

Examples of register-based statistics

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I . Profit Corporation Statistics

Overview

- Developed in 2012
- Purpose
 - To identify the financial status of corporations by industry and size of corporation through the use of using administrative data of public agencies
- Periodicity
 - Reference Date: Dec. 31
 - Data Periodicity: Annual
- Main Items
 - number of enterprises, sales, assets, liabilities and capital stock
 - by industry
 - number of enterprises and sales
 - by business size, by enterprise group, by type of activity

Overview

- Coverage

- All corporations paying corporate taxes to National Tax Service
- Excludes non-profit corporations
 - ex) a medical corporation, educational foundation etc.

- Units

- Enterprise

- Type of enterprise

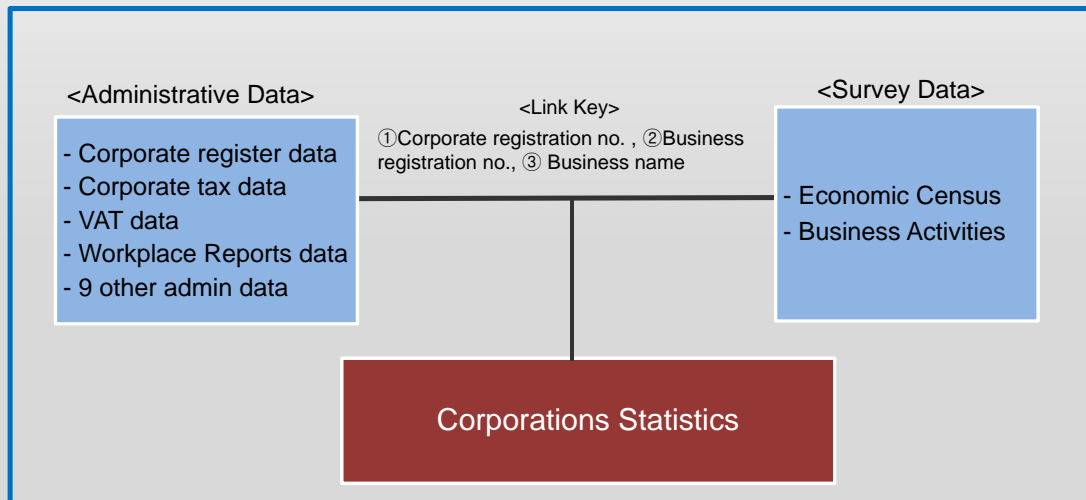
- Size of enterprises
- Number of industry activities
- Membership to Enterprise Group

Data Sources and Use

Data Sources	Use for	Data suppliers
Corporate tax	sales, operating income, assets, liabilities, capital stock	National Tax Service
Value Added Tax	industry classification code, sales	National Tax Service
Business register data	Link headquarters and subsidiaries	National Tax Service
Employment income payment receipt	number of employees	National Tax Service
Health insurance	number of employees	National health insurance service
Employment insurance, Industrial accident compensation insurance,	number of employees	Ministry of Employment and Labor
National pension	number of employees	National Pension Service

Statistical Process

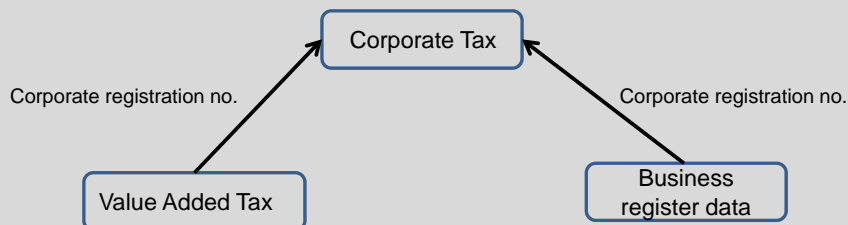
<Data Mapping for Producing Corporation Statistics>



Statistical Process

● Step 1 : Development of Corporation Population

- Link corporate tax and relevant administration data
 - Match data(corporate tax, business register data, value added tax) using corporate registration number as link key
- Create statistical units : local units, enterprise, enterprise group



Statistical Process

● Step 2 : Set up Profit Corporation Population

- Extract profit corporation: excludes non-profit corporations using the system of business register number and corporate register number
- Separate non-profit corporations

*Using middle code of business register number (xxx:xx-xxxxx)

Code	Type
80	non religious groups of non-corporations
82	corporations
83	corporations
89	religious group of non-corporations

*Using middle code of corporate register number (xxx:xx-xxxxx)

Code	Type
21	Incorporated association
22	Foundation corporation
31	Educational foundation
32	Social welfare corporation
33	Medical corporation
39	⋮
40	⋮

Statistical Process

● Step 3 : Create Statistical Items

- Number of Employees
 - ① Aggregate a number of employees by local units using employment income payment receipt
 - ② Replace a number of employees of health and employment insurance with null of step ①
 - ③ Complement null of step ② using survey data
 - ④ Review time series of the data with the number of employees
 - ⑤ Aggregate the number of employees by enterprise unit

Statistical Process

- Step 3 : Create Statistical Items

- Type of activities

- ① Create an industrial classification code(5digits) by local units using VAT
- ② Aggregate the data of step ① by enterprise units
- ③ Divide the enterprises into one kind of business and several kinds of business

Statistical Process

- Step 3 : Create Statistical Items

- Financial Items

- ① Remove duplicate corporate register numbers in corporate tax data
 - It is possible to remain several duplicate enterprises due of the change of accounting periods
- ② Create Statistical Items
 - Balance Sheet: assets, liabilities, capital stock, etc.
 - Income Statement: sales, operating income or loss, net income, etc.
- ③ Compare to Business active survey data

Statistical Process

- **Step 4 : Apply the criteria of classification**

- Size of enterprises
 - By law: Classification based on the criteria of sales, capital stock and a number of employees by industry
- Enterprise Group : Using public data
 - Link corporate tax and enterprise group list

- **Step 5 : Compile Statistical Tables**

- Aggregate result tables
- Level analysis: identify the reason for variation if time series change considerably
- Announcement

Policy Use

- **Applicable Areas**

- Provide basic data to support economic policies (i.e. support win-win growth for large and small/medium enterprises)

- **Example**

- Ministry of Strategy and Finance, Small and Medium Business Administration
 - Data used to support policies directed at enterprises by assessing business activities (i.e. structural changes, assets, liabilities, capital stock)

II . Other cases

Case1. Business Demography Statistics

- Developed in 2012
- Purpose
 - Identify changes in business status (i.e. births/deaths) and survival rate to provide life cycle data on businesses
 - Estimate job creation from new businesses and employment loss from closed business to provide current job data
- Periodicity
 - Reference Period: 1.1~12.31
 - Periodicity: 1 year
- Coverage
 - For-profit businesses: business with turnover or full-time employee
 - Excludes following industries
A(AFF), O(Public admin, national defense, social security administration), T(Activities of households as employers), U(Extraterritorial Organizations and Bodies), 64992(Financial holding company)

Case1. Business Demography Statistics

• Definitions

- For-profit enterprises
 - Excludes non-profit enterprises
 - Businesses with turnover in the year or full-time employees
- Business births
 - Business engaged in new economic activities with turnover or full-time employees based on comparison of for-profit business database active in year (t) vs. previous year (t-1)
- Business deaths
 - Business that have suspended economic activities based on comparison of for-profit business database active in year (t) vs. following year (t+1)

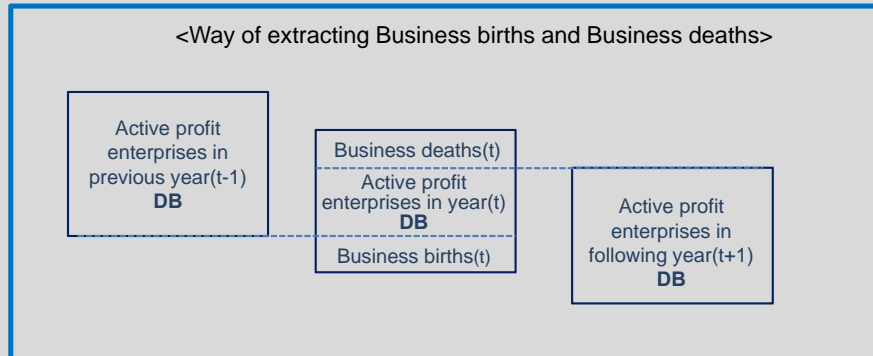
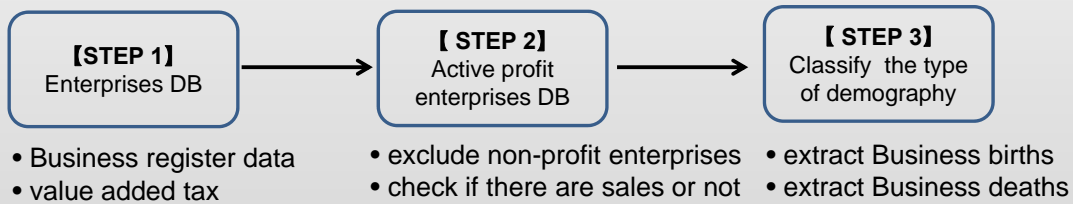
Case1. Business Demography Statistics

• Data Sources

Item	Used for	Data Sources
Business registration number	Link key	Business register data, value added tax, employment income payment receipt, business closing report
Name of business	Used to determine data continuity	Business register data
Name of owner	Used to determine data continuity	"
Owner ID no.	Gender/age statistics	"
Corporate registration number	Link key	"
Business registration number for headquarter	Link headquarters and subsidiaries	"
Primary business category code (industry classification)	Produce industry-specific statistics	"
Date of opening	Business birth statistics	"
Admin district code	Regional classification	"
Workplace address	Used to determine data continuity	"
Date of closing	Business death statistics	business closing report
Number of employees (full-time)	Job creation statistics	Income withholdings
Sales	Used to determine activity	Value added tax reports

Case1. Business Demography Statistics

• Statistical process



Case2. Wage and Salary Employment Position Statistics

• Developed in 2012

• Purpose

- To provide wage and salary employment position statistics by sex & age, size of enterprise and industrial classification by using administrative data of governmental agencies
- To provide basic data needed when making policy of job creation policy and when job seeker select a job

• Periodicity

- Reference Period: 12.31
- Periodicity: 1 year

• Units

- employment position, enterprise

Case2. Wage and Salary Employment Position Statistics

- Population

- Wage and salary employment positions occupied by those who declare their incomes the national tax service or registered workplace social insurance subscribers

- Items Produced

- Personal items: by sex, age, working period
- Corporate items: by type of legal organization, industry, number of employees, size of sales, public sector

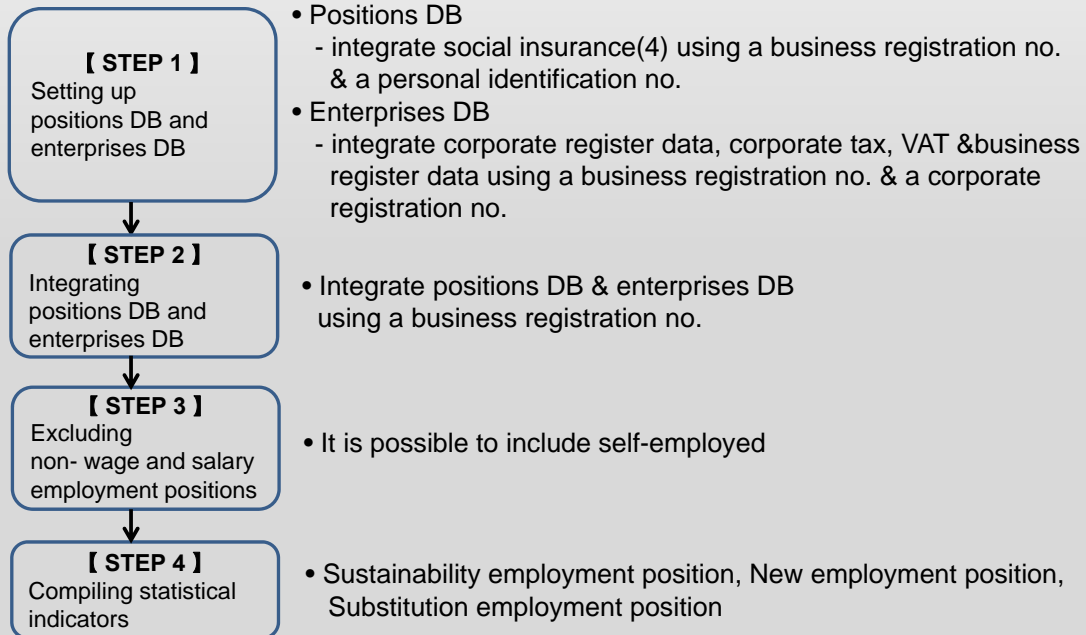
Case2. Wage and Salary Employment Position Statistics

- Data Sources

Data Sources	Used for	Data Suppliers
Health Insurance	Service period, sex, age	national health insurance service
Employment insurance	"	Ministry of Employment and Labor
National pension	"	National Pension Service
Employment income payment receipt	"	National Tax Service
Corporate register data	type of legal organization, industry, capital stock	Supreme Court
Corporate tax	sales	National Tax Service
Value Added Tax	"	"
Business register data	duration, type of legal organization, industry,	"
Industrial accident compensation insurance	Service period, sex, age	Ministry of Employment and Labor

Case2. Wage and Salary Employment Position Statistics

• Statistical process



• THANK YOU •