

1. Industry scope of census

(1) Industry scope and classification system:

The industry scope and classification system of this census complied with the “Census Program” approved and proclaimed by Executive Yuan, and followed “Standard Industrial Classification (the 9th revision)” proclaimed for enforcement in 2011. All units who operates in the following sectors and in the Counties/Cities in Taiwan Province, Taipei City, New Taipei City, Taichung City, Tainan City, Kaohsiung City (including Dongsha and Spratly Islands) and Kinmen and Lianjian counties in Fujian Province are the scope of this census:

1. Mining and Quarrying
2. Manufacturing
3. Electricity and Gas Supply
4. Water Supply and Remediation Activities
5. Construction
6. Wholesale and Retail Trade (excluding Retail Sale via Stalls).
7. Transportation and Storage
8. Accommodation and Food Service Activities (excluding Food and Beverage Service Activities via Stalls).
9. Information and Communication
10. Financial and Insurance Activities (excluding Trusts, Funds and Other Financial Vehicles; Pension Funding)
11. Real Estate Activities
12. Professional, Scientific and Technical Activities (excluding R&D).
13. Support Service Activities
14. Compulsory Social Security
15. Education (includes the part of cramming schools in Other Education and Educational Support Activities only).
16. Human Health and Social Work Activities (The clinics of Human Health Services exclude the part of medical services without clinics; Social Work Activities include seniors, children and disabled care institutes only).
17. Arts, Entertainment and Recreation (Excluding Artistic Creation, Library and Archives Activities, and other similar institutes without operating).
18. Other service Activities (excluding Activities of Membership Organizations, Activities of Households as Employers of Domestic Personnel).

The 18 sectors listed above cover subsectors, industry groups and industries as follows: Mining and Quarrying Sector covers 3 subsectors, 3 industry groups and 3 industries.

Manufacturing Sector covers 27 subsectors, 88 industry groups and 211 industries. Electricity and Gas Supply Sector covers 1 subsector, 3 industry groups and 3 industries. Water Supply and Remediation Activities Sector covers 4 subsectors, 6 industry groups and 8 industries. Construction Sector covers 3 subsectors, 9 industry groups and 11 industries. Wholesale and Retail Trade Sector covers 2 subsectors, 26 industry groups and 89 industries. Transportation and Storage Sector covers 6 subsectors, 18 industry groups and 25 industries. Accommodation and Food Service Activities Sector covers 2 subsectors, 5 industry groups and 6 industries. Information and Communication Sector covers 6 subsectors, 10 industry groups and 21 industries. Financial and Insurance Sector covers 3 subsectors, 11 industry groups and 26 industries. Real Estate Activities Sector covers 2 subsectors, 3 industry groups and 5 industries. Professional, Scientific and Technical Activities Sector covers 8 subsectors, 14 industry groups and 23 industries. Support Service Activities Sector covers 6 subsectors, 12 industry groups and 22 industries. Compulsory Social Security Sector covers 1 subsector, 1 industry group and 1 industry. Education Sector covers 1 subsector, 2 industry groups and 7 industries. Human Health and Social Work Activities Sector covers 3 subsectors, 5 industry groups and 10 industries. Arts, Entertainment and Recreation Sector covers 4 subsectors, 6 industry groups and 13 industries. Other Service Activities Sector covers 2 subsectors, 7 industry groups and 12 industries.

(2) The procedure of industrial classification:

“Industry” refers to the categories of economic activities, including all activities for manufacturing various tangible commodities and providing various services. Every establishments was classified the industry code (four-digit code) by economic activities in this census according to Standard Industrial Classification, in order to assist the data processing operation of census and prepare various statistics. The principles to determine industrial classification are as follows:

1. The greatest and primary economical activity for the added value of the establishment as the determined basis of industrial classification.
2. If the data of added-value is not available, then adopts the most of total year-round revenues, the number of working staff or equipment of the product or services as the basis of determination.

(3) The determination of industrial classification:

The determination is carried out according to the above mentioned principles of industrial classification; to the industry dealing with multiple kinds of individual economical activities, then the determination is carried out adopting the procedure of “top-down”, determining the

Sector sharing the most proportion in top level and then determining level by level down to industry.

1. **Sector determination:** Determination is according to primary product or labor service types.
2. **Industry classification:** Manufacturing is classified according to product types or the category (material) of used raw materials, materials/supplies; wholesale and retail trade are classified according to the category of commodities to be sold and purchased; and the industrial code (four-digit code) of service business is classified according to the service items provided.

(4) **Explanation on sector classification:** (The explanation of Subsector, Industry Group and Industry, please refer to Standard Industrial Classification)

1. Mining and Quarrying:

The industry which is engaged in exploring, taking of such mines and stones as crude petroleum, natural gas, sand, stone and clay, and initial treatment (for instance beating, washing etc. treatment operation) as well as preparation operation (for instance the mining engineering of soil eradication, tunnel opening and digging).

2. Manufacturing:

The industry using physical or chemical method transfer materials or substances into new product, no matter using power machinery or manpower, in plant or at home is attributed to manufacturing. As for overhaul, transformation, reconstruction operation, maintenance and installation of industrial machinery and equipment, as well as the fabrication of assembly are deemed as manufacturing. As for parts and components specially used for machinery and equipment, with the manufacturing of the body of its machinery and equipment are attributed to the same category. The components not for specially used, as the manufacturing of prime mover, piston, motor, accessories of electric appliances, active valve, gear and bearing is attributed to proper manufacturing category according to accessories themselves.

3. Electricity and Gas Supply:

The industry engaged in electric power, gas fuels and steam supply.

4. Water Supply and Remediation Activities:

The industry which is engaged in water supply, waste water (swage) treatment, cleaning, transportation and treatment of wastes, as well as pollution rectification; in addition, classification of recycled goods and reproduction hereof into raw materials are also attributed to this Section.

5. Construction:

The industry which is engaged in the construction, reconstruction and repair of building

and civil engineering as well as special construction; the lease of construction equipment with operator is also attributed to this Section.

6. Wholesale and Retail Trade:

The industry which is engaged in wholesale, retail, brokerage and agency of tangible commodities; sale of commodities with simple treatment which will not change the nature of commodities, for instance, package, purge, classification, transportation, installation, repair and so on are also attributed to this Section.

7. Transportation and Storage:

The industry which is engaged in providing regular or irregular passenger and goods transportation and its transport assistance by various transport implements, warehouse management, postal administration and courier. Transportation equipment lease with driver belongs to this Section.

8. Accommodation and Food Service Activities:

The industry engaged in short-term or temporary lodging service and restaurant service.

9. Information and Communication:

Every industry which is engaged in information and communication belong, such as publication, film service, voice recording and music publication, communication and program broadcasting, telecommunication, computer system design, data processing and information supply service etc.

10. Financial and Insurance Activities:

The industry engaged in finance broker and its supplemental activities (including insurance business and retirement fund). Activities of holding assets, such as the activities of finance holding belong to this Section too.

11. Real Estate Activities:

The industry engaged in development, operation and management of real estate belong.

12. Prof., Scientific and Technical Activities:

The industry which is engaged in various professional, science and technology service, such as lawful and accounting, business management consultant, architecture and work service, technology inspection and analysis, advertisement and market search, professional design and veterinarian service etc.

13. Support Service Activities:

The industry which is engaged in supporting various activities of general enterprise's operation (a few part also supporting family), such as lease, manpower agency and supply, travelling and booking service hereof, security and private detective, building and greening service, business and office administrative service, etc.

14. Compulsory Social Security:

The social security plan which government provides administration and funds including labor insurance, national health insurance, civil servants' insurance, pension funds, and the Labor Retirement Supervisory Committee etc.

15. Education:

The industry engaged in education services of various professional fields rather than regular education system, namely short-term cramming school and educational support services industries with non-educational nature, etc.

16. Human Health and Social Work Activities:

The industry engaged in human health and social work services. However, it excludes the part of medical service without clinic and senior, children and disabled care institutes.

17. Arts, Entertainment and Recreation:

The industry engaged in art, recreation and leisure service, such as live show, operating zoo, botanical garden, museum, museum of art (gallery), and providing games, sport, recreation and leisure service activities.

18. Other Service Activities:

The industry engaged in the business other than A to R Sections of Industrial Standard Classification, such as repair and maintenance of personal and home appliances, laundry, barbering and cosmetology (body care) and funeral services etc.

2. Term explanation applied in census

(1) Enterprise unit:

A business unit with an establishment or multiple establishments, or an independent operation body engaging in one kind or many kinds of economical activities, making its own operation policy, fund application, with operation accounting and being responsible for loss and profit is deemed as an enterprise unit.

(2) Establishment unit:

Refers to an individual business establishment engaging in goods production, sales or providing labor services, such as a plant, a shop, a hotel, a restaurant, a business office, a branch and a retail sales division etc..

(3) Labor dispatch:

Also known as "Staffing Service", refers to enterprises, whichs engage in labor dispatch and sign labor contracts with enterprises or organizations, which needs manpower. And then the enterprise dispatches its employees to the unit employing manpower and accepting the commend, supervision and job assignment by the same, providing labor and collecting labor expenses or service charge from the unit employing the manpower.

(4) New Emerging Industry and International Logistics Industry operation:

Among New Emerging Industries or focused service industries in policy guidance, some industries with higher operability were retrieved from Industry, Commerce and Service scope and the associated contents of which are prepared and classified in accordance with the policies and the contents of related plans, including the items as follows:

- 1. “Green Energy Industry”:** Operating items were selected and industrial classification determination is prepared as follows in accordance with “Green Energy Industry Sunrising Program”:

Name of Industry	Operating Items
Photovoltaic	Solar polysilicon manufacturing, Solar silicon wafers (without epitaxial process) manufacturing, Solar ingot manufacturing, Solar cell (battery modules, thin-film modules) manufacturing, Solar power system equipment (systems planning assembly, solar charge controllers and other components) manufacturing, Solar lighting manufacturing, Solar home fans manufacturing, Solar power converter (inverter) and charger manufacturing, Solar power plant operating, and solar electrode materials manufacturing
LED Lighting	Sapphire ingot manufacturing, LED epitaxial wafers, grain, and module manufacturing, LED packaging and testing, LED bulbs, lamp, and lamp manufacturing
Wind Power	Wind power system equipment (generators, transformers, power converters, control systems, growth gearbox, blades, tower, hub, spindle, cabin, hydraulic system and steering system) manufacturing, Wind power plant construction engineering, Wind power plants operating
Biofuels	Biodiesel manufacturing, bio-ethanol manufacturing
Hydrogen and Fuel Cell	Hydrogen production, Alloy hydride container manufacturing, Chemical hydride container manufacturing, the fuel cell and its components (including hydrogen reformers, fuel cell bipolar plates, electrodes, proton exchange membranes, gas diffusion layers and membrane electrode assembly, and the battery system) manufacturing
Smart Meter Manufacturing	Smart Meter manufacturing
Electric Vehicle	Vehicle power battery (including power nickel-hydrogen cells, power lithium cells, etc.) and its components (including the positive and negative materials, separation membrane, battery core, and its modules, etc.) manufacturing, electric vehicles (motorcycles, bicycles) manufacturing, electric vehicles (motorcycles, bicycles) dedicated components (including power motors and drives, vehicle control devices, battery management systems and charging current converter module, and charging system, etc.) manufacturing

2. **“Biotechnology Industry”**: Operating items were selected and industrial classification determination is prepared as follows in accordance with “Taiwan Biotech Take-off Diamond Action Plan”:

Name of Industry		Operating Items
Pharmaceutical		Human-use Chinese medicine, western medicine, and Active Pharmaceutical Ingredients (API) manufacturing, technology transfer and licensing
Medical Device		IVD (Vitre Testing Reagents) manufacturing; medical chemicals (such as medical sutures, bandages, sterile gauze, sterile cotton, dressings, medical plaster, surgical catgut, etc.) manufacturing; radiation and electronic medical equipment manufacturing, medical transportation (such patients vehicles as wheelchairs, electric wheelchairs, and electric scooters for medical use) manufacturing; artificial eyes, contact lenses, corrective lenses manufacturing; hospital beds, stretchers, syringes, hypodermic needle, catheters, intubation, artificial limbs, dentures, tooth mold, dental cements, artificial tissues and organs, walkers manufacturing; medical equipment and supplies manufacturing, technology transfer and licensing
Emerging Biotech Industry	Biotechnology Pharmaceutical	Human-use biopharmaceuticals manufacturing, technology transfer and licensing
	Regenerative Medicine	Cord blood bank, Bone marrow stem cells center, DNA preservation service, technology transfer, and licensing
	Food Biotechnology	Biotech health food manufacturing, and health food manufacturing certified by the Ministry of Health and Welfare
	Agricultural Biotechnology	Biological animal feed additive manufacturing and preparation; biological pesticide manufacturing; bio-fertilizer, biological soil conditioner, biological plant growth adjuvants etc. manufacturing; animal drugs and vaccines manufacturing (including technology transfer and licensing)
	Environmental Biotechnology	Biodegradable plastic materials (ex. polylactic acid, PLA) and its products manufacturing; bio-environmental agent manufacturing; biological cleaning products manufacturing; environmental biological agents (such as biological water treatment agent, environmental testing biological agents) manufacturing, and raw biofuel manufacturing
	Special Metaplasia Biotech	Industrial enzymes, amino acids, bio-polymer manufacturing, and biotechnology cosmetics manufacturing
Biotech Services		Pharmaceutical and biotechnology product testing analysis services (including clinical or pre-clinical trials for products), biotechnology assessment, guidance or biotechnology consultant, and marketing management consultant of biotech industry

3. **“Cultural and Creative Industry”**: Operating items were selected and industrial classification determination is prepared as follows in accordance with “Cultural and

Creative Industry Development Plan”:

Name of Industry	Operating Items
Visual Arts	Art auction, appraisal, certification, retail (including art exhibition and sales, and gallery outright sale), sub-commission for agent service, gallery operating, and arts exhibition organizing services
Music and Performing Arts	Non-pop music and art performances (individual performances are out of census range), non-pop music, drama, dance education services; non-pop music event organizing and assistance (including organizing performing arts, stage design and construction, lighting and costume guide, and art performances production, etc.); performing arts related hardware, and supplies wholesale and leasing; artists, musicians brokers, and drama casting service
Application & Perform. Facilities Cultural Asset	Museum of fine arts, and museum operating; heritage galleries, cultural centers, and art performing venues operating; industry, commerce and services operating within various domestic monuments
Craft	All kinds of arts and crafts materials design, manufacturing, wholesale, and retail
Film	Films shooting, production, editing, transcription, subtitling, special effects, distribution, agency, screenings, and recording
Radio and TV	Broadcasting, television broadcasting industry, cable and other pay programs broadcast industry; television programs, TV commercials and programs videotape shooting, editing, transcription, subtitling, special effects; television program distribution, program videotape distribution, radio advertising production, radio voice services, radio program distribution, and broadcast pre-recorded tape production
Publishing	News, magazines (periodicals), books and other printed matter publishing, and music books publishing
Advertising	Various types of advertising planning, design, production and arranging advertising media for broadcasting, post services, advertising; leaflets and promotional samples distribution
Product Design	Industrial design; product appearance, structure, and human-computer interface design
Design Brand Fashion	Design, manufacturing, wholesale, retail of designer’s brand with various types of material
Visual Communication Design	Visual communication design, Corporate identity system(CIS), brand design, multimedia design
Architectural Design	Building design, Interior design
Digital Content	TV animation, advertising animation production, computer animation post-production and computer special effects for television programs, digital television (radio) operating, online-TV programs broadcasting; animation film, advertising animation, and animated films production; digital archive video production; computer animation post-production and computer special effects for movie; wireless communications services,

Name of Industry	Operating Items
	satellite communications services, internet access services; portal operating, data processing; web hosting and related services; foreign language teaching digital services, professional management services of digital teaching, online applications software services, online gaming site management, e-paper, e-dictionary, whiteboard, e-pen, electronic game console, e-book reader, coin-operated video game machine, and electronic game console (replaceable software) manufacturing; digital news, digital magazines (periodicals), digital books distribution, audio books distribution, packages publishing, game software publishing; package design, modification, testing and maintenance
Popular Music and Cultural Content	Pop records, tapes, compact discs and audio recording services, advertising soundtrack recording services, ringtones download (distribution) services, music download service, online music video playback services, KTV online services, popular music performance organizing and ancillary services (including stage design and construction, lighting and costume guide, etc.)
Creative Living	Commerce, Industry and Services business units who are reviewed and approved by the government, providing depth of experience and high-quality beauty by core knowledge of integrated life industry with creativity

4. **“Tourism Industry”**: Operating items were selected and industrial classification determination are prepared as follows in accordance with “Project Vanguard For Excellence In Tourism” (the following operating items are counted associated with tourism section only; the way of counting is detailed in (17) of “III. Calculation Method for Primary Statistic Items in Census”):

Name of Industry	Operating Items
Tourism-featured Industry	Land Passenger Transport Railway, MRT, car, taxi and bus
	Air Passenger Transport Air passenger services
	Accommodation Services Hotels, B & Bs and other short-term accommodation services, camping, hostels, RV campground operating
	Food Service A variety of restaurants, beverage stores, alcoholic beverages shop operating
	Travel Service Tourism and booking services
	Car Rental Car rental Services
	Arts and Leisure Services Art performance and venues operating; museums, zoo/ botanical garden place operating; game-related services, sports stadiums operating; amusement parks and theme parks operating; audiovisual and sight-singing services; dance halls, karaoke, bar, playground, beach, catching shrimp farms, Internet cafes, and other places of operating
Other Tourism-related (including tourism	Retail deposit-taking institutions, insurance, sports and entertainment supplies rental services; hairdressing, body,

related industries)	beauty, geomancy, massage, Tuina, photography services; postal services, courier services, parking industry, and telecommunications industry
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5. “Health and Nursing Care Industry”: Operating items were selected and industrial classification determination is prepared as follows in accordance with “Health Care Value-added Platinum Program”:

Name of Industry	Operating Items
Pharmaceutical	Same as biotechnology industry
Biotechnology	
Pharmaceutical	
Regenerative Medicine	
Medical Device	
Medical Information Systems Services	Hospital information system(HIS), Picture archiving and communication System(PACS), Radio frequency Identification (RFID) and other health-related information system planning, design, integration and analysis services
Healthcare Services	Hospitals, clinics, pathology centers, medical radiology, inspection, health center, nursing home, postpartum care agencies, home care agencies, midwifery, physiotherapy, occupational therapy, dental, psychological counseling (treatment) , community mental health centers; martial arts bone damage service, martial arts and massage services, nutritional counseling agencies, and ambulance transport services
International, Cross-Strait Medical Services	Undertaking international or cross-strait medical services in terms of project (for groups or individuals, and including medical cosmetology, health examination, and health care)
Care Services	Residential-type nursing care, care for the disabled, elderly care services, day care and home services for the elderly, and the handicapped day care institutions

6. “International Logistics Industry”: Operating items were selected and industrial classification determination is prepared as follows in accordance with “Action Plan of Developing International logistics Services”:

Name of Industry	Operating Items
Cargo Transport	Railway, automotive containers, trucking, and trucks with driver renting; the ocean cargo shipping, airfreight, package delivery, and courier services
Cargo Transport Auxiliary	Customs services, shipping agents, land, sea, air freight forwarding; port services (piers, docks, lighthouses, channel management), marine cargo handling, diversion service, tow barge operating, ship cargo handling, air cargo handling, cargo (containers) terminal operating, packing services, and tonnage calculating service
Warehousing	General warehousing and refrigerated warehousing services

(5) Operation digitization:

Refer to using computers or network equipments (such as PC, Notebook, computer station, computer host, area network, wireless area network and intranet etc.) to handle operation-related business.

1. **“Assisting internal management operation”:** Refers to the computerized procedure of internal management in enterprise, such as the resource planning system for personnel and salary, financial accounting, production, sale and storage of products, as well as supply chain management, digital learning, knowledge management, and customer relation’s management systems.
2. **E-commerce:** refers to related transactions carried out through computer or using information, telecommunication and network technology.
 - (1) **“Providing business information through Internet”:** Refers to providing such business information as product catalogue externally via Internet, including transmission of email, establishment of enterprise website and publishing advertisement on the Internet etc.
 - (2) **“Internet purchase”:** Refers to the purchase transaction carried out via Internet, including on-line order, e-transfer payment etc.
 - (3) **“Internet sale”:** Refers to the sales transaction via Internet carried by enterprises, including sales on the on-line platform, and establishment of website to receive on-line order etc.

(6) R&D expenditures:

Refers to the capital expenditures for purchase of fixed assets in order to improve production, sales or service technology, and develop new products, and business operation expenditures related to payment for personnel, raw materials and supplies, maintenance, business and travel expenses.

(7) Employee training:

Refers to the capital expenditures, which are for purchase of fixed assets in order to carry out employee training, and the business operation expenditures related to payment of lecturer fee, place fee, and registration fee for employee training and of personnel and business of training department.

(8) Marketing:

Refer to the business operation expenditures for advertisement, market research, packing design, social public relation, and personnel and business expenses of marketing department, and the capital expenditures for purchase of hardware equipment for the marketing department.

(9) Purchase of Computer software and database:

Refers to the expenditure related to computer software and database of every department, including purchase cost and lease cost etc.

(10) Professional technology transaction amount:

Refers to the amount for purchase or sale of technology by the way of technology cooperation or technology authorization, including trademarks, distribution rights, patent (purchase, sale), patent authorization, and specialized technical cooperation and transfer by way of contracts signed; not including financial, commercial, administrative, legal technical assistance; audio and video products (including data) within the scope of copyright, as well as trading and software design.

(11) Environmental protection expenditures:

Refer to the investment expenditures for such pollution prevention equipment as recycle and cleaning treatment of waste gas, wastewater, wastes, and noise, vibration as well as toxic chemical substances management. It includes the expenditures for operation, maintenance, supervision, test and inspection (including personnel expenses), outsourcing expenses, and the common handling pollution expenses and the same submitted to the government, and environmental influence appraisal and R&D etc.

(12) Operation OBM:

Refers to the text or images registered as a trademark approved by law, and in marketing to promote their products and services to clearly show the differences of other products or services, but excluding agency brands, brand belonging groups or affiliates.

(13) *Triangular Trade*:

Refers to the situation when selling commodities (products), the order is received in Taiwan, and the production is made aboard; however, clearance is not made in Taiwan, and the commodities are directly transported to foreign buyer, excluding the business only engaging in middleman; its sales income and cost shall report the sales income and cost of original order respectively if list account with the commission income.

(14) Merchandising routes:

1. **“Selling on storefront”**: Refers to the sales way carried out by the staff in regular commodity display place.
2. **“TV shopping”**: Namely “TV shopping”, refers to the mode through the sales platform and service provided by TV shopping station presenting the contents of commodity and accepting order and transaction.
3. **“Internet”**: Refers to the marketing mode presenting the contents of product through Internet and accepting customer’s on-line order of commodities.

4. **“Mail ordering”**: Refers to the transaction mode carrying out commodities trade through the fax or catalogue sent by post-purchase company.
5. **“Vending machines”**: Refers to the sales way by auto machine instead of staff.
6. **“Direct selling”**: namely “Single-level marketing” and “Multiple-level marketing”, refers to the sale behavior carried out by sales staff who directly sell products to consumers face to face without fixed sales place; the sales place is always at consumer’s or other’s home, working site, or other place rather than fixed retail shops.
7. **“Others”**: Refers to the sales channels other than abovementioned six types.

(15) Foreign Investment Layout:

1. **Overseas deployment**: Refer to the situation that including domestic enterprises establish branch units (branch offices) abroad (at offshore), or reinvest foreign enterprises, and with the ability directly or indirectly to control a single enterprise abroad (at offshore); where any of enterprises have any one or more items of following situation is within the scope of foreign layout:
 - (1) A domestic enterprise has the control ability abroad (at offshore);
 - (2) A domestic enterprise establish branch units abroad (at offshore).
2. **FDI (Foreign Direct Investment)**: Refer to (single foreign natural persons or foreign (offshore) corporate shareholders shareholding 10% (or more) of equity interest.
3. **Personal Activities**: Refer to the situation where any of the domestic companies have sent national staff to foreign (offshore) place for business travel, training or work, as well as foreigners (excluding foreign workers) or foreign (offshore) enterprises’ employees in domestic enterprises for business travel, training or work.

(16) Persons engaged:

Refers to the on-the-job employees with salary in the end of year (including foreign employees and the students of industrial cooperation), and self-employed persons without fixed salary and non-compensation dependent worker (referring to capital owner and dependents engaged without fixed salary who work over 15 hours weekly in December 2011). It excludes the directors, supervisors, and consultants who receive honorarium only, but do not join management operation actually.

(17) Salary and labor compensation:

Salary includes basic salary, fixed allowance (such as transportation allowance etc.), overtime fee, festival and various bonuses etc., as well as the salary paid to the person left in the end of year. Labor compensation includes salary and non-salary compensation; for instance, pension and lodgment, indemnity funds, severance pay, premium and other

welfare subsidiary funds etc. The whole-year round salary of self-employed and non-compensation dependent worker include cash and article discounted value withdrawn in the enterprise by capital owner and his/her dependents.

(18) Annual expenditures:

Total year-round expenditures is calculated as per accrual concept, namely referring to every expense annually paid for operating business by enterprise, including due payable amount, however, excluding prepaid and temporary payment and capital payment in operation (such as the expenses for purchasing land or machinery equipment, new construction and overhauling machinery etc.)

(19) Annual revenues:

The total year-round revenues including “Operating revenues” and “Non-operating revenues”, calculated as per accrual accounting basis, expect removing account collected in advance, should include outstanding receivables; among which operating revenues refer to the revenues associated with operating items, such as sales revenues of Manufacturing and Wholesale and Retail Trade, and contracted project income of Construction; non-operating revenues refer to revenues occurred other than operating items, such as non-operating rents, interest income, and investment income.

(20) Assets used in operation:

Refers to the net value of assets actual in operation for business need, including self-owned/self-used assets and leased and borrowed fixed assets in this organization, excluding the owned but not used for operating fixed assets rented and lent, idled and to be disposed of.

(21) Over 5-year (10-year, 15 year, and 20-year) survival rate of enterprise:

The rate of industrial, commercial and service industry unit operating over five years among the same in the end of 2011 occupying the number of units of the end of 2006 (2001, 1996 and 1991) census.

(22) Large enterprise and SMEs:

The classification adopts the number of employees hired as the standard as follows, referring to the “Middle and Small Enterprises Recognized Standards” amended by Ministry of Economy in 2009:

1. **Large enterprise:** Refers to Manufacturing, Construction, Mining and Quarrying employing more than 200 persons; the remained industries employing more than 100 persons.
2. **SMEs:** Non-large enterprises, among which Micro enterprises (also known as “small enterprises) refer to the enterprise employing less than 5 persons.

(23) Four main industries in Manufacturing:

Its scope is as follows according to the definition by Ministry of Economy (figures in the brackets referring to the code of industrial division in the 9th revision of “Standard Industrial Classification”):

1. **Consumer goods industry:** Includes Manufacturing of Food Products (08), Beverages (09), Tobacco Products (10), Textiles (11), Wearing Apparel and Clothing Accessories (12), Wood/Bamboo Products (14), Other Non-metallic Mineral Products (23), Furniture (32) and Other manufacturing (33).
2. **Chemical industry:** Including Manufacturing of Leather, Fur and Related Products (13), Paper and Paper Products (15); Printing and Reproduction of Recorded Media (16); Manufacturing of Petroleum and Coal Products (17), Chemical Material (18), Chemical Products (19), Pharmaceuticals and Medicinal Chemical Products (20), Rubber Products (21), Plastic Products (22).
3. **Metal and mechanical industry:** Includes Manufacturing of Basic Metals (24), Fabricated Metal products (25), Electrical Equipment (28), Machinery and Equipment (29), Motor Vehicles and Parts (30), Other Transport Equipment and Parts (31); Repair and Installation of Industrial Machinery and Equipment (34).
4. **Information and electronic industry:** Includes Manufacture of Electronic Parts and Components (26), Computers, Electronic and Optical Products (27).

(24) Knowledge-intensive:

Refer to the definition of OECD (2003), including Merchandise Brokers; Postal Activities; Telecommunications; Computer Systems Design Services; Web Portals, Data Processing, Hosting and Related Activities; Financial and Insurance Activities; Professional, Scientific and Technical Activities (excluding Veterinary Activities); Support Service Activities(excluding Travel agency, Tour Operator, Reservation Service and Related Activities); Education; Human Health Activities.

(25) Non-knowledge intensive:

Non-knowledge intensive = whole Service Sector – Knowledge-intensive.

3. Calculation method for primary statistic items in census

- (I)** Owned assets = Current assets + Net value of fixed assets + Long-term investments + Net value of intangible assets + Other assets
- (II)** Assets used in operation = Total assets owned(net value) + Fixed assets in-rented or borrowed – Net value of fixed assets out-rented and lent, idled and disposable
- (III)** Fixed assets used in operation = Net value of assets owned + Fixed assets in-rented or borrowed

(IV) Total value of production:

Refer to the market value of all final commodities and labor produced by all domestic production organizations or units in some certain time. The way to calculate total value of production for each sector is as follows:

1. **Manufacturing** = Operating revenues – Total value of raw materials and fuels consumed provided to other foreign (offshore) enterprises (including subsidiaries) used for production or processing + Inventory of products and work-in-process at year-end – Inventory of products and work-in-process at the beginning of the year – Costs on year-round purchases and on redemption of products outsourced to other enterprises – Payment to other foreign (offshore) enterprises (including subsidiaries) for outsourcing processing expenses – Costs of raw materials, supplies, fuels and goods concurrently sold + Other non-operating revenues. **(Also applicable to Mining and Quarrying, Electricity and Gas Supply, and Water Supply and Remediation Activities)**
2. **Construction** = Operating revenues – Construction contracting payments + Cost of constructed engineering, own and self-constructed engineering in construction at the end of the year – Cost of constructed engineering, own and self-constructed engineering in construction at the beginning of the year + The amount of construction in progress at the beginning of the year by percentage of completion method – The amount of construction in progress at the end of the year by percentage of completion method – Cost of real estate and land sold – Cost of goods and materials sold + Other non-operating revenues.
3. **Wholesale and Retail Trade** = Operating revenues – Annual amount of goods purchased – The value of inventory at the beginning of the year + The value of inventory at the end of the year + Other non-operating revenues.
4. **Transportation and Storage** = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.
5. **Accommodation and Food Service Activities** = Operating revenues – Annual amount of goods purchased – The Value of inventory at the beginning of the year + The Value of inventory at the end of the year + Other non-operating revenues.
6. **Information and Communication** = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.
7. **Financial and Insurance:**
 - (I) **Deposit Institutions** = Operating revenues – Cost of goods concurrently sold – Deposit interest expenditures – Other operating interest expenditures – Operating investment losses + Other non-operating revenues – Exchange loss in other operating expenses.

(II) Securities, Futures and Securities Financing = Operating revenues – Cost of goods concurrently sold – Deposit interest expenditures – Other operating interest expenditures – Operating investment losses + Other non-operating revenues.

(III) Insurance = Operating revenues – Cost of goods concurrently sold – Deposit interest expenditures – Other operating interest expenditures – Insurance indemnity and payments – Withdrawing and depositing reserves for various liabilities – Operating investment losses + Other non-operating revenues.

(IV) Financial Intermediation (excl. Deposit Institutions, Securities Financing) and Other Financing = Operating revenues – Cost of goods concurrently sold – Operating interest expenditures – Operating investment losses + Other non-operating revenues.

8. Real Estate Activities (including Architecture and Engineering Activities; Technical Testing and Analysis, Interior Design Activities) = Operating revenues – Cost of goods concurrently sold – land costs of real estate sold and cost of outsourcing construction + Other non-operating revenues.

9. Professional Scientific and Technical Activities (excluding Architecture and Engineering Activities; Technical Testing and Analysis, Interior Design Activities) = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

10. Support Service Activities = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

11. Compulsory Social Security = Operating revenues – Cost of goods concurrently sold – Deposit interest expenditures – Other operating interest expenditures – Insurance indemnity and payments – Withdrawing and depositing reserves for various liabilities – Operating Investment Losses + Other non-operating revenues.

12. Education = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

13. Human Health and Social Work Activities = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

14. Arts, Entertainment and Recreation = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

15. Other Service Activities = Operating revenues – Cost of goods concurrently sold + Other non-operating revenues.

(V) Intermediate consumption: the calculation methods of the intermediate consumption in different sectors are as follows:

1. Mining and Quarrying = Utilized value of raw materials, supplies and fuels – Utilized value of raw materials, supplies and fuels provided to other foreign (offshore)

enterprises (including subsidiaries) used for production or processing + Expenses of utilities + Outsourcing processing expenses – payment to other foreign (offshore) enterprises (including subsidiaries) for outsourcing processing expenses + Other operating expenses.

2. **Manufacturing** = Utilized value of raw materials, supplies and fuels – Utilized value of raw materials, supplies and fuels provided to other foreign (offshore) enterprises (including subsidiaries) used for production or processing + Expenses of utilities + Outsourcing processing expenses – payment to other foreign (offshore) enterprises (including subsidiaries) for outsourcing processing expenses + Other operating expenses.
3. **Electricity and Gas Supply** = Utilized value of raw materials, supplies and fuels – Utilized value of raw materials, supplies and fuels provided to other foreign (offshore) enterprises (including subsidiaries) used for production or processing + Expenses of utilities + Outsourcing processing expenses – payment to other foreign (offshore) enterprises (including subsidiaries) for outsourcing processing expenses + Other operating expenses.
4. **Water Supply and Remediation Activities** = Utilized value of raw materials, supplies and fuels – Total value of raw materials, supplies and fuels consumed provided to other foreign (offshore) enterprises (including subsidiaries) used for production or processing + Expenses of utilities + Expenses for processing – Payment to other foreign (offshore) enterprises (including subsidiaries) for outsourcing processing expenses + Other operating expenses.
5. **Construction** = Utilized value of construction materials + Expenses of utilities + Expenses of fuels for construction machinery and tools + Rental expenses of construction machinery and tools + Other costs of construction sites + Other operating expenses.
6. **Wholesale and Retail Trade** = Utilized value of raw materials, supplies and fuels + Commission expenditures + Other operating expenses.
7. **Transportation and Storage** = Utilized value of fuels + Utilized value of supplies + Expenses of utilities + Rental expenditures of transportation equipments + Expenditures of freight transportation + Repair and maintenance expenses + Commission expenditures + Other operating expenses.
8. **Accommodation and Food Service Activities** = V Utilized value of raw materials, supplies and fuels + Commission expenditures + Other operating expenses.
9. **Information and Communication** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.

- 10. Financial and Insurance Activities:**
- (1) **Deposit Institutions** = Handling charge expenditures + Commission expenditures + Other operating expenses. (Excluding exchange loss).
- (2) **Financial Intermediation (Excluding Deposit Institutions), Securities, Futures and Other Financing** = Handling charge expenditures + Commission expenditures + Other operating expenses.
- (3) **Insurance** = Reinsurance expenditures + Handling charge expenditures + Commission expenditures + Other operating expenses.
- 11. Real Estate Activities** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 12. Professional, Scientific and Technical Activities** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 13. Support Service Activities** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 14. Compulsory Social Security** = Reinsurance expenditures + Handling charge expenditures + Commission expenditures + Other operating expenses.
- 15. Education** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 16. Human Health and Social Work Activities** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 17. Arts, Entertainment and Recreation** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- 18. Other Service Activities** = Utilized value of raw materials, supplies and fuels + Service costs + Commission expenditures + Other operating expenses.
- (VI) Gross value of production** = Total value of production – Intermediate consumption.
- (VII) Net value of production** (at market price) = Gross value of production – Various depreciation.
- (VIII) Net value of production** (at factor cost)
- = Net value of production at market price – Indirect taxes.
- = Labor compensation + Enterprise rewards + Net value of rents + Net value of interests.
- (IX) Enterprise rewards** = Profits + Bad debts and transferred expenditures + Other non-operating expenditures – Gain from investment and earnings of assets sold – Government grant revenues.
- (X) Profits** = Annual total revenues – Annual total expenditures.
- (XI) The net value of rent** = Rental expenditures – Rental revenues.
- (XII) The net value of interests** = Interest expenditures – Interest revenues.

(XIII) Labor productivity

1. Total value of production per person engaged (NT\$1,000):

$$\frac{\text{Total value of production}}{\text{Number of persons engaged}}$$

2. Gross value of production per person engaged (NT\$1,000):

$$\frac{\text{Gross value of production}}{\text{Number of persons engaged}}$$

3. Net value of production per person engaged (NT\$1,000):
(At factor cost)

$$\frac{\text{Net value of production}}{\text{Number of persons engaged}}$$

4. Total value of production per dollar of labor compensation (NT\$):

$$\frac{\text{Total value of production}}{\text{Labor compensation}}$$

5. Net value of production per dollar of labor compensation (NT\$):
(At factor cost)

$$\frac{\text{Net value of production}}{\text{Labor compensation}}$$

(XIV) Labor cost of unit output

Labor compensation per dollar of total value of production (NT\$):

$$\frac{\text{Labor compensation}}{\text{Total value of production}}$$

(XV) Capital productivity

1. Efficiency of assets used in operation (%):

$$\frac{\text{Gross value of production}}{\text{Assets used in operation}}$$

2. Gross value of production per dollar of net value of fixed assets used in operation (NT\$):

$$\frac{\text{Gross value of production}}{\text{Fixed assets used in operation}}$$

3. Total value of production per dollar of net value of assets used in operation (NT\$):

$$\frac{\text{Total value of production}}{\text{Assets used in operation}}$$

4. Turnover ratio of total assets (%):

$$\frac{\text{Operating revenues}}{\text{Owned assets}} \times 100$$

5. Turnover ratio of net value of fixed assets in operation (%):

$$\frac{\text{Operating revenues}}{\text{Fixed assets used in operation}} \times 100$$

6. Turnover ratio of net value of assets in operation (%):

$$\frac{\text{Operating revenues}}{\text{Assets used in operation}} \times 100$$

(XVI) Operating benefit

1. Value-added ratio (%):

$$\frac{\text{Gross value of production}}{\text{Total value of production}} \times 100$$

2. Profit rate (%):

$$\frac{\text{Profits}}{\text{Total revenues}} \times 100$$

3. Assets used in operation per person engaged (NT\$1,000):

$$\frac{\text{Assets used in operation}}{\text{Number of persons engaged}}$$

4. Turnover ratio of inventory (%):

$$\frac{\text{Operating revenues}}{\text{Inventory}} \times 100$$

(XVII) Statistical methods of Emerging industries and International logistics industry:

1. Tourism Industry: Refers to basing on the percentage of tourism in "Tourism-featured industry", "Tourism-related industry", and "Other industries", listed in the latest "Tourism Satellite Account" by Tourism Bureau, Ministry of Transportation and Communications, multiplied by the total value of production and the number of persons engaged of the industry, that was the total value of production, and the number of persons of the industry.

2. Other industries: For the number of enterprises and establishments, where any one industry directly roughly calculated the operating items of that industry; as for total value of production and total number of persons engaged were obtained from the operating revenues of each industry accounting for the operating revenues of enterprises, multiplied by the total value of production and the number of persons engaged, and summed the total value of production in every operating items, and the number of persons engaged of enterprises, and classified each operating item into an industrial category attributed, that was total value of production and number of persons of each industry.

3. The total value of production and employees engaged of every each industry based on the enterprise as the unit.

(XVIII) Statistical methods for industry specific area—application of Geographic Information System:

It was completed by depicting the geographic boundaries of specific areas (export processing zones, free trade zones, science parks and industrial areas) of each industry based on a Geographic Information System, then positioning the actual business address of the manufacturers, to calculate roughly the manufacturers located within the boundaries of each specific area.