

# GETTING DATA FOR BUSINESS STATISTICS: A RESPONSE MODEL

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## 1. Getting data for business statistics

Traditionally, data for business statistics are collected by NSIs using paper forms. These forms are characterized by detailed items to be answered by business respondents. Furthermore, a lot of technical terms are used, and explained by many and long definitions. These definitions stem from government regulations, which often are not in line with the information that is available in business administrations. Generally, these surveys are mandatory.

Nowadays, many businesses complain more and more about the completion of these forms. The arguments we hear from businesses are: “What is the goal of this survey?”, “What is in it for me?”, “It takes too much time to complete.”, “A lot of detailed information is asked for, that I do not have, or takes too much time to look for.” Although, a survey is mandatory or is conducted by a government, businesses are aware of the burden of surveys, and they no longer comply willingly. The completion of surveys has the least priority. This affects the response rate, the timeliness of the response, as well as the data quality.

These two sides (the National Statistical Institute (NSI) and the business), and their interests, will be discussed in the response model that I present in this paper (figure 2). The model evolved out of my experiences with business surveys at Statistics Netherlands (Snijkers, 2007). It is based on the framework for business survey participation as presented by Willimack, Nichols and Sudman (2002), which in itself is based on the conceptual framework for survey cooperation as defined by Groves and Couper for social surveys (1998). Another model is presented by the NSIs of Sweden, Norway and the UK, which describes factors that affect response burden (Hedlin, Dale, Haraldsen & Jones, 2005; Dale & Haraldsen, 2007). The models contain the same elements, but there are differences in emphasis. I adopt a behavioural scientific approach, focussing on behaviour of people in businesses and their response behaviour.

With this model I would like to contribute to business survey methodology with regard to identifying factors in the data collection process and parameters that are in and out of control, their (inter)relationships and their effect on response. With this framework in mind conscious decisions with regard to these parameters can be made. Also, it helps to identify areas for further research.

## 2. The basic model

The starting point for the model is the data (see figure 1). These data are needed for research or for producing statistics. The survey organisation wants to get the data in time, to be as complete as possible (i.e. without unit and item non-response) and to be of good quality (i.e. as less measurement error as possible, see e.g. Biemer & Lyberg, 2003). In a simple situation, a specific survey is conducted with sampled businesses according to a survey design. With the survey design the survey organisation tries to control the data collection process, i.e. tries to influence the behaviour of the business respondent –the response behaviour– in order to get the required response.

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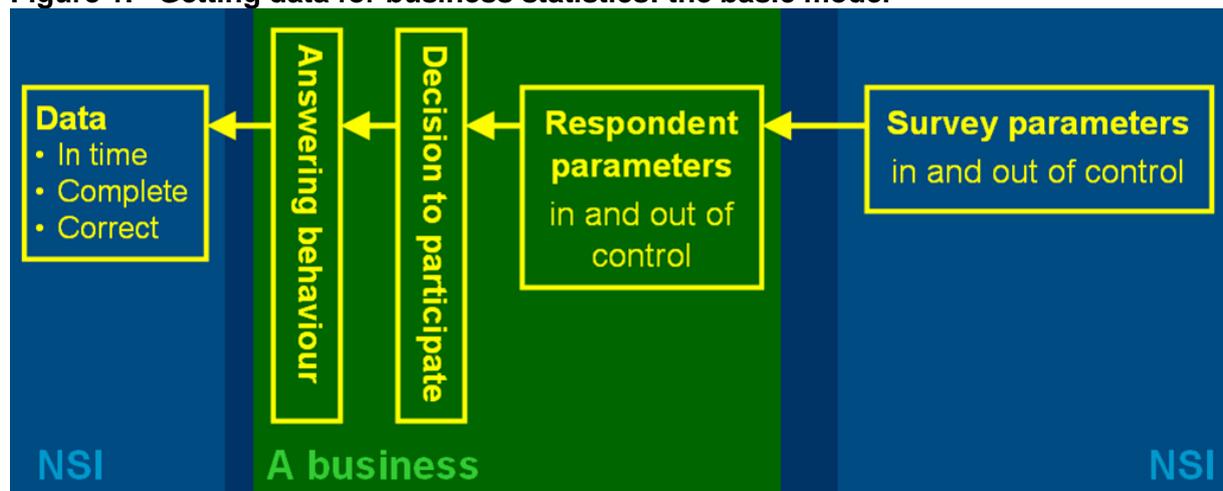
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Paper presented at the 4<sup>th</sup> European Conference on Quality in Official Statistics, 8-11 July 2008, Rome, Italy.

The views expressed in this paper are those of the author and do not necessarily reflect the policies of Statistics Netherlands.

In my view, the concepts *data* and *behaviour* are central in the methodology of data collection. Methodology indicates how a survey can be designed, how a respondent's behaviour can be influenced in such a way that the researcher quickly acquires complete and good responses (figure 1; the full model is shown in figure 2). This response behaviour can be subdivided into two separate but related phases: 1) the request for participation in a survey, and the subsequent decision, and 2) if the business in question agrees to participate, the subsequent answering behaviour when filling in the questionnaire. Studies indicate that behaviour displayed when people are approached to participate in a survey, influences their answering behaviour (Couper, 1997; Stoop, 2005). E.g. when people are reluctant to participate because they are not interested, they may adopt a minimizing answering behaviour in stead of a conscientious attitude.

**Figure 1. Getting data for business statistics: the basic model**



### 3. The survey organisation

In this data collection process both businesses and the survey organisation have different interests: the survey organisation wants something, which the respondent is not always willing to provide. The question is: How can the survey organisation reach its goal?

In order to answer this question we need to firstly ask ourselves what means the researcher has to his disposal for conducting a business survey (Willimack et al., 2002; Groves & Couper, 1998). To make matters easier, I will assume that the following survey elements have been specified (see figure 2):

- The topic of the survey. The topic indicates the study's theme, such as, turnover, environmental investments, the number of job openings and business activities.
- The population studied and the sample. A good sample design using an adequate sampling frame which is a valid representation of the target population.
- The authorities commissioning the survey, sponsors, and the survey organisation conducting the survey. Statistics Netherlands e.g. conducts research commissioned by Dutch ministries and Eurostat.
- A number of organisational preconditions, such as resources (budget, capacity), and time schedules (including deadlines for publication of the data).
- Legal and ethical norms, such as, the legal requirement to participate and the confidentiality of the information provided. The reporting of information was made mandatory by the Dutch government to guarantee reliable data regarding the state of the Dutch economy.

These parameters of the survey are of influence to the response. This is, however, dependent on the way the survey organisation manages them. This holds e.g. for the way the survey is

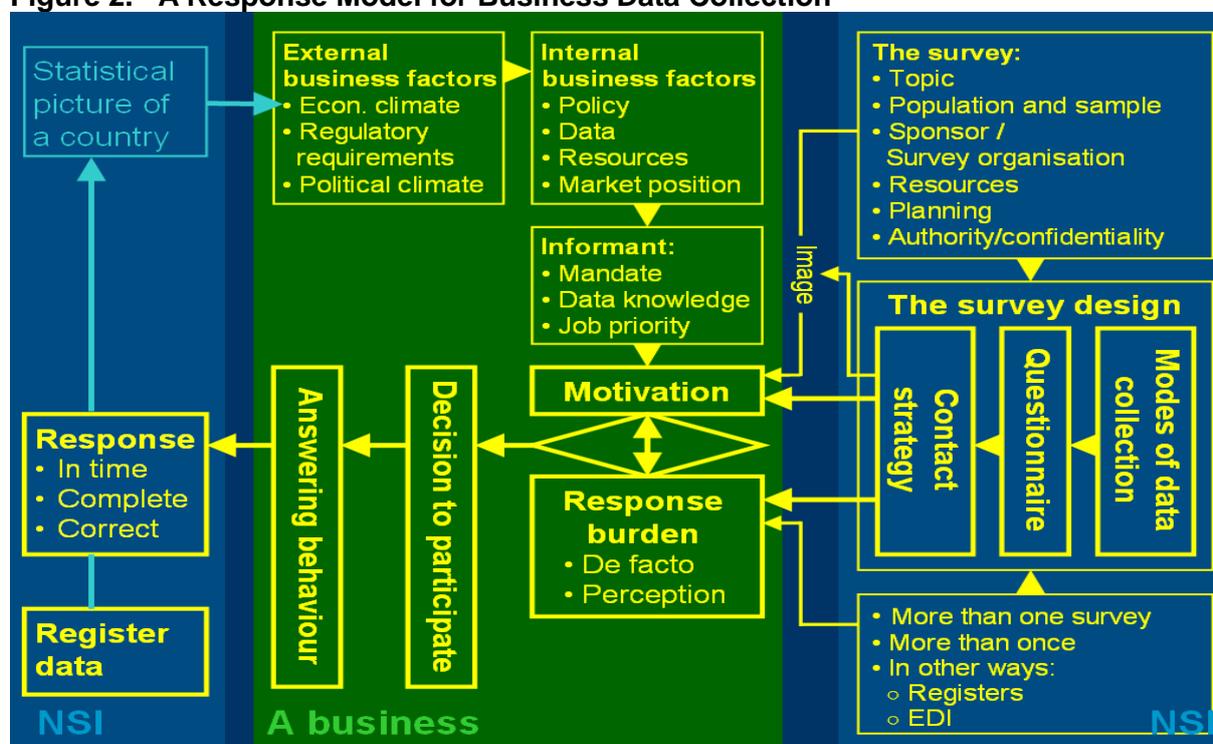
introduced to sampled businesses. At some point in time they will be informed about the survey and the topic, e.g. by receiving a letter. In the case of a household survey, the respondent's interest in the survey topic is an important parameter that influences response behaviour (Stoop 2005; Groves & Couper 1998). In the case of business surveys the businesses' own interests and the usefulness of surveys are also relevant factors. But above all the availability of the requested data in their administration and the ease to retrieve the data are of influence to the response behaviour (Willimack et al. 2002; Giesen, 2007). Also, the legal requirement to participate is an important factor in this context (see section 4).

Perhaps the businesses are already familiar with the authorities commissioning the survey and the survey organisation. For example, businesses know Statistics Netherlands from newspapers, the daily news on TV, the Internet or previous surveys. The image that businesses have of Statistics Netherlands as a research organisation is partly determined by this. Willimack et al. (2002) state that government agencies achieve higher response rates than do academic researchers.

Available resources, which usually are limited, set the organisational preconditions a researcher has to deal with: there is always a shortage of money, people and computers. This may influence the overall design of the survey, meaning that no optimal design may have been developed. Also, the time schedule is a factor that should be taken into account. In general, there is never enough time to fully develop the survey, e.g. do extensive pre-testing before going into the field. Also, deadlines with regard to the publication of statistics or research results limit the period of data collection. This may result in non-response, e.g. when at the end of the data collection period the data are not yet available or when businesses are busy with other, more important, activities.

At present days, the challenge NSIs face is to make tailored and relevant, integrated and coherent statistics, thus providing more information. This has to be done in less time, with less money and less compliance costs for businesses.

**Figure 2. A Response Model for Business Data Collection**



How the researcher deals with these elements, is to a certain extent influenced by policy of the survey organisation and internal culture. The researcher now has three means to his disposal in order to influence response behaviour. These are:

- the mode of data collection method, for example, via mail, internet or a mix of these,
- the questionnaire, and
- the contact strategy, including communication tools such as letters and brochures.

### 3.1 Mode of data collection

The mode of data collection of the survey is a choice that is made at an early stage. It involves e.g. the choice between a mail survey or a web survey, or a mix of these.

Up till now, Statistics Netherlands mostly uses the paper mode for business surveys. In 2005 Statistics Netherlands adopted an integral data collection strategy (Göttgens et al., 2005). As for primary data collection, this strategy requires to first of all use the Internet mode. An important motivation for this was that it would be easier for businesses to fill in an e-questionnaire, and therefore reduce the administrative burden. Furthermore, the data quality of web surveys in general is better as compared to paper, which requires less data cleaning afterwards. This makes the internet mode cheaper, which is also another important argument as we have seen.

Another reason in favour of this choice is the fact that many businesses request web surveys. This is also shown by American (Willimack et al. 2002) and English research. Dowling shows that businesses find web surveys easier than paper questionnaires (Dowling, 2005; Dowling & Stettler, 2007). She does however remark that the questionnaire has to be designed for communication via the screen. If this is not the case, people will quit and turn to paper again.

It is important to choose a mode that suits the possibilities of businesses. Not all companies can be approached via the Internet, some are not able to open the questionnaire due to their strict firewalls, and others prefer paper questionnaires. In order to still obtain response we will have to offer alternative options. The Internet is supplemented by paper questionnaires, telephone, or face-to-face interviews. In practice, several modes are combined in *mixed-mode* designs. This means that different questionnaires have to be developed: one per mode. The questionnaires are similar in terms of content, but their design and presentation differ (De Leeuw et al., 2008).

Methodological research has been conducted into the benefits and restrictions of different modes and its effect on response behaviour (see e.g. De Leeuw, 2005; see Couper, 2008, for a discussion on the role of technology in surveys). Based on this kind of research we know that the choice for a mode influences response behaviour. These studies were conducted in a social survey setting. Similar research is also relevant for business surveys. Research at Statistics Netherlands e.g. shows differences in response behaviour (Hoekstra, 2007) and data quality (De Nooij, 2008) for web and paper modes for the Monthly Survey. In short, for this survey, web reporting is faster and results in better representativity (or at least is not worse) than paper.

### 3.2 The questionnaire

The design of the questionnaire is a separate process within the survey design. It will be clear by now that selecting a particular data collection mode will influence the questionnaire design.

The questionnaire is an important tool with which the researcher can influence the respondent's behaviour. Via the questionnaire the researcher communicates with the respondent. In order to make this communication process run smoothly, the questionnaire has to be ergonomically and communicatively well designed. In business surveys the questionnaire often is an instrument to be self-administered; no interviewer is present to provide help. Respondents who fill in the questionnaire have to find their way in it by themselves. If the questionnaire is not well-designed people get lost (Snijkers, Onat & Vis,

2007; Dillman, Gertseva & Mahon-Haft, 2005; Jansen & Steehouder, 2001). Therefore we have to give guidance to respondents.

The first step in questionnaire design is the translation of theoretical concepts into observable variables (Hox, 1997). This means that the questionnaire should match information that is available within businesses. In the next step the actual questionnaire is designed. This step includes the ordering of the questions, question wording, answering categories, instructions, the structure, the visual design, and its length.

The design of questionnaires is discussed in great detail in methodology handbooks. Guidelines which have to be considered, are listed, such as: write questions that everybody understands, do not use difficult words and keep the questions as concise as possible. These guidelines are necessary, but the actual design of a questionnaire leaves a lot of creative decisions to be made. The guidelines are often not concrete and at times contradict each other. The effect of the implementation of these guidelines on the user friendliness of the questionnaire is not clear. A way to discover this is by pre-testing questionnaires (Willis 2005; Snijkers 2002).

In addition to this instrumental approach, more research is needed with regard to cognitive, psychological and communicative processes that underlie the completion of a questionnaire. The main question is: How do people fill in a questionnaire, and how can we adjust the questionnaires to this? In modern handbooks this is discussed, as is pre-testing (Groves et al. 2004; De Leeuw, Hox & Dillman, 2008).

Examples of research in this field are the studies by Norbert Schwarz (see e.g. Schwarz & Sudman 1996) and Roger Tourangeau (Tourangeau, Rips & Rasinski 2000). They apply knowledge of our brain and memory to questionnaires. Another example is a paper by Herbert Clark and Michael Schober from 1992, in which principles from conversation analysis and language use is applied to questionnaires.

Other examples are the research by Mick Couper (2002) and Don Dillman (2000; Dillman et al., 2005). Both study the relation between the layout of a questionnaire, its user friendliness, and its effect on response behaviour. Dillman refers to this as *visual design*. According to Dillman (2006) people's approach to a questionnaire consists of three steps: 1) elemental scene organisation, 2) pattern recognition, and 3) task-oriented process. It is only in the third step that people will really read and answer the questions one at a time. Another approach is discussed by Jansen and Steehouder (2001). They present the kick-and-rush strategy, indicating that people start at the top and rush through the questionnaire, until they get stuck in the questionnaire. People have a task-by-task approach without prior orientation.

More research into these kinds of completion strategies is needed. At Statistics Netherlands e.g. audit trails collected with the e-questionnaire of the Structural Business Survey (Snijkers, Onat & Vis, 2007) are being analysed. These are recorded entries while filling in the questionnaire. Preliminary results identified a number of completion profiles (Snijkers & Lammers, 2007): people who print out a questionnaire first and then fill it in from paper, people who complete it as quickly as possible, and thirdly people who try to fill in a questionnaire as correctly as they can.

### **3.3 The contact strategy**

The third and last factor with which we can influence the respondent's behaviour in the context of the survey design is the contact, or communication strategy. This strategy is first of all aimed at getting the questionnaire to the respondent, but it can also be used for other purposes: to motivate and stimulate respondents to participate.

Contact strategy elements are: selection of the right contact within a business, the participation invitation, possibly a background information brochure, the distribution moment, the letters of reminder, the manner and moment of reminding respondents to participate, and the use of incentives.

It is common practice for respondents to receive an advance letter to the questionnaire in which the survey is introduced. This letter briefly discusses the topic, the survey organisation, the importance of participation, the return date, the legal requirement statement, the confidentiality of the data and a telephone number for further information. The letter can be accompanied by a brochure containing background information. If the respondent does not respond in time, a reminder letter is sent; sometimes the questionnaire is included again. Using the telephone for reminding is another option.

Yet again it remains unclear what a letter should look like and what language should be used, and when to use what communication means. In other words: How do you get the respondent to participate? Or: How do you sell the survey? Here, knowledge of social psychology, communication processes and marketing can serve methodology.

An example in this direction is a study by Groves, Cialdini and Couper (1992) in which they applied six social psychology persuasion principles to the communication of surveys. These compliance principles are: reciprocity, consistency, social validation, authority, scarcity and liking (see also Cialdini, 2001).

Based on this theory a project was started to discover the compliance principles used by Statistics Netherlands in its communications with respondents. In this project letters and the website of Statistics Netherlands were analysed. The result of this project indicated that Statistics Netherlands mainly uses the authority principle. This refers to someone's tendency to participate more likely because an authoritative institution commissioned or conducts the survey. This also includes the mandatory status of surveys. In addition, Statistics Netherlands attempts to come across as a sympathetic organisation ('liking') by lending a helping hand when necessary, providing postage paid envelopes and thanking people for their contribution. The other principles are hardly used, even though businesses are susceptible to them (Snijkers, Berkenbosch & Luppens, 2007; see section 4).

One of the other principles is reciprocity. This means: if I do something for you, I will get something in return; 'one good turn deserves another'. Translated to surveys this means offering an *incentive*. At Statistics Netherlands a benchmark incentive for the Short Term Statistics has been developed (Snijkers, Berkenbosch & Luppens, 2007). A quantitative analysis to research the effect on the response rate is not yet completed.

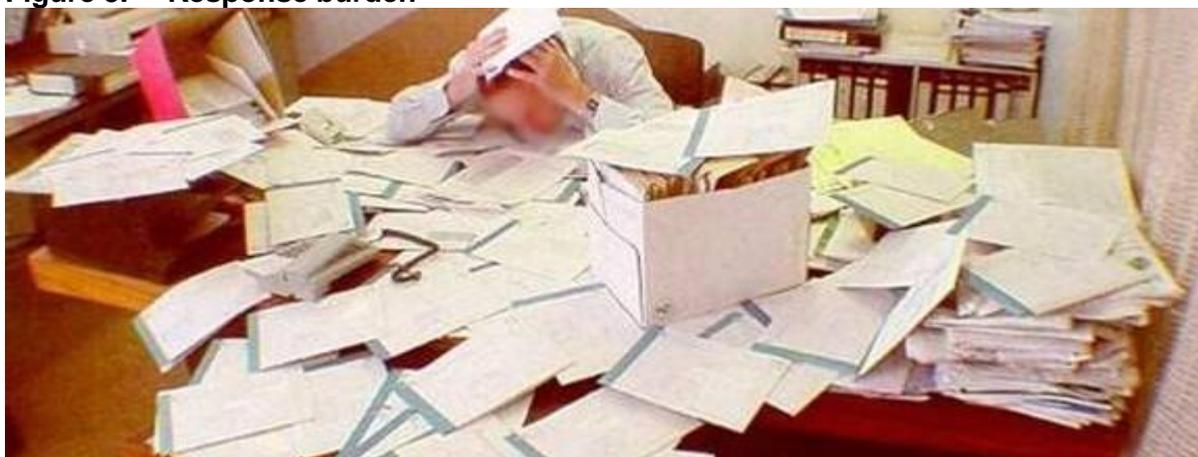
### **3.4 More than one and more than once**

So far I have only discussed the conduction of one survey. In reality, Statistics Netherlands sends out more than one business survey. For almost every aspect of the Dutch economy a survey is conducted, such as macroeconomic developments, market prices, inflation, employment, industrial accidents, turnover growth, environmental investments, international trade, the transportation of goods, etc., etc.

Businesses receive questionnaires about all of these topics. Furthermore, they often receive the same questionnaire more than once, for example every month. The way businesses experience this, is shown in figure 3. You can see a desperate gentleman surrounded by envelopes of Statistics Netherlands. This adds to the burden business already experience by the many other requirements they have to comply with (see section 4.1). Figure 3 may be seen as a visualisation of response burden.

In setting up a survey, researchers have to keep this in mind. When designing surveys, the various questionnaires have to be attuned to one another in terms of content and design, e.g. by using the same (visual) design guidelines, using the same definitions of concepts, and avoiding overlap across questionnaires. Also with regard to sampling the researcher should look into attuning samples to one another, e.g. by using the same unit definitions, coordinating over samples in order to reduce overlap across samples, and rotating over time by introducing survey holidays.

**Figure 3. “Response burden”**



### **3.5 Alternative ways of data collection**

Apart from sending out questionnaires, data can be collected in numerous ways. In section 3.1 I have mentioned the integral data collection strategy of Statistics Netherlands with regard to primary data collection (Göttgens et al., 2005). This strategy is based on the new Statistics Netherlands Act from 2003, which demands the use of administrative data: first of all administrative data have to be used, unless this cannot be realised due to time constraints, completeness or the quality of the registers.

The data collection strategy consists of two main steps, preceded by an obliged step:

0. Determination of user requirements with regard to the statistical information.
1. Secondary data collection: first of all use administrative data, from e.g. the Tax Office, the Chamber of Commerce or the Dutch Employees' Insurance Union (UvW).
2. Primary data collection (surveys): only if the administrative data cannot be used, surveys may be conducted.

It is obvious that a clear fine-tuning amongst the two collection steps must be guaranteed. This means that in practice different sources will be combined, resulting in a *multi-source* data collection design, or even a *multi-source/mixed-mode* design when combined with surveys. As a consequence, the data available in registers do not have to be requested anymore. One can understand that this has far-reaching consequences for surveys: questionnaires can be shorter and samples smaller, and even the elimination of particular surveys as a whole (like is the case in e.g. Finland (Orjala, 2008) and Portugal (Chumbau, Neves & Pereira, 2008)).

Using administrative data instead of or in combination with survey data has been discussed for many years now. Research on this issue has been presented at the three International Conferences on Establishment Surveys (ASA, 1993, 2000, 2007).

Another way of collecting data is by electronic data interchange (EDI), e.g. by XBRL (eXtensible Business Reporting Business Language). This is a new Internet technology, which allows for the automatic retrieval of financial data from a business's administration. This can be done once the correct connections in the business administration have been made,

according to the definition of concepts. Businesses applying for this technology still are in the sample, but they do not receive a questionnaire (Roos, 2008).

#### **4. The business**

So far I have discussed the researcher, his role and his means. I will now continue with the respondent: a business. As is the case with the researcher, I will discuss some factors that influence response behaviour. These factors are –to a large extent– out of control of the researcher. Willimack and her colleagues at the US Census Bureau described these factors in their framework (Willimack et al., 2002). They distinguish three levels: the external business factors, the internal business factors, and factors at the level of the informant.

##### **4.1 External factors**

The external business factors as described by Willimack et al. (2002) consist of the economic climate and administrative obligations. During a recession businesses will be less willing to participate in a survey, because of struggles with the competition or lack of personnel (this effect is corroborated by Willimack, 2007a). Furthermore, the survey-taking climate is determined by administrative duties with respect to the government and business organisations. Businesses have to report about many, many aspects of their dealings. Participation in a survey is then not a top priority. Willimack et al. (2002) even indicate that surveys are often a minor priority, which is also the case in the Netherlands (Giesen, 2007; Snijkers, Berkenbosch & Luppens, 2007).

To the external factors, I also add the political climate: how does the government view these administrative obligations? In the Netherlands, but also in other European countries, there are many debates about the administrative burden caused by legislation.

The Dutch government strives for a drastic reduction of this burden. By the end of 2002 the administrative burden of entrepreneurs constituted 16 billion Euros. The last cabinet wanted to boost the Dutch investment climate by decreasing the administrative burden with 25% in the years 2003–2007. This objective was completed in 2007. With the forming of a new cabinet in 2007, a new reduction round of 25% commenced. The World Bank (2006) has expressed her appreciation for this policy, but also indicated that the communication, especially with businesses, could be improved.

The reduction of administrative burden is not only an internal affair. Approximately half of the total administrative burden is caused by international requirements; many statistics are produced because of Eurostat regulations. Recently, the European Commission has set the goal of decreasing this burden in Europe with 25% by the end of 2012. This will reduce the burden caused by NSI even more.

Statistics Netherlands has been working on the reduction of the administrative burden since 1994. By the end of 2005 this was reduced by 75% from 80 to 19 million euro. This is only 0.12% of the total of 16 billion Euros (Snijkers, 2007).

The actual contribution of Statistics Netherlands to the administrative burden is therefore minimal. However, the Dutch Economic Institute for Small and Medium-sized Businesses, EIM, indicates that when it comes to the most irritating activities for small and medium-sized businesses, complying with statistical obligations from e.g. Statistics Netherlands or the Dutch Chamber of Commerce are at number one (Vendrig, 2005). The EIM states (ibid: 9-10):

*‘Statistical obligations are considered as THE administrative burden that irritates entrepreneurs the most. However, the statistical obligations are not even mentioned in the summary of the main causes for the administrative burden.’* Businesses want to get rid of the *‘obligations that are most removed from their own business processes.’* They have to fulfil

obligations *'for which they have not been consulted and which they consider pointless. As soon as they do see the value of these obligations and/or there is a connection with their business activities, the irritation decreases immediately.'*

As the three main irritations the EIM lists (Vendrig, 2005): the supply of pointless and double information, the use of surveys in general, and the number of obligations. Also the Dutch Committee for the Reduction of Administrative Burden for Businesses, the Stevens Committee, discusses this and calls *'irritating compliance costs a result of unnecessary information obligations and interpretation differences about definitions'* (Stevens Committee, 2005) the second most annoying obligation in the top ten of irritating obligations.

These conclusions have led the Dutch Liberal (VVD) Member of Parliament C. Aptrout to twice in 2006 propose a motion to lift the small and medium-sized businesses' obligation to participate in statistical data collection. I wonder if this measure will decrease the administrative burden. Since the burden caused by Statistics Netherlands already is very small (as we have seen above). Furthermore, there is some evidence that businesses categorise all questionnaires as coming from Statistics Netherlands, even when they are not. They do not distinguish between government and other agencies (like branch organisations); to them it is non-profitable work.

The solution to this problem is not the endless reduction of samples and questionnaires. It is my belief that we cannot compromise the quality of statistics unduly. The decrease of the administrative burden can be achieved in different ways. Two ways are the implementation of tailored multi-source/mixed-mode data collection designs (as discussed in section 3), and the abolishment of unnecessary regulations.

Yet more is possible. What I expect of politicians is the stimulation of more collaboration and harmonisation among organizations that collect data with businesses, like the Tax Office, the Chambers of Commerce, and branch organisations, with regard to data collection and data sharing. Also it is important to stress the importance of data quality, in order to get good statistics. This would create a different survey-taking climate.

In this political discussion on burden and necessity of statistics, the focus is on the burden. This influences the response behaviour of businesses in a negative way. Here, two compliance principles are effective (Groves, Cialdini & Couper, 1992; Cialdini, 2001): authority and social validation. The latter principle states that businesses are consistent in their actions and policy, with other businesses or organizations with whom they identify. However, there are more principles that play a role.

#### **4.2 Internal business factors**

This brings me to the internal business factors that influence response behaviour. For a business it is most important to survive in an age of increasing globalisation. All activities are aimed at retaining, improving or obtaining a good market position (Willimack, 2007b; Sudman et al., 2000). All other activities are of less importance. This viewpoint will influence a business's attitude towards a survey: It is firstly a business expense that is not beneficial in any way. Businesses however deal with this differently.

Many businesses quietly cooperate and do what is expected of them. They try to answer the questions as best as they can. Estimates are not good enough, because they want to represent themselves as correctly as possible. The business can also promote its responsibilities towards society: it presents itself as a business with a social conscience. Complying with requests from the government is part of this policy.

These businesses are willing to participate. The compliance principle is authority ('I will do what the government asks of me') and consistency ('I am consistent in my actions,

based on my policy'). Yet, it should not require too much of an effort. Even for these businesses there is a barrier. The required data have to be available and businesses need to have the time to be able to participate. Reliable response will firstly increase when the requested information corresponds better to the available information and definitions of a business's administration, and when the data can be easily retrieved. Secondly, it will also increase when employees have the time to fill in the questionnaire and when there are not more pressing matters at work. Thirdly, the number of questionnaires that have to be filled in at that moment should be limited.

Other businesses have a less positive attitude towards surveys. They are irritated by the double questions, questions that do not correspond to their administration, and the many details. Jan van Vroenhoeven of the Dutch Employers' Union in the provinces of Brabant and Zeeland (Brabants Zeeuwse Werkgeversvereniging) states (Vroenhoeven, 2006: 23): *'The costs outweigh the added value'*. Here he refers to the reciprocation principle: one good turn deserves another.

These businesses are also annoyed by the fact that they are approached to participate more than once. *'Once Statistics Netherlands has located you, they will not let you go'*, and *'Select another company'* are often heard remarks (Snijkers, Berkenbosch & Luppés, 2007). The principle of scarcity ('I represent others') does not apply. It is even more irritating when the questionnaire regularly changes in terms of design and content. Furthermore, they find the questionnaires pointless.

These businesses participate because it is mandatory. Statistics Netherlands does not gain a positive image by emphasising this over and over again. To quote Jan van Vroenhoven once more (Vroenhoven, 2006: 23): *'What disturbs me the most is the tone of voice. Instead of emphasizing the why of surveys, Statistics Netherlands poses threats of penalties or managerial fines in her correspondence'*.

This concise analysis shows that the communication by Statistics Netherlands does not correspond to the arguments that businesses are susceptible to (Snijkers, Berkenbosch & Luppés, 2007). Of course... the surveys are mandatory, but the reciprocation principle could be used more. Through benchmarking e.g. the societal use of the surveys will become apparent. It is important that this information is presented on a silver platter<sup>2</sup>. Also it is recommended to speak the language of the entrepreneur ('liking'). Furthermore, the principle of social validation can be used to seek the cooperation with branch organisations. In this way the internal business factors could be influenced. However, research into the effectiveness of these tailored communication strategies on reducing perceived response burden is needed.

This seems to be especially true for small and medium-sized businesses. For the large and influential businesses this is not as big an issue. They have employees to deal with these matters. Also, they have incorporated the completion process into their own processes. In addition, they know that without their contribution it is impossible to obtain a good overview of the Dutch economy ('scarcity'). On the other hand, because they are so large, they are in many surveys. Also for large companies running the business is given priority, and again timing of the survey request, availability and retrievability of the data affect the response behaviour (Sudman et al., 2000).

#### **4.3 The informant**

External and internal business factors determine the response behaviour of a business. Yet this is not the end of the discussion. The third and last factor that is of importance is the informant. This is the person within a business that fills in the questionnaire. If it is not the

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<sup>2</sup> A complicating matter here is that in businesses the employees providing the data may be other employees than the ones using statistics. In some cases we have noticed that they do not know this from each other.

managing director, this person has to have permission to fill it in. He will need to have knowledge of and access to the right sources within the business. Finally, he will need to prioritise the assignment (Sudman et al., 2000).

Often in businesses surveys, the informant is not just one person, but a number of employees. The questionnaire has to be passed to others who match the above criteria. When the right informant is not known the questionnaire may float around within the company before reaching the appropriate provider. Sometimes managers serve as a coordinator with regard to the survey request, and make sure that the job is done. However, they may also watch over their personnel and serve as a gatekeeper (Dillman, 2000) making sure that first things come first, and assignments are carried out according to internal priorities. On the other hand informants may also use the mandatory character of surveys to persuade managers that a survey request has priority (Giesen, 2007). As for a researcher this process is hard to influence.

For recurring surveys (Bavdaz, 2006) the informant usually is known and is addressed directly with new data requests. When informants leave, change position or are temporarily absent this may influence the response.

## **5. The decision to participate**

So far I have discussed almost all factors that influence participation and answering behaviour. I have shown what the researcher can do, and how business factors influence response behaviour. What still needs to be discussed is at the heart of the model, namely the balancing out of positive and negative incentives (figure 2). As I have shown, the business can have a positive but also a negative intrinsic motivation to participate. The researcher can influence this motivation by stimulating response behaviour, e.g. with incentives, or by the right communicative strategies. On the other hand participation places a burden on the organisation. This is a cost, a negative incentive. How a business experiences participation is dependent on business factors, but also on the design of the survey and how it is adapted to the company.

In this assessment, the perceived response burden outweighs the actual burden. A survey may be a burden, but if businesses do not experience this they will be more motivated to participate. This is exactly where the importance of a proper survey design is shown, in which –in my view– communication plays a vital role. In summary, this means in terms of the survey (Snijkers & Luppens, 2000): send the questionnaires to the *right person* (the person that has access to and knowledge of the data, and has the authority to fill in the form, or to delegate this task), ask the *right information* (information that is really needed, that is not available in other sources (like administrative data), and businesses can provide), do this at the *right moment* (the moment in which the business can deliver the information, and has the time and motivation to fill in the form), and do it in the *right way* (the way that suits the procedures of the business best, and by using the compliance principles). The result is a *tailored multi-source/mixed-mode* design.

The balancing out of positive and negative incentives determines eventually what a business will do. If the assessment turns out positively we will obtain data. In combination with administrative data, these data are used to determine the state of the economy, and many more statistics. This is in turn, input for businesses.

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