10,954
145	493,598	1,673	519,920	1,760
146	524,481	622	550,718	656
147	362,276	229	380,393	233
148	883,528	9,566	921,238	9,994
149	545,590	3,940	573,262	4,225
150	508,330	265	533,553	277
151	667,237	1,074	700,355	1,120
152	703,548	1,959	737,782	2,072
153	908,607	3,465	949,295	3,587
154	25,527	1,350	24,880	1,483
155	37,991	836	37,891	975
156	97,327	91,062	102,275	96,694
157	76,872	49,137	83,598	51,704
158	62,460	118,656	67,019	124,035
159	70,702	66,171	71,812	68,678
160	74,703	44,608	83,477	46,525
161	66,927	5,206	71,041	5,800
162	90,485	95,544	101,750	99,657
163	93,458	157,596	105,745	165,726
164	18,990	23,118	14,439	23,612
165	41,267	96,822	42,567	100,530
166	56,935	61,709	58,535	63,722
167	63,389	630	63,314	644
168	46,671	10,130	48,154	10,058
169	59,524	186,521	64,149	195,472
170	19,330	20,628	15,017	21,198

Note: 'Value' is in billions of USD.