

**IMF Committee on Balance of Payments Statistics and
OECD Workshop on International Investment Statistics**

DIRECT INVESTMENT TECHNICAL EXPERT GROUP

Room Document

U.S. Industry Classification Procedures for Direct Investment

**Prepared by Ralph Kozlow and Obie G. Whichard
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In the United States, data on direct investment are classified by industry using a classification system that is derived from the 1997 North American Industry Classification System (NAICS).¹ For the most part, the classifications are assigned based on information on sales (or total income, in the case of holding companies) that is reported in benchmark and annual surveys. A three-stage procedure is used to determine the primary industry of a direct investment enterprise or of a U.S. parent company.

In the first stage, the parent or affiliate firm is classified in the NAICS sector that accounts for the largest percentage of its sales.² Second, within that sector, it is classified in the three-digit subsector in which its sales are largest; a three-digit subsector consists of all four-digit industries that have the same first three digits in their four-digit International Surveys Industry (ISI) code.³ Third, within its three-digit subsector, the parent or affiliate is classified in the four-digit industry in which its sales are largest. This procedure ensures that the parent or affiliate is not assigned to a four-digit industry outside either its sector or its three-digit subsector.

¹NAICS is the industry classification system of the United States, Canada, and Mexico. In the United States, NAICS supplants the 1987 Standard Industrial Classification (SIC). Compared to the SIC, NAICS better reflects new and emerging industries, industries involved in the production of advanced technologies, and service industries. NAICS was introduced in 1997 and was first used in BEA data on direct investment in the 1997 benchmark survey of foreign direct investment in the United States.

²Under NAICS, "sectors" are the broadest industry groups identified. The sectors used for this purpose were agriculture, forestry, fishing, and hunting; mining; utilities; construction; manufacturing; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional, scientific, and technical services; management of companies and enterprises; administrative and support, waste management, and remediation services; educational services; health care and social assistance; arts, entertainment, and recreation; accommodations and food services; and all other services.

³A detailed classification booklet, *Guide to Industry and Foreign Trade Classifications for International Surveys*, provides respondents with detailed descriptions of industries. In the booklet, the industries are numbered using 4-digit codes. The *Guide* and all of BEA's surveys may be downloaded from the Bureau of Economic Analysis Web site, at www.bea.gov.

The following example illustrates the three-stage classification procedure. Suppose a parent's or an affiliate's sales were distributed as follows:

Percentage of total sales	
Code	
All industries.....	100
Manufacturing.....	55
333 Machinery	30
3331 Agriculture, construction, and mining machinery	10
3332 Industrial machinery	15
3336 Engines, turbines, and power transmission equipment	5
334 Computers and electronic products...	25
3344 Semiconductors and other electronic products.....	25
Wholesale trade.....	45
421 Durable goods.....	45
4218 Machinery, equipment, and supplies..	45

Because 55 percent of its sales were in manufacturing and only 45 percent were in wholesale trade, the parent's or affiliate's major industry is manufacturing. Within manufacturing, 30 percent of its sales were in three-digit industry 333 (machinery) (the sum of the percentages in 3331, 3332, and 3336), and 25 percent were in three-digit industry 334 (computers and electronic products); therefore, the parent's or affiliate's three-digit industry is 333. Finally, because its sales within industry 333 were largest in subindustry 3332 (industrial machinery), the parent's or affiliate's four-digit subindustry is 3332. Thus, because of the three-stage classification procedure, the parent or affiliate is assigned to subindustry 3332, even though its sales in that subindustry were smaller than its sales in either subindustries 4218 or 3344.

Under these procedures, each parent or affiliate is classified in a single industry, even though many parents and affiliates have operations in more than one industry. As a result, the

distribution of data by industry of parent or foreign affiliate differs from the distribution that would result if each individual activity of a parent or an affiliate was distributed by detailed industry. It should be noted, though, that BEA also publishes data on parent affiliate sales by industry of sales; in these presentations, the data for a given parent or affiliate are distributed across the full range of industries in which it had sales, rather than being allocated in their entirety to the single industry representing its major activity. For entities in the United States—U.S. parent companies and U.S. affiliates of foreign companies—data on employment also can be broken down according to the industries of the sales with which the employment was associated.⁴ Employment of foreign affiliates is not broken down on this basis, because foreign affiliates tend to be less diversified than U.S. parents and U.S. affiliates, which are reported on a fully consolidated basis. Because a parent or affiliate that has an establishment (for example, a plant) in an industry usually also has sales in that industry, the distribution by industry of sales roughly approximates the distribution that would result if the data were reported and classified by industry of establishment. An example of the data collection instrument used for classifying parents or affiliates by industry, and for distributing sales data by detailed industry, is contained in the attachments (see questions 30 through 38 of the 2004 BE-10B(LF), Benchmark Survey of U.S. Direct Investment Abroad).⁵

A simplified alternative classification procedure is used in conjunction with the quarterly survey of transactions between U.S. parent companies and their foreign affiliates to identify changes in the industries of affiliates. When the industry of an affiliate has changed, the respondent is requested to complete a worksheet (see attachments). In the worksheet, the respondent first identifies the “major activity” of the affiliate – either production of goods, sales of goods, or services. Next, based on the major activity, the appropriate 4-digit ISI code is selected. This corresponds to the ISI code with the highest percentage of annual sales within the major activity of the foreign affiliate. For start-ups with no sales, the code that is most closely associated with the intended activity is selected.

In most data presentations, data for affiliates are broken down according to the industry of the affiliate. However, some data for affiliates are broken down on the basis of the industry of the owning firm. In these presentations, data for foreign affiliates are broken down according to

⁴For U.S. parents, employment is broken down by industry of sales only for years covered by a benchmark survey. (Benchmark surveys are conducted every 5 years.)

⁵A complete set of BEA forms may be downloaded from BEA’s Web site, at <www.bea.gov>.

the industry of the U.S. parent company, and data for U.S. affiliates are broken down on the basis of a highly aggregated list of "UBO codes," which identify the major activity of the affiliate's ultimate beneficial owner.⁶

⁶Included among these codes are identifiers for foreign investors that are not business enterprises, such as governments and individuals.

Part I — IDENTIFICATION OF FOREIGN AFFILIATE — Continued

22. Do two or more U.S. persons each directly or indirectly own or control at least 10 percent of this foreign affiliate's voting rights? Mark (X) one.

- 1022 1 Yes — Item 14 or 15 on page 2 must have an entry, and either item 23 or 24 must be completed. See **Instruction Booklet**, Part I.B.2.d.(2).
 2 No — Skip to item 28

23. If the answer to item 22 is "Yes," and the U.S. Reporter named in item 1 is submitting the Parts II and IV data (i.e., the "complete" report) for this foreign affiliate — Give name(s) and mailing address(es) of the other U.S. Reporter(s) who is (are) not submitting the data.

Name	Mailing address

24. If the answer to item 22 is "Yes," and if the U.S. Reporter named in item 1 is not submitting the Parts II and IV data (i.e., is submitting a "partial" report) for this foreign affiliate — Give name and mailing address of U.S. Reporter who is submitting the data.

25. BEA USE ONLY	1025	1	2	3	4	5
26. BEA USE ONLY	1026	1	2	3	4	5
27. BEA USE ONLY	1027	1	2	3	4	5

28. Major activity of foreign affiliate — Mark (X) one

Select the one activity below that best describes the major activity of the foreign affiliate. For an inactive affiliate, select the activity based on its last active period; for "start-ups," select the intended activity.

- 1028 1 Producer of goods 4 Provider of services
 2 Seller of goods the foreign affiliate does not produce 5 Other — Specify
 3 Producer or distributor of information

29. What is the MAJOR product or service involved in this activity? If a product, briefly state what is done to it, i.e., whether it is mined, manufactured, sold at wholesale, packaged, transported, etc. (For example, "Manufacture widgets.")

1029

Industry classification of foreign affiliate (based on sales or gross operating revenues) — Enter the 4-digit International Surveys Industry (ISI) code(s) and the sales or gross operating revenues associated with each code. For a full explanation of each code, see the Guide to Industry Classifications for International Surveys, 2002 . For an inactive affiliate, enter an ISI code based on its last active period. Holding companies (ISI code 5512) must show total income as reported in item 46. Holding companies see Additional Instructions on page 19 for Part I, items 30-38.	ISI code (1)	Sales or gross operating revenues (2)			
		Bil.	Mil.	Thous.	Dols.
30. Largest sales or gross operating revenues	1030	\$			
31. 2nd largest sales or gross operating revenues	1031				
32. 3rd largest sales or gross operating revenues	1032				
33. 4th largest sales or gross operating revenues	1033				
34. 5th largest sales or gross operating revenues	1034				
35. 6th largest sales or gross operating revenues	1035				
36. 7th largest sales or gross operating revenues	1036				
37. Sales or gross operating revenues not accounted for above	1037				
38. TOTAL SALES OR GROSS OPERATING REVENUES — Sum of items 30 through 37 (Must equal item 41 and also item 54, column (1).) —>	1038	\$			

39. BEA USE ONLY	1039	1	2	3	4	5
	1040	1	2	3	4	5

Remarks

WORKSHEET FOR DETERMINING ISI CODE OF FOREIGN AFFILIATE

For purposes of determining an affiliate's 4-digit ISI code, use the following worksheet and Summary of Industry Classifications.

1. Identify major activity of foreign affiliate. Mark (X) one item below:

	Production of goods – The foreign affiliate is primarily engaged in construction, mining or extracting (including exploration and development), manufacturing, fabricating, assembling, processing, or growing a good. These activities are coded in 1110 through 1140, 2111 through 2127, 2330 through 2350, and 3111 through 3399 of the list of ISI codes.
	Sales of goods – The foreign affiliate is primarily engaged in selling (at wholesale or retail) goods that it does not produce. These activities are coded in 4211 through 4540 of the list of ISI codes.
	Services – The foreign affiliate is primarily engaged in providing a service such as utilities, transportation and warehousing; information (including newspaper, periodical, book, and database publishers, and software publishers), finance and insurance; professional, scientific, and technical services; holding companies; administrative and support, waste management and remediation; accommodations and food services (including restaurants, and eating places), etc. These activities are coded in 1150, 2132, 2133, 2211 through 2213, and 4810 through 8130 of the list of ISI codes.

2. Based on the major activity identified in item 1, select the appropriate 4-digit ISI code and enter on Form BE-577, item 6. If the foreign affiliate has sales in more than one ISI code, select the single ISI code representing the highest percentage of annual sales and enter on Form BE-577, item 6.

For "startups" with no sales, show the intended activity(ies). Holding companies should compute percent of total income. A holding company's equity in the net income of affiliates that it holds must constitute a majority of its total income and, in general, it must have a sizeable portion (usually, at least 50%) of its total assets invested in affiliates that it holds. ISI code 5512, holding companies, is an invalid classification when the foreign affiliate being reported generates, or is expected to generate, more than 50 percent of its total income from other activities.

3. For additional information on industry classifications, see BE-799, Guide to Industry and Foreign Trade Classifications for International Surveys.

SUMMARY OF INDUSTRY CLASSIFICATIONS

AGRICULTURE, FORESTRY, FISHING, AND HUNTING

- 1110 Crop production
- 1120 Animal production
- 1130 Forestry and logging
- 1140 Fishing, hunting, and trapping
- 1150 Support activities for agriculture and forestry

MINING

- 2111 Oil and gas extraction
- 2121 Coal
- 2123 Nonmetallic minerals
- 2124 Iron ores
- 2125 Gold and silver ores
- 2126 Copper, nickel, lead, and zinc ores
- 2127 Other metal ores
- 2132 Support activities for oil and gas operations
- 2133 Support activities for mining, except for oil and gas operations

UTILITIES

- 2211 Electric power generation, transmission, and distribution
- 2212 Natural gas distribution
- 2213 Water, sewage, and other systems

CONSTRUCTION

- 2330 Building, developing, and general contracting
- 2340 Heavy construction
- 2350 Special trade contractors

MANUFACTURING

- 3111 Animal foods
- 3112 Grain and oilseed milling
- 3113 Sugar and confectionery products
- 3114 Fruit and vegetable preserving and specialty foods
- 3115 Dairy products
- 3116 Meat products
- 3117 Seafood product preparation and packaging
- 3118 Bakeries and tortillas
- 3119 Other food products
- 3121 Beverages
- 3122 Tobacco
- 3130 Textile mills
- 3140 Textile product mills
- 3150 Apparel
- 3160 Leather and allied products
- 3210 Wood products
- 3221 Pulp, paper, and paperboard mills
- 3222 Converted paper products

- 3231 Printing and related support activities
- 3242 Integrated petroleum refining and extraction
- 3243 Petroleum refining without extraction
- 3244 Other petroleum and coal products
- 3251 Basic chemicals
- 3252 Resins, synthetic rubbers, and artificial and synthetic fibers and filaments
- 3253 Pesticides, fertilizers, and other agricultural chemicals
- 3254 Pharmaceuticals and medicines
- 3255 Paints, coatings, and adhesives
- 3256 Soap, cleaning compounds, and toilet preparations
- 3259 Other chemical products and preparations
- 3261 Plastics products
- 3262 Rubber products
- 3271 Clay products and refractories
- 3272 Glass and glass products
- 3273 Cement and concrete products
- 3274 Lime and gypsum products
- 3279 Other nonmetallic mineral products
- 3311 Iron and steel mills and ferroalloys
- 3312 Steel products from purchased steel
- 3313 Alumina and aluminum production and processing
- 3314 Nonferrous metal (except aluminum) production and processing
- 3315 Foundries
- 3321 Forging and stamping
- 3322 Cutlery and hand tools
- 3323 Architectural and structural metals
- 3324 Boilers, tanks, and shipping containers
- 3325 Hardware
- 3326 Spring and wire products
- 3327 Machine shops, turned products, and screws, nuts, and bolts
- 3328 Coating, engraving, heat treating, and allied activities
- 3329 Other fabricated metal products
- 3331 Agriculture, construction, and mining machinery
- 3332 Industrial machinery
- 3333 Commercial and service industry machinery
- 3334 Ventilation, heating, air conditioning, and commercial refrigeration equipment
- 3335 Metalworking machinery
- 3336 Engines, turbines, and power transmission equipment

- 3339 Other general purpose machinery
- 3341 Computer and peripheral equipment
- 3342 Communications equipment
- 3343 Audio and video equipment
- 3344 Semiconductors and other electronic components
- 3345 Navigational, measuring, electro-medical, and control instruments
- 3346 Manufacturing and reproducing magnetic and optical media
- 3351 Electric lighting equipment
- 3352 Household appliances
- 3353 Electrical equipment
- 3359 Other electrical equipment and components
- 3361 Motor vehicles
- 3362 Motor vehicle bodies and trailers
- 3363 Motor vehicle parts
- 3364 Aerospace products and parts
- 3365 Railroad rolling stock
- 3366 Ship and boat building
- 3369 Other transportation equipment
- 3370 Furniture and related products
- 3391 Medical equipment and supplies
- 3399 Other miscellaneous manufacturing

WHOLESALE TRADE

DURABLE GOODS

- 4211 Motor vehicles and motor vehicle parts and supplies
- 4212 Furniture and home furnishings
- 4213 Lumber and other construction materials
- 4214 Professional and commercial equipment and supplies
- 4215 Metals and minerals (except petroleum)
- 4216 Electrical goods
- 4217 Hardware, and plumbing and heating equipment and supplies
- 4218 Machinery, equipment, and supplies
- 4219 Miscellaneous durable goods

NONDURABLE GOODS

- 4221 Paper and paper products
- 4222 Drugs and druggists' sundries
- 4223 Apparel, piece goods, and notions
- 4224 Grocery and related products
- 4225 Farm product raw materials
- 4226 Chemical and allied products
- 4227 Petroleum and petroleum products
- 4228 Beer, wine, and distilled alcoholic beverages
- 4229 Miscellaneous nondurable goods

SUMMARY OF INDUSTRY CLASSIFICATIONS — Continued

RETAIL TRADE

- 4410 Motor vehicle and parts dealers
- 4420 Furniture and home furnishings stores
- 4431 Electronics and appliance stores
- 4440 Building material and garden equipment and supplies dealers
- 4450 Food and beverage stores
- 4461 Health and personal care stores
- 4471 Gasoline stations
- 4480 Clothing and clothing accessories stores
- 4510 Sporting goods, hobby, book, and music stores
- 4520 General merchandise stores
- 4530 Miscellaneous store retailers
- 4540 Nonstore retailers

TRANSPORTATION AND WAREHOUSING

- 4810 Air transportation
- 4821 Rail transportation
- 4833 Petroleum tanker operations
- 4839 Other water transportation
- 4840 Truck transportation
- 4850 Transit and ground passenger transportation
- 4863 Pipeline transportation of crude oil, refined petroleum products, and natural gas
- 4868 Other pipeline transportation
- 4870 Scenic and sightseeing transportation
- 4880 Support activities for transportation
- 4920 Couriers and messengers
- 4932 Petroleum storage for hire
- 4939 Other warehousing and storage

INFORMATION

- 5111 Newspaper, periodical, book, and database publishers
- 5112 Software publishers
- 5121 Motion picture and video industries
- 5122 Sound recording industries
- 5131 Radio and television broadcasting
- 5132 Cable networks and program distribution
- 5133 Telecommunications
- 5141 Information services
- 5142 Data processing services

FINANCE AND INSURANCE

- 5221 Depository credit intermediation (Banking)
- 5223 Activities related to credit intermediation
- 5224 Non-depository credit intermediation

- 5229 Non-depository branches and agencies
- 5231 Securities and commodity contracts intermediation and brokerage
- 5238 Other financial investment activities and exchanges
- 5242 Agencies, brokerages, and other insurance related activities
- 5243 Insurance carriers, except life insurance carriers
- 5249 Life insurance carriers
- 5252 Funds, trusts and other financial vehicles, except REITs

REAL ESTATE AND RENTAL AND LEASING

- 5310 Real estate
- 5321 Automotive equipment rental and leasing
- 5329 Other rental and leasing services
- 5331 Lessors of non-financial intangible assets (except copyrighted works)

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

- 5411 Legal services
- 5412 Accounting, tax preparation, bookkeeping, and payroll services
- 5413 Architectural, engineering, and related services
- 5414 Specialized design services
- 5415 Computer systems design and related services
- 5416 Management, scientific, and technical consulting services
- 5417 Scientific research and development services
- 5418 Advertising and related services
- 5419 Other professional, scientific, and technical services

MANAGEMENT OF COMPANIES AND ENTERPRISES

- 5512 Holding companies, except bank holding companies
- 5513 Corporate, subsidiary, and regional management offices

ADMINISTRATIVE AND SUPPORT, WASTE MANAGEMENT, AND REMEDIATION SERVICES

- 5611 Office administrative services
- 5612 Facilities support services
- 5613 Employment services
- 5614 Business support services
- 5615 Travel arrangement and reservation services
- 5616 Investigation and security services
- 5617 Services to buildings and dwellings
- 5619 Other support services
- 5620 Waste management and remediation services

EDUCATIONAL SERVICES

- 6110 Educational services

HEALTH CARE AND SOCIAL ASSISTANCE

- 6210 Ambulatory health care services
- 6220 Hospitals
- 6230 Nursing and residential care facilities
- 6240 Social assistance

ARTS, ENTERTAINMENT, AND RECREATION

- 7110 Performing arts, spectator sports, and related industries
- 7121 Museums, historical sites, and similar institutions
- 7130 Amusement, gambling, and recreation industries

ACCOMMODATIONS AND FOOD SERVICES

- 7210 Accommodations
- 7220 Foodservices and drinking places

OTHER SERVICES

- 8110 Repair and maintenance
- 8120 Personal and laundry services
- 8130 Religious, grantmaking, civic, professional, and similar organizations

PUBLIC ADMINISTRATION

- 9200 Public administration