The State of Israel
Ofice of the Prime Minister

Statistical Methodology Dept.

December 2013

<u>Business surveys: measuring the response burden in business surveys</u>

1. Introduction

In recent years, the problem of response burden on businesses in Israel has broadened. The burden arises out of business data collection for statistical needs of the ICBS. Businesses are required by the ICBS to to fill out ever more questionnaires, due to the need of providing the decision makers and policy setters with further and more detailes data on business, employees, labor conditions, etc. Some of the requirements stem from the meed to keep up with changes in economic activity and the new regulations. From the business sector' point of view, the requirements to participation in the polls is a burden which takes time and money and is seen by them as a practice that does not benefit them. Response on business surveys is essential for the Statistics Bureau , due to the quality of the official statistics on business.. Therefore, ICBS sees as important to focus on finding the balance between the requirements for business information and the need for quality of business statistics.

The purpose of this document is to present various aspects related to the measurement, management and and reducrion of the burden burden Business Bureau in the surveys conducted by the ICBS.

2. Perspectives on the response burden

2.1 Actual Response Burden

The traditional perspective on response burden is simple and is limited to the time it takes to answer the demand for data. Here the response burden is perceived as an issue of/(??since there is??) a cost to the business. According to that approach, the cost is the

רח׳ כנפי נשרים 66, פינת רחוב בקי, ת״ד 34525, ירושלים 91342, טל׳, 02-6592701 פקס׳ 02-6592703
דואר אלקטרוני: louiza@cbs.gov.il כתובת האתר: www.cbs.gov.il

actual response burden and is measured by the actual time it takes for a business to collect the information, process it into the desired shape, and fill in the forms with the answers. Additionaly, it is possible to translate the time costs into money coasts, as is the case in several countries.

In this approach, no reference exists to the *benefits* of participation in the survey, such as learning about certain industry branches, or using the statistics produced.

2.2 Perceived Response Burden

This perspective was developed in recognition that measuring [only] the time in the Actual Response Burden approach is inconsiderate of factors that can affect the burden, such as the [extra] effort required, and the anxiety caused to the respondent by the sensitive questions. Statistical bureaus of England, Norway and Sweden examined the causes of this burden and measured their weight in 2005, and found that the burden *percieved* by the respondent was not directly related to the frequency of the survey and the time it takes to answer the survey, but it wsa more related to other factors: like ways of [data] gathering, efforts needed to fill in the questionnaire, perception of benefit from the survey.

2.3 Total Business Survey Burden

The approach to Total Survey Burden is analytic (how it is created, how the survey flows, etc..), and attempts to identify both the causes and the affects of the response burden. This is a circle/circuit which begins with the demand of survey, and the survey design; and continues with implementation of the survey, while the respondent is only part of this circle. This is a holistic concept that appears in (Jones et al., 2005), and then in a more refined form in (Dale et al., 2007), and has 4 steps explained in more detail in ((Jacqui Jones, 2013). The [total?] burden perceived by the respondent includes both the actual burden and the perceived burden.

It is important to emphasize that this approach allows to identify the causes of the burden in the process, analyze them, and even change them. An example: If the survey is seen as a heavy burden as a result of the texts in the questionnaire, it is possible to try shortening them, while keeping their initial goals. In addition, one should always examine and identify the survey design part and elements of planning in the burden created.

רח' כנפי נשרים 66, פינת רחוב בקי, ת"ד 34525, ירושלים 91342, טל', 02-6592701 פקס' 02-6592703
דואר אלקטרוני: louiza@cbs.gov.il כתובת האתר: www.cbs.gov.il

3. Measuring the Actual Response Burden

The goal is to measure the time it takes to answer the demand for data.The methodological challenges of measurement are:

A) What should be included in the calculated/measured time? should it include the time of everyone involved in understanding the requests, collecting and processing the requested data, in addition to the time it takes to fill the questionnaire? Shall it include the time it takes to read letters of request, repeat letters, and the questions before participating in the survey? Shall it include the time of repeated communications in order to verify the data or to fix them?

B) After you know what to include and how to measure it, are the businesses to be asked directly, or to measure indirectly, i.g. through information that comes from the pre-test?

C) What to measure: levels or changes over time?

D) Accuracy of measurement.

In calculations the following should be considered:

E) Should big, medium and small businesses treated evenly?

F) Is it worth turning the “time” [scale] into “money” [scale]?

M) Whether to make adjustments accoring to response? Should the time it took to decide not to respond be included?

In addition to all these, it is an important question of whether to dismantle the overall burden into individual surveys and publish them.

A standardized approach to Measuring the Actual Response Burden was propsed by Eurostat (2009a):

(Actual Response Burden) $= \mathrm{R} \times T \times C$

When

R – The number of people involved in completing the questionnaire

T – The time it took for people involved

C – The cost of salaries of these people.

Previous to this [**Eurostat (2009a)**] approach, the Standard Cost Model (SDM) was [widely accepted]. SDM includes collecting of specific data from all business on all activites and the time spent on the activities related to survey.This was costly and time-consuming.

3.1 Measuring the Actual Response Burden in Bureaus around the world.

To understand the issue of measuring the Actual Response Burden in business surveys around the world, a comprehensive survey that included 42 countries was carried out: all Bureaus belonging to the European statistical system, in the addition of central bureaus of New Zealand, Australia, Canada, and the U.S. The web survey was carried out from November 2010 to February 2011, and the results are to be found in. (Giesen et al., 2010), the findings suggest that:

A) 16 bureaus measure the actual response burden by "time" terms alone.

- [Other] 16 bureaus measure both in terms of time and terms of money.
- One bureau uses the number of questionnaires sent to businesses as an indicator to burden.

B) Bureaus use a different data source to calculate the burden.

- 29 bureaus receive information directly from businesses, and some [bureaus] also receive estimates of experts (25 bureaus).
- 13 bureaus use studies for estimation of costs, and other [bureaus] use other sources.

C) In calculating the response burden, all bureaus include the time it took to fill in the questionnaire. Most of the bureaus also include the time it took for the search, collection and processing of data.

- In contrast, regarding other components, there are differences between the bureaus. For example, 13 bureaus include the time of repeated communications in order to verify the data or to fix them, while 16 others do not include this parameter.

D) 13 bureaus include all questionnaires sent. 11 bureaus include only the the questionnaires returned. And, 6 bureaus include both.

E) 16 bureaus keep a database of data/prescriptions?? of the burden on wcwer business. New Zealand uses this to monitor and control the burden.

4. Measuring the Perceived and Total Business Survey Burdens

First study on the subject was based on focus groups and in-depth interviews to understand the factors that contribute to the perceived response burden. This study paved the way for developing a questionnaire to measure various aspects of the actual and of the percieved burdens (Dale et al., 2007). Detailing of the parts of the questionnaire appear in (Jacqui Jones, 2013).

The questions are important in order to understand the problems and perceptions, but not always address the source of the problem. So, one can see that there is a problem in the survey questionnaire, but they would not know what specific questions cause this. The burden perceived by the respondent includes the actual burden and the perceived response burden. Different bureaus add additional questions in the survey to identify the perceived burden of specific surveys.

5. Reducing the response burden

Actions done to reduce the response burden can be put into four ctegories: 1) Actions related to demand for data; 2) Planning the survey and the samples; 3) Implemnetation and communications during the survey; 4) Raising confidence in the Bureau and in its actions.

5.1 Actions related to the demand for data

- The data should be well defined and minimalist.
- The data should be obtainable, realistic and adapted to the era.
- Using administrative or register data as possible and when possible.
- Construction of automatic data collection systems for administrative or other sources (XBRL).

5.2. Actions related to planning the survey and the samples

- Designs have to be adapted for the purpose, namely, to obtain accurate and reliable estimates. However, differential burden on the big, medium and small businesses should be taken into account.
- Integration and coordination of the various samples of organisation in most surveys and in most periods.
- Developing strategies for monitoring small business participation in business surveys and reducing the frequency of their participation.

5.3 Actions related to implementation of the survey and survey communications

- Importance of the survey and concrete uses of it need to be highlighted in the first communication and and in the collecting/surveying tools. This, in order to make the overall interest in the survey.
  - [It is important] to have an available Help Desk. Businesses should be able to contact the Help Desk for questions, inquiries at any time. Normally, email or phone number of a specific person shall be given to businesses. There are bureaus that have a special web-based system that developed was developed for htis purpose.
- Communication between the business and the organization/Bureau is managed and executed by an individual contact or a small dedicated team – there is an in-charge [for the process]. In particular, large businesses participating in numerous surveys have only one contact who handles all issues related to surveys.
- Preparation of calendars for businesses for their participation in certain surveys or other additional surveys, in order to help them plan and prepare.
- There are bureaus that perform "dependent interviews" – for example, who send the data provided last month to help fill the current month.
- Using the convenient and quick collection tools - electronic questionnaires for quick self-fill-out. Providing a choice of possible [alternative] survey/questioning methods.
- Using generic and/or standardized instruments in different surveys with similar formats.
- The questionnaire should be well designed, as this considerably lowers the percieved response burden.

רח' כנפי נשרים 66, פינת רחוב בקי, ת"ד 34525, ירושלים 91342, טל', 02-6592701 פקס' 02-6592703
דואר אלקטרוני: louiza@cbs.gov.il כתובת האתר: www.cbs.gov.il

- Clarity in relation to the investigation unit, the period that the data should treat and a deadline time forreturn the questionnaire.
- The notes and instructions in questionnaires should appear at the right place, where the respondent needs them.

  - Usually experiments are done to see whether the clarifications and instructions are comprehensible, synchronized between the surveys, and are in the right places.
- Changes to the survey and especially in relation to various questions need to be known to the respondent before receiveing the questionnaire, if possible, but certainly before filling in the questionnaire.
- The data should be obtainable, realistic and adapted to the era.
- Using administrative or register data as possible and when possible.
- Construction of automatic data collection systems for administrative or other sources (XBRL).

5.4 Actions related to raising confidence in the Bureau and in its actions.

- Confidence in the Bureau/organization begins with understanding of the functions of the Bureau.

  - Usually, it is customry to send relevant information about the Bureau and its unique roles in the first communication.

  - In addition, this information should be available in a variety of ways, e.g. Special bulletins, information on the Bureau web-site, and others.
- The respondent businesses should be assured about maintaining confidentiality and safety of data delivered by them. You must provide information about preserving the confidentiality over the first communication and in the gathering tools.
- In general, action should be taken to increase confidence in the Bureau as the body responsible for official statistics, that performs its job reliably and professionally.