EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS
Policy strategy and co-ordination
Economic situation, forecasts, business and consumer surveys

2012 EU Workshop on recent developments in Business and Consumer Surveys

15 - 16 November 2012

Brussels, Bedford Hotel

Minutes

(Final 18.12.2012)

15 November 2012

MORNING SESSIONS

INTRODUCTION

The workshop was opened by **Flores**, Director of DG ECFIN.A "Policy strategy and co-ordination". She pointed to the importance of tendency surveys in a context of continued high uncertainty about economic prospects. The increased interest of economists and policy-makers in timely survey data since the outbreak of the economic and financial crisis called for further efforts to fully exploit the potential of survey indicators for now-casting and short-term forecasting. In this context she stressed the importance of harmonisation of survey methodologies and ensuring high quality and reliability of survey indicators. Apart from this, the crisis had brought non-conventional uses of survey data to the fore, such as gauging capacity utilisation and households' financial constraints, or filling gaps in official statistical data. **Gayer**, Head of Sector "Business and Consumer Surveys (BCS)", continued by summarising the main developments related to the BCS programme over the last 12 months, focusing on the follow-up to the 2011 Evaluation study (*inter alia* transparency initiative, feasibility study on revamping the BCS website, access to more detailed survey results, analysis of composite indicators) and work on the harmonisation of the survey methodology. He also informed participants about the state of play concerning the Call for proposals launched in June 2012 and mentioned the finalisation of the NACE back-casting exercise as one of the activities planned for the next months. Finally, **Gayer** informed participants that the 2013 calendar for data delivery had been circulated, asking to receive feedback from the institutes by the end of November via e-mail.

HARMONISATION OF BUSINESS AND CONSUMER SURVEYS

Friz (DG ECFIN – EC) reported on the outcome of a task-force that has gathered in 2011/2012 to decide on ways of rendering results of the quarterly question on factors limiting production in industry, services and construction as well as the annual Oct/Nov question on the structure of investment comparable across Member States. National institutes differ in the way they aggregate and transmit the results to DG ECFIN, which engenders a serious harmonisation problem. **Friz** explained the pros and cons of each method and communicated DG ECFIN's preferred techniques: For the question on factors limiting production, institutes should from January 2013 onwards send the survey results without adjusting them (i.e. the percentage quotes for the different factors can add up to more than 100%), whereas data gathered from the Oct/Nov question on firms' investment structure should be subject to the "fractional" method (each tick is divided by the number of ticks a firm gave) from autumn 2013 onwards. With a view to offering time series of appropriate length to end-users, the concerned partner institutes were asked to calculate back data complying with the new methods for the period from 2000 onwards. A first chunk of back data covering the period from May 2010 on should be made available already by the next BCS publication in January 2013.

In the ensuing discussion, **Schwarz** (WIFO – AT) as well as **Josing** (EKI – EE) sought clarification as to whether they would need to revise their questionnaires such that they would allow respondents to choose multiple, instead of a single answer. **Gayer** replied that questionnaires allowing for just one answer, though not in line with the harmonised questionnaire, were tolerable in order to avoid breaks in otherwise well-performing series. Pointing out that Spain is already applying DG ECFIN's preferred aggregation method for the question on factors limiting production, **Garcia** (Simple Logica Investigacion – ES) asked whether she would need to provide back data. **Friz** clarified that this was not necessary. However, she took the opportunity to inform partner institutes that DG ECFIN has the intention to send them the back data in order to check whether the different factors are correctly encoded (there are indications that in some cases the factor 'financial constrains', currently encoded as F6, is inverted with 'other factors', encoded as F5). Replying to **Urbanski** (GfK – PL), who recalled that Poland was allowing respondents of the industry and services survey to choose among 11 and 15 factors limiting production respectively, DG ECFIN requested to be provided with aggregate results in line with the harmonised factor categories, including consistent back data. **Almendros Ulibarri** (MITYC - ES) explained that the Spanish investment survey asked managers to allocate percentages of overall annual investment to the investment categories of the questionnaire, rather than just indicating which kind of investment is planned. **Friz** confirmed that there was no need to produce back data or change the questionnaire in this case. Supported by **Balea** (NIS – RO), **Vergouw** (CBS – NL) asked for the new rules on factors limiting production to be applied only from April 2013 onwards, arguing that changing their computer programs would take some time. **Gayer** agreed to postpone the introduction of the new procedure and the deadline for submission of back data to April 2013 in order to insure a smooth changeover. **Abberger** (KOF – CH) explained that some institutes seem to i) categorise respondents not replying to the question on factors limiting production among firms declaring not to face any production constraints and ii) include those firms in the number of responding firms, used as a denominator when transforming the number of firms choosing a particular response into a relative share. DG ECFIN is aware of that issue and urges partner institutes to exclude firms not replying to the question on factors limiting production from the calculation of aggregate scores for this question.

NEW QUESTION ON CAPACITY UTILISATION ON THE SERVICES SECTOR

Since July 2011 a new question on capacity utilisation in the services sector has been asked quarterly. During last year's workshop there was a lively debate (mostly on theoretical grounds) about the appropriateness of the wording of the question and possible flaws in the answering behaviour of respondents. **Negau** (DG ECFIN) presented an analysis of the results of the new question based on six waves collected up to date. With an average of 86% in both the EU and the euro area, the capacity utilisation in services is by 6-7 pps higher than in industry, which appears sensible given the higher capital endowments in industry. Furthermore, quarter-on-quarter volatility of the results is somewhat lower in services compared to industry and the cross-country correlation of capacity utilisation in services and industry has followed an upward trend over the six waves. While previous concerns vis-à-vis the adequacy of the chosen approach were based mainly on theoretical grounds, the empirical evidence pointed to the plausibility of the results. In conclusion - and also in the light also of the CBI findings on the UK managers' answering practice in the services sector survey (see below) - ECFIN proposed to continue with the current approach and to envisage publishing the data (both seasonally and non-seasonally adjusted series) as from July 2014.

Wood (CBI – UK) presented the results of the CBI's "answering practices surveys" in the UK services sector. The presentation shed light on the factors orienting respondents' behaviour, as well as on how respondents themselves interpreted concepts. In particular, **Wood** showed that most respondents think in terms of turnover when assessing the value of their business and in terms of income received when asked about the volume of their business. To compare the current level with the "normal" level of business, the majority of managers think in terms of past level of work/historical average. 57% of the respondents stated that when answering questions that refer to trends over the past three months, they think in terms of the change between the past three months as a whole compared with the previous three months. He also highlighted that the majority of the respondents would answer "up" or "down" instead of "same" when they register a variation between 5 and 8%. In the services survey most of the respondents did adjust for seasonal factors. Finally, the answering practice survey indicates that 68% of respondents reply to the new capacity utilisation question on a possible increase of their activity in terms of percentage changes (i.e. the 'correct' interpretation) and only 22% answer in terms of percentage points. This pattern was broadly valid also at the sub-sector level with the exception of 'hotels, bars and restaurants', where most managers (46%) replied in percentage points.

In the following discussion, **Abberger** (KOF – CH) recalled the lively discussion about the issue of answering in percentage changes or percentage points (pps) and said that in his opinion the CBI findings partly confirmed these doubts, in particular for hotels, bars and restaurants (HBR). The fact that a share of managers answered in pps caused an overestimation of capacity utilisation in the services sector. **Schwarz** (WIFO – AT) noted that the results were encouraging but agreed on the possible overestimation issue mentioned by Abberger. He furthermore expressed his concerns about the fact that even managers in branches such as accounting were giving the 'wrong' answers. **Joy** (CBI –UK) replied that this phenomenon would require further analysis. **Gayer** pointed out that the 'wrong' answering behaviour of the HBR sector was not so important for the total results in weighted terms. Concerning the reportedly high share of 'wrong' responses also in the management/accounting sector, he wondered about the representativeness of these results, given that – unlike in the HBR sector – this was hard to back by any intuitive explanation. Overall, some variation in the degree of understanding of survey questions by respondents was a pervasive feature of all surveys, and not confined to the question on capacity utilisation. About the ability to exclude seasonal factors from their answers, **Gamba** (OECD) asked whether CBI was able to identify which groups of respondents were not able to seasonally adjust the data, with a view to possibly adjusting these results with another method. **Wood** answered that CBI could not do this. However, CBI research on why some firms cannot exclude seasonality pointed to the fact that part of the managers consider that their business is not subject to seasonal factors while others are unable to exclude them. **Wohlrabe** (Ifo – DE) asked if there was a variable with which one could compare the results in order to assess their reliability. **Gayer** answered that this was unfortunately not the case and that the absence of 'hard data' was in fact the reason why the question on capacity utilisation had been included in the services survey. **Hilbinger** (GfK – DE) suggested adding a clarification on the way managers should answer the question directly to the questionnaire. On that point, **Gayer** reminded of the trade-off between giving guidance (which in this case would need to be quite lengthy) and keeping the questionnaire simple. Finally, the sensible empirical findings presented earlier argued in favour of continuing with the current formulation of the question. **Wood** used the occasion to encourage other institutes to conduct similar surveys as the one he presented in their countries.

AFTERNOON SESSIONS

ON-GOING INTERNATIONAL WORK AND PROSPECTS IN THE FIELD OF BCS

Gamba (OECD) presented recent developments in the area of business tendency surveys at the OECD. She announced that a new hierarchy for tendency surveys, based on new ranking criteria and achieving enhanced transparency and comparability, should be ready by March 2013. Having provided a brief update on the on-going seasonal adjustment project, she turned to the handbook on tendency surveys, which is a common effort of ISTAT, UNSD, OECD, NSCB Philippines, KOF and Statistics Netherlands. The plan is to have a final draft by the end of 2013 so as to be able to present it to the UN Statistical Commission by February 2014. Finally, **Gamba** announced that the OECD was continuing to work on the consolidation of BRIICS coverage and the extension of tendency surveys to the G20 countries.

Moauro (ESTAT) presented an overview of the economic situation in the euro area based on bridge modelling, the unobserved component approach (EuroMIND), the system of euro area turning point detection and the early warning system. The bridge model estimates GDP, employment and industrial production for the euro area based on infra-annual statistical data (retail sales, exports, construction output, unemployment rate, euro/$ exchange rate) and BCS data (present business situation, consumers' intentions to make major purchases over the next 12 months, confidence in industry, confidence in construction, activity over the past three months in construction and employment expectations over the next three months in construction). The EuroMIND model provides a monthly proxy of GDP by combining available monthly output and expenditures components. The official quarterly accounts are used as a benchmark. Based on ME, MAE and RMSE statistics the second month of each quarter proved to be the most difficult to estimate. The system of euro area turning point detection consists of estimating the business cycle coincident indicator, the growth cycle coincident indicator and the acceleration cycle coincident indicator by averaging the probability of recessions returned by univariate Markov switching models fitted to hard data series and confidence indicators. Based on the results of the research, **Moauro** indicated that the bottoming out of the acceleration cycle could be a positive signal, hinting at a rather fast recovery from the recession.

In the ensuing discussion, **Hoven** (CBS - NL) mentioned that CBS developed an experimental indicator of economic growth which is partly based on direct measurement and partly on model based techniques using indicators such as BCS data. He inquired about the appropriateness of such efforts by a statistical office whose objective is to directly measure economic variables, rather than now-casting them. **Moauro** stated that such *"experimental data"* are useful for scientific purposes, albeit only to the degree to which statistical offices are willing and able to make use of them. **Nguiffo-Boyom** (BCL – LU) asked about the selection procedure of the exogenous variables and **Moauro** answered that a standard procedure based on correlations was used. **Reuter** (DG ECFIN - EC) wondered whether the present business situation and major future purchases from the consumer survey were picked up as explanatory variables on the basis of an algorithm or as an arbitrary choice. In response, **Moauro** pointed out that several robustness checks had been conducted and the results proved stable over the last five years.

TOPICAL APPLICATIONS OF SURVEY DATA – 1ST PART

Minty (DG EMPL) presented the "financial distress" indicator based on question No. 12 (current financial situation of households) of the consumer survey that DG Employment is publishing since 2011 in their Quarterly Review "EU Employment and Social Situation". The main advantage of this indicator is its timeliness compared with the standard EU-SILC indicators of the social situation that have considerable delays. Comparing the results of the financial distress indicator with EU – SILC indicators (financial strain indicators and other key social indicators), Minty found that the BCS-based indicator is useful for signalling growing social problems and that it can be used to some extent as an advanced indicator of established social indicators in many Member States. However, there was some variation across countries with respect to which hard indicators the financial distress indicator can actually "foretell". **Minty** concluded that some further investigation was needed, requiring access to detailed response categories for Q12 and national questionnaires. He also stressed the importance of the quality of the underlying data and invited partner institutes to check the consistency of their data.

In the following discussion, **Friz** asked about the SILC survey. Given that some of the correlation coefficients between the financial distress indicator and the two indicators derived from the SILC survey were contradicting each other she was wondering whether this suggested possible quality issues on the side of the SILC survey. As a follow-up question, **Suardi** (DG ECFIN) inquired how the collection of SILC data was actually carried out. Minty replied that some of the 'hard' indicators were indeed negatively correlated with each other, pointing to a need for further investigation. He explained that the collection process varied between countries, with some using registers, while others were conducting surveys. **Gayer** supported Minty's request for a quality check of the data. To this end, DG ECFIN would send a complete extraction of all series in DG ECFIN's database to the concerned partner institutes with a view to comparing them with their own records. Moreover, he announced that the national questionnaires would be made available on the BCS website very shortly.

Dieden (ECB) presented how the ECB is using the assessment of order books (from the industry survey) to fill gaps in official statistics. On the background, he explained that Eurostat has stopped collecting industrial new orders in mid-2012. While for the moment a number of National Statistical Institutes continued data collection at national level, there was a possibility that further MS would stop collecting the data in the future. The new order statistics were however of great importance for the ECB. **Dieden** then presented the ECB's estimation framework, which included new order series for the countries that are still transmitting them, DG ECFIN's BCS data, PMI data and Eurostat data on industrial turnover. Concerning future work, he explained that the ECB would continue with a monthly production of the series. The underlying methodology and findings were to be published in an ECB Occasional Paper and the current aim was to start publishing the data as “ECB experimental statistics” in 2013 Q1.

In the following discussion, **Abberger** (KOF – CH) asked if the ECB had looked at the data in current and constant prices, the background being that for the survey data it was not clear whether managers performed a price adaption or not. **Dieden** replied that the ECB had not looked into this differentiation, given that the interest was in continuing the discontinued series, which was in current prices; deflation was therefore not needed.

Bovi (Istat - IT) presented a model-based approach of how people build their expectations, with a focus on the importance of using real time data when comparing econometric models and survey data. Among a wide range of models that were estimated, the model with adaptive expectations (AE model) proved to have the best fit in terms of the mean squared forecast error (MSFE) across all five estimation intervals. In conclusion, peoples' expectations were found to be persistently heterogeneous calling for the necessity to identify other factors behind these disparate expectations.

In the following discussion, **Lyziak** (National Bank of Poland) asked which scaling factor had been used in the quantification method and inquired about the possibility of losing information when using quantification methods like the probability method of Carlson and Parkin. **Bovi** replied that in fact he did not use any scaling factor, which was an important improvement compared with previous methods.

Departing from the observation that Ifo indicators are good at forecasting German industrial production, **Wohlrabe** (IFO – DE) presented an analysis of where that forecasting power comes from. To that end, he classified respondents along different dimensions and made out-of-sample forecasts of German industrial production separately for those groups. Classification of respondents was done according to firm size, branch and sector. Furthermore, survey participants were classified into different groups depending on the volatility of their *un-conditional* switching behaviour (% of cases in which they switched answers from one survey to another over the past 2 years) and of their *conditional* switching behaviour (amount of months since last switching of answers, conditional on actually switching answer at point t). The results show that large firms (>1,000 employees), firms from the basic materials sector and "medium" switchers (firms having switched answers in 10-20% of surveys) perform better than the full sample. Regarding the conditional switching behaviour, firms with consistent answering practice over the last 1-3 months seem to produce the best results. In an attempt to further increase the forecasting performance, **Wohlrabe** also conducted forecasts where the commonly used balance statistic was reweighted with entropy to capture the dispersion of answers. The analysis shows that entropy-weighted balance statistics produce superiour forecasting results than the conventional balance statistic.

Following a question from **Reuter**, **Wohlrabe**, assisted by **Abberger** (KOF - CH), clarified that entropy is widely used in physics and measures the degree of dispersion of elements in liquids. Its value increases with growing dispersion.

ASSESSMENT OF THE QUALITY AND RELIABILITY OF SURVEY DATA

Gayer (DG ECFIN) started his presentation by stressing the importance of providing quality measures for survey data. After briefly outlining the dimensions of data quality and pointing to the current emphasis on detecting turning points, he focused on the volatility and tracking performance of survey data. The presented cross country comparisons showed wide differences in sample sizes, response rates, short-term volatility (noise) and tracking performance of confidence indicators, signalling considerable room for improvement in some cases. As could be expected, there was evidence of a negative relation between (effective) sample sizes and short-term noise in the series that, in some cases, clearly dominated the cyclical information content. **Gayer** concluded that in several cases the short-term volatility had to be reduced, possibly through larger samples and/or improvements of other features of sampling methods. The observed wide differences in the tracking performance of confidence indicators for sectoral reference series were supposedly explicable by frame errors and systematic non-response leading to bias. He concluded by calling for a common assessment framework for measuring the quality of BCS data. The next step would be to identify and implement remedies. He announced the set-up of a taskforce on BCS quality following the workshop and invited partner institutes to actively participate.

Vuillaume (INSEE – FR) presented the results of a study investigating whether French small and medium-sized enterprises (SMEs) face a business climate distinct from the one of intermediate-sized and large firms. To that end, she presented the balance statistics of INSEE's monthly industry and services surveys (part of the EU BCS programme) separately for the three size categories. Visual inspection of balance series for the three size categories suggested that both volatility and the overall level of optimism are higher for large firms. However, when several individual balance series are aggregated into a composite indicator, the differences between the different size categories disappear. That finding is also reflected in the correlations between composite indicators and respective reference series, which take on similar values for the different firm size categories. It thus appears that SMEs and larger firms share the same business cycle, which might be explicable by subcontracting. However, on the level of individual questions, the observation holds that smaller firms tend to be more pessimistic and, as an aggregate, provide smoother answers. Based on this latter observation, **Vuillaume** announced future research inquiring the appropriateness of the currently used weighting scheme, which attaches higher weights to large firms' answers.

Abberger (KOF – CH) said that he was surprised that small firms' responses were smoother than that of large ones, also given that survey institutes were normally oversampling larger firms. Vuillaume explained that there were relatively few large firms in the sampling frame (around 50), which even if fully sampled, would explain the high volatility of the series. **Moauro** (ESTAT) asked if the authors had compared the survey results also with other 'hard' data, such as value added. **Vuillaume** replied that in the study she presented, the comparisons were done only with turnover, but that they could consider using other variables for future analysis. **Reuter** asked whether standardising balance series separately by firm size category and subsequently merging the standardised series into an aggregate might be a more promising approach than embarking on a new weighting scheme. Both **Vuillaume** and **Wohlrabe** (IFO – DE) clarified that this would not help to produce smoother series.

Renne (INSEE – FR) provided a refresher on sampling design and the inherent constraints of statistical inferences. Regarding the former, she sketched the differences between probability and non-probability sampling, remarking that they were used by 17 and 9 of DG ECFIN's national partner institutes for the industry survey, respectively. Having introduced the concepts of variance and bias, she explained how to calculate the sampling error, whereby a distinction was made between weighted and un-weighted questions. The formula for weighted questions applied equally for individual strata in stratified sampling.

Following the presentation, a statement by **Schwarz** (WIFO – AT) according to which sampling errors were meaningless when the response-rate to the survey was below some critical level (he reported Austrian BCS to have a response rate below 10%), provoked a lively debate. The majority of interventions supported the view advanced by **Gayer** who pointed out that sampling error and a lack of representativeness due to survey non-response are different issues which should not be mixed. Accordingly, the view was supported that institutes conducting probability sampling should (continue to) report sampling errors, even when faced with high non-response.

16 November 2012

TOPICAL APPLICATIONS OF SURVEY DATA – 2ND PART

Cuevas (MINETUR - ES) presented a coincident indicator of industrial activity using BCS data with a view to assessing the real time state of the Spanish industry. A dynamic factor model built on standardised and logarithmically transformed monthly data series (seasonally adjusted) was used to compute real time predictions of gross value added in industry and to assess the probability of a recession. The presence of leading indicators, such as the industrial confidence indicator, was crucial in order to project the factor and anticipate the evolution of industrial activity in real time.

Following the presentation, **Casaux** (DG ECFIN - EC) wondered about the use of car registrations among the leading indicators and whether mixing supply and demand factors to estimate a sectoral indicator would not bias the results. She suggested that the chosen set of variables might be better suited for an early estimation of GDP. Cuevas replied that the selection of indicators had been purely data-driven in his approach.

In his presentation, **Lyziak** (National Bank of Poland) showed that the survey question on perceived price changes underlying the EC survey conducted in Poland by GfK is not the exact translation of the harmonised question. The difference had an impact on the survey results, limiting their cross-country comparability. The difference in the formulation of the question concerned the second response category, where the adjective “moderately” is lacking: respondents observing an increase in prices can thus choose between “prices are much higher”, “prices are higher” and “prices are a little higher”. The meaning of the second response option was more general than in the harmonised survey question, overlapped with the other two response categories and could induce respondents to avoid choosing the "much higher" response. To assess the impact on the results, **Lyziak** referred to two other surveys available for Poland (by the Central Statistical Office (GUS) and Ipsos) that contained more accurate translations of the EC survey question on perceived price changes. The analysis showed that the distribution of survey responses in those surveys is considerably different from that in the GfK survey; the percentages of the "much higher" responses were indeed significantly higher, pointing to an excessively optimistic picture of perceived price changes in the EC survey. The impact of phrasing differences on survey responses was confirmed by the results of an additional survey that has been conducted recently by Milward Brown SMG/KRC for the National Bank of Poland. **Lyziak** concluded that in presenting and interpreting EC consumer survey data more efforts should be devoted to analysing the degree of harmonisation of survey questions.

In the following discussion, **Urbanski** (GfK, Poland) explained that the polish formulation of the question did not include the world "moderately" because the polish translation was very similar to "a little". He also presented an analysis using quantitative replies to the same question showing that the qualitative results collected by GfK PL were in line with consumers' opinions. **Friz** asked whether other methodological aspects of the GUS and Ipsos surveys (such as sampling, period in which the surveys are conducted) could partly explain the different results. **Lyziak** replied that the methodologies were quite similar, but the sample in the GUS survey was significantly larger than in the GfK survey. Replying to a question by **Dieden** (ECB), **Lyziak** considered that the value added of the quantitative price questions was limited in the case of Poland. Concerning the quantitative inflation perceptions and expectations, **Friz** reminded that these measures were essential during the years after the euro cash changeover, when the inflation perceptions series diverged considerably from the

HICP measure in the euro area. **Gayer** concluded by stressing the importance of the harmonisation of questionnaires across countries participating in the BCS programme.

Reuter assessed the Economic Sentiment Indicator's ability to track GDP growth. While excellent in a y-o-y setting, its performance in a q-o-q context is generally weaker. The presentation showed that a higher correlation with q-o-q GDP growth can be achieved with an index i) constructed only on the basis of the survey questions with the highest GDP-correlation and ii) which multiplies quarterly changes of the ESI by a constant factor in case a critical amount of questions changes in the same direction (i.e. changes should be taken more "seriously" when reflected in many survey questions). Future work would focus on further testing the approach and remedying its downsides (e.g. the approach only works for quarterly indicator data while leading to excessive volatility when used in a monthly setting).

In the ensuing discussion, **Dieden** (ECB) wondered whether the smoothness of the ESI and its high correlation with y-o-y changes in GDP might be the results of the method of seasonal adjustment used by ECFIN. Referring to the weighting procedure used by ECFIN, he wondered if a change to a moving weighting system would result in improved coincident and leading properties of ECFIN confidence indicators. Reacting to these issues, **Reuter** stressed that the process of reviewing the computation DG ECFIN's composite indicators was still in an experimental phase. A systematic and gradual approach would be followed, investigating inter alia also the weighting procedure. Answering to **de Greef** (NBB – BE), who wondered whether all possible combinations of questions had been made in order to check for possible better correlations, **Reuter** argued that he considered it unlikely that combining variables only weakly correlated with GDP would result in a highly correlated measure.

Slento (Statistics Denmark) presented the Business cycle tracer for Denmark. He pointed to the revision issue (turning point problem), stemming from the fact that the input data need to be smoothed. He showed how the tracer improves when using principal components analysis (PCA) to derive a composite indicator instead of the industrial confidence indicator. The variable generated with PCA seemed a statistically better composite indicator for Denmark than the industrial confidence indicator, which is based on simple averaging. By contrast to the tracers calculated by DG ECFIN, the Danish tracer improved when 'stocks of finished products' was omitted from the data set, as this series had a very low correlation with GDP growth. **Slento** concluded that the Business Cycle tracer was an interesting and appealing visualisation of survey results.

FINANCIAL SERVICES SECTOR SURVEY (FSSS)

Wiercx (GfK – BE) gave an overview of the sampling design of the Financial Services Sector Survey (FSSS), as well as a first tentative analysis of the reliability of its results at country level. The panel used for the FSSS includes 11 Member States (including the 5 biggest ones) and comprises some 1,150 firms, of which 43% are specialised in financial services in the narrow sense, while 29% pertain to the group of (re-)insurance companies or pension funds and another 28% is specialised in operations auxiliary to the afore-mentioned types of service. Turning to cross-country differences, **Wiercx** showed that the number of responses for the 5 largest Member States was in most survey waves well above 40, with the exception of France. A comparison of country-specific FSSS balance series with the corresponding Economic Sentiment Indicators confirmed that both follow some common trend, which was also reflected in high correlations. An exception was the UK, where correlation between the two series is virtually absent.

Following the presentation, **Dieden** (ECB) asked whether there are concrete plans to extend the geographic coverage of the FSSS to all EU Member States and to publish results on country level. **Gayer** clarified that there are no plans to extend the geographic coverage of the FSSS. However, he indicated that the possibility of publishing country-specific data for the largest Member States covered by the survey was under consideration, albeit conditional on the outcome of further analyses.

Linden (DG ECFIN – EC) gave an overview of recent work of DG ECFIN's Financial Markets unit using data from the Financial Services Sector Survey (FSSS). Among others, he showed the use of FSSS data for assessing the impact of financial bank support measures on the stability of the banking sector. While being just one of several time-series used in the study, the FSSS data appeared a reliable source of information, showing correlations of above 0.80 with other well-reputed time-series like the Bank Lending Survey (BLS) in areas of thematic overlap. The Financial Markets unit also used FSSS questions regarding firms' competitive position to shed light on a possible link between profitability of banks and their risk-affinity. Based on these examples, **Linden** concluded that the FSSS is a useful tool for economic analysis. For the data to be widely used, he considered it essential to provide breakdowns of the data by country.

CONCLUSIONS

Gayer wrapped up the Workshop by recalling the main conclusions.

- **Harmonisation:** The agreed changes in data aggregation and transmission of results for "***factors limiting production***" (according to method 2A in the terminology of the taskforce) are to be implemented as from April 2013. The concerned institutes are those that currently send the results transformed according to methods 2B, 2C, 3 or 4. Institutes allowing for just one factor (method 1), are invited to reconsider bringing their questionnaires in line with the harmonised questionnaire. However, with a view to avoiding a structural break in their series, and given that this method does not lead to inconsistency problems at the EU/euro area level, they can continue to apply method 1 if they prefer to do so. Where applicable, the file to be sent in April 2013 containing the recalculated results (total and sub-sector level, including MIGs for industry survey) shall include back data to, at least, July 2010 (i.e. first results according to NACE rev.2). ECFIN will propose a time plan for the sending of recalculated results for earlier periods in early 2013. Of course, institutes that wish to do so are invited to send longer recalculated series already in April 2013. Institutes are also invited to make sure that the different factors are correctly encoded (in particular factors 'financial constrains', encoded as F6, and 'other factors', encoded as F5).

- Institutes allowing for more factors than foreseen in the harmonised questionnaire are asked to make sure to correctly and consistently aggregate their answer categories to the harmonised scheme of answers before transmitting the results to ECFIN.

- The agreed changes in data aggregation and transmission of the (annual) results for "***investment structure***" (according to method 3 in the terminology of the taskforce) are to be implemented as from Oct/Nov 2013 (i.e. the next time the question will be asked). This will give the concerned institutes enough time to prepare the transmission of a complete and consistent set of time series (i.e. back-casted to pre-NACE rev. 2 periods) for totals and breakdowns. Institutes inquiring explicit percentages for the individual answer categories can continue to do so (no aggregation issue).

- **Capacity utilisation in services**: given the satisfactory empirical results, it was agreed to continue with the current approach. Institutes that are not yet sending the results for this compulsory component of the harmonised questionnaire to ECFIN are asked to do so as from January 2013.

- **Financial distress indicator**: In response to DG EMPL's detection of several inconsistencies in the data, institutes carrying out the consumer survey have agreed to check the data sets for inconsistencies/transmission errors. To this end, ECFIN will send its complete records (all category breakdowns) to the institutes for a check-up against their own data records. The time plan for this project will be circulated in early 2013.

- **Assessment of quality of BCS data**: Participants considered this as an important project for further joint work. ECFIN will follow up on this by creating/asking for participation in a taskforce to set up a common assessment framework for the quality of BCS data and identify concrete measures to improve data quality. Following up on the presentations and the discussion, sample sizes, volatility, tracking performance and bias due to non-response will be some of the elements to be addressed in the task force. ECFIN will circulate draft terms of reference shortly and ***partner institutes are invited to express their availability to be member of the task force***.

- Institutes performing probability sampling are asked to provide information on their sampling errors, in case not already included in their metadata sheets.

- **Financial services survey:** ECFIN considers making the country results available, at least for the large Member States, in line with user requirements. However, some further testing and cross-checking with results from the general services survey is needed in order to safeguard the reliability and representativeness of the results to be published.

- **Concerning future work**, DG ECFIN announced to continue to look into the tracking performance of its confidence indicators and their composition, as part of its continuous monitoring and in line with the findings of the 2011 Evaluation study. National questionnaires will be made available on the BCS website very soon. The planned revamping of the BCS website in 2013, which will increase user-friendliness and provide better access to data, will be used as an opportunity to include new detailed data sets for download (percentages of positive, unchanged and negative replies, non-seasonally-adjusted breakdowns of totals), where partner institutes have given their explicit consent to the release of these data. ECFIN will also finalise the NACE rev. 2 change-over by making available the EU/euro area aggregates of sectoral breakdowns and percentages of response categories, as soon as the necessary weighting coefficients can be reliably computed from structural business statistics for the year 2010. This will also include the updating of the weights underlying the aggregates for Main Industrial Groupings to base year 2010.

Suardi and **Gayer** thanked all the participants for the interesting, lively and fruitful debate and announced that the draft minutes of the Workshop would be circulated for comments by email soon. They also reminded participants that all presentations are available on the BCS website.