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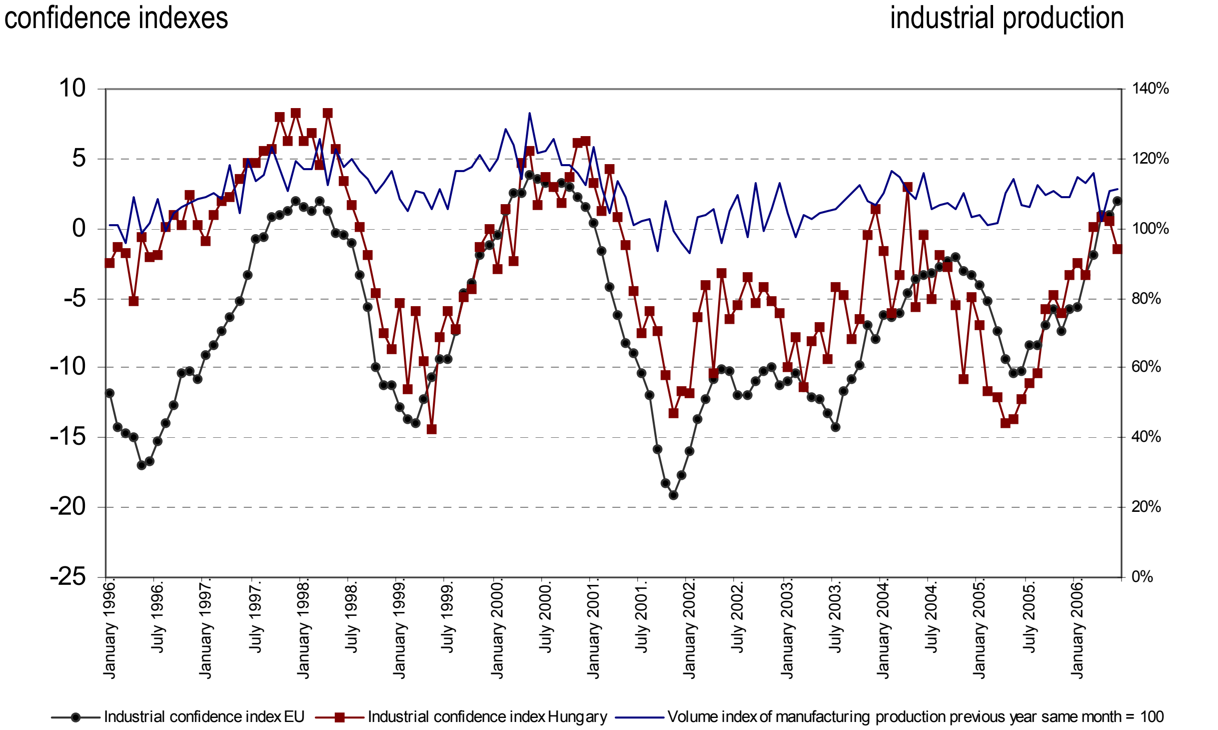
The habits of respondents, their opinions on business surveys and the reasons for non-responding

PAPER FOR EU WORKSHOP ON RECENT DEVELOPMENTS IN BUSINESS AND CONSUMER SURVEYS

GKI Co. has conducted monthly business tendency surveys since January 1996[1]. The first surveys covered the manufacturing industry and the retail trade sector, but they became soon applied in the construction, and service sector as well. The survey method used was published several times (for example: *Papanek – Petz – Vértes* [1997]).

Fig. 1

Industrial confidence index* in the EU and Hungary, and volume index of the manufacturing production in Hungary



* The industrial confidence index is a seasonally adjusted index computed from answers about production in the recent past, expected production in the near future, order books and stocks.

[1] The GKI Economic Research Co. has conducted economic tendency surveys since 1992; its predecessor, the Economic Research Institute since 1968. Between 1968 and 1989 about 2-3 surveys of the Hungarian economic processes were done each year. These surveys supported the planning activities of the National Planning Office. That time the GKI documents often highlighted the unfavourable perspectives, especially the possible deviations from the plans, thus the survey results were confidential. At the end of the 1980s, the time of the political changes, the situation changed: the Office ceased to exist and economic surveys became demanded both by companies and policy makers (*Csernenszky – Papanek – Pető* [1992]). In 1992 GKI became an independent company, and the today present techniques of forecasting evolved.

We have always considered the monitoring and ex-post evaluation of the business tendency survey results (and the forecasts based on these results) important. The above cited papers have already shown the reliability of the results of GKI Co.' surveys. From time to time the forecasts are checked against actual statistics. It has been verified that the results of industrial surveys are relatively reliable in the short term (when trend lines are stable), which means that they coincide with the economic situation at the survey date (see Fig.1). If there was a turning point, we have rarely managed to capture greater future changes in industry either. By using the available macro-economic information, sometimes GKI can improve the forecasts based on the company expectations, but these actions do not necessarily improve reliability of the long-term forecasts (*Németné – Papanek - Petz* [2000], *Tóth* [2000], *Papanek – Petz – Sulok* [2004]).

In the present paper we analyse reliability of the surveys again. We assess the bias caused by non-responders based on the results of telephone interviews. Out of 1000 non-responders of the industry and service surveys conducted in May 2006, we have called 100-100 companies. Distribution (stratification) and random selection of the interviewees were ensured. We have to say that we still do not know the opinion of those non-responders, who – by principle – always strongly refuse to respond. Nevertheless, during implementing the telephone survey, we saw that this group was relatively small. In the telephone survey we wanted to collect information for two reasons. First, we wanted to have an overview about the opinion on the GKI surveys and the willingness of the involved firms to take part in surveys. Second we overlook the pitfalls of surveys as regards sampling and weighting. E.g. we examine the consequences of the inclusion/omission of the answers of large companies, and the under-representation of micro companies.

We showed in our 2006 CIRET conference presentation in Rome, that in general non-responding does not cause bias in the results of the manufacturing industry and services sector business tendency surveys. We conclude it on the basis of a research, which compared the results of the original postal surveys and the ad-hoc telephone interviews, with the help of some regular survey questions.

The first - introductory - questions of the telephone interviews asked about the company opinions on the survey and about position of the responders. We found the answers quite reassuring. Most of the responders had no doubts about the usefulness of the GKI's EU harmonized business tendency surveys: they said that the collected information was useful and rated the professional standard of the work as quite good (86 % said that the surveys were suitable to measure business expectations).[2] They also told that the responders were mostly those, who had the requested information (Table 1).

Table 1.

Position of responders (%)

Position of the responder	Number of employees				Industrial	Service	Total
	-20	21-50	51-250	251-	companies		
Executive	83	70	55	61	76	65	70
Production, sales manager	-	3	8	4	5	1	3
Other middle manager	17	19	26	35	16	28	22
Employee	-	5	11	-	2	5	4
Who has just the time	-	3	-	-	1	1	1
Total	100	100	100	100	100	100	100

[2] Executives are more critical in this question than the average.

As the table shows, it is mostly the executive, who takes part in the business tendency surveys. This refers to a high reliability level of the answers, even if we take into account that the responder sometimes tries to show “politely” the ideal conditions of the company’s answers.

The further questions asked about the willingness to respond and the causes of non-responses.

There are many explanations why companies do not answer postal or electronic questionnaires. Losing the questionnaire, forgetting to answer, considering questions as confidential are reasons that appear in the sample randomly and they usually do not have a substantial impact on the final statements of the survey. In the case of other reasons, results can be (sometimes extremely) biased. E.g. such situations occur when dominant companies in a sector hide their intentions, or when companies in unfavourable business situation would not like to lose their reputation by answering our questions etc. The task of the present paper is to analyse the latter mentioned type of survey errors.

Taking into account the responders’ positive attitude towards the GKI surveys, it is not surprising that they rated their own willingness to respond at a much higher level than the usual response rate (30-40% higher than the 10% real response ratio, see Table 2).

Although the telephone interviews covered the non-responders of the May survey, several companies told us that they did answer the survey in May!

Table 2.

Breakdown of responders by the frequency to answer the questionnaire (%)

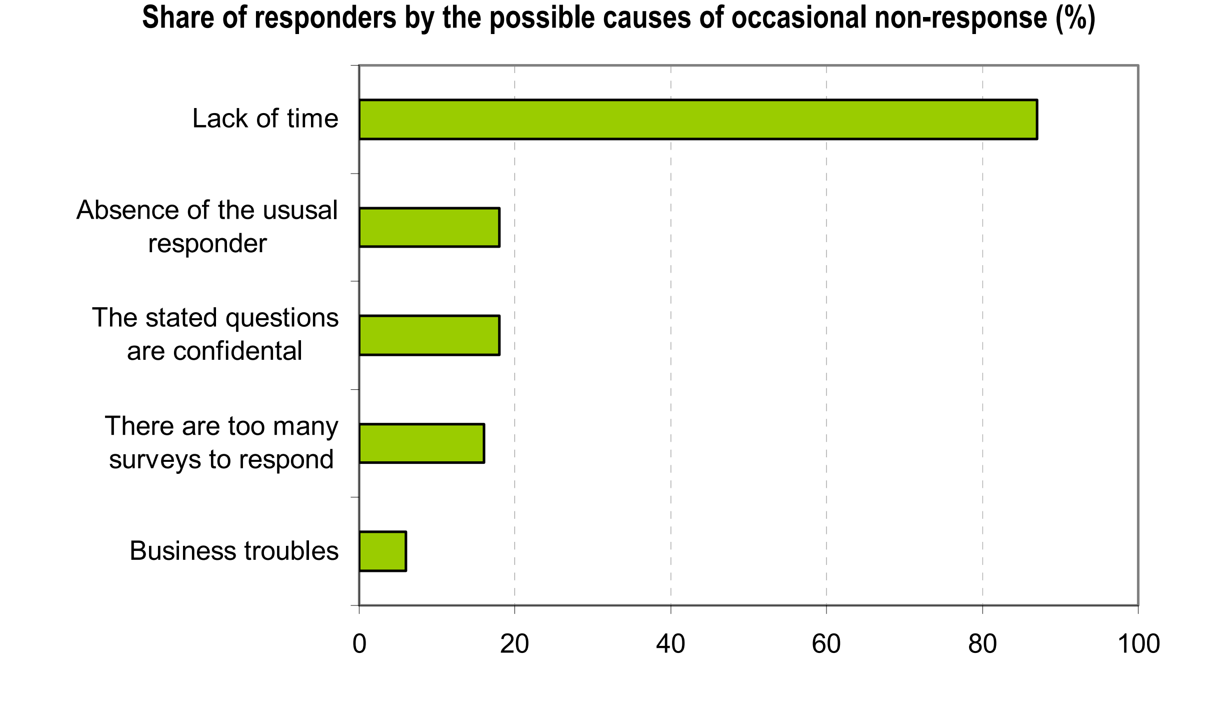
Frequency to answer the questionnaire	Number of employees				Industrial	Service	Total
	- 20	21-50	51-250	251-	companies		
- usually	62	57	53	65	44	68	56
- sometimes	36	35	32	35	43	27	35
- never	2	8	15	-	13	5	9
Total	100	100	100	100	100	100	100

As the table shows, the presumed response ratio is much higher in services than in industry, slightly higher in small and large companies than medium ones. Further, the response ratio increases from West to East within the country. In light of the actual response rate, small service companies assume to answer the questionnaire more frequently than they actually do.

> In spite of the above conclusions, we shall not forget, that in some sectors there are important monopolies. In the case of these sectors we always have to check whether we received respond from a company in a dominant position or not.

In the telephone interview we also asked about the possible causes of occasional non-responses. The results are depicted in Fig.2.

Fig. 2



The most common cause of non-responses is the lack of time, which is thought to modify the results only to a small extent (companies in business troubles caused are only a few in number). However, one-fifth of the companies deny responding because of the problem of confidentiality. Fortunately larger companies do trust GKI, but this only reduces and not eliminates the risks. As the data in Table 3 shows, there are no large companies that refuse to answer referring to confidentiality.

Table 3

Share of responders by the possible causes of occasional non-response (%*)

Cause of non-response	Number of employees				Industrial	Service	Total**
	- 20	21-50	51-250	251-	companies		
Absence of the usual responder	15	8	14	12	25	11	18
Lack of time	92	92	95	81	90	84	87
There are too much surveys to respond	12	17	14	25	16	16	16
Business troubles	4	8	9	-	7	6	6
The stated questions are confidential	4	17	14	-	15	22	18

* It was possible to give more answers, so the sum of the frequencies can exceed 100.

** Some companies did not give information about the number of their employees and the proportion of companies treating the questions confidential is high among them. This explains why figures by staff category are lower than the total.

We believe that the presented telephone survey results reinforce the reliability of the GKI business cycle surveys.

Conclusions:

- Non-responding usually does not distort significantly the results of the business tendency surveys of GKI Co.
- The research showed, first of all, that the majority of Hungarian companies is not averse to business tendency surveys.
- Hungarian companies consider the results of the surveys useful.
- Non-responding is mostly the consequence of the lack of time - probably in random distribution.

Bibliography

Judit ADLER – Judit BARTA –Tamás KOPIK- Raymund PETZ: The contradiction between survey results in the service sector and service sector situation. Causes and solutions 27th CIRET Conference, Warsaw, September 2004

Csernenszky L. – Papanek G. - Pető M.: *Business Surveys and Business Forecasts in Hungary.* In: Oppenländer, K.H. - Poser, G. - Nerb.G.: New Development of Business Surveys in Central and Eastern European Countries. CIRET Studien. 1992. No. 42.

Németné P.K. – Papanek G. – Petz R.: Reliability of Sample Data in GKI Co.'s Enterprise Surveys. Paper presented at the CIRET Conference, Paris, 10-14 October 2000.

Papanek G. - Petz R. - Vértes A.: *EU Harmonized Enterprise Surveys in Hungary*. Statisztikai Szemle, special edition in English, 1997.

Tóth István János: Vállalati és lakossági konjunktúra felmérések Magyarországon. (Enterprise and Consumer Surveys in Hungary). Institute of Economics, HAS. 2000.

Adler J. – Papanek G. – Munkácsy A.: Confidence intervals in the GKI Business Tendency Surveys 28th CIRET Conference, Rome, September 2006