**UNITED
NATIONS**

E

<table>
<tr><td></td><td>**Economic and Social Council**</td><td>Distr.
GENERAL

ECE/CES/GE.42/2009/16
17 September 2009

ENGLISH ONLY</td></tr>
</table>

ECONOMIC COMMISSION FOR EUROPE   **STATISTICAL COMMISSION**

CONFERENCE OF EUROPEAN STATISTICIANS

Group of Experts on Business Registers

Eleventh session
Luxembourg, 6-7 October 2009
Item 5 of the provisional agenda

BUSINESS REGISTER AS A SOURCE FOR FUTHER DEVELOPMENT OF BUSINESS
DEMOGRAPHY STATISTICS

Updating the Business Frame in Japan using administrative data and mail survey

Note by the Statistics Bureau of Japan

I.   ABSTRACT

1.   Before 2009, the Business Frame (BF) in Japan was constructed using the results of the Establishment and Enterprise Census (detailed census was conducted at a 5 year interval, and simplified census was conducted 3 years after the detailed one).

2.   Therefore, births and deaths of establishments were not reflected to BF until the next census was conducted. Moreover, surveys which use BF as a sampling frame were confronted with the delay of updates because BF was revised at a 2 or 3 year interval.

3.   To overcome the problem, we started using administrative data for timely updating BF. Commercial/Corporate Register data are already being used for updating. Social Security data will be made available in the near future. However, these data do not include information of the industrial classification and the number of employees of establishments. So, we are planning to conduct a mail survey to supplement such information for newly-created establishments.

GE.09-

II. INTRODUCTION

4.   In the past, the Business Frame (BF) in Japan was constructed using only the results of the Establishment and Enterprise Census (EEC). EEC covered all establishments and enterprises in Japan, except for:

(a) privately-managed establishments engaged in agriculture, forestry or fishery;
(b) establishments for domestic services;
(c) foreign governments and international agencies.

5.   EEC adopted the enumerator-canvassing method, and was conducted at 2 or 3 year interval (detailed census at a 5 year interval, and simplified census 3 years after the detailed one).

6.   Recently, the detailed EEC was conducted as of October 1, 2006. There are 6,092 thousand establishments and 1,734 thousand corporations (sum of single-units and head-offices of corporations) by the results of 2006 EEC.

Table 1.Number of Establishments in Japan

		Total	Single-unit	Head office	Branch offices
Total		6,092,096			
	National and local government	188,479			
	Privately owned	5,903,617			
	Individual proprietorships	2,735,107	2,698,402	6,449	30,256
	Corporations	2,955,123	1,512,261	221,567	1,221,295
	Organizations other than corporations	32,329	27,405	648	4,276
	Legal status unknown	181,058			

Source: 2006 Establishment and Enterprise Census (Statistics Bureau of Japan)

7.   However, EEC had the problems of incompleteness of coverage and lack of timeliness.

A.   Coverage of EEC

8.   As mentioned before, EEC adopted the enumerator-canvassing method. It is hard for enumerators to find establishments with no signboards. So, EEC may miss such establishments, especially SOHOs (Small Offices, Home Offices).

9.   In Japan, all corporations are required to register, the Commercial/Corporate Register (CCR). Presently 2.8 million corporations are in CCR, about 1 million more than those in EEC. Part of the difference may be explained by the existence of inactive companies or dummy companies (more broadly, companies without physical locations). The definition of "establishment" in EEC is "a unit of location (a demarcated area) with proper equipment and personnel to produce goods or to render services continuously under a single management." Therefore, inactive companies or companies without physical locations are not included in EEC, by definition. Anyway, there may be establishments which are missed in EEC.

B. Timeliness

10.   EEC was conducted at 2 or 3 year interval. Therefore, new creation and abolishment of establishments were not reflected to BR until the next census had been conducted.
Statistical surveys, such as "Monthly Labour Survey" by MHLW (Ministry of Health, Labour and Welfare), use the Business Frame as a sampling frame. They renew samples when the Business Frame is revised. There are gaps in the results of surveys, when the samples are renewed. Some surveys, such as the Monthly Labour Survey, calculate "gap-adjusted indices." Of course, there are inevitably gaps when survey samples are changed. However, part of the (large) gaps may come from the infrequent revision of the Business Frame.

11.   Presently, the birth-rate of establishments in Japan is calculated by EEC.
For example, the birth-rate of private establishments from 2001 to 2006 is calculated as follows;

- (a) Private establishments which do not exist in 2001 Census, but exist in 2006 Census: 1,358,485;
- (b) Private establishments which exist in 2001 Census: 6,138,180.
  Birth-rate (5-years) $1,358,485 / 6,138,180 = 0.221317$
  Birth-rate (annual) $(1+0.221317)^{1/5} -1 = 0.041$ → 4.1 per cent

12.   The birth-rate is much lower than those of other countries.
(See, for example, Giovannini (2008), Understanding Economic Statistics, OECD p.87).
We can see, from the above calculation that establishments opened after 2001 but closed before 2006 are not included in the calculation. It may be a reason why the birth-rate is (seemingly) low in Japan. (Another reason would be, of course, the coverage of EEC, as mentioned before.)

13.   EEC adopts enumerator-canvassing method. Therefore, an establishment which moved in from another enumeration district is treated as "newly open". However, it cannot explain the "low" birth rate.

14.   Statistics Bureau of Japan made efforts to overcome these problems. In this paper, we will review these efforts, and discuss some future plans.

III.   UTILIZATION OF COMMERCIAL/CORPORATE REGISTER (CCR)

15.   In Japan, we started the Economic Census in July 2009, replacing EEC. As mentioned before, EEC may miss establishments which are hardly grasped by appearance. Therefore, we utilized the Commercial/Corporate Register (CCR) to make the preparatory list of establishments for the Economic Census.

16.   The preparatory list identifies the name, address and phone number of establishments in each enumeration district. An enumerator uses the preparatory list to find out establishments he/she has to visit. Moreover, he is required to find new establishments which do not appear in the preparatory list, by canvassing the designated enumeration district.

C.   Preparatory list for 2009 Economic Census

17.   The preparatory list for 2009 Economic Census is made as follows. Data sources for the list are the results of 2006 EEC and CCR. 2006 EEC contains 1.7 million corporations, and CCR contains 2.8 million corporations.

18.   Firstly, we match data of 2006 EEC and CCR, using the name and address of the head office of corporations.

(a)   Corporations which exist in 2006 EEC, but not in CCR
In Japan, every corporation is required to register in CCR. So, corporations which exist in 2006 EEC but not in CCR would be due to some mistakes (in name/address) or the nominal head office (in CCR) is different from the real head office (in EEC). We send mail to such corporations to check whether there may be mistakes.

(b)   Corporations which exist in CCR, but not in 2006 EEC
There would be two types of corporations which exist in CCR, but not in 2006 EEC. The first type is that enumerators in 2006 EEC couldn't find corporations, probably because there were no signboards. The second type is that of inactive corporations, which are not included in 2006 EEC by definition. We send mail to such corporations to check whether they are active or not. Corporations for which mails are returned as "not found" are dropped from the list as inactive corporations.

19.   Enumerators use the preparatory list for 2009 Economic Census. Eventually, 2009 Economic Census will resolve the gap between EEC and CCR.

D.   Updating the Business-Frame using CCR

20.   The business-frame (BF) in Japan has been constructed on the results of the Establishment and Enterprise Census (EEC). So, BF was revised only at 2 or 3-year interval.

21.   However, we can use monthly CCR data, containing newly-established corporations in the corresponding month. About 10,000 corporations are newly established monthly. It will resolve the problem of "timeliness" of BF. Now we use (tentatively) monthly CCR data for updating BF. Users of BF can choose whether or not to reflect data of CCR.

IV.   SUPPLEMENTARY MAIL SURVEY

22.   Monthly CCR data for newly-established corporations contain:

(a) Name of the corporation;
(b) Address of the head office of the corporation;
(c) Objectives of the corporation (i.e. businesses);
(d) Startup date;
(e) Capital amount (for stock company).

23.   However, some key items are missing, for example:

(a) Industrial classification;
(b) Number of persons engaged;
(c) Number of branch offices.

24.   These items are important for statisticians, because they are often used as key variables for sampling and/or stratification. The industrial classification of the corporation is similar to "objectives of the corporation" in CCR. However, corporations usually mention several "objectives" in CCR. So, it is hard to distinguish which is the "main objective", or, the industrial classification, of the corporation.

25.   We plan to conduct mail survey for newly-established corporations in CCR.

26.   Survey items would be:

(a) Name;
(b) Address;
(c) Phone number;
(d) Main business activity;
(e) Number of persons engaged;
(f) Number of branch offices.

27.   Items collected will be reflected to the business frame. ("Main business activity" is converted to the industrial classification code by the National Statistical Center.)

28.   Generally, we cannot expect a high response rate for the mail survey. Moreover, as CCR data do not contain phone number, we cannot use phone-call to ask for response.
So, we plan to use investigator-visiting method for corporations in major cities (Tokyo, Osaka, etc.) to keep high response rate.

V.   UTILIZATION OF SOCIAL SECURITY DATA

29.   Utilization of CCR data and supplementary mail survey will improve the business frame for the coverage and timeliness.

30.   However, CCR does not contain unincorporated entities. In Japan, about half of establishments are those of unincorporated entities. So we have to find data that cover unincorporated entities. Labor insurance data will be a hopeful candidate. By the labor insurance law, an establishment with one or more employees has to notify to the local labor bureau. In 2006, 2.97 million establishments filed applications for the labor insurance system.

31.   Under the labor insurance law, small establishment which depends on another (large) establishment for its personnel/accounting affairs does not have to notify by itself. In that case, the corresponding (large) establishment has to notify to the labor bureau. Therefore, the number

of establishments under the labor insurance may be smaller than that of EEC. In fact, by the result of 2006 EEC, there are 4.39 million establishments with one or more employees.

32.   Ministry of Health, Labor and Welfare (MHLW) plans to disclose names and addresses of establishments to which labor insurance is applied, via internet, in early 2010. Statistics Bureau now talks to MHLW to utilize the data for updating the business frame. The data do not include industrial classification and number of persons engaged. So, a supplementary mail survey will be necessary, as in the case of CCR data.

V.   FUTURE TASKS

33.   Utilization of CCR and labor insurance data, and supplementary mail survey, will greatly improve the business frame, both for coverage and timeliness.

34.   However, there remain some problems to be resolved.

   (a) Unincorporated establishments with no employees;
   (b) They are not covered by CCR nor labor insurance data. However, these establishments are not, economically and/or statistically, so important;
   (c) (Probably low) response rate for supplementary mail survey.

35.   Tax data may be able to resolve these problems. However, the tax law provides the duty to protect privileged information. Utilization of tax data for other purposes than taxation is strictly prohibited, even if for statistical purpose. At least, revision of the tax law might be necessary.

36.   There has been long debate about the statistical use of tax data, but no (positive) conclusion has been settled yet. It will be necessary to promote public understanding on the usefulness of tax data for statistical purposes and data security of using such data for compilation of statistics. Gaining public support will be an essential precondition for statistical use of tax data.