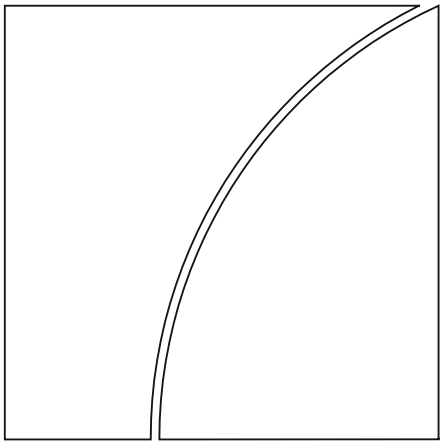
Irving Fisher Committee on Central Bank Statistics



2014 IFC Annual Report

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BANK FOR INTERNATIONAL SETTLEMENTS

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2014 Annual Report of the Irving Fisher Committee on Central Bank Statistics

On 12 January 2015 the BIS All Governors' meeting approved the publication of this fifth Annual Report of the Irving Fisher Committee on Central Bank Statistics (IFC). It provides a brief update on the governance of the IFC, a review of its activities over the past year, and a summary of its plans for future initiatives.

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. It has 82 institutional members, including almost all BIS shareholder central banks. In April 2014, following its affiliation as a member of the International Statistical Institute (ISI) in 2013, the IFC chairman and the President of the ISI invited IFC members to become ISI corporate members. As of November 2014, 21 central banks have done so, in addition to the six central banks that were already prior ISI members.

On 3 September 2014 the Committee held its annual meeting, under the chairmanship of Mr Muhammad bin Ibrahim, Deputy Governor of the Central Bank of Malaysia, to review its activities and discuss future work.

On 10 November 2014, in accordance with the IFC statutes, and following consultations with central banks, the BIS All Governors' Meeting formally endorsed the proposal to elect Turalay Kenç, Deputy Governor of the Central Bank of the Republic of Turkey, as the new IFC Chair for a three-year term, effective 1 January 2015 (see Annex 1 for the composition of the IFC Executive).

IFC activities over the last year

The IFC organised several activities in 2014, with the support of its member central banks and a number of international organisations:

- One major achievement was the production of a report on data-sharing between statistical and supervisory authorities. This report outlines a range of good practices and practical guidance that can help to foster data-sharing and cooperation.
- In support of ongoing international initiatives, the IFC also organised workshops on the development of sectoral financial accounts, which can be instrumental in enhancing financial stability analyses.
- The seventh biennial IFC conference held in September 2014 reviewed the statistical implications of the evolving functions and objectives of modern central banks.
- The IFC participated in the 2014 ISI Asian Regional Statistics Conference and reviewed on this occasion the implications and challenges posed by increasing household debt in Asia.

- The Committee set up a Global Network of Balance of Payments (BoP) Compilers which will facilitate the stocktaking of central banks' practices and the sharing of experiences in BoP issues.
- The IFC organised with the ECB a virtual seminar on big data. Big data represent a new source of financial and economic information that could be mobilised by central banks to take timely policy measures and to extract information on the impact of their actions.
- In close liaison with financial standard-setting bodies, the IFC furthered in 2014 its work on the measurement of financial inclusion and the related challenges.
- Lastly, the IFC conducted its 2014 membership survey that highlighted several statistical subjects of interest to central banks and will help shaping its future work programme.

Task Force on Data Sharing

In January 2013, Governors endorsed the establishment of a task force by the Committee to analyse data-sharing between statistical and supervisory authorities. The task force has now produced its report, which has been endorsed by the IFC and has been approved for publication by the BIS All Governors.

The report – see executive summary in Annex 2 – focuses on the data-sharing between central bank statistical departments and bank supervisors. It considers potential avenues for enhancing cooperation in the areas of the collection, compilation and dissemination of statistical and supervisory banking data. The overarching objective is to have timely and quality system-wide indicators on banking activities that need to be brought together from all available sources, irrespective of the official owner of the underlying micro data. To this end, the task force estimates that: (i) the integration of various large micro databases would greatly improve the analytical capabilities of users and analysts and would support policymaking; and (ii) clear synergies would be gained from centralising data collections through central banks' statistical functions. However, other models of cooperation could also be efficient, and there is no single best practice. The way forward is to find adequate tailor-made solutions at the level of individual countries, in a progressive way, and building on observed best practices.

The IFC will periodically survey data-sharing practices of member countries (through, for example, the annual IFC membership survey) so as to foster the awareness of existing good practices.

Development of sectoral financial accounts

In support of the international initiatives for developing and improving sectoral financial accounts, the IFC organised workshops for central banks in three main regions (see Annex 3). An important objective for the interest of the central banking community is to augment the "traditional" national accounts framework to present information on financial flows and positions on a sectoral basis. Such "integrated sectoral financial accounts" can be instrumental in supporting financial stability analyses. However, the development of financial accounts brings with it acute data challenges. The IFC will continue to promote knowledge-sharing on this important topic for central banks and to identify best practices.

Seventh biennial IFC conference

In September the IFC held its seventh biennial conference on "Indicators to support monetary and financial stability analysis: data sources and statistical methodologies". The conference – see overview in Annex 4 – was an opportunity to review the statistical implications of the evolving functions and objectives of modern central banks. Monetary authorities want to be able to identify and address in a timely manner not only emerging inflation pressures but also the build-up of financial vulnerabilities and risks. However, while the recent crises have highlighted the interconnectedness between financial and monetary stability, central banks might still face a number of challenges. For instance, in response to emerging financial imbalances, they may opt to increase the policy rate, which otherwise would remain unchanged on the basis of the short-term inflation outlook.

Good data are an important element in supporting central banks in this new context. This essentially increases the need for high-quality, more granular and standardised data sets that encompass the entire financial system as well as the interactions with the real economy. The conference shed useful light on the new types of monetary and financial stability indicators that can appropriately assist in formulating the best combination of monetary and financial stability policies and in guiding central banks' timely responses to emerging threats. It was also an opportunity to describe the various appropriate tools and methodologies that can be mobilised for compiling such indicators (eg sample surveys, micro data, statistical techniques).

ISI Asian Regional Statistics Conference

The Committee organised six sessions at the ISI Regional Statistics Conference, co-organised by the Central Bank of Malaysia and the ISI, and held in Kuala Lumpur in November 2014. In addition, a full-day IFC satellite seminar addressed the question: "Is the household sector in Asia overleveraged: what do the data say?" (cf Annex 5). This proved to be a very timely topic. Indeed, the economic importance of the household sector has developed markedly in Asia since the 1990s. While the rising level of debt in the household sector could indicate growing strength in Asian domestic demand as well as increased resilience to economic shocks, it also involves risk and is posing new challenges, especially for policymakers.

Global Network of BoP Compilers

In 2014 the IFC established the BOP.*net* network, a global network of balance of payments (BoP) compilers maintained by the BIS (using the eBIS infrastructure). This network allows central bank members to exchange documentation on balance of payments issues, best practices and contacts. The project has been steered by a small group consisting of the IFC members from France, Malaysia, Turkey and the United States.

After a pilot phase, the project went live in September 2014, and the network has since been progressively made available to all IFC members in order to promote knowledge-sharing and exchange of experiences on BoP issues. The objective is not to provide methodological instructions or to set compilation standards. It is rather to take stock of existing practices in an informal way and to collect feedback from central banks that could be passed to appropriate bodies such as the IMF BOPCOM

Committee. Another possibility to be explored is how this network could be mobilised to compare, and possibly enhance, bilateral BoP data. In practice, central bank heads of BoP divisions and their deputies have typically been invited to join the network. It could be opened up at a later stage to other central bank staff involved in IFC matters, and then possibly even further to wider groups of staff.

Big data

A webinar was organised in October 2014 on the outcome of an April 2014 ECB workshop co-organised with the International Institute of Forecasters on "Using big data for forecasting and statistics". The ECB also used this occasion to share its experience in collecting weekly search data. Around 50 participants from the central banking community from several continents participated in the event. The IFC will continue to work on this issue and will, along with the ECB, survey central banks' regarding their experiences using, and their interest in, big data. The experience gained in organising the webinar will also help in the organisation of similar events on other issues of interest to IFC members.

A key question discussed was whether and how the new sources of financial and economic data (such as big data) can help central banks to take timely policy measures and to extract information on the impact of their actions within the financial system and the economy at large. These data (eg web search data, social media data, payments data) can be put to various uses, for instance, to enhance the forecasting/nowcasting of economic series such as unemployment, to construct new economic indicators such as web-based sentiment indicators, or to assess the potential impact of information demand (as proxied by web searches) on other economic variables. However, while big data could provide economic insights for policymakers in real time, it is of utmost importance that this information be usable and useful. Moreover, there are important challenges related to data access, analysis, usage, quality and privacy issues. To address these challenges, especially when using big data for official purposes, it is therefore essential to adhere to strict statistical standards.

Financial inclusion

In October 2014, the BIS hosted the Third Meeting on Financial Inclusion with standard-setting bodies and stakeholders. This was an occasion to present IFC experience on data and measurement issues related to financial inclusion, following up on the IFC 2012 international meeting on financial inclusion indicators co-organised with the Central Bank of Malaysia – see IFC contribution on "Data issues related to financial inclusion – a potential roadmap" in Annex 6. The objective is to support the development of international standards for measuring financial inclusion, assessing the implementation of such standards and addressing the related methodological challenges. There are four areas to be considered in this respect: methodological concepts; statistical data framework; data collection; and data dissemination.

Meeting participants endorsed the ongoing IFC contribution towards measuring relevant financial inclusion indicators. To address the important data challenges that pertain to financial inclusion, one avenue is to take stock of national practices and projects, including implementation of international data initiatives.

2014 survey of IFC membership

The 2014 IFC membership survey was short and focused on gathering feedback from members on IFC activities and on collecting suggestions for future work.

General satisfaction with IFC governance and activities remains high, with 63% of consulted central banks being "very satisfied" and 33% "satisfied". Almost all Committee members feel that IFC activities are relevant for their institution. IFC members have been actively participating in events organised by the IFC, with a participation rate of around 60% for the main events organised by the Committee, especially those organised in the context of ISI annual conferences. New, more specific IFC initiatives have raised strong interest too, for instance the IFC workshops on financial accounts and the task force on data-sharing. There was also great satisfaction with the Committee governance as well as with the work of the IFC secretariat.

As regards the IFC work programme, the survey highlighted several statistical subjects of interest such as: (i) financial stability indicators (eg macroprudential and supervisory data); (ii) "traditional" BIS statistics (eg debt securities, international banking statistics, property prices); (iii) external sector statistics; and (iv) data management issues (eg technology, SDMX standards, communication and dissemination). This feedback will help in the preparation of the future activities of the Committee.

Looking ahead

In 2015 the Committee will continue the work undertaken in the area of financial accounts (with an additional regional workshop for African countries), big data, financial inclusion and balance of payments issues, following up on the initiatives described above.

A key event will be the 60th World Statistical Congress in Rio de Janeiro in July 2015. The IFC will again sponsor a number of sessions, on derivatives statistics, government debt, the use of surveys, sectoral accounts, micro data and property prices. A satellite meeting will also be organised in cooperation with the Central Bank of Brazil on balance of payment issues, including a review of the new Balance of Payments Manual (BPM 6), the issue of nationality versus residency concepts, and the related communication challenges. Lastly, an IFC Workshop will be co-organised by the Central Bank of Poland in November 2015 on external sector statistics, reflecting the strong interest expressed by IFC members for this topic.

Annex 1
Members of the IFC Executive as of 1 January 2015

Under the chairmanship of Mr Muhammad bin Ibrahim, Deputy Governor of the Central Bank of Malaysia, the Committee held its annual meeting on 3 September 2014 and elected on this occasion Robert Kirchner (Deutsche Bundesbank), and João Cadete de Matos (Bank of Portugal) as new members of the Executive, replacing (as of 1 January 2015) Jacques Fournier (Bank of France) and Pascual O'Dogherty (Bank of Mexico).

The Committee also noted that Bruno Tissot, Head of Statistics and Research Support in the BIS Monetary and Economic Department, has been in charge of the IFC Secretariat since 1 June 2014, replacing Paul Van den Bergh.

The table below shows that there continues to be proper representation of all regions on the Executive.

Executive member	Institution	Term
1. Mr Turalay KENC (Chair)	Central Bank of the Republic of Turkey	2015–17
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 João CADETE DE MATOS	Bank of Portugal	2015-17
5. Mr Eugeniusz GATNAR	National Bank of Poland	2014–16
6. Mr Masahiro HIGO	Bank of Japan	2013–15
7. Mr Joon JUNG	Bank of Korea	2013–15
8. Mr Robert KIRCHNER	Deutsche Bundesbank	2015-17
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
Executive summary of the "*Data-sharing: issues and good practices*" report[1]

prepared by the IFC Task Force on Data Sharing

Ensuring and improving data-sharing between statistical and supervisory authorities has become more important in recent years. The financial crisis that erupted in 2007 underlined the usefulness of the data these authorities collect and the merits of sharing them. Supervisors, monetary and other macro policymakers need to have access to a wide range of information to facilitate a holistic approach in analysis. While objectives and mandates may differ, analysts and decision-makers in the relevant agencies should ideally have access to all pertinent available information. In this report, "data-sharing" refers to data collected from banks by national central banks or other competent national authorities.

Central bank statistical departments are often the promoters of data-sharing, and of related data cooperation more generally. Their objective is to support better policymaking. Data-sharing and cooperation facilitate this by: (i) providing a comprehensive and coherent picture for policymakers; (ii) building a holistic and multifaceted picture and promoting cross-fertilisation; (iii) enhancing data quality; and (iv) reducing reporting burdens and banks' reluctance to provide data, in particular new data. It is therefore important that these benefits and the best practices to achieve them are argued more strongly, including in the public sphere. Bringing them to the attention of other stakeholders such as supervisors and macroprudential authorities as well as reporting agents would be beneficial. Countries' experiences also suggest that it can be helpful that the central bank statistical departments proactively propose their services to supervisors as a way to facilitate data-sharing and data cooperation.

There is a need to create a new culture of data-sharing and cooperation. Political support at the highest levels (eg parliaments, treasuries or systemic risk boards) can be instrumental in promoting data-sharing and raising awareness of its benefits. As highlighted in the UK example, the move to greater data and information-sharing can be greatly facilitated if it is authorised and advertised from the top down. Promoting this business case will produce rewarding improvements for policymakers.

Data-sharing and data cooperation may not be easy to initiate. Obstacles may have to be addressed which require effort and a common willingness to cooperate, especially at the beginning. Therefore perseverance is essential in attaining these objectives.

This report describes some data and cooperation business models that have been implemented in a number of countries. These could be used as benchmarks, although starting points in data-sharing and cooperation differ and tailor-made solutions will have to be found in each country.

[1] IFC report on data-sharing: issues and good practices between statistical and supervisory authorities: http://www.bis.org/ifc/events/7ifc-tf-report-datasharing.pdf.

The report outlines a range of good practices and practical guidance, which are intended to serve all countries and organisations that wish to improve data-sharing and cooperation irrespective of the existing arrangements:

Good Practice 1 – Establish appropriate communication with stakeholders and seek proper institutional endorsement. It is important to establish a dialogue on the benefits of data-sharing on the basis of a catalogue of existing data collections and their possible uses. Establishing a single governance body with an overview of both statistical and supervisory data has a positive impact in sharing information with full knowledge of the facts.

Good Practice 2 – Ensure a clear legal basis to support data-sharing. Data-sharing may happen in the absence of an explicit legal framework, but this can lead to asymmetrical information, which can be disastrous in crisis situations, and ad hoc treatment of users with different tasks. A long-term solution should be pursued by seeking high-level institutional support for a clear legal foundation. If the existing legal framework does not allow for data-sharing for institutions' statutory tasks, the removal of all obstacles to statistical use and cross-checking of data should be sought.

Good Practice 3 – Establish fully fledged cooperation at all levels. It is of utmost importance that cooperation and dialogue among all parties involved be fostered, including within the same organisation, across agencies or with reporting agents, in order to achieve synergies and aim at common goals to facilitate data-sharing. Cooperation may help to streamline reporting burdens and decrease information asymmetry even if there are challenges in establishing a clear legal basis to support data-sharing.

Good Practice 4 – Collect common data using joint methodological and technical standards. Collecting granular data which can meet all user needs is important in promoting the benefits of sharing while avoiding some of the impediments. In fact, the legal constraints – if any – on data-sharing would fall away if both statisticians and supervisors had access to the same granular data source. This is facilitated by consistency of concepts, classification, methods and reporting standards. Statisticians may assist in data and quality management.

Good Practice 5 – Ensure sound measures to protect confidential information. Even when data are shared, they need to be protected, and key to this are eg secure IT infrastructures as well as confidentiality agreements and procedures for granting and monitoring access rights. Confidential data could also be transformed in different ways (eg anonymisation) before being shared, although such a fall-back solution may not be a preferred option considering in particular its implied costs.

Good Practice 6 – Formalise governance and cooperation arrangements. This can include introducing a memorandum of understanding (MoU) or similar formal arrangements which set out common rules to which institutions should adhere. The report gives practical guidance for compiling an MoU.

It is important that support be sought from newly established authorities responsible for macroprudential supervision or financial stability boards. Their work also requires timely and quality system-wide indicators on banking activities that need to be brought together from all available sources, irrespective of who the official owner of the underlying micro data may be. Given the number of possible stakeholders in data-sharing, the report illustrates the clear synergies to be gained from centralising data collection in the central bank statistical function.

Annex 3
Development of sectoral financial accounts

In support of the international initiatives for developing and improving sectoral financial accounts, the IFC organised workshops for central banks in three main regions: the Black Sea region and central and eastern Europe, in cooperation with the Central Bank of the Republic of Turkey; Asia, in cooperation with the South East Asian Central Banks (SEACEN) and the Central Bank of Malaysia; and Latin America and the Caribbean, in cooperation with the Central Bank of Brazil and the Center for Latin American Monetary Studies (CEMLA). The proceedings of these workshops will be published as a forthcoming IFC Bulletin.

A key objective is to augment the "traditional" national accounts framework to present information on financial flows and positions on a sectoral basis. Such "integrated sectoral financial accounts" can be instrumental in supporting financial stability analyses, for instance, to understand how and why a sector borrows from (or lends to) another sector, as well as to analyse financial interconnections. An important element is the provision of detailed information on a from-whom-to-whom basis – that is, a breakdown of all the main instruments of the financial assets and liabilities of a specific sector by its counterparty sectors.

However, the development of financial accounts brings with it acute data challenges. It often requires the collection of large data sets at the micro level, ie information that is granular enough to capture the situation of individual economic agents – for instance, security-by-security databases, credit registers, etc. Countries' experiences show that a micro data approach can have several benefits, such as enhanced analytical capabilities, greater flexibility, and reduced reporting burden, at least in the long run. Yet, there are also substantial difficulties, such as legal and confidentiality aspects, the costs and complexity of granular data collection, associated quality issues and, last but not least, the challenge of making use of detailed granular information in a comprehensive and simple way, especially for policymakers.

The IFC will continue to promote knowledge-sharing on this important topic for central banks and to identify best practices. There are several ways to address the limited availability and/or the quality of the financial accounts data, especially for the sectors of households and non-financial corporates. One important future recommendation is to ensure that joint efforts are made by the various data compilers to integrate financial accounts in a comprehensive and consistent way. Experience suggests that this integration should be implemented loosely, in "a weak sense" – by building a framework able to make a better use of existing data, instead of embarking on overly ambitious new data collection exercises. Lastly, data collection should be prioritised, so as to focus on selected subsectors and/or instruments that are key from a financial stability perspective – with particular priority placed on the non-bank financial institutions.

Annex 4
Overview of the Seventh IFC Conference

The seventh IFC conference on "*Indicators to support Monetary and Financial Stability Analysis: Data Sources and Statistical Methodologies*" was hosted by the BIS in Basel on 4–5 September 2014. It brought together 139 participants from central banks and statistical agencies in 60 countries. On this occasion, Zlatina Balabanova (ECB) and Ruben Peter van der Helm (Netherlands Bank) received the IFC award for the best paper presented by young statisticians for their study on "Enhancing euro area capital stock estimates".

The first two sessions covered new indicators for monetary policy and financial stability. The other sessions focused on the use of sample surveys, micro and granular data, new statistical methodologies and techniques to enlighten monetary and financial stability analysis at central banks in the aftermath of the recent financial crisis, especially in the presence of data gaps. A special session was devoted to household finance statistics. Two main themes emerged from the closing panel discussion: communication around statistics and the use of micro versus macro data.

The overarching theme of the first session on *New indicators for monetary policy* was how to condense several monetary indicators into a single one to serve as a policymaking tool. The usefulness of these new indicators for monetary policy decisions first depends on their accuracy. Comprehensiveness is also essential, as policymakers may need to rely on more than just a single indicator to gauge monetary conditions.

The second session on *New indicators for financial stability* showed that financial stability monitoring can be enhanced by: (i) the construction and use of composite financial conditions indices and (ii) the use of aggregated data reported at the base level by individual banks and non-bank financial institutions. One major point of debate is whether all aspects of financial conditions can be captured by a single indicator.

The session on *The use of sample surveys* discussed whether central banks can make use of surveys to supplement other statistical methods in order to fill information gaps. Indeed the use of surveys can help enhance monetary and financial stability analysis. In particular, bank lending surveys can convey useful information on credit standards not available from other sources. This can, for instance, help to get a better picture of SME financing. However, challenges remain, especially as regards low response rates, sampling bias, and survey quality. Cross-country comparability can also present an additional difficulty.

The session on *Granular and micro data* looked at how central banks can use aggregated and disaggregated micro data to improve their financial stability analysis and policy decisions. Indeed, such data on individual loans, individual securities and bank balance sheets can be useful. Several central banks rely on data from credit registries or individual loan repositories for their financial stability and monetary analysis, as well as for microprudential supervision. But there are issues related to data quality, confidentiality, cost-benefit trade-offs and comparability. On quality, the volume and complexity of very granular data make it more difficult to maintain data quality. Granular data also tend to be less complete. A detailed

dataset is more likely to have gaps than an aggregated one. Regarding confidentiality, a balance needs to be struck between drilling deep down into individual (entity-level) data and overcoming confidentiality restrictions, or offering confidentiality safeguards that the collection, storage and use of such detailed data requires. On the issue of cost, micro databases can be very labour-intensive and costly to build and manage. This means that a careful cost-benefit analysis needs to be conducted before a micro database project is launched. The results need to be communicated to future users of the data. Finally, there are harmonisation and comparability issues between micro databases prepared by different institutions or set up in different jurisdictions, which can pose challenges for cross-country analyses.

The session on *Statistical techniques and methodologies* introduced new ways that can be mobilised to better assess vulnerabilities such as the propagation of shocks across countries or sectors. They also allow a better measurement of systemic risk. Particular techniques can also help to meet users' needs without increasing the reporting burden, when data are incomplete. When using innovative statistical techniques central banks should take into consideration the scarcity of resources, data gaps and the statistical burden.

The session on *Policy indicators* highlighted the need for reliable policy indicators, especially in the area of public finance and supervision. A recurring theme is the issue of consolidation in the context of whom-to-whom financial accounts. Non-consolidated data suit international comparison better but include intra-group financing. Consolidated data at group level would be useful. Besides, the issue of net versus gross debt is important especially for fiscal analyses.

The session on *Household finance statistics* emphasised the need for policymakers to monitor the indebtedness and vulnerability of households, in particular with a view to identifying emerging threats to financial stability. Progress has been made but challenges remain in the area of measuring house prices, and household assets and liabilities. Micro information on households' wealth, income and consumption can be particularly useful for monitoring and analysis purposes. Since real estate often constitutes households' main source of wealth, residential property prices are also a key indicator of interest to policymakers.

The *Closing panel* discussion centred on two main themes: communication issues related to statistics and micro versus macro data.

How can better data quality be achieved through enhanced communication? There is a need for open and honest discussions between different stakeholders (eg central banks and supervisory agencies) in data collection. Within the same institution, communication on statistical issues must be horizontal as well as vertical. Horizontal communication should involve the various departments, while vertical communication along different hierarchical echelons of the institution can be essential to gain traction with senior management for statistical projects. As regards communication to the public, it is important to have healthy and transparent dialogue on statistical compilation methods. One form of communication is to perform more analysis with the data. Consultation with data reporting institutions and entities is also warranted on a regular basis to keep the reporting burden reasonable. Finally, there is need for dialogue on statistical issues between advanced and emerging market economies. Indeed, reporting rules or guidelines are often established in the former, where there is a lot of statistical expertise, but they must also be applied by the latter.

As regards the debate on micro versus macro data, it is generally felt that micro data can often yield superior analytical insights. But a balance needs to be found between exploiting the full granularity of the information and protecting its confidentiality. A good compromise might be to enrich statistical analysis with indicators such as concentration measures to complement averages. Another challenge in the use of micro data is cross-country comparability (because of potential differences in methodologies). Lastly the use of one composite index is often insufficient to characterise conditions or vulnerabilities in the entire economy or sector.

Annex 5
IFC participation in the 2014 ISI Asian Regional Statistics Conference – Seminar on "Is the household sector in Asia overleveraged: what do the data say?"

The Committee organised six sessions at the ISI Regional Statistics Conference, co-organised by the Central Bank of Malaysia and the ISI, and held in Kuala Lumpur in November 2014. The titles of the sessions were: (i) "Application of statistical techniques for surveillance and decision/policy making"; (ii) "Compilation of economic indicators through survey"; (iii) "Compilation and usage of flow of funds statistics"; (iv) "Housing bubble: measurement of housing price"; (v) "Measuring government and public sector debt"; and (vi) "Securities statistics compilation and stock market analysis".

In addition, a full-day IFC satellite seminar addressed the question: "Is the household sector in Asia overleveraged: what do the data say?". This proved to be a very timely topic.

The economic importance of the household sector has developed markedly in Asia since the 1990s. The financial and non-financial assets held by households have expanded significantly, and so have their liabilities. Certainly, the growing level of debt in the household sector could indicate growing strength in Asian domestic demand as well as increased resilience to economic shocks. But it also involves risk and is posing new challenges, especially for policymakers.

The first challenge is the data itself. Enhancing the quality of data on household balance sheets in Asia requires further development of the financial sector accounts. Many projects are being initiated in the region to develop these accounts and also to mobilise other data sources on households' overall financial positions. However, significant data gaps remain in most countries in Asia. While liabilities are relatively easy to assess, the measurement of household assets can be challenging. Data collection exercises should focus on the key elements of both sides of household balance sheets, with a sufficient long-term view and attention paid to actual policy needs. Another key point is to correctly take into consideration cross-border positions and flows.

The second challenge is the particular role played by housing, which often represents the bulk of household assets. But as houses are expensive, housing also represent important liabilities (mortgages) for households. This puts a premium on having reliable data on house prices and housing wealth. However, the measurement of residential property prices remains challenging, and the choice of the adequate indicators may depend on the analysis conducted and on the policy questions being asked. Further research and development is obviously needed on this front. One particular issue is the adjustment of prices for quality and the use of hedonic methods. Another is the development of non-price indicators that can be useful for assessing the property cycle, such as: diffusion indexes, measures of housing affordability, and web-based indicators of supply and demand. Yet a last issue is the variability of house prices within a country.

A third challenge is how to move beyond the simple measurement of assets and liabilities to get a sense of the financial soundness of households' positions.

There are various indicators that can be used to assess the risk of financial distress and vulnerabilities to sudden movements in asset prices. Experience suggests in particular that the evolution credit-to-GDP ratios, property prices and households' repayment capacities (eg the debt service ratios) can be very useful for debt sustainability analysis. Specific attention should be paid in this context to low-income households. To this end it is important to access data at a sufficiently granular level, for instance individual loan databases maintained by financial institutions, public credit registers, etc.

A fourth issue is that aggregate data is not enough. The G20 Data Gaps Initiative has highlighted the importance of knowing more about the distribution of households' balance sheet positions. For instance, financial stability risks may still be high if debt is concentrated on a very specific group of households, eg new homeowners that have to rely extensively on bank financing. But capturing distributional information requires a better understanding of the links between the "macro" national accounts-based world, and the "micro" world based on granular information, especially on income, wealth and debt. One avenue is to have available specific panel datasets that are sufficiently rich at the micro level, available in a timely manner, and regularly updated over time.

A fifth challenge is how to use information on household financial positions and possible vulnerabilities and translate it into policy recommendations, especially to mitigate financial stability risks. For instance, the design and implementation of macroprudential policies (eg loan-to-value limits, debt servicing limits) require close monitoring of available data. This is often further complicated by policies that are targeted at specific segments of the household sector or housing market. Assessing the effectiveness of such policies over time is critical in ensuring their timely calibration and, at some point, their removal. It will also help to mitigate possible unintended consequences, especially as regards agent behaviours in response to these policies and the overall impact on the economy. The Asian region has gained a lot of experience in recent years with regard to the design and the use of such macroprudential tools.

Annex 6
Data issues related to financial inclusion – a potential roadmap

Financial inclusion is a fundamental issue for governments and policymakers around the world. It is estimated that at the beginning of the 2000s, half of world's adult population did not have an account at a formal financial institution – this proportion was as high as 75% for the poorest people.

The central bank community has a clear interest in tackling this situation. Greater financial inclusion is essential for sustained economic welfare and for reducing poverty. It will also support economic, monetary and financial stability, by making saving and investment decisions more efficient, enhancing the effectiveness of monetary policy instruments, developing and strengthening the financial sector, and facilitating monitoring of the economic system. In turn, economic stability allows for a well-functioning financial system that can support financial inclusion.

If financial inclusion is a key policy area, why are data an important issue? A starting point is that it is essential to rely on well-founded data frameworks when developing financial services for the poor, in both formal and informal markets. Good data are a precondition for good financial inclusion policies. They ensure that financial inclusion is properly assessed and that policies aimed at developing it are adequately implemented, monitored, and adjusted as required. Good statistics can also help to strike a fine balance between encouraging innovation and growth of financial services on the one hand, and ensuring that financial stability is preserved on the other hand.

The Irving Fisher Committee is a BIS-hosted forum to discuss data issues of interest to central banks. Its expertise can be mobilised to support the development of international standards for measuring financial inclusion, assessing the implementation of such standards and addressing the related methodological challenges. The IFC has already been pro-active in bringing together economists and statisticians from central banks to discuss data and measurement issues related to financial inclusion. In 2012 it co-sponsored with the Central Bank of Malaysia an international meeting on financial inclusion indicators.

Based on this experience, there are four main areas (the "roadmap") that address data issues related to financial inclusion.

1. Methodological concepts (how to look at financial inclusion?)

There is currently no standard definition of financial inclusion. In a narrow sense, it refers to the delivery of accessible, affordable, appropriate and cost-effective financial products and services to households. This definition can be extended to include enterprises, especially smaller ones. In its broadest form, financial inclusion can also encompass the qualitative aspects of financial inclusiveness such as financial literacy and consumer protection. Contrary to more conventional forms of financial intermediation, one needs to consider formal as well as informal networks when thinking about financial inclusion. This adds to the complexity of the concept.

The lack of a uniform definition suggests that a preliminary step in thinking about data issues related to financial inclusion is to conduct a stock-taking exercise of the various methodologies applied for defining it. As a committee of central banks, the IFC is ideally placed to organise a survey of national experiences and to help to identify what a common approach could be, based on best or commonly-shared practices.

2. Statistical data framework (defining the scope of financial inclusion data exercises)

Policymakers in general and central banks in particular need to base their actions on sound data. This is particularly the case in the area of financial inclusion. The experience of the IFC is that a key ingredient for having good data is the development of internationally comparable indicators that allow for benchmarking among countries.

This does not imply that national data collection should be unified – experience suggests that this can be a very lengthy and complex process, and in any case there are important country specificities. But it does call for the establishment of a common indicative framework for dealing with data to measure financial inclusion. Such a framework would be helpful for: (i) comparing national situations; (ii) fostering the development of well-calibrated composite indicators; (iii) addressing methodological issues when using these indicators for policy development purposes; and (iv) assessing the performance of financial inclusion policies.

3. Statistical data collection (what are the indicators of interest, and how to collect them?)

It is widely recognised that there is a need for a basic set of data that includes indicators of financial access and usage of financial products and services. Statistics on, for example, the spread of bank networks and ATMs, the number of deposit and loan accounts, the contribution of migrant remittances as a source of capital for development, deposit/GDP and credit/GDP ratios fall in this category. Such data already exist in some form, at least partially, and it would perhaps be useful to document their availability, both in domestic and international databases.

A secondary set could include more elaborated data, in areas like payments and remittances, credit information, financial capability and consumer protection. Here there may be a need for more consultation work to define the precise indicators that should be considered. Furthermore, by virtue of their qualitative nature, some of the more elaborate indicators are less widely available than those of the basic set, and would require more work on exploring data sources. Capturing the contribution of (formal and informal) non-bank entities to financial inclusion may be especially challenging.

For all these indicators, it would also be important to draw on the various initiatives – especially those undertaken under the aegis of international financial institutions – that provide guidance on the collection of financial inclusion data.

4. Data dissemination (how to communicate the data)

As financial inclusion is a new area of statistical analysis, it would be useful to analyse how these data are disseminated and communicated, both to official authorities and to the public at large. Note that the mandate of a number of central banks includes a general mission to educate the public at large. So, in countries where financial inclusion is an important issue, communication on the topic can be of particular relevance for the central bank. Here again it would be useful to analyse the variety of country experiences and assess best or commonly shared practices.

In conclusion, the IFC could serve as a forum for mobilising the central banks' network so as to better address the important data challenges with respect to financial inclusion – especially by taking stock of national practices and projects, including implementation of international data initiatives. One way forward would be to assess the feasibility of a survey of country practices that the Committee could, at some point, decide to conduct among its IFC members. Such an exercise could be useful for, among other things:

- enhancing methodologies for the collection, compilation, presentation and publication of financial inclusion data;
- filling existing data gaps by using surveys, developing methodologies for qualitative indicators and measuring how new technologies are facilitating financial inclusion;
- developing composite indices comparable across regions and over time;
- contributing towards an analytical framework for assessing the implementation of financial inclusion policies and standards; and
- coordinating with international groups.