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Basic Statistics on Korean SMEs using Business Registers

Abstract

(300 – 500 words)

Small and medium-sized enterprises (SMEs) play a crucial role in the Korean economy. Korean statistics on SMEs often feature the phrase ‘9988’, which means that SMEs account for more than 99 percent of all Korean enterprises and 88 percent of total employment. These figures were compiled based on numbers of establishments as recorded in the Census on Establishment, the Economic Census and others. Along with amendments made to the Framework Act on Small and Medium Enterprises and the building of the Statistical Business Register, Statistics Korea (KOSTAT) has cooperated with the Ministry of SMEs and Startups to compile statistics on the number of small and medium-sized enterprises and the number of employees (basic statistics on SMEs). The methodologies used to produce the basic statistics on Korean SMEs are outlined below, as well as the key findings.

Keywords: Small and medium-sized enterprises (SMEs), SBRs, Census on Establishments

I . Introduction

South Korea rapidly grew from one of the poorest countries in the world in the 1950s to a major economy. Rapid development has been export-led, with large business groups, known as “Chaebols”. (OECD Economic Surveys: Korea 2018)

The economy of South Korea is the 4th largest in Asia and the 11th largest in the world. At the same time, the South Korean economy faces slowdown in growth potential. Polarization between the large companies and small and medium-sized enterprises (SMEs) has exposed limitations of traditional growth models.

Accordingly, the Korean government aims to make SMEs a driver of innovation and job creation. SMEs play an important role in the Korean economy. Basic statistics on SMEs are the basis of a effective support policy for small businesses.

Current basic statistics on SMEs utilize the Census on Establishment as a population. Korean statistics on SMEs often feature the phrase ‘9988’ , which means that SMEs account for more than 99 percent of all Korean enterprises and 88 percent of total employment.

table 1. Current Status of SMEs in KOREA

(Survey unit: each establishment, Unit: thousand, %)

Category		2013	2014	2015
Establishment	Total	3,419	3,545	3,605
	Large	3	3	4
	SMEs	3,416	3,542	3,601
	(share, %)	99.9	99.9	99.9
Employees	Total	15,345	15,963	16,775
	Large	1,923	1,935	1,648
	SMEs	13,422	14,028	15,127
	(share, %)	87.5	87.9	90.2

* sources: Census on Establishment (the Economic Census) → Appendix.1

However, there are some limitations to these statistics. First, they overestimate the share of SMEs in employment. For example, all branches of Starbucks Korea, which has 559 branches and 5,400 employees are classified as SMEs.

Second, the Census on Establishment cannot identify a business that does not have a physical

location. Lastly, many resources such as manpower and budget are required and there are problems with the worsening survey environments such as response burden and low response rates.

Along with amendments made to the Framework Act on Small and Medium Enterprises (2015) and the building of the Statistical Business Register (SBR), Statistics Korea (KOSTAT) has cooperated with the Ministry of SMEs and Startups (MSS) to compile basic statistics on SMEs. The methodologies used to produce the basic statistics on Korean SMEs using the SBR are outlined below, as well as provisional results.

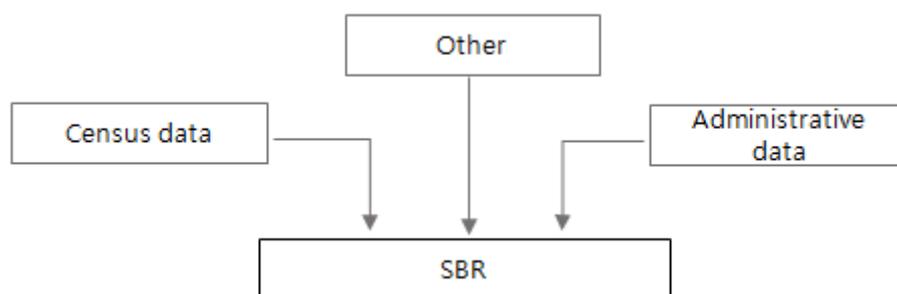
II SBR in KOREA

Definition

The SBR (Statistical Business registration) refers to the management of businesses by their own identification number which is a concept similar to a person's resident registration number. As the SBR is the backbone of all statistics, it can be used as a population measurement for business surveys.

Data Sources

The SBR is made in combination with administrative data (National Tax Service and Social Security Insurance data, etc.), economic census data and others. The SBR aims to capture all the businesses of all sectors of the country's economy.



* Source: Figure 2.2 SBR live register (UNECE, 2015)

Using administrative data, it is possible to identify different types of businesses without fixed sites such as web-based businesses and individual entrepreneurs (door-to-door sales).

table 2. Data collection for SBR

Administrative Data		Survey Data	
Source	Type of Data	Source	Type of Data
National Tax Service (NTS)	Business Registration	Statistics Korea	Census on Establishment
	Value-added Tax		The Economic Census
	Statement on wage and salary income payment		
	Closure of Business		Annual Business Survey
Social Insurance	Health Insurance		Annual Survey of Manufactures
	National Pension		Annual Service Survey
	Employment Insurance		Annual Wholesale Trade Survey
	Occupational Health and Safety Insurance		Annual Retail Trade Survey
Court of Justice	Registration of Corporation		Annual Survey of Construction

Data Linkage

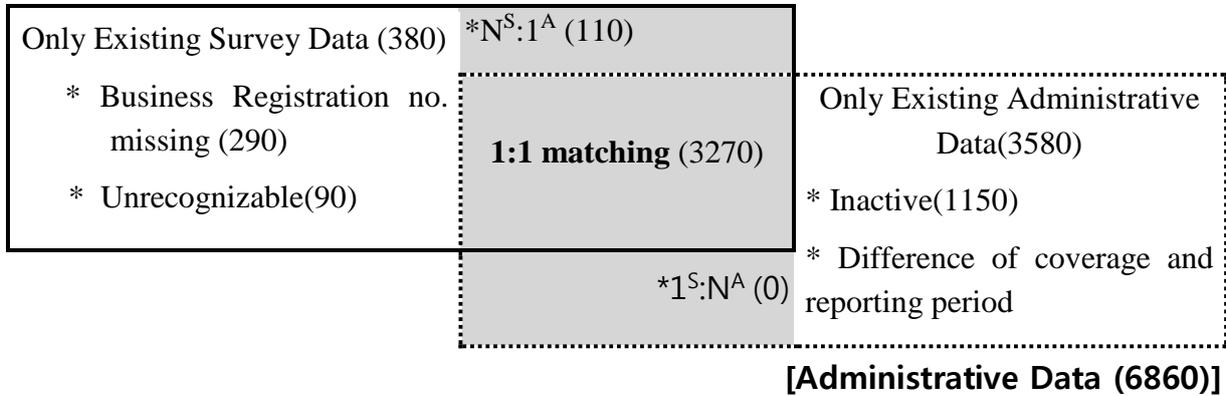
KOSTAT currently uses the 10 digit Business Registration Number (BRN) and the 13 digit Corporation Registration Number (CRN) for the identification of statistical units (enterprises) and data linkages.

The data of Business Registration from the NTS was 6.86 million in 2014. In 2015, the number of establishments in Korea was 3.76 million. The number of establishments that were matched one to one by the BRN (as a linkage key) was 3.27 million. There were 3.58 million businesses that existed only in administrative data, and 1.15 million of these are inactive. 0.38 million businesses are only found in survey data and these cases are unregistered businesses or have an unidentifiable number.

table 3. Combined Results (2014)

(Unit: thousand)

[Survey Data (3760)]

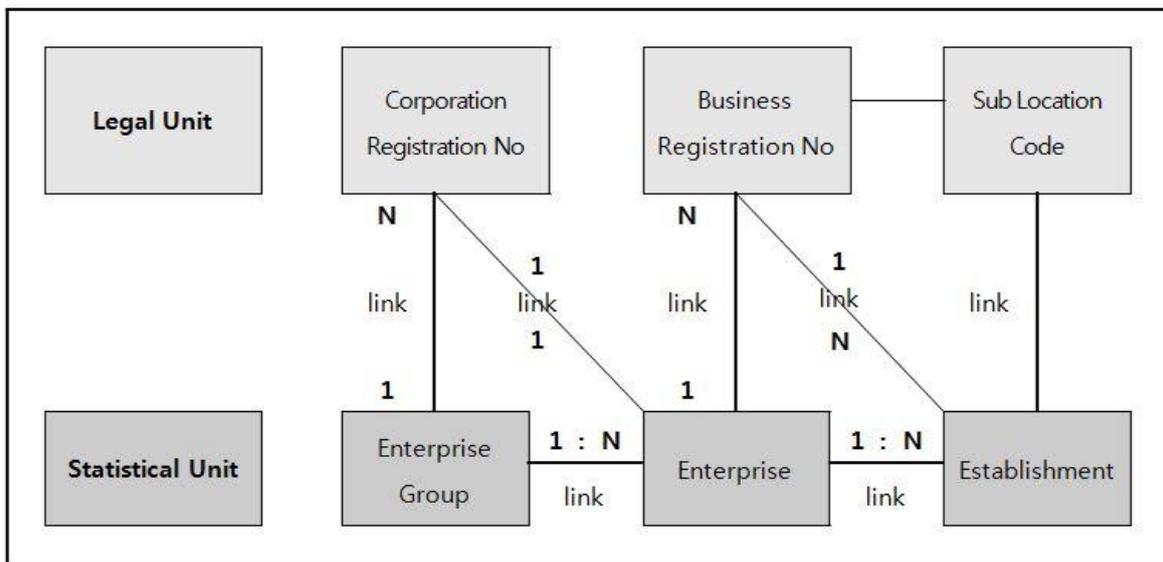


* S: Survey Data, A: Administrative Data

Statistical Unit

The unique Key of the statistical unit of the SBR is assigned to enterprise groups, enterprise (CRN, BRN), establishment etc. After combining the survey data and the administrative data, we categorize it with the same number as one enterprise regardless of the administrative area; in the case of a corporation we base it on the CRN, while in the case of an individual enterprise we base it on the personal identification number and the BRN.

table 4. Links Between Statistical and Administrative Units



The KOSTAT SBR model provides the following information for each statistical unit. It consists largely of basic information and characteristic information. This information is updated on a daily basis (quarterly, annually).

table 5. Contents of the SBR

Category	Enterprise Group	Enterprise	Establishment
Basic Information	CRN, BRN, Representative Information (name, gender, identification no., birth date), Business location code, address, telephone, kind of activity		
Additional Information	- annual turnover - the number of employees - the number of enterprises-	- annual turnover - the number of employees · full time/part time/own account workers - the number of local units - Industry (KSIC) - legal form - size class	

III Statistic on SMEs Using SBR

The definition of SMEs

Along with amendments made to the Framework Act on SMEs, the criteria for SMEs has changed since 2015 from the number of employees to the 3-year average sales. SMEs are categorized according to 3-year average sales by industry, and the macro is categorized according to the number of regular workers. (Appendix. 2)

ex) Manufacturing of electrical equipment

- ◆ (Medium sized enterprise) 3-year average sales: over 12 billion KRW less than 150 billion KRW
- ◆ (small enterprise) 3-year average sales: less than 12 billion KRW
- ◆ (macro) less than 10 regular workers

Provisional results

Number of enterprises and the share of SMEs

There were 6,626 thousand SMEs out of 6,633 total enterprises in the SBR in 2015. This is 3,601 thousand more figures than the result of the Economic Census.

table 6. Comparison of the number and share of SMEs in 2015
(Economic Census vs. SBR)

unit: in each

Category		Overall	Small			Medium	Total SMEs	Large
			Micro	Others	Total			
(Share, %)	Establishment	3,604,773 (100)	3,084,376 (85.6)	415,955 (11.5)	3,500,331 (97.1)	100,551 (2.8)	3,600,882 (99.9)	3,891 (0.1)
	SBR (Enterprise)	6,632,988 (100)	6,252,041 (94.3)	288,534 (4.3)	6,540,575 (98.6)	85,529 (1.3)	6,626,104 (99.9)	6,884 (0.1)

Number of employees and the share of SMEs

There were 16,617 thousand SMEs employees out of 20,458 employees in the SBR in 2015. This is 1,490 thousand more figures than the result of the Economic Census (15,127 thousand).

table 7. Comparison of the number and share of SMEs in employment
(Economic Census vs. SBR)

unit: person

Category		Overall	Small			Medium	Total SMEs	Large
			Micro	Others	Total			
(Share, %)	Establishment	16,774,948 (100)	6,065,560 (36.2)	5,042,200 (30.0)	11,107,760 (66.2)	4,019,287 (24.0)	15,127,047 (90.2)	1,647,901 (9.8)
	SBR (Enterprise)	20,458,260 (100)	8,186,630 (40.0)	4,513,212 (22.0)	12,699,842 (62.1)	3,917,041 (19.1)	16,616,883 (81.2)	3,841,377 (18.7)

Difference

As a result of these pilot findings, the number of SMEs is larger in the SBR than in the economic census data. This is the result of including inactive and non-recognizable business sites. According to statistics compiled using the SBR, 81.2 percent of the share of SMEs in employment are found to be lower than the survey data.

IV Conclusion

The SBR has been developed since 2016 and is still in its initial stage. Our objective is to be the backbone of all the economic statistics production processes, as well as the basis for longitudinal surveys. Furthermore, it will be used as an emerging paradigm for producing economic statistics. Future tasks will be to improve the quality and the coverage of the SBR through continuous work and to produce various statistics such as SME statistics for policy use.

Appendix.1: Census on Establishments Overview

Purpose

To provide basic data required for the establishment of various policies by the government, establishment of management plans by private enterprises, and research activities by academies and research institutes, and to use the survey population for other surveys on establishments

Target Population

Establishments with one or more employees that are doing business (or did business) in Korea as of the survey reference date (Dec. 31)

※ Excluding agriculture, forestry and fisheries businesses (by individual owners), national defense, housekeeping service, international and foreign organizations according to the Korean Standard Industrial Classification

Survey unit

establishments

Survey Reference Period and Date

Survey reference: Jan. 1 ~ Dec. 31 (for one year)

Reference period: As of Dec. 31

Survey Item

Name of establishments, name of CEO (including gender and age), location, date of foundation, business registration number, type of corporations (including corporate registration number and, type of establishments)

Survey Method

On-site interview (together with distribution or mail, Internet survey)

Publication

Frequency: Annual

website: www.KOSTAT.go.kr, KOSIS (Korean Statistical Information Service)

Publication Title: Report on the Census on Establishments

Appendix. 2: Framework act on small and medium enterprises (§2.Definition)

unit: krw

Industry		Small-Mid	Small	Macro
Manufacturing	wearing apparel, clothing accessories and fur articles	< 150 billion	< 12 billion	< 10 person
	leather, luggage and footwear		< 8 billion	
	pulp, paper and paper products		< 12 billion	
	basic metal products		< 8 billion	
	electrical equipment		< 12 billion	
	furniture		< 12 billion	
	Food Products	< 100 billion	< 8 billion	
	tabacco		< 12 billion	
	Textiles, Except Apparel		< 8 billion	
	Wood Products of Wood and Cork ; Except Furniture		< 12 billion	
	coke, hard-coal and lignite fuel briquettes and refined petroleum products		< 8 billion	
	chemicals and chemical products except pharmaceuticals, medicinal chemicals		< 12 billion	
	rubber and plastic products		< 8 billion	
	fabricated metal products, except machinery and furniture		< 12 billion	
	electronic components, computer, radio, television and communication equipment and apparatuses		< 8 billion	
	Other Machinery and Equipment		< 12 billion	
	motor vehicles, trailers and semitrailers		< 8 billion	
	Other Transport Equipment	< 12 billion		
	beverages	< 8 billion		
	Printing and reproduction of recorded media	< 12 billion		
	pharmaceuticals and medicinal chemicals	< 8 billion		
	Other Non-metallic Mineral Products	< 12 billion		
	medical, precision and optical instruments, watches and clocks	< 8 billion		
Other manufacturing	< 8 billion			

Electricity, gas, steam and water supply	< 100 billion	< 12 billion	< 5 person
Agriculture, forestry and fishing		< 8 billion	
Mining and quarrying		< 5 billion	< 10 person
Construction		< 5 billion	< 5 person
Wholesale and Retail Trade	< 80 billion	< 8 billion	< 10 person
Transportation		< 5 billion	< 5 person
Publishing, video, broadcast communications and information services		< 3 billion	
Sewage & waste treatment, material recovery and restoration activities of environment	< 60 billion	< 3 billion	< 5 person
Professional, scientific and technical activities		< 1 billion	
Business facilities management and business support services		< 1 billion	
Art, Sports and Recreation Related Services		< 1 billion	
Human Health and Social Work Activities	< 40 billion	< 8 billion	< 5 person
Membership organizations, repair and other personal services		< 3 billion	
Financial service and insurance activities		< 3 billion	
Real Estate Activities, and Renting and Leasing		< 1 billion	
Accommodation and food service activities	< 40 billion	< 8 billion	< 5 person
Education		< 1 billion	