The International Trade and Production Database for Estimation - Release 2 (ITPD-E-R02)

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Abstract

This paper introduces Release 2 of the International Trade and Production Database for Estimation (ITPD-E-R02). ITPD-E-R02 covers the period 1986-2019 for 265 countries and 170 industries across four broad sectors: Agriculture, Mining and Energy, Manufacturing, and Services. Some of the improvements in the new release of the database relative to its first release include additional years, additional countries, two new industries (Forestry and Fishing), better country coding and coverage and, as a result, a significant increase in the number of observations: 72.5 million, compared to 35.8 million in the original release. ITPD-E-R02 can be downloaded from the USITC's Gravity Portal at https://www.usitc.gov/data/gravity/itpde.htm.

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Yoto V. Yotov Drexel University, ifo, CESifo **Disclaimer.** The ITPD-E is a public good that was created in response to market demand. The initial development of the database and its first update required substantial long-term efforts by the authors. Accordingly, in return for that effort, we expect two things from all users of the ITPD-E-R02. First, <u>please cite the following two papers</u> if you use Release 2 of the database:

- Borchert, Ingo & Larch, Mario & Shikher, Serge & Yotov, Yoto V., 2022. "The International Trade and Production Database for Estimation Release 2 (ITPD-E-R02)," USITC Working Paper 2022-07-A.
- Borchert, Ingo & Larch, Mario & Shikher, Serge & Yotov, Yoto V., 2021. "The International Trade and Production Database for Estimation (ITPD-E)," International Economics, Elsevier, vol. 166, pages 140–166.

Second, 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 administrative/raw 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)*, cf. 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 administrative data and intentionally does not include information estimated by statistical techniques. Therefore, it could be used for theory-consistent disaggregated gravity estimations with international and domestic trade flows, cf. 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 concluded that the ITPD-E has been a useful resource for many scholars, researchers, and policy makers. In addition, we have received many requests and recommendations for an update of the database. In response, we have developed the first update of the ITPD-E – *The International Trade and Production Database for Estimation - Release 2 (ITPD-E-R02)*. The objective of this paper is to describe ITPD-E-R02 and to compare it with its predecessor (ITPD-E-R01), while highlighting the key features and improvements in the updated database.

Relying on the same methods and capitalizing on the new releases of the original administrative/raw data sources that we used to construct ITPD-E-R01, we built a new database that includes 72,534,869 unique observations and covers the period 1986-2019 for 265 countries and 170 industries.

The complete list of the industries covered in ITPD-E-R02 is included in Table 1. Similar to ITPD-E-R01, the disaggregated industries in ITPD-E-R02 can be classified within 4 broad sectors, including 'Agriculture', 'Mining & Energy', 'Manufacturing', and 'Services', which now have extended coverage. Specifically, the 'Agriculture' sector in the ITPD-E-R02 covers

the period 1986-2019 for a total of 28 sectors. Importantly, 'Agriculture' in ITPD-E-R02 encompasses two new industries – 'Forestry' and 'Fishing'. The 'Mining & Energy' sector in ITPD-E-R02 covers the period 1988-2019 and includes 7 industries. The 'Manufacturing' sector in ITPD-E-R02 covers the same period (1988-2019) and includes 118 industries. Finally, the 'Services' sector in ITPD-E-R02 covers the period 2000-2019 and includes 17 industries.

In addition to the standard ISO3 country codes, Release 2 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-R02 is included in Table 2. ITPD-E-R02 covers 265 countries when unique dynamic country codes are counted or 256 countries when unique ISO3 country codes are counted.³

The following is a brief summary of the highlights of the new version of the data (ITPD-E-R02) in relation to its original release (ITPD-E-R01):

• Data for earlier years. ITPD-E-R02 includes data for years prior to 2000. Specifically, the data go back to 1986 for 'Agriculture', and to 1988 for 'Mining & Energy' and 'Manufacturing'. Due to administrative data limitations, we were not able to extend the data for 'Services' to years prior to 2000 because statistics on services trade flows prior to 2000 published by the WTO are not bilateral.

¹Two of the manufacturing industries from ITPD-E-R01 – 'Reproduction of recorded media' and 'Casting of iron and steel' – do not appear in ITPD-E-R02. The reason is that these industries did not appear in the United Nations' COMTRADE data, which we use for international trade flows. As a result, despite the addition of 'Forestry' and 'Fishing', the total number of industries in ITPD-E-R02 remains 170, just as in ITPD-E-R01.

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 detail. Also, there are two countries, Cambodia and Samoa, that changed names, but not boundaries, ISO3 codes, or dynamic country codes.

- Data for recent years. Data for all sectors are extended to 2019 in ITPD-E-R02.
- New industries. ITPD-E-R02 includes data for two new industries 'Forestry' and 'Fishing', 1988-2019. Due to their nature, these industries were added under the broad sector of 'Agriculture'.
- Improved country coverage. ITPD-E-R02 includes improved data coverage of some countries. For example, domestic manufacturing trade data for the United States were only available in ITPD-E R01 for the period 2000-2008, whereas in ITPD-E-R02, U.S. data on domestic trade flows are available for all years during the period 1997-2019.
- Improved country coding. The country codes in ITPD-E-R02 are fully synchronized with USITC's "Dynamic Gravity Dataset" (DGD), version 2.1 (Gurevich and Herman, 2018). Consistent with DGD, ITPD-E-R02 includes dynamic country codes.
- New countries. ITPD-E-R02 covers 265 countries if the dynamic country codes are counted, or 256 countries if the ISO3 codes are counted, compared to 243 countries in ISO3 terms in Release 1. Most of the new countries were introduced due to the longer time coverage of ITPD-E-R02, because they no longer existed post-2000.
- More observations. The total number of observations in ITPD-E-R02 is 72,534,869, i.e., 88% more as compared to ITPD-E-R01, which had 38,518,253 observations. The number of positive trade observations in ITPD-E-R02 is 28,245,817, while ITPD-E-R01 has 18,510,257 positive trade flow observations, i.e., there are 53% more positive trade flow observations in the new release.

The rest of the paper is organized as follows. Section 2 describes the variables and format of the ITPD-E-R02, and how to access the database. Section 3 summarizes the methods used to construct the data and the administrative data sources. Section 4 compares ITPD-E-R02 with its predecessor, ITPD-E-R01, across various dimensions.

2 File Format, Access, and Variables

The ITPD-E databases are distributed as a comma-separated files, ITPD_E_RXX.csv, where XX is the release number. Thus, the initial release file is called 'ITPD_E_R01.csv', and the update is called 'ITPD_E_R02.csv'. Both versions of the data are available for free download at https://www.usitc.gov/data/gravity/itpde.htm. 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-R02 includes corresponding dynamic country identifiers ('exporter_dynamic_code' and 'importer_dynamic_code') 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-R02 is consistent with the country coding in the USITC's "Dynamic Gravity Database" (DGD), cf. 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 these industry variables are specific to the ITPD-E-R02, Tables 5-8 of this document include concordances that can be used to match ITPD-E-R02 with other databases. Finally, the broad sectors in ITPD-E-R02 are described in the variable 'broad sector'.⁴
- The key variable in ITPD-E-R02 is 'trade'. Its values are expressed in millions of current United States dollars and include international and domestic trade. Trade is *international* when the exporter and the import countries are different. Trade is

 $^{^4}$ Note that the sector "Mining and Energy" is now called as such in the data. It was called "Mining_energy" in Release 1.

domestic when the importer and the exporter are the same country.

• Finally, ITPD-E-R02 includes two flag variables. As explained in Section 3.1, 'flag_mirror' is an indicator variable that is equal to 1 for observations that are obtained from 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 original/raw data sources, we follow closely the steps and procedures that we followed to construct the first version of the ITPD-E.

3.1 Methods

To construct ITPD-E-R02, we follow the methods that we used to construct the original version of the data. We perform the following three principal steps, which are common across all sectors in the original and new releases of the database.

- Construct international trade. To take full advantage of all reported international trade data we use a mirroring procedure. Given the specifics of the raw data, in our mirroring procedure for goods, we use exports reported by partner countries to fill in missing values for the corresponding import values. For services, we use reported imports to fill in missing values of exports. To denote mirrored cases, the ITPD-E-R02 includes a flag variable named flag_mirror, which is an indicator that takes a value of 1 if a trade flow observation is mirrored, and 0 otherwise.
- Construct domestic trade. Domestic trade is calculated as the difference between the (gross) value of total production and total exports. 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-R02.

For more details on the common principles and steps to construct ITPD-E-R02, 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-R02 we relied on new versions of the same sources that we employed for the original version of the database. A summary of the various 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 Value of Agricultural Production data from the FAO contain 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", https://www.fao.org/faostat/en/#data/QV).

The original FAO data are classified according to the FAOSTAT Commodity List (FCL) which includes more than 600 items.⁷ As we provide a database containing agricul-

 $^{^{5}}$ https://www.fao.org/faostat/en/#data.

⁶http://www.fao.org/faostat/en/#data/TM.

⁷http://www.fao.org/economic/ess/ess-standards/commodity/en/.

ture, mining, energy, manufacturing, and services, we have to carefully avoid double counting. Specifically, 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 that are part of the manufacturing data. 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 the number of constituent HS lines. We also dropped industries we could not match to any ISIC or HS code 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.

• Forestry and Fishing. These two industries are new in ITPD-E-R02. Even though they are ultimately treated as part of the broad sector 'Agriculture', the data sources for these two industries are different from the data sources for the rest of industries

⁸These 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.

⁹This 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.

¹⁰Specifically, 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.

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), 11 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)." '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 in ISIC rev. 3. Availability of trade data determined 1988 as the first year of coverage for 'Mining & Energy'. Production data for 'Mining & Energy' come from the "MINSTAT Mining and Utilities Statistics Database" dataset of the United Nations Industrial Development Organization (UNIDO). To take full advantage of MINSTAT, and to ensure maximum coverage in ITPD-E-R02, we use the ISIC rev. 3 and ISIC rev. 4 versions of MINSTAT. Availability of production data determined the last year of coverage for 'Mining & Energy' as 2019. A list of the ITPD-E mining and energy industries, together with the concordance that we created between ISIC rev. 3, ISIC rev. 4, and ITPD-E-R02 appear in Table 6.
- Manufacturing. International trade flows data come from COMTRADE, and were obtained in ISIC rev. 3. 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 (http://stat.unido.org),

 $^{^{11}}$ As 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.

¹²http://data.un.org/Data.aspx?d=SNA&f=group code%3a206.

and the data come in two versions – ISIC rev. 3 and ISIC rev. 4. 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 dataset¹³ with services trade statistics from the UN Trade in Services (UN-TSD) Database as incorporated into COMTRADE.¹⁴ As before, the reasons are twofold: firstly, 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.

That said, services trade data in Release 2 come with the following significant improvements. Due to new trade flow and gross output data, the services part of the R02 update exhibits nearly complete coverage of the year 2019 and as such represents the most recent statistics currently available.¹⁵

Compared to the R01 release, another new feature of the WTO-UNCTAD-ITC dataset is that about half of the raw data are reported zeroes, i.e. unlike in prior releases, zero trade flows now seem to have been captured more systematically, and 'true' reported zero flows are identifiable in the data through a flag. At the same time, the WTO-UNCTAD-ITC dataset does no longer contain 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.

¹³http://stats.wto.org/assets/UserGuide/services annual dataset.zip.

¹⁴https://comtrade.un.org/data/.

 $^{^{15}}$ Information for years prior to 2000, potentially reaching back to 1981, are now included in the latest vintage of the WTO-UNCTAD-ITC dataset; however, these flows are not bilateral. As such, we will have to disregard these flows for the R02 update.

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, the data combine two different data types: annual trade broken out by sector but not by partner, over the period 1980-2013, and annual trade broken out by sector and partner, over the period 2005-2019. These two kinds of data flows correspond to different ways and sources of collecting the raw data as the former set of observations is in EPOBS 2002 (BPM5) whereas the latter set of observations is in EPOBS 2010 (BPM6). Since we will discard the BPM5 (non-bilateral) data, we expect that, as in the R01 release, augmentation of services trade data for the period 2000-2010 from the UN Trade in Services dataset will bring considerable benefits in terms of coverage and completeness.

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)." ¹⁶

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 R02, output data for Belarus have been discarded. This issue also afflicts the R01 services trade data and an erratum to this effect will be published.

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

 $^{^{16}} http://data.un.org/Data.aspx?d=SNA\&f=group_code\%3a206.$

struction of ITPD-E-R02, we refer the reader to Borchert et al. (2021).

4 A comparison of ITPD-E Release 2 and Release 1

This section compares ITPD-E-R02 with the first release of the data. Tables 9-12 summarize the differences between the two releases across different dimensions. All four tables reflect the entirety of trade flows contained in each release, i.e. domestic and international trade. Table 9 compares the total number of observations in the two releases. Release 2 has significantly more observations in total, about 72.5 million, compared to 38.5 million in Release 1. Most of these additional observations come from additional years covered by Release 2. A small number of observations, less than 1 million, was present in Release 1 but is no longer in Release 2. These observations likely disappeared because they were reclassified to a different country, industry, or year.

Table 10 compares the number of observations across Releases 1 and 2 by year. It is apparent that most of the additional 35 million observations in Release 2 arise from additional years now covered by Release 2 relative to Release 1. 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. Comparing the number of observations in the years that are covered in both Releases 1 and 2 (i.e. 2000-2016), we see that Release 2 has more observations per year. This is due to the two additional industries now included in Release 2, Forestry and Fishing, and

 $^{^{17}}$ Exceptions 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.

also due to improved data coverage in the original data sources that we use. 18

Table 11 compares the number of observations across Releases 1 and 2 by industry. The number of observations for each industry is greater in Release 2. There are also two additional industries in Release 2, Forestry (27) and Fishing (28). Therefore, industry IDs diverge after number 26 between Releases 1 and 2. At the same time, Release 2 drops two manufacturing industries that were present in Release 1, namely 'Reproduction of recorded media' (77) and 'Casting of iron and steel' (103). We removed these two industries from the manufacturing sector because they have no international trade data. 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.

Table 12 shows the coverage across Releases 1 and 2 by country. This table also makes it easy to see which countries were added in Release 2 compared to Release 1. Because of the addition of earlier years, some of these new entries are countries that existed prior to 2000, such as, for example, Yugoslavia. The United States is by a wide margin the largest single economy in the database, accounting for 26% of the total value of trade (across all years and industries) in Release 2. The second and third largest economies are the two Asia-Pacific powerhouses China (9.2%) and Japan (9.0%), followed by Germany (6.6%). It is interesting to note that the relative value share of the US has remained roughly the same, whereas Japan's and Germany's shares have fallen in Release 2 compared to Release 1, reflecting the steep rise of China (via the additions of new years), whose value of trade has nearly doubled. Again, since domestic trade flows are included, value shares and ranks reflect economic size more than trade openness. The global reach of Release 2 can also be seen by the fact that major emerging economies such as India or Brazil now account for 2% or more of global

¹⁸Even though the number of industries does not change between releases 1 and 2, the two new industries have many more observations than the two that were removed.

trade.

5 Conclusions

With more years and more countries, Release 2 of ITPD-E offers nearly twice as many observations for trade and production as its predecessor (72.5 million, or an increase by 88%). It features global coverage and an unprecedented level of sectoral disaggregation, covering all economic activity. The addition of earlier years, starting in 1986/88, for Agriculture, Mining and Manufacturing will enable analyses with longer time-series that were not possible with the first Release. Thus we hope that ITPD-E R02 will prove a useful resource for a wide range of econometric analyses including structural gravity estimation.

We plan to complement the ITPD database for estimation with a companion dataset suitable for general equilibrium analysis and simulation (ITPD-S).

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 ${\bf Table\ 1:\ \ ITPD\text{-}E\text{-}R02:\ Industry\ Coverage}$

ID	Industry Description	Broad Sector
$\frac{1}{2}$	Wheat Rice (raw)	Agriculture 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 16	Prepared vegetables Nuts	Agriculture 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 29	Fishing Mining of hard coal	Agriculture
29 30	Mining of hard coal Mining of lignite	Mining and Energ Mining and Energ
31	Extraction crude petroleum and natural gas	Mining and Energ
32	Mining of iron ores	Mining and Energ
33	Other mining and quarring	Mining and Energ
34	Electricity production, collection, and distribution	Mining and Energ
35	Gas production and distribution	Mining and Energ
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 43	Starches and starch products	Manufacturing
44	Prepared animal feeds Bakery products	Manufacturing 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 59	Other textiles n.e.c.	Manufacturing Manufacturing
59 60	Knitted and crocheted fabrics and articles Wearing apparel except fur apparel	Manufacturing 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
$\frac{72}{72}$	Other articles of paper and paperboard	Manufacturing
73 74	Publishing of powerpapers is a publishing of powerpapers is a publishing of powerpapers is a publishing of powerpapers.	Manufacturing
$\frac{74}{75}$	Publishing of recorded media	Manufacturing Manufacturing
76	Publishing of recorded media Other publishing	Manufacturing Manufacturing
76 77	Other publishing Printing	Manufacturing 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

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 Manufacturing
95	Pottery china and earthenware	9
96 97	Refractory ceramic products	Manufacturing
	Struct.non-refractory clay; ceramic products	Manufacturing
98 99	Cement lime and plaster Articles of concrete cement and plaster	Manufacturing Manufacturing
100	Cutting shaping & finishing of stone	Manufacturing
101	Other non-metallic mineral products n.e.c.	Manufacturing
102	Basic iron and steel	Manufacturing Manufacturing
102	Basic precious and non-ferrous metals	Manufacturing
103	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-R02. Column (1) lists ITPD-E-R02 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.

 ${\bf Table~2:~ITPD\text{-}E\text{-}R02:~Country~Coverage}$

Dynamic Country Code	Country Name
ABW	Aruba
AFG	Afghanistan
AGO	Angola
AIA	Anguilla
ALB	Albania
AND ANT.X	Andorra
ARE	Netherlands Antilles 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 BLZ	Belgium-Luxembourg 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
CCK	Cocos (Keeling) Islands
CHE	Switzerland
CHL CHN	Chile 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 CZE	Cyprus
DDR	Czech Republic 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)
	Finland
FIN	
FJI	Fiji
FJI FLK	Falkland Islands
FJI FLK FRA	Falkland Islands France
FJI FLK FRA FRE	Falkland Islands France Free Zones
FJI FLK FRA FRE FRO	Falkland Islands France Free Zones Faeroe Islands
FJI FLK FRA FRE	Falkland Islands France Free Zones

Dynamic Country Code	Country Name
GBR GEO	United Kingdom
GHA	Georgia Ghana
GIB	Gibraltar
GIN	Guinea
GLP	Guadeloupe
GMB	Gambia, The
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
GRC GRD	Greece Grenada
GRL	Greenland
GTM	Guatemala
GUF	French Guiana
GUM	Guam
GUY	Guyana
HKG	Hong Kong Heard Island and McDonald Islands
HMD HND	Honduras
HRV	Croatia
HTI	Haiti
HUN	Hungary
IDN	Indonesia
IMN	Isle of Man
IND IOT	India British Indian Ocean Ter.
IRL	Ireland
IRN	Iran
IRQ	Iraq
ISL	Iceland
ISR	Israel
ITA	Italy
JAM JOR	Jamaica Jordan
JPN	Japan
KAZ	Kazakhstan
KEN	Kenya
KGZ	Kyrgyzstan
KHM	Kampuchea (until 1988), Cambodia(1989-present)
KIR.X	Kiribati
KNA KOR	Saint Kitts and Nevis Korea, South
KWT	Kuwait
LAO	Laos
LBN	Lebanon
LBR	Liberia
LBY	Libya
LCA LIE	Saint Lucia Liechtenstein
LKA	Sri Lanka
LSO	Lesotho
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MAC MAR	Macao Morocco
MCO	Monaco
MDA	Moldova
MDG	Madagascar
MDV	Maldives
MEX	Mexico
MHL MKD	Marshall Islands Macedonia
MLI	Mali
MLT	Malta
MMR	Myanmar
MNE	Montenegro
MNG MND	Mongolia Northern Marianas
MNP MOZ	Northern Marianas Mozambique
MRT	Mauritania
MSR	Montserrat
MTQ	Martinique
MUS	Mauritius
MWI	Malawi
MYS.Y MYT	Malaysia Mayotte
NAM	Namibia
NCL	New Caledonia
NER	Niger
NFK	Norfolk Island
NGA	Nigeria
NIC NIU	Nicaragua Niue
NLD	Netherlands
NOR	Norway
NPL	Nepal
NRU	Nauru
NTZ	Neutral Zone
NZL	New Zealand Continued on next page

Dynamic Country Code	Country Name
OMN OMN	Oman
PAK.X	Pakistan
PAN.X	Panama
PCN PER	Pitcairn Peru
PHL	Philippines
PLW	Palau
PNG	Papua New Guinea
POL PRI	Poland Puerto Rico
PRK	Korea, North
PRT	Portugal
PRY	Paraguay
PSE PYF	Palestine French Polynesia
QAT	Qatar
REU	Reunion
ROM	Romania Romania
ROU RUS	Romania Russia
RWA	Rwanda
SAU	Saudi Arabia
SAU.X SCG	Saudi Arabia
SDN	Serbia and Montenegro Sudan
SDN.X	Sudan
SEN	Senegal
SGP SGS	Singapore South Georgia and South Sandwich Islands
SHN	Saint Helena, Ascension, and Tristan da Cunha
SLB	Solomon Islands
SLE	Sierra Leone
SLV SMR	El Salvador San Marino
SOM	Somalia
SPM	Saint Pierre and Miquelon
SRB	Serbia
SRB.X SSD	Serbia South Sudan
STP	Sao Tome and Principe
SUR	Suriname
SVK	Slovakia
SVN SVU	Slovenia Soviet Union
SWE	Sweden
SWZ	Swaziland
SXM	Sint Maarten
SYC SYR	Seychelles Syria
TCA	Turks and Caicos Islands
TCD	Chad
TGO	Togo
THA TJK	Thailand Tajikistan
TKL	Tokelau
TKM	Turkmenistan
TLS	East Timor
TON TTO	Tonga Trinidad and Tobago
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TWN TZA	Taiwan Tanzania
UGA	Uganda
UKR	Ukraine
UMI URY	U.S. Minor Outlying Islands Uruguay
USA	United States
UZB	Uzbekistan
VAT	Holy See
VCT VEN	Saint Vincent and the Grenadines Venezuela
VGB	British Virgin Islands
VIR	U.S. Virgin Islands
VNM.X	Vietnam
VUT WLF	Vanuatu Wallis and Futuna Islands
WSM	Western Samoa (until 1996), Samoa (1997-present)
YEM	Yemen, North
YEM.X	Yemen Vernen South
YMD YUG	Yemen, South Yugoslavia
ZAF	South Africa
ZAF.X	South Africa
ZAR	Zaire
$_{ m ZWE}$	Zambia Zimbabwe
	Continued on next page

Dynamic Country Code Country Name

Notes: This table lists the 265 countries/regions covered in ITPD-E-R02 (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. See text for further details.

Table 3: Variables in ITPD-E-R02 - Data File Columns

Column name	Column description
exporter_iso3	ISO 3-letter alpha code of the exporter
exporter_name	Name of the exporter
$importer_iso3$	ISO 3-letter alpha code of the importer
$importer_name$	Name of the importer
exporter_dynamic_code	Dynamic alpha code of the exporter based on DGD
importer_dynamic_code	Dynamic alpha code of the importer based on DGD
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-R02. 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 3	Rice (raw) Corn	27 56	Rice, paddy Maize
4	Other cereals	44	Barley
4	Other cereals	71	Rye
4	Other cereals	75	Oats
4	Other cereals	79 83	Millet
4 4	Other cereals Other cereals	89	Sorghum 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 Other cereals	103 108	Mixed grain 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 5	Cereal products Cereal products	91 96	Bran of Buckwheat 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 7	Other oilseeds (exc. peanuts) Other oilseeds (exc. peanuts)	$\frac{251}{254}$	Copra 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 7	Other oilseeds (exc. peanuts) Other oilseeds (exc. peanuts)	275 280	Tung Nuts 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 7	Other oilseeds (exc. peanuts)	310 311	Kapok fruit
7	Other oilseeds (exc. peanuts) Other oilseeds (exc. peanuts)	312	Kapokseed in shell 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 8	Other oilseeds (exc. peanuts) Animal feed ingredients & pet foods	339 169	Oilseeds nes Beet Pulp
8	Animal feed ingredients & pet foods 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 Legumes for silage
8	Animal feed ingredients & pet foods Animal feed ingredients & pet foods	643 646	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 8	Animal feed ingredients & pet foods	859	Hay nes
9	Animal feed ingredients & pet foods Raw & refined sugar & sugar crops	862 156	Alfalfa Meal & Pellets 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 11	Pulses & legumes(dried, preserved) Pulses & legumes(dried, preserved)	181 187	Broad beans, dry Peas, dry
11	Pulses & legumes(dried, preserved) 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 11	Pulses & legumes(dried, preserved) Pulses & legumes(dried, preserved)	205 210	Vetches 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, satsum
$\frac{12}{12}$	Fresh fruit Fresh fruit	497 507	Lemons & limes Grapefruit & pomelo
12 12	Fresh fruit Fresh fruit	507 512	Citrus fruit nes
12	Fresh fruit	515	Apples
12	Fresh fruit	521	Pears
			0.1
12	Fresh fruit	523	Quinces

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
$\frac{12}{12}$	Fresh fruit	568	Melons, Cantaloupes
12	Fresh fruit Fresh fruit	569	Figs
12	Fresh fruit	571 572	Mangoes Avocados
12	Fresh fruit	574	Pineapples
12	Fresh fruit	577	Dates
12	Fresh fruit	587	
12	Fresh fruit	591	Persimmons Cashewapple
12	Fresh fruit	591 592	Casnewappie 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 Fresh vegetables	136	Taro (Cocoyam)
13	Fresh vegetables Fresh vegetables	137	Yams
13	Fresh vegetables Fresh vegetables	149	Roots & tubers nes
13	Fresh vegetables Fresh vegetables	260	Olives
13	Fresh vegetables Fresh vegetables	358	Cabbages
13	Fresh vegetables Fresh vegetables	366	Artichokes
13	Fresh vegetables	367	Asparagus
13	Fresh vegetables Fresh vegetables	372	Lettuce & chicory
13	Fresh vegetables	373	Spinach
13	Fresh vegetables 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 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 Fresh vegetables	446	Green Corn (Maize)
13	Fresh vegetables Fresh vegetables	449	Mushrooms
13	Fresh vegetables 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 Cattle	946	Buffaloes
18	Live Swine	1034	Pigs
19	Eggs	1062	rigs Hen eggs
19	Eggs Eggs	1002	Eggs, exc. hen eggs
	±88°		
	Other meats livest or live anim-1-	076	
20 20	Other meats, livest. pr. live animals Other meats, livest. pr. live animals	976 987	Sheep Wool, Greasy

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 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 Other meats, livest. pr. live animals	1181	Bees
20	Other meats, livest. pr. live animals Other meats, livest. pr. live animals	1183	Beeswax
20	Other meats, livest. pr. live animals Other meats, livest. pr. live animals	1185	Cocoons, reelable
20	Other meats, livest. pr. live animals Other meats, livest. pr. live animals	1216	Hides nes
20	Other meats, livest. pr. live animals Other meats, livest. pr. live animals	1218	Hair, fine
20		661	
21 22	Cocoa and cocoa products		Cocoa beans
	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
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Notes: This table presents the concordance that we created between the ITPD-E agriculture classification and the FCL classification.

Table 6: Mining: ITPD-E-R02 Classification and Concordances

ITPD-E	7-R02 Code	TPD-E-R02 Code ITPD-E-R02 Description	$_{\rm ISIC3}$	ISIC3 ISIC rev. 3 Description	$_{\rm ISIC4}$	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	9	Extraction of crude oil and gas	
	32	Mining of iron ores	131	Iron ores	71	Mining of iron ores	
	33	Other mining and quarring	190	C-(101+102+111+131)	06	B-(051+052+61+62+071)	
	34	Electricity proden, collen, and distr.	401	Electricity proden, 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 that we creat	ed hetw	en the ITPD-F-B09 mining classification	ISI edt	Notes. This table presents the concordance that we created between the ITPD-R-R02 mining classification the ISIC ray 3 and ISIC ray 4 classifications. The	Ш

Table 7: Manufacturing: ITPD-E-R02 Classification and Concordances

TPD-E-R02 Code	ITPD-E-R02 Description	ISIC3	ISIC4
36	Processing/preserving of meat	1511	1010
37 38	Processing/preserving of fish Processing/preserving of fruit & vegetables	1512 1513	1020 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 1549	1074
48 49	Other food products n.e.c. Distilling rectifying & blending of spirits	1551	$^{1075+107}_{1101}$
50	Wines	1552	1101
51	Malt liquors and malt	1553	1102
52	Soft drinks; mineral waters	1554	1104
53	Tobacco products	1600	1200
54	Textile fibre preparation; textile weaving	1711	1311 + 131
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+139
60	Wearing apparel except fur apparel	1810	1410
61 62	Dressing & dyeing of fur; processing of fur	1820	1420
62 63	Tanning and dressing of leather Luggage handbags etc.; saddlery & harness	1911 1912	1511 1512
64	Luggage nanddags etc.; saddlery & narness Footwear	1912	1512 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 76	Publishing of recorded media	2213	
76 77	Other publishing Printing	$\frac{2219}{2221}$	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	1020
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+268
90	Man-made fibers	2430	2030
91	Rubber tires and tubes	2511	2211
92 93	Other rubber products Plastic products	2519 2520	$\frac{2219}{2220}$
93 94	Glass and glass products	2610	2310
94 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
107 108	Cutlery hand tools and general hardware Other fabricated metal products n.e.c.	2893 2899	$2593 \\ 2599$
108	Engines & turbines (not for transport equipment)	2911	2811
110	Pumps compressors taps and valves	2911	2812+281
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 + 282
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
		2027	
$\frac{121}{122}$	Weapons and ammunition Other special purpose machinery	2927 2929	2520+304 2829

ITPD-E-R02 Code	ITPD-E-R02 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	Jewelery 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 that we created between the ITPD-E-R02 manufacturing classification, the ISIC rev. 3 and ISIC rev. 4 classifications. The difference between this classification and the classification in ITPD-E is that the industries 'Reproduction of recorded media' and 'Casting of iron and steel' are not in ITPD-E-R02.

Table 8: Services: EBOPS-ISIC-ITPD Concordance

ITPD-E Code	ITPD-E Code ITPD-E Description	EBOPS 2002	EBOPS 2010	ISIC Rev. 4
154	Manufacturing services on physical inputs owned by others		SA	
155	Maintenance and repair services n.i.e.		SB	I
156	Transport	205, 246	SC	Н
157	Travel	237, 243	$\mathrm{SDA} + \mathrm{SDB3}$	I
158	Construction	249	SE	Έų
159	Insurance and pension services	253	SF	(80%)
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	$\mathrm{SI}+\mathrm{SK1}$	J
163	Other business services		SJ excl SJ34	M + N
164	Heritage and recreational services	I	$SK23^{a}$	R
165	Health services	241, 896	$\mathrm{SDB1} + \mathrm{SK21}$	~
166	Education services	242, 895	$\mathrm{SDB2} + \mathrm{SK22}$	Ь
167	Government goods and services n.i.e.	291	$S\Gamma$	I
168	Services not allocated	982	$_{ m NN}$	I
169	Trade-related services	271	SJ34	Ü
170	Other personal services	1	$ m 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 release R1	38,518,253
In release R2	72,534,869
In either release	73,510,718
In both releases	37,542,404
In R1, but not in R2	975,849
In R2, but not in R1	34,992,465

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

	ITPD-E	R01	ITPD-I	E R02
Year	Freq	Value	Freq	Value
1986			120,430	105
1987			121,728	111
1988			1,129,339	1,306
1989			1,298,872	1,935
1990			1,367,742	3,138
1991			1,473,637	4,349
1992			1,837,326	$5,\!357$
1993			2,004,519	5,973
1994			2,075,523	9,325
1995			2,110,024	11,668
1996			2,115,491	12,848
1997			2,164,968	15,979
1998			2,189,455	15,730
1999			2,229,839	16,295
2000	2,213,278	$43,\!327$	2,448,006	$43,\!281$
2001	2,218,685	$42,\!580$	2,454,598	42,612
2002	2,230,848	44,222	$2,\!467,\!250$	44,058
2003	$2,\!252,\!326$	$51,\!582$	2,485,058	$51,\!182$
2004	2,258,436	60,130	2,490,433	59,645
2005	2,264,393	$65,\!113$	2,501,253	64,997
2006	2,289,096	$71,\!416$	2,533,745	71,720
2007	2,292,213	81,824	2,539,988	81,015
2008	$2,\!291,\!181$	89,455	2,539,993	89,014
2009	2,287,047	76,832	2,539,544	$79,\!507$
2010	2,285,389	83,995	$2,\!542,\!579$	86,725
2011	$2,\!281,\!534$	93,723	2,542,149	99,624
2012	2,282,782	$84,\!572$	2,542,748	$101,\!527$
2013	$2,\!277,\!242$	84,394	2,536,653	104,529
2014	2,268,835	79,795	2,527,113	105,075
2015	$2,\!264,\!521$	$66,\!512$	2,525,834	$97,\!388$
2016	$2,\!260,\!447$	$61,\!578$	$2,\!522,\!556$	84,414
2017			$2,\!522,\!672$	88,433
2018			$2,\!522,\!523$	92,145
2019			2,511,281	77,553

Note: 'Value' is in billions of USD.

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

	stry ID		ITPD-1		ITPD-	
R01	R02	Industry Description	Freq	Value	Freq	Value
1	1	Wheat	77,845	2,319	161,462	3,598
2	2	Rice (raw)	63,997	3,864	264,780	6,290
3	3	Corn	87,885	2,704	190,760	4,374
4	4	Other cereals	81,678	927	176,680	1,452
5	5	Cereal products	39,654	15	82,098	24
$\frac{6}{7}$	6 7	Soybeans Other oilseeds (excluding peanuts)	55,957 $160,283$	1,339	113,761	2,248 $3,721$
8	8	Animal feed ingredients and pet foods	71,448	2,713 78	344,260 $264,382$	343
9	9	Raw and refined sugar and sugar crops	10,651	1,071	21,611	1,599
10	10	Other sweeteners	82,972	91	174,104	133
11	11	Pulses and legumes, dried, preserved	134,352	533	285,160	826
12	12	Fresh fruit	211,150	5,831	450,335	8,532
13	13	Fresh vegetables	175,575	8,722	373,785	12,562
14	14	Prepared fruits and fruit juices	106,861	32	216,489	48
15	15	Prepared vegetables	16,594	21	37,767	39
16	16	Nuts	127,163	648	265,904	961
17	17	Live Cattle	31,588	108	73,982	192
18	18	Live Swine	16,511	53	35,096	81
19	19	Eggs	65,981	1,596	$147,\!396$	2,443
20	20	Other meats, livestock products, and live animals	173,954	265	$402,\!403$	575
21	21	Cocoa and cocoa products	38,609	138	89,594	213
22	22	Beverages, nec	192,290	478	404,965	795
23	23	Cotton	99,474	746	226,642	383
24	24	Tobacco leaves and cigarettes	104,397	295	229,436	490
$\frac{25}{26}$	25	Spices	186,919	214	396,341	334
26	26	Other agricultural products, nec	271,908	1,049	559,554	1,588
	27	Forestry Fishing			474,015	558
27	$\frac{28}{29}$	Mining of hard coal	75,090	3,318	391,607 $136,108$	376 $5,834$
28	30	Mining of lignite	19,707	185	38,152	401
29	31	Extraction crude petroleum and natural gas	92,441	23,781	172,182	37,881
30	32	Mining of iron ores	45,156	2,083	82,390	3,020
31	33	Other mining and quarring	306,736	5,869	588,170	20,624
32	34	Electricity production, collection, and distribution	21,438	13,884	36,842	24,798
33	35	Gas production and distribution	17,634	2,054	17,305	3,863
34	36	Processing/preserving of meat	264,080	9,208	516,818	14,567
35	37	Processing/preserving of fish	304,756	2,268	595,490	3,812
36	38	Processing/preserving of fruit & vegetables	333,462	2,458	632,741	4,865
37	39	Vegetable and animal oils and fats	266,236	3,605	518,023	6,130
38	40	Dairy products	$253,\!217$	4,931	475,034	9,373
39	41	Grain mill products	270,470	2,233	$515,\!338$	4,283
40	42	Starches and starch products	183,214	586	343,283	1,073
41	43	Prepared animal feeds	169,836	2,384	$325,\!852$	4,835
42	44	Bakery products	$252,\!274$	3,072	473,776	5,642
43	45	Sugar	188,988	1,137	363,745	1,874
44	46	Cocoa chocolate and sugar confectionery	280,421	1,613	530,735	2,700
45	47	Macaroni noodles & similar products	184,870	547	347,555	1,019
46	48	Other food products n.e.c.	374,789	4,113	702,654	7,786
47	49	Distilling rectifying & blending of spirits	246,847	1,619	474,545	2,139
48	$\frac{50}{51}$	Wines Malt liquors and malt	213,716 $179,923$	845	400,350 $342,300$	1,397 2,645
49 50	52	Soft drinks; mineral waters	257,976	1,440 $2,079$	475,168	3,758
51	52 53	Tobacco products	237,970 $235,124$	2,633	409,339	5,320
52	54	Textile fibre preparation; textile weaving	344,835	$\frac{2,033}{3,705}$	664,162	$\frac{5,320}{7,257}$
53	55	Made-up textile articles except apparel	391,348	1,263	739,452	1,876
54	56	Carpets and rugs	265,513	422	511,303	798
55	57	Cordage rope twine and netting	234,543	105	438,109	195
56	58	Other textiles n.e.c.	307,153	1,001	575,255	1,677
57	59	Knitted and crocheted fabrics and articles	397,698	2,098	704,883	3,165
58	60	Wearing apparel except fur apparel	506,144	6,163	940,066	9,986
		Dressing & dyeing of fur; processing of fur	130,653	92	248,006	164
59	61	Bressing & dyeing of fair, processing of fair	100,000		= 10,000	101
59 60	62	Tanning and dressing of leather	184,452	578	333,818	981

Indus	stry ID		ITPD-I	E R01	ITPD-	E R02
R01	R02	Industry Description	Freq	Value	Freq	Value
62	64	Footwear	372,876	2,129	711,001	3,448
63	65	Sawmilling and planing of wood	247,071	2,013	457,447	3,070
64	66	Veneer sheets plywood particle board etc.	224,925	1,328	$428,\!831$	2,561
65	67	Builders' carpentry and joinery	209,825	1,405	$388,\!821$	2,476
66	68	Wooden containers	195,088	299	354,160	566
67	69	Other wood products; articles of cork/straw	331,583	492	$625,\!893$	983
68	70	Pulp paper and paperboard	301,621	4,696	554,714	7,845
69	71	Corrugated paper and paperboard	283,916	2,310	$525,\!845$	4,577
70	72	Other articles of paper and paperboard	374,885	1,588	649,022	$2,\!827$
71	73	Publishing of books and other publications	378,505	585	707,063	1,071
72	74	Publishing of newspapers journals etc.	$175,\!255$	1,008	$330,\!423$	1,729
73	75	Publishing of recorded media	$169,\!299$	189	389,849	434
74	76	Other publishing	$330,\!683$	198	$616,\!388$	398
75	77	Printing	$373,\!622$	3,522	$646,\!272$	6,568
76	78	Service activities related to printing	104,597	460	195,249	762
77		Reproduction of recorded media	33,613	281		
78	79	Coke oven products	53,512	6,043	102,682	1,110
79	80	Refined petroleum products	319,655	23,889	579,355	34,644
80	81	Processing of nuclear fuel	81,830	402	149,557	427
81	82	Basic chemicals except fertilizers	367,995	11,724	693,409	19,195
82	83	Fertilizers and nitrogen compounds	197,467	2,045	380,385	3,453
83	84	Plastics in primary forms; synthetic rubber	296,165	6,266	559,196	9,989
84	85	Pesticides and other agro-chemical products	214,444	763	408,568	1,415
85	86	Paints varnishes printing ink and mastics	295,304	1,862	551,441	3,365
86	87	Pharmaceuticals medicinal chemicals etc.	380,241	11,552	717,974	19,818
87	88	Soap cleaning & cosmetic preparations	388,759	3,344	733,862	5,932
88	89	Other chemical products n.e.c.	435,301	4,753	780,479	8,091
89	90	Man-made fibres	187,332	1,177	347,947	2,044
90	91	Rubber tyres and tubes	275,980	1,765	521,156	2,931
91	92	Other rubber products	389,019	1,638	722,035	2,737
92	93	Plastic products	482,105	10,319	898,032	18,673
93	94	Glass and glass products	371,857	2,961	697,158	4,028
94	95 06	Pottery china and earthenware	323,151	$\frac{584}{429}$	614,680	1,078
95 06	96 97	Refractory ceramic products Struct.non-refractory clay; ceramic products	163,078	429 888	304,355	$846 \\ 1,686$
96 07	98		234,859		385,166	
97 98	98 99	Cement lime and plaster Articles of concrete cement and plaster	167,892	1,887 $2,788$	316,025 $361,036$	3,245 5,530
99	100	Cutting shaping & finishing of stone	193,650	618		1,067
100	100	Other non-metallic mineral products n.e.c.	$198,141 \\ 275,469$	1,277	366,762 $515,930$	2,231
101	101	Basic iron and steel		18,681	692,029	28,158
$101 \\ 102$	102	Basic from and steel Basic precious and non-ferrous metals	375,386 $331,416$	11,638	617,097	19,968
102	103	Casting of iron and steel	264,452	1,266	011,091	19,900
103 104	104	Structural metal products	288,356	4,509	539,604	8,431
104	105	Tanks reservoirs and containers of metal	223,679	786	412,513	1,369
106	106	Steam generators	146,238	736	272,156	1,074
107	107	Cutlery hand tools and general hardware	431,422	2,009	786,787	3,312
108	107	Other fabricated metal products n.e.c.	483,221	5,043	894,532	9,172
109	109	Engines & turbines (not for transport equipment)	225,913	1,966	427,948	3,278
110	110	Pumps compressors taps and valves	409,150	3,868	774,183	5,831
111	111	Bearings gears gearing & driving elements	337,549	1,647	640,411	2,656
112	112	Ovens furnaces and furnace burners	197,186	285	432,717	836
113	113	Lifting and handling equipment	304,791	2,262	576,201	3,988
114	114	Other general purpose machinery	436,553	5,288	812,989	8,229
115	115	Agricultural and forestry machinery	248,332	1,490	464,647	2,717
116	116	Machine tools	349,097	2,385	644,355	3,915
117	117	Machinery for metallurgy	120,723	351	223,857	970
118	118	Machinery for mining & construction	334,163	2,710	624,198	4,938
119	119	Food/beverage/tobacco processing machinery	255,581	643	482,750	1,151
120	120	Machinery for textile apparel and leather	268,892	619	508,391	1,106
121	121	Weapons and ammunition	148,226	512	281,244	802
122	122	Other special purpose machinery	371,734	4,286	682,623	7,429
123	123	Domestic appliances n.e.c.	367,690	3,033	695,056	5,532
124	124	Office accounting and computing machinery	448,807	9,571	837,300	14,533
125	125	Electric motors generators and transformers	457,444	4,881	738,947	7,770
126	126	Electricity distribution & control apparatus	407,076	3,607	755,770	5,160
		v	,		tinued on 1	

	try ID		TTPD-	E R01	TTPD-	E R02
R01	R02	Industry Description	Freq	Value	Freq	Value
127	127	Insulated wire and cable	356,089	2,193	634,359	4,060
128	128	Accumulators primary cells and batteries	293,490	969	535,878	1,651
129	129	Lighting equipment and electric lamps	373,200	1,342	664,967	2,205
130	130	Other electrical equipment n.e.c.	416,978	3,277	$717,\!569$	5,501
131	131	Electronic valves tubes etc.	350,806	14,654	665,949	20,584
132	132	TV/radio transmitters; line comm. apparatus	401,113	7,449	703,623	11,036
133	133	TV and radio receivers and associated goods	$417,\!532$	$5,\!387$	774,075	7,554
134	134	Medical surgical and orthopaedic equipment	379,228	3,454	667,257	6,001
135	135	Measuring/testing/navigating appliances etc.	420,499	4,093	791,761	7,103
136	136	Optical instruments & photographic equipment	326,220	1,841	$604,\!513$	2,557
137	137	Watches and clocks	267,915	615	506,628	928
138	138	Motor vehicles	$362,\!326$	24,684	695,327	38,656
139	139	Automobile bodies trailers & semi-trailers	248,525	1,244	$471,\!373$	2,494
140	140	Parts/accessories for automobiles	$427,\!422$	$11,\!358$	$784,\!562$	20,602
141	141	Building and repairing of ships	181,233	2,335	332,385	4,051
142	142	Building/repairing of pleasure/sport. boats	155,453	315	290,323	478
143	143	Railway/tramway locomotives & rolling stock	128,073	1,000	234,083	1,818
144	144	Aircraft and spacecraft	258,794	5,122	481,752	$9,\!596$
145	145	Motorcycles	223,329	916	422,337	1,489
146	146	Bicycles and invalid carriages	245,497	334	446,207	536
147	147	Other transport equipment n.e.c.	168,167	68	312,501	202
148	148	Furniture	412,160	5,008	775,336	8,692
149	149	Jewellery and related articles	302,899	2,149	461,520	3,385
150	150	Musical instruments	227,752	150	434,369	250
151	151	Sports goods	306,837	549	573,449	944
152	152	Games and toys	317,275	1,143	602,799	1,683
153	153	Other manufacturing n.e.c.	427,790	1,739	795,776	2,812
154	154	Manufacturing services on physical inputs owned by others	11,693	686	19,446	992
155	155	Maintenance and repair services n.i.e.	18,995	451	29,468	649
156	156	Transport	64,771	62,460	84,876	79,101
157	157	Travel	43,927	34,333	59,182	43,011
158	158	Construction	41,874	82,076	52,970	102,884
159	159	Insurance and pension services	46,687	45,073	60,808	57,266
160	160	Financial services	49,593	30,048	64,170	38,248
161	161	Charges for the use of intellectual property n.i.e.	44,255	3,214	57,181	4,172
162	162	Telecommunications, computer, and information services	56,484	64,361	76,749	81,753
163	163	Other business services	61,736	105,546	79,548	134,632
164	164	Heritage and recreational services	8,636	17,053	14,468	19,846
165	165	Health services	24,006	66,806	34,038	84,091
166	166	Education services	34,327	42,817	44,452	53,616
167	167	Government goods and services n.i.e.	40,507	419	53,734	520
168	168	Services not allocated	38,824	14,099	38,259	13,491
169	169	Trade-related services	39,111	127,625	50,249	162,233
170	170	Other personal services	9,542	14,988	14,338	18,241

Note: 'Value' is in billions of USD.

Table 12: Comparison of Number and Value of Trade Flows, By Exporter $\,$

	ŢΤ	PD-E R01		ITPD-E R02			
Country	Freq	Value	Share	Freq	Value	Share	
Afghanistan	112296	9	0.00	229423	16	0.00	
Albania	134929	210	0.02	269251	265	0.02	
Algeria	131418	1123	0.10	259549	1647	0.10	
American Samoa	60231	1	0.00	80267	1	0.00	
Andorra	124044	3	0.00	250166	4	0.00	
Angola	80145	706	0.06	229153	889	0.05	
Anguilla	44262	0	0.00	79511	0	0.00	
Antarctica	13631	0	0.00	18830	0	0.00	
Antigua and Barbuda	107178	14	0.00	198542	15	0.00	
Argentina	298090	1293	0.11	579345	2627	0.16	
Armenia Aruba	109879	$\frac{76}{38}$	$0.01 \\ 0.00$	186398 117469	$\frac{105}{39}$	0.01	
Aruba Australia	67627 411231	36 7398	0.63	780770	39 11185	$0.00 \\ 0.67$	
Austria	402064	9450	0.80	759501	12824	0.67	
Azerbaijan	129709	722	0.06	228284	885	0.05	
Bahamas, The	112764	126	0.00	222837	167	0.03	
Bahrain	161213	273	0.02	324850	268	0.02	
Bangladesh	197858	598	0.05	383979	967	0.06	
Barbados	134317	12	0.00	250680	15	0.00	
Belarus	182347	495	0.04	339941	555	0.03	
Belgium	455415	14919	1.26	574725	18847	1.13	
Belgium-Luxembourg				215601	965	0.06	
Belize	102160	12	0.00	210549	16	0.00	
Benin	84039	45	0.00	164077	63	0.00	
Bermuda	52032	348	0.03	108852	534	0.03	
Bhutan	38215	6	0.00	70369	9	0.00	
Bolivia	114868	130	0.01	244960	194	0.01	
Bonaire, Sint Eustatius and Saba	675	0	0.00	1831	0	0.00	
Bosnia and Herzegovina	166510	248	0.02	295169	343	0.02	
Botswana	103952	73	0.01	132829	98	0.01	
Bouvet Island	6357	1	0.00	8547	1	0.00	
Brazil	390469	24853	2.10	758309	33656	2.02	
British Indian Ocean Ter.	27357	0	0.00	48396	1	0.00	
British Virgin Islands	94766	14	0.00	173346	29	0.00	
Brunei Bulgaria	80447 333410	$156 \\ 1231$	$0.01 \\ 0.10$	186172 636249	$\frac{227}{1659}$	$0.01 \\ 0.10$	
Burkina Faso	83832	51	0.10	165404	117	0.10 0.01	
Burma	03032	51	0.00	4399	0	0.01	
Burundi	52196	33	0.00	105174	53	0.00	
Cambodia	131392	163	0.01	251186	255	0.02	
Cameroon	162520	153	0.01	312120	219	0.01	
Canada	447913	22170	1.88	837369	32384	1.94	
Cape Verde	66543	7	0.00	108745	9	0.00	
Cayman Islands	52393	15	0.00	98880	80	0.00	
Central African Republic	59182	6	0.00	125366	11	0.00	
Chad	43268	62	0.01	83957	69	0.00	
Chile	247812	2213	0.19	497905	3537	0.21	
China	484848	80839	6.84	890333	153320	9.19	
Christmas Island	20039	0	0.00	34913	1	0.00	
Cocos (Keeling) Islands	28942	0	0.00	53364	0	0.00	
Colombia	248553	1445	0.12	494103	5649	0.34	
Comoros	24837	1	0.00	52456	1	0.00	
Congo, Democratic Republic of the	85860	63	0.01	151370	101	0.01	
Congo, Republic of the	99841	158	0.01	196664	232	0.01	
Cook Islands	28778	1	0.00	57512	1 1 1 1 1 1 1 1	0.00	
Costa Rica	204397	767	0.06	402059	1205	0.07	
Cote d'Ivoire	173161	207	0.02	362197	326	0.02	
Croatia	251509	1089	0.09	446512	1512	0.09	
Curação	116830	30 18	0.00	228167 45025	$\frac{47}{20}$	0.00	
Curacao Cyprus	25205	18 506	0.00	45925		$0.00 \\ 0.04$	
Cyprus Czech Republic	238844 361673	596 5735	$0.05 \\ 0.49$	482824 610129	$745 \\ 7555$	$0.04 \\ 0.45$	
Czechoslovakia	201013	0100	0.43	18193	20	0.45	
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	II	PD-E R0		II	PD-E R0	2
Country	Freq	Value	Share	Freq	Value	Share
Denmark	417392	7528	0.64	794665	9868	0.59
Djibouti	50921	2	0.00	98025	3	0.00
Dominica	96735	2	0.00	197922	3	0.00
Dominican Republic	188147	347	0.03	354962	762	0.05
East Timor	39710	3	0.00	51231	5	0.00
Ecuador	210291	1037	0.09	416984	1509	0.09
Egypt, Arab Rep.	299337	1244	0.11	578434	1727	0.10
El Salvador	135014	168	0.01	266438	350	0.02
Equatorial Guinea	34080	138	0.01	61728	160	0.01
Eritrea	46703	100	0.00	73379	16	0.00
Estonia	250130	559	0.05	438713	728	0.00
Ethiopia (excludes Eritrea)	169668	167	0.03	288727	213	0.04
1 (109000	107	0.01	1190	1	0.01
Ethiopia (includes Eritrea)	41075	10	0.00		20	
Faeroe Islands	41075	10	0.00	87466		0.00
Falkland Islands	17524	3	0.00	34174	4	0.00
Fiji	112434	26	0.00	212613	45	0.00
Finland	345940	5826	0.49	663109	7787	0.47
France	488779	60567	5.13	898592	80109	4.80
Free Zones				120252	80	0.00
French Guiana	12	0	0.00	3030	0	0.00
French Polynesia	63579	2	0.00	126055	6	0.00
French Southern Territories	11443	0	0.00	17358	0	0.00
Gabon	105156	106	0.01	202110	155	0.01
Gambia, The	73257	3	0.00	146880	8	0.00
Gaza Strip				51936	10	0.00
Georgia	190823	59	0.00	334295	184	0.01
German Democratic Republic				4566	7	0.00
Germany	505048	82860	7.02	853468	110866	6.64
Ghana	180850	215	0.02	361463	353	0.02
Gibraltar	57828	6	0.02	123294	7	0.00
Greece	340433	5218	0.44	676245	6369	0.38
Greenland	29919	11	0.00	62588	19	0.00
Grenada	58708	11	0.00	121186	3	0.00
	36706	1	0.00			
Guadeloupe	9,000	-	0.00	6672	1	0.00
Guam	36830	1	0.00	46379	1	0.00
Guatemala	174822	140	0.01	355412	217	0.01
Guinea	97025	60	0.01	187720	106	0.01
Guinea-Bissau	18911	15	0.00	38541	18	0.00
Guyana	98856	19	0.00	193572	33	0.00
Haiti	66869	12	0.00	144619	19	0.00
Heard Island and McDonald Islands	4358	0	0.00	5500	0	0.00
Holy See	21378	0	0.00	32114	0	0.00
Honduras	145168	119	0.01	296890	184	0.01
Hong Kong	387871	7447	0.63	544368	9263	0.56
Hungary	322083	3640	0.31	628484	4859	0.29
celand	190033	337	0.03	379423	418	0.03
ndia	458718	22533	1.91	854103	37656	2.26
ndonesia	398769	5064	0.43	749824	6701	0.40
ran	250447	3118	0.45	484638	6887	0.40
raq	71569	822	0.20	141061	1196	0.41
raq reland						
	332240	7561	0.64	653724	9726	0.58
sle of Man	54	4061	0.00	81	0	0.00
srael	302920	4061	0.34	572554	5699	0.34
taly	476930	51938	4.40	885861	69084	4.14
Jamaica	157336	68	0.01	309421	101	0.01
Japan	418911	122564	10.38	803909	150295	9.01
fordan	195097	234	0.02	390342	512	0.03
Kampuchea				925	0	0.00
Kazakhstan	161252	1393	0.12	278004	1902	0.11
Kenya	224274	465	0.04	460734	575	0.03
*	22107	1	0.00	41980	1	0.00
Kiribati		-		000		5.50
Kiribati Korea. North		92	0.01	363968	666	0.04
Korea, North	180083	92 28664	0.01 2.43	363968 769156	666 36961	
		92 28664 1564	0.01 2.43 0.13	363968 769156 348744	666 36961 2006	0.04 2.22 0.12

		PD-E R0		IT	PD-E R0	
Country	Freq	Value	Share	Freq	Value	Share
laos	76981	66	0.01	151492	103	0.01
Latvia	241274	631	0.05	429994	836	0.05
Lebanon	269503	65	0.01	530272	128	0.01
Lesotho	35750	14	0.00	56895	21	0.00
Liberia	66270	19	0.00	136865	33	0.00
Libya	73995	504	0.04	144799	659	0.04
Liechtenstein	3034	11	0.00	4796	15	0.00
Lithuania	268554	825	0.07	474033	1157	0.07
Luxembourg	255449	2690	0.23	331272	3325	0.20
Macao	107253	40	0.23	218185	60	0.20
Macedonia	143330	195	0.02	259273	257	0.02
Madagascar	143136	63	0.01	284340	100	0.01
Malawi	110255	93	0.01	210465	136	0.01
Malaysia	382376	5127	0.43	732886	7169	0.43
Maldives	48908	3	0.00	94487	5	0.00
Mali	121058	86	0.01	231263	133	0.01
Malta	196532	359	0.03	390660	496	0.03
Marshall Islands	30833	11	0.00	53172	14	0.00
Martinique				4335	2	0.00
Mauritania	69112	33	0.00	136198	48	0.00
Mauritius	178090	135	0.01	342821	142	0.01
Mayotte	12459	0	0.00	12110	0	0.00
Mexico	332546	20032	1.70	638936	27047	1.62
Micronesia, Federated States of	16044	1	0.00	24886	2	0.00
Moldova	134406	111	0.01	249497	178	0.01
Monaco	4	0	0.00	3084	18	0.00
Mongolia	81905	133	0.00	149529	199	0.00
9	49748	34	0.00	75175	34	0.01
Montenegro						
Montserrat	33768	0	0.00	62821	0	0.00
Morocco	254319	767	0.06	508276	1024	0.06
Mozambique	120864	126	0.01	246005	185	0.01
Myanmar	101074	247	0.02	225652	185	0.01
Namibia	194306	74	0.01	264055	102	0.01
Nauru	37406	1	0.00	75568	1	0.00
Nepal	112751	88	0.01	221096	198	0.01
Netherlands	484893	22172	1.88	893114	28554	1.71
Netherlands Antilles	71673	26	0.00	141910	31	0.00
Neutral Zone				84	0	0.00
New Caledonia	96687	24	0.00	131706	30	0.00
New Zealand	326632	2747	0.23	628514	3668	0.22
Nicaragua	124986	64	0.23	259239	98	0.01
Niger	112934	73	0.01	224720	112	0.01
Nigeria	196703	5460	0.01 0.46	387871	7316	0.01
Niue	23575	0	0.40		1310	
				35187		0.00
Norfolk Island	10002	0	0.00	15341	0	0.00
Northern Marianas	20697	0	0.00	31301	0	0.00
Norway	324450	8938	0.76	626619	12102	0.73
Oman	171143	560	0.05	349990	828	0.05
Pakistan	302648	1627	0.14	576245	3110	0.19
Palau	15097	0	0.00	25746	1	0.00
Palestine	41745	35	0.00	57025	90	0.01
Panama	204284	122	0.01	406514	242	0.01
Papua New Guinea	70730	87	0.01	146826	240	0.01
Paraguay	108819	124	0.01	226712	297	0.02
Peru	224824	2469	0.21	444669	3647	0.22
Philippines	313383	2322	0.20	600269	3270	0.20
Pitcairn	18244	0	0.00	28642	0	0.00
Poland	389642	10704	0.00	740321	15272	0.92
Portugal	366106	5327	0.91 0.45	740321 712245	6850	0.92 0.41
Puerto Rico	25	1205	0.00	3866	11	0.00
Qatar	166066	1385	0.12	304684	2002	0.12
Reunion			2	6199	0	0.00
Romania	308195	3740	0.32	591582	5270	0.32
Russia	350310	10972	0.93	598051	19586	1.17
Rwanda	71646	56	0.00	139359	74	0.00

	ΙΊ	TPD-E R0	1	II	PD-E R0	2
Country	Freq	Value	Share	Freq	Value	Share
Saint Barthelemy	1151	0	0.00	4221	0	0.00
Saint Helena, Ascension, and Tristan da Cunha	38225	0	0.00	66381	0	0.00
Saint Kitts and Nevis	54605	2	0.00	106639	3	0.00
Saint Lucia	67450	3	0.00	136241	6	0.00
Saint Pierre and Miquelon	9439	0	0.00	24928	0	0.00
Saint Vincent and the Grenadines	63868	4	0.00	129044	6	0.00
Samoa	47287	3	0.00	70773	4	0.00
San Marino	62214	3	0.00	83642	6	0.00
Sao Tome and Principe	43583	0	0.00	80426	0	0.00
	271794					
Saudi Arabia		4187	0.35	544584	7044	0.42
Senegal	176385	70	0.01	335543	163	0.01
Serbia	155497	725	0.06	220768	899	0.05
Serbia and Montenegro	27390	78	0.01	19275	18	0.00
Seychelles	86160	12	0.00	162028	15	0.00
Sierra Leone	109954	29	0.00	214410	35	0.00
Singapore	387573	4309	0.36	742896	6316	0.38
Sint Maarten	4914	0	0.00	11207	0	0.00
Slovakia	292232	2346	0.20	490703	2979	0.18
Slovenia	285543	1221	0.10	499961	1566	0.09
Solomon Islands	36306	2	0.00	69364	11	0.00
Somalia	43068	5	0.00	91256	7	0.00
South Africa	415897	2320	0.20	537940	2573	0.15
South Georgia and South Sandwich Islands	4831	0	0.00	6870	0	0.00
South Sudan	1431	11	0.00	4852	16	0.00
Soviet Union	1451	11	0.00	11842	61	0.00
Spain	444857	32416	2.74	836360	41005	2.46
1						
Sri Lanka	261440	484	0.04	512095	833	0.05
Sudan	113170	223	0.02	224231	266	0.02
Suriname	105557	32	0.00	203172	39	0.00
Swaziland	147003	60	0.01	209736	78	0.00
Sweden	395584	10966	0.93	750382	15233	0.91
Switzerland	428383	14240	1.21	809083	19930	1.19
Syria	192354	353	0.03	356368	338	0.02
Taiwan	396874	8967	0.76	747876	9397	0.56
Tajikistan	56713	48	0.00	108359	97	0.01
Tanzania	193263	147	0.01	370769	235	0.01
Thailand	425045	3738	0.32	804167	5557	0.33
Togo	99571	39	0.00	203667	62	0.00
Tokelau	50304	0	0.00	92329	1	0.00
Tonga	28536	1	0.00	49178	1	0.00
Trinidad and Tobago	161523	271	0.02	309582	325	0.02
Tunisia	228179	320	0.02	456051	323 440	0.02
Turkey	408159	6111	0.03 0.52		8891	0.03
•				784803		
Turkmenistan	53615	166	0.01	101328	198	0.01
Turks and Caicos Islands	56611	1	0.00	100439	1	0.00
Tuvalu	18968	1	0.00	31994	1	0.00
U.S. Minor Outlying Islands	42973	0	0.00	59472	1	0.00
U.S. Virgin Islands	71	0	0.00	75	0	0.00
Uganda	145506	125	0.01	278071	168	0.01
Ukraine	335438	3416	0.29	580951	4260	0.26
United Arab Emirates	373205	2366	0.20	710981	3854	0.23
United Kingdom	493871	58329	4.94	917582	75393	4.52
United States	513572	298703	25.29	939248	433738	25.99
Uruguay	173672	196	0.02	351309	267	0.02
Uzbekistan	83616	86	0.01	164042	437	0.03
Vanuatu	36771	7	0.00	65787	9	0.00
Venezuela	182439	1152	0.10	367176	1390	0.08
Vietnam	317891	$\frac{1132}{2274}$	0.10	597083	2874	0.08
Wallis and Futuna Islands	10395	0	0.00	18052	0	0.00
West Germany		_	0	62427	975	0.06
Western Sahara	6386	0	0.00	10639	0	0.00
Western Samoa				12938	0	0.00
Yemen	108046	176	0.01	190141	257	0.02
Yemen, North				3331	1	0.00
Yemen, South				28	0	0.00

	IT	ITPD-E R01			ITPD-E R02		
Country	Freq	Value	Share	Freq	Value	Share	
Yugoslavia				12311	23	0.00	
Zaire				44302	9	0.00	
Zambia	114920	107	0.01	226129	270	0.02	
Zimbabwe	136006	49	0.00	271870	99	0.01	

Notes: 'Value' is in billions of USD.
'Share' denotes the value share per year.