Needs and uses - the Israeli business register statistics Levi Avigail/Business Register-CBS

A statistic business register in line of the most international recommendations has been completed in 2003 including updated data. The business register consolidates administrative business files comprising mainly the VAT files(compulsory vat data :revenue and expenses) and THE NATIONAL INSURANCE (NI) files(total employees and total salaries per employers).

The VAT data is updated monthly and the employee's data is updated two times a year and bimonthly added files containing new employers.

A yearly income tax data also consolidates to the BR but it is updated only in 2 years lag.

From a methodological standpoint, the business register provides sampling frames for the various monthly and annual business surveys carried out at the CBS. Since 2004 the businesses register renewed important frames of business surveys (including updated maintenances and additions) and had provided a several new business surveys (Innovation, job vacancies, develop& research surveys).

The business register includes the enterprises activity details, dates, addresses, activity code (ISIC), relations, quantity data like monthly revenue and monthly employees and salaries.

The BR also supports other business surveys and other statistics that are produced from different frames rather than the BR in the CBS information such as: economic branch, activity, and quantity data like employees, revenue and other demographic details and addresses.

Administrative sources:

Most of the BR systems based on taxes administrative source. Most of the authorities are managed administratively for there own purposes;

The VAT needs to collect the VAT taxes- they manage there records in there own convenience; if there is missing variable like classification description or a mistake in the export revenue (free of VAT) it doesn't matter –variables such as VAT id and the taxed revenue are in high quality and been logically maintained and corrected. The address of the business might be good for mails rather than the exact location of the businesses-ut is not critic variable to be maintained correctly.

There are some administrative big businesses-mostly large enterprises that report and pay the national insurance – that from convenient reasons -in one record – in one address! Even they actually operated in variety of geographical areas. In ISRAEL BR the national insurance as a main source contains many institutions and many business reported in that differential way; banks, local authorities, healthcare institutions(there are 4 institutions legally defined),retail networks and many other industrial enterprises.

A similar problem occurs in the VAT sources. In ISRAEL there is a VAT possibility to report and pay the tax on revenue of a group of businesses in VAT reporting unit. That reporting unit is treated in the VAT authorities as any other businesses for collecting the VAT tax. Those VAT partners has a record in the BR and likely to have employees reports in that record and classification codes, without revenue-while the revenue is reported in the VAT reporting unit and might have a different classification code (depend on the majority of the partners). the VAT authorities doesn't have the share of each partner-the same in the BR. The outcome in the BR is that we has an active businesses without revenue. The total reported revenue from the VAT authorities is completed but the individual business has a lack and the aggregation by classification codes is inaccurate and not correct.

In ISRAEL some of the largest enterprises use those reporting unit. Producing a revenue statistics by classifying codes is problematic, also any other combination of revenue based statistics.

There might be some interests of the business that answer some criteria such as activity sectors or geographic areas- such as benefits or reductions in taxes. The outcome is that the data obtained from tax authorities might be biased by the business interests.

<u>Logical corrections and imputations:</u>

Some the data obtained from the administrative are logically checked and been improved while inserting to the BR. The corrections are manually taken care and based on knowledge we gained by the time. There is a tend to be mistaken in non-tax variables like: number of employees (the salaries are better), the exported revenue (the non export revenue is better checked by the authorities). In our BR we do corrections but we don't use an imputation system.

To summarize-The data obtained from the BR has obligations according to the specific structures that rely on administrative and tax sources.

Local units

Those problems that immerge from use of administrative source bring us to the need of local unit as an improvement of the BR data. The ideal situation is that every enterprise which has different local activities would have presentation of each local unit in the BR tied to there enterprise. In ISRAEL we started in the project of local unit. The collecting data from the enterprises is a long process. The cooperation we get is concerning the location and the number of employees. The experience of getting the local unit revenue is quite poor –that data is not collected.

Consumers of business statistics

Local authorities, government institutions and research institutions are main consumers of business statistics along with other economic consulting/advisors to businesses or public institutions.

Businesses Demography

The business register provides annually demographic data including:

- number of active business by size economic branch and main regions
- number of employees by economic size and economic branch
- Openings and closures by VAT registrations-since 2003.
- Number of enterprise births and deaths by economic branch
- Survival rates by economic branch(since 2005 enterprises births)

There is growing needs to obtain regionally business statistics: amount of businesses, number of employees, size category act. There are also needs of focusing special economic branch (for example: restaurants, electric wholesale).

Zooming in:

The producing of statistic data from BR is problematic and more critical in small businesses and as you zoom to specific data criteria.

There are some demographic statistics from the BR that we tend to produce and publish very carefully. Most of the demographic statistics from the BR is aggregated by classification codes. A common problem occurre in the population of small businesses(less than 5 employees)- that often change their economic activity as a survival way. Updating the changes in activity codes (classifications) in the BR needs more resources and most of the changes are taken care in a lag or in most cases are in low priority. If there is a need to produce demographic statistics by 4 digit classification-one might find small population (in ISRAEL-specifically) that might be not updated and misleading. In those cases we tend not to publish the data.

Another need is for specific activities that are part of aggregated classification codes (coffee shops for example). As long as the manuals of BR recommend on keeping 4 digit activity code, and there isn't any special variable for each kind of activity – it might be very hard to make those focuses and each BR has their own possibility.

Contradictions between surveys statistics and BR statistics:

Maintenance of a sample in most cases is better than the BR maintenance. The reason is the size. As mentioned before in CBS BR we don't use any imputation system- the sample uses corrections and imputations.

One should be very careful producing the same data from one survey and from the BR. Also we should care of good maintenance of the BR in many aspects like - the maintenance/updating of the classifying system.

For example If there is a business that participates in an industrial sample and was found to be mistaken in the economic classification code in the industrial sector-normally it is reported to the BR and being corrected;

- From the survey point of view that business is removed from the survey population-"including" all the businesses that it represents (if it represents 50 businesses -than 50 businesses are removed from the sample also).
- In the BR there is only one business corrected in the industrial sectoreven that example might represent a population phenomena.

If one needs to estimate <u>the size of population</u> (number of enterprises) from the sample it will be smaller-comparing the BR counting. The effect of correction is been

taken to account only in the sample and in the estimators but not in whole population of business register.

Of course the estimator from the sample shouldn't produce a variable from a sample that was not designed to estimate it (the industrial survey population is likely to be sampled by size of revenue or employees). One might think that there is inconsistency. The problem is critical in small businesses that have a very small probability to be in the sample.

This problem of gapes could be minimized if there is high maintenance and updating of the classifying system in the BR. Most of that changes and corrections should be taken care and detected not as a solution of the specific survey but as a policy or a special BR survey.