

Response Burden in Business Surveys

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Current Situation

PRESENTERS:

RAM KANDIL
NOA REGEV

The Enterprises in Israel

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Businesses Grand total
505,258

With employees
(49%) 246,706

Self-employed and
Companies without employees -
(51%) 258,552

100+
3,582
(2%)

50-100
4,068
(2%)

1-50
239,056
(96%)

General

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- The structure of the business sector in Israel and the need for a representational sample increases the chances that a portion of the businesses will be sampled for more than one survey.

Furthermore:

- The number of business surveys performed by the CBS is increasing over the years, due to Israel's membership in the OECD and due to the need to provide policy makers with reliable and relevant information for economic development.

General

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- All the business surveys (about 35-40 in a given year) are conducted under the auspices of the Statistics Ordinance.
- The present CBS policy is to first and foremost “be concerned about the statistics”.
- Lately, the CBS has decided to strengthen the treatment and measurement of the response burden placed on the businesses that have to respond to the CBS

Past to Present Situation

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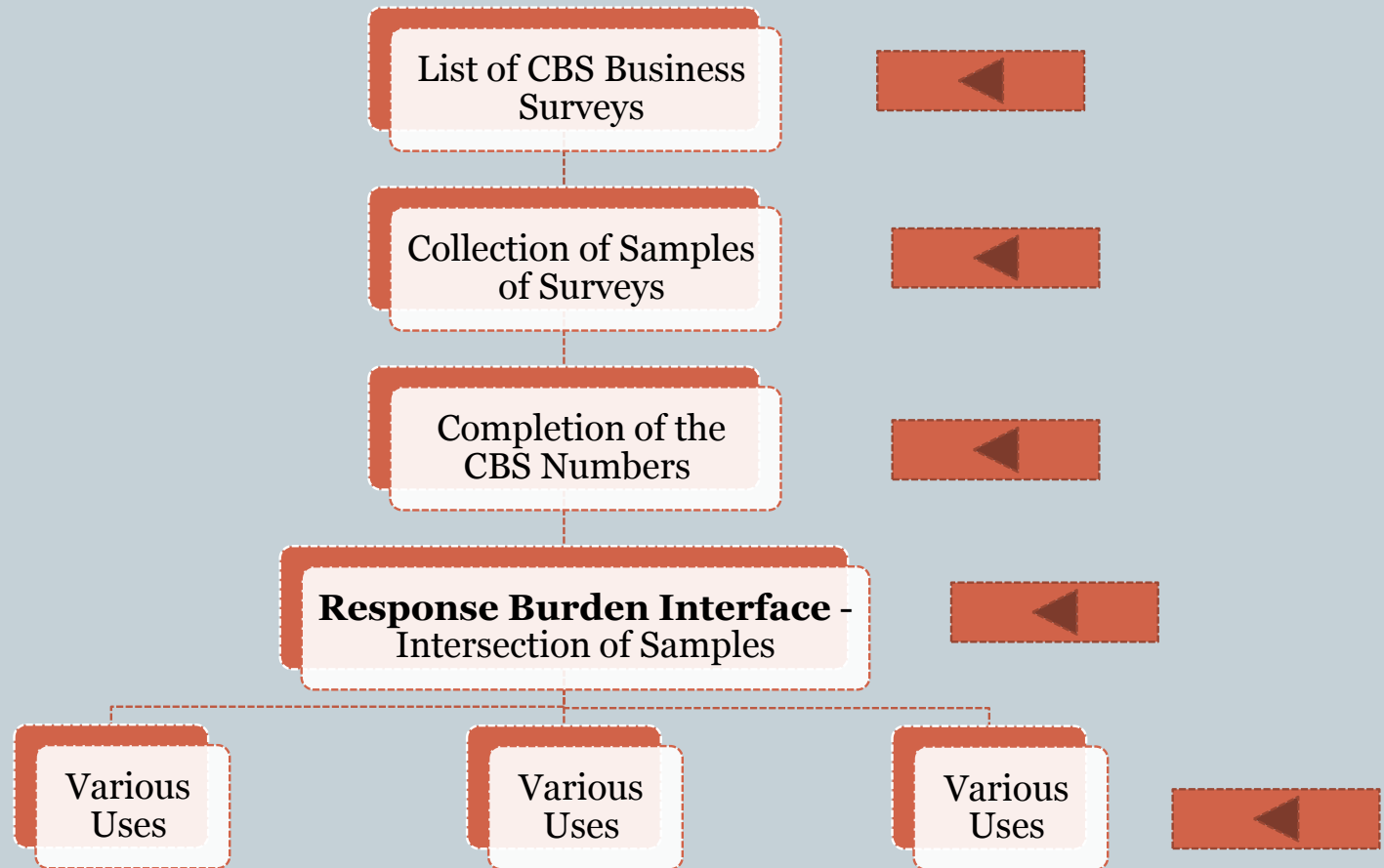
The Response Burden System was initially developed in 2010

Declared Goals of the Response Burden System:

1. Providing information to those who are directly collecting data, about additional surveys in which the company participates, and measuring the number of surveys per business.
2. Enabling the data collectors to fill out the questionnaire with the help of data on the sampled company, collected from other surveys.
3. Improvement of the treatment of refusals.
4. Building “smart samples”.
5. Providing a tool for determining policy on the response burden of business surveys.

The Structure of the Response Burden System

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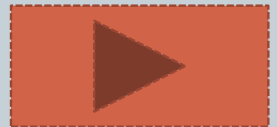
List of CBS Business Surveys

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The list is a mapping of all business surveys carried out in practice and planned to be performed in the test year.

characteristics of the survey collected

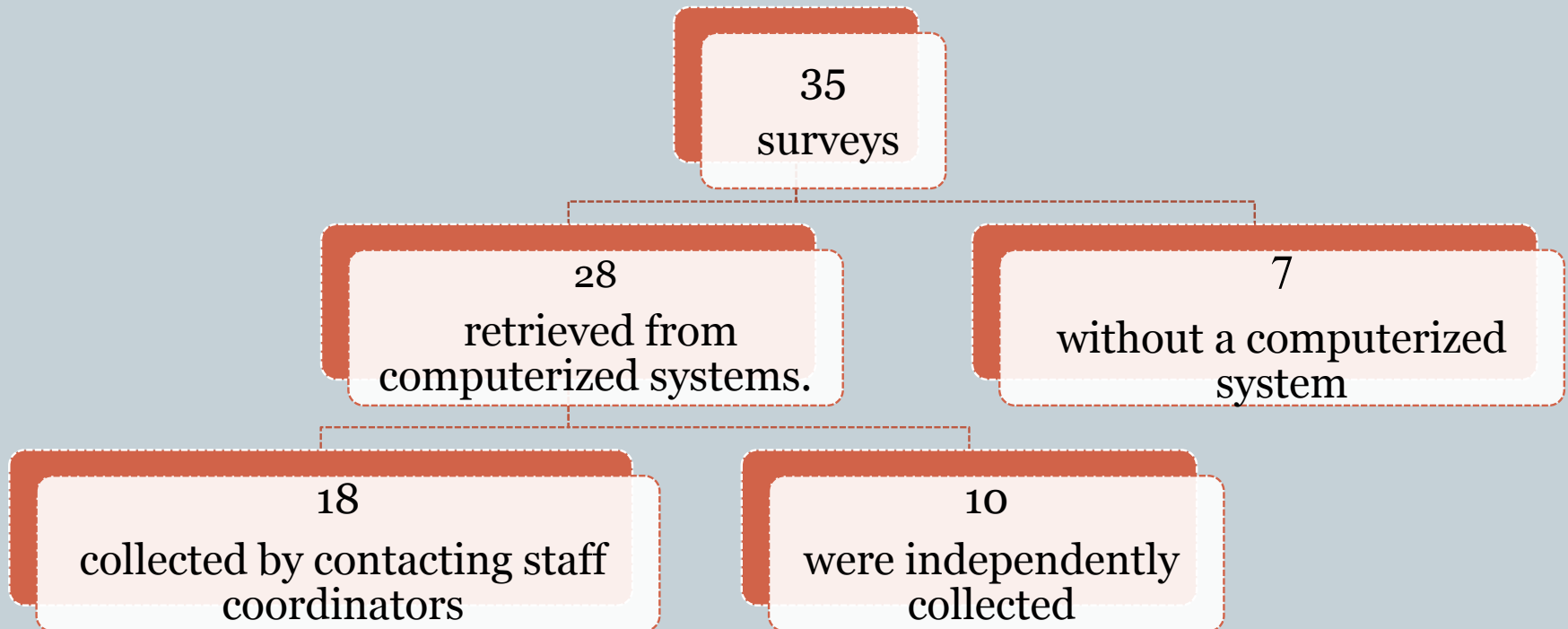
- Survey name
- Frequency
- Collection method
- Surveyed population
- Data collection period
- Estimated time to fill out the questionnaire



Collection of Samples of Surveys

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Collection is partially taken from the computerized surveys management systems, in an independent fashion:

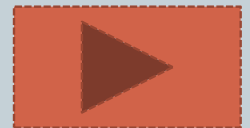


Collection of Samples of Surveys (Cont.)

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Samples of surveys were collected in a fixed standard record structure and included the following variables:

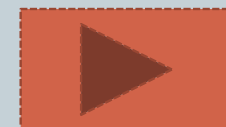
- CBS number
- Private Company number
- National Insurance Institute file number
- Name of the respondent at the company
- Phone number
- Business activity
- Code of the industry and description
- Status of the enumeration of the business (full enumeration, partial enumeration, not yet treated, not located, closed, etc.)
- Notes on the enumeration results
- Business mailing address



Completion of the CBS Numbers and Further Administrative Information

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- **CBS number** – is a single value number determined for a business by the Business register. This number is a master key for matching the investigative units that were collected in the framework of collecting samples.
- After completion of the CBS numbers, the size and characteristics of the Industries of the business were obtained and linked as well:
 - The average number of persons employed, by group size (1-20, 20-100, 100-300, 300+)
 - Annual revenue of the business, by group size (up to NIS 5 million, NIS 5-50 million, NIS 50+ million)
 - To which industry the business belongs (code + description)



Response Burden Interface – Intersection of Samples

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The database enables an updated picture and much information on the following, among other things:

- Total number of businesses that respond to more than one survey
- The distribution of those responding to more than one survey, by employee size groups.
- The distribution of those responding to more than one survey, by business revenue size groups.
- The distribution of those responding to more than one survey, by industry
- List of businesses responding to more than... (by choice: 1 survey, 2 surveys etc.).

Response Burden Interface – Intersection of Samples

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The database provides focused information on any business, including the list of surveys to which the business responds, and their characteristics (name of the survey, frequency of the survey, collection method, the surveyed population, data collection period, and an estimation of the time required to fill out the questionnaire).

Example of Information Presented on the "Business Card" of a Company that Participates in Three Survey

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Shilon Company, Ltd.

CBS No. 568972

Industry Code: 257

Name of Survey	Frequency of Survey	Collection Method	Estimation of time to fill out questionnaire	Business Name	Private Company Number	National Insurance Institute File Number	Name of Reporter	Tele-phone No.	Post Address	Enumeration Status	Notes
מלאי מסחר	רבעוני	catil	20 דק'	שילון מוצרים בע"מ	51113333	958745200	דני לוי	089445666		נפקד חלקי-המשך טיפול	המדווח הבטיח להשלים נתונים
משרות פנויות	רבעוני	catil	20 דק'	שילון מוצרי גומי בע"מ	51113333	958745200	רמי ליף	035666321	הגפן 7 ת"א	נפקד מלא	
תעשייה	שנתי	שטה	120 דק'	שילון בע"מ	51113333	963635895	דני לוי	089445666	הגפן 7 ת"א	טרם טופל	



Uses of the Response Burden System: Products for the Methods Units – Designing Smart Samples

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A Response
Burden file for all
business sampled



```
graph TD; A[A Response Burden file for all business sampled] --> B[Return Balance – Methods Unit];
```

**Return Balance –
Methods Unit**

The idea behind the above product is so that the unit responsible for sampling in the CBS can take into account the burden on businesses when sampling businesses for the various surveys.

Uses of the Response Burden System: Products for Determining General Policy

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- Refusal Report – [Link to Refusal Report November 2013](#)
- Participation in Business Surveys Report – This is a periodic report that details the range of business surveys carried out by the CBS in a given period (year). The report is distributed among the senior management of the CBS as well.

Uses of the Response Burden System: Process for Dealings with Refusals

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refusal



examined
necessity



Decision

Return Balance - Business Register

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Updated contact
information from
the field



update the CBS Business
Register - the main sampling
source at the CBS for business

VIC

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VIC – Very Important Company
Especial process for Handling selected companies



Noticeable Shortcomings

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- Update frequency – The current update frequency is low. We wish to improve the process of collecting samples and their absorption into the Response Burden System, and to strive for complete automation and update of the database (online)
- Measurement - The system **analysis** the response burden of a business mainly based on the number of surveys in which the business participates.
We aim for a response burden **analysis** based on other variables as well, such as response time, complexity and length of the questionnaire, the respondent's position in the company, and more.

Looking Ahead

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- The Response Burden System for business surveys is a good base for further treatment and development of a comprehensive policy for the growing response burden for businesses that respond to the CBS.
- Recently, use of the system and its products has intensified, and the "green light" has been given to continue its development.
- Among planned developments is the development of a **Response Burden Index**, which will provide a scientific and ranked comparative value for the response burden imposed on businesses.

Thanks for listening!



Response Burden System

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- In 2012, 24% of the sampled businesses participated in more than one CBS survey, and on the average responded to 2.6 surveys

From the Response Burden System – Updated to 2012

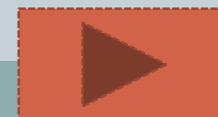
Total Surveys in Cycle	Total Businesses in Cycle	Participants in One Survey	Participants in Two Surveys or More	Not linked
33	12,107	7,395	2,940	1,772
	100%	61%	24%	15%

Participation of Businesses in More than One Survey

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שנת 2012	
12,107	משתתפים במחזור
מתוכם : משתתפים בשני סקרים ומעלה	גודל חברה (מספר מועסקים)
560	1-20
5%	
901	20-100
7%	
615	100-300
5%	
552	+ 300
5%	
312	לא ידוע
3%	
2940	סה"כ משתתפים בשני סקרים ומעלה
24%	

Participation in two or more surveys is **not limited to any certain company size**. All types of large, medium and small sized companies bear the burden more or less equally

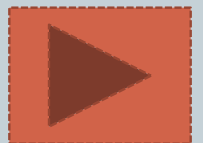


Participation of Businesses in More than One Survey – Cont.

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	Total businesses participating	Participate in 1 survey	Participate in 2 surveys	Participate in 3 surveys	Participate in 4 surveys	Participate in 5 surveys	Participate in 6 surveys or more
2012	12107	9167	1956	492	235	107	150
	100%	75.70%	16.20%	4.10%	1.90%	0.90%	1.20%

- About 24% of businesses participate in more than one survey
- Of those, about 16% participate in two surveys, about 4% in three surveys, about 2% in four surveys, and about 1% in five surveys.
- About 1% of businesses respond to more than six surveys.



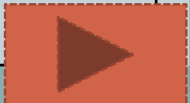
The Distribution of Those Responding to More than One Survey, by Business Revenue Size Groups

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Response Burden by Revenue
Cycle: 2012 Quarter 2

Date: April 4, 2013

Revenue	Total Participating in Cycle	Total Response Burden	Participating in 2 Surveys	Participating in 3 Surveys	Participating in 4 Surveys	Participating in 5 Surveys	Participating in more than 6 Surveys
unknown		1160 10%	662 5%	228 2%	113 1%	72 1%	85 1%
1-4,999,999		414 3%	377 3%	29	8		
5,000,000-49,999,999		748 6%	613 5%	94 1%	36	3	2
50,000,000 +		618 5%	304 3%	141 1%	78 1%	32	63 1%
	12,107 100%	2940 24%	1956 16%	492 4%	235 2%	107 1%	150 1%



כל המשתנים שנכנסו למדד עברו, כאמור, תקנון כדי שיהיו ברי השוואה, ושלכל משתנה יהיה משקל זהה במדד. בצורה זו כל המשתנים הם בעלי תוחלת 0 וסטיית תקן 1.

יהיו X_1 עד X_5 משתנים ממוצעים מתוקננים לעסק.

X_1 = ממוצע דירוג תדירות ביצוע הסקרים לעסק.

X_2 = ממוצע דירוג משלחי יד המדווח לעסק.

X_3 = ממוצע דירוג תוצאות הפקידה לעסק.

X_4 = ממוצע דירוג שיטות הפקידה לעסק.

X_5 = ממוצע הערכות זמן מילוי שאלוני הסקרים לעסק.

יהיו X_6 ו- X_7 משתני גודל של עסק מתוקננים.

X_6 = דירוג פדיון בסדר יורד.

X_7 = דירוג מספר מועסקים בסדר יורד.

יהי משתנה Y :

Y = מספר סקרים בהם העסק משתתף.

יהי משתנה YS מספר סקרים בריבוע מתוקן.

להלן נוסחת המדד :

$$MADAD = PER \cdot \frac{1}{2} + YS \cdot \frac{1}{2} = \frac{X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7}{\sqrt{VAR(X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7)}} \cdot \frac{1}{2} + YS \cdot \frac{1}{2}$$

Cate- gory	Division	Industry	Size group according to average employee jobs per employer			
						מעסיקים - סך הכל Employers total
			100+	50-100	1-50	
A	01-04	TOTAL	3,582	4,068	239,056	246,706 100.0%
B, C	05-34	Agriculture, forestry and fishing	78	202	7,448	7,728 3.1%
D, E	35-39	Manufacturing; mining and quarrying (2)	590	651	14,060	15,301 6.2%
F	41-43	Electricity and water supply, sewerage and waste management	17	29	597	643 0.3%
G	45-47	Construction	115	218	30,108	30,441 12.3%
H	49-53	Wholesale and retail trade and repair of motor vehicles	395	526	53,221	54,142 21.9%
I	55-56	Transportation, storage, postal and courier activities	115	139	11,500	11,754 4.8%
J	58-63	Accommodation and food service activities	234	505	13,820	14,559 5.9%
K	64-66	Information and communications	218	228	8,628	9,074 3.7%
L	68	Financial and insurance activities	72	72	7,469	7,613 3.1%
M	69-75	Real estate activities	9	27	6,772	6,808 2.8%
N	77-82	Professional, scientific and technical activities	175	224	38,973	39,372 16.0%
O	83-84	Administrative and support service activities	375	294	8,568	9,237 3.7%
P	85	Local, public and defence administration and social security	250	90	461	801 0.3%
Q	86-88	Education	344	344	7,440	8,128 3.3%
R	90-93	Human health and social work activities	359	215	14,524	15,098 6.1%
S, U	94-96, 99	Arts, entertainment and recreation	67	103	5,620	5,790 2.3%
		Other service activities; extraterritorial organizations and bodies	169	201	9,847	10,217 4.1%