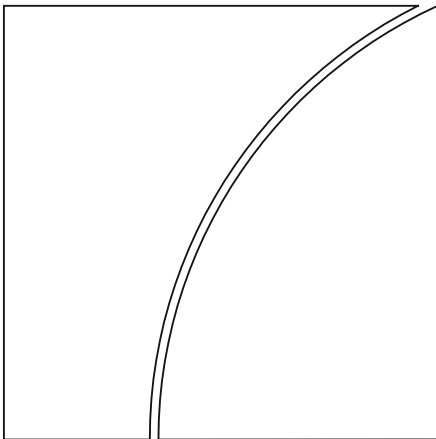


Irving Fisher Committee on Central Bank Statistics



2013 Annual Report

February 2014



BANK FOR INTERNATIONAL SETTLEMENTS

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2013 Annual Report of the Irving Fisher Committee on Central Bank Statistics

This is the second public Annual Report of the Irving Fisher Committee on Central Bank Statistics (IFC). It provides a brief update on the IFC's governance, reviews the Committee's activities over the past year and presents its planned future activities.¹ The report highlights the continued high-level support for the Committee's work from all regions in the world as well as the range of important statistical policy issues it is addressing. Of particular importance is the Committee's analysis of data sharing practices between central bank statistical departments and bank supervisory authorities.

Governance and organisation

The IFC is a global network of central bank economists, statisticians and policymakers that discusses statistical issues of interest to central banks. The Central Bank of Morocco joined the Committee last year, bringing total institutional membership to 82, including almost all BIS shareholding central banks.

The Committee held its annual meeting on 25 August 2013 in Hong Kong under the chairmanship of Mr Muhammad Ibrahim, Deputy Governor of the Central Bank of Malaysia. It reviewed activities over the past year and discussed the future work proposed by the Executive. It also elected Mr Eugeniusz Gatnar of the National Bank of Poland and Mr Olorunsola Emmanuel Olowofeso of the Central Bank of Nigeria as new members of the Executive. The Committee took note that the three-year term of Ms Jianhong Ruan of the People's Bank of China had come to an end. It thanked her for the excellent contributions she and her colleagues had made to the work of the Executive and the activities of the Committee more generally.

To ensure continuity, the Committee extended the term of Ms Katherine Hennings of the Central Bank of Brazil until 2015 and appointed her as Vice Chairperson. Mr Aurel Schubert of the ECB was appointed as the second Vice Chairperson. The updated list of Executive members and their terms of office is attached as Annex 1. There continues to be a proper representation of all regions on the Executive.

Finally, the Committee endorsed the Memorandum of Understanding (MOU) on the IFC's affiliation with the International Statistical Institute (ISI), a well-known and respected international scientific organisation. The ISI promotes the understanding, development and good practice of statistics worldwide as well as the collaboration among its member organisations, statistical societies and other national and international statistical organisations. The MOU explains the purpose of the affiliation, its governance and the rights and obligations of both the ISI and

¹ The report was prepared by Mr Paul Van den Bergh (paul.van-den-bergh@bis.org) with the active contribution of the members of the IFC Executive. Any questions or comments that central banks may have on this report should be addressed to him.

the IFC. The MOU was signed on 26 August 2013 by the President of the ISI and the IFC Chairman. The IFC Chairman will initially serve as the official liaison with the ISI.

IFC activities over the last year

The IFC organised a number of activities over the past year.² Individual members of the IFC Executive contributed to their organisation, with the support of the IFC Secretariat provided by the BIS. The Committee continued to be able to rely on contributions from its member central banks as well as from international organisations in terms of resource persons, logistical support for meetings outside Basel and the payment of travel costs of staff participating in these events.

Workshop on Balance of Payments Issues

On 28 February and 1 March 2013, the Bank of France hosted an IFC-sponsored workshop in Paris to discuss the renewed importance of balance of payments (BOP) statistics in the context of the financial crisis and its resolution. Also discussed were the challenges ahead with the implementation of revised international statistical standards for BOP. It was attended by around 100 statisticians from over 46 different countries, representing all the regions of the world as well as international organisations. Bank of France First Deputy Governor Anne Le Lorier made a keynote address, in which she stressed the strong analytical power of BOP statistics. This derives from the way in which such statistics combine, in a consistent framework, the real and financial external transactions of the economy, thereby highlighting economic and financial imbalances (even in cases where the economy is part of an economic and monetary union).

The workshop covered a number of topics, including direct investment flows and incomes; asymmetries in mirror data and errors and omissions; BOP statistics as indicators of external imbalances and/or international competitiveness; BOP and recent developments in the financial system; early estimates of BOP and specific practical issues of BOP compilation and uses.

A Paris statement (attached as Annex 2) was issued after the meeting by the IFC Executive, which met in parallel with the workshop. This highlighted a number of insights from the workshop. First, being a key macroeconomic dataset, BOP statistics deserve closer attention in that they inform policymakers and the general public about the relevant country's current economic situation and possible future problems. Second, the education of the users of BOP data should be enhanced. The presentation of BOP statistics, including their semantics, should be adapted to diverse user needs to ensure that data are understood correctly. Third, growing

² In exploring topics, the Committee aims to strike a balance between (i) those that are of interest to Governors and senior officials at central banks and that can be reported to meetings at the BIS; (ii) those at the frontier of research and analysis by users and compilers at central banks, which are covered at the Committee's flagship biennial conferences and the sessions the Committee organises at the biennial World Statistical Congress of the International Statistical Institute; and (iii) technical topics that are discussed in workshops and seminars, including at the regional level, and that serve to promote the exchange of views, or training, on existing practices or statistical standards.

errors and omissions undermine the quality and usability of BOP statistics. Further progress in improving the quality of these statistics could be achieved by enhancing data collections so as to keep them fit for capturing data from global chains of international trade as well as cross-border financial positions and transactions in complex and globalised financial markets. Finally, there would be clear benefits from establishing a global network of BOP compilers. This could significantly contribute towards improving the quality of data underlying the official BOP statistics.

Porto Workshop on Integrated Management of Micro-databases

The IFC and the ECB co-sponsored a workshop organised by Bank of Portugal on 20 and 21 June 2013 on Integrated Management of Micro-databases. It was attended by 142 officials from 44 central banks from all regions. A total of 42 papers were presented. The meeting was addressed by Mr Carlos da Silva Costa, Governor of the Bank of Portugal who noted that IT provides new capabilities for drawing on the variety of micro-databases that central banks have at their disposal. Also, macroprudential supervision requires that policymakers look further than the aggregate level and try to understand the behaviour of different groups of financial and non-financial corporations as well as that of individuals.

The workshop was chaired by Mr João Cadete de Matos of the Bank of Portugal, Mr Aurel Schubert of the ECB, and Mr Paul Van den Bergh of the IFC Secretariat at the BIS. Together they issued a document highlighting the key conclusions of the workshop (see Annex 3). One was the recognition that central banks generate and have access to huge amounts of microdata. This includes raw data underlying statistical data collections; administrative data sets such as security-by-security databases, credit registers, central balance sheet registers, payment and settlement systems, trade repositories; and third-party data sources (institutional and commercial). Finally, there are “big data” from the internet.

Another conclusion is that IT solutions are now becoming available that may facilitate the processing of huge quantities of data not only from the same source but also from separate sources. So-called business intelligence (BI) tools can be used to integrate micro-databases. Such tools are not always new but are becoming increasingly important for statistical IT applications. However, BI tools are not by themselves the solution to better manage and integrate micro-databases. Equally important are the appropriate governance of statistical functions in the central bank; improving the skill mix of data managers (eg registration of data, data validation); good cooperation between economists, statisticians and IT experts; and appropriate solutions to legal, confidentiality and privacy constraints to facilitate access by users.

A final conclusion is that, maximising the benefits while reducing the costs of using microdata will take time and should be carried out stepwise. New opportunities will be discovered when integrating micro-databases, including meeting demands from policymakers and data analysts that were previously difficult to accommodate.

Shenzhen Seminar on Measuring Structural Change in the Financial System after the Crisis

The People's Bank of China hosted an IFC seminar on 23 August 2013 on “Measuring Structural Change in the Financial System after the Crisis”. This meeting

was attended by 130 experts from 34 countries, of whom around 80 were from different organisations in China. Keynote speeches were made by Mr Andrew Sheng, President of Fung Global Institute, and Mr Sheng Songcheng, Director General of the People's Bank of China's Statistics and Analysis Department. One session focused on the monitoring of cross-border banking, for which the BIS International Banking Statistics were seen to be the major source. Other sessions principally dealt with data needs to monitor the shadow banking system. Apparent in this area are various data gaps that the Financial Stability Board is aiming to close at the international level.

There were a number of messages from the seminar. First, it is possible to build on existing statistics and frameworks (eg money and banking, financial accounts, BOP/IIP) to collect additional information in the future. At the same time, some new thinking is needed, including on the formulation of the policy issues that any new data need to help address. Second, the reporting burden related to the collection of an increasingly large and complex set of data needs to be kept in mind. In setting priorities for data collections, it would be good to understand the "theory" behind them and the specific user requirements. Third, new technologies and approaches need to be explored to make data collection more efficient, including IT solutions and data standardisation. Regarding the latter, one major challenge is to integrate the concepts and definitions used by statisticians, supervisors and accountants. Finally, most of the focus of international efforts to collect new or better data is on quantities (eg balance sheets, transactions). But there is also a need to look at better information on, for instance, prices, credit conditions and risk aversion/appetite as well as on qualitative data (eg from surveys).

Sessions at the 59th World Statistics Congress of the ISI

On 26–27 August 2013, the Committee organised six sessions at the ISI's 59th biennial World Statistics Congress held in Hong Kong. These covered statistics related to bank interest rates, real effective exchange rates, inflation measures, external debt and capital flows. There was also a session on the use of micro data for compiling macro statistics that followed up on some of the themes explored at the earlier IFC workshop on the same topic (see above). Short summaries of the sessions are attached as Annex 4. Committee members participating in the ISI Congress also benefited from, and contributed to, other sessions organised at the Congress. The ISI General Assembly was held in parallel with the Congress. The IFC's affiliation with the ISI was mentioned and welcome at this meeting (a short message was also included in the event's daily newsletter).

2013 Survey of IFC membership

This year's IFC membership survey was short and focused on getting feedback from members on IFC activities and on collecting suggestions for future work.

General satisfaction with the IFC governance and activities remains high. All Committee members feel that the IFC activities are relevant for their institution and more than 60% intend to participate in future planned work. There is much satisfaction with the transparency of the Executive's decision-making. The satisfaction with the Secretariat's support also remains high.

With respect to topics for discussion, there remains considerable interest in some issues mentioned in last year's membership survey, including public debt,

property prices, macroprudential data, composite indicators, and internet-based data (“big data”). The management of central bank statistical activities as well as the communication and dissemination of statistics also continues to be of interest. In addition, a number of other suggestions were made, such as external sector statistics, sectoral account data, securities and derivative statistics as well as various measures of expectations. Selected topics will be addressed at future IFC events (see below).

Task Force on Data Sharing

The Committee set up a Task Force to analyse data sharing between statistical organisations at the national and international level, a topic on which there is broad interest in all regions of the world.

The Task Force held two meetings (May and November) to share insights on various ways that have been, or are being, pursued to share data with the statistical departments of central banks. It focused initially on the sharing of data on bank activities, in particular balance sheets, between supervisory authorities and central bank statistical departments (and, through them, other departments at the central bank).

Users of central bank statistical departments are increasingly interested in different types of data on bank balance sheets and on activities other than those for which data are available from the traditional money and banking statistics that such departments collect. In particular, the requirements of users working on the analysis and policy formulation for macroprudential issues are different from those supporting monetary or macroeconomic policy. These requirements include measures of credit, market and operational risk, as well as indicators for solvency and liquidity. These measures need to be available not only at an aggregated level but also at the micro level for individual institutions, or even individual transactions, in order to track correlations and concentrations. Such information is typically available to supervisory authorities, which may or may not be part of the central bank.

In many countries, supervisors are increasingly interested in data that central bank statistical departments may have available. These include loan-to-loan data from credit registers, security-by-security data on holdings and issues of securities, as well as various commercial and administrative micro databases. In some countries, supervisors may receive information from other departments of the central banks such as the credit and market departments (covering monetary and refinancing operations, for instance, and data on reserve requirements and holdings).

The Task Force has spelled out the benefits of data-sharing between bank supervisors and central bank (statistical) departments. One is that policy decisions could be based on more consistent and comprehensive information. Another is that it would support better analysis as data would not be kept in silos. In addition, the Task Force has identified various factors that may inhibit data sharing. The obvious ones are legal and confidentiality constraints, which may not be as tight as is readily assumed in some countries but may pose serious challenges in others. Additional factors include organisational and cultural aspects as well as methodological differences between the different datasets.

The Task Force has made an inventory of different approaches that have been, or are being, taken to promote data sharing. These differ significantly from country to country. The Task Force is now in the process of identifying a number of good practices with respect to data sharing. These are likely to include:

- setting preconditions for data sharing, for instance by ensuring an appropriate legal basis to support the sharing of data and high-level support for data sharing initiatives;
- formalising data sharing arrangements, including by creating inter-departmental or inter-agency groups and the signing of Memoranda of Understanding or Service Level Agreements; and
- implementing an integrated data platform, such as operating a shared database and introducing state-of-the-art access controls.

The final report by the Task Force should be available by end-2014.

Looking ahead

Apart from the continuation of the work on data-sharing mentioned above, the following activities are being planned by the IFC:

- The organisation of the 2014 biennial conference in early September;
- The organisation of regional workshops on Developing and Improving Sectoral Financial Accounts in Turkey (for central banks of the Black Sea Group and others), Malaysia (in cooperation with SEACEN), Brazil (in cooperation with CEMLA) and Algeria (for central banks of the French-speaking African countries).
- Contribution to the Asia ISI Regional Statistics Conference, scheduled to be held in Malaysia in November 2014, at which the IFC would focus on statistical areas related to finance and economics.
- The organisation of a number of sessions at the 60th ISI World Statistics Congress to be organised in Rio de Janeiro in July 2015 as well as a separate IFC seminar in cooperation with the Central Bank of Brazil on that occasion (Vice Chairperson Ms Katherine Hennings will play a major coordinating role for these events).

A number of topics identified through the membership survey are under consideration for the events planned for next year.

More detailed information on past and forthcoming IFC activities can be found at www.bis.org/ifc.

Annex 1

Members of the IFC Executive as of 14 January 2014

Executive member	Institution	Term
1. Mr Muhammad IBRAHIM (Chair)	Central Bank of Malaysia	2011–14
2. Ms Katherine HENNINGS (Vice-Chair)	Central Bank of Brazil	2010–15
3. Mr Aurel SCHUBERT (Vice-Chair)	European Central Bank	2006–15
4. Mr Jacques FOURNIER	Bank of France	2011–14
5. Mr Eugeniusz GATNAR	National Bank of Poland	2014–16
6. Mr Masahiro HIGO	Bank of Japan	2013–15
7. Mr JUNG Joon	Bank of Korea	2013–15
8. Mr Pascual O'DOGHERTY	Bank of Mexico	2011–14
9. Mr Olorunsola Emmanuel OLOWOFESO	Central Bank of Nigeria	2014–16
10. Ms Gülbin SAHINBEYOGLU	Central Bank of the Republic of Turkey	2013–15
11. Mr Charles THOMAS	Board of Governors of the Federal Reserve System	2009–15

Annex 2

Paris Statement– Workshop on Balance of Payments Statistics

On 28 February and 1 March 2013, the Bank of France co-sponsored an international meeting in Paris to discuss the renewed importance of balance of payments (BOP) statistics in the context of the financial crisis and its resolution as well as the challenges ahead with the implementation of revised international statistical standards for BOP. The other sponsor was the Irving Fisher Committee on Central Bank Statistics (IFC), a forum of economists and statisticians which operates under the auspices of the Bank for International Settlements.

The meeting was introduced by Anne Le Lorier, Deputy Governor of the Bank of France and Muhammad Ibrahim, Deputy Governor of the Central Bank of Malaysia and Chairman of the IFC. It was attended by around 100 statisticians from over 46 different countries, representing all the regions of the world as well as international organisations. The programme of the meeting covered direct investment flows and incomes; asymmetries in mirror data and errors and omissions; BOP statistics as indicators of external imbalances and/or international competitiveness; BOP and recent developments in the financial system; and specific practical issues of BOP compilation and uses. A closing panel discussion focused on the way forward to enhance the quality of BOP data.

The meeting yielded the following main insights:

1. Being a key macro-economic dataset, BOP statistics should deserve closer attention from policy makers and the general public.
2. The education of the users of BOP data should be enhanced. The presentation of BOP statistics, including their semantics, should be adapted to diverse user needs in order to ensure that data are understood correctly.
3. The official release of updated international standards for external sector statistics, in particular the sixth edition of the IMF's Manual on Balance of Payments and International Investment Position (BPM6), is a much welcomed development.
4. Growing errors and omissions undermine the quality and usability of BOP statistics. Further progress in improving the quality of these statistics could be achieved by enhancing data collections so as to keep them fit for capturing data from global chains of international trade as well as cross-border financial positions and transactions in complex and globalised financial markets.
5. There would be clear benefits from establishing a global network of BOP compilers. This could significantly contribute towards improving the quality of data underlying the official BOP statistics.

The IFC will continue to work with the central banking community and other international organisations in enhancing the quality and the relevance of the balance of payments statistics.

Annex 3

Key points of the Porto Workshop on Integrated Management of Micro-databases

On 20 and 21 June 2013, the Irving Fischer Committee on Central Bank Statistics (IFC) co-sponsored a Workshop on Integrated Management of Micro-databases with the Bank of Portugal and the ECB. The meeting was addressed by Mr Carlos da Silva Costa, Governor of the Bank of Portugal who noted that *"... as central bankers, our responsibilities in this area have now increased significantly, given the fact that IT systems are providing us with new capabilities to draw on the existing micro-databases and to put their data to good use. ... If we want to do macro-supervision, if we want to understand the behaviour of companies and individuals, if we want to realise what is happening as regards financial reality, we need to know how diverse reality is and we need to look further than the aggregate level and try to see what is going on at the level of the different groups of individuals or firms and to look for the reasons that are behind this diversity."* Mr João Cadete de Matos, Director of the Bank of Portugal's Statistics Department chaired the workshop in cooperation with Aurel Schubert, Director General Statistics at the ECB, and Paul Van den Bergh, Head of the IFC Secretariat at the Bank for International Settlements. The workshop was attended by 142 officials from 44 central banks from all regions. A total of 42 papers were presented.

The workshop yielded the following insights:

1. Central banks generate and have access to huge amounts of microdata. This includes raw data underlying statistical data collections (based on censuses and surveys); administrative data sets such as security-by-security databases, credit registers, central balance sheet registers, payment and settlement systems, trade repositories; and third-party data sources (institutional and commercial). Finally there are "big data" from the internet.
2. Micro-databases have been around for quite a long time but central bank statisticians have been constrained in fully exploiting their potential. IT solutions are now becoming available that facilitate the processing of huge quantities of data not only from the same source but also from separate sources.
3. There are clear benefits in using microdata, such as
 - reducing the respondents' reporting burden;
 - enhancing data quality and quality control procedures;
 - increasing the efficiency of the statistical production process;
 - improving responsiveness to users' requirements, by expanding the range of available statistics and providing higher flexibility and agility, particularly in the context of macroeconomic analyses and risk-based financial stability and micro-supervisory analyses; and
 - providing an excellent tool for economic analysis and research.
4. There are also various constraints on the use of microdata, in particular those dealing with the problems of record-matching, data coherence, under-coverage, missing variables, reference data consistency over the various

domains, differences in concepts and statistical units and data updating equally reflected across domains.

5. Business intelligence tools can be used to integrate micro-databases. Such tools include data warehouses, registries, central repositories or dictionaries; building smart cubes; ETL tools; using aliases; anonymising data; digital signatures for accessing data. These are not new but are becoming increasingly important for statistical IT applications.
6. Business intelligence tools are not by themselves the solution to managing and integrating micro-databases. Equally important are:
 - Appropriate governance of statistical functions in the central bank;
 - Improving the skill mix of data managers (eg registration of data, data validation);
 - Good management of key common identifiers (eg business registers) and reference data (eg bank identification numbers);
 - Good cooperation between economists, statisticians and IT experts;
 - Appropriate solutions to legal, confidentiality and privacy constraints to facilitate access by users;
 - Use of data standards such as SDMX (statistics), XBRL (accounting), DDI (surveys); and
 - Education of users, including through online tools.
7. Maximising the benefits while reducing the costs of using microdata will take time and should be carried out stepwise. New opportunities will be discovered when integrating micro-databases, including meeting demands from policymakers and data analysts that were previously difficult to accommodate.

The papers of the workshop are available at <http://www.bis.org/ifc> and will be compiled into an IFC Bulletin. The findings of the workshop will be reported to the BIS Governors as part of the yearly IFC Annual Report.

Annex 4

Summaries of the sessions organised by the IFC at the 59th World Statistics Congress of the International Statistical Institute

On 26–27 August 2013, the IFC organised a total of six sessions at the 59th World Statistics Congress of the International Statistical Institute in Hong Kong. A total of 30 papers were presented and discussed. The sessions were chaired by various current or prospective members of the IFC Executive (or a deputy).

Methodological and compilation review on bank interest rate statistics (Aurel Schubert, ECB)

Bank interest rate statistics are crucial for monetary policy purposes since important insights can be gained for the analysis of the transmission of the central bank's interest rates to the real economy. Against this background, bank interest rate statistics are commonly collected from reporting agents and compiled by central banks in different regions of the world. The approaches used to collect and sample bank interest rate data (usually those on deposits and loans) are rather homogeneous across regions and mainly consist in a total census or a sampling of the banks within a particular country. However, the coverage varies in terms of the indicators depending on policy needs and actual reporting population (deposit-taking institutions or other lenders). In some countries, for instance the United States, market rates are also collected, mainly from commercial sources, to serve as reference or benchmark rates.

Further to extensive work that has been done by the European System of Central Banks (ESCB) to set up and regularly publish a broad set of indicators across euro area countries, it could be useful to define a comparable set of harmonised indicators worldwide. The Bank of Korea, for instance, already publishes rather similar indicators. It is important to have sufficiently granular breakdowns of bank interest rates in order to facilitate in-depth analysis of economic developments in crisis periods or following movements in the official interest rates.

Measuring real effective exchange rates (Gülbin Şahinbeyoğlu, Central Bank of the Republic of Turkey)

There are various methodologies for assessing relative prices across countries, all of which are sensitive to the choice of country coverage, deflator, and trade weights. Efforts are constantly being made to improve real effective exchange rate measures, for instance by taking account of the effects of transit trade (ECB), more frequent updating of the country weights and utilising more recent directions of trade (Macedonia) and utilising relative price levels instead of price indexes (the Weighted Average Relative Price developed at the Board of Governors of the Federal Reserve System).

Though the real effective exchange rate is a key indicator in international finance, there is, unfortunately, no “one-size-fits-all” definition. The appropriate

definition and calculation of the real effective exchange rate depends heavily on the theoretical model of interest, and calculation is also constrained by data availability. Although there are various data sources that allow alternative measures to be calculated, commonly used indices are often inadequate for the task at hand. Therefore, researchers and policymakers should be ready to generate the effective exchange rate index that is most useful for the problem they want to address. Making the right choice requires a sound knowledge of the detailed data and of the trade-offs that need to be made.

The use of microeconomic data in compiling macroeconomic statistics (Masahiro Higo, Bank of Japan)

The use of microeconomic data is becoming indispensable to analysts of monetary and financial stability. With respect to the latter, micro data, and their link to macro aggregates, are needed to understand the vulnerabilities of the various sectors and subsectors of the economy to financial shocks (as reflected in their financial transactions and their balance sheets). They are also necessary in order to analyse the impact of financial turmoil and crisis on the macroeconomy. The IFC workshop in Porto in June confirmed that the efficient management and integration of micro data can be facilitated by technical (IT) innovations as well as proper organisational approaches.

Nevertheless, several challenges remain before central bank statisticians and users can exploit the full potential of micro-databases. First, in order to integrate existing databases and facilitate access to users, it is necessary to strengthen the cooperation and governance of the agencies involved, particularly with respect to safeguarding confidential information. Second, as micro data are often very large and unstructured, it is important to develop statistics at higher aggregation levels, such as by segments or by using distribution and correlation measures. Third, it is necessary to integrate quantitative data (eg transactions and stocks of assets and liabilities) with price data in order to understand the decision-making of economic agents. In addition, qualitative information, for instance from surveys, can be used and these can be conducted via the internet at a low cost.

Measuring domestic and international inflation (Jacques Fournier, Bank of France)

Inflation measurement is crucial for monetary policy as well as for general economic policy. It must therefore be credible, reliable and as timely as possible. However, there is a trade-off between these last two objectives, which statisticians need to carefully balance.

Some methodological issues are challenging. Shifts in consumption behaviour are difficult to capture without overburdening respondents with too frequent surveys. Housing prices have become more important, although knowledge of how to incorporate them in Owner Occupied Housing is still uneven and methods and this area are not sufficiently harmonised. Moreover, the use of hedonic methods to take into account quality changes is demanding and sometimes costly.

In addition to headline inflation, economists often see merits in core inflation measures while recognising that non-core inflation should not be discarded given that possible pass-through effects have to be considered. Moreover, over the past

years, inflation expectations have taken a more prominent role as they can anticipate current and future inflation. Also, anchoring inflation expectations is typically a central objective of monetary policy. At the same time, the usual measurements of expected inflation do not appear fully satisfactory, partly because some quantitative measurements may not be based entirely on actual trades or on transactions in a liquid market. Finally, commodity prices, spot or forward, may also be an important indicator of inflationary pressures in some countries.

Although the development of official inflation measures dates back to the beginning of the last century, the accurate measurement of a consumer price index remains a major statistical challenge, a “moving target” that will continue to demand a great deal of attention and effort from statisticians.

Reviewing measures of external debt (Katherine Hennings, Central Bank of Brazil)

The international financial crisis made the linkages between the different economies evident again. For instance, changing liquidity conditions in mature economies affected other parts of the world and manifested themselves in volatile capital flows (first inflows and then sudden reversals). Policymakers needed detailed information, not only about international financial transactions (flows) but also about financial positions (stocks).

The importance of timely, comprehensive, coherent and internationally comparable external debt statistics cannot be underestimated as a tool for identifying the external vulnerabilities of countries at an early stage. This requires clear concepts and detailed breakdowns in terms of currency denomination, original and remaining maturity, sectors, interest rate and payment conditions. Consistency is particularly important when data are collected by different agencies. However, even the standard breakdowns recommended by international statistical standards might not be sufficient. More granular data would allow analysts to refine their work, as illustrated by the use of security-by-security databases in Europe and elsewhere.

Two particular issues were identified. First, the recent trend towards focusing on net positions should not lead to the neglect of gross debt ratios. External debt obligations should be analysed in a multidimensional framework with a view to understanding the underlying dynamics. Second, there may be a need to better record the external positions of special purpose entities (SPEs) that might be hiding the real external indebtedness of economies where such entities are important. Satellite accounts to the external debt statistics could help to shed more light on this.

Improving measures of capital flows including speculative flows (Hock Chai Toh, Central Bank of Malaysia)

Measuring capital flows has always been a major challenge. It is even more challenging to measure short-term capital flows, particularly speculative flows, which are highly volatile. In view of the increasing magnitude and volatility of capital flows in recent years, the need to monitor capital flows has become more important to policymakers, making it imperative to have in place a robust capital flow surveillance framework. Recognition is growing that this framework should include

data for flows as well as stocks on both a net and gross basis. Indeed, data on a net basis can mask gross positions and flows, which are often significantly larger and better reflect market developments

The existing methodological frameworks and compilation exercises of multilateral agencies are a good starting point. The IMF's data on balance of payments and international investment positions (BOP/IIP) provide valuable information for analysis of interconnectedness across borders, global liquidity flows and global financial interlinkages. The revised BOP/IIP Manual is being implemented across the world. The BIS has been collecting and disseminating data on the international balance sheet positions of internationally active banks. The global financial crisis revealed gaps in available information and led to enhancements to BIS statistics to facilitate analysis of risks associated with international banking transactions. The latter should be analysed not only with the BIS residency-based data but also with data on a nationality basis. Using the BIS and IMF data, as well as other sources, efforts are being made to construct a global flow of funds mapping domestic and external financial stocks and flows, broken down by counterparty country, sector, currency and instrument.

One challenge is to ensure that data are available in a timely and granular way. In most countries, cross-border data are generally obtained via quarterly enterprise surveys. There is a need to obtain more timely data, which in some cases could be estimated from capital market transactions or obtained through the administrative records of the securities exchanges. In other cases, better use could be made of records of foreign exchange and related payments between residents and non-residents.