# Motivation and burden in business surveys



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## **Outline of presentation**



- What is burden?
  - Actual burden
  - Perceived burden
- Links between perceived burden and motivation
- Studies on how to increase motivation
  - Facilitating businesses use of olfficial statistics
  - Providing beneficial feedback to the businesses
- Some challenges



## Why is respondent burden important



The burden of participation in business surveys should be minimized, as low as possible

#### The business perspective

Surveys = Time and resources spent on responding instead of on productive, profit-making, activities

### **National Statistical Institutes (NSI) perspective**

High burden = decrease data quality, increase costs of data collection

## The concept of burden



Burden = "costs" of participating (time, irritation etc)

Two parts

- 1) Actual burden (objective)
- 2) Perceived burden (subjetive)

### **Actual burden**



**Actual burden** = an objective measure of the amount of resources (usually time) spent responding to a survey

#### How is it measured?

- With survey questions on time spent on responding (in total or split into subtasks such as filling out the questionnaire, retrieving information etc)
- By estimation by NSI staff/experts

### **Actual burden**



#### How can the actual burden be reduced?

### By:

- Reduction of information request
- Improved questionnaire design
- Support functions
- Timing of the survey
- Using administrative data
- Flexible data collection
- Sampling (reduction of sample size or frequency of data collection, spreading the burden etc)

### Perceived burden



**Perceived burden =** a subjective measure of how burdensome the respondent perceives that the survey task is.

#### How is it measured?

 With survey questions on how easy/difficult the questionnaire was, how quick or time-consuming it was etc.

### Perceived burden



### How can the perceived burden be reduced?

The same factors as for actual burden *should* also reduce the perceived burden...

#### By:

- Reduction of information request
- Improved questionnaire design
- Support functions
- Timing of the survey
- Etc ...

... but sometimes they do not. Since it is about perceptions, it's much more complex

## A related concept - motivation



#### What is motivation?

A huge concept in psychology, several theoretical frameworks

### A, somewhat simplified, definition:

An inner drive to act towards a goal

An individual's motivation can vary in strength (from low to high). In general, highly motivated respondents should experience less burden but not necessarily...

... it depends on what the individual's goal is.

## **Examples of goals respondents might have**



I respond to avoid reminders and fines

I respond because the statistics are important to society

I respond because it benefits my business

Respondents with these goals might be equally likely to respond but for different reasons and with different consequences concerning burden

## Why?



## A general finding in research on motivation psychology:

Individuals provide better output and associate the task with more positive feelings if they, themselves, think that the task is important, compared to if they do it for external reasons (due to pressure, to avoid negative consequences, for a seperate reward etc).

### **Applied to the survey context**

Respondents who think the survey is important should provide better data and experience less burden, in general, compared to those who respond for external reasons

## **Examples of goals respondents might have**



I respond to avoid reminders and fines

I respond because the statistics are important to society

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Blue goals (importance): perceive less burden, better data Red goal (external): not necessarily so

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## Then, how can these be promoted?

SCB

I respond because the statistics are important to society

I respond because it benefits my business

### By, for example:

- 1) Facilitating businesses' use of the output of surveys NSI statistics
- 2) By giving useful information back to the businesses (i.e. feedback)

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## Study 1

1) Facilitating businesses' use of the survey output - NSI statistics

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Examined in the Blue-ets project – how businesses use NSI statistics and whether there are obstacles



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## Methods

- Three sources of information
  - I. The perspective of NSIs as producers of NSI (official) statistics (data on user support services, customer satisfaction surveys, invoices to businesses etc)
  - **II. The businesses' perspective** (39 interviews with different types of businesses)
  - III. The perspective of external experts" (21 interviews with businesses association representatives, chambers of commerce etc)









## Results - use of NSI statistics

- In general, NSI statistics not widely used.
- Depends on businesses size and industry
- Sometimes NSI statistics is used via a business association without the business necessarily realizing its' origin









## Results - use of NSI statistics

- Statistics used were those on:
  - wages and labour market, productivity, economic growth, trade, national accounts, CPI and other indexes, import and export, demographics









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- Statistics used were those on:
  - wages and labour market, productivity, economic growth, trade, national accounts, CPI and other indexes, import and export, demographics

#### These statistics were used for:

- benchmarking (comparison with competitors, industry, economy)
- market analysis (exploring new markets and new potential customers)
- reporting (annual reports, annual planning)
- tenders and official applications
- contracts and agreements (wage negotiations, price adjustment, etc)









## Obstacles – using NSI statistics

- 1) Lack of awareness what statistics exists at the NSI
- 2) Lack of awareness how it can be of use for the business







## Obstacles – using NSI statistics

- 1) Lack of awareness that what statistics exists at the NSI
- 2) Lack of awareness how it can be of use for the business
- 3) Issues with
  - a) finding data
  - b) using/interpreting data
  - c) correspondence of NSI data with internal data
  - d) timeliness of data
- 4) Need for additional (usually, more detailed) data or other classifications

Thus, these are things to work on and try to counter if to improve businesses' use of NSI statistics.



## Then, how can these be promoted?

SCB

I respond because the statistics are important to society

I respond because it benefits my business

### By, for example:

- 1) Facilitating businesses' use of the survey output, official statistics
- 2) By giving useful information back to the businesses (i.e. feedback)







## Study 2

## 2) By giving useful information back to the businesses (i.e. feedback)

Lorenc, Persson, Berg, Ansanius, Bergman and Karlsson









## 2) By giving useful information back to the businesses (i.e. feedback)

An experiment – if/how different text additions to a reminder letter in SBS influence motivation and, in that way, the response rates

Påminnelse2		November 2011
FÖRETAGETS! ADRESS POSTORT	NAMN	
	Företagens e	konomi 2010
	Ert svar saknas	
	För en tid sedan fick ni brev anglende Föreingens skonomi 2010 som vi bad e i. Vi saknar fordrannde ert svar. Vi ber er därför att narast skicka in stylida uppgifter: Syfter med tundersklaningen är bland annat att beskriva den ekonomika utvecklingen för sventka företig per brancki och region.	
	Om ni shicket in efterfrågede uppgifter denne påminnelse	under de senaste degarne ber vi er bortse från
	undersöllningen av uppgiftsskyldigk statistiken. Statistiken regleras även statistiken och SCB:s föreskrifter (SC	alla unvalda företag medverkar, omfattas iet enligt lagen (2001-99) om den officiella av förordningen (2001-100) om den officiella B-FS 2009-13). Om uppgifter som omfattas kan ni komma att förefäggas vid vite att
	Uppgifterna ska avse organisations nu	mmer:
	Skicks in efterfrägsde uppgifter suur www.scb.se-fek-där det finns mer information om undersökningen	Användarid: Verdena 11 Lötenord: Verdena 11
	Tack på förhand för er medverkan!	
	Med vanis habeing	
	Unka Ansanias	
	Ulrika Anzanius Produktionsansvarig	
	Om uppgiftslämnandet Uppgifons som lämna skyldas otligt 14	nakilda arbetastallen att kunna identifieras.
	(2009 400). Vid gubliconing kommer inga r Surerid har skett med. Naringalivets Rogels	
Statisti Statistics S	Sereid har sket met Nanngaliveta Regeli iska centralbyrån	Kontakta oss gärna Teletor: 018-178070 Fax: 018-178024









## 2) By giving useful information back to the businesses (i.e. feedback)

#### The ideas were:

- Information about getting beneficial feedback ("key ratios") should improve motivation -> response rates
- 2) Explaining the purpose of the survey and how useful it is to society should improve motivation -> response rates

I respond because it benefits my business

I respond because the statistics are important to society



## 2) By giving useful information back to the businesses (i.e. feedback)

### Four experimental groups

- Standard SBS reminder (mentions feedback but peripheral)
- 2) Enhanced version (more emphasis on the feedback part)
- 3) Useful to society (replaces feedback)
- 4) None of the motivating paragraphs

Businesses randomnly assigned to the four groups.







## 2) By giving useful information back to the businesses (i.e. feedback)

1: business, standard	2: business, enhanced	3: society	4: none
1541	1541	1540	1541
410	366	355	370
0.27	0.24	0.23	0.24

No significant differences









## 2) By giving useful information back to the businesses (i.e. feedback)

#### **Conclusions**

- Letters might be a too weak form of communication
- The respondents might not have read the letter carefully enough
- Sample persons did read but were not influenced by the letters (perhaps didn't find the feedback useful?)

-> follow-up study









## Study 2b

## 2b) Follow-up on how the feedback was perceived

Lorenc, Persson & Wibell







## SCB

## 2 b) A follow-up study on the feedback

- All the businesses that responded to the survey (SBS) got the feedback in a seperate letter after the data collection
- What happened with the feedback?:
  - Did they notice the feedback letter?
  - How did they react to it?
  - Did they dowdnload the key ratios?
- A qualitative interview study-among 30 of the (randomly selected) businesses that received the feedback

unded under Socio-economic Sciences & H

## SCB

## 2 b) A follow-up study on the feedback

- 22 respondents remembered the letter
- 15 remembered the possibility to download key ratios from SCB:s web page but only 3 did so.
- 4 respondents forwarded the letter to someone else in the business
- 8 respondents were spontaneously positive to getting feedback
- Timing of feedback (at the end of year)
- The requirement to log in on SCB:s webpage might have been a threshold







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Thus, many remembered, some were spontaneously positive but, in the end, few downloaded the feedback.



## Summary of the feedback study



- 22 of 29 respondents remembered the letter
- 15 remembered the possibility to download key ratios from SCB web page but only 3 did so.
- 4 respondents forwarded the letter to someone else in the business
- 8 respondents were spontaneously positive to getting feedback
- The requirement to log in on SCB:s webpage might have been a threshold

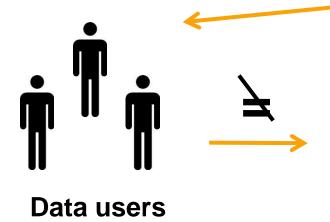
Thus, many remembered, some were spontaneously positive but, in the end, few downloaded the feedback.



## A final challenge

## Who should be motivated?





They might use and be motivated by NSI statistics





From an NSI perspective, we want to increase their motivation



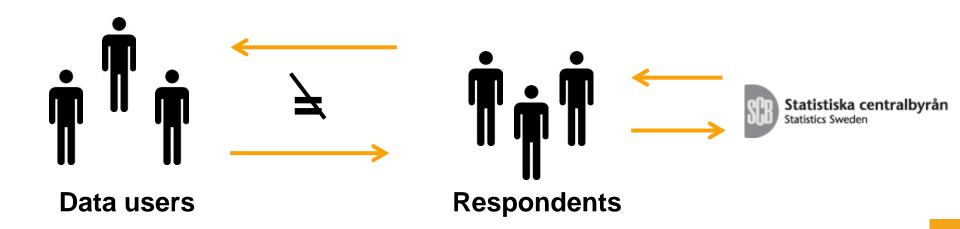


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## A final challenge Who should be motivated?



However, the data users are unknown to the NSI, we have to communicate through the respondents/contact persons

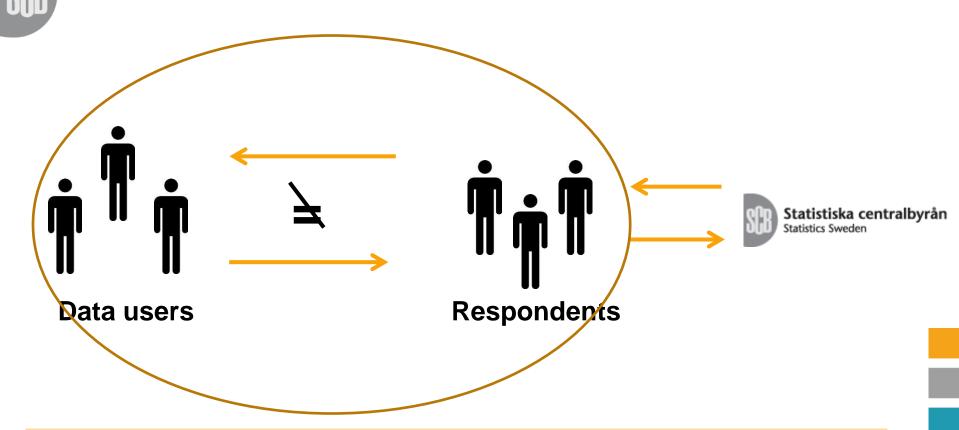






## A final challenge

Who should be motivated?



This communication within the business is beyond the NSI's control. A communication challenge – how do we reach the "right" persons?

## **Summary**



- Burden should be minimized
- One way to reduce perceived burden can be to increase motivation
- Motivation should be increased by making responding to the survey beneficial for businesses...
- ... by facilitating businesses use of NSI statistics
- Challenge to communicate what the NSI can offer, how it can be useful and to reach the "right" persons within the business









## Thank you!

#### References

- Bavdaz (ed.) (2011). Business perspectives on NSI statistics. Blueets report
- Dale & Haraldsen (eds.) (2007). Handbook for monitoring and evaluating business response burden
- Deci & Ryan (2008) SDT: A macrotheory on human motivation
- Giesen (ed.) (2011). Response burden in Official Business Surveys.
   Blue-ets report
- Snijkers, Haraldsen, Jones & Willimack (2013). Designing and conducting business surveys





