VOORBURG GROUP ON SERVICE STATISTICS

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User Needs With Respect to Short-term Statistics on Trade and Services

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Abstract

This report summarises the results of a questionnaire-based survey among well-known international users of short-term statistics (STS) on trade and services.

The majority of respondents interested in STS consider this kind of information to be very important, some respondents even vital, for their organisation. Almost all respondents indicated that their organisation would benefit from an international publication on this topic. Such an international publication would match their widespread interest in more, if not all global regions, both at national as well as more aggregated levels. However, users are not satisfied with the current availability of STS, mainly because of insufficient timeliness and frequency, and insufficient coverage of sectors and countries.

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The author greatly thanks Helene Thygesen, Hans Pijpers and other colleagues for their energetic support and suggestions for improvement and Lieneke Hoeksma for linguistic services. Author's address: Statistics Netherlands, Room 408, PO Box 4000, 2270 JM Voorburg, The Netherlands. E-mail: twrn@cbs.nl

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Summary

This report summarises the results of a questionnaire-based survey among well-known international users of short-term statistics (STS) on trade and services.

The majority of respondents interested in STS consider this kind of information to be very important, some respondents even vital, for their organisation. Almost all respondents indicated that their organisation would benefit from an international publication on this topic. Such an international publication would match their widespread interest in more, if not all global regions, both at national as well as more aggregated levels. However, users are not satisfied with the current availability of STS, mainly because of insufficient timeliness and frequency, and insufficient coverage of sectors and countries.

As part of the survey, users were requested to report which statistics they need for which ISIC 2 digit sectors, in terms of desired frequency (monthly, quarterly, half yearly), level of detail (more, equal or less detail) and priority (high, medium or low). The pre-defined set of
variables (statistics) submitted for this purpose comprises Sales value, Price index, Sales volume, Physical output indicators, Value added, Profits, Imports and Exports of services, Employment, Wages and salaries, Hours worked, Births/deaths of enterprises, Investment expenditure, New orders and Business sentiment. Users consider this set to be exhaustive enough: although the questionnaire allowed for addition of extra statistics as well as sectors, this option remained unused.

On the whole there is significant support for all variables and for all sectors. All the statistics were needed by half to three-quarters of the users, whereas for each of the sectors there is a flat support rate of approximately fifty per cent. The majority favours a quarterly frequency for a whole range of statistics, the most significant exceptions being New orders and Business sentiment, for which most respondents require a monthly frequency; this seems only natural given their meaning as timely business cycle indicators. Approximately half of respondents also need Sales value, Price indices and Sales volume at a monthly frequency. With respect to the level of detail, the majority calls for the 2-digit level in general, with the exception of Post and Telecommunication (ISIC 64), Other business (ISIC 74) and Other Services (ISIC 93), which are needed in more detail.

Although the statistics and sectors as a whole were quoted a significant number of times users assigned different priorities to each statistic/sector and the interests involved. High priority variables are: Value added, Price index, Sales value, Physical output indicators and Employment; while highest priority sectors were: Retail trade, Financial intermediates, Wholesale trade, Hotels and restaurants, and Transport (pipelines, land, air) and Computer and related activities.

However, this does not imply that all statistics should be covered by all sectors with exactly the same frequency and level of detail. In this sense the conclusions are based on averages. In fact the frequency of statistics may differ from sector to sector. The same

holds for the level of detail of each sector, which may also differ between statistics. Although the survey has been set up to allow such precise statements, statistically speaking the response so far is not enough to permit them. Such analysis requires more response. Increasing the number of cases would enrich the results in terms of

- information content: user need framework for each world region separately; details and frequency of statistics for each sector separately; cross relations between the various aspects of user needs;
- relevance: greater user coverage improves evidence of what is really needed and makes it more convincing.

It is therefore recommended that the survey be continued and that it should also incorporate the perceptions of the National Statistical Institutes with respect to national user needs.

1. Introduction

In recent decades the importance of trade and service sectors has grown substantially. The availability of information to trace the economic performance of service sectors, however, has not grown to the same extent. Country studies looking at the current state of the art at national statistical institutes show that there is a long way to go. This report approaches the issue from a different angle. Instead of focusing on the supply side of statistics, it deals with the needs of users.

The results on user needs elaborated in this report have been compiled from a survey based on a questionnaire especially designed for this purpose. The report is intended as a discussion document for the Voorburg Group, a group of representatives from several organisations, including the OECD and various national statistical institutes.

Both nationally and internationally there are signs that the availability of short-term statistics on trade and services does not meet the needs of users. In recognition of these shortcomings it is very important to gain a systematic insight into the precise needs of users and the interest these needs can serve. Responding to these needs by way of setting up new statistics should take place with the utmost care and efficiency, especially in the present climate of limited resources for new projects. New statistics should be set up effectively in terms of matching users' wishes, or at least a 'common denominator' of users' wishes. In this respect assigning priorities - which are the most important issues? - is an essential part of the survey.

Of course, because of sheer numbers it is impossible to send the survey questionnaire to all potential users of the statistics concerned. Therefore we opted for an international approach, with the aim of establishing an international common denominator of user needs. This means that specific national demands fall outside the scope of this survey. Indeed, as increasing economic globalisation demands comparable statistical systems,

our target list of potential users focuses especially on organisations whose domain or interest covers several countries and/or global regions.

The questionnaire used in this survey is discussed in Section 2. Section 3 examines in more depth the (international) organisations asked to participate in the survey. Section 4 describes how the results were compiled, while Section 5 looks at the results themselves. The report ends with a number of conclusions (Section 6) and recommendations (Section 7).

2. Setting up a survey of user needs

The questionnaire design has tried to keep the questions relatively straightforward for users. Most questions can be answered by choosing one of a number of answer options. There is also room for answers not covered by the options and for additional information. The questionnaire also asks the respondent if he or she wishes to receive a copy of the survey report. Annex A contains a copy of the questionnaire.

The questions focus on the following issues:

- whether or not the organisation is interested in short-term statistics on the services sectors (question 1);

- the importance of short-term services statistics for users:
  - degree of importance for the organisation (question 2);
  - the purpose of the users (question 3);
  - the geographical domain of interest (questions 4 and 5);

- how users assess presently available services statistics;
  - satisfied or dissatisfied (question 7);
  - reason for dissatisfaction (question 8);

- the types of statistics and sectors users are interested in, by priority, frequency and degree of sector detail (question 9);

- the data flow in the direction of the users
  - current sources of statistics (question 6);
  - what is more important: timeliness or detail (question 10);
  - the importance of a (future) international publication (question 11).

With the exception of question 9, on types of statistics and sectors, the questions are worded fairly straightforwardly and can be answered quite simply by ticking the boxes of the relevant answer categories. Some questions permit only one answer (questions 1,2,7,10,11), others allow more than one answer.
If - in answer to question 1 - the organisation is not interested in short-term statistics, the other questions may be ignored.

Question 9 is the core of the survey, as it is here that users can indicate where their interests lie. This question is therefore more extensive than the others. It takes the form of three tables (Tables A, B and C). Together these form one large table, with the services sectors (20) on the horizontal and the types of statistics (14) on the vertical axis. The sector classification is based on the ISIC 2-digit classification of the UN, while the types of statistics follow the best practices as far as possible. For each cell (= combination of sector and statistics) in the table, respondents are asked to fill in the desired frequency, level of detail and priority. Empty cells are considered as being non-relevant for the respondent. The table allows for additions to sectors or statistics if required.

Lastly, users are requested to complete the questionnaire in such a way that it not only reflects the need of the own organisation but also that of the affiliated organisations.

3. Type of users

There are of course a great many different users, operating both nationally and internationally. It is impossible for the survey to cover them all , and indeed it does not aim to do so. Instead, it focused only on the key players in the many different kinds of fields possibly relevant for services statistics. For example, international federations of trade organisations acting on behalf of their national counterparts and the enterprises they represent. Universities were excluded from the survey, under the assumption that for scientific research *pur sang* all statistics are relevant. This survey focuses primarily on the use of statistics as part of day to day 'ongoing business', for which there is a continuous and effective international demand. Statistical institutes are also excluded

from the survey, since they primarily represent the supply side of statistics and provide only indirect evidence of what is needed. To limit the size of the sample, governments and ministries were not taken into account, with a few exceptions, however, because of the lack of coverage of certain regional areas.

Among the potential users are international federations, monetary authorities, leading business cycle research institutes, press agencies etc.

Unfortunately, there is no central register of the organisations relevant for this survey. In the short time available to set up the survey approximately 180 key organisations were detected as possible users of services statistics.

Given the limited time and information available for drawing the (selective) sample, the list of candidates should not be regarded as being complete. The results should therefore above all be seen as indications of the main stream of user needs. Annex B contains the full list of organisations which received the questionnaire.

4. Calculation method of overall results

Basically two methods were applied to add up the individual scores to overall results: an unweighted and a weighted method.

The first method is rather simple: it just adds up the individual answers on a one to one basis, that is without applying differential weights between users. This implies that organisations with average interests in short-term statistics have the same weight in the calculation of the final outcomes as those with vital interests.

The second method is slightly more complicated in the sense that before adding up, individual outcomes are weighted by the individual interests at stake. These weights are based on *a posteriori* information, that is on their answers to questions 2 (how important?) and 9 (how many sectors of interest?). With exception of questions 1, 2, 6 and 9, the weights are applied rather straightforwardly to all questions. Before adding up, each individual answer is multiplied by the weight assigned to the organisation concerned. With respect to question 9, however, the weight acts as normalisation factor, in such a way that organisations which are both equally interested in the same number of sectors have an equal impact (=weight) on the overall results, regardless of differences in the number of statistics needed and regardless of systematic differences in the priority assigned. Annex C gives a more technical explanation of the weighting system.

Both methods have their own merits; comparing them also unfolds the differences in underlying interests at stake.

Nota bene: instead of applying the above-mentioned *a posteriori* weights, one could also argue that each user should have an *a priori* weight based on the type or significance of the organisation. However, since this sort of *a priori* information is not available, we assumed interested parties to be *a priori* equally important for the outcomes of the survey.

5. Results

The final decision to conduct the survey was taken in May 1998; in that month the development of the questionnaire took place as well as the selection of organisations possibly interested. The questionnaire was sent out in June, and was followed up by a reminder at the end of July.

5.1 Response

Approximately 60 organisations returned their questionnaire. Of those, 39 indicated that they and/or their affiliated organisations were interested in short-term statistics. Although no real investigation into the nature of the non-response took place, there are indications that it was partly caused by postal delay, summer holidays and the problem of quickly finding the right person to fill in the questionnaire. Although a more massive response would substantiate the results, the main message expressed by the users seems clear enough.

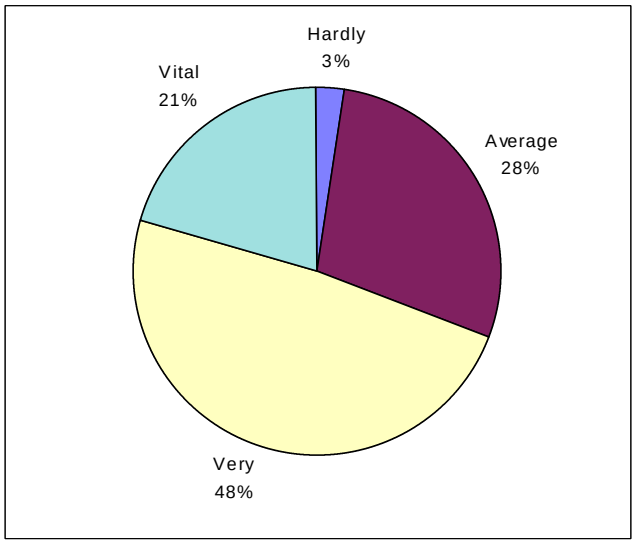
The results summarised in this report are based on the 39 organisations who responded positively. These users represent a wide variety of well-known organisations and major interests covering many countries and world regions. For example: UN, IMF, OECD, WTO and many other upstanding organisations.

Note: almost all 39 organisations indicated that they were interested in the overall outcomes of the survey. Furthermore, data underlying the figures presented in the next sub- sections is included as Annex D.

5.2 Significance of short-term statistics for users.

The relevance of short-term statistics is expressed in terms of their overall importance for the organisation(s) concerned. Figure 1 clearly shows that on the whole short-term statistics are considered to be very important.

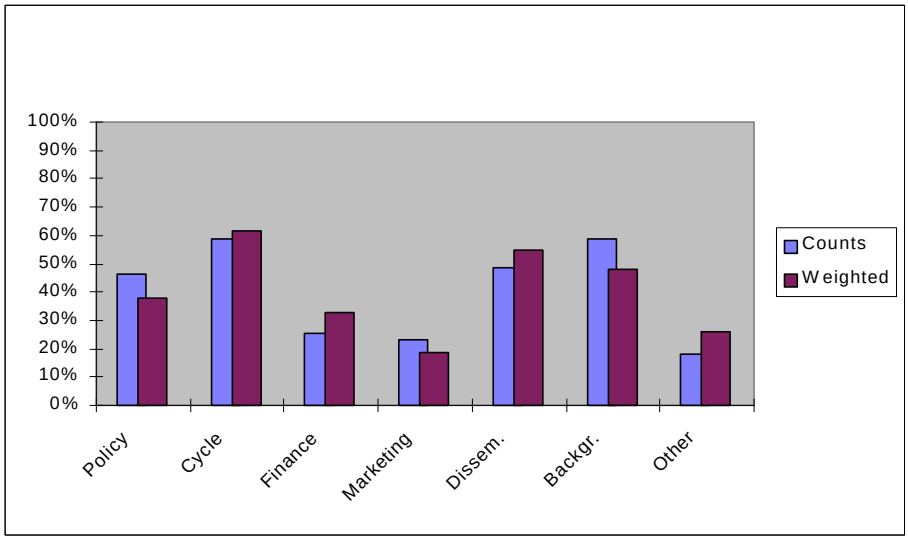
Figure 1. Importance of short-term statistics (% of total response, unweighted)



For about one fifth even vital interests are at stake. However, it should be kept in mind that the response has already been filtered for organisations not interested in short-term statistics.

Looking at the purpose for which the statistics are used, illustrated in Figure 2, business cycle research and dissemination are the major topics, although other purposes were also frequently mentioned.

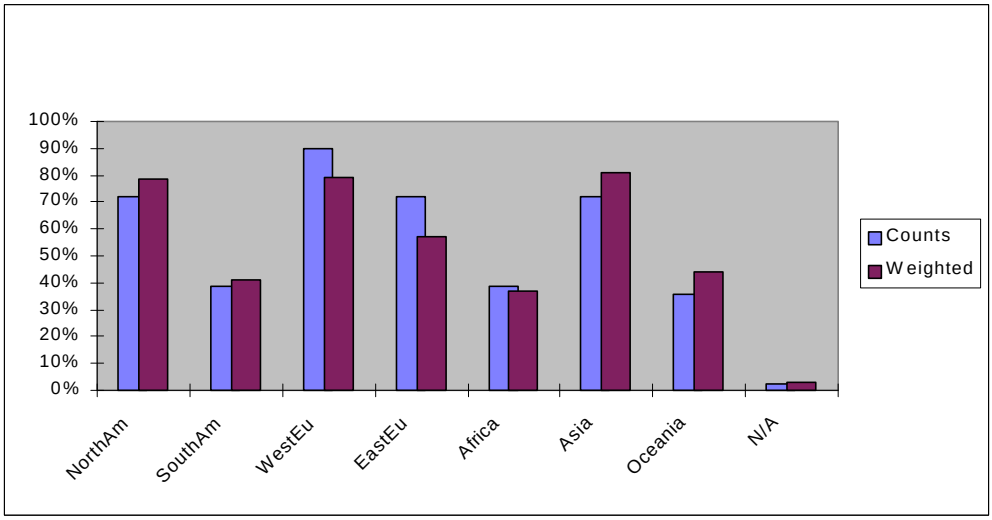
Figure 2. Purpose of short-term statistics (% of total response, unweighted and weighted)



Although in the raw count the purpose of ‘background information’ scored highest, on average users consider this type of information to be relatively less important: the weighted end result is lower than the raw count. For business cycle research and dissemination the reverse applies: on top of already high raw counts, their relatively higher importance raises it even further. Roughly one third of responding organisations use short-term statistics for policy and finance.

For many of the users the activities are not limited to a single world region. Practically all organisations show interest in at least two world regions, while four regions is the average (see Figure 3).

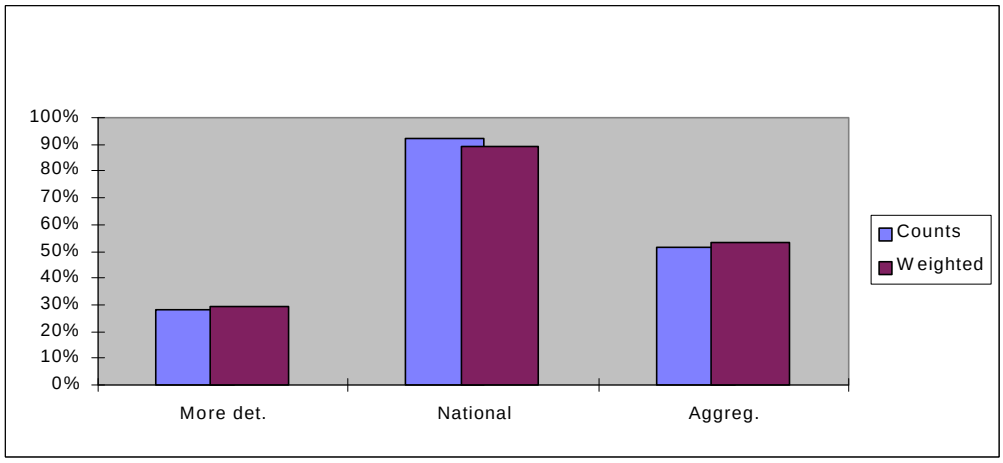
Figure 3. World regions of interest (% of total response, unweighted and weighted)



Loosely speaking, the weighted figures for regions of interest basically reveal three levels, with North America, Western Europe and Asia at the top, followed by Eastern Europe in the middle and lastly South America, Oceania and Africa.

The geographical level at which users need their statistical information is quite straightforward, as shown in Figure 4. Almost all organisations consult data at the national level, whereas aggregates are used by more than half. Approximately one quarter use more detailed levels than national level.

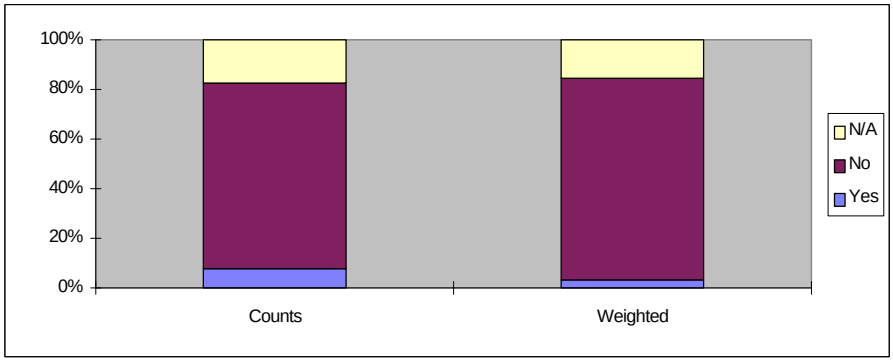
Figure 4. Geographical level of interest (% of total response, unweighted and weighted)



5.3 Users' assessment of current availability

Given the great significance of short-term statistics for user organisations on the one hand, and the relatively scarce availability of such statistics on the other, it is not surprising that almost all respondents were dissatisfied. Figure 5 leaves no doubt about that.

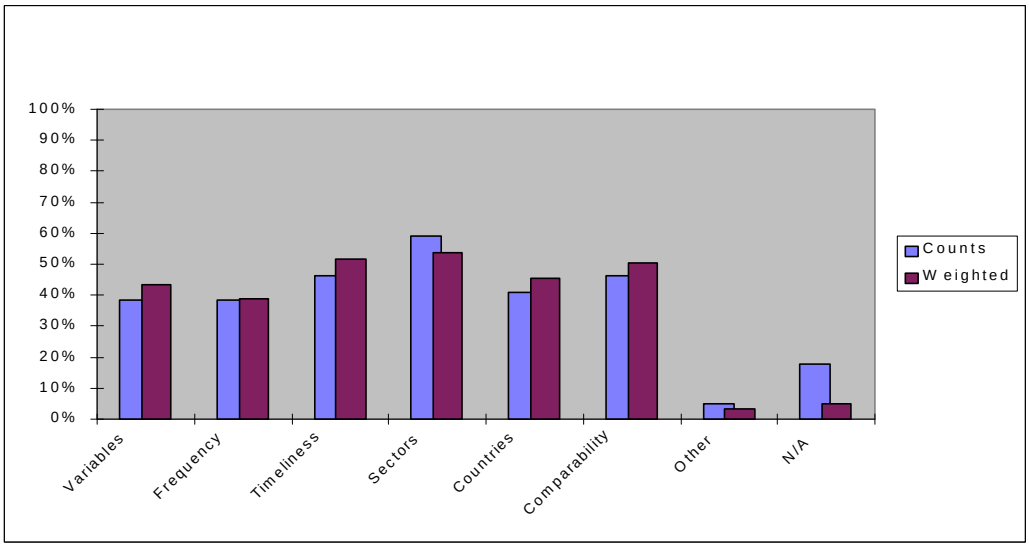
Figure 5. Are you satisfied with current short-term statistics? (% of total response, unweighted and weighted)



A comparison between the weighted and unweighted figures reveals that respondents who are either satisfied or did not answer the question attach relatively less importance to short-term statistics than the others.

But what are the reasons for this dissatisfaction? Although the scores of the reasons vary, they are generally quite high, which means that users express their dissatisfaction in terms of a bundle of shortcomings (Figure 6).

Figure 6. Shortcomings of short-term statistics (% of total dissatisfied, unweighted and weighted)



Preliminary cross tabulation analysis of the reported shortcomings suggests that there are three such bundles:

1. Timeliness and Frequency: obviously, there is a clear relation between the two. Lower frequencies reduce timeliness, often to the same extent, in most cases even more. Unsatisfactory frequencies imply a shortcoming timeliness. The reverse does not necessarily apply.

2. Statistics, Comparability and Countries: this seems to suggest that some countries have deficient statistical coverage and that the statistics are not comparable.
3. Statistics and Sectors: too few statistics cover too few sectors.

5.4 Statistics and sectors of interest

In the survey each user was asked (question 9) to submit their view on a large number of pre-defined 'sector-statistics' combinations, in terms of priority, level of detail and frequency. Combinations left blank were considered to be irrelevant. Ideally, a sufficiently large response would have allowed a precise specification for each combination. From a statistical point of view, 39 cases are, however, not enough to make a proper and full multi-dimensional assessment of the tables in question 9. Instead, only the row totals (statistics) and column totals (sectors) have been calculated. For the same reason the results on 'stocks' (one of the statistics only relevant for a couple of sectors) are left out of this report.

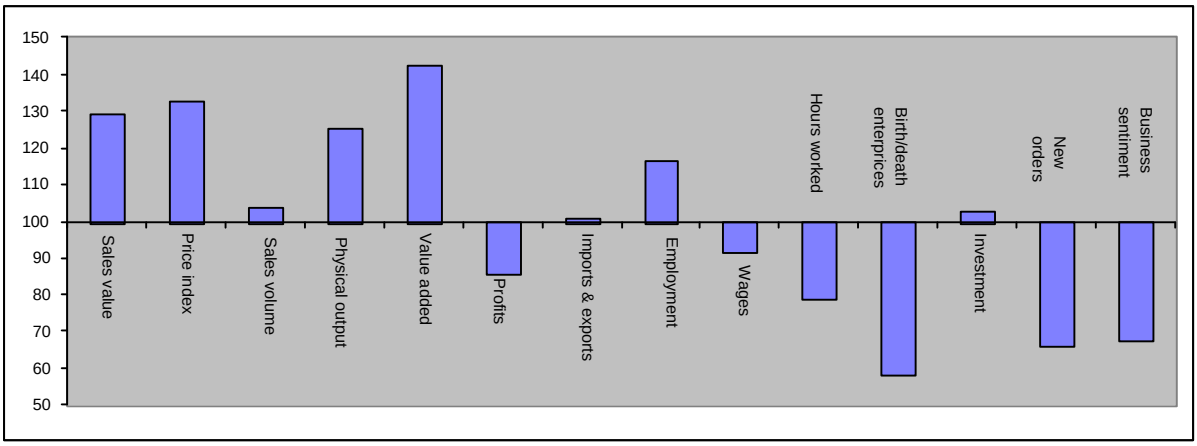
The general outcome is that for all the statistics and for all the sectors concerned, a significant number of organisations consider them important. Each set of statistics has a support ranging between approximately half to just over three-quarters of all users; for all sectors there is support from approximately half of all users. Although the tables explicitly allow additional statistics and sectors to be included, this option was not

chosen by any of the responding organisations. These results indicate that the pre-defined set of statistics and sectors corroborates the needs of users: a set for which there is substantial demand.

Although all sectors and statistics are of significant interest with regard to the needs of users, this ambitious aim cannot be achieved overnight. In this respect it is useful to gain more insight into their relative priority. For this purpose a transformation of the qualitative priority indication to a quantitative one has been applied in order to facilitate a quantitative assessment (see Annex C for technical details).

In figure 7, the weighted priority for each statistic is plotted against the average priority. The average is normalised at 100. Statistics beyond 100 are above average priority. As illustrated, this is the case for value added, together with price indexes, sales values, physical output indicators and employment. Value added ranks highest and is found to be roughly 40% more important than on average.

Figure 7. Priority of statistics (weighted, 100=average priority)

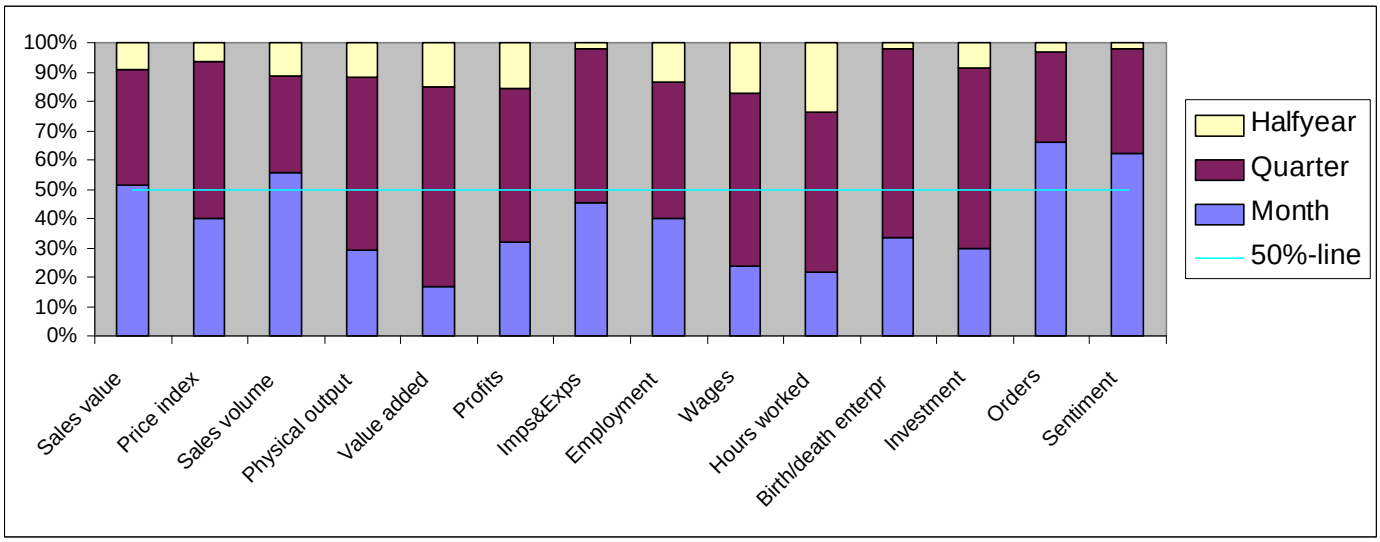


Still relevant but with lower priority: sales volume, investment, imports and exports of services, wages, profits, hours worked, investment, orders and business sentiment and births and deaths of enterprises.

What about their frequencies: should they be monthly, quarterly or half-yearly? There are many ways to answer this question. Here, a simple method is applied: within the group of interested users for a particular variable, the (weighted) majority determines the outcome. For this purpose the (weighted) frequency scores for each statistical series are plotted on top of one another. In Figure 8 the 100% level mirrors the group of users interested in the variable concerned. Take prices, for example: 40% favours a monthly, 53% a quarterly and

7% a half-yearly frequency. The horizontal 50%-line marks the frequency area for which there is a majority interested in the statistics under consideration. In the case of prices, the quarterly frequency prevails. At least 60% (=53%+7%) will be satisfied with quarterly price statistics and perhaps the remaining 40% will also be partly content. But it also reflects that 93% (=40%+53%) wants the frequency to be at least quarterly.

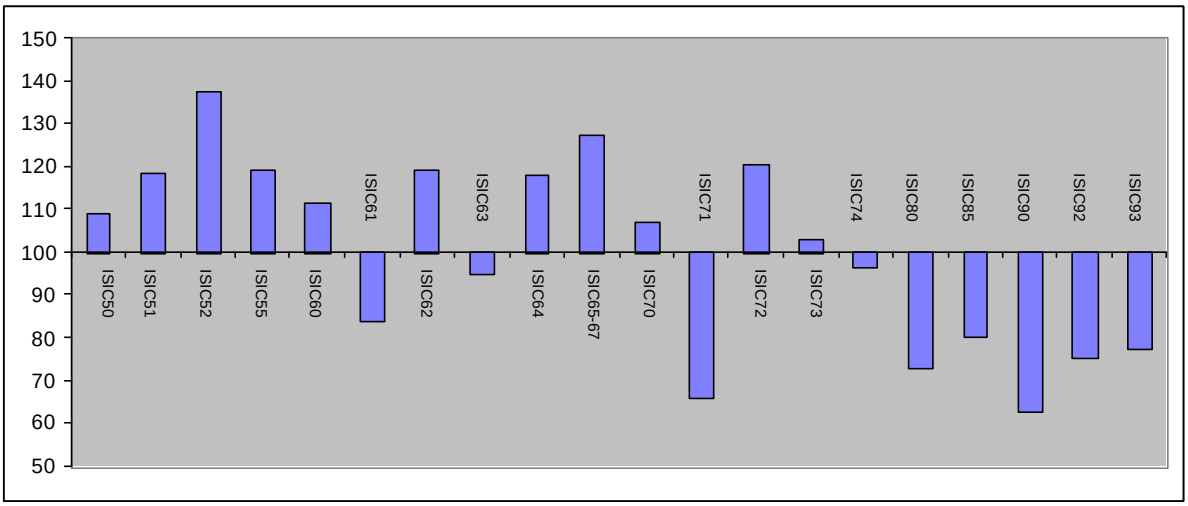
Figure 8. Frequencies per series of statistics (weighted and normalised)



The main conclusion from Figure 8 is that all statistics should be at least quarterly. There is a clear majority call for 'business sentiment' and 'orders' to be monthly. There is a logical explanation for this: in the daily practice of industry statistics, for instance, business sentiment and orders are mostly used as business cycle indicators, for which timeliness is a major concern. Furthermore, they are also relatively easy to collect. If they were to be set on a quarterly periodicity, their information lead and relevance will most probably drop significantly. For Sales value, Price index and Sales volume as an 'interrelated package' the need for monthly and quarterly frequency seem in balance.

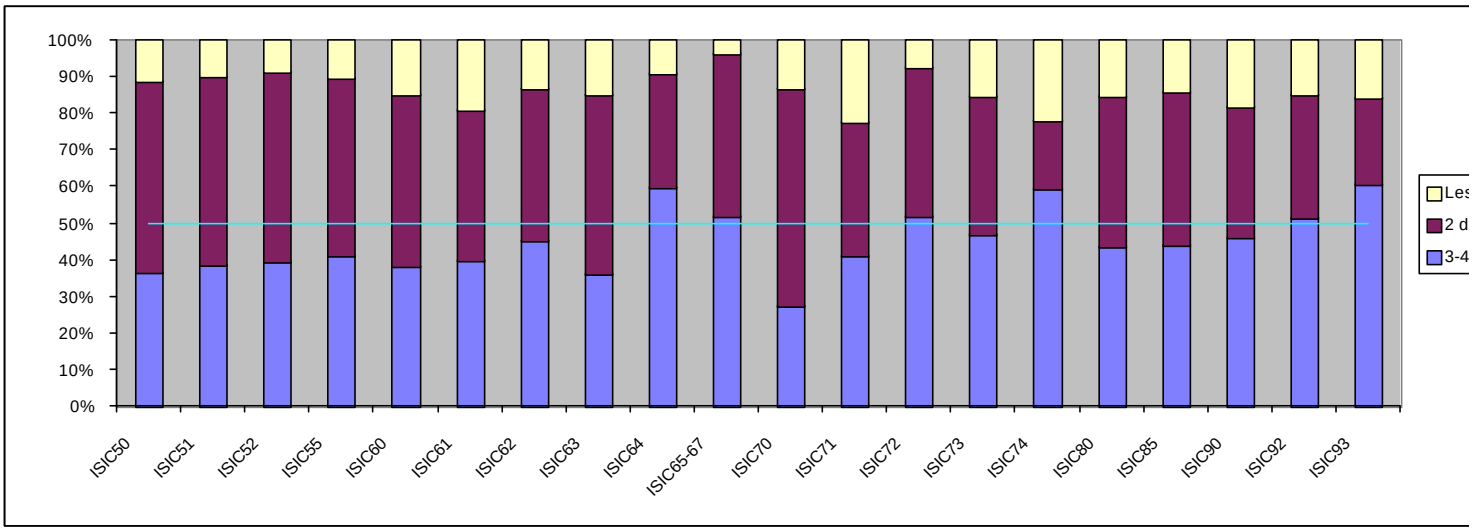
Turning to the sectors of interest, Figure 9 expresses clear differences in priority. Most priority is given to Retail trade (ISIC 52) and Financial intermediates (ISIC 65-67). There is also more than average priority for Wholesale (ISIC 51) and Hotels and Restaurants (ISIC 55), Motor vehicles and Retail of automotive fuel (I50), Transport via land & pipelines (ISIC 60), Air Transport (ISIC 62) and Post and Telecommunication (ISIC 64) and Computer and related activities (ISIC 72). Relatively low priority short-term statistics are those on Water transport (ISIC 61), Renting of machinery (ISIC 71) and Education (ISIC 80), Health and social work (ISIC 85) and Other community, social and personal service activities (ISIC 90-93).

Figure 9. Priority of sectors (weighted, 100=average priority)



As for their level of detail, the 50%-line pinpoints the level of detail at 2-digit for almost all sectors (see Figure 10). Only for Post and Telecommunication (ISIC 64) and Other business activities (ISIC 74) and Other services (ISIC 93) is there a majority requesting more detail.

Figure 10. Details per sector (weighted and normalised)

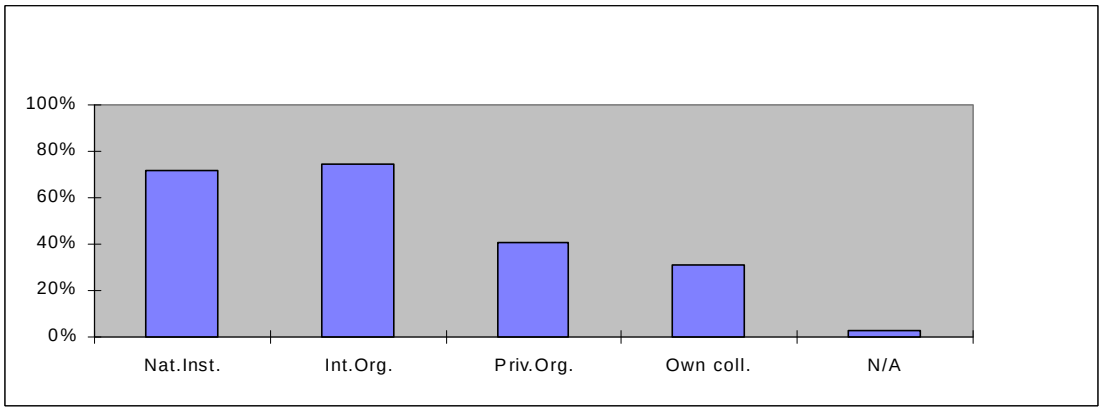


The outcomes presented in this section do not imply that all sectors should be covered to the same extent by all statistics. The above results only reflect average majorities. There may certainly be some evidence for deviation from the ‘general rule’. Some sectors perhaps need more (or less) frequent statistics than average. Such heterogeneous aspects, however, can only be unfolded under the assumption of a sufficient number of cases, i.e. responding organisations.

5.5 Data flow towards users

Many users often obtain their statistical information from a number of different sources. The main sources are national statistical institutes and international organisations. Approximately three-quarters of users retrieve their statistics from these public sources.

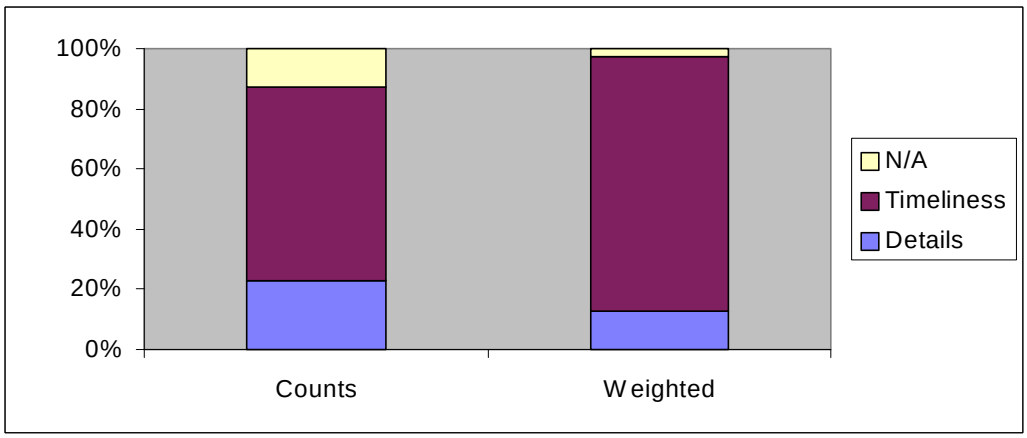
Figure 11. Sources of statistical information (% of total response, unweighted)



But these are obviously not the only sources. Information collected by private organisations or by the organisation itself is also significant, with 41% and 31% respectively.

Of course the data should achieve certain quality standards. With timeliness and detail being considered as the two major quality aspects, by far the majority of the respondents consider timeliness as being the most important factor (see Figure 12). This conclusion corresponds with the request for sector details mainly restricted to the 2-digit level (see Section 5.4), but at a quarterly frequency.

Figure 12. What is more important? (% of total response, unweighted and weighted)

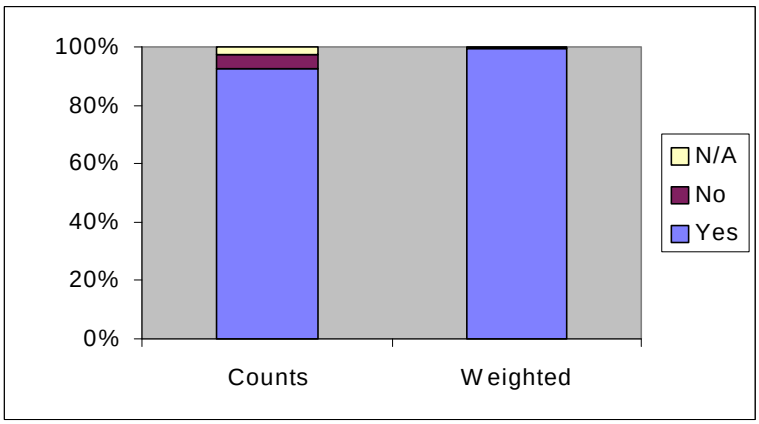


Timeliness is even more important if the underlying interests of the respondents are taken into account.

In addition to statistically related quality aspects, dissemination also rates as another constituent of quality. The last, but certainly not least important, question in the survey was whether the organisations would benefit from an international publication on short-

term statistics on trade and services. Figure 13 shows that there is almost a unanimity in favour of such a publication.

Figure 13. Would your organisation benefit from an international publication?
(% of total response, unweighted and weighted)



6. Conclusions

The aim of the survey is to identify user needs for short-term statistics (STS) on trade and services. The results in previous sections clearly reveal a vivid interest of users.

In general STS are regarded as very important for the organisations concerned, in most cases serving more than one purpose (business cycle research, dissemination, policy, finance, etc.). Since the population of the survey was selected on the criteria of operating internationally, it is not surprising that each user wants data for several world regions (with four as the average). Data is needed both at national level (almost all) and at more aggregated levels (half of the users). Furthermore, there is almost unanimous support for the idea to start an international publication in this area.

Practically all organisations are not satisfied with the current availability of STS with respect to timeliness/frequency, as well as to sector and country coverage of statistics.

The demand for statistical data is strong. For each and every set of statistics there is interest from at least half of all users, ranging up to three-quarters. Similarly, each sector has the support of approximately half of all users.

For the (weighted) majority of the organisations a desire for quarterly frequency for all statistics prevails, except for new orders and business sentiment which are needed on a monthly basis. In daily practice these monthly statistics generally act as first business cycle indicators. Furthermore there is a clear majority demand concerning the coverage which should be at the 2-digit level (ISIC) for almost all trade and service sectors. For Post and Telecommunication (ISIC 64), Other business (ISIC 74) and Other services (ISIC 93) there is even a majority demand for 3/4 digit details. There is a strong - but not majority - call for more detailed figures for the other sectors as well. All in all however, timeliness is considered to be more important than details.

Although the 'package' of statistics and sectors has been found to be relevant as a whole, the priority of each may differ. As such value added, prices, sales value, physical output indicators and employment are considered most important. Variables with relatively lower priority are: sales volume, investment, imports and exports of services, wages, profits, hours worked, investment, orders and business sentiment and births and deaths of enterprises.

With regard to sectors: retail trade and financial intermediates have the highest priority, whereas education, health and social work and other community, social and personal activities are clearly below the average priority

Unfortunately, the number of responding organisations is statistically too low to allow deeper analysis. If there had been a larger response, it would have been possible to make additional statements on

- frequency, level of detail and priority per statistical series for each sector separately: even though statistics are needed at a quarterly frequency at the 2-digit level in general, looking more closely at the specific statistics-sector outcomes may unfold areas for which there is significantly more or less demand in terms of frequency or level of detail;
- cross relations between the different aspects of user needs, for example between factors of insufficiency and the purpose of statistics, between world regions and the level of the desired regional breakdown, etc.;
- user need framework for each world region separately.

7. Recommendations

Based on their response, the main message of what international organisations need has now been charted. Some of it is clear cut, some will have to be investigated in more detail.

Fine tuning the results and elaboration of user needs for each world region separately is, however, only feasible if the survey work continues and response increases. Thereby giving more mass, and thus relevance, to the user need signal in general. With regard to the world regions of interest and the regional breakdown needed, it is then recommended that these two separate questions be integrated into one relatively small matrix. Further research might look into additional weighting systems at the front (*a priori* weight of individual organisations) and at the end (GDP related weights to add up world region results to the world total).

Further survey work should include research on non-response behaviour and on the background of organisations not interested in STS. What are the underlying factors: are they related to the survey itself, or to awareness, dissemination, availability or quality of statistics, or are they really and truly uninterested, even under the assumption of full information?

For the recognition and understanding of the user needs, it is important to start up an investigation among national statistical institutes to look into the extent to which international user needs are confirmed there, in the short run and in the long run. But also: do the national statistical institutes perceive differences between national user wishes and the international framework presented in this report?

Balancing (international) demand and supply in the area of short-term statistics on trade and services calls for long-term perseverance. Starting up a new (quarterly) international publication is a big step forward in this process. For reasons of efficiency and effectiveness the possibilities of a joint approach should be examined: many of the users said that associated private bodies or they themselves produce statistical information, which might be useful for the public domain in order to avoid duplicate work and unnecessary administrative burden on enterprises.

Annex A: The questionnaire on user needs

QUESTIONNAIRE ON USER NEEDS
WITH RESPECT TO
SHORT TERM STATISTICS ON TRADE & SERVICES

Please return this questionnaire before 17th July 1998 to

STATISTICS NETHERLANDS (CBS)
attn. Thom Werkhoven, Room 408
PO Box 4000 Tel : 0031-70-3374373
2270 JM Voorburg Fax: 0031-70-3877429
The Netherlands E-mail: twrn@cbs.nl

***Person responsible for filling in this questionnaire*:**
If the address above is incorrect, please give the correct address here:
Name :_____
Function : _____
Department:_____
Tel. : _____
Fax. : _____
E-mail : _____

Please fill in the questionnaire in such way that it reflects the need of your organisation including affiliated organisations.

Do you wish to receive the overall results of this survey free of charge? YES [ ] NO [ ]

---

1. Is your organisation interested in short term statistics (see Question 9, Table A) on the trade and services sectors?

YES [ ] NO [ ]

If 'NO', please skip the remaining questions and return the questionnaire as soon as possible.

2. How important are short term statistics for your organisation?

Not at all important	[ ]
Hardly important	[ ]
Averagely important	[ ]
Very important	[ ]
Vitally important	[ ]

3. What purpose do short term statistics serve in your organisation? (more than one answer possible)

Policy making	[ ]
Business cycle research	[ ]
Financial analysis	[ ]
Marketing	[ ]
Dissemination (data distribution)	[ ]
Background information	[ ]
Other purposes	[ ]
	e.g._____

4. What is the geographical level of the short term statistics you consult? (more than one answer possible)

National level	[ ]
More detailed than national level	[ ]
Aggregates of national levels	[ ]

5. Which world regions are of interest to your organisation? (more than one answer possible)

America	
North America	[ ]
South America	[ ]
Europe	
Western Europe	[ ]
Eastern Europe	[ ]
Africa	[ ]
Asia	[ ]
Australia and Oceania	[ ]

6. From whom do you receive statistical information on trade and services? (more than one answer possible)

National Statistical Institutes	[ ]
International public organisations	[ ]
Private organisations	[ ]
Own collection and compilation of statistics	[ ]

7. Are you satisfied with the current availability of short term statistics on trade and services (in comparison with statistics on the manufacturing industry, for instance)?

YES [ ] NO [ ]

8. If you are dissatisfied with current short term trade and services statistics (see Question 7), is this because of : (more than one answer possible)

Too few variables	[ ]
Too low frequency	[ ]
Insufficient timeliness	[ ]
Insufficient coverage of sectors	[ ]
Insufficient coverage of countries	[ ]
Insufficient comparability between countries	[ ]
Other insufficiencies	[ ]
	e.g._____

9. Please indicate in Tables A, B and C below which areas are of interest for your organisation.

Within each relevant cell of the table, please express your needs with regard to priority, frequency and level of detail.

Priority	[I] = high
	[II] = medium
	[III] = low
Frequency	[M] = monthly
	[Q] = quarterly
	[H] = half yearly
Level of detail	[a] = neither less nor more detail
	[b] = more detail (3-4 digit level ISIC Rev. 3)*
	[c] = less detail

* See attached classification list ISIC Rev. 3

Cells or tables left blank will be considered to be IRRELEVANT for your organisation from a short term statistics' point of view.

Example:

Activities Variables	Retail Trade ISIC 52	Explanation
Sales value (turnove	I M b	the contents of the cell indicate that the sales value for re trade is needed with a high priority, on a monthly basis with more digit details.

TABLE A

Activities / Variables	Motor vehicle motorcycles & retail sale automotive fu ISIC 50	Wholesal Trade ISIC 51	Retail Tra ISIC 52	Hotels Restauran ISIC 55	Transport via land pipelines ISIC 60	Water Transpor ISIC 61	Air Transport ISIC 62
Sales value (turnov							
Price index (of sal							
Sales volume							
Physical output indicators *****)							
Value added							
Profits							
Import & export o services							
Stocks (of product							
Employment							
Wages & Salaries							
Hours worked							
Birth/death enterprises							
Investment expenditure							
New orders							
Business Sentimer							
Other:							
Other:							

*****) for example: length of pipelines, number of passengers, etc.

TABLE B

Activities / Variables	Supporting auxiliary trans port act. & tra agencies ISIC 63	Post Telecomr ISIC 64	Financial inter- mediates ISIC 65-6	Real es activities ISIC 70	Renting machiner ISIC 71	Compute and relate activities ISIC 72	Research and developm ISIC 73
Sales value (turnov							
Price index (of sal							
Sales volume							
Physical output indicators							
Value added							
Profits							
Import & export o services							
Employment							
Wages & Salaries							
Hours worked							
Birth/death enterprises							
Investment expenditure							
New orders							
Business Sentimer							
Other:							
Other:.....							

TABLE C

Activities / Variables	Other busi activities ISIC 74	Educatio ISIC 8	Health an social wo ISIC 85	Sewage refuse dis sanitation ISIC 90	Recreatio cultural sporting a ISIC 92	Other services ISIC 93	.... ISIC .....
Sales value (turnov							
Price index (of sal							
Sales volume							
Physical output indicators							
Value added							
Profits							
Import & export o services							
Employment							
Wages & Salaries							
Hours worked							
Birth/death enterprises							
Investment expenditure							
New orders							
Business Sentimer							
Other:.....							
Other:							

10. What do you consider more important for short term statistics?

Details [ ]
Timeliness [ ]

11. In your opinion, would your organisation benefit from an international publication on trade and services?
YES [ ] NO [ ]

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

Annex B: List of organisations (possible users)

AFX-NEWS LTD.
AIG FINANCIAL PRODUCTS
AMERICAN BUREAU OF METAL STATISTICS INC.
AMERICAN IRON AND STEEL INSTITUTE
ANDERSEN MANAGEMENT INTERNATIONAL A/S
AP DOW JONES NEWS WIRES
ASS. INTERNATIONAL RESEARCH
ADECCO NEDERLAND HOLDING BV
AFRICAN DEVELOPMENT BANK
AIRPORTS COUNCIL INTERNATIONAL
ARTHUR ANDERSEN ACCOUNTANTS
ASIAN DEVELOPMENT BANK
ASS.OF COMM.OF SIMPL. PROCED.FOR INT.TRADE WITHIN THE EU AND THE EU FREE TRADE ASS.
ASSOCIATION BANCAIRE POUR IÉCU ECU BANKING ASSOCIATION (ABE)
ASSOCIATION OF EUROPEAN AIRLINES
ASSOCIATION OF WEST EUROPEAN SHIPBUILDERS
AUSTRALIAN BANKERS' ASSOCIATION
AUSTRALIAN AND NEW ZEALAND BANKING GROUP (ANZ)
BAK OXFORD INTERNATIONAL
BANK FOR INTERNATIONAL SETTLEMENTS
BANK OF JAPAN INTERNATIONAL DEPARTMENT
BANQUE EUR. D' INVESTISSEMENT
BLOOMBERG FINANCIAL MARKETS
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
BUSINESS - TO - BUSINESS INDUSTRIEMARKTFORSCHUNG GMBH
BUREAU DE LIAISON DES INDUSTRIES CERAMIQUES EUR. - CERAME-UNIE
BUREAU OF THE CENSUS U.S.DEPARTMENT OF COMMERCE
CENTRAL BANK OF CHINA
CHINA EXTERNAL TRADE DEVELOPMENT COUNCIL
COMMITTEE FOR INTERNATIONAL COOPERATION IN NATIONAL RESEARCH IN DEMOGRAPHY
CUSTOMS GENERAL ADMINISTRATION
CANADIAN BANKERS' ASSOSATION
CENTRE FOR BUSINESS CYCLE RESEARCH AND DEVELOPMENT (CBRD)
CENTRE FOR BUSINESS RESEARCH & DEVELOPMENT FACULTY OF BUSINESS ADMINISTRATION
CENTRE FOR ECONOMICS AND BUSINESS RESEARCH LTD.
CENTRE FOR INTERNATIONAL RESEARCH ON ECONOMIC C/O IFO INSTITUTE FOR ECONOMIC RESEARCH
COMITÉ EUROPÉEN DES ASSURANCES
COMITÉ EUROPÉEN DES COOPÉRATIVES DE PRODUCTION ET DE TRAVAIL ASSOCIÉ

COMITÉ DE LIAISON EUROPÉEN DES COMMISSIONNAIRES ET AUXILIAIRES DE TRANSPORT DU MARCHÉ COMMUN
COMITÉ DU COMMERCE DE CÉRÉALES,ALIMENTATION DU BÉTAIL, OLÉAGINEUX HUILE
ET AGROFOURNITURE D'E.U.
COMMITEE OF EC SHIPBUILDERS ASSOCIATION
COMMUNAUTÉ DES CHEMINS DE FER EUROPÉENS
CONFÉDÉRATION EUROPÉENNE DES INDÉPENDANTS
CONFÉDÉRATION FISCALE EUROPÉENNE
CONSEIL EUROPÉEN DE L INDUSTRIE CHIMIQUE
DEUTSCHES INST. FUR WIRTSCHAFTSFORSCHUNG
DRESDNER INTERNATIONAL RESEARCH INSTITUTE GMBH

DRI EUROPE INC
DATASTREAM
DELOITTE & TOUCHE
DEPARTMENT OF FINANCE CANADA
DUN & BRADSTREET
ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC
ECONOMIST INTELLIGENCE UNIT
ERNST AND YOUNG CHARTERED ACCOUNTANTS
EUROMONITOR
EUROPAISCHES ENTWICKLUNGSZENTRUM FUR DIE BINNEN-SCHIFFAHRT E.V.
EUROPEAN DEVELOPMENT CENTER FOR INLAND NAVIGATION E.V. DUISBURG
EUROPEAN ENVIRONMENT AGENCY
EUROPEAN TOURISM COORDINATION CENTER NV
ECONOMIC CYCLE RESEARCH INSTITUTE
ECONOMIST
ELSEVIER SCIENCE PUBLISHER BV
EUR. ASS. OF MANUFACTURERS OF BUSINESS MACHINES AND INFORMATION TECHNOLOGY
EUR. TELECOMMUNICATIONS AND PROFESSIONAL ELECTRONICS INDUSTRY ECTEL
EUROPEAN ASSOCIATION OF AEROSPACE INDUSTRIES
EUROPEAN ASSOCIATION OF AUTOMOTIVE SUPPLIERS
EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT
EUROPEAN CENTRAL BANK
EUROPEAN FED. OF ENGINEERING CONSULTANCY ASS.
EUROPEAN PUBLIC POLICY ADVISORS
EUROPEAN UNION OF WHOLESALE WITH EGGS, EGGS- PRODUCTS, POULTRY AND GAME
EUROPESE INVERSTERINGSBANK
EUROPESE SPAARBANKENVERENIGING

FERI GMBH
FEDERAL RESERVE BANK OF NEW YORK
FEDERAL RESERVE BOARD OF GOVERNORS AND US SMALL BUSINESS ADMINISTRATION
FEDERATION OF EUROPEAN BEARING MANUFACTURERS ASS.
FEDERATION OF EUROPEAN DIRECT MARKETING
FEDERATION OF EUROPEAN DIRECT SELLING ASSOCIATIONS
FEDERATION OF SMALL BUSINESS
FINANCIAL TIMES
FOOD AND AGRICULTURE ORGANIZATION (FAO)
FÉD. EUROPÉENNE DU COMMERCE EN FRUITS SECS, CONSERVES, EPICES ET MIEL
FÉDÉRATION BANCAIRE DE I' UNION EUROPÉENNE
FÉDÉRATION HYPOTHÉCAIRE EUROPÉENNE
FÉDÉRATION DE L' INDUSTRIE EUROPÉENNE DE LA CONSTR.
GATT
GALLUP ORGANIZATION
GOLDMAN SACHS INTERNATIONAL
GROUPE (CECD/FEWITA/GEDIS)
GROUPE BANQUES POPULAIRES
GROUPEMENT EUROPÉEN DES BANQUES COOPÉRATIVES
HWWA-INSTITUT FÜR WIRTSCHAFTSFORSCHUNG
INTERNATIONAL ENERGY AGENCY
INTERNATIONAL GRAINS COUNCIL
INTERNATIONAL TEXTILE MANUFACTURERS
INTERNATIONAL TRADE CENTRE TRADE LIBRARY

INTERNATIONAL UNION OF PUBLIC TRANSPORT
INSTITUTE OF WORLD ECONOMY AND INTERNATIONAL RELATIONS
INTER AMERICAN DEVELOPMENT BANK
INTER AMERICAN DEVELOPMENT BANK EUROPE
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (IBRD) /WORLD BANK
INTERNATIONAL FINANCE CORPORATION/WORLD BANK
INTERNATIONAL MONETARY FUND (IMF)
J.P. MORGAN
JAPAN IRON AND STEEL FEDERATION
KPMG
KPMG PEAT MARWICK INTERNATIONAL TRADE & CUSTOMS SERVICES
KANSAI ECONOMIC RESEARCH CENTER
KELLY SERVICES NEDERLAND BV
KONJUNKTURFORSCHUNGSSTELLE EIDGENÖSSISCHE TECHNISCHE HOCHSCHULE ZÜRICH

LEHMAN BROTHERS
LIEBERMAN RESEARCH WORLDWIDE
MARKET TRACKING INTERNATIONAL
MEDISTAT WORLD MEDICAL MARKET ANALYSIS
MERRILL LYNCH
MONEY MARKET SERVICES
MANNPOWER INC.
MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY (MITI);
INTERNATIONAL TRADE POLICY BUREAU
RESEARCH AND STATISTICS DEPARTMENT
MORET ERNST & YOUNG
NATIONAL ASSOSATION FOR BUSINESS ECONOMICS
NATIONAL BUREAU OF ECONOMIC RESEARCH INC.
NATIONAL FEDERATION OF INDEPENDENT BUSINESS C/O TEMPLE UNIVERSITY
NEW ZEALAND BANKERS' ASSOCIATION
NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH (INC)
OECD
OXFORD ECONOMIC FORECASTING LTD
OVERSEAS DEVELOPMENT ASSOCIATION
PROGNOS GMBH
PANORAMA DE L' INDUSTRIE DE L' UE
PRICE WATERHOUSE
RANDSTAD HOLDING NV
REUTERS LTD.
SRI INTERNATIONAL
STATE STATISTICAL BUREAU OF THE PEOPLES REPUBLIC OF CHINA
SERVICE STATISTIQUES, ETUDES ET DOCUMENTATION
SMALL BUSINESS FINANCE CORP.
SOCIETY FOR WORLDWIDE INTERBANK FINANCIAL TELECOMMUNICATION (S.W.I.F.T)
START HOLDING BV
SURVEY RESEARCH CENTER UNIVERSITY OF MICHIGAN
TOURISTIK UNION INTERNATIONAL
THE AMERICAN BANKERS ASSOCIATION
THE CONFERENCE BOARD
THE CONFERENCE BOARD OF CANADA
THE FEDERATION OF BANKERS ASSOCIATION OF JAPAN THE TOKYO BANKERS ASS. INC.
THE INSTITUTE OF INTERNATIONAL FINANCE, INC.
THE STATE INFORMATION CENTRE

UEPG
UNCTAD

UNION EUROPÉENNE DE L' ARTISANAT ET DES PME
UNION EUROPÉENNE DES CHAMBRES DE COMMERCE
UNION DE L' INDUSTRIE DE CHIMIE
UNION DES CONFÉDÉRATIONS DE L' INDUSTRIE ET DES EMPLOYEURS D EUROPE
UNION DES GROUPEMENTS DE COMMERÇANTS DÉTAILLANTS INDÉPENDANTS DE L' EUROPE
UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA (ECA)
UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA
UNITED NATIONS INTERNATIONALE LABOUR ORGANISATION (ILO)
UNITED NATIONS STATISTICAL DIVISION ECON. COMMISSION FOR EUROPE
UNITED NATIONS (ESCAP) ECON.AND SOCIAL COM.FOR ASIA AND THE PACIFIC DRPAD/ INT'L TRADE & ECONOMIC COOPERATION DIVISION
UNITED NATIONS (ECLAC) ECON. COM.FOR LATIN AMERICA AND THE CARRIBBEAN
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION (UNESCO)
UNITED NATIONS STAT.INST. FOR ASIA AND THE PACIFIC
UNITED NATIONS STATISTICAL OFFICE (UNSTAT)
VENDEX INTERNATIONAL NV
WORLD BUREAU OF METAL STATISTICS
WORLD DATA INTERNATIONAL BOOKSELLERS
WORLD BANK
WORLD CUSTOMS ORGANISATION
WORLD HEALTH ORGANIZATION (WHO)
WORLD TOURISM ORGANIZATION
WORLD TRADE ORGANIZATION
YOUNG ENTREPRENEURS FOR EUROPE

Annex C: Weighting of the respondents

The results of this survey are presented partly by means of "raw" counts, sums and percentages, partly by means of weighted counts etc. The purpose of the weighting is threefold:

1) To allow respondents who indicate an overall high degree of interest in short-term statistics on trade and services to have more impact than respondents with less interest.

2) To avoid respondents who appear to have rather widespread areas of interest, i.e. respondents who fill in a wide range of statistics, having a disproportionately high impact compared with respondents who appear to be more focused in their interests. (This only applies to question 9).

3) To allow respondents who indicate a high degree of interest in a particular subject matter to have more impact on the figures for that subject than respondents with less interest. (This, too, only applies to question 9).

To achieve aim 1) we define, for each respondent $\boldsymbol{r}$, $\mathbf{S}_r$ as the number of sectors for which the respondent has filled in at least one cell in question 9. Further, we define a number $\mathbf{I}_r$ according to the answer given to question 2 (How important are short term statistics .....):

Question 2 answer:	$\mathbf{I}_r$
Not at all important:	0
Hardly important:	1
Averagely important:	2
Very important:	3
Vitally important:	4

The weight applied for each question $\boldsymbol{q}$ (question 3,4,5,7,8,10 and 11) is $\mathbf{W}_{r,q} = \mathbf{I}_r\mathbf{S}_r\mathbf{N}_q$, where $\mathbf{N}_q$ is a normalisation factor that ensures that the raw figures and the weighted figures sum up to the same total, thereby making the weighted figures comparable to the raw figures and giving them a natural interpretation, e.g., as a percentage of the population.

For the indicators for priority of statistics (figure/table 7) and of sectors (figure/table 9), a score, $\mathbf{P}_{r,s,v}$ has been defined for each priority given by respondent $\boldsymbol{r}$ to the combination statistic $\boldsymbol{v}$/sector $\boldsymbol{s}$ in question 9:

Question 9 answer:	$\mathbf{P}_{r,s,v}$
High:	4
Medium:	2

Low: 1
No answer: 0 if the indications for frequency and detail level are also missing, otherwise 2

To achieve aims 2) and 3), these scores have been normalised with a factor $\mathbf{U_r}$, defined as

$$U_r = \frac{W_r}{\sum_{s,v} \mathrm{P}_{r,\,s,\,v}}$$

where $W_r = I_r S_r$

The importance per sector, $\mathbf{I_s}$, and per statistic, $\mathbf{I_v}$, are then the weighted sums of the **P**'s:

$$I_s = \sum_{v,r} U_r \, \mathrm{P}_{r,\,s,\,v} \qquad I_v = \sum_{s,r} U_r \, \mathrm{P}_{r,\,s,\,v}$$

The normalisation factors $\boldsymbol{U_r}$ are also used for the figures for detail level and frequencies, which are further weighted with **P**. Thus, for each detail level **d** (2 digits, more digits or fewer digits),

$$I_{s,\,d} = \sum_{v,r} U_r \, \mathrm{P}_{r,\,s,\,v} D_{d,\,r,\,s,\,v}$$

where **D** is the indicator function for detail level **d**. The figures for frequencies per statistic are computed in the same way.

Annex D : Tables

Notes: The numbers of the tables correspond with figures in the main text;

Unless mentioned otherwise, % scores relate to total response;

Due to rounding errors the sum of % scores does not in all cases add up to 100% (only relevant for questions that allow single answers);

N/A = Not Answered;

Table 7 and 9 contain data underlying figure 7 and 9 respectively. Figure 7 illustrates the ratios of the weighted priority of each variable to the average priority of all variables. The same calculation applies to the sectors (figure 9).

Table 1. Importance of short term statistics

	Unweighted	
Not at all	0	0%
Hardly	1	3%
Average	11	28%
Very	19	48%
Vital	8	21%
N/A	0	0%

Table 2. Purpose of short term statistics

	Unweighted		Weighted	
Policy making	18	46%	14,8	38%
Business cycle analysis	23	59%	23,9	61%
Finance	10	26%	12,8	33%
Marketing	9	23%	7,3	19%
Dissemination	19	49%	21,3	55%
Background information	23	59%	18,6	48%
Other	7	18%	10,2	26%
N/A	0	0%	0,0	0%

Table 3. World regions of interest

	Unweighted		Weighted	
North America	28	72%	30,6	78%
South America	15	38%	16,0	41%
Western Europe	35	90%	30,8	79%
Eastern Europe	28	72%	22,2	57%
Africa	15	38%	14,4	37%
Asia	28	72%	31,6	81%
Australia and Oceania	14	36%	17,1	44%
N/A	1	3%	1,2	3%

Table 4 Geographical level of interest

	Unweighted		Weighted	
More detailed than national level	11	28%	11,4	29%
National level	36	92%	34,8	89%
Aggregates of national levels	20	51%	20,9	53%
N/A	0	0%	0,0	0%

Table 5. Satisfied with current short term statistics?

	Unweighted		Weighted	
Yes	3	8%	1,4	4%
No	31	79%	35,4	91%
N/A	5	13%	2,2	6%

Table 6. Shortcomings of short term statistics
(% relate to total dissatisfied)

	Unweighted		Weighted	
Variables	15	38%	17,0	44%
Frequency	15	38%	15,2	39%
Timeliness	18	46%	20,2	52%
Sectors	23	59%	21,0	54%
Countries	16	41%	17,7	45%
Comparability	18	46%	19,7	51%
Other	2	5%	1,3	3%
N/A	7	18%	2,0	5%

Table 7. Priority of statistics

	Unweighted	Weighted
Sales value	327	371,9
Price index	315	381,2
Sales volume	290	298,8
Physical output	313	360,8
Value added	321	409,5
Profits	285	247,1
Imports & exports	276	289,8
Employment	314	335,4
Wages	287	263,9
Hours worked	279	228,1
Birth/death enterpr.	242	168,0
Investment	290	296,2
New orders	240	191,3
Business sentiment	239	195,2

Table 8. Frequencies per statistic (weighted and normalised)

	Monthly	Quarterly	Halfyearly
Sales value	51%	40%	9%
Price index	40%	54%	7%
Sales volume	55%	33%	11%
Physical output	29%	59%	12%
Value added	17%	68%	15%
Profits	32%	52%	15%
Imports & exports	45%	53%	2%
Employment	40%	47%	13%
Wages	24%	59%	17%
Hours worked	22%	54%	24%
Birth/death enterpr.	33%	65%	2%
Investment	30%	62%	8%
New orders	66%	31%	3%
Business sentiment	62%	36%	2%

Table 9. Priority of sectors

ISIC	50	51	52	55	60	61	62	63	64	65-67	70	71	72	73	74	80	85	90	92	93
Unweighted	227	221	250	240	234	201	257	210	231	201	176	166	197	191	211	180	190	165	186	176
Weighted	224	243	282	245	229	173	245	195	242	261	219	136	247	212	199	151	165	130	155	159

Table 10. Details per sector in % (weighted and normalised)

ISIC	50	51	52	55	60	61	62	63	64	65-67	70	71	72	73	74	80	85	90	92	93
3-4 digits	36	39	40	41	38	40	45	36	60	52	27	41	52	47	59	43	44	46	52	60
2 digits	52	51	52	48	47	41	42	49	31	45	60	37	41	37	19	41	42	36	34	24
Less	11	10	9	10	15	19	13	15	9	4	13	22	7	16	22	15	14	18	15	16

Table 11. Sources of statistical information

	Unweighted	
National institutes	28	72%
International organisations	29	74%
Private organisations	16	41%
Own collection	12	31%
N/A	1	3%

Table 12. What is more important?

	Unweighted		Weighted	
Details	9	23%	4,9	13%
Timeliness	25	64%	33,1	85%
N/A	5	13%	1,0	3%

Table 13. Would your organisation benefit from an international publication?

	Unweighted		Weighted	
Yes	36	92%	39	99%
No	2	5%	0,27	1%
N/A	1	3%	0	0%