DEVELOPMENT OF BUSINESS AND CONSUMER SURVEYS
IN CENTRAL AND EASTERN EUROPE

SUMMARY OF WORKSHOPS
1991-1996

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris

54343

Document incomplet sur OLIS
Incomplete document on OLIS
FOREWORD

The development of reliable statistics, oriented towards the requirements of policy-making in a market-based economy, is a key component in the programme of the Centre for Co-operation with the Economies in Transition. Activities on statistics include the provision of advice on the practical implementation of Western statistical systems focusing on those areas where the OECD possesses internationally recognised expertise (e.g. national accounts, prices and volume measures, short-term economic indicators and business surveys) and the development of a database of key economic statistics to monitor economic and social developments.

Within the framework of the CCET programme, the Transition Economies Division of the OECD Statistics Directorate has worked since 1991 with the European Commission and its Statistical Office (EUROSTAT) to develop a programme of business tendency and consumer surveys in transition countries. These surveys provide a cost-effective means of generating timely information on short-term economic developments.

This document focuses on the evolution of business and consumer surveys in Central and Eastern Europe through the deliberations of a series of workshops over the period 1991-1996. The paper outlines the main points and issues discussed at each workshop. The issues covered include the development of harmonised questionnaires to enable the compilation of data comparable between transition countries and OECD Member countries located in Europe and European Union Member countries. In providing background information to some of the decisions associated with the development of business and consumer surveys this paper provides useful information on the problems and issues faced by transition countries in the development of their surveys.

This paper complements other documents published by the OECD on business and consumer surveys in transition economies. These documents are:

- *Business Tendency Surveys in Transition Economies: Methodological Review and Recommendations for Harmonisation*

- *Cyclical Indicators and Business Tendency Surveys*

- *Cyclical Indicators in Poland and Hungary*

- *Seasonal Adjustment of Industrial Production Series in Transition Economies*

This document is published on the responsibility of the Secretary-General of the OECD.
## TABLE OF CONTENTS

FOREWORD ............................................................................................................................ 3

INTRODUCTION .................................................................................................................... 6

OPINION SURVEYS FOR BUSINESS AND CONSUMERS AND TIME SERIES ANALYSIS 
MUNICH, 24-25 JUNE 1991 .......................................................... 8

1. INTRODUCTION ................................................................. 8
2. BUSINESS AND CONSUMER SURVEYS IN MARKET ECONOMIES .................. 8
3. CYCLICAL ANALYSIS AND OPINION SURVEYS .............................................. 14

HARMONISATION OF BUSINESS TENDENCY SURVEYS IN INDUSTRY 
BRATISLAVA, 6-8 APRIL 1992 ........................................................... 15

1. INTRODUCTION ............................................................................ 15
2. HARMONISED QUESTIONS ......................................................... 15
3. SUMMARY OF OTHER TOPICS DISCUSSED AT THE WORKSHOP ................. 21

HARMONISATION OF SURVEYS IN RETAIL TRADE AND CONSTRUCTION SECTORS 
WARSAW, 16-18 NOVEMBER 1992 .................................................. 22

1. INTRODUCTION ............................................................................ 22
2. HARMONISED QUESTIONS ......................................................... 22
3. OTHER TOPICS RELATED TO HARMONISED SURVEYS ............................... 25

IMPLEMENTATION OF BUSINESS SURVEYS EVALUATION OF EXPERIENCE TO DATE 
POZNAN, 24 JUNE 1993 ................................................................. 27

1. INTRODUCTION ............................................................................ 27
2. RECENT EXPERIENCES IN TRANSITION COUNTRIES ............................... 27
3. SAMPLE DESIGN AND SURVEY OPERATIONS ....................................... 31
4. EVALUATION OF SURVEY RESULTS ............................................. 32
5. INTERPRETATION AND ANALYSIS OF SURVEY RESULTS ....................... 34

INTRODUCTION OF HARMONISED CONSUMER SURVEYS IN CENTRAL AND EASTERN 
EUROPE PRAGUE, 18-20 APRIL 1994 .................................................. 37

1. INTRODUCTION ............................................................................ 37
2. CONSUMER SURVEYS CONDUCTED IN TRANSITION COUNTRIES ............ 37
3. HARMONISATION OF QUESTIONNAIRE .............................................. 41
4. OTHER TOPICS DISCUSSED AT WORKSHOP RELATING TO CONSUMER SURVEYS 
................................................................................................................................. 43
5. CONSUMER SURVEYS AT INSEE: EVALUATION AND USE FOR SHORT-TERM ECONOMIC INDICATOR ANALYSIS .................................................................45
6. THE EXPLANATORY POWER OF THE EUROPEAN UNION HARMONISED CONSUMER SURVEY RESULTS .................................................................46
7. CENTRAL AND EASTERN EUROBAROMETER ..................................................47

QUALITATIVE BUSINESS SURVEYS REVIEW, EXPERIENCE AND EVALUATION TALLINN, 14-16 SEPTEMBER 1994 .................................................................49

1. INTRODUCTION .................................................................................................49
2. SURVEY IMPLEMENTATION ...............................................................................49
3. TECHNICAL DESIGN ISSUES ...........................................................................50
4. HARMONISATION OF QUESTIONNAIRES .........................................................51
5. SUMMARY OF OTHER TOPICS DISCUSSED AT WORKSHOP .........................55

QUALITATIVE BUSINESS SURVEYS, REVIEW AND ANALYSIS SLIVEK, BULGARIA, 5- 7 JULY 1995 .................................................................58

1. INTRODUCTION .................................................................................................58
2. HARMONISATION - REVIEW OF IMPLEMENTED SURVEYS .................................58
3. EXPERIENCE WITH SURVEYS IN A MARKET ECONOMY .....................................67
4. THE USE OF SURVEY RESULTS IN ECONOMIC ANALYSIS .................................69

BUSINESS AND CONSUMER TENDENCY SURVEYS BUDAPEST, 29-31 MAY 1996 ....73

1. INTRODUCTION .................................................................................................73
2. METHODOLOGICAL ISSUES ............................................................................73
3. RATIONALE FOR A PRODUCT BASED SURVEY .................................................79
4. SAMPLING ISSUES RELATED TO CONSTRUCTION AND RETAIL TRADE SURVEYS ..............................................................................................................79
5. ANALYTICAL ISSUES .......................................................................................81
6. CONSUMER SURVEYS .....................................................................................89

CONSUMER SURVEYS IN CENTRAL AND EASTERN EUROPEAN COUNTRIES BLED, SLOVENIA, 13-15 NOVEMBER 1996 .................................................................91

1. INTRODUCTION .................................................................................................91
2. SURVEY IMPLEMENTATION AND EXPERIENCES .............................................91
3. HARMONISATION .............................................................................................97
4. METHODOLOGICAL AND TECHNICAL ISSUES .............................................99
5. PRESENTATION AND USE OF CONSUMER SURVEY RESULTS ..................102

ATTACHMENT 1 BUSINESS TENDENCY SURVEYS: STANDARDISED QUESTIONS 107

ATTACHMENT 2 CONSUMER SURVEYS: STANDARDISED QUESTIONS ........115

ATTACHMENT 3 BUSINESS SURVEY ANNEX, APRIL 1997 ..............................117
INTRODUCTION

The OECD Centre for Co-operation with the Economies in Transition has been working with EUROSTAT and the European Commission to develop a programme of business and consumer tendency surveys in transition countries since 1991.

Business and consumer tendency surveys collect qualitative information from business managers and consumers on their assessment of the current economic or financial situation and on their intentions and expectations for the immediate future. Such surveys are conducted in all OECD Member countries and they have proved a cost-effective means of generating timely information on short-term economic developments. Current economic information is of particular interest to countries in transition and a reliable system of both quantitative and qualitative short-term indicators is of prime importance.

Compared to traditional quantitative statistical surveys, business and consumer tendency surveys present many advantages as a source of short-term economic information. They collect information which is easier for enterprises and consumers to supply because the answers are not based on precise records and the returns can be submitted more quickly. Business and consumer tendency surveys cover a wide range of variables selected for their ability to monitor the business cycle and include information on variables not covered by quantitative statistics, such as capacity utilisation and views on the overall economic situation.

This paper presents the deliberations of a series of workshops held over to period 1991 to 1996 which focused on the development of business and consumer surveys. The paper focuses on the main points and issues discussed at each workshop. These related to the development of harmonised questionnaires to enable the compilation of data comparable between transition countries and with OECD Member countries located in Europe and European Union Member countries. The current standardised questions for the industry, construction and retail trade surveys, and for consumer surveys are provided in Attachments 1 and 2 respectively.

The workshops also discussed many of the issues associated with the collection of the basic data. These included coverage, treatment of non-response, etc. The problems raised are also relevant to many other statistical collections conducted in transition economies.

In providing background information to some of the decisions associated with the development of business and consumer surveys conducted in transition economies this paper provides useful information on the problems and issues being confronted by these countries in the development of statistical systems more orientated towards their emerging market economies.
More detailed information on specific aspects of the development business and consumer surveys discussed in this paper, and their use in the development of composite and leading indicators is provided in the following publications produced by the OECD:

- *Business Tendency Surveys in Transition Countries: Methodological Review and Recommendations for Harmonisation*
- *Cyclical Indicators and Business Tendency Surveys*
- *Cyclical Indicators in Poland and Hungary*
- *Seasonal Adjustment of Industrial Production Series in Transition Countries*

Selected business survey results have been published in the OECD’s quarterly publication *Short-term Economic Indicators: Transition Economies*, since April 1993. An annual business tendency survey annex to this publication provides more detailed results from a wider range of surveys. The first such annex was included in *Short-term Economic Indicators: Transition Economies, Number 2/1995*. The annex contains the full set of results from surveys conducted in manufacturing, construction and retail trade. A copy of the annex published in May 1997 is provided in Attachment 3 of this publication.
1. INTRODUCTION

The objectives of the two day workshop were to: present opinion surveys for businesses conducted in OECD and European Union (EU) Member countries; discuss the experiences of transition countries in conducting similar surveys; and to discuss the provision of technical assistance for the future development of business surveys in transition countries to ensure their comparability with those conducted in OECD and EU Member countries.

The workshop was held at the IFO Institute, Munich, on 24-25 June 1991.

Participants at the workshop included representatives from statistical offices or research institutes in: Bulgaria, the Czech and Slovak Federal Republic (CSFR), Hungary, Poland, Romania, the USSR and Yugoslavia. Also present were a number of external consultants from OECD Member countries.

The major purpose of the workshop was to provide an overview and an introduction to conducting business tendency and consumer surveys in transition countries. Papers presented at the workshop included: business surveys in OECD countries; harmonised consumer and business tendency surveys conducted in EU countries. These were followed by further papers and discussion on seasonal adjustment and how data collected by business tendency surveys could be used to monitor the business cycle and in the development of leading indicators.

2. BUSINESS AND CONSUMER SURVEYS IN MARKET ECONOMIES

2.1 Business tendency surveys in OECD countries

The first session commenced with a methodological review of business tendency surveys carried out in OECD countries. The purpose of the presentation was to give a comparative review of how such surveys are conducted in market economies. This was intended to be used as a guide for transition countries interested in implementing business tendency surveys.

The review covered type of variables requested, questionnaire design, form of questions asked, sample selection, data collection procedures and calculation methods. The main features of the surveys are summarised below.
Compared to traditional quantitative statistical surveys which only cover one or a few related variables from one area of the economy, business tendency surveys collect information about a wide range of variables. Priority in the selection of variables is given to indicators that measure:

- an early stage of the production process (e.g. new orders, order books); which
- respond rapidly to changes in economic activity (e.g. stocks of raw materials and finished goods); and
- measure expectations or are sensitive to expectations (e.g. production, overall economic situation).

Qualitative information is also collected for variables difficult or impossible to measure by conventional methods. Such variables include capacity utilisation, production constraints and views on the overall economic situation.

The chief characteristic of business tendency surveys is that instead of asking for exact figures they ask for the respondent’s assessment of the current situation with the normal state, e.g. questions on levels (order books/stocks), or they ask for an judgement on the direction of changes, e.g. questions on tendency (flow variables). Answers are typically given as “above normal/normal/below normal” or as “up/same/down”. Questions may refer either to the present situation or to expectations, e.g. questions on future tendency for the next three to six months.

Qualitative questions of the three-fold multiple-choice type referred to above are used for most variables in business tendency surveys conducted in all OECD Member countries. Two commonly surveyed variables however use a different form. The question on production capacity use one of the following forms:

- actual figures
- dichotomy type
- size ranges
- qualitative appreciation

Questions related to production impediments, e.g. production bottlenecks, are normally multiple-choice with several alternatives. The respondents are asked to tick one or several causes responsible for current production constraints.

Two major types of sampling frames are used in the selection of respondents in business tendency surveys: statistical registers, and administrative registers. Use of these two types of frames is evenly split among OECD countries. The source of the administrative register is either business directories maintained by industry confederations or trade directories maintained by trade associations. The only country using a different administrative source is Japan, which uses the stock exchange list. Coverage of the administrative register is normally biased towards larger enterprises.

The sampling units are either enterprises or establishment (local units). Enterprises are however used as the principal sampling unit in all but four OECD Member countries.
The most common sampling methods used may be classified into:

- stratified random sampling;
- restricted sampling; and
- purposive sampling.

The first method is the most common and is used by over half of OECD countries. In restricted sampling the sample is drawn from the part of the population that is readily accessible. This is normally a list of the larger firms. In the few countries using this method the sample usually includes all firms in the frame. Purposive sampling is used here in the context of a sampling method where a sample of “representative” units are drawn from the population. This method is also used by only a few countries and the sample is also biased towards larger enterprises.

Data collection is undertaken by mail questionnaires in all OECD countries. Questionnaires are normally addressed personally to respondents in order to facilitate follow-up.

Returns are normally completed by senior management or by chief executives depending on the size of enterprises. Reporting is voluntary in all OECD countries.

The basic calculation procedures used in OECD countries are very similar. For qualitative questions of the multiple-choice type, the principle is to calculate, for each question, the frequency distribution of answers expressed by the respondents and then to gross up the sample results to total population levels. For quantitative questions an average of all reported figures is calculated instead of relative frequencies.

The answers received are usually weighted according to the size of the responding firm. For convenience the results are usually given as one figure. This is straightforward where a single figure is requested from respondents, e.g. percentage of capacity utilisation. Respondents are sometimes asked to indicate one or several alternatives in a nominal list of alternatives (production constraints), in which case the weighted proportion of firms selecting the alternative is given.

In the case of three-choice questions the data are generally presented in the form of percent balance. “Normal” and “same” answers are ignored and the balance is obtained by taking the difference between the weighted percentages of respondents giving favourable and unfavourable answers. Negative balances indicate that unfavourable answers exceed favourable; positive balances show that favourable answers predominate.

2.2 Harmonised business and consumer surveys in EU countries

Member countries of the European Union have found it useful to standardise (or “harmonise”) their business and consumer surveys so that the results are internationally comparable. The harmonised system of business and consumer surveys in the EU was presented as a reference frame for transition countries interested in implementing a number of standard question to help ensure that their survey results were also internationally comparable.
The EU harmonised business and consumer surveys are harmonised in the following aspects:

- content (questions or variables included in questionnaires);
- type of variable (form of question);
- period covered by variables;
- classifications;
- frequency; and
- timing of surveys

The variables included in the EU harmonised business and consumer surveys are set out in the table below. For variables concerning judgements on past/present and present/future changes or tendencies the indicated time period in the table refers to the reference period specified for the variable for a comparison between the situation at the time of the survey, and an earlier or an expected later situation.

The industry survey covers manufacturing industry and is conducted using a nomenclature based on the NACE (General industrial classification of the European Community) and the corresponding sections of the International Standard Industrial Classification (ISIC). For NACE manufacturing industry is broken down into 20 major industrial branches and by three end use groups: consumer goods, investment goods and intermediate goods.

The nomenclature used for the construction survey is very simple. Construction is broken down into housing, other buildings, and public works (civil engineering).

The retail trade survey uses a classification comprising six main branches:

- food, drink and tobacco
- textiles, clothing, footwear
- household goods
- motor vehicles
- large multiple shops
- remaining retail trade.

Consumer survey results are broken down by category of respondent and reply options. The categories and breakdowns used are:

- income
- occupation
- education
- age
- sex

Business and consumer surveys are conducted on a monthly basis. However, not all variables or questions are surveyed every month. In the industry survey only variables 1 to 6 below are surveyed monthly, the remaining 8 variables are surveyed quarterly. Variable 6 in the construction survey and variable 5 in the retail trade survey are surveyed quarterly. In the consumer survey, variables 1 to 12 are surveyed monthly and the other 3 variables are surveyed quarterly.
## Harmonised business and consumer surveys in EU Member countries: list of variables

<table>
<thead>
<tr>
<th>Survey</th>
<th>Variable</th>
<th>Type of Variable/Period Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Production</td>
<td>present tendency, (3-4 months ago)</td>
</tr>
<tr>
<td>2</td>
<td>Production</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>3</td>
<td>Order books, total</td>
<td>present level</td>
</tr>
<tr>
<td>4</td>
<td>Order books, export market</td>
<td>present level</td>
</tr>
<tr>
<td>5</td>
<td>Stocks of finished goods</td>
<td>present level</td>
</tr>
<tr>
<td>6</td>
<td>Selling prices</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>7</td>
<td>Employment</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>8</td>
<td>Limits to production</td>
<td>present situation</td>
</tr>
<tr>
<td>9</td>
<td>Production capacity</td>
<td>present situation</td>
</tr>
<tr>
<td>10</td>
<td>Duration of production assured by order books</td>
<td>months</td>
</tr>
<tr>
<td>11</td>
<td>New orders</td>
<td>present tendency, (3-4 months ago)</td>
</tr>
<tr>
<td>12</td>
<td>Exports</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>13</td>
<td>Capacity utilisation</td>
<td>present rate</td>
</tr>
<tr>
<td>14</td>
<td>Stocks of raw materials</td>
<td>present level</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Business activity</td>
<td>present tendency, (3-4 months ago)</td>
</tr>
<tr>
<td>2</td>
<td>Limits to production</td>
<td>present situation</td>
</tr>
<tr>
<td>3</td>
<td>Order books/production schedules</td>
<td>present level</td>
</tr>
<tr>
<td>4</td>
<td>Employment</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>5</td>
<td>Prices</td>
<td>future tendency, (3-4 months ahead)</td>
</tr>
<tr>
<td>6</td>
<td>Duration of activity assured by order books</td>
<td>months</td>
</tr>
<tr>
<td><strong>Retail trade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Business situation</td>
<td>present situation</td>
</tr>
<tr>
<td>2</td>
<td>Stocks</td>
<td>present level</td>
</tr>
<tr>
<td>3</td>
<td>Orders placed with suppliers</td>
<td>future tendency, (3 months ahead)</td>
</tr>
<tr>
<td>4</td>
<td>Business situation</td>
<td>future tendency, (6 months ahead)</td>
</tr>
<tr>
<td>5</td>
<td>Employment</td>
<td>future tendency, (3 months ahead)</td>
</tr>
<tr>
<td><strong>Consumer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Financial situation of household</td>
<td>present tendency, (12 months ago)</td>
</tr>
<tr>
<td>2</td>
<td>Financial situation of household</td>
<td>future tendency, (12 months ahead)</td>
</tr>
<tr>
<td>3</td>
<td>General economic situation</td>
<td>present tendency, (12 months ago)</td>
</tr>
<tr>
<td>4</td>
<td>General economic situation</td>
<td>future tendency, (12 months ahead)</td>
</tr>
<tr>
<td>5</td>
<td>Cost of living/price trends</td>
<td>present tendency, (12 months ago)</td>
</tr>
<tr>
<td>6</td>
<td>Cost of living/price trends</td>
<td>future tendency, (12 months ahead)</td>
</tr>
<tr>
<td>7</td>
<td>Unemployment</td>
<td>future tendency, (12 months ahead)</td>
</tr>
<tr>
<td>8</td>
<td>Conditions for making major purchases</td>
<td>present situation</td>
</tr>
<tr>
<td>9</td>
<td>Major purchases</td>
<td>future tendency, (12 months ahead)</td>
</tr>
<tr>
<td>10</td>
<td>Conditions for making savings</td>
<td>present situation</td>
</tr>
<tr>
<td>11</td>
<td>Savings</td>
<td>future situation, (12 months ahead)</td>
</tr>
<tr>
<td>12</td>
<td>Characteristics of financial situation</td>
<td>present situation</td>
</tr>
<tr>
<td>13</td>
<td>Car purchase</td>
<td>future situation, (2 years ahead)</td>
</tr>
<tr>
<td>14</td>
<td>Home purchase</td>
<td>future situation, (2 years ahead)</td>
</tr>
<tr>
<td>15</td>
<td>Home improvements</td>
<td>future situation, (12 months ahead)</td>
</tr>
</tbody>
</table>

The timing of the surveys is very important for achieving comparable results and all harmonised surveys are carried out according to the following time schedule: field work is performed in the first half of the month and processing is carried out somewhere between the 10th and the 25th of the month. Results are published before the end of the month.
3. CYCLICAL ANALYSIS AND OPINION SURVEYS

Cyclical indicators are of special interest for forecasting in that they give specific information on changes in direction (turning points) of overall economic activity. Business and consumer surveys belong to this category of indicators. The reason for this is that data from such surveys have both theoretical and practical grounds for being good cyclical indicators. This is partly explained by the fact that business and consumer surveys collect information about a wide range of variables selected for their ability to monitor the business cycle. They also give unique information on intentions and expectations of both entrepreneurs and households.

A prerequisite for cyclical analysis however is seasonal adjustment and two papers presented at the workshop discussed this topic with reference to different applications. The first paper gave a general overview of the main steps in the estimation procedure of the X11-ARIMA program and discussed a number of common problems related to seasonal adjustment. These included: calendar adjustment, prior adjustment, model selection, parameter selection, concurrent adjustment, high contribution from irregulars and publication policy.

The second paper discussed the application of the X11-ARIMA/88 seasonal adjustment package for personal computers for seasonal adjustment of external trade data.

Business cycle monitoring techniques were discussed in two additional papers. The first paper described and compared the market economic cycle and cycles experienced in centrally planned economies. It also discussed the main objectives of short-term economic analysis and investigated selection criteria for cyclical indicators. The need for short-term indicators in transition countries was discussed and it was noted that business tendency surveys would be a useful tool to supply some of the detailed information and specific variables needed during the transition period.

The second paper presented the OECD system of leading indicators and described the turning point and trend estimation methods used in the system. The different subject areas from which the leading indicators are chosen were discussed and it was noted that series derived from business tendency surveys were among those most frequently used in the countries where they are available.

In the discussion that followed the presentation of the above papers it was noted that the statistical series derived from business and consumer surveys were by their very nature particularly suitable for business cycle monitoring and forecasting. The cyclical profile of the series were in many cases easier to detect because they contained no trend. The series derived from business surveys were normally seasonally adjusted by respondents which added to the relative smoothness of the series and the time span of the consumer survey series was normally twelve months which reduced problems of seasonality. This and the fact that they were available on a very timely basis and were seldomly revised facilitated their use in forecasting and in particular, to predict the cycle’s turning point.

Business and consumer surveys present many advantages as a source of short-term economic indicators as noted above. The development of such surveys in transition countries would mean the introduction of new statistical surveys designed for the needs of a market economy but which were also flexible enough to meet the needs for specific information during the transition period.
1. INTRODUCTION

The objectives of the workshop were to: address technical considerations and plan for the harmonisation of business surveys in industry in transition countries; discuss problems linked to the infrastructure of surveys (registers and sampling); provide information to participants on how to conduct surveys; and how to present and interpret survey results.

Participants at the workshop included representatives from statistical offices or research institutes in: Bulgaria, the Czech and Slovak Federal Republic (CSFR), Hungary, Poland, Romania. Representatives from Estonia, Latvia and Lithuania attended as observers. Also present were a number of external consultants from OECD Member countries.

Business surveys covering the industrial sector have been conducted on a regular basis over several years in Hungary and Poland while regular surveys were introduced during 1991 in CSFR and Romania, and in January 1992 in Bulgaria. The first business survey in industry was conducted in Russia in January 1992. This survey was however restricted to enterprises in the Moscow region though a new survey has already been mounted on a nation-wide scale.

The rapid extension of business surveys in industry in transition countries raised the need for their harmonisation to ensure comparability of data at an international level.

Against this background the decision was made to devote the main part of the workshop to discussing approaches for harmonisation of business surveys in industry.

An initial list of harmonised questions for industry surveys was presented and discussed at this workshop. In order to avoid confusion only the current list (as at December 1996) is provided in Attachment 1.

2. HARMONISED QUESTIONS

Two papers served as reference documents for the discussion. The first, based on the outcome of the 1991 Munich Workshop, reviewed the approaches taken by the different transition country surveys in comparison with those used by OECD Member countries. The paper presented a number of suggestions for a harmonised system.

The second paper presented the harmonised business surveys industry used in the European Union (EU). It included details of special questions used in the business survey in Eastern Germany.
which could be used as a basis for a harmonised system of business surveys to be introduced in other transition countries.

2.1 Content

As the first objective was to agree on the content of a harmonised survey, the session commenced with a discussion of the individual questions included in the EU harmonised survey as a basis for a permanent set of questions to be used in surveys in transition countries. The discussion ended with agreement among the participants on a permanent set of questions to be regularly surveyed, comparable with those in the EU survey. These covered the following variables:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production</td>
</tr>
<tr>
<td>2</td>
<td>Production</td>
</tr>
<tr>
<td>3</td>
<td>Demand/order books, total</td>
</tr>
<tr>
<td>4</td>
<td>Demand/order books, export market</td>
</tr>
<tr>
<td>5</td>
<td>Demand, export market</td>
</tr>
<tr>
<td>6</td>
<td>Demand total</td>
</tr>
<tr>
<td>7</td>
<td>Stocks of finished goods</td>
</tr>
<tr>
<td>8</td>
<td>Selling Prices</td>
</tr>
<tr>
<td>9</td>
<td>Employment</td>
</tr>
<tr>
<td>10</td>
<td>Limits to production</td>
</tr>
<tr>
<td>11</td>
<td>Production capacity</td>
</tr>
<tr>
<td>12</td>
<td>Capacity utilisation</td>
</tr>
</tbody>
</table>

In addition to above EU variables, it was agreed to include additional questions concerning planned investment similar to the ones covered in the separate EU investment survey:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Investment</td>
</tr>
<tr>
<td>14</td>
<td>Type of investment</td>
</tr>
<tr>
<td>15</td>
<td>Factors limiting investment</td>
</tr>
</tbody>
</table>

In order to capture the overall picture, it was further agreed to ask two further questions concerning the general economic situation on a regular basis:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>General economic situation</td>
</tr>
<tr>
<td>17</td>
<td>General economic situation</td>
</tr>
</tbody>
</table>
2.2 Definitions and specifications

Some of the above questions were discussed in more detail. It was agreed to use the following definitions and/or specifications for the following variables and/or questions:

Demand/order books

Variables 3 and 4 should, as far as possible, refer to order books, i.e. quantities of goods for which a firm order had been received but which still had to be produced. If the volume of orders at hand was not recorded by producers, or if only part of production was covered by orders, respondents should be asked to report on the level of demand for their products.

Selling prices

This question should use a more detailed specification (i.e. a five point scale) than the EU question which uses a standard three point scale. The adopted specification however, would enable comparison with the EU question and at the same time provide more detailed information on the development of prices. The selling price expectations should be indicated according to the following standard pre-printed categories:

| 1 (a)       | increase at a higher rate |
| (b)         | increase at about the same rate |
| (c)         | increase at a lower rate |
| 2           | remain stable |
| 3           | decrease in absolute terms |

Limits to production

The standard set of alternatives offered to respondents in answering the question concerning impediments to production in the EU survey was thought to be too restricted. To obtain more information about the specific development of production during the transition period (supply and shortages) it was decided to extend the number of alternatives used in the transition country survey.
The standard pre-printed categories should cover the following alternatives:

<table>
<thead>
<tr>
<th></th>
<th>1. insufficient domestic demand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. insufficient foreign demand</td>
</tr>
<tr>
<td></td>
<td>3. competitive imports</td>
</tr>
<tr>
<td></td>
<td>4. shortage of labour</td>
</tr>
<tr>
<td></td>
<td>5. shortage of skilled labour</td>
</tr>
<tr>
<td></td>
<td>6. shortage of raw materials</td>
</tr>
<tr>
<td></td>
<td>7. lack of appropriate equipment</td>
</tr>
<tr>
<td></td>
<td>8. financial problems</td>
</tr>
<tr>
<td></td>
<td>9. others</td>
</tr>
<tr>
<td></td>
<td>10. none</td>
</tr>
</tbody>
</table>

No restriction should be applied to the number of alternatives a respondent could indicate.

**Production capacity**

Production capacity should refer to technically and economically usable or competitive capacity. The question on current production capacity should be assessed with respect to the expected order or demand situation over the next twelve months.

**Capacity utilisation**

The same definition of capacity in the previous question should be applied in this question. The present utilisation rate should be asked in percent either as an actual figure or by ticking one alternative among a given sequence of size ranges. The scale of the size ranges did not need to be harmonised.

**Investment**

The questions concerning investment needed only to be asked twice a year, in the second and fourth quarters. The questions should refer to the volume of fixed investment expenditure, i.e. at constant prices over a twelve month period.

**Type of investment**

This question needed to be asked only once a year, in the fourth quarter, in connection with the question on planned investment for the following year. The pre-printed answers should include the following alternatives:
Factors limiting investment decisions

This question needed to be asked only once a year, in the fourth quarter, in connection with the question on planned investment for the following year. The pre-printed answers should include the following alternatives:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insufficient demand</td>
</tr>
<tr>
<td>2</td>
<td>Cost of capital too high</td>
</tr>
<tr>
<td>3</td>
<td>Credit guarantees insufficient</td>
</tr>
<tr>
<td>4</td>
<td>Insufficient profits</td>
</tr>
<tr>
<td>5</td>
<td>Fear of indebtedness</td>
</tr>
<tr>
<td>6</td>
<td>Technical factors</td>
</tr>
<tr>
<td>7</td>
<td>Others</td>
</tr>
</tbody>
</table>

General economic situation

The general economic situation should refer to the situation in the respondent's own firm or company.

2.3 Form of questions

The exact formulation of the questions was not discussed in detail at the workshop, but the following basic principles were agreed. All questions referring to an assessment of the current situation (e.g. variables 3, 4 and 7 on demand/order books for total and export market and stocks of finished goods) should imply a comparison with the normal. The pre-printed answers would be of the form:
The question on production capacity should however use the following form:

| 1. more than sufficient | 2. sufficient | 3. not sufficient |

All questions referring to an appreciation of past/present and future changes (e.g. variables 1, 2, 5, 6, 8, 9, 16 and 17 on production, demand for export market and total market, employment and the general economic situation) should imply a comparison between the situation at the time of the survey and an earlier or an expected later situation, i.e. the pre-printed answers should be of the following form:

| 1. up | 2. unchanged | 3. down |

The question on selling prices should however use a five point scale, and the question on investment should use the following form:

| 1. higher | 2. about the same | 3. lower |

The questions on limits to production, type of investment and factors limiting investment decisions should be of the multiple-choice type and cover the alternatives presented in the previous section. The capacity utilisation question should use one of the following forms: actual figures or size ranges as indicated in the previous section.

2.4 Period covered by variables

The time period covered by the different variables or questions was discussed and the following general principles were agreed for questions referring to an appreciation of past/present and future changes:

- Questions concerning past/present tendency should compare the previous month or quarter, depending on survey periodicity, against the current month or quarter.
• Questions concerning future tendency should compare the next 3 to 4 months or quarter, depending on survey periodicity to the current month or quarter.

The only exceptions to these principles should be the investment questions, which should use a twelve month period as the reference period, and the question on the general economic situation which should use the next six months as the reference period.

2.5 Implementation

The participants at the workshop agreed to implement and survey the harmonised questions on a quarterly basis from January 1993. It was left to the transition countries to decide whether to conduct the harmonised questions on a monthly basis. It was further decided to conduct the quarterly surveys in the first month of the quarter, i.e. January, April, July and October.

3. SUMMARY OF OTHER TOPICS DISCUSSED AT THE WORKSHOP

The discussion of registers and sampling focused on non-response, type of survey units, lowest size of units to survey, and activity classification of survey units. These questions were covered in the reference paper for this session, but the following additional comments were offered in the discussion:

• One way to correct for non-response was to take a sub-sample from the non-response group to revisit and use this information to improve estimation. Using a representative sample drawn from the register was most important for business surveys. The lowest size of units chosen to be surveyed should be determined by the importance and structure of the units below the threshold. Two-stage sampling could be used to correct the representativeness of the sample.

• A simple system for the weighting of survey results, based on weights 1, 2 and 3 for small, medium and larger enterprises, respectively was proposed in the reference paper for this session. These weights were suggested to aggregate the individual responses within a branch. Proper weights based on value added or some other size variable should however, be used to aggregate data for branches. Weighting of individual responses were discussed in detail and several participants requested more information on the different approaches taken by OECD Member countries.

The last topic concerned the presentation and interpretation of survey results. The reference paper focused on the different users of the survey results and their needs. Most of the discussion referred to dissemination of survey results in transition countries and on the international market.
1. INTRODUCTION

The Workshop was held at the Central Statistical Office (GUS) in Warsaw on 16-18 November 1992.

The objectives of the workshop were to: plan for the harmonisation of business surveys for the retail trade and construction sectors; set up and agree on harmonised questionnaires; address technical considerations for conducting surveys, such as weighting and representative sampling, and; discuss suggestions on how to use survey results in economic analysis.

The workshop was attended by representatives from statistical offices or research institutes in Bulgaria, CSFR, Hungary, Poland, Romania, Lithuania, Latvia, Estonia, Russia, Belarus and the Ukraine. Also present were a number of external consultants from OECD Member countries.

An initial list of harmonised questions for retail trade and construction surveys was presented and discussed at this workshop. In order to avoid confusion only the current list (as at December 1996) is provided in Attachment 1.

2. HARMONISED QUESTIONS

2.1 Standard Variables

The main part of the workshop was devoted to a discussion on how to determine the contents of harmonised questionnaires for business surveys of the retail trade and construction sectors in transition countries. Two reference documents served as a basis for the discussion. The first described harmonised business surveys for retail trade and building sectors used in the European Union (EU). The second paper discussed the additional questions used in business surveys for these sectors used in various OECD Member countries. The discussion ended with an agreement among all participants on standard questionnaires for both surveys.

These questionnaires should include all core questions of the respective harmonised EU surveys plus other important questions which were also part of the questionnaires used in most OECD/EU countries. For the retail trade survey three supplementary questions were proposed as optional additions to the standard questions.

All questions (in both surveys) should relate to the surveyed enterprise itself and not to the economy as a whole. For example, the question on "assessment of business situation" asked for the
situation of the individual enterprise and not for the assessment of the entrepreneur with regard to the
general economy. The only exception was question 9 in the retail trade questionnaire where the
“degree of competition” relates to the sector to which the enterprise se belongs.

The standard questionnaires covered the following variables:

**RETAIL TRADE SURVEY**

**As in the EU survey**

<table>
<thead>
<tr>
<th>1</th>
<th>Business situation</th>
<th>present situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Stocks</td>
<td>present level</td>
</tr>
<tr>
<td>3</td>
<td>Orders placed with suppliers</td>
<td>future tendency</td>
</tr>
<tr>
<td>4</td>
<td>Business situation</td>
<td>future situation</td>
</tr>
<tr>
<td>5</td>
<td>Employment</td>
<td>future tendency</td>
</tr>
</tbody>
</table>

In addition to these EU variables, it was agreed to include questions covering the following
variables:

<table>
<thead>
<tr>
<th>6</th>
<th>Selling prices</th>
<th>present tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Selling prices</td>
<td>future tendency</td>
</tr>
<tr>
<td>8</td>
<td>Financial situation</td>
<td>present tendency</td>
</tr>
<tr>
<td>9</td>
<td>Competition in own sector</td>
<td>present tendency</td>
</tr>
<tr>
<td>10</td>
<td>Limits to activity</td>
<td>present situation</td>
</tr>
</tbody>
</table>

Two questions on sales, to test for seasonality, and a question concerning sales storage space
were recommended as optional questions:

<table>
<thead>
<tr>
<th>11</th>
<th>Sales (comparison over one year)</th>
<th>present tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Sales (comparison over one period)</td>
<td>present tendency</td>
</tr>
<tr>
<td>13</td>
<td>Storage space</td>
<td>present situation</td>
</tr>
</tbody>
</table>
CONSTRUCTION SURVEY

As in the EU Survey

<table>
<thead>
<tr>
<th></th>
<th>Business activity</th>
<th>present tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Limits to production</td>
<td>present situation</td>
</tr>
<tr>
<td>3</td>
<td>Order books</td>
<td>present level</td>
</tr>
<tr>
<td>4</td>
<td>Employment</td>
<td>future tendency</td>
</tr>
<tr>
<td>5</td>
<td>Output prices</td>
<td>future tendency</td>
</tr>
<tr>
<td>6</td>
<td>Period of production secured</td>
<td>months</td>
</tr>
</tbody>
</table>

In addition to these EC variables, it was agreed to include questions covering the following variables:

<table>
<thead>
<tr>
<th></th>
<th>New orders (contracts)</th>
<th>future tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Financial situation</td>
<td>present tendency</td>
</tr>
<tr>
<td>9</td>
<td>Delays in payments from clients</td>
<td>present tendency</td>
</tr>
<tr>
<td>10</td>
<td>Technical capacity</td>
<td>future situation</td>
</tr>
</tbody>
</table>

It was further agreed that the standard questionnaires would be introduced at least on a quarterly basis for both the retail trade and construction surveys.

However, it was left to individual transition counties to decide whether or not to conduct these surveys on a monthly basis as is done in EU Member countries. For a monthly frequency it should be recalled that in EU surveys question 5 from the retail survey and question 6 from the construction survey are only asked once a quarter.

Given the specific conditions for implementing surveys in the different transition countries, it was left to each country to determine the date for the earliest possible start of both surveys.

2.2 Classification of Activities

Retail Trade

For the retail trade survey in transition countries it was agreed to use the same classification of activities as in EU countries:
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food, drink and tobacco</td>
</tr>
<tr>
<td>2</td>
<td>Textiles, clothing and footwear</td>
</tr>
<tr>
<td>3</td>
<td>Household goods</td>
</tr>
<tr>
<td></td>
<td>3.1 - Electrical goods</td>
</tr>
<tr>
<td></td>
<td>3.2 - Others (furniture, etc.)</td>
</tr>
<tr>
<td>4</td>
<td>Motor vehicles (including parts)</td>
</tr>
<tr>
<td>5</td>
<td>Large multiple shops (incl. department stores and mail-order houses)</td>
</tr>
<tr>
<td>6</td>
<td>Remaining retail trade</td>
</tr>
</tbody>
</table>

**Construction**

For the construction survey it was concluded that the EU breakdown was insufficient and should be broken down into new housing and renovations:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Buildings</td>
</tr>
<tr>
<td></td>
<td>1.1 - Housing</td>
</tr>
<tr>
<td></td>
<td>1.1.1 - New housing</td>
</tr>
<tr>
<td></td>
<td>1.1.2 - Renovations, repairs and maintenance</td>
</tr>
<tr>
<td>1.2</td>
<td>- Other buildings</td>
</tr>
<tr>
<td></td>
<td>1.2.1 - New buildings</td>
</tr>
<tr>
<td></td>
<td>1.2.2 - Renovations, repairs and maintenance</td>
</tr>
<tr>
<td>2</td>
<td>Public works</td>
</tr>
</tbody>
</table>

3. OTHER TOPICS RELATED TO HARMONISED SURVEYS

3.1 Weighting

Weighting issues in business surveys were discussed in the first session on this topic. The reference paper covered the following general issues:

- simple versus complex weighting systems
- choice of weighting variables
- weighting of individual responses, and
• aggregation of results

The general issues were discussed in connection with the presentation of the Confederation of British Industries' approach to weighting survey data.

For the weighting of individual responses within a branch, a simple weighting system was recommended giving equal weights for all respondents in each size group.

Weights based on value added or some other size variable should then be used to aggregate data for branches up to total industry level. This "double weighting" system was recommended as the best model for transition countries undergoing large structural changes in their economy.

3.2 Registers

Specific problems related to business surveys of retail trade and construction sectors were discussed on the basis of a reference paper presenting the experience of the Instituto Nazionale per la Studio della Congiuntura (ISCO). The discussion focused on practical problems concerning registration of firms and how to establish a representative sample.

Defining a register of firms as a survey frame in the above sectors could be very difficult. Some of the factors affecting the construction of a register included: the large number of small firms concerned; their territorial spread and possible unwillingness to co-operate due to the informal nature of these sectors; and their high birth and death rates.

The ISCO solution to these problems was to match data from several different sources and eliminate duplicates. ISCO excluded the informal sector (i.e. street traders) from regular surveys but covered them by ad-hoc surveys.

The related sampling problems were directly linked to the imperfect information about the total population of firms in the retail trade and construction sectors. The procedure used by ISCO was recommended as a suitable example for transition countries to follow.

3.3 Economic Analysis and Forecasting

The final section on this topic concerned the use of results from surveys in economic analysis and forecasting. The paper presented focused on applications using both macro and micro data from business surveys. The use of micro data compared with cross sector and time series data was also covered.

The specific use of the results of the production constraints question was illustrated as an example of micro data analysis. This application was put forward as a good approach for analysis of survey results in transition countries where the lack of time series data was a problem.
IMPLEMENTATION OF BUSINESS SURVEYS
EVALUATION OF EXPERIENCE TO DATE

POZNAN, 24 JUNE 1993

1. INTRODUCTION

The Workshop was held at the Academy of Economics in Poznan on 2-4 June 1993.

The objectives of the workshop were to: exchange experiences between representatives from transition countries on recently introduced business surveys; assess the progress and experiences concerning the implementation of harmonised questionnaires in surveys in industry, construction and retail trade; address methodological principles for conducting surveys; present methods for evaluating survey results, and; interpret and analyse survey results.

The workshop was attended by participants from statistical offices or research institutes in Albania, Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia and the Ukraine. Also present were a number of external consultants from OECD Member countries.

2. RECENT EXPERIENCES IN TRANSITION COUNTRIES

Progress in the implementation of business tendency surveys was presented by participants at the workshop in a number of country reports. These are summarised below.

2.1 Survey Implementation

Industry surveys

Regular surveys in industry were conducted in ten transition countries namely: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia and Slovak Republic. Three surveys were conducted in Poland by different agencies: the Central Statistical Office and the Academy of Economics in Poznan (GUS/AEP), AEP and the Research Institute for Economic development in Warsaw (RIED).
Construction surveys

Regular surveys in construction were conducted in four transition countries namely: Bulgaria, Czech Republic, Hungary and Slovak Republic. Poland (GUS/AEP), Romania, Latvia and Lithuania were expected to commence regular surveys in 1993 and Estonia in 1994.

Retail surveys

Regular surveys in retail trade were conducted in four transition countries namely: Bulgaria, Czech Republic, Estonia and Slovak Republic. A survey was planned for Poland and Hungary conducted regular surveys up to 1992.

Consumer surveys

Regular consumer surveys were conducted in Estonia, Latvia and Poland (RIED).

Agricultural surveys

Regular surveys in agriculture were conducted in Poland (RIED) and Russia.

Other Surveys

Surveys in the banking sector were conducted in Russia and special export surveys among foreign trade companies were carried out in Poland by the Foreign Trade Research Institute. Qualitative information on production constraints was collected in a regular industry survey in Slovenia and competitiveness was being monitored in an experimental survey.

2.2 Operational and Methodological Issues

Operational and methodological problems reported in several papers presented at the workshop focused on the following points:

Register

Coverage and other deficiencies in the register in papers presented by the Czech Republic, Latvia, Poland, Slovenia;

Sample

Difficulties in obtaining a stable and representative sample in papers presented by the Czech Republic, Slovak Republic, Slovenia;
Response rate

High non-response and/or replacement of non-responding units were discussed in papers presented by the Czech Republic, Latvia, Lithuania, and Poland.

Experiences in adapting the surveys to reflect the economic situation in transition countries were reported for Estonia and some experiences from analysing the results were reported for Romania. The Romanian experience showed that production expectations seem to be assessed by respondents against the same period of the previous year and not, as asked, against the previous period. It also seemed that there was a lack of internal consistency in responses to some questions, e.g. production capacity and the order situation. However, survey data on foreign demand, and laying-off intentions showed external consistency with quantitative data on exports and unemployment, respectively.

Classification, sampling and operational experiences were reported in a paper prepared by Poland (GUS/AEP). An important part of the paper focused on non-response for small firms and how higher response rates had been gained by involving regional offices in the data collection process. This experience also provided ideas on how to gain higher response rates.

The present sample in Poland was not designed to be representative at the regional level and the presented results were not that interesting for local authorities and participating enterprises. In order to make the data useful to enterprises future work would include a study on how to change the survey from kind-of-activity to product classification. Future development work in Poland was planned to include: sample improvements; change of weights to value-added; improvements in presentation of results and seasonal adjustment of data.

Methodological research based on the results from the business survey in industry was presented in a paper by Poland (RIED). The paper reported a high correlation between survey results (business climate) and the official index of industrial production; changing seasonal pattern in the business climate indicator over the pre-transition period and the transition period; forecasting accuracy of individual survey questions by branches and size groups of enterprises; and the effect on survey results by applying different weighting systems for aggregation of data.

Two other papers by Poland (RIED) presented research on a composite economic sentiment indicator and experiences from conducting a consumer survey. The first paper reported the different approaches for the calculation of a sentiment indicator for Poland based on results from sectoral business surveys of industry, agriculture and from consumers/households surveys.

The results indicated continued weak development with no sign of improvement in the Polish economy. This was in contrast to results from official statistics or survey data referring to the industrial sector alone which indicate a more positive development. The second paper supported these results by reporting a more pessimistic attitude among consumers (as compared to entrepreneurs) concerning the present and future general economic situation.

2.3 Review of the Implementation of the Harmonised Questions

The progress in transition countries in relation to the proposed harmonised survey was as follows
Industry survey

There was a well developed set of questions in virtually all countries, though investment was the main aspect not covered. Details of the ownership of the firm (public or private) was only asked in Hungary and the Slovak Republic, though this was useful for monitoring purposes. For Poland, information on ownership was available on the register and the GUS/AEP survey sample was stratified by private and public sectors.

Construction survey

Was not undertaken in several countries and harmonisation was not as far advanced as in the industry survey. Questions on order books and operating time in relation to the normality of production schedules were not asked, though this would be important later in the transition countries as the market economy developed. The Slovak Republic was in line with the harmonised scheme and surveys based on the harmonised system would be introduced in Poland, Latvia and Lithuania this year and possibly in Estonia in 1994.

Retail survey

The harmonised questionnaire contained a core set of questions and two optional questions on sales, which would be helpful for transition countries to include as a check on seasonality. However, relatively few countries were carrying out this survey. Estonia covered most but not all questions. The division of the former Czech and Slovak Federal Republic into the Czech Republic and the Slovak Republic had led to a loss of questions compared with the position under the unified state.

The discussion on the formulation of questions raised an important set of issues in relation to:

- qualitative questions usually with a three point scale;
- assessment of present situation with respect to "normal";
- time span for assessment of past and present should be consistent (month-on-month, quarter-on-quarter or year-on-year). It would be preferable if countries harmonised on the same time span.

Another paper presented at the workshop contained a suggested typology for classifying surveys based on structural parameters (size and ownership) with at one extreme a few large state owned firms (Bulgaria, Romania) and at the other a large number of small and medium sized private firms represented in the sample (Estonia, Latvia and Lithuania).

The following points were raised in the ensuing discussion:
• It was vital to monitor progress in transition countries towards harmonisation in order to improve comparability of data;

• Firms found it hard to assess "normality" in most countries. On the time period, it was suggested that there was no need for over-precision (it was sufficient to inform participating firms that next 3 to 4 months compared to the previous 3 to 4 months was the "correct" interpretation).

• On coverage and response rate, it was stated that the total number of enterprises in the economy was needed before accurate figures for the proportion of public/private and small/large firms could be calculated.

• The problems of allowing for seasonality were discussed and it was also emphasised that the questionnaire should explicitly refer to volume basis as was the practice in the EU survey. A representative from Poland urged that a harmonised agricultural survey would be helpful to transition countries given the relatively greater importance of this sector in total employment and output.

3. SAMPLE DESIGN AND SURVEY OPERATIONS

The paper presented on this topic focused on obtaining cost effective results. It outlined the following necessary conditions:

3.1 Sample Frame and Units

A good frame had to deal with coverage deficiencies, duplication and incorrect classification. Secondly, it was important to distinguish between the “reporting unit” and the “responding unit”. Transition countries had to ensure that their questionnaire was sent to the correct unit and the appropriate individual in the participating firm.

3.2 Sample Design

From the different approaches (e.g. total, cut-off, purposive, random) transition countries could find it helpful to adopt the hybrid method of stratified random sampling with a lower threshold cut-off to eliminate the smaller firms. Building a panel from a stable core of responding firms was another fruitful strategy.

3.3 Response Rate

The reduction of non-response rate was vital to business surveys. Firms had to be motivated. They should be shown that the results of the surveys were useful to themselves as well as for tracking economic trends. To help improve the level of response it was vital to ensure the confidentiality of information provided by individual firms. A good questionnaire could itself help to reduce non-response with content, design and layout being clear, relevant, simple and logical. Efficient data collection based, for example on a postal method, backed up by telephone follow-up could also be helpful in improving the response rate.
The discussion indicated that transition countries did not in general see non-response as a problem. However it was pointed out that as more small/medium sized firms entered the sample in transition countries, then non-response reduction was likely to become a key issue.

3.4 Measurement Methods

Errors could be introduced at the data entry/editing/tabulating stages. The method of avoiding errors at data entry were dependent upon the collection method. Data editing errors could be inadvertently introduced and the general rule was that, wherever possible, editing should be done at the registration of data on EDP medium.

The risk of errors at data tabulation could also arise from the use of an incorrect estimation formula, incorrect parameter values in the formula, or incorrect programmes for aggregating the individual records. The first could be avoided by consulting experts on statistical methods in designing the estimation, the second by rigorous “proof reading” and the third by testing the EDP system on a special set of data before going into full scale use.

4. EVALUATION OF SURVEY RESULTS

The aim of this session was to discuss different ways of checking the reliability of survey data in terms of both internal consistency and of external control. Two reference papers served as a basis for the discussion. The first attempted a preliminary analysis of cyclical and trend behaviour of survey data in four countries in transition: Poland, Hungary, Bulgaria and Romania - concentrating attention, in particular, on the issue of seasonality. The second paper analysed more specifically the relationship between qualitative business survey data and official statistics drawing examples from the German experience.

Six different methodologies were presented.

4.1 Time-series Analysis

This basically consists of detecting the relative contribution of the irregular, cyclical and seasonal components to the overall variation of survey series over a certain time span, expressed in month or quarters according to the periodicity of the survey. Such a methodology, once applied to transition countries’ survey series, showed a very high contribution of the seasonal component and therefore stressed the need for seasonal adjustment of national survey data. Its application, however, was still limited by the availability of time-series data.

4.2 Cross-correlation Among Different Survey Data

This approach was based on the interdependence of the individual survey variables determined by their definitions and plausible economic relationships. In the transition countries' exercise the "assessment of production" series had been used as a reference series, namely as a proxy for the business cycle. Then the correlation of all other variables with the business cycle had been tested. The whole exercise had been carried out using both seasonally adjusted and unadjusted series.
4.3 Cross-correlation Between Survey Data and Official Statistics

There was ample evidence in the literature that business survey results were good proxies for variables not covered by official statistics or quantitative data that become available only with long delays. A crucial issue in these comparisons was whether survey balances refer to changes rather than to levels of comparable official statistics. With reference to German data concerning employment trends, econometric analyses suggest that survey balances were correctly interpreted as referring to the percentage changes of the official series. By contrast, in questions on production expectations, econometric evidence was not quite clear mainly because balances did not appear to adequately pick-up the non-linearity implicit in such complex relationships. In this case, approaches based on log-linear functions using survey data on “ups” and “downs”, rather than balances, often produce better forecasts. In general, higher correlation was observed when dealing with de-trended data.

4.4 Internal Consistency Check

A special case of cross-correlation among survey data, this involved in comparing ex-ante (forecast) and ex-post (assessment) evaluations of the same variable to test the forecasting accuracy of survey variables. In the case of transition countries, ex-ante and ex-post net balance production series had been compared and evaluated with the following measures: mean absolute deviation, maximum deviation, over and under-estimation, correct and opposite indication of direction of change.

Seasonally adjusted series seemed to have better forecasting performance especially in relation to the changes of direction of monthly results.

4.5 “Test of the Test”

This was a special way of checking which variables did actually influence entrepreneurs' answers. National institutes carried out special surveys periodically to investigate the reporting practices of respondents and to see whether they altered over time. Such an exercise would be very useful for transition countries in order to monitor changes in entrepreneurial perspectives while moving to market economies.

4.6 Meso-analysis

This approach comprised clustering micro-data by theoretical categories. One successful approach was to formulate categories according to findings of the disequilibrium, theory, i.e. “weakness in demand”, “balance”, “supply bottlenecks”, “weakness in demand and supply bottlenecks”.

Charts established on this basis guaranteed that only well defined consistent answer combinations were taken into account for the analysis. Practical experience gained in Germany had shown that only an extremely small proportion (1-2 per cent) of companies’ answers had to be refuted because of inconsistency with such theoretical considerations.

Most representatives from transition countries showed great interest in the different ways of evaluating business survey results. The Polish Central Statistical Office announced that they had just started checking the relationships between survey results and official statistics for some variables.
referring to a monthly panel of firms. They offered to report their experience at a future workshop. The Romanian representative seemed keen on carrying out a “test of the test” for the business survey in manufacturing industry by the end of the current year.

At the end of the session, it was agreed to again discuss methodological issues concerning evaluation of business survey results at future workshops.

5. INTERPRETATION AND ANALYSIS OF SURVEY RESULTS

5.1 How Firms Answer Business Surveys

The Confederation of British Industry (CBI) investigated the reporting practices of respondents by carrying out special surveys from time to time and monitored changes in these practices over time. A clear understanding of the basis on which respondents reply was vital for a correct interpretation of the qualitative business survey results.

The results from the latest special survey were presented at the workshop and the key indicators and their determinants were analysed and companies' assessment and use of the business survey results were investigated. The discussion of the paper centred on the following points.

*The use of the terms “normal” and “trend” in the formulation of questions*

First, it was noted that the wording of questions in the recommendations for the contents of the harmonised business tendency surveys was not binding. Due to national circumstances questions sometimes need to be worded differently in different countries in order to have the same meaning.

Second, it was agreed that “normal” might be an unnecessarily ambiguous word and that it should be avoided if possible. It was noted that in the CBI's business tendency survey different companies not only interpret the term differently but also there are systematic shifts in this interpretation over time. As a result understanding statistics based on questions relating to “normal” was difficult.

Third, it was recommended that use of the term “trend” should be abolished. Instead, questions should clearly indicate what periods or points of time they pertain to.

*Determinants of business and export optimism.*

Here, the participants interest centred on the results from the special survey questions regarding factors determining enterprise attitudes. It was agreed that this type of information was useful “in its own right” for analysts and policy makers because it indicated factors and conditions of importance for actual behaviour of entrepreneurs.
Questions relating to capacity and capacity utilisation

It was difficult to give a clear definition of this concept. The general opinion emerging from the discussion was that some specification was useful but that fairly large differences between respondents in their interpretation of the term could be accepted. Their answers would give a fairly good indication of the level of activity anyhow.

Investments, investment intentions and purpose of investment

It was felt that countries in transition might have a specially strong need for information on restraints to investment. A question regarding this ought to contain a number of specified alternatives and an open question, i.e. insufficient demand, difficulties to finance, high interest rate, other factors.

This type of question had been recommended for the harmonised business survey in industry for transition countries.

Use of results from qualitative surveys by companies

It was pointed out that the interest of enterprises centred on the customer industry/ies and their own industry and that the usefulness of this information increased the more narrowly the industries were specified.

Who's opinions are reflected in the surveys?

It was agreed that for qualitative surveys it was important to obtain information on the opinions and evaluations of top management in firms because it was their assessments which determined what enterprises did. The special survey discussed in the paper did not contain this type of information although some inference was possible from the fact that in a large majority of firms the results of qualitative surveys are used by top management and their staff.

5.2 Using Business Survey Data for Macroeconomic and Company Forecasting

The paper presented at the workshop gave an overview of the uses of qualitative information from business surveys on the macroeconomic, sectoral and company levels, and how this type of information related to different business cycle theories.

Countries with experience of qualitative surveys used the results mainly for the following purposes:

• to describe the economic environment at the time of the survey (“forecasting the present”);
• to indicate the probable short-term development of the variables covered in the survey (deliveries, incoming orders etc.);
• to develop economic indicators;
• to assist model builders by providing qualitative information as a complement to quantitative data.

The outcome of macroeconomic forecasts was heavily dependent upon the underlying business cycle theory. Three mainstream theories of particular interest in this context were namely:

1. the (neo-)Keynesian approach;
2. the New Classical Equilibrium (rational expectations) theories and;
3. the disequilibrium theories.

Data from qualitative surveys were useful for forecasters in all three cases:

• When approach (1) is used, confidence indicators were important;
• For models based on (2), price expectations played an important role;
• Models based on (3) had a use for the whole range of data in order to characterise the cyclical position of individual enterprises.

Thus, data from qualitative surveys played their largest role in empirical research on the basis of disequilibrium theory.

Available research results indicated that the New Classical Equilibrium approach with its postulation of rational expectations was not very realistic. Application of survey results to models in line with (neo-) Keynesian or Disequilibrium theories seemed more promising.

Using German data it had been shown that on basis of factor analysis composite coincident and leading indicators could be developed. Also, very conclusive results had been derived by analysing the interplay between the enterprises assessment of the present situation and their expectations.

Enterprises were interested in sectoral analysis describing the present situation and expectations for their own industries and for customer industries. Studies performed on German data showed that useful information of this type could be derived from the surveys. However, this calls for surveys with a rather detailed specification of industries, and consequently quite large total samples.

Finally, interesting information on the role and importance of innovations in German industry had been derived by introducing a set of questions asked once a year regarding: innovation activity, ex post and ex ante; and the production structure in terms of the part of total production consisting of products in the market introduction, growth, stagnation and contraction phase respectively.
INTRODUCTION OF HARMONISED CONSUMER SURVEYS
IN CENTRAL AND EASTERN EUROPE

PRAGUE, 18-20 APRIL 1994

1. INTRODUCTION

This was the first workshop on consumer surveys for transition countries in Central and Eastern Europe organised within the joint OECD-EC/Eurostat project on short-term indicators. The workshop was organised in co-operation with the Czech Statistical Office and held in Prague on 18-20 April 1994.

The objectives of the workshop were to: present general principles and characteristics of qualitative consumer surveys; take stock of the current situation concerning consumer surveys and related surveys conducted in transition countries; present and discuss a proposal for a harmonised questionnaire for consumer surveys in transition countries; address methodological principles for conducting consumer surveys, and; present selected operational and analytical issues.

Those attending the workshop comprised participants from statistical offices and/or research institutes from the following eleven transition countries: Albania, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Also present were a number of external consultants from OECD Member countries.

An initial list of harmonised questions was presented and discussed at this workshop. In order to avoid confusion only the current list (as at December 1996) is provided in Attachment 2.

2. CONSUMER SURVEYS CONDUCTED IN TRANSITION COUNTRIES

The current situation as regards consumer surveys was presented by participants at the workshop from transition countries. All countries were conducting household budget surveys, but only three countries, namely Estonia, Latvia and Hungary were at present conducting qualitative consumer surveys. However, Poland reported plans for a pilot survey in 1994 year and several countries expressed intentions in implementing consumer surveys over the next few years.

A short summary of implemented or planned consumer surveys is presented below by country and institute.
2.1 Estonia - Estonian Institute for Market Research (EKI)

Regular consumer surveys had been conducted twice a year (June and December) since 1991. The survey was based on a sample of around 700 persons included in the EKI consumer panel. Financial problems prevented a shorter periodicity for the surveys at present.

The survey covered past or present and opinions about the future on the following variables:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial situation of household now compared to six months ago</td>
</tr>
<tr>
<td>2</td>
<td>Expected financial situation of household over next six months</td>
</tr>
<tr>
<td>3</td>
<td>General economic situation in Estonia now compared to six months ago</td>
</tr>
<tr>
<td>4</td>
<td>General economic situation in Estonia over the next six months</td>
</tr>
<tr>
<td>5</td>
<td>Level of unemployment over the next six months</td>
</tr>
<tr>
<td>6</td>
<td>Advantage for people to make major purchases at present</td>
</tr>
<tr>
<td>7</td>
<td>Household expenditure on major purchases compared to six months ago</td>
</tr>
<tr>
<td>8</td>
<td>Favourable/unfavourable time to save at present</td>
</tr>
<tr>
<td>9</td>
<td>Characteristics of present financial situation of household:</td>
</tr>
<tr>
<td></td>
<td>- running into debt</td>
</tr>
<tr>
<td></td>
<td>- having to draw on savings</td>
</tr>
<tr>
<td></td>
<td>- managing to make ends meet</td>
</tr>
<tr>
<td></td>
<td>- saving a little</td>
</tr>
<tr>
<td></td>
<td>- saving a lot</td>
</tr>
<tr>
<td></td>
<td>- don't know</td>
</tr>
<tr>
<td>10</td>
<td>Intention to buy a car within the next two years</td>
</tr>
<tr>
<td>11</td>
<td>Intention to spend money on home improvements over next six months</td>
</tr>
<tr>
<td>12</td>
<td>Cost of living now compared to six months ago</td>
</tr>
<tr>
<td>13</td>
<td>Price development over next six months (compared to last six months)</td>
</tr>
</tbody>
</table>

All questions were qualitative and most of them were of the five-fold multiple-choice type. The pre-printed categories related to questions concerning past/present and future changes were of the following forms:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>lot better</td>
<td>much more</td>
<td>very likely</td>
<td>very much higher</td>
</tr>
<tr>
<td>little better</td>
<td>a little more</td>
<td>fairly likely</td>
<td>a little higher</td>
</tr>
<tr>
<td>stay the same</td>
<td>about the same</td>
<td>about the same</td>
<td>about the same</td>
</tr>
<tr>
<td>a little worse</td>
<td>a little less</td>
<td>fairly unlikely</td>
<td>a little lower</td>
</tr>
<tr>
<td>a lot worse</td>
<td>much less</td>
<td>very unlikely</td>
<td>very much lower</td>
</tr>
<tr>
<td>don't know</td>
<td>don't know</td>
<td>don't know</td>
<td>don't know</td>
</tr>
</tbody>
</table>

All questions corresponded to the questions asked in the harmonised EU consumer survey with the exception of the time horizon, which was six months instead of the twelve months in the harmonised survey.
Results were presented in the form of percentages, i.e. relative frequencies of individual answers. Net balances, i.e. the difference between the weighted percentages of reported positive and negative answers were calculated for all questions.

2.2 Hungary - GKI Research Institute

The GKI Research Institute had been conducting a consumer survey on a monthly basis since February 1993. The sample of 1 000 households was representative of the population characterised by sex, age, education and place of living (e.g. capital, city or village). Data collection was carried out by Szonda-Ipsos, one of the leading opinion and market research firms in Hungary.

The questionnaire included all the twelve questions asked on a monthly basis in the EU harmonised survey. Additional questions were asked on a quarterly basis. However, due to financial problems (the results are hard to sell), only two extended quarterly questionnaires had been carried out in 1993. They would be made more frequently during 1994.

The results were published in one of the most influential economic newspapers in Hungary (called “Figyelo”) one month after completion of survey field work. The results were presented according to EU standards and a consumer confidence indicator was calculated.

The results from the surveys so far revealed the following points:

- The consumer confidence indicator results showed that the averages and the standard deviations of the questions included seem quite stable from month to month, but contained some trends. This indicated that consumers’ opinions only changed slowly.

- In the first surveys, consumers had been very pessimistic about the current situation but less pessimistic about the future. More recently, a strong improvement had been registered in the net balances for the questions concerning the general economic situation and the financial situation of households. The improvement in consumer confidence was explained by the proximity of the elections in Hungary. People were disappointed with the performance of the present government and hoped, that the new one would bring about improvement to the economic situation.

- There was a strong positive correlation (over 0.8) between the expectations concerning the general economic situation and the financial situation of households.

- Consumers were relatively unwilling to make major purchases. They did not plan to buy cars, build homes or spend money on home improvements in the future.

2.3 Latvia - Latvian State Committee for Statistics (SCS)

A consumer survey had been conducted on a quarterly basis since April 1993. The survey sample included 1 300 respondents within the household budget network. Information was collected by face-to-face interviews.
The questionnaire included all the twelve questions asked on a monthly basis in the EU harmonised survey. In addition, two more questions were asked in order to obtain more information about the financial situation of households:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Are you able to pay rent for your dwelling and make payments for heating, hot water, gas, electricity and other communal services?</td>
</tr>
<tr>
<td>14</td>
<td>Have you enough money to buy food products?</td>
</tr>
</tbody>
</table>

The questions concerning expenditure on a car purchase or on home improvements which were included in the EU harmonised survey were not included at present because many consumers in Latvia live below the minimum subsistence level.

The experience from the surveys so far revealed the following points:

- High inflation and large fluctuations in the economy made it difficult to predict the future. One third of the respondents could not give an opinion about the future financial situation of their household and the general economic situation in the country.

- Lack of experience with this type of surveys and changing economic conditions made it difficult for respondents to remember the situation twelve months ago and estimate it. The proportion of "don't know" answers was consequently very high.

- The survey results showed that expectations concerning income, savings and living standard improvements were very pessimistic.

- Development work with the surveys' future would include improvements related to sampling and interpretation and presentation of results.

**2.4 Poland - Central Statistical Office (CSO)**

The CSO was planning the introduction of a consumer survey. A pilot survey would be conducted in 1994 and regular surveys were planned to start in 1995.

The Research Institute of Economic Development (RIED) at the Warsaw School of Economics had conducted a questionnaire survey to monitor consumer conditions since the first quarter of 1990. The questionnaire was included every quarter in the weekly magazine "Kobieta i Życie" (Woman and Life) and readers/respondents were requested to complete and send it. Thus, the sample was drawn from a specific set of households/consumers every quarter. However, the sample was not representative of the population structure in terms of geographic, occupational and household composition factors.

The CSO survey would include all the basic questions asked in the harmonised EU consumer survey. In addition, it would include some specific items of special interest at a given time.
mostly of social nature. These included: financial means for going away on holidays; opinions concerning the use of paid medical services or readiness to take an additional job; etc. These supplementary questions would be modified in the light of the economic situation.

The implementation of the CSO consumer survey would be preceded by consultations with domestic research centres dealing with similar problems and with West-European experts concerning both general questions and details and development of further forms of co-operation with interested partners.

A first consultation with INSEE took place in February 1994. The regular survey would be conducted quarterly and based on a sample of 2 000 households. The pilot survey would use a sub-sample from the existing household budget surveys.

3. HARMONISATION OF QUESTIONNAIRE

A proposal for a harmonised questionnaire based on the EU harmonised consumer survey was presented and discussed question by question at the workshop in order to define a permanent set of questions to be used in surveys in transition countries.

The discussion of the harmonised questionnaire focused on the number of questions to be included, definitions, form and wording of questions, and period or planning horizon covered by variables.

The twelve month span used in the harmonised questionnaire was discussed in some length. Some of the countries at the workshop believed that a twelve month span was too long in a situation of dramatic changes in the economic situation. The discussion ended however with a general consensus in favour of the twelve month span because a shorter time span could create serious problems of seasonality in the data.

The conclusion of the discussion was that the minimum core set of the harmonised questions should as a first priority cover the following five variables or questions:

<table>
<thead>
<tr>
<th>Core set of variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1</strong> Financial situation of household</td>
</tr>
<tr>
<td><strong>Q2</strong> Financial situation of household</td>
</tr>
<tr>
<td><strong>Q3</strong> General economic situation in country</td>
</tr>
<tr>
<td><strong>Q4</strong> General economic situation in country</td>
</tr>
<tr>
<td><strong>Q5</strong> Purchases of consumer durable</td>
</tr>
</tbody>
</table>

As a second priority, the core set of variables should be extended to cover the following three variables or questions:
The question concerning cost of living (Q6) referred to the consumer price (CPI) development which has a measure of the cost of living in the past/present. Question Q7 (price development) referred as well to the CPI development.

The core set of variables should be surveyed on a monthly basis, if possible. However, a quarterly periodicity could be used at the outset of the survey, i.e. over the first two to three years. Quarterly surveys should be conducted in the first month of the quarter, i.e. January, April, July and October.

It was left to the individual transition countries to decide whether or not to survey the remaining proposed harmonised questions in addition to the core questions. These questions concerned the following variables:

<table>
<thead>
<tr>
<th>Q6</th>
<th>Cost of living</th>
<th>present situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7</td>
<td>Price development</td>
<td>future situation</td>
</tr>
<tr>
<td>Q8</td>
<td>Unemployment</td>
<td>future situation</td>
</tr>
</tbody>
</table>

Questions Q13, Q14 and Q15 need only to be asked quarterly as in the harmonised EU consumer survey. The planning horizon concerning questions Q13 and Q14 should refer to a two year period instead of the twelve months span used in other questions concerning future situations.

Although the exact formulation of the questions may vary slightly according to the national language, the following basic principles concerning definitions and specifications should be used:

- Questions should refer to the surveyed person and the household to which he/she belongs and not to people in general or the economy as a whole, unless otherwise stated.
- Questions concerning opinions about past/present and present/future changes or intentions should in general make use of a five-point ordinal scale (e.g. a lot better, a little better, the same, a little worse, a lot worse) with a normal zero point for scaling in the central observation. The only exception to this concerns the price questions where a small price increase is used as the normal zero point.
- Exceptions from the preceding concern the "pure" and "probable" subjective questions or variables which should make use of three or four reply options. This applies to
questions on future intentions concerning savings, car and house purchase and spending on home improvements.

- All questions concerning opinions about past/present and present/future changes should refer to a common time span of twelve months with the exception of the two questions concerning intentions to buy a car or purchase/build a house which should use a two year period as time span.

4. OTHER TOPICS DISCUSSED AT WORKSHOP RELATING TO CONSUMER SURVEYS

4.1 Consumer Surveys as a Data Source for Short-term Indicators

This session of the workshop commenced with a presentation of the general principles and characteristics of consumer surveys and their use as a source for short-term economic indicators. The special feature of the consumer surveys to obtain qualitative information on consumer sentiment (willingness to buy) was explained and compared to the quite different information obtained from quantitative household budget surveys.

Three different categories of variables could be distinguished according to the pre-printed questions included in the consumer surveys:

- "pure" subjective variables, i.e. with no ordering of the different answer options;
- "ordinal" subjective variables with a possibility of scaling the answers; and
- "probable" subjective variables, i.e. questions which imply answers in the form "very likely", "fairly likely" etc.

In order to use the survey variables as short-term indicators the qualitative information needed to be converted into a quantitative form. The desirable properties of such a quantitative index were presented and discussed. Focus was given to:

- weak monotonicity
- natural origin
- symmetry

The index used in the EU harmonised survey, the so-called balance, satisfies above mentioned properties.

For the purpose of the cardinal scale the convention was adopted that "a lot" is counted twice as much as a little".

The use of simple indicators, i.e. those based on the percentage of replies to individual answer options to a question instead of the balance was presented. For example, it could be interesting to study individually the two categories "savings" and "making ends meet" from the
question related to the financial position of the household. On the other hand, it was necessary to compile a composite index based on different questions in order to achieve an overall picture of consumer sentiment. The result was an index called "consumer confidence indicator".

The relevance of consumer sentiment as a driving force of economic activity was discussed at length. In summary it appeared that information from consumer surveys was highly correlated with other current macroeconomic aggregates and although the predictive power was relatively modest it was statistically significant, and in particular was a reliable source for the assessment of the current economic situation.

4.2 Conducting a Consumer Survey

The aim of this session was to discuss different ways of establishing a sample suitable for consumer surveys and how to install and manage the field work.

It was stressed that, in contrast to household budget surveys where the sampling unit was the household, consumer surveys used the individual as the sampling unit. Sampling individuals was usually easier to handle and offered better results with smaller sample sizes and thus lower costs.

In brief, three different sampling methods were presented and discussed:

*Address random sampling*

This method of sampling was the most reliable but required the availability of a very detailed population register including address identification. The method involved the three steps:

- definition of sample points by territorial criteria (region, district, town, etc.);
- the identification of random addresses by referring, for example, to voters lists; and
- the specification of target persons by the Kish method or any other random criteria (e.g. birth date).

*Random route sampling*

This method was less reliable than address random sampling but could be applied without having access to addresses for the whole population. The method involved the three steps:

- the selection of sample points by territorial criteria;
- the definition of random starting points by referring, for example, to the telephone directory; and then
- by random walk from fixed starting points (e.g. always on the left).
Quota sampling

This was the easiest way of sampling, but also the least reliable method of the three presented. This method comprised just two steps:

- the selection of sample points by territorial criteria; and
- the specification of sample quotas according to a selection of social characteristics (occupation, age, sex, marital status, etc.).

No sample size could strictly be recommended. The choice depended of course on the size of the country, the level of detail of the output, and the financial resources available. However, one thousand interviews were usually considered enough to guarantee reliable results on a monthly basis especially if the consumer survey was included in an omnibus survey.

The best way of conducting a consumer survey was considered to be by face-to-face interviews. This was more expensive, but it gave better results. For a two thousand person sample it was usually necessary to employ 250-300 interviewers. Telephone interviews could not be carried out in transition countries because of the low telephone penetration. Postal surveys could provide less reliable results because it was not always possible to reach the target person with certainty. Whatever method was used to conduct the survey, the response rate should be at least 70 per cent.

5. CONSUMER SURVEYS AT INSEE: EVALUATION AND USE FOR SHORT-TERM ECONOMIC INDICATOR ANALYSIS

This session covered three different topics: presentation and comparative analysis of two different consumer surveys carried out in France; a comparison between selected qualitative indices from consumer surveys with corresponding quantitative macro-economic aggregates from the quarterly national accounts, and; the use of consumer surveys in short-term economic analysis.

The general comparative analysis was carried out in order to find out if the monthly survey, based on a telephone interviews of 3 300 households, was reliable enough in comparison to the three times a year survey, based on face-to-face interviews of 7 500 households.

In brief, the results indicated that there was a stable difference in the levels of the balance indices between the two surveys. Correlation between the indices was over 0.6 for all questions, except two, dealing with consumer behaviour. For more than half of the questions the correlation coefficient was above 0.8. The conclusions from this comparison could be summarised as follows:

- sample representativeness was not a major problem;
- lack of consistency for two weakly correlated questions could be explained by the wording of the questions;
- the monthly survey was more volatile, but gave more rapid information on changing economic conditions;
- the monthly survey was more cost efficient.
On the whole, this suggested that priority should be given to the monthly consumer survey and that the less frequent but larger survey should be discontinued.

The quality of the balance indices from the triennial survey was tested against corresponding quantitative statistics using correlation analysis. The results indicated the following:

- Environmental variables: Households awareness of past inflation showed a high correlation (0.75) with the year on year change in the quarterly consumer price indices, and household opinions related to past employment show a rather high correlation with the change in employment during the previous quarter. Opinions concerning expected unemployment showed strongest correlation with the employment change during the current and the next quarter.

- Consumption: The index of consumer confidence (see below) showed the best correlation (0.39) with the year on year change in the quarterly household consumption.

- Real personal disposable income: All survey questions related to past and future financial situation and living conditions showed rather high correlation (0.55) with the year on year change in the quarterly disposable income.

- Savings: The questions on saving timeliness and expected ability to save did not seem to provide any useful information on household savings. An improvement in the wording of these questions seemed necessary.

The presentation and discussion of the use of consumer surveys in short-term economic analysis revealed the following points:

- the information was never revised;
- the results of the surveys were available with short delays;
- the surveys offered an independent source of information;
- the results were robust;
- the surveys gave information on past, present and future periods;
- the information established, in particular, a bridge between the past and the present the results were sensitive to cyclical changes, i.e. identification of turning points;
- the results were valuable for uses other than pure economic analysis, e.g. assessment of social and political situation.

6. THE EXPLANATORY POWER OF THE EUROPEAN UNION HARMONISED CONSUMER SURVEY RESULTS

The analytical sessions of the workshop ended with a presentation and discussion of the results from the EU-harmonised survey and their relevance for cyclical analysis and for tracking the economic development. In addition, the use of the results on respondent categories was presented.
In brief, the explanatory power of the survey results in relation to corresponding macro-economic variables revealed the following points:

- The consumer confidence index (CCI), e.g. the simple average of the balances to the five questions: the financial situation of the households and the general economic situation ex post and ex ante, respectively and the question concerning the advisability of making major purchases at present, was tracking the growth rate in private consumption very well.

- The correlation coefficient over the period 1979-1993 between the CCI and the growth rate of private consumption over the same quarter of the previous year was very high (0.82) for the European Union as a whole. The highest correlation (0.83) however was at a lag of one quarter, which suggest that the CCI was a lagging indicator in relation to private consumption.

- The CCI's for Germany and Italy on the other hand were leading indicators in relation to private consumption, with a lead of one quarter.

- The price indicators provided by the consumer survey were found to be very reliable. Opinions on past development of prices showed a high correlation with the annual change in the price deflator for private consumption on the Community level and opinions on expected development of prices on a monthly basis were indicating in advance the future development in consumer prices (change over same month of the previous year).

- The consumer opinions on expected development of unemployment showed a high correlation with the change in unemployment over twelve months.

- Consumer behaviour by respondent categories showed major differences in attitude towards consumption when considering age, occupation and education of respondents. However, respondent opinions do not seem to differ according to their sex in most countries. In general, elderly and less educated respondents as well as farmers were the most pessimistic categories, while young, well-educated and self-employed respondents appeared more optimistic in relative terms.

In France, clerics appear to be more inclined to consumption than professionals and elderly people were less pessimistic than middle-aged ones mainly because of a more secure financial position.

In Italy, middle-aged and elderly people showed a very pessimistic view and women appeared constantly more pessimistic than men.

7. CENTRAL AND EASTERN EUROBAROMETER

The European Union’s public opinion surveys in Central and Eastern Europe were presented as background information to illustrate the set-up of a general public opinion poll and to provide experience for conducting opinion surveys in transition countries.
The surveys measure attitudes of people concerning the general direction of the country, financial situation of households, development of economic reforms and privatisation, satisfaction with democracy and respect for human rights. In addition, opinions concerning future links with other countries and the image of the European Union were polled. Supplementary surveys were carried out from time to time to cover specific topics.

The surveys were carried out in co-operation with national institutes in Central and Eastern Europe. Sixteen countries were surveyed in the last poll. A multi-stage random probability sample design was used in all countries with a sample size of around 1 000 respondents. Information was collected by face-to-face interviews in peoples homes. The final sample was representative for adult population aged from 15 years and over.

The experiences so far revealed problems relating to: co-ordination (changes during transition phase and communication problems); physical conditions (tougher data collection); special needs for ethnic minority groups (languages and interviewers); population less used to surveys; and bad infrastructure for operating surveys.
1. INTRODUCTION

The workshop was organised in co-operation with the Estonian Institute for Market Research and was held in Tallinn on 14-16 September 1994.

The main objectives of the workshop were to: review and assess implementation and operation of qualitative business surveys conducted in the industry, construction and retail trade sectors concerning technical design and harmonised questions; present recommendations and guidelines in order to achieve comparability between surveys conducted in transition countries and EU/OECD countries, and; present methods for evaluating, interpreting and analysing survey results.

Representatives at the workshop included participants from statistical offices and/or research institutes from the following Central and Eastern European countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Also present were a number of external consultants from OECD Member countries.

2. SURVEY IMPLEMENTATION

There was a discussion on progress made in implementing surveys based on papers contributed by experts in transition countries and an overview prepared for the workshop.

The progress in implementing business surveys in transition countries was described as follows:

2.1 Industry Surveys

Regular surveys for industry were conducted in nine countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic. Introduction of a regular survey was planned in Slovenia for Spring 1995.

2.2 Construction Surveys

Regular surveys for construction were conducted in the same nine countries.
2.3 Retail surveys

Seven of these countries conducted regular surveys of the retail sector, the exceptions being Latvia and Lithuania.

3. TECHNICAL DESIGN ISSUES

The following aspects of the present state of technical design of surveys in industry, construction and retail trade were discussed at the workshop.

3.1 Sampling Frame

Almost all agencies in transition countries used a statistical register as the basic frame for surveys in industry, construction and retail trade. Administrative registers were only used in Estonia and Romania for surveys in construction and retail trade. The statistical registers were all maintained by central statistical agencies or government ministries, and updated once a year in most countries. The enterprise was used as the principal sampling unit in each surveys in all transition countries.

3.2 Sampling Method

Random stratified sampling was the most frequently used method for surveys in industry in all transition countries. The first stage of stratification was normally by industry (or by industry and region). A size variable was then used for the second stage (employment was used by most of the countries to divide enterprises into size groups). This method was however usually used in combination with purposive selection to establish a panel over time.

The sampling methods used for the construction surveys were evenly split among purposive selection and stratified random sampling. Employment was used in all but one country for stratification by size groups.

Random stratified sampling was the most frequently used method for the retail trade surveys. Employment or sales values were used in most countries for stratification by size groups.

In general, the survey samples were in most countries updated with one of the following methods:

- fixed panel
- panel with new units at regular intervals
- rotated panel
- new sample at regular intervals

Panel with new units at regular intervals was the most frequently used updating method, followed by the fixed panel approach. The other two methods are used by only a few countries.
3.3 Weighting Method

A variety of methods were used by transition countries for the aggregation of survey results including:

1. aggregation without weighting;
2. use of single weighting pattern at all levels of aggregation;
3. single weighting pattern at any higher levels of aggregation, and;
4. double weighting, (i.e. two-stage) pattern.

The two most commonly used methods for the industry survey were method (2) and method (4). The variables used to determine weights in method (2) were employment, production or turnover. For method (4) the first stage in the aggregation, up to the level of industry groups, was the same as for method (2). The second stage of the aggregation, intended to reflect the industrial structure, used production or value added to determine the weights.

A single weighting pattern at all levels of aggregation was the most frequently used method for the surveys of construction and retail trade, the variables used being employment or turnover.

Only two transition countries aggregated their survey results in unweighted form, and only one country used weighting only at higher levels of aggregation.

4. HARMONISATION OF QUESTIONNAIRES

4.1 Overview of Harmonised Variables

An overview of the variables included in the harmonised set of questions proposed for use in transition countries for surveys in industry, construction and retail trade is presented below. The harmonised questionnaires include the following variables:
**INDUSTRY SURVEY**

<table>
<thead>
<tr>
<th>Type of Variable and Period Covered</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>tendency</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Order books, total and export</td>
<td>level</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Stocks of finished goods</td>
<td>level</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Production constraints</td>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>Production capacity</td>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>Capacity utilisation</td>
<td>level</td>
<td>tendency 12 months</td>
</tr>
<tr>
<td>Investment</td>
<td></td>
<td>situation</td>
</tr>
<tr>
<td>Type of investment</td>
<td></td>
<td>situation</td>
</tr>
<tr>
<td>Investment constraints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business situation</td>
<td>tendency</td>
<td>tendency 6 months</td>
</tr>
</tbody>
</table>

**CONSTRUCTION SURVEY**

<table>
<thead>
<tr>
<th>Type of Variable and Period Covered</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business activity</td>
<td>tendency</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Production constraints</td>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>Order books</td>
<td>level</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output prices</td>
<td></td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Period of production secured</td>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>New orders (contracts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial situation</td>
<td>tendency</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Delays in payment by clients</td>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>Technical capacity</td>
<td>situation</td>
<td></td>
</tr>
</tbody>
</table>

**RETAIL SURVEY**

<table>
<thead>
<tr>
<th>Type of Variable and Period Covered</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business situation</td>
<td>tendency</td>
<td>tendency 6 months</td>
</tr>
<tr>
<td>Stocks</td>
<td>level</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Orders placed</td>
<td></td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Selling prices</td>
<td>tendency</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Financial situation</td>
<td>tendency</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Competition in own sector</td>
<td>tendency</td>
<td></td>
</tr>
<tr>
<td>Activity constraints</td>
<td>level</td>
<td></td>
</tr>
</tbody>
</table>
In the industrial sector almost all harmonised variables were covered by surveys in all countries. The only variables not fully covered related to one or more questions concerning investment in the case of Estonia, Hungary and Poland. The questions concerning total demand expectations and present and future business situation were not covered in Estonia.

In the construction sector all harmonised variables were covered by surveys in the Czech Republic, Latvia, Poland and the Slovak Republic. Surveys in Bulgaria and Romania cover all but one of the harmonised variables namely, financial situation and technical capacity, respectively. Two or three of the variables concerning order books, period of production secured, new orders, financial situation and delays in payments were not covered in Estonia, Hungary and Lithuania.

In the retail trade sector all harmonised variables were covered by a survey in all countries with the exception of Romania. Variables concerning prices, financial situation and competition were not covered by the survey in Romania and the variable orders was not covered by one of the surveys in Poland.

The exact formulation of the harmonised questions could vary slightly between surveys according to the national language but the basic content was the same. The basic principles concerning definitions and specifications listed below were discussed and agreed for the surveys in industry, construction and retail trade.

4.2 Recommendations for the Content of the Harmonised Questionnaires

- All information should be qualitative unless otherwise stated;
- All questions should be referred to the surveyed enterprise itself and not to the industry or economy as a whole, unless otherwise stated;
- Questions referring to an assessment of the current situation should imply a comparison with a normal situation;
- Questions concerning judgements about past/present and present/future changes or tendencies should make use of a three-point ordinal scale (+, =, -) with values + 1, 0 and - 1;
- All questions concerning past/present changes should refer to a common time span of one period (month or quarter according to the periodicity of the survey);
- All questions concerning present/future changes should be evaluated on a 3-4 month basis, unless otherwise stated.

The main departures from the above definitions and specifications for the surveys in the different sectors in the transition countries are outlined below.
The surveys of the industrial sector showed more departures from the harmonised definitions relative to the surveys in the other sectors. However, in the surveys in Bulgaria, Latvia and Lithuania there were no departures from the harmonised definitions.

The main differences in the industry surveys concerned the comparison period for future changes (mainly for production, order books, selling prices, employment and business situation) and the form of the question, i.e. change versus level (production, order books and stocks of finished goods). A mixture of qualitative and quantitative information concerning questions on production, prices and employment was used in two countries.

Most countries used the harmonised questions in their surveys of the construction sector. Bulgaria, Estonia, Latvia and Lithuania complied fully with the harmonised definitions. Only the questionnaires in Hungary and the Slovak Republic showed major departures from the harmonised definitions.

The main discrepancies in the construction survey compared with the harmonised form concerned the form of the question relating to variable order books and the comparison period for questions on future changes concerning employment, prices and capacity. A mixture of qualitative and quantitative information concerning questions on employment and business activity was used in two cases.

The surveys of the retail trade sector showed the closest agreement with the harmonised questions in almost all countries. Four countries, namely Bulgaria, the Czech Republic, Estonia and the CSO survey in Poland also complied fully with the harmonised definitions. Only the survey in the Slovak Republic showed major departures from the harmonised definitions.

The main differences were in the form of the questions for the variables covering stocks and in the comparison period for the variable “expected business situation”. Two countries collected information on demand or purchases under the variable “orders” and a mixture of qualitative and quantitative information concerning selling prices was used in one country.

4.3 Requirements for Comparability Between Surveys

Criteria for achieving comparability between business surveys were presented in a paper presented at the workshop. The aim of the paper was to identify and discuss the requirements which should be fulfilled to achieve co-ordinated and comparable business surveys conducted in industry carried out by transition countries. Comparability was relevant over time within a country and over space between countries.

The paper presented recommendations for a common set of standards for defining and delineating the target universe, its sub-aggregates and units and for giving guidelines for designing business surveys with acceptable quality and describing the contents of the surveys.

The target universe was defined by kind of activity, size, location and time. Problems of over-coverage in business registers were outlined and methods proposed for dealing with them. Under-coverage (i.e. firms which exist but which are not included in the register) was likely to be a more important problem in transition countries and its impact on survey quality was analogous to non-response. Other information systems could however identify and deal with under-coverage (e.g. national accounts data, business registers etc.).
Sampling procedures that could be followed were:

- a survey covering the whole universe. Was possible but not practical as it was costly and slow;
- sampling via purposive selection. Was simple, cheap but gave biased results;
- random sampling was demanding but gave unbiased results.

The paper then discussed weighting and sampling adjustment issues. Possible reasons for bias, including non-response, measurement and processing errors, were outlined.

5. SUMMARY OF OTHER TOPICS DISCUSSED AT WORKSHOP

5.1 Reporting Practices Survey

The Confederation of British Industry (CBI) investigates the reporting practices of respondents to their regular business surveys by carrying out special surveys from time to time. The results from the latest special survey on how companies answered the CBI's survey of retailing, wholesaling and motor trades were presented at the workshop. The paper centred on a number of issues which are crucial to the correct interpretation of the survey results. The main results are summarised below:

- Sales volume increases tended to be overstated by the price rises during periods in which inflation was picking up, and were correspondingly understated when inflation rate falls;
- Sales were assessed on a consistent "like-for-like" basis and a majority of companies replied in terms of a calendar month, rather than for four or five week trading periods;
- Most respondents indicated that sales were assessed as "average" for the time of the year by examining the previous year's sales for the month in question.
- Little information was lost by using the balance, i.e. difference between the percentage of respondents giving positive and negative replies as an indication of "trends". The majority of respondents used the answer "unchanged" only if they experienced a fairly small change, i.e. a range of up to two per cent in the variable concerned.
- Quarterly questions on price and employment expectations referred to the next three months, but were interpreted by most companies for only one month ahead. However, the relative stability of these variables meant that expectations were likely in practice, to be reliable over the next three months.
- Price changes of capital goods were excluded by a third of the respondents when assessing investment plans for the year ahead. The prices used were those prevailing at the time of the survey.
5.2 Integration of Survey Results in Economic Analysis

The indicator approach for analysis and forecasting using business survey data was the main topic of another paper presented at the workshop.

It was pointed out in the paper that econometric models were based on structural equations which reflected regularities of past behaviour. If policy or the behavioural structure changed the equations were no longer reliable for forecasting purposes and less formalised indicator systems were much more flexible and thus able to overcome such difficulties.

The indicator approach was presented and criteria for selection and evaluation of economic indicators was discussed. The rationales for the phasing of the group of indicators selected as leading indicators were then discussed in detail in relation to the following arguments: (1) production time, (2) ease of adoption, (3) market expectations and (4) prime movers. The logic of these arguments was elaborated and it was argued that entrepreneurial assessments and expectations play a crucial role in the end.

In reviewing these arguments it was concluded that the principal leading indicators were derived from empirically ascertained data on assessments and expectations.

The integration of business survey data in macro-economic analysis and forecasting was demonstrated with the procedure used at the IFO Institute. The analytical part of the forecasting procedure was based on a systematic analysis of cyclical indicators of both quantitative and qualitative nature. This informal way of forecasting was then compared with the results of the more formal results based on macro-economic model forecasting. The procedure was repeated in an iterative way until the results seemed satisfactory from both a pragmatic and theoretical point of view.

5.3 Evaluation and Use of Survey Results

The purpose of this session was to present and discuss different ways of investigating the reliability of survey results and methods for building composite indicators of survey indicators. Two reference papers served as a basis for the discussion.

The first paper analysed the relationship between qualitative business survey data and official statistics in six transition countries: Bulgaria, Czech Republic, Hungary, Poland, Slovak Republic and Romania, with particular attention to comparisons between balances of survey data and changes or de-trended data of comparable official statistics.

The results of the external comparisons pointed to mixed results for the countries analysed. In the case of Hungary, a very high correlation was observed between survey data on production tendency and the quarterly change in the official production index. Data for Poland indicated best results between survey data and the twelve month change or de-trended index of production. The same comparison on Romanian data presented in another paper pointed to high correlation between survey data lagged one quarter and the quarterly change in the official production index. The results for the other analysed countries showed no clear relationships.

The second paper pointed out advantages and limits of survey results and gave examples on how to use the results for cyclical analysis, in particular, the construction of composite indicators of survey results.
The evaluation of the cyclical development based on results from the different business surveys in the European Union showed that many indicators from these surveys were highly correlated and were leading indicators for the economic cycle. This experience led to the establishment of composite indicators for the industry, construction and consumer surveys.
1. INTRODUCTION

The workshop was organised in co-operation with the National Statistical Institute of Bulgaria (NSI) and was held at the training centre of the NSI at Slivek, Bulgaria on 5-7 July 1995.

The objectives of the workshop were to: review progress and discuss problems concerning technical design and harmonised contents of the surveys; review different weighting methods; present experiences with conducting surveys in an established market economy; develop recommendations on how to present and design survey reports, and; present methods on how to use survey results in economic analysis.

The workshop was attended by representatives from statistical offices and/or research institutes from the following eleven Central and Eastern European countries: Albania, Bulgaria, Czech Republic, Estonia, FYROM, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Also present were a number of external consultants from OECD Member countries.

2. HARMONISATION - REVIEW OF IMPLEMENTED SURVEYS

The present situation concerning progress with implementing the harmonised questions or variables in the surveys of industry, construction and retail trade in transition countries is summarised below.
## 2.1 Industry Survey

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Transition country surveys: Variables not covered</th>
<th>Main Departures from harmonised variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Production, ex post</td>
<td></td>
<td>Poland*</td>
</tr>
<tr>
<td>Q2 Total demand/order books</td>
<td></td>
<td>Estonia, Poland#</td>
</tr>
<tr>
<td>Q3 Export demand/order books</td>
<td></td>
<td>Estonia, Poland#</td>
</tr>
<tr>
<td>Q4 Stocks of finished goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5 Production, ex ante</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6 Selling prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7 Employment, ex ante</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8 Limits to production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9 Production capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10 Total demand, ex ante</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q11 Exports, ex ante</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12 Capacity utilisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13 Investment, ex ante</td>
<td>Poland*</td>
<td>Poland#</td>
</tr>
<tr>
<td>Q14 Type of investment</td>
<td>Poland*</td>
<td></td>
</tr>
<tr>
<td>Q15 Investment constraints</td>
<td>Estonia, Hungary, Poland@</td>
<td>Poland*</td>
</tr>
<tr>
<td>Q16 Business situation</td>
<td>Estonia</td>
<td>Poland*</td>
</tr>
<tr>
<td>Q17 Business situation, ex ante</td>
<td>Estonia</td>
<td>Poland@, Romania</td>
</tr>
<tr>
<td>Q18 Ownership</td>
<td>Bulgaria, Estonia, Latvia, Lithuania, Poland@</td>
<td></td>
</tr>
</tbody>
</table>

# Poland CSO survey: * Poland RIED survey: @ Poland both CSO and REID surveys

**Country coverage**

Regular surveys were conducted in the following ten countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

**Coverage of harmonised variables**

Almost all harmonised variables were covered by surveys in all transition countries. The only variables not fully covered related to one or more questions concerning investment (Q13, Q14 and Q15) in the case of Estonia, Hungary and the CSO survey and the RIED survey in Poland.

The questions on present and future business situation (Q16 and Q17) were not included in the survey for Estonia. Information on ownership (Q18) was not asked in the surveys for Bulgaria, Estonia, Latvia, Lithuania and Poland (both CSO and REID surveys). However, this information was available from the statistical register in most countries and separate surveys for private and public enterprises were conducted in Bulgaria and Poland (CSO survey).
Main departures from harmonised variables

- Estonia

The assessment of total demand (Q2) and demand from abroad (Q3) were measured in terms of a change in demand between the current and previous quarter and not as an assessment against a normal demand level, as recommended.

- Hungary

The comparison period for future production activities (Q.5) and employment expectations (Q7) was 6 months and not 3-4 months, as recommended.

Selling price expectations (Q6) were measured in seven intervals expressing percentage changes transformed to a three point scale and with a comparison period of 6 months and not 3-4 months, as recommended. A mixture of quantitative and qualitative information was not recommended.

Expected total and export demand (Q10 and Q11) refer to the volume of sales and the comparison was 6 months and not 3-4 months, as recommended.

- Poland

. CSO Survey

The assessment of total and export demand (Q2 and Q3) was measured as changes between current and previous month and not as assessments against normal demand levels, as recommended.

The comparison period for future production and selling price expectations (Q5 and Q6) was 1 month and not 3-4 months, as recommended.

The comparison period for the expected business situation (Q17) was 3 months and not 6 months, as recommended.

. RIED Survey

The present and future production (Q1 and Q5) was measured in comparison with a normal situation and not in terms of a change between current and previous period, as recommended.

The present business situation (Q16) referred to the general economic situation in the Polish economy and the comparison period and was measured as the change between current and previous month and not as an assessment of the present situation (good, sufficient, bad), as recommended. The harmonised question referred to the situation of the enterprise and not the general economic situation in the country.

The expected business situation (Q17) referred to the general economic situation in the Polish economy and the comparison period was 3-4 months and not 6 months, as recommended. The
A harmonised question referred to the situation of the enterprise and not the general economic situation in the country.

- Romania

The comparison period for the expected business situation (Q17) was 3 months and not 6 months, as recommended.

### 2.2 CONSTRUCTION SURVEY

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Transition Surveys: Variables Covered</th>
<th>Country Not Covered</th>
<th>Main Departures from Harmonised Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Business activity, ex post</td>
<td></td>
<td></td>
<td>Hungary</td>
</tr>
<tr>
<td>Q2 Limits to production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 Order books</td>
<td></td>
<td></td>
<td>Poland@, Romania</td>
</tr>
<tr>
<td>Q4 Employment, ex ante</td>
<td></td>
<td></td>
<td>Hungary</td>
</tr>
<tr>
<td>Q5 Order books</td>
<td></td>
<td></td>
<td>Hungary</td>
</tr>
<tr>
<td>Q6 Period of production secured</td>
<td>Poland*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7 Orders (contracts), ex ante</td>
<td>Hungary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8 Financial situation, ex post</td>
<td>Bulgaria, Hungary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9 Delays in payment by clients</td>
<td>Hungarian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10 Technical capacity</td>
<td>Romania</td>
<td></td>
<td>Poland@</td>
</tr>
</tbody>
</table>

# Poland CSO survey: * Poland RIED survey: @ Poland both CSO and REID surveys

**Country coverage**

Regular surveys were conducted in the following nine countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovak Republic.

**Coverage of harmonised variables**

All harmonised variables were covered by surveys in the Czech Republic, Estonia, Latvia, Lithuania, Poland and the Slovak Republic. Surveys in Bulgaria and Romania covered all but one of the harmonised variables namely, financial situation (Q8) and technical capacity (Q10), respectively. The variable period of production secured (Q6) was not included in the RIED survey in Poland. The three variables orders (contracts) (Q7), financial situation (Q8) and delays in payment (Q9) were not covered by the survey in Hungary.
Main departures from harmonised variables

- Hungary

  Business activity (Q1) was measured in comparison with a normal situation in terms of an appreciation of the level of activity and not as the change between current and previous period, as recommended.

  The employment expectations (Q4) and price expectations (Q5) referred to the situation over the next 6 months and not over the next 3-4 months, as recommended.

- Poland

  CSO Survey

  The assessment of order books (Q3) was measured as the change between the current and previous quarter and not in comparison with a normal situation, as recommended.

  The comparison period for the assessment of technical capacity (Q10) was 6 months and not 12 months, as recommended.

  RIED Survey

  The assessment of order books (Q3) was measured as the change between the current and previous period and not in comparison with a normal situation, as recommended.

  The assessment of technical capacity (Q10) was measured in terms of a change in capacity between the last quarter and future 3-4 months and not in comparison with a sufficient level of capacity with regard to expected demand over the next 12 months, as recommended.

- Romania

  The assessment of order books (Q3) was measured as the change between the current and previous quarter and not in comparison with a normal situation, as recommended.
2.3 RETAIL TRADE SURVEY

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Transition Surveys: Covered</th>
<th>Country Variables Not</th>
<th>Main Departures from Harmonised Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Business situation</td>
<td></td>
<td></td>
<td>Poland#</td>
</tr>
<tr>
<td>Q2 Stocks</td>
<td></td>
<td></td>
<td>Romania</td>
</tr>
<tr>
<td>Q3 Orders placed, ex ante</td>
<td></td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Q4 Business situation, ex ante</td>
<td></td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Q5 Employment, ex ante</td>
<td></td>
<td></td>
<td>Romania</td>
</tr>
<tr>
<td>Q6 Selling prices, ex post</td>
<td></td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Q7 Selling prices, ex ante</td>
<td></td>
<td></td>
<td>Romania</td>
</tr>
<tr>
<td>Q8 Financial situation, ex post</td>
<td></td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Q9 Competition/own sector, ex post</td>
<td></td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Q10 Activity constraints</td>
<td></td>
<td></td>
<td>Slovak R</td>
</tr>
<tr>
<td>Q11 Sales, ex post (SPPY)</td>
<td></td>
<td>Bulgaria, Estonia, Hungary, Poland@</td>
<td></td>
</tr>
<tr>
<td>Q12 Sales, ex post (PP)</td>
<td></td>
<td>Bulgaria, Hungary, Poland#</td>
<td>Slovak R</td>
</tr>
<tr>
<td>Q13 Storage space, ex post</td>
<td></td>
<td>Estonia, Poland#</td>
<td>Romania</td>
</tr>
</tbody>
</table>

# Poland CSO survey: * Poland RIED survey: @ Poland both CSO and REID surveys

Country coverage

Regular surveys were conducted in the following eight countries: Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Poland, Romania and the Slovak Republic.

Coverage of harmonised variables

All basic harmonised variables (Q1 to Q10) were covered by a survey in all countries with the exception of Romania. Variables concerning prices (Q6 and Q7), financial situation (Q8) and competition (Q9) were not covered by the survey in Romania and the variable orders (Q.3) was not covered by the CSO survey in Poland.

The optional variables (Q11 to Q13) were not included in the surveys in several countries. The variable sales (Q11), measured in comparison to the same period of the previous year (SPPY), was not covered by the surveys in Bulgaria, Estonia, Hungary and Poland (both CSO and REI surveys). The variable sales (Q12), measured in comparison to the last period, was not covered by the surveys in Bulgaria, Hungary and Poland and the variable storage space (Q13) was not included in the surveys in Estonia and Poland (CSO survey).
Main departures from harmonised variables

- Poland - CSO Survey

The assessment of stocks (Q2) was measured with inverted scale, i.e. too large is assigned a value of minus 1 and too small a value of plus 1, in comparison with the recommended scale.

- Romania

The comparison period for the expected business situation (Q4) was 3 months and not 6 months, as recommended.

Storage space (Q13) was measured in terms of an appreciation of the level of space and not as the change between current and previous period, as recommended.

- Slovak Republic

Sales (Q11 and Q12) referred to retail turnover.

2.4. Discussion and Recommendations

The discussion of the harmonised contents of the surveys covered the following general points:

The structure of the questionnaires

It was noted that the general structure of the questionnaires was characterised by the following:

- A three point ordinal scale was used;
- One set of questions concerned changes over time, another gave an assessment of the situation at a point of time;
- Comparisons to the normal situation referred to what was normal for the reporting unit;
- The information referred to a common time span and a common point of time, respectively.

Time schedule for the individual surveys

Although the time schedule for the surveys had to be adjusted to the specific conditions in each country it was agreed to aim at having a timeliness at least meeting the following dates.
• Questionnaires to reach respondents no later than the 25th of month t (where month t is the month (or the third month in the quarter) for which outcome information is collected);

• Respondents to send in their replies no later than the 10th of month t+1;

• Reminders to be sent out on the 10th of month t+1;

• Production of tables to start on the 21st of month t+1;

• Survey report to be published on the 30th of month t+1.

The order of questions

With regard to the order in which the questions were to be asked in the questionnaires it was agreed that monthly, quarterly and (bi)annual questions should be held together each in a group of its own. The order in which the questions were to be asked within each group was left to the discretion of individual countries with the exception that questions about past development and present situation should be placed before questions about expectations for the future. This could either be done variable by variable or by taking all questions on past developments for one period in one block and all questions regarding expectations for the next period in another block.

The recommendations can be summarised as follows.

<table>
<thead>
<tr>
<th>Monthly data</th>
<th>Quarterly data</th>
<th>(Bi) Annual data</th>
</tr>
</thead>
<tbody>
<tr>
<td>in one group with order of variables free that either:</td>
<td>in one group with order of variables free that either:</td>
<td>in one group with order of variables free that either:</td>
</tr>
<tr>
<td>In blocks of:</td>
<td>In blocks of:</td>
<td>In blocks of:</td>
</tr>
<tr>
<td>- ex poste data</td>
<td>- ex poste data</td>
<td>- ex poste data</td>
</tr>
<tr>
<td>- as of now data</td>
<td>- as of now data</td>
<td>- as of now data</td>
</tr>
<tr>
<td>- ex ante data</td>
<td>- ex ante data</td>
<td>- ex ante data</td>
</tr>
<tr>
<td>or:</td>
<td>or:</td>
<td>or:</td>
</tr>
<tr>
<td>Variable by variable:</td>
<td>Variable by variable:</td>
<td>Variable by variable:</td>
</tr>
<tr>
<td>- ex poste</td>
<td>- ex poste</td>
<td>- ex poste</td>
</tr>
<tr>
<td>- as of now</td>
<td>- as of now</td>
<td>- as of now</td>
</tr>
<tr>
<td>- ex ante</td>
<td>- ex ante</td>
<td>- ex ante</td>
</tr>
</tbody>
</table>

The term "normal"

This term was used in questions regarding the present situation, not in questions regarding change over time. It referred to the situation of the respondent's own business. It was noted that although the term "normal" was somewhat ambiguous it had turned out to be useful in the two cases
where it was used in the manufacturing survey, viz. order books and stocks of finished goods. Several participants at the workshop reported that some respondents in their countries had had difficulties in envisaging what conditions would be normal for their business.

Interpreting results for the investment question

The way the question about investments was structured had caused difficulties in describing the development over time of investments using the traditional balance between the percentage of "up" and "down" responses. The harmonised questionnaire read as follows on this point:

Fixed investment (machinery, buildings etc.)

a) Is planned for this (next) year
   yes  no

b) If yes, will fixed investment be this (next) year compared to last (current) year
   higher (+)  about the same (=)  lower (-)

A full description of the investment development reflected in the answers to these two questions cannot be given using just one balancing item. It had been proposed (in a paper presented at the Tallinn workshop held in 1994) to treat the problem as follows where "no investment planned" is the alternative used for the respondents answering "no" to question (a).

Investment question

<table>
<thead>
<tr>
<th>Answer alternative</th>
<th>Assigned value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>+1</td>
</tr>
<tr>
<td>About the same</td>
<td>+1, +/-O</td>
</tr>
<tr>
<td>Lower</td>
<td>-1</td>
</tr>
<tr>
<td>No investment planned</td>
<td>-1</td>
</tr>
</tbody>
</table>

This meant that tabulation of the replies to this question should be made in two cells as illustrated by the following example (data in percentage of all replies).

<table>
<thead>
<tr>
<th>a) Do you plan to invest this (next) year</th>
<th>b) Size of investment this (next) year compared to last (this) year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 75</td>
<td>Higher 40 (53)*</td>
</tr>
<tr>
<td></td>
<td>About the same 20 (27)*</td>
</tr>
<tr>
<td></td>
<td>Lower 15 (20)*</td>
</tr>
<tr>
<td>No 25</td>
<td></td>
</tr>
</tbody>
</table>

* The percentage distribution over "Higher", "About the same" and "Lower" of those planning investments.
**Weighting**

Different weighting methods with numerical illustrations were covered in a paper discussed at the workshop. The discussion focused on the use of weights and more specifically about how not to use weights. This discussion was often beset by confusions and misunderstandings. There were in fact two interpretations of the word “weighting”:

- The first was to make an adjustment to the sample according to the properties of the target population. Here we had the sample fraction in mind. As far as random sampling was concerned experts in this field at the workshop pointed out that this kind of "weighting" is always necessary. The use of the sample fraction for a simple random sample and a stratified random sample was illustrated during the discussions. In the first case, each firm had the same probability to be chosen for the sample. In a stratified random sample this probability differed for each stratum.

- The second meaning of the word "weighting" was for indicating the process of aggregating the individual responses. Here there are three main possibilities:
  - the democratic option (i.e. each element had the same weight/one man one vote);
  - the plutocratic option. The weights varied according to the importance of the element;
  - the hybrid option. Within the stratum, there was equal weighting (democratic option), but each stratum was given a weight according to its importance.

The choice of one of these three weighting systems depended normally on the nature of the question and the availability of data that could be used as weights.

Although it was clearly showed that weighting has an important influence on the results it could be stated however that unweighted (equally weighted) results were, under certain conditions, not necessarily worse than weighted ones.

The comparison of on the one side the influence of weights and the unweighted results, and the experiences of the different countries on the other side, leads to the conclusion that the hybrid weighting system could be highly recommended to the participants.

3. EXPERIENCE WITH SURVEYS IN A MARKET ECONOMY

The experience of the National Bank of Belgium in conducting surveys and in presenting survey results was covered in two separate papers discussed at the workshop.

The main points covered in the first paper dealing with the operation of business surveys were:

- Enterprises were treated as the main users of the survey results and not only as the respondents. In many transition countries, institutions such as the government,
The use of product classification corresponded more to business needs. However, this classification had some features which made the operation of surveys more costly. Benefits should outweigh costs. Taking this into account, the use of a product classification was not recommended for countries in transition.

Next to product orientation, there was a tendency towards market orientation. Users of survey results wanted more than just data about their products, they wanted market information without paying for it.

Questionnaires should be sent to local units and not to headquarters. It was necessary to use local units to obtain regional information. Belgium as a federal state was very interested in regional information. The use of local units was sometimes a problem because they may have limited production and no financial data.

The business register was not the only source of information used for compiling a panel because information supplied by the business register was not complete. Local units were, for example, not represented in the business register. Additional information was to be found within the so-called business organisations, which regroup firms by sector. These organisations accepted information about local units, but because they are forced to take all interested firms, some duplication existed. Business organisations were useful for the manufacturing and construction sector, but not for the service sector. The Chamber of Commerce provided source data on the service and retail trade sectors. Finally, additional information was found by the bank agencies network.

The main part of the strategy to convince entrepreneurs to fill in the questionnaires was the supply of product and market information in return. Furthermore, survey results were not only sent to the person filling in the questionnaire, but also to other potential users within the firm, such as the market and financial managers. If the survey results were useful to these managers they might put extra pressure on the company respondent to fill in the questionnaire. It was important that the results be presented in a clear and attractive way and become quickly available. In order to guarantee confidentiality the "tear off" address method was used so that the name of the company is separated from the questionnaire.

Data were transferred via mail (traditional sectors), phone and fax (emerging sectors). Fax was used by 70 per cent of respondents in the service sector.

Data editing was performed on-line in two ways. The "heads up data entry method" gave very quick results with warnings about possible errors based on a simple validation of the questionnaires. The "heads down method" was more time consuming. Part of the data was transferred to another computer and further validations and information on non-response could be derived.

The aggregation of individual answers was based on the turnover of the product and the aggregation to sector level was based on value added. A difficulty which existed in this context was to find the value added on the different products. The experience of the
National Bank with weighting and not weighting was that it depended on several factors such as the product, the sector and even the state of the economy.

The main points emerging from the second paper on the design and content of survey reports and the ensuing discussion are summarised below.

- The last stage was the most important. The presentation of business survey findings offer the business community insight into sharply as well as poorly perceived developments that were taking place in the business environment. The shared common awareness of these developments on part of policy makers as well as corporate management facilitated proactive and reactive initiatives.

- Structural coherence and conciseness was important, that is, the survey approach and associated documentation had to be pragmatic and focused. Topics should be current, relevant, address points of interest to the reader, be short and concise, simple in structure, well formatted and attractively presented.

- Content should be user driven. Indicators should be transparent. The resultant effort should demonstrate and clearly acknowledge the target audiences interests and concerns. Candidate indicators used in the effort should be clearly explained and qualified. Product related, chronological or aggregated (composite) indicators need to be clearly specified in terms of their relevance, use and limitations. Finally, subjective or objective elements affecting the results should be clearly indicated.

- Supporting material should be well qualified. Tables, graphs or other types of supporting pictorial media would typically be presented within the body of the survey report. The reader should be able to access the reasoning behind this selection process. Subjective factors motivating the choice of one presentation scheme over another should be well articulated. Equally, objectives factors should clearly be stated in terms of standards and practices commonly used by the business survey community.

4. THE USE OF SURVEY RESULTS IN ECONOMIC ANALYSIS

Three papers were covered under this topic at the workshop. The first focused on strategies for improving the use of survey results for economic forecasting within companies. The second gave an overview of cyclical indicators and how survey indicators fitted into this context. The third focused on advantages and limits of survey results for cyclical analysis.

4.1 How to Improve the Acceptance of Survey Results by Entrepreneurs/Policy Makers

The starting point of this paper was the observation that one of the main problems in running surveys was the lack of interest by companies to participate. This was once again confirmed in the results of the ad-hoc survey for the Sofia workshop. This ad-hoc survey also pointed to the fact that different survey institutions expressed doubts about the usefulness of survey results for economic analysis and forecasting within individual companies.
The paper discussed gave convincing examples which prove that these doubts are not well founded and that business survey results could really be of great interest for sectoral and company analysis.

At a sectoral level the system of "corridors" which was now used in Germany for 20 branches, was explained. This system comprised building up a short-term forecast for a target variable (e.g. production trends) using leading indicators. It was important to mention that the choice of leading indicators was not limited to survey results, but was extended to quantitative statistics. As even the best composite leading indicator never showed a perfect fit with the target variable it was necessary to calculate a confidence interval and this procedure resulted in "forecast corridors".

The paper also gave an example of company forecasting. In this field it was important to be able to present to a company, relevant leading information about the branch in which it was active. This could for example be done by presenting the business climate for the company's customer's branches. By doing so the company would get a leading indicator with respect to the orders it would receive.

Another original way of using survey results was based on the disequilibrium analysis at the branch level. This approach focused on the micro data and attempted to draw conclusions from the structure of individual answers. Companies were classified into one of four groups according to their replies to the question about limitations to production in the manufacturing survey. The first group of companies without limitations problems, the second group with complaints about the weakness of demand, a third with complaints on the supply side, and the final group comprising those who had both demand and supply problems.

This approach had many advantages:

- it enabled the assessment of both cyclical and structural phenomena at the same time;
- it allowed not only sectoral approaches but also a more aggregate approach to be carried out;
- it was possible to apply this approach without having time series and this was of special interest in the case of transition countries;
- where time series did exist it was a tool for cross-section analysis.

Finally, the paper indicated ways to demonstrate the usefulness of survey results for policy makers. Most of the time policy makers relied for their decisions on forecasts based on a strict application of economic theory. However, these forecasts were not always successful because their starting point was that behaviour of economic agents was strictly rational. This view was unrealistic. An analysis of the micro-data of business survey results added to the understanding of the behaviour of economic agents. This was important in order to obtain a clear understanding of the relationship between policy decisions (fiscal and monetary policy) and their impact.
4.2 Cyclical Indicators and Business Tendency Surveys

This paper covered the broad spectrum of cyclical indicators from criteria used for selecting series, processing them (i.e. seasonal adjustment de-trending, etc.) and combining individual indicators into composite ones, in order to increase the chances of obtaining true signals for economic turning points.

Naturally the greatest interest lay with composite leading indicators. It was stressed that the choice of components for this type of indicator may vary between countries. Some countries depended to much larger degree on exports than others. For example, the United States where the export ratio, i.e. exports in relation to GDP, was less than 10 per cent. It seemed necessary to tailor-make such composite indicators.

The business survey results had the advantage of being flexible and robust at the same time. This meant that even under different structural preconditions in the individual countries business survey series were as a rule amongst the most important components of a composite leading indicator. A special advantage of the business survey results lay in the fact that these series were usually much less distorted by strong seasonal or erratic influences than most quantitative series.

In the discussion at the workshop it was further stressed that it was difficult to find good quantitative benchmarks for composite as well as for individual leading indicators. The conclusion for the time being was to continue with business surveys in the harmonised way and focus on internal consistency checks as criteria for the reliability of the business survey results. An OECD representative at the workshop mentioned that work was in progress to improve national accounts in all Central European countries as well as more reliable figures on a quarterly basis which could be used as benchmarks for the business survey results. These were expected to be available in 1996.

Another problem stressed in the discussion at the workshop was the nature of the business cycle in transition countries. There was no question that transition countries face a much stronger mixture of structural and cyclical components than was the case in most established market economies and that it was difficult to disentangle these factors. However, business surveys if analysed in an appropriate way by focusing more on an analysis of micro-data, seemed to be better suited to tackle these problems than was possible with traditional quantitative indicators.

The comparison of quantitative and qualitative indicators was impeded by the different degrees of seasonal distortions. In most Central European countries no seasonal adjustment procedure has been applied until now, either because the series were too short, or because no appropriate software was available. However, most countries planned to commence using seasonal adjustment in the near future.

4.3 The Use of Business Tendency Survey Results

This paper focused on three aspects of the use of business survey results:

- Advantages and limitations of survey results as a source for short-term economic information;

- Interpretation of survey results;
• Use of business and consumer survey results for cyclical analysis

Business survey results had several advantages. These included rapidity (survey results were available before those obtained with traditional statistical methods), and the fact that business surveys provided information not covered by quantitative statistics. They also include forecast information. However, the interpretation of business survey results was sometimes complicated by the subjective nature of the replies. Results over longer time periods show that many firms were consistently a little too optimistic (or too pessimistic) in their replies. For example, firms tended to report that their order books were rather lower than normal and that their stocks were rather higher than normal. In addition, answers to change questions may refer to the change over corresponding period of the previous year and not, as requested, to the change over previous period.

Business survey results were extremely useful for cyclical analysis. Many survey indicators could be used to predict turning points in the general economic development. The best cyclical survey indicators were combined into so called confidence indicators for each harmonised survey.

These confidence indicators were finally combined into the economic sentiment indicator. This indicator was the average of four sets of data, the three confidence indicators and the share price index.

Finally, confidence indicators calculated on survey results for Central European countries were analysed and discussed.
BUDAPEST, 29-31 MAY 1996

1. INTRODUCTION

The workshop was organised in co-operation with the GKI Economic Research Company in Hungary and held in Budapest on 29-31 May 1996.

The main objective of the workshop was to discuss analytical issues related to business and consumer surveys conducted in transition countries. As a basis for this discussion analysis was carried out on real data provided by participants from transition countries. The analysis covered the following issues:

- data analysis-evaluation of business survey results;
- evaluation of economic activity on the basis of business survey results;
- composite leading indicators;
- cross-section analysis of business survey data on the micro level; and
- analytical issues concerning consumer surveys.

Methodological issues concerning business surveys in industry, construction and retail trade were also discussed in the first session and covered the following issues: review of implemented surveys and progress with harmonisation; rationale for a product based survey in manufacturing industry; and sampling issues related to construction and retail trade surveys.

The workshop was attended by participants from statistical offices and/or research institutes from the following twelve Central and Eastern European countries: Albania, Bulgaria, Czech Republic, Estonia, FYROM, Hungary Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Also present were a number of external consultants from OECD Member countries.

2. METHODOLOGICAL ISSUES

The aim of this session was to recall and discuss some of the basic principles for the harmonisation of business surveys in industry, construction and retail trade and to review progress in implementing business and consumer surveys.
2.1 Progress in Implementing Business and Consumer Surveys

Industry surveys

Regular surveys are conducted in the following ten countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Surveys in all countries except Slovenia are carried out since 1993 or earlier. The survey in Slovenia and a new survey in Hungary by the GKI Research Company are conducted since 1995.

Construction surveys

Regular surveys are conducted in the following nine countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovak Republic. Surveys in all countries except Lithuania are carried out since 1993 or earlier. The survey in Lithuania and a new survey in Hungary by GKI are conducted since 1994 and 1996, respectively.

Retail trade surveys

Regular surveys are conducted in the following nine countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovak Republic. Surveys are carried out since 1993 or earlier in the following six countries: Bulgaria, Czech Republic, Estonia, Hungary, Poland and Slovak Republic. The survey in Romania and a new survey in Poland by the Central Statistical Office (GUS) are conducted since 1994. The survey in Lithuania and a new survey in Hungary by GKI are conducted since 1995 and the survey in Latvia since 1996.

Consumer surveys

Regular surveys are conducted in the following seven countries: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovenia. Surveys in Estonia, Hungary (GKI) and Poland by the Research Institute for Economic Development (RIED) are carried out since 1993 or earlier. Surveys in Czech Republic and Slovenia are conducted since 1995 and in Latvia and Lithuania since 1996.

2.2 Progress with Harmonisation of Business Surveys

Harmonisation of questionnaires

An overview of the variables included in the harmonised set of questions proposed to be used in transition countries for surveys in industry, construction and retail trade are presented below.
### INDUSTRY SURVEY

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Type of Variable and Period Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present</strong></td>
<td><strong>Future</strong></td>
</tr>
<tr>
<td>Q1, Q5 Production</td>
<td>tendency</td>
</tr>
<tr>
<td>Q2, Q10 Total demand/order books</td>
<td>tendency/level</td>
</tr>
<tr>
<td>Q3, Q11 Export demand/order books</td>
<td>tendency/level</td>
</tr>
<tr>
<td>Q4 Stocks of finished goods</td>
<td>level</td>
</tr>
<tr>
<td>Q6 Selling prices</td>
<td></td>
</tr>
<tr>
<td>Q7 Employment</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q8 Limits to production</td>
<td>situation</td>
</tr>
<tr>
<td>Q9 Production capacity</td>
<td>situation</td>
</tr>
<tr>
<td>Q12 Capacity utilisation</td>
<td>situation</td>
</tr>
<tr>
<td>Q13 Investment</td>
<td></td>
</tr>
<tr>
<td>Q14 Type of investment</td>
<td>tendency 12 months</td>
</tr>
<tr>
<td>Q15 Investment constraints</td>
<td></td>
</tr>
<tr>
<td>Q16, Q17 Business situation</td>
<td>situation</td>
</tr>
<tr>
<td>Q18 Ownership</td>
<td></td>
</tr>
</tbody>
</table>

### CONSTRUCTION SURVEY

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Type of Variable and Period Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present</strong></td>
<td><strong>Future</strong></td>
</tr>
<tr>
<td>Q1 Business activity</td>
<td>tendency</td>
</tr>
<tr>
<td>Q2 Limits to production</td>
<td>situation</td>
</tr>
<tr>
<td>Q3 Order books (contracts)</td>
<td>level</td>
</tr>
<tr>
<td>Q4 Employment</td>
<td></td>
</tr>
<tr>
<td>Q5 Output prices</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q6 Period of production secured</td>
<td>months</td>
</tr>
<tr>
<td>Q7 New orders (contracts)</td>
<td></td>
</tr>
<tr>
<td>Q8 Financial situation</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q9 Delays in payment by clients</td>
<td>situation</td>
</tr>
<tr>
<td>Q10 Technical capacity</td>
<td>situation</td>
</tr>
</tbody>
</table>
**RETAIL TRADE SURVEY**

<table>
<thead>
<tr>
<th>Harmonised Variables</th>
<th>Type of Variable and Period Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Business situation</td>
<td>tendency</td>
</tr>
<tr>
<td>Q2 Stocks</td>
<td>level</td>
</tr>
<tr>
<td>Q3 Orders placed</td>
<td>tendency 6 months</td>
</tr>
<tr>
<td>Q4 Business situation</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q5 Employment</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q6 Selling prices</td>
<td>tendency</td>
</tr>
<tr>
<td>Q7 Selling prices</td>
<td>tendency 3-4 months</td>
</tr>
<tr>
<td>Q8 Financial situation</td>
<td>tendency</td>
</tr>
<tr>
<td>Q9 Competition/own sector</td>
<td>tendency</td>
</tr>
<tr>
<td>Q10 Activity constraints</td>
<td>situation</td>
</tr>
<tr>
<td>Q11 Sales (year on year change)</td>
<td>tendency [optional]</td>
</tr>
<tr>
<td>Q12 Sales</td>
<td>tendency [optional]</td>
</tr>
<tr>
<td>Q13 Storage space</td>
<td>tendency [optional]</td>
</tr>
</tbody>
</table>

The present situation concerning progress with implementing the harmonised questions or variables in the different surveys is as follows.

Coverage of harmonised variables

- Industry survey

All harmonised questions are covered by surveys in the following four countries: Czech republic, Romania, Slovak Republic and Slovenia.

All harmonised questions except the question on ownership (Q18) are covered by surveys in the following four countries: Bulgaria, Estonia, Latvia and Lithuania. However, this information is available from the statistical register in most countries.

The only two countries with surveys of less coverage of the harmonised questions are Hungary and Poland. In Hungary, the survey conducted by the Institute for Economics and Market Research and Informatics Ltd (KOPINT) excludes the question on selling prices (Q6) and ownership (Q18) and the GKI survey excludes the questions on production capacity (Q9), total demand (Q10), exports (Q11) and present business situation (Q16). In Poland, the GUS survey excludes the questions on capacity utilisation (Q12), investment (Q13) and ownership (Q18) and the RIED survey excludes the questions on limits to production (Q8), total demand (Q10), type of investment (Q14), investment constrains (Q15) and ownership (Q18).
- Construction survey

All harmonised questions are covered by surveys in eight of the nine countries conducting such surveys, namely Czech Republic, Estonia, Hungary (KOPINT), Latvia, Lithuania, Poland (GUS), Romania and Slovak Republic.

The only country with a survey with less coverage of the harmonised questions is Bulgaria. This survey excludes the question on financial situation (Q8).

The GKI survey in Hungary, however, excludes the questions on new orders (Q7), financial situation (Q8), delays in payment (Q9) and technical capacity (Q10), and the RIED survey in Poland excludes the questions on period of production secured (Q6) and technical capacity (Q10).

- Retail trade survey

All basic harmonised questions are covered by surveys in all nine countries conducting such surveys, namely Bulgaria, Czech Republic, Estonia, Hungary (KOPINT), Latvia, Lithuania, Poland (RIED), Romania and Slovak Republic.

The GKI survey in Hungary, however, excludes the question on competition in own sector (Q9) and one or more of the optional questions (Q11-Q13) are excluded in the surveys in five countries.

2.3 Discussion and Recommendations

The discussion focused on the harmonisation of the surveys in industry, construction and retail trade and covered the following points:

**Harmonisation of questionnaires**

It was noted that many countries have modified their questionnaires for the industry survey from the beginning of 1994 to fit the harmonised questionnaire and most questions are now comparable across countries. However, the period covered by some questions is not specified in a clear way in the surveys in a few countries and the order and wording of some questions of the multiple answer type (such as Q8 on limits to production) differ from the harmonised questionnaire in the surveys in some countries.

In addition, questions related to investment activity (Q13, Q14 and Q15) and ownership (Q18) are not covered in all countries.

A high degree of harmonisation was noted for the surveys in construction and retail trade. All basic harmonised questions are covered in most surveys in all countries and most questions are treated in accordance with the basic principles for the harmonised questionnaires.

Participants at the workshop agreed to check the coverage of all questions in their questionnaires to fit the harmonised questionnaires and correct remaining differences concerning wording of questions and specification of time period for questions according to the recommended basic principles.
Timing of surveys

Particular attention was devoted to the timing schedule for the different surveys. The analysis presented in the reference paper for the session disclosed some serious lack of synchronisation with regard to the date for the collection of questionnaires from entrepreneurs as practiced by EU countries. As a highly recommended principle, it was recalled that the questionnaire should arrive at the enterprise at the beginning of each month or quarter and that great effort should be made to make the final survey results available for publication before the end of the reference month. However, the discussion showed that the terms “dispatching of the questionnaires” and “diffusion, i.e. dissemination of final results” was misunderstood by several participants and that part of the lack of synchronisation was simply a result of misunderstanding.

However, even after correction for above “misunderstanding”, a more synchronised scheduling of the surveys should be introduced in order to improve comparison of survey results. The participants were recommended to check and, if necessary, adjust the timing of their surveys to meet the following recommended dates: dispatch of questionnaires in the two first weeks of the month \(t\) and diffusion of survey results about the 25th of month \(t\). For quarterly surveys, the dates are the same, each first month of the quarter.

Other criteria for comparability of survey results

It was noted that most surveys follow the adopted recommendations for the design of surveys concerning the following parameters: units, classifications and sampling procedures. However, weighting methods and weighting variables used to aggregate survey results differ from the adopted recommendations in some surveys.

The quality of the survey results is, however very much linked to the response rate and coverage of the surveys. The response rate in the industry surveys meets the lowest acceptable level in most surveys in all countries with exception of the surveys in Hungary, while the response rate in the construction and retail trade surveys are below the acceptable level in Poland and the Slovak Republic and particularly low in Hungary.

The coverage of the surveys measured in terms of total turnover or employment in the surveyed sector indicates that the qualities of the surveys in many countries are affected by deficiencies in the frame for the surveys. This problem concerns in particular the construction surveys in several countries and the retail trade surveys in most countries. The frame, i.e. register of enterprises belonging to the target universe suffers in most transition countries from undercoverage, i.e. firms which exist but are not included in the register.

The participants were reminded about the adopted recommendations concerning weighting methods and weighting variables and it was agreed to investigate the different options recommended.

It was noted that problems related to non-response and under/overcoverage were important and that ways to treat them should be identified.
3. RATIONALE FOR A PRODUCT BASED SURVEY

The aim of this session was to present advantages and problems with a product based survey. The paper presented at the workshop also included the findings of a special survey on the use of survey results among participants to the regular product based business survey conducted by the National Bank of Belgium. The main points covered were:

- A major advantage with a product based survey is that it produces results which correspond to the needs of the participating enterprises and thereby increase the level of participation in the survey. A high response rate is achieved by providing product and market information in return to entrepreneurs participating in the regular business surveys.

- The results of the special survey indicated that detailed product information is of main interest for about half of the enterprises and most of them find the information useful. Small and medium sized firms are more interested in this type of information than large enterprises. Summary results of the overall economic situation was found useful by 20 per cent, followed by the situation in different sectors of the economy.

- However, most companies find it difficult to relate their own results to the total results for the sub-sector. This is explained by the fact that 25 per cent of the respondents do not keep a record of their own answers and of those who keep a record only about half of them use the record for comparing their answers with the results for the sub-sector. In addition, the results of the special survey showed that only about half of the respondents used other information sources in combination with the survey results.

- The above results indicate that micro-economic information is of prime interest to enterprises, however, this information is not sufficient in itself. Enterprises need information on how to use the information, e.g. how to incorporate the survey results in the existing statistical framework of economic statistics.

- However, the use of product classifications is not without problems. Response burden increases due to the fact that participants fill in a questionnaire for each product. The representativeness of the sample is more difficult to ensure in the case where there are only a few producers for a product. For aggregation of individual answers it may be difficult to find a weighting variable, such as value added, at the product level. The use of a product classification implies the existence of transposing tables between different classifications. These problems and the fact that a product based survey is more costly to operate mean that it is not recommended, as a first priority, for transition countries to implement such a survey at present.

4. SAMPLING ISSUES RELATED TO CONSTRUCTION AND RETAIL TRADE SURVEYS

This session was devoted to discussing statistical problems encountered by countries in their work with surveys in construction and retail trade. The basis for the discussion at the workshop was a paper on the topic and a synoptic table summarising country replies to a questionnaire regarding the main statistical characteristics of their business surveys in the two sectors. The main points treated were the following.
4.1 Frame and Units

For obvious reasons it is most difficult for countries to judge how well their registers of enterprises cover the universe. Probably for many countries, undercoverage is a more serious problem when private enterprises are concerned than indicated by the synoptic table. For public enterprises available frames cover the universe satisfactorily. Countries were encouraged to investigate the completeness of their frames for private enterprises applying one or more of the methods mentioned in the paper.

All countries use the enterprise as their sampling unit. In a number of cases there is some ambiguity in respect of the response unit (the unit for which data are reported). Countries felt that it should be stated more clearly to respondents that they should report their activity in construction and retail trade respectively, and not include other activity of the enterprise. This means that the kind of activity unit will be used as response unit.

4.2 The Sample

It was agreed that (stratified) random sampling is the best choice in principle because generalisation from the sample to the universe is straightforward. In order to reduce the ‘noise’ in comparisons over time it is most important to use fixed panels continuously updated for changes in the content of the universe. This holds true for both random and purpose selected samples. In this context it was noted that due to the measurement methods used in business surveys they cannot reflect the development over time due to changes in the number of enterprises in the universe.

4.3 Non-response

High level of non-response is a serious problem for two reasons:

- non-response may be selective and thus cause a positive or negative bias in survey results;
- the composition of responding firms will vary from one survey to the next thus diminishing the beneficial effect of the panel design on the ‘noise’ in the results on comparisons over time.

A number of methods to reduce non-responses were discussed. The simplest one would be to exclude from the survey individual enterprises which are specially difficult to persuade to participate. In the extreme case whole groups of enterprises with a high non-response rate could be excluded, for instance the small private enterprises. It was agreed that exclusion of individual firms is an undesirable last resort because it could lead to serious bias.

Refraining from covering one or more categories of enterprises from the sample of course creates a ‘black hole’. Provided that it is particularly difficult to get response from most firms of a category which is of limited economic importance it could be acceptable to exclude this category from the survey. However, it was felt that the best way of handling non-response is to persuade the enterprises in the sample to respond.

Three ways of achieving this were discussed at the workshop.
• Simplify reporting by using clear, easy to fill in forms. The three point scale [(-), (=), (+)] used in business tendency surveys and the thoroughly tested questionnaires are most helpful to achieve this. However, systematic information on respondents’ reactions to the questionnaire might be helpful in making the questionnaire still more respondent friendly.

• Promote the motivation of respondents. This could be made along two lines. One is to use marketing techniques for increasing the status of the business tendency surveys as important economic indicators. The other is to provide feedback to participating enterprises adapted to their information needs. This service probably needs to be complemented by direct demonstrations to (groups of) enterprises of ways to benefit from the survey results.

• Follow-up of non-responding enterprises by direct contact by telephone or personal visit. This is a costly and time-consuming activity and it is preferable to have a small sample with a low non-response rate than a large sample with a high non-response rate.

As a very rough rule of thumb a non-response rate of more than 30 per cent was deemed to impose serious problems for the reliability of the survey results and a reduction to less than 25 per cent was considered to be highly desirable.

4.4 Timeliness

One of the most important quality properties of the business tendency surveys is that they are timely. The results are available to users within a few days of the ex post period covered. It was agreed, therefore, that it is better to publish preliminary results in time and come back with definitive, more reliable, information later than to delay publication. For monthly surveys one way to handle this situation would be to publish the definitive results for one month together with preliminary results for the next. For quarterly surveys this approach is less attractive.

5. ANALYTICAL ISSUES

5.1 Data Analysis - Evaluation of Business Survey Results

The aim of this session was to investigate the reliability of survey results in transition countries in terms of both internal and external consistencies. The session consisted of five country studies based empirical results from surveys in Hungary (Kopint), Lithuania, Poland (GUS), Slovak Republic and Romania.

The Hungarian paper and the Lithuanian paper focused on the relationships between survey variables by size of enterprises. The Polish paper and the Slovak paper examined both the relationships between survey variables and between survey variables and external quantitative data. Finally, the Romanian contribution included, in addition to internal and external consistency checks, an investigation of timing relationships at turning points. All studies, except the Lithuanian, evaluated survey variables in both original forms and after correction for seasonal variation. The presentation of the different country studies covered the following main points.
Romanian study

The consistency between survey series at the macro-level, i.e. total industry, was analysed in the first part of the Romanian study. The investigation referred to the business survey in manufacturing industry and covered the period 1991-1996. The analysis was carried out on both unadjusted, seasonally adjusted and smoothed survey series.

The results based on unadjusted series showed plausible economic relationships between the following variables: current business situation against production expectations, and new orders and production expectations against incoming orders. All of these variables showed strong relationships with correlation coefficients above 0.75. However, the series on stocks of finished goods and capacity showed rather weak relationships against production series. The relationships based on seasonally adjusted data showed no significant difference compared to the situation based on unadjusted data. An improvement in the already noticed relationships were obtained when analysing smoothed data.

The second part of the Romanian study analysed the external consistency of survey variables against the quantitative production index as reference series. The analysis was performed on unadjusted, seasonally adjusted and smoothed data. The comparison between unadjusted survey data and the first difference of the production index showed rather bad results for most survey series. The best results were obtained when comparing seasonally adjusted and smoothed survey series and reference series. Finally, the cyclical relationships between survey series and the reference series were investigated. This analysis was, however, very preliminary due to the short period investigated and the fact that only one cycle is identified by most survey series.

Hungarian study

The Hungarian study analysed the internal consistency between the most important survey series in both unadjusted and seasonally adjusted forms for different size groups of enterprises, i.e. small, medium and large enterprises, according to the number of employees. The analysis referred to the business survey in manufacturing industry and covered the period 1987-1996.

In the first investigation, the survey variable on ex post production was used as reference series and the correlation of all other survey series with the reference series were tested. These results showed a relatively good correlation in the case of large and medium sized enterprises based on unadjusted data and an even better correspondence in the case of seasonally adjusted data. The relationship was relatively weaker in the case of small firms. The present and future business situation and the order books series showed stronger than average correlation with the ex post production series. These results indicate that production and order books are key variables for entrepreneurs in determining the general business situation.

Second, the relationships between the different size groups of enterprises were analysed for all survey variables. These results showed a rather good correspondence between medium and large enterprises and a relatively weaker correspondence between small and large enterprises. These differences could be explained by a different behaviour of small firms and indicate that it may be worth analysing survey results by size groups.
Lithuanian study

The relationships between survey series by detailed size groups of enterprises in industry, construction and retail trade were analysed in the Lithuanian study. A set of survey series by size groups was tested for conformity against a selected reference series. The assessments of production, business activity and sales were used as reference series in the industry, construction and retail surveys, respectively. The analysis was carried out on unadjusted data for 1995. The results showed weak relationships between the reference series and most other survey series and size groups. However, these results are very much affected by the short time period analysed and a new investigation should be carried out when longer time-series are available.

Polish study

The forecasting accuracy of ex-ante data (anticipation’s) in relation to ex-post data was evaluated in the first part of the Polish study with simple correlation analysis. The investigation referred to the survey in manufacturing industry and covered the period 1992-1996. The analysis was carried out on five survey variables: general economic situation, demand, production, financial commitments, prices and employment; on the macro level, i.e. total industry and on the most important branches of industry.

The second part of the study analysed the external consistency of the three survey variables on production ex-post and ex-ante and employment and price expectations by comparing the survey data with the corresponding quantitative statistics.

The results of the Polish investigations may be summarised in the following points:

- the best forecasting accuracy was obtained for the survey variables: general economic situation, demand and production; and for the industry branches; food products (except prices), non-metallic mineral products (except employment) and furniture (except financial commitments);

- seasonal adjustment affected positively the results for such variables as: financial commitments, prices and employment and the industry branches, food products and furniture;

- the external consistency check indicated that survey variables on expectations were better correlated with corresponding quantitative statistical series.

Slovak paper

The Slovak study analysed in the first part the forecasting accuracy by comparing and evaluating ex-ante and ex-post data for selected survey variables in relation to the following measures: mean absolute deviation, over- and under estimate and correct and opposite indication of direction of change. The investigation referred to the surveys in industry and construction and covered the period 1993-1996.

The analysis was carried out on five survey variables in the industry survey: production, demand, business situation and employment and the production variable in the construction survey.
The second part of the study investigated the external consistency by comparing a set of survey variables from the industry and construction surveys with the total index of industrial production and construction production, respectively.

The forecasting evaluation shows the following main results:

• entrepreneurs are too optimistic in forecasting such variables as production, demand and business situation and too pessimistic concerning the future development of employment;
• forecasting performance is improved for seasonally adjusted and smoothed production series, but such adjustments show no improvement for other variables.

The results of the external consistency analysis indicate that the best results are obtained when comparing survey series with quantitative production series in smoothed and de-trended form. The worst results are obtained when survey data are compared with the first difference form of the quantitative production series in unadjusted form.

Summary of main points of papers

In general, the results of the above investigations show that the business surveys produce consistent information over time and show plausible economic relationships between survey variables. However, the survey series are in many cases affected by seasonal and irregular variations, which make the analysis more difficult.

The time period covered by most surveys in transition countries is at present too short to effectively identify and correct the survey series for these disturbing seasonal and irregular variations.

In summary, the results of the different studies indicate the following common points:

• seasonality is more pronounced in survey series on tendencies (changes) than in survey series on levels;
• series on assessments of current tendencies (changes) show more seasonal and irregular variation than series on expectations;
• survey series on expectations show in general a too optimistic development in relation to realisations;
• survey series show better correspondence with seasonally adjusted, smoothed and de-trended quantitative series than with first differences (changes) of quantitative series.

5.2 Evaluation of Economic Activity on the Basis of Business Survey Results

This session consisted of three contributions from Bulgaria, Lithuania and Poland. The Bulgarian paper and the Lithuanian paper both referred to the industry survey and investigated the relationships between survey variables and external quantitative data and used the results for analysing the economic development. The Polish paper analysed the economic development based on survey results for industry, construction, agriculture, retail trade and
households. All papers clearly showed how business survey results may be used to describe the main
dynamics of the economy, as well as the underlying phenomena.

**Bulgarian paper**

In Bulgaria, the picture given by the business surveys result in industry is coherent with the
stabilisation, and then recovery, observed since 1994. Opinions on past and future production, and on
the level of order books have been improving over time since 1993. The results also indicate the
consequences of the devaluation of the currency in March 1994, in terms of imported inflation.

The timing of this devaluation, when compared with the timing of recovery, suggests that
foreign demand may have been an important factor. What is clear, is that the level of orders has been
rising since 1994, which also coincided with the drop in the insufficiency of domestic demand.
However, shortages of raw materials remained high. This comes as somewhat of a surprise. In a
market economy, quantity restrictions - prevalent in a planned economy - are replaced by “rationing”
through prices. Is this shortage due to lack of resources or to real problems with suppliers?

**Lithuanian paper**

The Lithuanian contribution also showed a picture of stabilisation. The data for the capacity
utilisation rate seem to be somewhat strange. Therefore some (tentative) comments on the answers to
the question on the assessment of the production capacity (more/less than normal) would have been
rather interesting. The lack of demand remains the most important limiting factor, whereas financial
problems seem to be gradually decreasing. However, it would be interesting to be more precise about
the causes of this reduction. Furthermore, since the country was producing goods for which demand
dropped (particularly military oriented productions) there is some room for an analysis in terms of
differentiation in activities.

**Polish paper**

The Polish documents attests for the improvement of economic conditions. Both households
and industrial firms have been becoming more and more confident. Interestingly enough, the picture
given for industry by the RIED survey, based on large public units, seem rather similar to the picture
given by the GUS surveys, based on both public and private units.

**Summary of main points of papers**

These studies have mainly shown how business surveys reflect the macroeconomic
dynamics and provide further information on the reasons for the observed evolution. Some future
work may include:

- assessing how to use more systematically business survey data to provide hints about the
  changes in macroeconomic variables that are not yet available - present or forecast;

- observation and analysis of sectoral, property status and size differentiation that are
  behind the macroeconomic changes. Structural changes are indeed one of the most
important features of the transition period. Using a disequilibrium approach could enrich this kind of analysis

5.3 Composite Indicators

The main purpose of this session was to calculate and evaluate composite confidence indicators based on results from the business surveys in industry, construction and retail trade and the consumer surveys in transition countries according to the EU formula and alternative formulas. Four country studies based on survey results in the Czech Republic, Estonia, Latvia and Poland were presented.

Czech study

The Czech study analysed the performance of confidence indicators calculated according to the EU formula for the industry, construction and consumer surveys, and a confidence indicator for the retail survey based on the average of the following four questions: present and future business situation, volume of stocks and intentions of placing orders.

An overall economic sentiment indicator based on the weighted average of the three confidence indicators for industry, construction, and consumers and the share price index was constructed and compared with an overall sentiment indicator combining data from all sectors i.e. including retail trade.

Seasonally adjusted balance series were used in the construction of confidence indicators and the results gave a good picture of the general development.

The confidence indicators in industry and construction pointed to continued growth after a somewhat weaker development during 1995, while the retail trade indicator indicated strong growth over the whole period since 1993 and good prospects for the near term future.

Estonian study

Confidence indicators according to the EU formula for the industry, construction and consumer surveys were analysed in the Estonian study. In addition, a confidence indicator for the retail survey was constructed from the average of the two questions on present and future business situation and an overall sentiment indicator was calculated as the unweighted average of the four confidence indicators for industry, construction, retail trade and consumers. The results, based on net balances not adjusted for seasonal variations, described a reasonable development in the different sectors, pointing to a stabilisation since 1995.

Latvian study

The Latvian study analysed confidence indicators calculated according to the EU formula with composite indicators calculated as the average of present and future business situation for the surveys in industry and construction.
The results showed a high degree of conformity, measured as the direction of change over previous quarter, between the two different composite indicators for the industry surveys, while the conformity was less favourable in the construction survey. However, the developments of the two different composite indicators show the same picture in both surveys, but the levels are much lower in the confidence indicators based on the EU formula due to the very negative balances for the order books series included in this indicator.

For the retail trade survey, a confidence indicator calculated as the average of the four questions on present and future business situation, present level of stocks and intentions of placing orders was compared to the average of the two questions on present and future business situation.

The result of these latter analyses, based on data for two periods only, indicated a rather good conformity between the two composite indicators, however, this is partly explained by the fact that two components are the same in both indicators i.e. one composite indicator is based on a subset of components of the other.

Polish study

A general composite indicator constructed from confidence indicators from surveys in industry, construction, retail trade, agriculture and among consumers was evaluated against a coincident indicator based on quantitative data in the Polish study.

The aim of the analysis was to investigate the performance and conformity of the two composite indicators as reference series for the Polish economy. The confidence indicators for the different sectors were based on the average of the following questions: present and future production in industry; order books and future employment in construction; present sales, new orders and stocks in retail trade; income and future confidence of farmers in agriculture; present and future state of national economy, present and future state of financial situation of households and buying intentions of consumer durable goods among consumers.

The result of the analysis indicated a rather weak conformity between the survey based general indicator and quantitative composite indicator. However, individual survey series such as production expectations, and general business situation shows a good correlation and some leading characteristics with the general quantitative composite indicator.

In summary

It was generally agreed that the construction of confidence indicators was a good tool for analysis and presentation of survey results. The above studies indicated that the EU formula could be used to construct such composite indicators, but it was recommended to experiment with different component series and weighting formulas in the calculation of composite indicators.

It was further recommended to evaluate the different confidence and composite indicators for conformity both internally between the different survey series, but also against external quantitative reference series and to investigate the timing relationships between the series.
5.4 Cross-section Analysis of Business Survey Data

The main purpose of the cross-section analysis is to exploit better the informational content of companies’ replies to the business survey than is possible in the traditional approach analysing time series on an aggregated level.

The concept of the cross-section analysis based on disequilibrium theory is convincing and simple at the same time. Prices and wages do not change quickly and sufficiently enough in order to prevent imbalances between supply and demand. This applies both to the product and labour markets. For that reason the “normal” situation of the economy will be disequilibrium and it is important to find out how the extent of disequilibrium changes over time. Is it only a small proportion of companies who find themselves in a disequilibrium situation, or is it an important and growing part thus pointing to cumulative processes?

Business survey data seem to be an ideal instrument for applying this theory in empirical research since these data are intended by design to measure deviations from the norm, however that may be defined.

This approach is particularly promising in economies in transition as the on-going cyclical and structural changes can be captured better by this cross-section approach than by time-series analysis on an aggregated level, particularly when those time series are relatively short.

For all these reasons this topic was put on the agenda for this workshop. The presented empirical results were based on case studies in Romania, Slovenia and Poland. The results for Germany both for the western and eastern part - were taken as a benchmark. All studies were carried out among industrial enterprises.

Romanian study

The Romanian study started off with the “standard” approach which had been first applied in Germany. In addition an interesting extension was presented. The standard part of the analysis focused on a segmentation according to the answers of the “bottleneck question”, i.e. the reported impediments to production.

The main conclusion to be drawn from this approach can be summarised in this way. The “equilibrium state” gained over time somewhat in importance, though the respective share of companies is still low. The category “supply bottlenecks”, reflecting primarily a lack of physical capital, increased whereas the share of companies constrained exclusively by weak demand decreased. The group of companies facing both severe demand and supply problems is still high though with a declining tendency.

According to experience in other countries, e.g. East Germany, this can be regarded as a success as companies have straightened out their problems and are - like in mature market economies - either demand or supply constrained in equilibrium.

In addition to this type of classification another set of criteria was used to group industrial companies according to their economic performance. The two variables chosen for this purpose were the assessment of the present business situation and respective expectations for the next months. In
total three segments were distinguished (equilibrium, weak equilibrium and disequilibrium). Though
this second type of classification is more subjective it has the advantage of taking into account not
only demand and supply considerations but also other aspects, e.g. financial aspects

*Polish and Slovenian studies*

The presentation of the cross-section analysis in Poland and Slovenia also showed
interesting results concerning the structure of the main problems of industrial companies. The
proportion of companies facing both supply and demand problems is still very high, signalling that
for most companies there is still a long way to go to reach “equilibrium”. For policy makers this
means that the main focus has to lie on structural measures and that Keynes’ type demand oriented
programs seem not appropriate. These conclusions are still tentative, as the number of observations is
yet small.

*Summing up*

It was generally agreed that this cross-section approach is a very powerful instrument for the
analysis of business survey data. If further developed it could provide an useful indicator for
assessing the degree of transition toward market economy in the individual countries. For that reason
it was proposed that all participating countries should apply this approach in a harmonised way which
still has to be decided on.

6. CONSUMER SURVEYS

Consumer surveys are in most Eastern European countries still in their early stages of
development. For that reason a thorough economic analysis of the survey data in the context of other
indicators has not been possible until now.

This session consisted of four contributions from Estonia, Hungary, Latvia and Slovenia. The
Estonian paper and the Latvian paper reported on problems with interpretation of survey results
and difficulties for respondents to predict future developments over a period of twelve months both
with regard to their own and the overall economic situation.

The Hungarian paper and the Slovenian paper focused mainly on socio-demographic
differences in answers, e.g. demonstrating the phenomena also identified in Western countries that
women and elderly people are as a rule more pessimistic concerning their own and the overall
economic situation than the average of all persons interviewed in the survey. To what extent those
differences are linked to factual differences in buying or saving behaviour have yet to be shown. However, this will only be possible when longer time series are available.

The only Eastern European county having conducted this type research seems to be
Hungary. According to regression results presented in the workshop paper, purchase intentions as well
as the plans to buy or build an own home seem to track the actual development relatively well,
though also in this case time series seem to be too short to draw final conclusions.

An interesting approach of the Hungarian paper was the explanation of survey results
concerning a specific variable on the one hand by other survey variables, but also by external
quantitative data. It was found that expectations concerning unemployment trends are positively correlated with inflation expectations, thus pointing to a non-existing Philip’s curve, i.e. no trade-off between employment and inflation.

In the discussion at the workshop it became clear that until now the consumer survey results are regarded as a type of “market-research data” of economic policy in the respective country, not so much as an instrument to forecast better total consumption and specific aggregates such as sales of consumer durable goods consumer credits, etc.

This latter research needs to be taken up in the future to prove the economic forecasting ability of the consumer survey approach. However, meaningful research on this line will only be possible when time series of at least five years are available.
CONSUMER SURVEYS IN CENTRAL AND EASTERN EUROPEAN COUNTRIES

BLED, SLOVENIA, 13-15 NOVEMBER 1996

1. INTRODUCTION

The workshop was organised in co-operation with the Slovenian Statistical Office and was held in Bled, Slovenia on 13-15 November 1996.

The objectives of the workshop were to: review experiences of conducting consumer surveys in transition countries; address methodological principles for conducting consumer surveys; discuss and suggest solutions to technical problems in conducting surveys in transition countries; present and discuss the EC harmonised system of consumer surveys; and to present the analytical use of survey results by international organisations and in individual countries.

Participants at the workshop were from statistical offices and/or research institutes from the following twelve transition countries: Albania, Bulgaria, Czech Republic, Estonia, FYROM, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia. Also present were a number of external consultants from OECD Member countries.

2. SURVEY IMPLEMENTATION AND EXPERIENCES

The current situation as regards consumer surveys was presented by participants from transition countries. The presentations revealed the following general points. Regular monthly or quarterly consumer surveys are conducted in the following six countries: Czech Republic, Estonia, Hungary, Latvia, Poland and Slovenia.

Surveys have been conducted since 1993 or earlier in Estonia, Hungary (GKI-Economic Research Company) and in Poland by two private institutes (not represented at the workshop). However, the Central statistical Office in Poland has conducted a pilot survey and reported on plans to introduce a regular survey in 1997. Consumer surveys in the Czech Republic and Slovenia have been conducted since 1995 and in Latvia since 1996. Bulgaria carried out two surveys during 1996 and intends to commence regular quarterly surveys in 1997. A regular survey will be started during 1997 in Lithuania. The Former Yugoslav Republic of Macedonia reported on plans to conduct a pilot survey at the end of 1996. No surveys have been conducted in Romania or the Slovak Republic.

The speed of implementation is very much related to the availability of financial resources (see country summary below). This also restricts the frequency of the surveys. Of the above eleven countries only three conduct monthly surveys and three others conduct the surveys quarterly. The other five countries have not yet commenced conducting regular surveys.
Financial problems have led some countries to carry out the consumer survey in conjunction with other surveys. The concern is that this practice may overburden the respondent and lead to results of low quality. The financial need for such practices could be alleviated by:

- contracting-out the field work (see Czech Republic below); and/or by
- increased efforts to sell the results (see Hungary below).

The papers on the use of survey results presented in Section five below might be helpful for these efforts.

A short summary outlining implemented or experimental consumer surveys, and experiences conducting the surveys are presented in the following section by country and institute.

2.1 Bulgaria - National Statistical Institute (NSI)

The NSI carried out a pilot survey in June 1995 with the intention of commencing regular quarterly surveys in 1996. However, due to financial problems only two surveys were conducted during 1996. The intention is to commence regular quarterly surveys in 1997.

The frame for the surveys is a 10 per cent sample of all enumeration districts from the last population census conducted in December 1992. The sample is a stratified two-stage cluster random sample. The distribution of the persons in the sample reflects the distribution of the target universe (inhabitants 16 years and older) by regions and also by proportion urban and rural inhabitants within a region. The size of the sample is about 1 200 persons. The response rate is over 90 per cent.

The survey covers all questions included in the harmonised EC consumer survey. Data collection is performed by personal interview.

The main problem is lack of financial resources to maintain and update the frame for the surveys. A partial updating is underway but mobility in the population during 1996 makes updating of the frame a difficult task. Other problems are the high partial non-response for questions on future developments and the difficulty experienced by interviewers in classifying occupation status of respondents according to the ILO-ISCO classification.

2.2 Czech Republic - Czech Statistical Office (CSO)

Regular quarterly consumer surveys have been conducted by the CSO since the first quarter of 1995. Sampling and field work is carried out by GFK Praha, a subsidiary of the Fessel & GFK Austria, a leading market research institute with subsidiaries in many Central and Eastern European countries.

The sample includes 1 000 persons which represents the population by sex, age, education, employment, place of living (size of municipality) and region. The sample is established by multi-stage random selection. A new sample is taken every year.

The consumer survey covers all fifteen questions included in the harmonised EC consumer surveys. Information is collected by personal interview.
The results are aggregated by a multiple weighting method and presented in breakdown by sex, age, education, employment, place of living and region. The CSO publish the results of the surveys every quarter and extended analytical results are published twice a year.

2.3 Estonia - Estonian Institute for Market Research (EKI)

The EKI has conducted consumer surveys since June 1992. The surveys were conducted twice a year up to the end of 1994. From 1995 the surveys are carried out on a regular quarterly basis.

The frame for the surveys is a panel of 2 000 persons with passports and who are aged 18-85 years. These persons are selected at random from the Estonian address catalogue. The panel is updated once a year to reflect the structure of the population by sex, age, region and income. A survey sample of 500 persons is selected at random from the panel each quarter. The survey is conducted by mail and the response rate is in the range of 80-85 per cent. The timetable for the surveys differs from the one used in the EC harmonised system because the results have to be presented in the first few days of the following quarter to the Government.

The content of the survey is based on the harmonised EC consumer survey and since 1993 has included all harmonised questions except the question on plans to purchase or build a home. However, additional questions concerning economic attitudes are asked in the survey conducted in the last quarter every year.

The results are published by EKI in the quarterly publication Konjunktuur, which is widely used by the government, parliament, banks and private firms. The consumer survey results are also presented to a wider public in radio, TV and periodicals.

The main problem with the surveys is related to recruitment of respondents for the panel. Persons with higher incomes are not as interested in participating in the surveys.

2.4 Hungary - GKI Economic Research Company

The GKI has been conducting consumer surveys on a monthly basis since February 1993. Sampling and field work is carried out by Szonda-Ipsos, one of the leading opinion and market research firms in Hungary.

The sample includes about 1 000 households which represent the population by sex, age, education and place of living (e.g. capital, city or village). A multi-stage address random selection is used to establish the sample. In the first step a sample of settlements is selected which reflects the administrative structure in the country. The database of the State Address Registration Office is used in the second step as a basis for the selection of a random sample of persons in the chosen settlements. Fall outs are replaced by people in the same area of the same sex and age. The survey is conducted by personal interview. The response rate is in the range of 90-95 per cent.

The questionnaire includes all twelve questions asked on a monthly basis in the EC harmonised surveys. The questionnaire is extended with additional questions asked quarterly.

The main indicators from the surveys are published in the press and the results are also used by the Ministry of Finance, banks and insurance companies.
A problem with the surveys is representation by education. Respondents tend to report a higher level of education than that registered in other official statistics. However, this may be caused by the fact that the data used for comparison purposes is 5 year old census data.

Hungarian experience in analysing consumer confidence in different sectors and by different categories reveals the following points:

- Consumer confidence in major sectors of the economy shows no significant difference between expectations of respondents working in the primary, secondary and other sectors.

- Households with a higher net income are more optimistic than those with a lower income. However, income figures are very unstable and a lot of income is generated in the black economy and is not registered in statistics.

- Consumer confidence by age groups shows that younger persons are more optimistic than older persons. However, the oldest people are not the most pessimistic. The age group before retirement is the most pessimistic group due to fear of future reductions in their standard of living. This age group also saves a high proportion of their income.

- Unemployed persons are more pessimistic than employed persons, self employed and professionals are the most optimistic groups. Females are more pessimistic than male.

2.5 Latvia - Central Statistical Bureau of Latvia (SCB)

A consumer survey has been conducted on a quarterly basis since April 1993. The survey sample includes 666 households within the household budget network. Information is collected by personal interview.

Population registers are used as the sampling frame for urban areas and simple random sampling is used in major towns. A two-stage random sampling method is used in other towns and rural areas. Response units selected in towns are persons (15 years and older) and households in rural areas. The response rate is in the range 70-75 per cent.

The survey covers all questions included in the EC harmonised consumer survey. Aggregation of results is performed by weighting individual answers. Age, sex and education are considered in the weighting procedure.

The main problem is lack of financial resources to conduct the survey on a full scale personal sample selection. Other problems are the high partial non-response for questions concerning future expectations and the lack of correspondence between the ILO-ISCO classification and the categories by occupation used in the harmonised EC consumer survey. Survey information on income is not precise enough and the results are not calculated by income groups at present.
2.6 Lithuania - Lithuanian Department of Statistics (LDS)

The first pilot consumer survey was conducted in April 1995. This survey used the same sample as the household budget survey. Quota sampling was used to establish the sample. The content of the consumer survey was based on the EC harmonised questionnaire.

A new regular consumer survey will be implemented in January 1997. This survey will use the same sample as the new household budget survey started in 1996, but it is not yet decided how to select the responding person in the household.

The new household budget survey uses the population register as the sampling frame in urban areas and available lists of households in rural areas. Simple random sampling is used in major cities and a two-stage sampling procedure in other urban areas and rural areas. Sampling units in urban areas are persons aged 16 years or older and sampling units in rural areas are households.

The main problem with the consumer survey is the mixed sample selection of persons and households.

2.7 Former Yugoslav Republic of Macedonia - Statistical Office (SO)

The SO is planning the introduction of consumer surveys. A pilot consumer survey will be conducted in December 1996 and regular surveys will be started during 1997.

The sampling unit for the surveys will be households and the sampling frame for the surveys will be the 1994 Census of the Population, Households, Dwellings and Agricultural Holdings. The pilot survey will be based on a selection of 200 households in 40 enumeration areas.

The sample design for the surveys was established by dividing the country into two regions, namely the capital and the rest of the country. The regions were then divided into urban and rural areas and 60 households were selected from the capital region and 140 from the rest of the country.

Information will be collected by personal interview in most cases, however if the selected household possesses a telephone, a telephone interview will be conducted. The content of the pilot survey was designed on the basis of the harmonised EC consumer survey questionnaire.

The pilot survey will be used to provide information on the following points: reception of questionnaire, readiness of households to participate in this kind of survey, whether questions are understandable, and willingness of households to be interviewed by telephone.

2.8 Poland - Central Statistical Office (CSO)

A pilot consumer survey was carried out by the CSO in March 1996 in co-operation with the Institute of Home Market and Consumption. This survey covered a sample of 1 350 households participating in the household budget survey of the CSO.

A regular quarterly survey is planned to start in the first quarter of 1997. The content of the survey will be based on the harmonised EC consumer survey questionnaire. The sample will consist
of 2,700 households and information will be collected by personal interview. The sampling scheme for the regular surveys will be the same as the one used in the pilot survey.

Sample selection is based on a geographically stratified two-stage sampling scheme with different selection probabilities of area sampling points in the first stage. The frame for the first stage selection is the register of statistical areas and the sampling units are stratified by regions and by urban and rural areas within regions. In the second stage four households are selected in each area sampling point and each household will participate in the survey during two consecutive quarters.

2.9 Slovenia - Slovenian Statistical Office (SSO)

The SSO conducted a pilot test of the consumer survey in October 1995 simultaneously by telephone and personal interview. Slovenia has a telephone penetration rate of 80 per cent and after detailed analysis of the pilot survey the SSO decided to conduct the regular consumer survey by telephone.

Analysis of pilot survey data showed deviations in confidence intervals between the results obtained by telephone and those by personal interview for some target questions (cost of living, unemployment and financial situation). These differences were caused by the wording of the questions which led to misunderstanding of the meaning of the questions by respondents. This problem was solved by rewording the questions and making the questions more easily understood.

Regular monthly consumer surveys were introduced in March 1996. The surveys are conducted with a CATI system (Computer Assisted Telephone Interviewing) running under BLAISE software.

Sampling is performed by stratification by telephone regions and simple random sampling within the regions. The database of telephone subscribers is used as the sampling frame for this address random sample. The size of the sample is 1,500 persons. Response rate is in the range of 67-73 per cent.

The basic weighting criterion is household size and weights are proportional to the number of persons aged 18 years and more in the households.

The main problems with the surveys are classification of occupation, the high non-response for the income question and the high “don’t know” rate for the income question in the age group 16-18 years. The last problem was solved by excluding this age group and by only conducting the surveys for the population aged 18 years or over.

The experience with the surveys so far reveal the following points:

- people with higher income are more optimistic than people with lower income;
- farmers are more pessimistic than other employment categories;
- higher educated persons are more optimistic than persons with only primary education;
• younger persons, in particular the group 18-29 years, are more optimistic than older ones; and

• men are more optimistic than women.

3. HARMONISATION

The aim of this session was to present the harmonised EC consumer survey and to discuss progress with harmonisation of surveys in Central and Eastern European countries (CEEC). The main points covered were:

• survey methods

• timing of data collection and presentation of results

• the content of the questionnaire

• breakdown of results by categories

The EC survey is conducted in each country on the basis of a sample of 1,500-2,500 consumers. The main techniques used are personal interviews and telephone interviews. The surveys conducted in CEEC countries are based on samples in the range of 500-1,500 consumers and/or households. The most frequently used technique is personal interview.

The timing of data collection (field work) for the EC survey is in the first half of the month and results are presented before the end of the month. For quarterly surveys, timing is the same, each first month of the quarter. It is important that surveys in CEEC countries follow the same timing in order to facilitate international comparisons.

Survey characteristics of consumer surveys conducted in CEEC countries are as follows:
Table 1: Survey characteristics of consumer surveys conducted in CEEC countries

<table>
<thead>
<tr>
<th>Country/ regular(P) pilot(R) surveys</th>
<th>Type of survey</th>
<th>Sample size</th>
<th>Response rate (%)</th>
<th>Sampling method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria (P)</td>
<td>face-to-face interviews</td>
<td>1 200</td>
<td>90</td>
<td>stratified double staged cluster random sampling among population aged 16 years or over</td>
</tr>
<tr>
<td>Czech Republic (R)</td>
<td>face-to-face interviews</td>
<td>1 000</td>
<td>na</td>
<td>multi stage random selection among population aged 16 years or over</td>
</tr>
<tr>
<td>Estonia (R)</td>
<td>mail questionnaire</td>
<td>500</td>
<td>80-85</td>
<td>simple random sampling among population aged 18 years or over</td>
</tr>
<tr>
<td>Hungary (R)</td>
<td>face-to-face interviews</td>
<td>1 000</td>
<td>90-95</td>
<td>two-stage random sampling; criteria: settlements and addresses</td>
</tr>
<tr>
<td>Latvia (R)</td>
<td>face-to-face interviews</td>
<td>666</td>
<td>70-75</td>
<td>simple random sampling among population aged 15 years or over in major towns; two stage random sampling of households in other towns and rural areas</td>
</tr>
<tr>
<td>Lithuania (P)</td>
<td>face-to-face interviews</td>
<td>na</td>
<td>na</td>
<td>simple random sampling among population aged 16 and over in major towns; two stage random sampling of households in other towns and rural areas</td>
</tr>
<tr>
<td>Poland (P)</td>
<td>face-to-face interviews</td>
<td>1 350</td>
<td>na</td>
<td>geographically stratified two-stage sampling with different selection probabilities of area sampling points in the first stage</td>
</tr>
<tr>
<td>Slovenia (R)</td>
<td>telephone interviews</td>
<td>1 500</td>
<td>67-73</td>
<td>stratified sampling by telephone regions and simple random sampling within regions among population aged 16 years or over</td>
</tr>
</tbody>
</table>

The EC survey is based on a harmonised questionnaire which is used in all EC countries. The content of the harmonised questionnaire is set out in the following table together with the coverage and frequency of the harmonised questions used in surveys conducted in CEEC’s.

Questions 1 to 12 are asked monthly and questions 13 to 15 quarterly in the EC survey. Progress in implementing the harmonised questions in CEEC’s is good. All monthly EC questions are covered by surveys in all CEEC’s, while the quarterly EC questions are only covered by surveys in half of the CEEC’s.

The reason for not including these last questions is because many persons in transition countries live below the minimum subsistence level. A prototype of the harmonised consumer survey questionnaire is set out in Attachment 2.
Table 2: Content of harmonised questionnaire and coverage/frequency of surveys conducted in CEEC’s

<table>
<thead>
<tr>
<th>Variable or question</th>
<th>BUL</th>
<th>CZE</th>
<th>EST</th>
<th>HUN</th>
<th>LAT</th>
<th>LIT</th>
<th>POL</th>
<th>SLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Financial situation, present</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>2 Financial situation, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>3 General economic situation, present</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>4 General economic situation, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>5 Price trends, present</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>6 Price trends, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>7 Unemployment, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>8 Major purchases, present</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>9 Major purchases, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>10 Savings, present</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>11 Savings, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>12 Characteristics of financial situation</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>M</td>
<td>Q</td>
<td>Y</td>
<td>Y</td>
<td>M</td>
</tr>
<tr>
<td>13 Car purchase, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
</tr>
<tr>
<td>14 Home purchase, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
</tr>
<tr>
<td>15 Home improvements, future</td>
<td>B</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
</tr>
</tbody>
</table>

(1) Y=yearly, B=bi-annual, Q=quarterly, M=monthly
(2) BUL=Bulgaria, EST=Estonia, HUN=Hungary, LAT=Latvia, LIT=Lithuania, POL=Poland, SLI=Slovenia

The results obtained for each question in the harmonised EC survey are broken down by category of respondents and reply option. The categories and breakdowns used are:

- income of household
- occupation of the respondent
- education of the respondent
- age of the respondent
- sex of the respondent

All transition countries represented at the workshop agreed that it is important to respect the basic principles discussed above. However, several participants from CEEC’s noted that more detailed information was needed concerning certain categories, in particular the breakdown of income and occupation.

4. METHODOLOGICAL AND TECHNICAL ISSUES

4.1 Basic principles

The basic principles of sampling, data collection including questionnaire design and interviewing, data entry and evaluation were reviewed. The difference between household and person samples was the first issue discussed. The fact that the statistical universe of the samples is different and must be taken into account when identifying the sample procedure was also discussed. The
A household sample describes characteristics of the household universe (e.g. the TV coverage of households) and is valid only for that, whereas the person sample describes characteristics of individuals (different attitudes and opinions of people) and is valid only for them.

The size of the sample is important with regards to the accuracy of the results. It is important to look at the deviation tables which show the accuracy of the results at different probability levels and sample sizes.

Besides the form and size of the samples the importance of the interview collection medium was underlined. The basic methods are personal interview, telephone interview and mailed questionnaires (self enumeration). The last method is the cheapest, but may in many cases produce the most unreliable results. It is not possible to know who fills in the questionnaire and high non-response rate is often a big problem. However, the mailed questionnaire methodology may be the only possibility, especially in the case of very sensitive surveys (e.g. sexual behaviour, health behaviour etc.) and for reasons of cost.

Telephone interviewing is rather cheap and also very quick. The telephone penetration rate must however be large enough to ensure that the results will be reliable and unbiased. In many Central and Eastern European countries the telephone coverage is still at a relative low level. In addition those who have telephones might not adequately represent the target population. Personal interviews normally provide the most reliable results, but is relatively expensive when compared to the other collection methodologies.

The difference between an address random system, a random route system and a quota system was carefully explained in the presentation at the workshop. The least reliable alternative is the quota system. The two methodologies always provide results that are more statistically reliable.

The last part of the review included some important remarks about the recruitment of interviewers as well as information on their training and actual work. The problem of “don’t know” answers (fairly common in many transition countries) was also discussed.

It is important to supervise interviewers in the field to ensure that they develop the required level of skill to obtain answers from respondents. There are many tricks used in different countries. The checking of the interviewers’ work in the office is also important. The use of computer assisted interviewing (CAI) provides the means for minimising the risk of certain types of interviewer error.

4.2 Conducting a consumer survey by telephone

During this session at the workshop a look into the future of interviewing was presented. The correct use of telephone technology seems to open new possibilities for the efficient collection of information.

Preconditions for appropriate use of telephone interviewing are either a high telephone penetration of the target universe and/or the substantiated assumption that there are no large differences between telephone owners and non-telephone owners with respect to the answers provided to given topics.
Regarding the survey design, as always, care should be taken to get as close as possible to the target universe. It is most important in this context to remember that telephone directories provide household based samples and not an individual person sample.

Advice was also given at the workshop for the address management and stratification to be made according to the usual socio-demographic criteria. Particular attention was paid to the adjustment of the weighting factors for individual results.

If use is made of the telephone interview methodology consideration could be given to the use of personal computers with appropriate software (CATI-method). Such technologies provide the opportunity for the systematic and rapid handling of many aspects of interviewing (such as address management, control of both the questionnaire and the results, etc.). The numerous advantages of the CATI-method were presented. The main drawback compared to standard paper questionnaires are the relatively high initial costs for the equipment and software.

4.3 Technical problems

The experiences of conducting the surveys presented in Section 2 above identified a set of common technical problems. These issues were discussed in this part of the workshop and the following recommendations were presented:

- Recruitment of respondents for mail enumeration surveys and the low participation of people with higher income. These problems could be reduced by sending out remainders and conducting telephone interviews in income groups with low participation.

- Income variable not reliable and replacement of fall-outs (mobile group). One way to minimise these problems could be to improve training of interviewers and to expand the coverage of total income to include income from black market jobs. A minimum of five contacts could be used before replacement of fall-outs.

- Classification of occupation could be improved by using more groups in the different categories.

- “Don’t know” answers in all groups and for the income question in the age group 16-18 years could be lowered by training of interviewers and by developing procedures for the estimation of the income question where necessary.

- Mixed sample (person/household). This is a serious problem and one way to improve the situation is to use different weighting systems for the two samples.

- Selection of target person in the household could be facilitated by use of the Kish method (birthday method)
5. PRESENTATION AND USE OF CONSUMER SURVEY RESULTS

5.1 Use of consumer survey results by the EC

The relationship between consumer survey results and corresponding quantitative statistics was discussed in the paper, “The use of the harmonised consumer survey results by the European Commission” that was presented at the workshop. Specific areas of quantitative (statistical) data with which consumer survey results could be compared were identified. The content of the harmonised consumer survey could be linked to the following quantitative statistical series.

Table 3: Comparison of consumer survey subject area with relevant quantitative series

<table>
<thead>
<tr>
<th>Consumer Survey Subject Area</th>
<th>Questions</th>
<th>Quantitative statistics - series linked with subject area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial situation of households</td>
<td>1,2</td>
<td>Income (disposable income)</td>
</tr>
<tr>
<td>General economic situation</td>
<td>3,4</td>
<td>GDP (growth)</td>
</tr>
<tr>
<td>Price development</td>
<td>5,6</td>
<td>Consumer price index</td>
</tr>
<tr>
<td>Unemployment</td>
<td>7</td>
<td>Unemployment</td>
</tr>
<tr>
<td>Major purchases</td>
<td>8,9</td>
<td>Private consumption (furniture, El. appliances etc.)</td>
</tr>
<tr>
<td>Savings</td>
<td>10,11,12</td>
<td>Household savings</td>
</tr>
<tr>
<td>Car purchases</td>
<td>13</td>
<td>Household car purchases</td>
</tr>
<tr>
<td>House purchases/building</td>
<td>14</td>
<td>Household residential investment</td>
</tr>
<tr>
<td>Home improvement</td>
<td>15</td>
<td>Private consumption (central heating, sanitary etc.)</td>
</tr>
<tr>
<td>Consumer confidence</td>
<td>1,2,3,4,8</td>
<td>Private consumption (total)</td>
</tr>
</tbody>
</table>

A graphical presentation of the relationships between corresponding quantitative and qualitative series was used to give an idea of the quality of the results from the consumer surveys in individual EU countries. The following subject areas were analysed: income, GDP (growth), prices (CPI), unemployment, savings (households) and private consumption (total). The comparisons were restricted to EU countries with available quantitative series comparable to the survey series.

The results of the comparisons may be summarised as follows.

- Consumer survey results provide a first, quick indication of developments in some areas of the economy. This was noticed in the areas of income and private consumption where the survey results are available long before corresponding quantitative statistics. Survey results were shown to be very important in countries with no quarterly national accounts.

- The correlation between the survey results and corresponding quantitative series was rather good for most variables and very good for prices and unemployment. These results indicate that consumer survey results could be a very useful tool in assessing and forecasting economic developments.

An important conclusion for the CEEC’s is that the usefulness of consumer survey results may be different compared to the EU countries depending on the availability of reliable alternative
information in certain subject areas. This particularly concerned the lack of quarterly national accounts in many transition countries.

5.2 Presentation and use of consumer confidence indicators by the OECD

The construction of consumer confidence indicators in OECD Member countries and their relationships to measures of aggregate economic activity was presented in this session at the workshop. The differences between national indicators and the consumer confidence indicators calculated by the EC were investigated and the timing relationships between the indicators against GDP and industrial production was analysed.

The confidence indicator calculated by the EC is an average of the answers (balances) to the following five questions in the consumer surveys:

- current financial situation of households compared to past 12 months
- expected change in financial situation of households over next 12 months
- change in general economic situation over past 12 months
- expected change in general economic situation over next 12 months
- current conditions for making major purchases

The confidence indicator is based on the above five questions with five answer alternatives to each question (a lot better, a little better, the same, a little worse, a lot worse) expressed as the balance of positive over negative results. The confidence indicator published by the EU is constructed with double weights on the extreme responses.

The confidence indicators published by the OECD for the three EU countries, i.e. Austria, France and Sweden, are computed according to national practices, i.e. with equal weights to positive and negative answer alternatives. The confidence indicator for Italy published by the OECD is also compiled according to national practice and differ from the one published by the EC in the selection of questions for the confidence indicator, i.e. nine questions of which five correspond to the ones included in the EC-indicator.

The confidence indicators published by the OECD for countries outside the EU are computed according to national practices and differ from the EC confidence indicator in the one or more of the following points:

- selection of questions;
- time period of questions; and
- weighting pattern.
The confidence indicators for the United States, Japan and New Zealand differ from the EC confidence indicator on all three points, while the one for the Switzerland differs on the first and third points.

The timing relationships between the confidence indicators and GDP (changes over 4 quarters) in general show a coincident behaviour in the countries analysed (United States, Japan, New Zealand, Austria and Switzerland). In comparison with industrial production (changes over 12 months), the confidence indicators in all analysed OECD countries show coincident or leading behaviour. The confidence indicators in Japan, France, Greece, Ireland, Italy and the Netherlands show a leading tendency, while clear leads are shown for the indicators in Portugal, Spain, Switzerland and the United Kingdom.

5.3 Presentation and use of consumer surveys in Finland

The publication of consumer survey data and the use of such data in short-term economic analysis and forecasting was discussed in a paper from Statistics Finland. The presentation commenced with a description of how the consumer survey is compiled and covered the following topics: sample design, data collection, weighting and estimation of results and survey content.

The consumer survey is conducted in conjunction with the Labour Force Survey, applying a rotating panel design focusing on individual persons. The sample frame is the Central Population Register and the target population is individuals living outside institutions aged 15-74. The size of the sample is gross 1,750 and net at least 1,500 people. The sample is rotated three times a year and non-response rate is in the range of 12-15 per cent.

Data collection is carried out by telephone interview, mainly CATI (Computer Assisted Telephone Interviewing), by around 160 trained interviewers. Data entry is performed by a BLAISE based application and data processing includes automatic coding for occupation of respondents. The data are weighted to correspond to the population structure by region, the persons’ age group and sex. SAS software is used for processing the results. The content of the questionnaire includes all basic EU questions.

A consumer confidence indicator is calculated according to the EC formula. This indicator has shown a strong correlation with changes in private consumption. Direct questions on purchasing, savings, and borrowing intentions have also provided a reliable measure of households’ actual investment decisions. However, no proper evaluation has as yet been done to test the reliability of the consumer surveys in Finland.

The results are published in monthly statistics, which gives the main results within two weeks after the interviews. This is followed by more detailed results in quarterly overviews and tables. A press release is issued in connection with monthly statistics. The consumer survey receives good coverage in the mass media and the consumer survey ranks among Statistics Finland’s top products in terms of media coverage.

The experience in Finland with barometer surveys, i.e. business and consumer surveys, is consistent with experiences in other countries. These types of surveys are valuable tools that are capable of monitoring and forecasting cyclical developments in output, investment and consumption.
5.4 Presentation and use of consumer surveys in Italy

The use of consumer survey results in forecasting and analysing private consumption and economic activity in Italy was discussed in a paper from ISCO (Istituto Nazionale per lo Studio della Congiuntura). The presentation commenced with a brief description of the main features of the consumer survey.

The consumer survey is conducted on the basis of a sample of about 2,000 households. The sample is built proportionally to the household universe, in three stages, stratified by 6 geographical areas and 7 sectors related to the demographic width of the Italian municipalities.

Data collection is carried out by telephone interview with the aid of a CATI system (Computer Assisted Telephone Interviewing). The telephone technique was introduced in 1995 and the subject investigated as “consumer” became a full-aged individual, irrespective of his/her position in the family (up to 1994 only the head of the family was interviewed). This change has produced a break in the series which must be taken into account when analysing the results.

A consumer confidence indicator is calculated on the basis of the weighted answers “balances” to the following nine survey questions:

- the general economic situation ex-post; and
- ex-ante;
- the economic situation of households ex-post; and
- ex-ante;
- unemployment expectations;
- saving prospects; and
- ability to make savings;
- current financial situation of households; and
- current conditions for making major purchases of durable goods.

The balances are aggregated by a simple average. This index, originally constructed as a coincident indicator, has also been shown to possess leading capabilities.

A new experimental composite leading indicator for the consumption demand is constructed from survey series with a good predictive capability of the cyclical behaviour of private consumption. This leading indicator includes series from both consumer and business surveys and quantitative series and shows better performance when compared to the consumer confidence indicator in predicting the consumption cycle.

The survey results for individual questions are also analysed and compared to available corresponding quantitative statistics. These analyses show that the results from the consumer surveys
give valuable information on key economic variables, and that the survey results contribute to an understanding of consumer behaviour both in the present and near future.
ATTACHMENT 1

BUSINESS TENDENCY SURVEYS: STANDARDISED QUESTIONS

MANUFACTURING INDUSTRY SURVEY

Harmonised questions

Business situation: tendency
Assessment of present business situation:
good (+), sufficient (=), bad (-)

Business situation: future tendency
Expected business situation six months from now:
better (+), same (=), worse(-)

Order books / Demand Total: level
Assessment of total demand/order books (present level):
above normal (+), normal (=), below normal (-)

Order books / Demand Export: level
Assessment of demand from abroad/export order books (present level):
above normal (+), normal (=), below normal (-)

Order books / Demand Total: future tendency
Expected total demand in the next 3-4 months:
up (+), unchanged (=), down (-)

Order books / Demand Export: future tendency
Export expectations for the next 3-4 months:
up (+), unchanged (=), down (-)

Production: tendency
Assessment of production activities in the last month (quarter):
up (+), unchanged (=), down (-)

Production: future tendency
Production activities for the next 3-4 months:
up (+), unchanged (=), down (-)
Production: current capacity
Assessment of current production capacity (with regard to expected demand in the next 12 months):
more than sufficient (+), sufficient (=), not sufficient (-)

Production: rate of capacity utilisation
Current level of capacity utilisation (in per cent of normal capacity utilisation).

Limits to production
Limits to production (present situation):
-- none
-- insufficient domestic demand
-- insufficient foreign demand
-- competitive imports
-- shortage of labour
-- shortage of skilled labour
-- lack of appropriate equipment
-- shortage of semi-finished goods
-- shortage of raw materials
-- shortage of energy
-- financial problems (e.g. insolvency, credits)
-- unclear economic laws
-- uncertainty of the economic environment
-- others, please specify

Stocks  Finished goods: level
Assessment of stocks of finished goods (present level):
above normal (+), normal (=), below normal (-)

Selling prices: future tendency
Selling price expectations for the next 3-4 months:
increase (+), remain stable (=), decrease (-);

Selling prices  Rate of increase: future tendency
if increase:
increase at a higher rate (+)
increase at about the same rate (=)
increase at a lower rate (-)

Employment: future tendency
Employment expectations for the next 3-4 months:
up (+), unchanged (=), down (-)

Fixed investment: intentions
Do you plan fixed investment for this year (next year):
yes (+1), no (0)
**Fixed investment: future tendency**

If fixed investment (machinery, buildings etc.) is planned will investment for this year (next year) compared to last year (current year) be:

higher (+), about the same (=), lower (-)

**Type of fixed investment**

If fixed investment is planned for next year, what type of investment will it be primarily:

--- replacement of old equipment
--- investment aimed at extending production capacity
   . with an unchanged product range
   . so as to extend the product range
--- rationalisation investment
   . mechanisation/automation of existing production process
   . introduction of new production techniques
   . energy saving
--- other motives
   . pollution control
   . safety measures
--- others, please specify

**Limits to fixed investment**

Factors limiting planned investments for the next year:

--- insufficient demand
--- cost of capital too high
--- credit guarantees insufficient
--- insufficient profits
--- fear of indebtedness
--- technical factors
--- others

**Departures from harmonised questions**

**Estonia**

The assessment of total/export demand is measured in terms of a change in demand between the current and previous quarter.

In the question on limits to production, only a subset of the alternatives is included.

**Hungary**

The comparison period for production: future tendency and employment expectations is six months.

Selling price expectations are measured in seven intervals expressing per cent changes transformed to a qualitative three point scale (increase/remain stable/decrease) and with a comparison period of six months.

In limits to production, the alternative “shortage of energy” is not included.
Expected total/export demand refer to the volume of sales and the comparison period is six months.

**Poland**

The assessment of total/export demand is measured as changes between the current and previous month.

The comparison period for future production and for future selling price expectations is one month.

Investment intentions refer to the value of fixed investment expenditure in the current quarter as compared to the previous quarter.

The comparison period for the expected business situation is three months.

**Romania**

The comparison period for the expected business situation is three months.

**Slovak Republic**

The assessment of total/export demand is measured in terms of the change between the current and previous month.

Answers to limits to production are restricted to a maximum of five possibilities.

The assessment of the business situation is measured as the change between current and previous period.

The comparison period of the expected business situation is three months.

**CONSTRUCTION SURVEY**

**Harmonised questions**

**Business activity: tendency**
Assessment of business activity compared to last month (quarter)
up (+), unchanged (=), down (-)

**Business activity: duration of work in hand**
With normal working hours, the work in hand and work already contracted will account for approximately ....... months operating time.

**Order books / Demand: level**
Assessment of order books or production schedules for domestic/foreign contracts
total: above normal (+), normal (=), below normal (-)
domestic: above normal (+), normal (=), below normal (-)
foreign: above normal (+), normal (=), below normal (-)

**Orders / Demand Total: future tendency**
Orders (contracts) expectations for the next 3-4 months
up (+), unchanged (=), down (-)
Technical capacity with regard to expected demand: tendency
Assessment of technical capacity (amount and quality of equipment) with regard to expected demand in the next 12 months
more than sufficient (+), sufficient (=), not sufficient (-)

Limits to production
Limits to production (present situation)
-- none
-- demand
-- weather conditions
-- cost of materials
-- cost of labour
-- cost of finance (e.g. interest rates)
-- access to bank credit
-- shortage of skilled labour
-- lack of equipment
-- shortage of materials
-- competition in own sector
-- others, please specify

Price expectations: future tendency
Price expectations for next 3-4 months
increase (+), remain stable (=), decrease (-);

Price expectations Rate of increase: future tendency
if increase:
increase at a higher rate (+)
increase at about the same rate (=)
increase at a lower rate (-)

Employment: future tendency
Employment expectations for the next 3-4 months
up (+), unchanged (=), down (-)

Financial situation: tendency
Assessment of financial situation compared to last month (quarter)
better (+), same (=), worse (-)

Financial situation: client delays in payment
Delays in payment by public/private clients compared to last month (quarter)
total: more widespread (+), unchanged (=), less widespread (-)
private: more widespread (+), unchanged (=), less widespread (-)
public: more widespread (+), unchanged (=), less widespread (-)
Departures from harmonised questions

Hungary

Business activity is measured in comparison with a normal situation in terms of an appreciation of the level of activity.

The employment expectations and price expectations refer to the situation in six months.

Poland

The assessment of order books is measured as the change between the current and previous quarter.

The assessment of technical capacity with regard to demand is measured in terms of the change in capacity in the form of a comparison between the last quarter and future 3-4 months.

RETAIL TRADE SURVEY

Harmonised questions

Business situation: tendency
Assessment of present business situation
good (+), satisfactory (normal for season) (=), bad (-)

Business situation: future tendency
Expected business situation six months ahead
better (+), same (=), worse (-)

Competition in own sector: tendency
Assessment of competition in own sector compared to last month (quarter)
up (+), unchanged (=), down (-)

Limits to improvements in business situation
Factors limiting improvements to the present business situation
-- none
-- demand
-- supply
-- cost of labour
-- cost of finance (e.g. interest rates)
-- access to bank credit
-- sales surface
-- storage capacity
-- competition in own sector
-- others, please specify
**Intentions of placing orders: future tendency**
Expectations on changes in the number of orders placed with domestic/foreign suppliers in the next 3-4 months

**Stocks: level**
Assessment of stocks
too small (+), adequate (normal for season) (=), too large (-)

**Selling prices: tendency**
Selling prices compared with the last month (quarter)
increase (+), remain stable (=), decrease (-), in absolute terms

**Selling prices Rate of increase: tendency**
if increase
increase at a higher rate (+)
increase at about the same rate (=)
increase at a lower rate (-)

**Selling prices: future tendency**
Selling price expectations for the next 3-4 months
increase (+), remain stable (=), decrease (-), in absolute terms

**Selling prices Rate of increase: future tendency**
If increase
increase at a higher rate (+)
increase at about the same rate (=)
increase at a lower rate (-)

**Employment: future tendency**
Employment expectations for the next 3-4 months
up (+), unchanged (=), down (-)

**Financial situation: tendency**
Assessment of financial situation compared to last month (quarter)
better (+), same (=), worse (-)

**Departures from harmonised questions**

**Poland**

The assessment of stocks is measured as the change between the current and previous quarter.

**Romania**

The expected business situation refers to the situation three months in the future.
Slovak Republic

The expected business situation refers to three months in the future.

The assessment of financial situation refers to the incapacity to pay or delays in payment by the firm or company.
ATTACHMENT 2

CONSUMER SURVEYS: STANDARDISED QUESTIONS

Harmonised questions

How does the financial situation of your household now compare with what is was 12 months ago?
   a lot better (++), a little better (+), no change (=), a little worse (−), a lot worse (−−−)

How do you think the financial situation of your household will change over the next 12 months?
   a lot better (++), a little better (+), no change (=), a little worse (−), a lot worse (−−−)

How do you think the general economic situation in the country has changed over the last 12 months?
   a lot better (++), a little better (+), no change (=), a little worse (−), a lot worse (−−−)

How do you think the general economic situation in the country will develop over the next 12 months?
   a lot better (++), a little better (+), no change (=), a little worse (−), a lot worse (−−−)

Compared with what is was 12 months ago, do you think the cost of living is now:
   very much higher (++), quite a bit higher (+), a little higher (=), about the same (−), lower (−−−)

By comparison with what is happening now, do you think that prices in the next 12 months will:
   increase at a higher rate (++); increase at the same rate (+), increase at a lower rate (=),
   stay the same (−), decrease slightly (−−−)

How do you think the level of unemployment in the county will change over the next 12 months?
   increase sharply (++), increase slightly (+), no change (=), fall slightly (−), fall sharply (−−−)

Do you think that there is an advantage for people to make major purchases (durable goods) at the present time?
   yes (++), neither right or wrong time (=), no, purchases should be postponed (−−−)

Over the next 12 months, how do you think the amount of money you will spend on major purchases will compared with what you sent over the last 12 months?
much more (++), a little more (+), about the same (=), a little less (–), much less (-- --)

In view of the general economic situation, do you think the present time to save is:
very good (++), quite good (+), rather unfavourable (–), very unfavourable (-- --)

**Over the next 12 months, how likely are you to be able to save any money?**
very likely (++), fairly likely (+), fairly unlikely (–), very unlikely (-- --)

**Which of these statements best describe the present situation of your household?**
we are running into debt (-- --), we are having to draw on our savings (--),
we are just managing to make ends meet our income (=), we are saving a little (=),
we are saving a lot (++)

The following questions are included in the questionnaire once a quarter (January, April, July and October)

**How likely are you to buy a car within the next 2 years?**
very likely (++), fairly likely (+), fairly unlikely (–), very unlikely (-- --)

**Are you planning to purchase or build a home within the next 2 years?**
yes, definitely (++), possibly (+), probably not (–), no (-- --)

**Over the next 12 months, how likely are you to spend any large sums of money on home improvements such as central heating, sanitary ware etc.?**
very likely (++), fairly likely (+), fairly unlikely (–), very unlikely (-- --)
ATTACHMENT 3

BUSINESS SURVEY ANNEX, APRIL 1997

Introduction

The OECD Centre for Cooperation with the Economies in Transition has been working with Eurostat and the European Commission to develop a programme of business tendency surveys in transition countries since the early 1990's.

Business tendency surveys collect qualitative information from business managers on their assessment of the current economic or financial situation and on their intentions and expectations for the immediate future. Such surveys are conducted in all OECD Member countries and they have proved a cost-effective means of generating timely information on short-term economic developments. Current economic information is of particular interest to countries in transition and a reliable system of both quantitative and qualitative short-term indicators is of prime importance.

Compared to traditional quantitative statistical surveys, business tendency surveys present many advantages as a source of short-term economic information. They collect information which is easier for enterprises to supply because the answers are not based on precise records and the returns can be submitted more quickly. Business tendency surveys cover a wide range of variables selected for their ability to monitor the business cycle and include information on variables not covered by quantitative statistics, such as capacity utilisation and views on the overall economic situation.

Member countries of the European Union have found it useful to standardise (or "harmonise") a number of the questions included in their business surveys so that the results are internationally comparable. Transition countries are being encouraged to use a number of standard questions to make their survey results internationally comparable.

Business surveys covering the industrial sector (in most cases the manufacturing industry) have been conducted on a regular basis. These surveys were introduced during 1991 in the former CSFR, Estonia and Romania and in January 1992 in Bulgaria. In the Russian Federation, the first business survey in manufacturing was conducted in January 1992. This survey, however was restricted to enterprises in the Moscow region, but a new survey has been introduced covering the western part of the Russian Federation including Moscow. Business surveys were introduced in Latvia and Lithuania during 1993, and in Belarus in 1994.

Business surveys in the construction sector are available for Bulgaria, Estonia, Latvia, Romania, Slovak Republic and Russian Federation. Surveys in retail trade are available for all of the above countries with the exception of the Russian Federation.

Selected business survey results have been included in the quarterly publication Short-term Economic Indicators: Transition Economies since April 1993. Business survey results in Bulgaria,
Estonia, Latvia, Lithuania, Romania, Slovak Republic, Belarus and the Russian Federation are now included on a regular basis. This annual Business Tendency Survey Annex provides more detailed results from a wider range of surveys. The first such Annex was included in *Short-term Economic Indicators: Transition Economies*, Number 2/1995.

In particular, this Annex contains the full set of results from surveys conducted in manufacturing, construction and retail trade.

**Data availability for business surveys in:**

<table>
<thead>
<tr>
<th>Country</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>M 11</td>
<td>M 01</td>
<td>M 06</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>1993</td>
<td>1993</td>
</tr>
<tr>
<td>Estonia</td>
<td>Q 2</td>
<td>Q 4</td>
<td>Q 2</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>1993</td>
<td>1993</td>
</tr>
<tr>
<td>Latvia</td>
<td>Q 2</td>
<td>Q 3</td>
<td>Q 1</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>1993</td>
<td>1996</td>
</tr>
<tr>
<td>Lithuania</td>
<td>M 01</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>Q 3</td>
<td>Q 4</td>
<td>Q 1</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>1993</td>
<td>1994</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>Q 1</td>
<td>M 01</td>
<td>M 07</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>1993</td>
<td>1993</td>
</tr>
<tr>
<td>Belarus</td>
<td>Q 2</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Fed.</td>
<td>M 03</td>
<td>Q 4</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>1993</td>
<td></td>
</tr>
</tbody>
</table>

The complete set of questions for all three surveys corresponding to these results is included in Attachment 1 of this publication. Summary tables describing the survey characteristics in each country are provided in the accompanying publication *Short-term Economic Indicators: Transition Economies, Sources and Definitions*, published in 1997.

In most countries, surveys are conducted by the Central Statistical Office in the country concerned. In some countries, however, private research institutes conduct the surveys. In Estonia, the surveys are carried out by the Estonian Institute for Market Research; in the Russian Federation, surveys are conducted by the Institute for the Economy in Transition, the Centre for Economic Analysis and Forecasting, and the Institute of World Economy and International Relations; in Belarus by the Economic Institute in the Ministry of the Economy.

**Terminology**

The chief characteristic of business surveys is that instead of asking for exact figures, they usually ask for the respondent's assessment of the current business situation compared with the "normal" state, i.e. a question on *levels*, or they ask for a judgement on the direction of changes, i.e.a question on *tendency*. Answers are typically given as "above normal/normal/below normal" or as "up/same/down". Questions may refer either to the present situation or to expectations, i.e. questions on *future tendency* for the next three to six months.
The answers received are usually weighted according to the size of the responding firm and, for convenience, the results are usually given as one figure. This is straightforward where a single figure is requested from respondents, e.g. percentage of capacity utilisation. Sometimes, respondents are asked to indicate one or several choices in a nominal list of alternatives, in which case the weighted proportion of firms selecting the alternative is given. This latter type of question is used for information concerning limits to production or investment, limits to improvement in business situation and type of investment.

In the case of three-choice questions the data are generally presented in the form of a percent balance. "Normal" and "same" answers are ignored and the balance is obtained by taking the difference between the weighted percentages of respondents giving favourable and unfavourable answers. Negative balances indicate that unfavourable answers exceed favourable answers; positive balances show that favourable responses predominate. In the case of two-choice questions, i.e. "do you plan fixed investment for this or next year - yes or no", the weighted proportion of firms indicating "yes" is given.

A more detailed description of the methodologies used in the eight transition countries listed above for the collection and compilation of business tendency surveys will be published by the OECD during 1997 in Business Tendency Surveys in Transition Economies: Methodological Review and Recommendations for Harmonisation. This publication will also discuss the requirements for comparability and sets out recommendations for the harmonisation of these surveys.

Another OECD publication, Cyclical Indicators and Business Tendency Surveys describes the use of business survey data in the development of composite and cyclical indicators.

The standardised questions for business tendency surveys are provided at the end of this chapter. The italicised title above each question refers to the title used in the tables in this Business Survey Annex.

In the tables, business survey series which refer to future tendency or prospects for some future period are located in all cases at the time period of the survey, not at the time period to which the forecast refers.