Introduction:

The purpose of this short paper is to provide a comprehensive overview of the evolution of the CBI’s business survey activity, its current scope and portfolio and to highlight those areas for likely research innovation in the future. This paper also brings together information on the development of the research link between the CBI and the European Commission in relationship to the supply of data and the enrichment of methodological harmonisation.

Survey Group – General Activity:

The CBI Survey Group, formerly the CBI Business Survey Unit has since 1982 conducted the following qualitative business surveys on behalf of its members and business in general.

- Industrial Trends Survey {quarterly and monthly} covering 50 sectors of UK manufacturing industry at the Chief Executive level. This is the longest running UK private sector qualitative business survey and it celebrated its 40th anniversary in October 1998.

- Distributive Trades Survey {quarterly and monthly} covering 23 sectors of UK retail, wholesale and motor trade activity. This qualitative business survey has been conducted since July 1983. This survey is completed by senior executives and owner - proprietors.

- Investment Intentions Survey {twice a year} covering EC determined sectors of UK manufacturing industry. This qualitative/quantitative survey has been conducted by the CBI since 1987 and is sent to the identical sample that responds to the CBI Industrial Trends Survey.

- Consumer, Business and Professional Services Survey {quarterly}. This is the newest of the CBI's qualitative business surveys and covers 36 UK service sector activities at the broad industry level. This survey, conducted since 1998, is completed by chief executives and senior partners.

- Financial Services Survey {quarterly} covering 10 sectors of UK financial services. This qualitative survey has been conducted since 1989 and is completed by senior executives.

- Property Trends Survey {twice a year} covering 8 divisions of the UK private sector. This qualitative survey has been conducted since 1994 and is completed by senior managers and property experts.

- The CBI Survey Group has also now taken on the responsibility for the management and operation of the CBI Pay Settlements Survey, formerly under the responsibility of the CBI Pay Databank Department. This survey monitors pay
settlements across UK manufacturing and services and publishes data at least 6 times per annum.

**Qualitative Business Surveys Supplied to the EC:**

The CBI has ensured that all EC harmonisation requirements have been integrated into the regular data that is supplied to the European Commission:

- The CBI supplies on a regular monthly and quarterly basis, harmonised results from its quarterly and monthly Industrial Trends Survey {Industry}.

- The CBI supplies on a regular monthly and quarterly basis, harmonised results for UK retailing taken from its quarterly and monthly Distributive Trades Survey {Retail}.

- The CBI supplies on a regular twice a year basis, harmonised results for investment intentions in UK manufacturing {Industry}, taken direct from the sample who also respond to the CBI Industrial Trends Survey of UK manufacturing.

- The CBI Survey Group has successfully conducted a pilot monthly service sector survey, on behalf of the European Commission, to assess the possibility of the development of a monthly index of data for specific supply to the EC and is now the UK representative supplying regular monthly and quarterly data to the EC.

- The CBI has also over the period of the past 15 years or so, conducted periodic surveys on behalf of the EC relating to the Manufacturing and Retail Labour Market.

- Harmonisation is conducted on the basis of survey field work periods, trend cycle periods, data output structures, NACE classifications, questions themselves and alterations to existing surveys and output requirements or transmissions. By November 2003, all required harmonisation {save for very minor textual differences to the texts of individual questions in line with national institute/participant difference requirements} will have been achieved.

**CBI Methodological Transparency:**

The CBI Survey Group is responsible for development and maintenance of the respected CBI qualitative 'trends' style methodology and for all the processes undertaken for the operation of a complete and regular cycle of business surveys. The CBI Survey Group consisting of 4 full-time colleagues is responsible for:

- Questionnaire format and methodological transparency and design is consistent across all CBI business surveys
- Maintenance and development of numerous business survey samples
- Organisation of survey despatch
• Collection and manual processing of the returned questionnaires
• Data entry of the completed questionnaires
• Processing of the completed data entry
• CBI survey data is not revised or seasonally adjusted at any stage prior to national publication. Obviously, the harmonised data supplied to the EU is then subject to the instruments that underpin the composite indicator process.
• Production of the survey results
• Supply of processed survey data
• Each qualitative business survey has a set schedule of despatch, collection, processing and supply. All the monthly and quarterly surveys are conducted within the first fortnight of each month with results available before the end of the month in question.
• The CBI Survey Group is also extremely attentive to the problem of participant survey fatigue, based in part on a more crowded and competitive business survey marketplace and also attention is paid to participants’ concern over required methodological changes or interpretations of familiar question texts.
• Non-response is a generic problem across all survey samples and this is dealt with by telephoning significant participants where necessary to ensure that we can capture their data. Obviously, this is more difficult when dealing with the larger surveys that take longer to go through on the telephone.

CBI Business Survey Participant Confidentiality Protocols:

• The CBI Business Survey Unit exercises the highest standards of confidentiality in respect of the identity of respondents and their individual data. All business survey data is calculated and analysed on an anonymous basis and data sets with too few participants are not published, to avoid impinging statistical secrecy and company identity.

• The Business Survey Unit deals with highly sensitive and competitive individual company data each month and for this reason, no one outside of the Unit is allowed access to either company identity or individual data. This rule applies across the CBI. Participant company identity and individual data are not and should not be part of the common currency of business information within the CBI.

• As these surveys are surveys of business rather than simply surveys of CBI members, the same strict guidelines are also afforded to non-member participants. Membership of the CBI is not a pre-requisite for taking part in any of our business surveys. Where this policy differs, is when the CBI commissions a specialist independent poll, to gauge the views of CBI members on leading issues such as the single European currency.

• It should be noted that the CBI Business Surveys are voluntary and that a key role of the Unit is to maintain the goodwill and co-operation of each participant, in the face of prevailing competition from other survey based organisations.

• This strict confidentiality guarantee is reinforced by the European Commission’s newly established regulations on survey secrecy with regard to those EU institutes
that supply data as part of the survey conjunction. This is a strictly contractual obligation but one that complements the CBI’s own guidelines where respect for confidentiality is of the highest order. The business integrity of the data and our operations depends upon adhering to this strict code.

**CBI Business Survey Samples:**

CBI business survey samples are constructed from the following sources:

- CBI parent membership and subsidiary lists
- UK sector trade associations
- CBI Regional Office contact
- Electronic database sources such as Dun & Bradstreet, FAME, KBE

The CBI samples are regularly maintained by the Business Survey Group to ensure that company details are current and that where reasonably possible, new companies are added to our samples to ensure sector representation.

**CBI Technical Survey Infrastructure:**

Each of the CBI's qualitative business surveys is underpinned by a scientific weighting and aggregation structure using official Government data and other sources.

It is essential for sound business survey analysis that each particular survey has a scientific calculation structure. The CBI has developed a rigorous approach to the application of its weighting methodology across all its surveys. The weighting frame identifies the constituent blocks of respondents {usually called ‘cells’} and then applies a pre-determined weight value in the total survey result, irrespective of the actual number of replies received in each cell.

Weights and aggregates are central to the calculation of the results of each survey. The calculation of survey results can be seen as the process of integration from individual responses to total data for each sector and for the panel of responses as a whole.

There is a specific process involved with the CBI business surveys. Firstly, the percentage of answers to each reply option is calculated. Two alternatives become available at this stage: a simple counting of the answers and a weighted counting. In the first case, the numbers of positive and negative replies are counted, then expressed as percentages of the total number of firms in the sector. In the second case, a weighting coefficient is used for each firm representing a component of its official size ie employment or turnover or production. The answers to each option are then given as the sum of the coefficients of the firms that have given the same reply.

The application of weighting measures at this point in the calculation process aims at reducing the bias introduced by the inclusion of different companies with different sizes. However, it is important to note that the weighting of business survey results
does not follow the same reasoning as that applied to the calculation of official statistical indicators. In the case of business survey information, there are no quantities involved. Therefore, weighting individual responses according to some element of size (e.g., employment or number of establishments), can attach greater significance to judgements and the predictions of larger firms. However, whilst this at first sight may imply that larger firms judge or predict better than small firms, it should not be held as an assumption in relation to the effect of the weights. For example, using a weighting frame based upon the number of enterprises, will give a much greater weight to the proportion of smaller firms within the survey panel.

Therefore the main reason for applying weights to individual responses is the assumption that all firms, regardless of size, base their reply upon the direction of change (i.e., trend) in a particular answer to the same estimated subjective rate. If this is the case, it is reasonable to assume that a ‘positive’ or ‘increase’ answer to a particular question from a larger firm, carries more weight than the same answer from a smaller firm.

Once the results for each sector or grouping have been calculated, the results for the total overall are calculated as weighted averages of the results by sector/grouping. Weighing measures used at this stage, reflect the relative significance of each sector in the survey frame via the measure derived from official statistics. The weighting at this stage is used to improve the quality of the sample data, by correcting possible discrepancies of representation.

When business survey data is aggregated to higher levels, in the case of the CBI, to the European level, a weighted average of country results is obtained by applying relevant country weights. These weighting values are value added or export-based in the case of the industrial trends survey (industry) and private consumption in the case of the distributive trades survey (retail).

{Taken in part from The European Economy-Reports and Studies: The Joint Harmonised EU Programme of Business and Consumer Surveys. No. 6 1997.}

**Future CBI Technical Development Work:**

- Strategic projects are to be put in place in 2004 to examine and update all current weighting mechanisms that underpin the calculation methodology of the surveys.
- This will definitely include work on the financial, industrial and retail surveys with significant priority given to parallel testing of current and revised weighting components to determine the level of change within each test data set.
- Examination of the provision of national and EU harmonised data to our survey participants via e-mail or via a special website.

**Current CBI Technical Internal Research:**

- The CBI Survey Group conducts periodic qualitative surveys into the answering practice patterns of participants on the Industry, Retail and Financial surveys, to
provide valuable research into the motivations underpinning responses. It is likely that this research will extend to examining the answering practices of the Service Sector Survey, which is now 5 years old.

- The CBI continues to use its manufacturing industry survey data to enrich its economic forecasts.

**Future CBI Technical Internal Research:**

- The CBI will also want to examine the established growth and behaviour of business sector in relation to their web based activity; both retail web business and manufacturing/service based B2C and B2B business. Now that this method of business is established and a significant component of UK GDP, it will be very useful to begin examining this question for our Retail participants.
- The CBI will be extending its coverage of the service sector in 2004 to include those NACE sectors not currently covered such as R&D and Trade Bodies.
- The CBI retains complete UK based data time series for all its business surveys; it is our wish to make these time series more available electronically. It will extend this so that all harmonised EU data is captured separately in time series format.
- In the late 90’s, a research companion to the technical structures of the CBI business surveys was published, covering the complete portfolio of activity. It is the CBI’s intention to publish a renewed and updated product in 2004 to meet the needs of the importance of the enlargement of business tendency research at a national and European level.

**External Technical Research undertaken on CBI surveys:**

- External research has been undertaken in 2003 by Dr Ulf Von Kalckreuth of the Economic Research Centre at the Deutsche Bundesbank, in association with the Bank of England. The specifics of the project relate to the analysis of historic individual ‘cost constraint’ data responses to the CBI Industrial Trends Survey, as a means of determining stock market performance and annual accounts.

The CBI Survey Group consists now of four full-time staff who manage the process, development and maintenance of the surveys cited below. The Unit is now part of the Economics and Enterprise Directorate, rather than being located within the CBI Economic Analysis Department. The CBI Survey Group supplies survey data to the Economic Analysis Department which consists of one head of group and six specialist economists with substantial expertise in survey analysis and also econometric/statistical methods and macro-economic forecasting.

**CBI Survey Management System:**

- The CBI has now developed an innovative intranet based business survey system for the complete processing and development of all its qualitative business surveys. This system became fully operational from January 2000. It allows for the complete development of new business surveys to be carried out by CBI Business Survey Group staff and will also allow for the transmission of results to clients/customers by e-mail. The new CBI business survey system has also been
developed to allow for the gradual use and development of transmitting business surveys via the internet and e-mail. Further work is required to facilitate web enablement along with serious examination of the likely differences that are likely to occur in relation to participant answering practices and the confidence of participants to respond using this medium, with data security issues in mind.

Key conclusions in relation to CBI UK and EU supply priorities:

- Enhancement of the technical infrastructure of our surveys, both through our continued examination of our methodologies and implementation of our refinement programmes and the promotion of our national and European work via new information publications.
- Refinement of the quality and reach of our survey samples and examination of survey fatigue and non-response issues with a view to decreasing the incidence and potential negative effects of the latter.
- Consolidation of our current and proposed internal research by publication of a collection of our papers on answering practices across the retail, industrial, financial and possibly service sector surveys. It is of key importance to examine and analyse the underlying motivations of participants that is reflected in their survey responses.
- Examination and development of methods of e-mail or web based survey response transmission and presentation of final national and European data through the CBI website or in co-operation with other partners.

Jonathan Wood
Head of Survey Group
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