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Statistical businesses register as a bridge between statisticians and respondents

Abstract

The modern SBR is not only a continuously-maintained central data base on businesses and institutions providing frame for business surveys. It has evolved into an essential part of official business statistics (which is reasonably called backbone) providing an infrastructure for data integration from statistical and administrative sources and playing a key role in frame coordination and spreading the samples optimally among respondents.

In Statistics Lithuania the whole system of controlling and reduction of statistical response burden was integrated into SBR. Providing business statisticians with the common frame SBR takes at the same time responsibility for coordination of samples. The list of businesses selected for statistical surveys is generated in the SBR and becomes a starting point in the work with respondents. Having an up-to-date contact information enables SBR to inform businesses about their participation in statistical surveys, to receive the feedback and distribute it among business statisticians. All changes in statistical accountancy and in parameters of businesses (e.g. activity codes, cessation of activity, etc.) can be effectively managed and information can be shared between statisticians and respondents.

Statistical Business Register has a function of a single contact point with administrative data owners. Administrative data coming to SBR on daily bases allows a quick reaction in fixing changes that have impact on statistical production.

As a result, SBR started playing a very important role as a bridge between Statistical Office and data providers. The new functions and responsibilities increased burden on Business Register team, but the permanent contacts with businesses give a better understanding of data providers and encourages cooperation which in turn results in high response rate and quality of statistics. On the other hand the coordinated approach to sampling frame and sample selection gives positive effect on consistency and comparability of statistical data. The complex and centralised system of reduction, measurement and control of statistical response burden helps to implement the Principle 9 of European Statistics Code of Practice – Non excessive burden on respondents.

1. Introduction

Traditionally Statistical Business Register (SBR) is understood as a register of economic units resident in the national economic territory. It is established and maintained for statistical purposes, and plays primary role in providing up-to-date sample frames and other support for business statistics.

Over the last decade the growing demand for better and more detailed economic statistics has changed the role of SBRs in the production of economic statistics.

2. Lithuanian Statistical Business Register

Statistics Lithuania built up a Statistical Business Register in 1989. Since then it has been maintained and regularly updated with the information from administrative data sources and statistical surveys.

The main administrative data providers are:

- the register of legal entities
- State Tax Inspectorate
- Social Insurance Fund Board
- VAT data base
- Bank of Lithuania (financial sector enterprises and their variables).

In Lithuania all enterprises have a unique identifier which is used in all governmental institutions and data bases. It is very convenient and withdraws all problems connected with data linking.

Many years SBR has served as a mean to generate sampling frames to all business and economic statistics. This is its natural and primary function. However, through the years SBR has developed from a performer of this basic function to an infrastructure offering assistance to the statistical production process at all its stages.

2.1. Frame construction and sample selection procedure

First of all the function of coordination was delegated to SBR in order to avoid inconsistencies between statistical surveys arising from continuous updating of SBR variables, such as NACE code, employment and turnover. It was decided to use one fixed sampling frame for all statistical surveys. Exceptions are only allowed in a case of changes in big and influential enterprises. This strong rule was acceptable for short-term-surveys because they needed stability of the frame during the year in order to fix and estimate changes in economy.

The yearly surveys - first of all the structural business statistics - faced problems, because they needed to depict the structure of economy and use current variables. To solve the situation a compromise was needed.

After a lot of data analysis and simulations the following frame creation and sample selection procedure was established: the frame population is fixed at the end of the year. It contains the most updated variables from administrative data sources (e.g. previous month employment data from Social Security Data Fund Board, latest available VAT data from Tax Office, etc.) and from statistical

surveys. The frame creation process is a complex task and survey managers also participate actively in it. Interim frame population is prepared by SBR team and presented to subject matter divisions. Survey managers are asked to provide comments, to report on errors or give any other feedback.

After the final corrections are made, the final frame is ready to use for the next year sample selection. As it was mentioned above, the procedure serves the goals of short-term-statistics very well. All next year statistical surveys will be conducted on the base of the newly updated frame population. The yearly surveys however will require the respondents to provide data of the previous year. So the frame, fixed at the end of the year is "too new" for them. For this reason it is reasonable to use variables of middle of the previous year. SBR produces the frame with half year "older" variables for SBS surveys.

2.2. Integration of statistical response burden control into SBR

The most important result of the fixed common frame set up for all statistical surveys was the possibility to implement the principle that no individual statistical domain is allowed to classify units in different ways. It made a significant impact on consistency of all business statistics.

SBR integration into central position of the statistical production process gave more than that. The trust and self-interest in SBR from the side of its users – subject matter statisticians – increased. They were involved into maintenance of SBR. It allowed making a step forward using the information potential of SBR and expanding its functionality.

Aiming for effectiveness and economy of resources Statistics Lithuania tries to streamline and improve the statistical production process moving from the "stovepipe" model to an integrated process approach. In this context, the activities aimed at the reduction of response burden were centralised and step by step integrated into SBR.

First of all, it meant coordination of samples. This quite complicated procedure allows spreading the statistical response burden among respondents as evenly as possible. Certain rules are implemented and kept. For example, statistical data can be collected via statistical questionnaires only if they are not available in other statistical or administrative data sources. Also the smallest enterprises (less than 5 employees and turnover less than 150 000 €) are not allowed to participate in more than 3 surveys a year, etc.

Due to the coordinated approach the number of statistical questionnaires in businesses statistics dropped down by 27 percent (from 175 in 2006 to 128 in 2018).
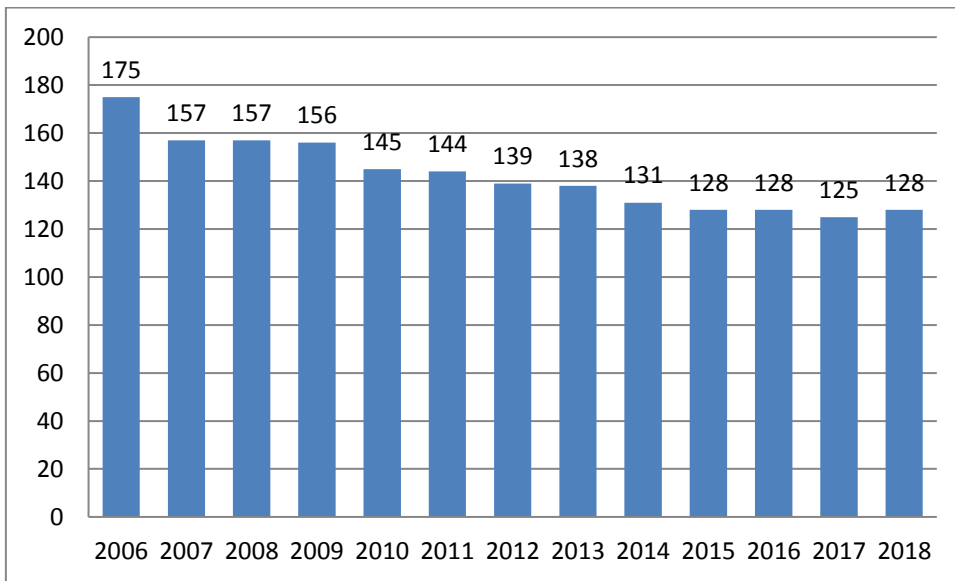
Picture 1. Number of statistical questionnaires in business statistics

The average number of statistical surveys per respondent during a year decreased as well.
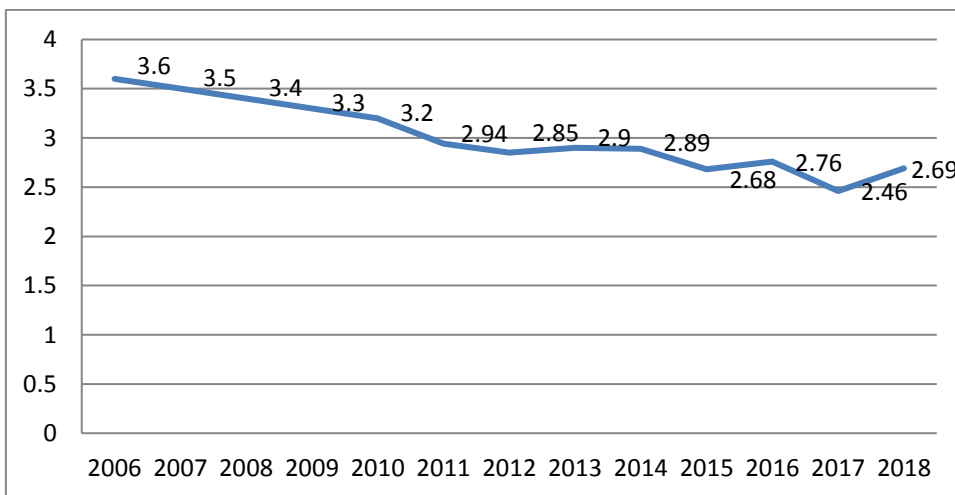
Picture 2. Average number of statistical surveys per respondent during a year

The whole sample selection process is managed and coordinated by the provider of the frame population – SBR. As a result, the full data base of statistically surveyed enterprises is created, all variables checked and contact information added.

2.3. Single contact point for respondents

Next step is to inform businesses about their participation in next year statistical surveys. SBR has all contact information and plays a role of mediator between statisticians and data providers. At the end of December all enterprises in the samples receive letters (electronic or by usual post) informing them that they were included into samples of data providers and they have to visit the web page of Statistics Lithuania in order to find the detailed information about the participation in statistical surveys including the questionnaires.

The whole process of informing respondents requires much responsibility and runs quite emotionally, because it includes a lot of direct contact with people outside the institution. For many businesses it is the first contact with the official statistics. They can e-mail or phone in order to receive all information concerning their respondent duties, statistical surveys or just to express their views towards official statistics. The feedback received from respondents this way is very valuable and often leads to ideas how to improve our work with respondents.

The work with respondents lasts the whole year long. They inform SBR about the changing activity, bankruptcy or other big changes in their business. Sometimes meetings with representatives of the companies or their organizations are organized.

It is adhered to the single contact principle. It means that data providers can call or write to Statistics Lithuania just one time to get answers to all their questions or problems. It is possible only having one single contact point.

2.4. Single point of access to administrative data sources

Using administrative data for statistical purposes has become a common practise in NSIs, frequently embedded in statistical legislature and facilitating access to such data. At Statistics Lithuania more than 40 percent of statistical output is produced from administrative data. They come from numerous administrative data bases.

In 2012 the Law of reduction of administrative burden was signed by the President of Lithuania. It prevents from asking businesses for the same information more than once. The law provided the legal background and made the data exchange among governmental institutions easier.

However the access to administrative data was not coordinated which meant that for instance every statistical division had to find contacts and sign treaties with administrative data owners in order to get access to the data. It was very inconvenient and time consuming. Therefore it was decided to centralize the process.

It was logical to arrange the single point of access to administrative data sources in SBR, because it was one of the biggest users of administrative data, possessed contacts and experience in communication. Currently subject matter statisticians and methodologists are concerned only about methodological aspect of the use of administrative data. Legal and technical help is provided by SBR.

Good contacts and cooperation with administrative data providers, supporting the administrative registers through exchange of information results in a positive influence on statistical data quality and trust in statistics.

2.5. Profiling and LCU

Acceleration of globalisation processes in the last decade gave the impulse for new methodologies, like profiling, to come to the stage. For this purpose a high quality SBR containing information on enterprise groups is crucial. This complex activity is performed by different specialists, but the coordination function comes from SBR which also has a strengthening effect on its role as a backbone of enterprise and economic statistics.
The first experience of work with big enterprise group's data just confirmed the idea that a special large case unit (LCU) is necessary. Currently, based on experience of other countries, a new

organizational structure is being created to deal with the biggest and the most influential enterprises. It has originated from SBR. The experience and first results will indicate the future structural and operational developments.

3. Concluding remarks

Despite the wide use of administrative data, modern technologies and developed methodological solutions, the quality of statistical surveys depends largely on the data provided by the companies. So, the qualitative work with data providers ensuring the non-excessive burden on respondents as requires European Statistical Code of Practise is a key concern of many statistical institutions.

SBR making a bridge between statisticians and respondents can become a vital component of economic surveys ensuring the production of comprehensive, coherent and high-quality economic statistics.

Current methodological and infrastructural developments due to globalization just increase the leading and consolidating role of SBR making it a real backbone of national business statistics and a part of ESBRs.

4. References
- [1] EU (1993a), Council Regulation (EEC) No696/93 of March 1993 on the Statistical Units for the Observation and Analysis of the Production System of the Community
- [2] Guidelines on Statistical Business Register, United Nations, New York and Geneva, 2015