

Compilation of Economic Statistics and Utilization of Administrative Data

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Introduction

Rapid change of socio-economic circumstances in the world

-  Circumstances surrounding statistics are getting complicated.
 - Society creating a number of new statistical demands
 - Users desire detailed and recent statistical information
 - Respondents neglect or hesitate to answer statistical surveys

To meet these changing circumstances,

-  Need to develop and improve various statistical methods
-  Should make every effort to reduce respondent's burden

Compilation of Economic Statistics



Several censuses and surveys to collect economic structure data have been conducted at different periods in Korea.

- ➔ Industrial Census (quinquennial)
- ➔ Census on Service Industry (quinquennial)
- ➔ Census on Basic Characteristics of Establishments (annual)
- ➔ Mining & Manufacturing Survey (annual)
- ➔ Construction Work Survey (annual)
- ➔ Transportation Survey (annual)
- ➔ Wholesale & Retail Trade Survey (annual)
- ➔ Service Industry Survey (annual)
- ➔ Survey of Business Structure & Activities (annual)





Difficult to produce comprehensive and comparable statistics in a single reference period


- Also, survey items are not standardized.

Compilation of Economic Statistics

The Economic Census

-  The KNSO will conduct the first Economic Census in 2011.
 - to standardize the definitions of survey items
 - to reduce survey workload
 - to prevent omission or duplication of establishments
 - to get comprehensive and comparable economic data at the same time

-  Pilot surveys in 2008 & 2009

-  Rehearsal survey in 2010

■ Coverage of the Economic Census

Korean Standard Industrial Classification	censuses		surveys	
A. Agriculture, forestry and fishing	Agricultural, Fishery & Forestry Census	Household	Basic Agricultural Statistics Survey Farm Household Economy Survey Basic Fishery Statistics Survey Fishery Household Economy Survey	-
		Establishment	Agricultural and Fishery Corporate Establishments Survey	Economic Census
B. Mining and quarrying	Industrial Census		Mining and Manufacturing Survey	
C. Manufacturing				
D. Electricity, gas, steam and water supply				
F. Construction	-		Construction Work Survey	
G. Wholesale and retail trade	Service Industry Census		Wholesale and Retail Trade Survey	
I. Accommodation and food service activities				
H. Transportation			Transportation Survey	
E. Sewerage, waste management, materials recovery and remediation activities				
J. Information and communications				
L. Real estate activities and renting and leasing				
N. Business facilities management and business support services				
P. Education				
Q. Human health and social work activities				
R. Arts, sports and recreation related services				
S. Membership organizations, repair and other personal services				
M. Professional, scientific and technical activities		Professional, Scientific and Technical Service Industry Survey		
K. Financial and insurance activities			-	
O. Public administration and defense	-		-	
T. Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-		-	
U. Activities of extraterritorial organizations and bodies	-		-	

Compilation of Economic Statistics


Business registers

The Census on Basic Characteristics of Establishments

- Covers all domestic establishments to collect basic characteristics ;
 - ➔ name, address & phone number of the establishment
 - ➔ owner's name & gender
 - ➔ number of persons engaged
 - ➔ business activities
 - ➔ head or branch office if any
- The results are used as business registers.
- It provides a national sample frame for various surveys.

Utilization of administrative data and internet survey

Too much respondents' burden

-  Neglect or hesitate to answer statistical surveys
 - apprehensive due to too frequent surveys
 - don't want to disclose respondent's information

Reasons for hesitating to answer statistical surveys

(unit : %)





Total	Too frequent surveys	Too many survey items	about confidentiality	with financial statements	understand survey questions	Others
100.0	24.7	12.7	11.0	10.9	10.7	30.0

2006 Survey on Respondent's Reaction, KNSO

-  **We should standardize and reduce survey items, and conduct annual and monthly surveys by industry integratedly or simultaneously.**

Utilization of administrative data and internet survey

Why should we develop the utilization of administrative data for statistical purpose?

-  Cost-efficiency
-  Reduce respondent's burden
-  Produce high quality official statistics
 - completely responded and edited
-  Produce more statistics by obtaining the information from administrative records

Utilization of administrative data and internet survey



Utilization of administrative data in Korea

Statistics	Administrative data	Related agencies
Mining & Manufacturing Survey (monthly)	City gas supply records	City Gas Association
Survey of Business Structure and Activities (annual)	Financial statements	Chamber of Commerce & Industry Financial Supervisory Service
Service Industry Survey (monthly)	Accounts of schools & universities	Ministry of Education, Science & Technology
Gross Regional Domestic Product (annual)	Aggregated value added tax data	National Tax Service
Agricultural Census (quinquennial)	Farmland register	Ministry for Food, Agriculture, Forestry & Fishery
Basic Fishery Survey (annual)	Fishing boat register	Ministry of Land, Transport & Maritime Affairs
Service Activity Indexes (monthly)	Fuel sales for vehicle or home	National Oil Corporation
	Transportation sales	Korea Railroad
	Revenue on insurance bill - life insurance - medical insurance - employment insurance - industrial disaster insurance	Financial Supervisory Service Heal Insurance Corporation Employment Information Service Worker's Compensation & Welfare Service
	Business income	Stock Exchange
	Real estate transaction	Land Corporation
	Waste collection and management	Environment and Resources Corporation

Utilization of administrative data and internet survey



Obstacles in utilizing administrative data




The current Tax Law prohibits supplying each establishment's business registers to others.

- The KNSO is trying to revise the related law which would permit the provision of tax records for statistical purposes.
- The Statistics Law has a strong regulation to maintain confidentiality.
- ➔ Only authorized staff have the right of access to data on the DB system.
- ➔ A person convicted of infringing an individual's privacy or establishment's confidentiality may be sentenced to a maximum of 3 years imprisonment or be fined 10 million Korean won.

Utilization of administrative data and internet survey

 **The list of all establishments derived from the Census on Basic Characteristics of Establishments can be mostly replaced by business registration documents of the National Tax Service.**

 However, some definitions are slightly different between two data sources.

- The Census uses the 9th Korean Standard Industrial Classification (KSIC) with 5 digits.
- The business registration documents use the 6th KSIC with 4 digits and add its own 2-digit code.


 Need to standardize the definitions of both data sources

Utilization of administrative data and internet survey

Cost-saving amount due to response burden reduction

The OECD guideline of Standard Cost Model

Response burden = wage per hour × responding time × number of responses × number of respondents

 If all survey items are not replaced by administrative records, we can not stop the survey as long as there is additional information that we require.

- The amount saved may be relatively less than our expectation.

Utilization of administrative data and internet survey





Internet survey

- ▶ Internet survey has mostly positive effects on the collection, analysis and dissemination of data and statistics.
 - reduces survey workload and cost
 - enhances data accuracy
 - shorten data processing time

- ▶ The following surveys are used by internet survey and traditional survey methods.
 - Population & Housing Census (quinquennial)
 - Survey of Business Structure & Activities (annual)
 - Cyber Shopping Mall Survey (monthly)
 - Economically Active Population Survey (monthly)
 - Mining and Manufacturing Survey (annual)
 - Census on Basic Characteristics of Establishments (annual)

Utilization of administrative data and internet survey

Paradox between administrative data and internet survey

-  The KNSO experienced that utilization of administrative data disturbed the internet survey method.
-  The KNSO used administrative records for the Survey of Business Structure & Activities for the first time in 2008.
 - The Internet survey ratio dropped from 16.5% in 2007 to 8.2% in 2008.
 - Among total of 134 items, 26 financial statement items are replaced by administrative records such as financial reports and statements announced to the public.

Utilization of administrative data and internet survey

- We surveyed the other items on management strategies such as outsourcing, e-business system, globalization, and strategic coalition.
- The respondents answered the questions of the enumerators easily and immediately.
- They did not want to answer the questionnaires through the computer afterwards.

Utilization of administrative data and internet survey

- ▶ An internet survey can not be applied to small establishments deprived of internet access, especially in rural and for establishments managed by the elderly.
- ▶ Only those who want to respond through the internet can be targeted.
- ▶ Therefore, the internet survey is simply a supplemental method of the traditional paper survey.
- ▶ **Despite these disadvantages, the internet survey is a very efficient survey method from a benefit/cost viewpoint, which is the means to meet the changing statistical circumstances.**
- ▶ The internet survey will eventually replace the traditional survey method.

Thank you!