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International Seminar on Early Warning and Business Cycle Indicators

14 to 16 December 2009
Scheveningen, The Netherlands

Report of the meeting

**International seminar on early warning and business cycle indicators,
14 – 16 December 20009, Scheveningen, The Netherlands**

Executive summary

1. The international seminar on early warning and business cycle indicators, held from 14 to 16 December in Scheveningen, The Netherlands was organised by United Nations Statistics Division (UNSD), Eurostat and Statistics Netherlands and hosted by Statistics Netherlands. This seminar is part of a series of three international seminars initiated by UNSD and Eurostat in February 2009. The series has the purpose to formulate an international statistical response to the economic and financial crisis for improved monitoring of the rapid and systemic changes in the global real economy and the financial markets and the impacts on vulnerable countries and population groups. It is expected that the series of seminars will recommend an agreed data template for high frequency statistics, related metadata and related communication and dissemination methods and techniques.

2. The purpose of the seminar in Scheveningen was to follow up on the findings of the first international seminar hosted by Statistics Canada in Ottawa in May 2009 which discussed the statistical and analytical aspects of early warning indicators for the measurement of economic and financial vulnerabilities and tracking changes in economic activity.

3. The Scheveningen seminar was organised around five themes, namely, i) the role of sentiment indicators in tracking economic trends; ii) the role of composite indicators in tracking business cycles; iii) flash estimates of gross domestic product; iv) the analytical framework for assessing rapid economic changes; and v) communication and dissemination of indicators.

4. Each theme was introduced by three or four invited speakers and a discussant of supporting papers. This introduction was followed by a detailed discussion during a plenary session. In addition, break out sessions were organised to determine the outcome and actions for each of the themes through detailed group discussions.

5. Mr. Gosse van der Veen Director-General, Statistics Netherlands; Mr. Paul Cheung, Director, United Nations Statistics Division; and Mr. Pieter Everaers, Director, External cooperation, communication and key indicators, Eurostat welcomed the participants to the seminar. The opening address was presented by Mr. Frank Heemskerk, Minister of Foreign Trade of The Netherlands in which he identified three factors which are vital for the early warning of risks to the economic financial system. These three factors include the expansion of short term economic indicators, the direct availability of indicators to the public and improved definitions for statistical terminology. Mr. Jan Mark Berk, Director of Statistics and Information, Central Bank, The Netherlands delivered the keynote address. Mr. Berk discussed the importance of cooperation between national statistical offices, central banks and regulators at national and international level to ensure access and expansion of real time and forward looking data to track and anticipate turning points and vulnerabilities.

6. Following the opening of the seminar, UNSD reported on the progress of the statistical response by the global statistical community on the financial and economic crisis and the purpose

of the seminar. Eurostat presented a draft overview of terminology on high frequency indicators to facilitate the communication on early warning and business cycle indicators. Further work will be undertaken on the terms and definitions to reach consensus on the terminology. These further consultations will be undertaken in the proposed Working Group on Flash GDP.

7. The session on sentiment indicators demonstrated the usefulness of sentiment indicators in providing an early warning of changes in economic activity. It was also shown that the leading properties of these sorts of indicators might reduce the relative size of revisions of high frequency statistics. It was concluded that a global survey on sentiment indicators was needed to analyse existing country practices and applications of the different types of sentiment indicators. The Working Group on Economic Sentiment Indicators will undertake this task.

8. The session on composite indicators led to a discussion on the compilation of the composite indicators and its usefulness to track business cycles. It was concluded that existing definitions and guidelines for collection, compilation and applications of composite indicators should be better articulated. In addition, it was recommended to create a knowledgebase on composite indicators as a central depository on statistical sources and methods and existing practices. The Working Group on Composite Indicators will advance these tasks and Statistics Netherlands undertook to establish the knowledge platform.

9. The session on flash GDP estimates highlighted the need for early estimates of GDP to make available an aggregate measure of the performance of the economy in addition to specific high frequency measures of economic activity. The trade-off between the timeliness and quality of the early GDP estimates was debated as a consequence of the accelerated release of GDP aggregates. It was acknowledged that the compromise between timeliness and completeness of this early GDP measure should be fully explained to the users. The session led to a discussion on the compilation of early GDP estimates using either direct statistical observations or econometric projections using past trends. For purposes of releasing official statistics, the use of direct observations was favoured over the use of econometric techniques that make use of past trends because these techniques are not capable to predict sudden changes in economic activity. The need for further clarification of different views, conceptualisation and purpose of flash estimates was identified as part of the work of the Working Group on Flash GDP.

10. The session on analytical frameworks for assessing rapid economic changes addressed in detail the policy need for a broad set of high frequency statistics. Participants agreed that the data template of high frequency statistics moderated and recommended by the first international seminar in Ottawa meets the needs of analytical policy framework. However, for the classification of the data template into three tiers, the strategic importance of an indicator should carry a heavier weight than the mere availability of the indicator. Strategically important indicators were identified as those indicators that provide information on demand and supply in the economy, those that identify vulnerability and risk and those that show international exposure. The Working Group on the Data Template should continue the consultation and finalise the template, add the metadata descriptions and complement the data template with derived analytical indicators on the performance of the real economy and the financial markets for effective monitoring. It was concluded that countries should be encouraged to implement the data template in consultation with its users and develop national adaptations of the data template at tier 3 to meet specific national data needs. Moreover, countries should be encouraged to

disseminate data from the template through adaptation of existing or newly created central data hubs at country level and to improve the facility to exchange these data with regional and international data hubs.

11. Presentations in the session on communication and dissemination of indicators demonstrated the innovative visualisation tools, good practices in user consultations and existing methodological guidance in data presentation developed by countries and international organisations. Participants agreed that these tools and practices should find a wider use in communication and dissemination by countries to inform a broad spectrum of users about rapid changes in economic activity. Developing countries expressed the need for guidance in applying these tools in the dialogue with users and producers of data. The Working Group on Communication and Dissemination should further advance this work through the creation of a knowledge base. Statistics Netherlands undertook to share their IT visualisation tools with national statistical offices upon request.

12. In summary, the following actions for follow up in 2010 where identified:

i) The *Working Group on Economic Sentiment Indicators* will conduct a global survey on sentiment indicators and analyse existing practices. Moreover, UNSD will establish a knowledge platform on economic sentiment indicators. The Group will be led by UNSD with support from the European Commission, OECD, Eurostat and country participants.

ii) The *Working Group on Composite Indicators* will undertake the review of existing guidelines on the collection, compilation and application of composite indicators. Statistics Netherlands will establish a knowledge platform on composite indicators. The Group will be led by the Conference Board and UNSD with support of Eurostat, OECD, Statistics Netherlands and other country participants.

iii) The *Working Group on Flash GDP* will advance the work on terminology, conceptualisation and purpose of flash GDP estimates. The Group will be led by Eurostat with support from country participants.

iv) The *Working Group on the Data Template and Analytical Indicators* will finalise the data template, meta data and related analytical indicators and prepare guidance in the adoption of the data template at country level. The Group will be led by UNSD and UNDPAD with support from Eurostat, Brazil and India and other country participants.

v) The *Working Group on Communication and Dissemination* will create a knowledge base and review the availability of existing visualisation tools and methodological guidance. The Group will be led by the World Bank and UNECE with support from Statistics Netherlands, Statistics Canada, and other country participants.

vi) The co-organisers of the Ottawa and Scheveningen seminar will jointly organise the third and final international seminar in second half of 2010 in collaboration with the established Working Groups. The main purpose of the third seminar will be to review the outcomes of the programmes of work of the Working Groups. It is expected that this review will be submitted to the UN Statistical Commission for its considerations.

Session 1. Opening

13. Mr. Gosse van der Veen Director-General, Statistics Netherlands; Mr. Paul Cheung, Director, United Nations Statistics Division; and Mr. Pieter Everaers, Director, External cooperation, communication and key indicators, Eurostat welcomed the participants to the seminar. In the opening remarks, Mr. Cheung noted that while statistics were available prior to the financial crisis, faster and more coordinated indicators would have been helpful. Mr. Cheung specifically mentioned the development of a global database of composite indicators and sentiment indicators. Mr. Everaers welcomed the opportunity to discuss backcasting and nowcasting of the economic indicators. He also noted the importance of a variety of indicators to policy makers, including economic, social and environmental indicators. Mr. Van der Veen speculated if there are still information gaps. He discussed how the availability of rapid economic indicators contribute to an early warning system, and asked whether the indicators currently available will be enough to predict the next unknown crisis.

14. The opening address was presented by Mr. Frank Heemskerk, Minister of Foreign Trade of The Netherlands. Mr. Heemskerk said that government economists and politicians rely on data to understand risks to the financial system. He mentioned that there are three factors which are vital for early warning of risks to the financial system. These three factors include the expansion of short term economic indicators, the direct availability of indicators to the public and improved definitions for statistical terminology. Mr. Heemskerk also made note of the trade off between the scope and the timeliness of indicators. He mentioned that policy makers typically make budget decisions only twice a year and thus perhaps having accurate trade and GDP figures is more important than a small decrease in the time lag.

15. Mr. Jan Mark Berk, Director of Statistics and Information, Central Bank, The Netherlands delivered the keynote address. Mr. Berk discussed the importance of cooperation between national statistical offices and central banks. He also described the events that lead up to the financial crisis and provided examples of how many of these events were evident in the available data. Mr. Berk presented a different opinion from the preceding speaker with the view that timeliness should be a primary focus of statistical agencies, especially under the assumption that most data revisions are relatively small. He pointed out that data providers need to be both flexible and timely, while still maintaining a detailed data revision history. Mr. Berk described how the data revision history along with a history of policy makers' decisions will help provide a better understanding of the dynamics between policy decisions and crisis events. He is optimistic that the current crisis will provide not only a better understanding of the financial system, but also a pathway to improve the global statistical system and to better understand the global economy.

Session 2. Global statistical response to the economic and financial crisis

16. Session 2 was chaired by Mr. Pieter Everaers, Director, External cooperation, communication and key indicators, Eurostat. Mr. Everaers recalled the outcome of the Ottawa seminar and the actions recommended in Ottawa. He mentioned that Ottawa called for an analysis of the existing indicators on a per country basis and the development of a glossary of statistical terms. He expressed the hope that the discussion on indicators and terms will help harmonize economic statistics across the globe.

Presentations

17. Mr. Ivo Havinga, Chief of the Economic Statistics Branch, United Nations Statistics Division, reported on the progress on the global statistical response to the economic and financial crisis. The international response included: the development of the Principal Global Indicators by the Inter-Agency Group on Economic and Financial Statistics (IAG) to facilitate the monitoring of economic and financial developments of "systemically important economies", http://www.principalglobalindicators.org; a number of high level international meetings initiated by UNSD and Eurostat; the initiation of the UN system-wide Global Impact and Vulnerability Alert System (GIVAS); as well as many other international efforts. The Ottawa seminar and this seminar are included as a part of the international response to the financial crisis. Mr. Havinga noted the importance of cooperation among international agencies. He concluded that this seminar should focus on further developing a data template of high frequency statistics that are accessible and analytically important for the detection of economic vulnerabilities and risks; that there should be a coordinated dissemination of high frequency statistics and related indicators; and that any data gaps that have been revealed by the financial crisis should be addressed.

18. Mr. Roberto Barcellan, Head of the National Accounts Production Unit, Eurostat, provided an overview of the development of a glossary of terminology associated with key economic indicators. He outlined some of the difficulties in constructing a glossary, such as ensuring that definitions are specific and concise, determining the scope of the glossary and gaining international consensus on the definitions. Mr. Barcellan used the definition of a flash estimate to demonstrate the importance of clear definitions.

Discussion

19. There was consensus among participants that a glossary of terms associated with key economic indicators is a vital aspect for moving forward. The participants noted that there have been discrepancies in definitions throughout the international statistical community; specifically, flash estimates, nowcasts and forecasts were mentioned as problematic terms. The participants commented that the development of a glossary will be very time consuming and needs a considerable amount of work; however, the importance of having such a glossary outweighs these considerations. The necessity of worldwide consensus on the glossary was also stressed.

Outcome

20. Further work and consultations need to be undertaken on the terms and definition to reach consensus on the terminology of key economic indicators.

Session 3. The role of sentiment indicators in tracking economic trends

21. Session 3 was chaired by Mr. Ivo Havinga, Chief of the Economic Statistics Branch, United Nations Statistics Division. Mr. Havinga proposed the creation of a global economic sentiment indicators database. He also mentioned that the inclusion of sentiment indicators in the Ottawa data template indicates the growing importance of this type of indicator.

Presentations

22. Mr. Gyorgy Gyomai, Statistician, Statistics Directorate OECD, introduced the topic of sentiment indicators as a tool for tracking economic trends. He outlined the usefulness of

sentiment indicators as stand-alone indicators, as tools to improve the estimation of other economic indicators (including GDP), and as components of composite indicators. Mr. Gyomai presented the wide variety of sentiment indicators in different sectors, and their corresponding usefulness for tracking specific economic trends. He also reported that the OECD carries out an on-going data collection and monthly publication of Business Tendency and Consumer Confidence data for major OECD and non-OECD economies (representing more than 80 per cent of the world GDP); that the OECD monitor and promote harmonization within OECD member states and Accession countries as well as large non-OECD economies; that the standardization work carried out so far by the OECD, made the major headline indicators comparable and allowed to calculate zone aggregates. He also noted that regular international forums exist (co-organized by OECD) to discuss sentiment indicator related issues.

23. Mr. Jan-Egbert Sturm, Director of the KOF Institute, Switzerland, presented the use of business tendency surveys as modelling tools to reduce the size of revisions to economic indicators. Mr. Sturm presented an analysis of the size of revisions by the type of revision, where revisions were grouped into five classes: benchmark revisions, summer revisions, winter revisions, early revisions and other revisions. He found that the largest revisions fall into the summer revision category. Mr. Sturm demonstrated that the size of the revisions could be decreased by improving the accuracy of the first release of data using business tendency surveys. He argued that this type of modelling would benefit policy makers who often base policy decisions on early data releases.

24. Ms. Kristine Vlagsma and Mr. Reuben Borg of the European Commission provided an overview of the European Union (EU) programme of business and consumer surveys. Ms. Vlagsma regarded the strengths of the programme to be results that are timely, representative, harmonized across the EU (and for some countries outside of the EU), not subject to revisions, have wide country coverage, and include a historical time series. She pointed out that the shortcomings of the programme are inflexibility due to logistical issues and a loss of interest in the surveys as hard data becomes available. Ms. Vlagsma noted that the programme includes six monthly surveys, specifically: Industry, Construction, Consumers, Retail Trade, Services, and Financial Services. Mr. Borg discussed some of the applications of the EU business and consumer surveys; these include forecasting and business cycle analysis. He demonstrated through a sequence of examples that the business and consumer survey results are highly correlated with the economic data and that these surveys can provide a good anchor for policy analysts.

25. Mr. Gian Paolo Oneto of Italy discussed two supporting papers on the topic of sentiment indicators, one paper from Mr. Eric Dubois of France and the other from Mr. Jiancheng Pan of China. Both papers include a technical discussion of a proposed methodology for the use sentiment indicators in detecting economic risks. Mr. Oneto discussed the two separate sentiment indicator systems. He indicated that while each paper provides an interesting outlook he cautioned the use of modelling for economic statistics such as GDP. Mr. Oneto argued that official GDP should be based on directly observed quantitative data and that GDP estimates that include economic modelling of a combination of hard and soft data might confuse users.

Discussion

26. The brief discussion included comments on the harmonization of sentiment indicators and business surveys, the role of national statistical offices in economic modelling and improving the understanding of how sentiment indicators and economic indicators can be brought together.

Outcome

27. The session concluded by suggesting that this topic should be further discussed in the breakout session (see paragraph 69).

Session 4. The Role of Composite indicators in Tracking the Business Cycle

28. Session 4 was chaired by Mr. Eduardo Nunes, President, Instituto Brasileiro de Geografia e Estatística (IBGE), and organized by the Conference Board.

29. Mr. Ataman Ozyildirim, Associate Director, Economic Research, US and Global Indicators Program of The Conference Board presented the Board's experience in the compilation and dissemination of three types of economic indices for business cycle analysis namely, coincident, leading and lagging indicators. He mentioned that this approach to business cycle analysis has been a major component of the work of the National Bureau of Economic Research (NBER) over the last 50 years. He presented the key criteria that the economic indicators need to satisfy in order to be included in a composite index, i.e. economic significance, soundness of the statistical measurement, etc. He discussed data needs and timeliness with respect to these indices and he presented some of the performance assessments of these indicators in relation to the prediction of past recessions of the global economy, with some selected breakdowns at the country and regional level.

30. Mr. Teck Wong Soon Director, Economic Accounts Division, Singapore Department of Statistics presented Singapore's experience in using composite leading indicators. He explained that Singapore adopted The Conference Board's approach to develop its Composite Leading Index (CLI). He also presented the Composite Coincident Index (CCI), which encompasses a broad spectrum of economic activity indicators that is used as the basis for identifying growth cycles in Singapore. He further mentioned that the CLI does provide early warning signs of a recession; specifically, the CLI decreases immediately before the onset of a recession and increases prior to a recovery. Mr. Soon said that while the CLI provided an indication of the current recession, most analysts and commentators at the time were sceptical and continued to project growth based on the prevailing trend. Mr. Soon noted that, for this reason, data compilers may need to improve the reporting and publicity of CLIs. He further argued that data users would need to have the discipline to pay attention to the CLIs, particularly when they signal the possible onset of an economic turning point.

31. Mr. Jacques Anas Director for Economic Indicators and Statistical Models, COE-REXECODE, France gave a presentation titled: 10 years of experience in forecasting turning points. He presented three main indicators (IARC: Indicateur avancé de retournement conjoncturel, IESR: Indicateur d'entrée-sortie de récession and IRC: Indicateur de croissance sous-jacente) used to forecast turning points in business cycle analysis. The indicators are based on a conceptual framework with the ABCD-approach as starting point. The presentation highlighted the composition of the indicators and discussed their performance in relation to the

economic developments over the past years. He concluded that despite the fact that the indicators proved to be useful for the short-term economic analysis, difficulties still remain regarding their communication and dissemination.

32. Mr. Geert Bruinooge from Statistics Netherlands summarized and commented on the supporting papers from Eurostat, Mexico, OECD, Korea, Malaysia and Mongolia. He highlighted a number of common issues within the papers and presented the following questions to the seminar: i) Are CLIs truly relevant or should statisticians concentrate on short-term economic indicators (monthly, quarterly, etc.), which actually measure the general economic activity? ii) Is there a need for two types of indicators (leading and coincident) or is a single composite indicator sufficient? iii) Is there a need for a fixed set of criteria in the selection of indicator components (for all countries to enhance co-ordination and comparability) or are the economic situations so diverse that no minimum set can be defined? iv) How can the early detection of turning points and measures of the robustness of growth be improved? v) Is there a need to develop international guidelines on composite indicators?

Discussion

33. The participants concluded that despite their relatively satisfactory track record in tracking economic cycles, some policy makers are still sceptical of using composite indicators as early warning systems. Some of the participants expressed reservations about including composite indicators as part of the core programme of national and international statistical agencies. Participants agreed that for some industries and countries it is better to concentrate on the short-term individual indicators (which actually measure general economic activity) rather than putting considerable efforts in combining these components into composite indicators. The participants also concluded that as the economies of countries can vary considerably, the components that should be included in useful composite indicators will differ from country to country. This will make it difficult to have defined standard sets of components to be used in the compilation and dissemination of composite indicators. Furthermore, some of the participants argued that, considering the use of these indicators as just part of early warning systems, comparability of composite indicators as well as a common set of standard components should not be an issue. The OECD has the widest available set of CLIs (35 countries and several zones) that are compiled with a common methodology. This methodology can serve as guideline for compiling leading indicator outside the OECD. The OECD is also working on to facilitate the study and construction of leading indicators.

Outcome

34. Undertake a review of existing guidelines on the collection, compilation and application of composite indicators and establish a knowledge platform on composite indicators. The Conference Board indicated that they are willing to coordinate this effort.

Session 5. Flash Estimates of the Gross Domestic Product

35. Session 5 was chaired by Mr. Pronab Sen, Chief Statistician of India and organized by Eurostat.

Presentations

36. Mr. Ales Capek Head of Unit, Key Indicators for European Policies, Eurostat gave the introduction to this topic by emphasizing the need for timely statistical data for economic analysis. He added that although the current crisis highlighted this need, it is not only the crisis that pressures the statistical community to produce early indicators, as early information is needed even without a crisis. Mr. Capek discussed the importance of the role indicators play in evidence based policy making. He further added that the crisis has influenced the trade-off between timeless and accuracy in favour of timeliness. He posed a question: Does flash estimates of GDP solve this timeliness problem? Mr. Capek said that the role of flash GDP estimates in economic and monetary policy decision-making is an important topic in this discussion. He added that the use of flash GDP estimates help to reduce the uncertainty in the economy and that policy makers in ministries and Central Banks usually "confirm" policy decisions using information available from partial early data (industrial output, import / exports) and/or the flash estimate of GDP. Regarding the issue of timeliness, he added it really does matter for policy decisions if flash GDP is available 2 weeks earlier. Another issue he raised was related to the choice of method and data sources used for flash estimates as these methods and data differ usually from country to country; specifically, do we need to favour a one fits all solution or a country/regional specific approach? He added that we need some basic principles to understand this "gray" area; such guidelines would clearly define flash estimates, promote the use of good methods and practices, allow for comparability of statistics between countries, and address the issue of quality of these statistics.

37. Mr. Adriaan Bloem brought a different view of flash GDP estimates and explained that the main reasons why many countries do not have a flash GDP are the lack of sufficient data, the high reliance on modelling or "nowcasting", the low information content (little value added), the difficulty of identify turning points, and the lack of accuracy (compared with later available data). He added that it might be beneficial to concentrate on producing a set of really fast individual monthly indicators on both the supply and use side (for example within 5 – 6 weeks) as opposed to concentrating on flash GDP. He added that these indicators would be consistent with the national accounting framework and provide a reasonably detailed picture of the economy. He proposed that eventually such a set of indicators might allow producing an accurate monthly GDP and would provide a context for other important indicators (labour force, household income and saving, financial indicators). He illustrated that such indicators have the advantages of being actual data, being quite fast, having more analytical value through their relevant level of detail, and enabling the identification of turning points for business cycle analysis.

38. Mr. James Mitchell of National Instituted of Economic and Social Research (NIESR) in England presented a joint paper on the 'Euro-area recession and nowcasting GDP growth, using statistical models'. He discussed an approach to produce estimates of quarterly GDP growth in the Euro-area faster than Eurostat's flash estimate of 45 days, namely by producing nowcasts using statistical models. Mr. Mitchell described how nowcasts are produced between 0 and 15 days after the end of the quarter and can always be produced more quickly by exploiting less hard (and more soft) information; he also emphasized the role of the trade off between timeliness and accuracy..

39. Mr. Teck Wong Soon from Singapore summarized and commented on the supporting papers from UNESCAP, Morocco, Belarus and China. He mentioned that the supporting papers

show a diversity of approaches; different stages of development and adequacy of data sources (statistical infrastructure); as well as differences in terminology (flash estimates, nowcasts, basic compilation) used around the topic of flash GDP estimates. Mr. Soon remarked that the stock-taking by UNESCAP, on GDP estimates and other short-term economic statistics confirms diversity not only in approaches but also in readiness and capacity. He added that a flash GDP is extremely challenging for many countries if not most countries; in many countries there is a need to develop basic statistics and to build up a sound statistical infrastructure (business registers, administrative data sources, expertise) for the collection and compilation of such estimates. Mr. Soon concluded that it is clear that there is a need for more timely assessment of trends, but it will be challenging for most countries. He also commented that sentiment indicators (whether consumer or business), coincident and leading indicators are useful and valuable supplements to flash estimates.

Discussion

40. The participants concluded that although statistical offices endure a lot of political pressure to produce fast estimates, differences arise on how countries cope with these constraints and associated problems depending on individual country circumstances. Regarding the issue of an alternative to flash GDP, a number of participants warned against reliance on monthly indicators as this practice raises the comparability issue. Some participants also warned against too much reliance on the use of econometric models despite their acknowledged advantages, as these models changes over time in both absolute and relative terms. The participants noted that building a sound statistical infrastructure and capacity should be given priority in order to enable national statistical offices to compile timely and accurate quarterly GDP estimates. Furthermore the participants confirmed the usefulness of sentiment indicators.

Outcome

41. Further work on terminology, conceptualisation and purpose of flash GDP estimates need to be undertaken. Eurostat indicated that they are willing to coordinate this effort.

Session 6. The Analytical Framework for Assessing Rapid Economic Changes

42. Mr. Art Ridgeway, Director General, Statistics Canada, chaired Session 6. The session was organised by the Division for Policy Analysis and Development from the Department of Social and Economic Affairs of the United Nations.

Presentations

43. Mr. Robert Vos, Director, United Nations Division for Policy Analysis and Development, introduced the topic of assessing rapid economic changes. He provided a detailed overview of the economic analysis his office performs, including the analysis used in the World Economic Situation and Prospects publication. Mr. Vos also discussed methods for monitoring the effects that crises have on developing countries and vulnerable populations. He pointed out that having reliable, accessible data sources is key to analyzing the economic situation and detecting risks to the vulnerable. Mr. Vos stated that the international statistical community should work toward identifying data gaps, increasing flexibility in the statistical system and escalating the level of

international collaboration to improve dissemination of high frequency statistics as exemplified by the data template for high frequency statistics.

44. Mr. Soong Sup Lee Senior Information Officer at the World Bank's Development Data Group presented on the topic of economic monitoring. Mr. Lee provided examples of the tools the World Bank uses for forward-looking monitoring of the global economic environment. These tools include: the Revealed Vulnerability Index to identify risks during a financial crisis; credit risk monitoring, and industrial production forecasting. The World Bank covers 160 countries in its high frequency data system, with country coverage varying for each indicator. Mr. Lee noted that the World Bank relies heavily on high frequency data for analyses; he pointed out that many of the indicators used by the World Bank are released on a daily basis. Mr. Lee concluded by noting that the demand for high frequency statistics is constantly increasing and international agencies must rise to this challenge.

45. Mr. Terry Ward, Director of Applica presented an analysis of EU countries on the effects of economic crisis on different populations. He discussed the relationship between demographic characteristics (age and gender) and unemployment. Mr. Ward observed that men, especially men under 25 and over 55, are most affected by the current economic crisis. He argued that men are typically more affected than women due to the type of jobs that are male dominated versus those that are female dominated. Mr. Ward also noted that the unemployment patterns seen in the present crisis are similar to those seen in past crises, despite differences between individual crises.

46. Ms. Daniela Schackis, Head of Section at the European Central Bank (ECB) discussed three supporting papers on the topic of indicators for assessing rapid economic changes. The three papers included a paper from Ales Capek from Eurostat, Michael Stanger from the Central Bank in Chile and Beejaye Kokil from the African Development Bank. She discussed the need for close collaboration between statistical agencies and central banks; the challenges in developing a statistical system that can be applied inclusively and the need to improve the statistical system in Africa to meet the analytical challenges.

Discussion

47. The participants discussed the issue of developing a common analytical framework for the assessment of rapid economic changes. They concluded that the articulation of an analytical framework demonstrating the use of an agreed data template will enhance the user dialogue and promote the dissemination of high frequency statistics. The participants also discussed that the problem in obtaining data to monitor the vulnerability relates not only to data availability but also to data dissemination. The participants concluded that the strengthening of the national statistical system should support implementation of analytical frameworks and data templates.

Outcome

48. The session concluded that an international analytical framework and data template should be flexible enough to incorporate the needs of developing countries as well as developed countries and to take into account the different levels of institutional absorption capacity of countries.

Session 7 Global assessment report on rapid indicators

49. Session 7 was chaired by Mr. Ivo Havinga Chief of the Economic Statistics Branch, United Nations Statistics Division. The session was organised in two parts: firstly, a plenary discussion on two papers presented by UNSD and secondly, breakout sessions for more in depth discussion of the themes of the seminar followed by a report back and plenary discussion.

Presentations

50. Mr. Herman Smith, Chief of the National Accounts Section, United Nations Statistics Division, presented the results from the global assessment on the availability, periodicity, timeliness and dissemination of high frequency indicators as formulated in the Ottawa template.The global assessment of the Ottawa data template confirms its relevance and the availability of high frequency indicators to monitor changes in economic activity. The assessment identified three levels (or tiers) of indicators namely, tier 1, those indicators that are widely available allowing the compilation of regional and world totals; tier 2, those indicators that are recommended to aspire to compile; and tier 3, those indicators that are important on the national level.

51. International compilation guidelines exist for most of the indicators on tier 1. However, for those indicators on tier 2 and 3 for which such guidelines do not yet exist, it is necessary to develop international guidelines on the definitions and compilation methodology.

52. Mr. Ralf Becker, Chief of the Economic Statistics and Classification Section, United Nations Statistics Division, presented results of work in progress to harmonize analytical indicators and improve the availability of underlying country data for the production of these indicators. A comparison has been made of various publications; it appears that more details and more indicators are available on the national than on the international level. He concluded that further harmonization of the analytical indicators (and underlying data) between countries should lead to greater availability and comparability of such derived indicators at the regional and world-wide level. A commonly agreed set of analytical indicators for country analysis would not only allow more detailed analysis at the aggregated world level, but also facilitate comparison of individual country analysis. Further work to assess common use of analytical indicators at country level and further discussion of groupings of analytical indicators in different tiers of the data template will be the next step.

Discussion

53. In the plenary discussion, it was pointed out that the strategy to encourage countries to disseminate all relevant high frequency data according to the data template should be drafted as the first priority. The aspects of quality and comparability remain, however, important and should also be addressed following the analysis of the country data. It was stressed that the objective of the initiative is not to increase the response burden of countries. Synergies may be obtained by taking stock of other initiatives of international and regional organisation, such as that of the IMF SDDS, Eurostat’s PEEI and the PGI of the IAG.

Breakout sessions

Breakout session 1: Flash estimates of GDP

54. *Chair:* Roberto Barcellan (Eurostat)
Facilitators: Pascal Ramaekers and Mieke Berends-Ballast (Statistics Netherlands)

55. Practices and experiences in the different countries represented were exchanged in this very lively session. It turned out that there are big differences between the national economies, and as a result also the statistics and methodologies vary strongly among countries.

56. The conclusion of the breakout session is that there is indeed a need for flash GDP estimates. The flash GDP has to be a real growth rate in the National Accounts framework, and it has to be based on hard data. At least a quarterly estimate is needed, but some countries already have or are trying to compile a monthly estimate also. There is some need for coordination on terminology on several aspects. Coordination in timing is needed as well; because not all countries have the same possibilities it would be advisable to have several windows, for instance at t+30, t+60 and t+90 days. The way forward includes the following concrete steps:

- Create Working Group on Flash GDP
- Collection of experiences in the countries: who does what and how;
- Select best practices;
- Propose or update guidelines, if necessary;
- Spot problems in data collection, timeliness and quality;
- Educate users; create a ‘flash estimate culture’.

Breakout session 2: Composite indicators

57. *Chair:* Ataman Ozyildirim (The Conference Board)
Facilitators: Sidney Vergouw and Wouter Jonkers (Statistics Netherlands)

58. In the discussion, 5 questions addressed in the plenary session were at the centre:

- Is there any need for international guidelines?
- Is there a need for a harmonised set of selection criteria?
- Is a minimum set of components in CI’s needed?
- What are the data requirements?
- What is the role of NSI’s in the creation of CI’s?

59. Participants showed a common interest and a wide range of experiences in composite indicators. A number of countries would like to have more information and advice on a wide range of issues. There is also a very wide range in understanding what a composite index is, what it should measure and different methodologies to compile the indices.

60. The group was interested in an overview of available methodologies and approaches on composite indicators and how comparable the existing indicators are. So, the group agreed that there is a need for an international forum to facilitate an exchange of knowledge and ideas.

61. A first task is to clarify the main purpose of leading and/or coincident composite indicators and establish a clear definition of different approaches to measuring cyclical fluctuations: 1) classical business cycles, 2) growth cycles or deviation cycles, 3) growth rate cycle. The goal of the composite indicators is primarily to help establish basic metrics of cyclical fluctuations and to detect turning points. The various techniques of compiling and analyzing indicators can also be used to measure more disaggregated fluctuations (for instance, the developments in manufacturing industry or cycles of provinces or states)..

62. Composite indicators have some advantages over individual indicators:

- There is an advantage in reporting: “headline” summary indicators;
- Because an average of underlying variables is estimated, the indicator is less volatile than the underlying indicators, and a better overview is provided;
- A large set of data can be summarized.

63. However, composite indicators are also an analytical tool. Therefore, it’s necessary to point producers and users in the same direction, in production, dissemination and education of users to interpret the indicators correctly.

64. When creating composite indicators there are some general guidelines:

- A basic set of (high quality, high frequency) economic series is required, and establishing the timing classification of the series in this set is the first step to building composite indices;
- Define what to measure to detect growth or turning points;
- The variables selected must be strongly correlated with what you want to measure;
- The techniques and the methodology must be appropriate and transparent;
- The composite indicator must also make sense economically; the set of indicators must not only be strongly correlated with the reference series, but it has to be based on economic theory as well.

65. “A one size fit all” approach in selecting variables for composite indices is not feasible; there are too many country specific details. So it seems unwise to try to impose a standard blueprint. Also, on methodological issues there is quite a lot to discuss, therefore, it is hard to create a one final best-practise (for example issues on trend extracting and seasonal adjustment). There is also some harmonisation in terminology needed.

66. A set of principles is more suitable, instead of “hard” guidelines. A set of best practices must be collected and made available for countries which want to create composite indicators. This creates more need for the exchange of information.

67. Therefore a platform for knowledge sharing is needed, a coordinated place where recommendations and methodology is assessable for everyone interested.

Final conclusions:

68. A first step is to establish more forms of communication and information sharing. There is much interest in collecting all kind of experiences in constructing composite indices.

- Set up of an e-mail forum, which starts with the participants of this discussion session
- Statistics Netherlands offers to investigate the possibility of an internet based knowledge SharePoint, to collect the knowledge in one accessible place
- The UNSD, OECD and The Conference Board, supported by Eurostat and Statistics Netherlands, will coordinate a Working Group on Composite Indicators which aims to create a "framework of best practices" in construction and use of composite indices
- A framework can give recommendation and make methodology available for anyone interested in constructing composite indices
- The framework/principles/best practices consists of knowledge and experiences on the following components:
    - Definitions of cycles,
    - Definition of reference series
    - Developing and maintaining cyclical timing classifications for basic sets of business cycle indicators for each country
    - What are appropriate methodologies (index numbers, trend estimation)
    - How to make composite indicators more current / real time
    - Construct them on historical data, follow/test them in future performance
    - Guidelines on quality of data input (including seasonal adjustment, price indices and inflation adjustment, benchmark revision, data continuity and consistency)
    - Capacity building in core areas of business cycle indicators, such as employment, inventories etc.

Breakout session 3: Sentiment indicators

69. *Chair:* Gyorgy Gyomai (OECD)
Facilitators: Karin van der Ven and Jeroen Nieuweboer (Statistics Netherlands)

In general

70. The participants of this breakout session focussed their discussion on methodology.

Where are we now

71. Worldwide, many organizations are involved in compiling sentiment indicators with varying rules and practises. However, there is an observable alignment to the harmonized EC – OECD guidelines. In many cases the indicators are produced outside the national statistical offices. The participants agreed that more/closer co-operation is needed. This specifically regards the availability of data, which can be a problem. Some privately owned data can only be disseminated under contract.

72. In particular the indices of the Project Management Institute and the Conference Board are mentioned in this respect. It is almost impossible to assess the quality of these indices, as access to privately collected data is difficult and can be very expensive. As they are using a different set of standards in compiling data, close collaboration with private companies is a must.

Overall co-ordination and available methodology

73. Already, considerable efforts have been made to harmonize sentiment indicators and make them available. Europe has a very co-ordinated set of data, for which the European Commission provides the standing methodology telling countries how things should be done.

74. The OECD also provides guidelines. Although comparable to the European Commissions' guidelines to some extent, these are of a more general nature and leave room for country specific requirements. The OECD also compiles sentiment indicators on aggregate levels. The organization has been working closely with countries outside the OECD, but it lacks resources to commit to spreading the methodology further.

Need for more connection

75. The participants of the breakout session agreed that harmonization itself is not a goal, but that it is good to stimulate countries to join the existing system and to extend it further. Practices have to be more connected worldwide, instead of in Europe only. A way forward to reach this is to share best practices. For developing countries no best practices are available as yet. For those countries, participants considered the drafting of a minimum set of international requirements, in combination with country specific needs.

What harmonization is needed?

76. Clear understanding of what needs to be harmonized to allow global comparison is necessary: is it questions in surveys, number of respondents, classifications used or how to aggregate (country weights)?

77. Harmonization also includes risks. Breaks in long-standing time series due to changing questions clearly present a hurdle. Interpretation gets difficult. Therefore, it has to be considered how to overcome objections of both long-time users and long-time compilers of data series?

Plan of action

78. Participants agreed that a deepening of the existing inventory is needed. This new assessment has to concentrate on (best) practices. What practices are currently in use and what kind of organizations are involved in compiling indicators. Do they comply with standing regulations by the European Commission or OECD? Do they bring in new points of view? Sharing of statistical practices, using anonymized data sets for further analysis is considered an option too, to get a grip on quality levels. It was further agreed that a knowledge platform on economic sentiment indicators would facilitate the share of knowledge on these issue.

79. It is felt that there is room for a body co-ordinating these efforts. UNSD, supported by the OECD, the European Commission and Eurostat, will coordinate a Working Group on Sentiment Indicators.

Breakout session 4: Analytical framework

80. *Chair:* Herman Smith (UNSD)
Facilitators: Bram Edens and Sjoerd Schenau (Statistics Netherlands)

81. The group discussed the classification of the high frequency indicators in three levels (or tiers) of indicators namely, tier 1, those indicators that are widely available allowing the compilation of regional and world totals; tier 2, those indicators that are recommended to aspire to compile; and tier 3, those indicators that are important on the national level. The main outcome of the discussion is that the strategic importance of an indicator should carry a heavier weight than the mere availability of indicators in classifying the indicators of the data template into a particular tier. The group defined strategic important indicators as those that provide information on demand and supply in the economy, those that identify vulnerability and risk and those that show international exposure. The group also suggested that more detail on international markets are needed both in terms of commodities (production and pricing) as well as in terms of analytical indicators (e.g. debt to income ratios) in order to better assess vulnerabilities.

82. Although availability of indicators may reflect its importance, a more in-depth look at the rationale and coverage of the template is required. By following a strategic approach may well mean that some indicators are not readily available and such data gaps need to be addressed. The purpose of the template was reiterated: the focus should be on high frequency indicators for early warning of changes in economic activity.

83. It was stressed that the objective of the initiative is not to increase the response burden of countries. The goal should be to work smarter. Synergies may be obtained by taking stock of current initiatives such as that of the Inter-Agency Group on Economic and Financial Statistics (IAG) which also developed an indicator set. It was remarked to not limit ourselves to the current financial crisis. Behind the financial crisis lurked a food and energy crisis that got masked by the severity of the financial crisis.

More detailed remarks:

84. The following remarks were made:

- Indicator 2.1 Production index for industry should be tier 1.
- Indicator 2.2 Construction index: important but difficult to compile.
- Indicator 2.2 A services production index would be important, but there are currently serious data quality issues.
- Indicator 2.3 It was remarked that retail trade was not important in terms of production; however others stressed that the template needs to reflect both the supply as well as the use (or demand) side of the economy.
- Indicator 2.8 Commodity production was debated at length. It was remarked that for certain countries commodity production (e.g. agricultural production) was very important and should warrant classification in tier 1. On the other hand it was stressed that commodity production tends to be highly country specific and therefore should not be part of the core set. Granted that agricultural production is systematically important (e.g. the effect on vulnerable people), the next question becomes at what level of disaggregation (by crop type or agricultural production as a whole) indicators would be

relevant. It was suggested to include international market data on commodity production and or prices.

- Set 3: It was suggested to include international commodity prices here.
- Set 5: Balance of payments data, such as, current account deficit as well as remittances should be included explicitly.
  Indicator 6.7 Balance sheet items, such as, assets and liabilities should take into account corporate accounting practices being different from national accounting practices.

85. Brief comments were made on the development of a complementary set of analytical indicators. The following indicators were mentioned: labour productivity but it was stressed that the definition of such a measure should be made explicit; price of food (in COICOP sense); vulnerability of certain sectors; international exposure of certain economies; possibility of a country defaulting; net debt positions; measure of vulnerable employment; share of population with some sort of social protection; solvency indicators and debt servicing ratios.

86. Due to time constraints the session was unable to go through all indicators in detail.

87. The group concluded that more time is needed to assess the classification of the indicators, taking into account its availability and strategic importance, and to identify relevant analytical indicators. UNSD will cfollow up on these issues with the participants of the breakout group.

<u>Plenary conclusion of the session</u>

Chair: Pieter Everaers (Eurostat)

88. Pieter Everaers concluded that the breakout groups worked well. More participants took part in the discussions in the smaller groups, more exchange of experiences is possible and concrete results were reached.

Session 8. Communication and Dissemination of Indicators

89. Session 8 was chaired by Ms. Lidia Bratanova, Director, Statistical Division of the United Nations Economic Commission for Europe and organized by the World Bank.

90. Mr. Soong Sup Lee from the World Bank introduced this session with an overview of international standards and practices in the area of statistical dissemination and communication, such as those developed by the UNECE, the IMF (SDDS and GDDS) , and the World Bank. UNECE for example, focuses on fundamental issues such as communication with the media, analysing feedback and managing dissemination and communication functions in line with the United Nations Fundamental Principles of Official Statistics. He highlighted two dimensions to address in data dissemination: prioritization between the national and international statistics and the statistical requirements for high frequency indicators. He further highlighted a number of relevant issues that need to be addressed, including the communication objectives, the clarity of the message, the definition of the target audience, the definition of user requirements, the communication vehicles, the data presentation, and maintaining the credibility. He mentioned that new data dissemination tools are being employed at the World Bank including a Google data

finder and the development of principal global indicators which facilitate the monitoring of the economic and financial developments for the G-20 economies.

91. Mr. Floris van Ruth of Statistics Netherlands presented the data dissemination tools that are being developed and used by Statistics Netherlands. He proposed that the ultimate goal and challenge of a statistical office is to provide access to the considerable amount of data available from statistical data producers to the user community in a form that meets the needs and technical capacity of the user. Mr. van Ruth demonstrated a business cycle tracer with fifteen indicators which gives visual information about the state of the business cycle by tracking the movement of the indicators (leading, lagging and coincident). He showed how the tracer can be used as an educational tool to show how business cycles develop. He further highlighted a number of criteria for the development of a good dissemination tool which include among others: a clear definition of the goal of the visualisation tool, a clear definition and understanding of the needed indicators, and a clear definition of the intended way of presenting these indicators.

92. Mr. Peter Everaers from Eurostat mentioned that a number of new dissemination tools have been developed by international organizations, for example, “Statistics Explained” is the World’s first encyclopaedia of European statistics for the general public. It features a new way of publishing European statistics, explaining what they mean, what is behind them and how they can be used.

93. Mr. Art Ridgeway of Statistics Canada presented the Canadian experience in the area of statistical consultation with users and the results and lessons learned. He highlighted three levels of user consultations: i) with key policy agencies, such as the Fiscal Authority, the Central Bank and the Social Security Authority; ii) with advisory committees; and iii) with a wide public user community. Mr. Ridgeway discussed the consultation process which is aimed at assessing the user’s needs by seeking user input regarding timeliness, the completeness of the data products and the adequacy of the communication strategy. He mentioned that these consultations resulted in a number of short-term data collection propositions including: a proposal to address, on a temporary basis, the data on labour market transitions; a proposal to focus on maintaining and developing the core statistical infrastructure; and a one time survey on capital expenditure intentions (which was funded from internal sources). He further added that Statistics Canada responded by releasing debt services ratios; expansion of Market Value balance sheets and financial flows; developing presentations and workshops to address the lack of up-to-date documentation for financial and wealth accounts; designing a new website; and recognizing the impact of the financial crisis on Canadian’s pensions. He concluded that the experience from the financial crisis has highlighted three important factors for the preparedness against future challenges: outreach - the capacity to quickly consult with clients and the access to micro data; flexibility - the capacity to quickly move resources from lower to higher priority programmes; and communication strategies - the regular communication programme with the users and the coordination of the communication between the central bank and financial market supervisors.

Discussion

94. The participants welcomed the information provided by the presenters, indicating that it provides a sound basis for organising the communication and dissemination of indicators. Some participant enquired if it was possible to use the visualization tools, developed by Statistics

Netherlands. Statistics Netherlands replied that they are willing to share their visualization tools with those interested to use it as long as the work of Statistics Netherlands is acknowledged.

Outcome

95. The session concluded that there is a need to create a knowledge base and to review the availability of existing visualisation tools and methodological guidance. The World Bank and UNECE indicated that they are willing to coordinate this effort, supported by Statistics Canada and Statistics Netherlands.

Session 9. Concluding Session

96. In this concluding session the session chairs provided a brief overview of the discussions in their respective sessions before each of the conference organiser institutions made some concluding remarks.

97. Mr. Ivo Havinga Chief of the Economic Statistics Branch, United Nations Statistics Division concluded that the seminar has demonstrated the keen interest of the statistical community to embark on programmes to accelerate the availability, timeliness and periodicity of high frequency indicators. Moreover, work is well advanced in improving the accessibility and interpretability of the data whereby innovative visualization tools and interactive web-based tools are facilitating the communication with the users. This seminar has also recognised the usefulness of economic sentiments indicators. Further collections of best practices in the collection of sentiment indicators and their integration in the compilation of other high frequency statistics are warranted. The leading properties of the sentiment indicators have proven their value in their own right as early warning indicators but also their value in the compilation of composite indicators and in reducing revisions. He further concluded that the seminar has expressed a preference for using direct observations in the acceleration of high frequency statistics rather than econometric techniques. Going forward, he welcomed the proposals to continue the work on guidelines, terminology, conceptualisation, purpose and knowledge bases for high frequency indicators. He suggested that this work should be taken up by establishing Working Groups and that the outcomes of the programmes of Working Groups be reviewed at the concluding seminar in the fall of 2010.

98. Mr. Walter Radermacher, Director General, Eurostat made three observations: i) Priority – while the acceleration of dissemination of high frequency indicators for tracking the economic and financial situation is a priority, it is not the only priority. Also high frequency statistics should be developed to assess social and environmental concerns such as those related to poverty, food crisis, and climate change. ii) Cooperation – There is a need for a close link or network with user groups. Statistical offices need to be proactive in identifying and understanding user needs. iii) Quality – There is a multi dimensional approach to ensure the quality of official data. This approach should now also be used to ensure the quality of high frequency indicator sets.

99. Mr. Gosse Van der Veen, Director General, Statistics Netherlands expressed his appreciation to those involved in organising the seminar and all that attended. He concluded that the objectives of the seminar were met and that he is looking forward to the conclusion of the seminar series at the next meeting.