

Committee on the Global Financial System

CGFS Papers

No 47

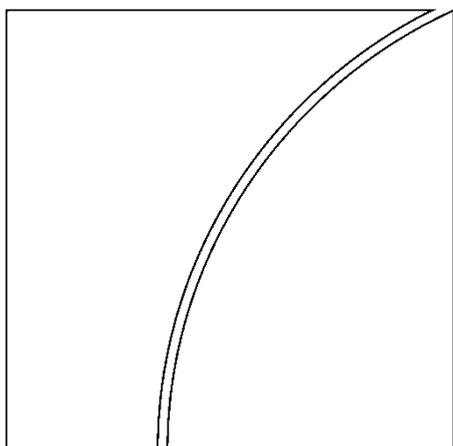
Improving the BIS international banking statistics

Report submitted by an Ad-hoc Group established by the
Committee on the Global Financial System

The Group was chaired by Werner Hermann, Swiss National Bank

November 2012

JEL Classification: F30, Y10



BANK FOR INTERNATIONAL SETTLEMENTS

This publication is available on the BIS website (www.bis.org).

© *Bank for International Settlements 2012. All rights reserved. Brief excerpts may be reproduced or translated provided the source is cited.*

ISBN 92-9131-160-X (print)

ISBN 92-9197-160-X (online)

Preface

In March 2010, to facilitate coordination of ongoing work on statistical data gaps at the BIS and its member central banks, the Committee on the Global Financial System (CGFS) established an Ad-hoc Group for the review of statistical proposals. Like earlier financial crises, events following the Lehman bankruptcy had highlighted the need for improved data for financial stability analysis, including possible enhancements to the BIS international banking statistics – a key dataset collected under the auspices of the CGFS.

The Group, composed of economists as well as statisticians, was chaired by Werner Hermann of the Swiss National Bank. Liaising with other groups working on statistical matters, it reviewed and prioritised a large number of potential enhancements of the international banking statistics, surveyed reporting banks regarding the cost implications of enhanced reporting, and prepared specific proposals for review by the Committee. The proposals, presented in two stages, were approved by the Committee in January 2012. They have since entered implementation, with enhanced data scheduled to start becoming available in late 2012. Data quality permitting, publication of enhanced (Stage 1) aggregates would begin in early 2013.

We hope that the statistical enhancements described in this report will help close some of the important data gaps revealed by the recent crisis, aiding central banks, other policymakers and private sector analysts in their monitoring of financial sector developments.

William C Dudley

Chairman, Committee on the Global Financial System
President, Federal Reserve Bank of New York

Contents

Preface	iii
1. Introduction and executive summary.....	1
2. A short summary of the IBS	2
3. The enhancements in detail	4
3.1 Stage 1: full balance sheets and vis-à-vis country information	4
3.1.1 Rationale and nature of Stage 1 reporting.....	4
3.1.2 Stage 1 implementation	5
3.2 Stage 2: closing key data gaps	6
3.2.1 Rationale and nature of Stage 2 reporting.....	6
3.2.2 Stage 2 implementation	7
4. Possible future work on IBS enhancements.....	7
References	9
Appendix 1 Details of the specific proposals – Stage 1	10
Appendix 2 Details of the specific proposals – Stage 2	14
Appendix 3 Proposed nationality and vis-à-vis breakdowns for the locational (nationality) statistics.....	23
Appendix 4 Members of the CGFS Ad-hoc Group on Statistics	25

1. Introduction and executive summary

Every financial crisis exposes gaps in data coverage that later need to be filled. Indeed, past crises have often spurred the improvement of financial statistics, including those collected by the BIS under the auspices of the Committee on the Global Financial System (CGFS). The turbulence that hit developing countries in the 1970s and early 1980s, for example, led to major revisions in the BIS international banking statistics (IBS), which have been collected since the 1960s to monitor the international activities of banks across an increasing number of reporting countries. The Asian crisis, in turn, prompted further refinements in those statistics and major enhancements in the disclosure of foreign exchange reserves. In each of these cases, the CGFS, as the oversight body for most of the BIS statistics, played a vital role in assessing the usefulness of new data requests and in providing guidance on the cost-benefit aspects of such additional reporting.

In early 2010, triggered by the most recent crisis experience, the CGFS mandated the Ad-hoc Group on Statistics, chaired by Werner Hermann (Swiss National Bank), to investigate various options for improving the IBS. The Group analysed a range of proposals from a conceptual and practical perspective. In addition, it surveyed the private sector on the additional reporting burden, and considered ways to reduce these costs without materially compromising the analytical value of the data being collected.

The Group followed a two-stage approach. The first stage focused on enhancements to the IBS that improve the ability to monitor global financial stability without requiring central banks to collect additional data from their reporting financial institutions (although they will involve significant changes to reporting systems at central banks as well as at the BIS). These enhancements will provide a more comprehensive picture of national banking systems' global consolidated balance sheets and allow for a more detailed analysis of vis-à-vis country information. The CGFS approved the Stage 1 enhancements in April 2011. The first data will refer to Q2 2012.

Work at the second stage sought to expand IBS data coverage to improve, in particular, (i) the understanding of banks' credit exposures to particular countries and counterparty sectors, (ii) the monitoring of trends in the supply of bank credit (both cross-border and domestically sourced) to the financial and non-financial sectors of individual countries, and (iii) assessments of banks' funding risks, including currency (and, to a lesser extent, maturity) mismatches in the assets and liabilities of major banking systems. In addition, reporting central banks decided to make efforts to advance the completeness and accessibility of their existing national data contributions. The CGFS approved the Stage 2 enhancements in January 2012. Stage 2 is scheduled to begin with the reporting of data for Q4 2013.

The two sets of enhancements are designed to make significant and long-lasting improvements to the IBS. To minimise the burden for reporting institutions, they tie in with other international data initiatives, particularly the work led by the Financial Stability Board (FSB) secretariat and International Monetary Fund (IMF) staff on closing data gaps, which includes the development of a bank-level dataset for systemically important global banks (see FSB-IMF (2009, 2010, and 2011)).

This report documents these forthcoming enhancements of the IBS based on the work of the Ad-hoc Group. Section 2 provides a short, high-level introduction to the IBS, as they are currently reported, and their main uses. Section 3 describes the key features of the recently adopted Stage 1 and Stage 2 IBS enhancements and assesses the new data's analytical value. Section 4 ends by outlining possible future work on IBS enhancements.

2. A short summary of the IBS

The IBS are a long-established and widely used dataset for monitoring the cross-border positions of internationally active banks. Even though they are based on information provided by individual creditor banks, the statistics are reported at a country rather than an institutional level, and hence they are best suited for macro analysis of economic and financial stability issues.¹ One key advantage is coverage, with the IBS capturing the international activities of more than 7,700 banking entities from 44 countries.

There are four main IBS data sets: (i) locational by nationality; (ii) locational by residency; (iii) consolidated on an immediate borrower basis; and (iv) consolidated on an ultimate risk basis.² They were established by central banks and the BIS at different times and with different objectives in mind.³

The first two sets, often collectively referred to as the “*locational banking statistics*”, cover banks’ international financial assets and liabilities based on the residence of the reporting entity. The locational by residency statistics provide information on the residence of the reporting banks’ counterparties, while the locational by nationality data provide information on the nationality of ownership of the reporting banks. The other two data sets, collectively forming the “*consolidated banking statistics*”, cover reporting banks’ worldwide consolidated international claims, both on an “*immediate borrower*” (IB) and “*ultimate risk*” (UR) basis. The latter takes risk transfers (such as hedges and other guarantees) into account.⁴

The available breakdowns differ across the various sets of statistics, as summarised in Table 1 below. Details for global aggregates and individual reporting countries are published quarterly by the BIS, according to the confidentiality restrictions specified individually by each reporting country.

The IBS can be used to address banking system-related questions in several broad areas. The first area is banks’ credit exposures to particular countries and counterparty sectors. For example, the BIS consolidated banking statistics (on both the IB and UR basis), have been particularly useful in assessing banks’ exposures to troubled sovereigns in the recent euro area crisis.

A second area is the supply of bank credit (both cross-border and domestically sourced) to the non-bank sectors of individual countries. Here, the locational banking statistics provide information on the cross-border borrowing by non-bank entities that, at the country level, is not generally picked up in domestic statistics.

A third area is banks’ funding risk. Key aspects include the monitoring of the banking systems’ mismatches in the currency and maturity of their assets and liabilities; and banks’ reliance on particular funding sources. For example, the system-level view of the US dollar

¹ There is no single “best” indicator that fully captures the complex nature of systemic risk. In this light, various authors have argued in favour of a *two-stage framework* for systemic monitoring. This would be based on a routine review of high-level information, such as the IBS, complemented by a detailed analysis of more granular indicators if and when required. See Eichner et al (2010) and Cecchetti et al (2010).

² For more detail on the BIS international banking statistics, see BIS (2009).

³ The locational statistics were originally established in the 1960s to track the growth in US dollar deposits outside the United States, and are a key source of information on the currency and geographical composition of banks’ international balance sheets (see BIS (2011)). The consolidated statistics were established in the early 1980s after debt crises in developing countries highlighted the need for information on banks’ exposures to country risk (see McGuire and Wooldridge (2005)).

⁴ See CGFS (2000) and McGuire and Wooldridge (2005) for a discussion of the ultimate risk data.

rollover needs of non-US banking systems afforded by these statistics has helped to explain the dislocations in short-term funding markets over the past several years (see more detailed discussion below). Finally, the statistics help in analysing the flow of capital from surplus countries to deficit countries through the global banking system. Such information is important in its own right, and also feeds into countries' financial accounts and balance of payments statistics.

Table 1: The BIS locational and consolidated banking statistics compared

	Locational statistics		Consolidated statistics	
Reporting unit	Banking offices resident in the reporting country (host country)		Banks headquartered in the reporting country (home country)	
Reporting countries	44 (20 CGFS members plus 24 other banking centres)		30 (19 CGFS members plus 11 other banking centres)	
Reporting basis	Unconsolidated data, including inter-office positions		Worldwide consolidated data, excluding inter-office positions	
Reported positions	Claims and liabilities, excluding positions in local currencies vis-à-vis residents of the reporting country		Claims and other potential exposures, excluding positions vis-à-vis residents of the reporting country	
Measures	Amounts outstanding at quarter-end and exchange rate adjusted changes in amounts outstanding		Amounts outstanding at quarter-end	
Reported breakdowns:	Locational by residency of banking office ¹	Locational by nationality of banking office ¹	Consolidated on an immediate borrower basis	Consolidated on an ultimate risk basis
1. Claims	cross-border in all currencies, local in foreign currencies	cross-border in all currencies, local in foreign currencies	International, local in local currencies	Cross-border, local in all currencies
2. Vis-à-vis country	>200 countries	n/a	>200 countries	>200 countries
3. Currencies	Domestic, USD, EUR, JPY, GBP, CHF	Domestic, USD, EUR, JPY	n/a	n/a
4. Sector	Non-banks, banks	Non-banks, banks, of which related offices, official monetary authorities	Banks, non-bank private, public	Banks, non-bank private, public
5. Type of instrument	Loans and deposits, debt securities, other financial instruments	n/a	n/a	n/a
6. Maturity	n/a	n/a	≤1yr, >1yr ≤2yr, >2 yr (remaining maturity)	n/a

¹ The nationality statistics are compiled by regrouping the same locational data into categories based on the control or ownership of the banking offices in question. Both locational data sets are on an immediate counterparty basis.

3. The enhancements in detail

3.1 Stage 1: full balance sheets and vis-à-vis country information

3.1.1 Rationale and nature of Stage 1 reporting

The Stage 1 enhancements to the IBS focus on the locational banking statistics and are designed to make the IBS as useful as possible based on data that are already available at most central banks. The CGFS formally approved them in April 2011. The specific Stage 1 proposals made by the Ad-hoc Group are reported in Appendix 1. Changes can be grouped into two broad areas:

Full balance sheets. For each national banking system,⁵ the existing structure of the locational by nationality statistics covers banks' operations at an *office location level*. Taking UK headquartered banks as an example, the statistics cover the asset and liability positions of UK banks' home offices separately from their positions booked by their offices located in, say, France or Germany. In principle, these locational by nationality data can be aggregated across all host countries into a consolidated balance sheet for UK banks worldwide.⁶ This provides a picture of UK banks that is complementary to that provided by the BIS consolidated statistics for UK banks, but with (i) detail on the positions booked by offices in particular host countries, and (ii) information on UK banks' liabilities, neither of which are covered in the BIS consolidated statistics.

There are gaps in the existing reporting framework for the locational by nationality statistics that the enhancements aim to fill. The statistics currently cover reporting banks' international positions only, and thus miss a critical piece of banks' balance sheets. That is, for banks in each host country (eg UK banks in Germany), the statistics cover banks' cross-border positions in all currencies and their local positions (*vis-à-vis* residents of the host country) in foreign currencies only. Thus, banks' locally extended *domestic currency* positions are not covered – a shortcoming of the current statistics that the Stage 1 enhancements will now address. In addition to this, the currency breakdown available in the locational by nationality statistics will be further refined to include Swiss franc and UK sterling positions, adding to the US dollar, euro and Japanese yen positions that are already available. Finally, the enhancements also include specific suggestions for improving the completeness and consistency of data that are already reported.

Combined, these enhancements will provide a more comprehensive picture of a national banking system's global consolidated balance sheet that is comparable with the BIS consolidated statistics, but with further detail by office location. This, in turn, will facilitate a fuller (even though imperfect) analysis of banks' sources and uses of particular currencies. This will help in monitoring aggregate imbalances in funding markets (ie the liability side of banks' balance sheets), which were an important feature of the 2007–09 financial crisis.⁷ In particular, banks' cross-currency funding (the degree to which they invest in one currency

⁵ In the context of the IBS, a national banking system is the set of internationally active banks headquartered in a particular country.

⁶ The construction of the global balance sheet for a particular national banking system from the locational by nationality statistics relies on individual central banks having access to the data of other reporting central banks through the BIS, or the BIS doing the necessary data aggregation. The aggregation is imperfect because: (i) there are reporting differences across central banks; and (ii) for some (but not all) countries, complex banking groups' SPVs and non-bank financial corporations are included in the consolidated statistics, but not in the locational statistics.

⁷ See, for example, CGFS (2010b).

and fund in another) proved to be a source of vulnerability as it involved the use of FX swaps and forwards, which are short-term contracts that need to be rolled over regularly regardless of the maturity of the underlying liability. Too many banks funding in the same direction – the funding equivalent of a “crowded trade” – created systemic risks that were difficult to monitor.⁸

Banks’ main funding, risk-taking and capital allocation decisions are typically made at the group level. But office-level data are a useful complement, as funding problems often first develop on banks’ local balance sheets and because it may not be easy to transfer resources between offices, particularly during periods of financial market stress.⁹ Importantly, the CGFS’s Stage 1 enhancements will facilitate monitoring of these funding vulnerabilities both at a *consolidated global* level and at an *office location* level.¹⁰ Moreover, additional data elements will be added in the Stage 2 enhancements to further facilitate the analysis of funding risks (see below).

Vis-à-vis country information. At present, the locational by nationality statistics capture the claims and liabilities of banks of a given nationality in a given reporting country vis-à-vis counterparties in *all other countries combined*. That is, it is currently not possible to jointly analyse reporting banks’ nationality, their location and the location of their counterparties (eg the positions of UK banks in France vis-à-vis borrowers in the United States). The second major enhancement, therefore, is the addition of a vis-à-vis country dimension that reveals the entire geographical exposure of banks’ balance sheets.

Adding a vis-à-vis country dimension allows a detailed analysis of the transmission of funding shocks across countries through the banking system. For example, if there is a major shock to a particular source of bank funding (say, US money market funds or petrodollars deposited in banks by oil exporting countries), the IBS could help identify which office locations of specific national banking systems rely most heavily on that funding source, and which countries and counterparty sectors those banking offices lend to.¹¹ More generally, the IBS allow close monitoring of trends in the supply of credit (both cross-border and domestically sourced) to different non-financial sectors of individual countries’ domestic economies. The enhanced data could also be analysed together with the consolidated banking statistics to better understand how banking groups operate across countries.

3.1.2 Stage 1 implementation

The majority of Group members (and most of the other reporting central banks) have indicated that they will be able to start providing the BIS with enhanced data in late 2012, covering the Q2 2012 reporting period. That said, consistent with the existing voluntary reporting framework for the IBS, the proposed enhancements will be implemented by reporting central banks on a best efforts basis. Some central banks might not be able to report all of the additional data, although enough information will be available to provide comprehensive coverage at the global level. Also, some reporters might start providing the additional items only in 2013 or 2014.

⁸ See McGuire and von Peter (2009).

⁹ This could complement more frequent and timely data collection on this issue at the supervisory level (eg enhanced liquidity monitoring under Basel III).

¹⁰ This is discussed, for example, in Cecchetti et al (2010).

¹¹ For more of a discussion of this sort of analysis, see Fender and McGuire (2010).

3.2 Stage 2: closing key data gaps

3.2.1 Rationale and nature of Stage 2 reporting

The Stage 2 enhancements to the IBS introduce new data fields in both the locational and consolidated banking statistics to improve, in particular, (i) the understanding of banks' credit exposures to particular countries and counterparty sectors, (ii) the monitoring of trends in the supply of bank credit (both cross-border and domestically sourced) to the financial and non-financial sectors of individual countries, and (iii) assessments of banks' funding risks, including currency (and, to a lesser extent, maturity) mismatches in their assets and liabilities. In addition, reporting central banks will endeavour to improve the completeness and accessibility of their existing national data contributions to the IBS. The CGFS approved the Stage 2 enhancements in January 2012. The detailed Group proposals are reported in Appendix 2 and can be grouped into four broad areas.

Better measurement of country credit risk. The first goal of the Stage 2 enhancements is to make the IBS much more useful for monitoring the credit exposures of national banking systems. To this end, the counterparty sector breakdown in the consolidated (UR) statistics will be made more detailed. Exposures to borrowers in the banks' home country, which are currently not collected, will be added, and consistent measures of the size of banks' equity base and total balance sheet will also be reported. Major emerging economies, whose banks are becoming increasingly important in the global financial system, are also encouraged to start reporting the IBS.

Monitoring trends in the supply of bank credit and banks' funding patterns. The second goal of the Stage 2 enhancements is to better track trends in the supply of bank credit and in banks' funding patterns. In the locational by residency statistics, banks will be grouped into domestic banks, foreign branches and foreign subsidiaries, allowing analysts to see how the lending behaviour and funding structures of those bank types differ. Moreover, a more detailed counterparty sector split will be introduced into both the locational by residency and nationality statistics so as to better measure the size, volatility and (country/sector) source of cross-border borrowing by resident banks, non-bank financial institutions and the non-financial private sector. Currently available data suggest that, in many countries, cross-border lending to the domestic economy was considerably more procyclical than domestic lending in the recent boom and bust.¹²

Better measurement of banks' funding risk. A third goal of the Stage 2 enhancements is further improvements in the measurement of bank funding risk. In particular, banks will start to report their total liabilities in the consolidated (IB) statistics, including a breakdown of their funding by broad instrument type – deposits, short- and long-term debt securities, derivatives, other liabilities, and total equity. In addition, a basic maturity split – short- and long-term by remaining maturity – will be included for banks' debt securities liabilities in both the locational by nationality and by residency statistics. These data will be useful in gauging which bank nationalities are reliant on less stable funding sources, such as short-term debt.

Maximising the usefulness of the existing BIS data requirements. With the growing prominence of the IBS over recent years, a final goal of the Stage 2 enhancements is to improve the completeness and accessibility of the IBS. Several central banks have agreed to close key gaps in their data reporting, so as to meet all of the current reporting guidelines. Furthermore, all Group members will revisit the confidentiality settings applied to their data with a view to making the data more widely available (particularly to other central banks, but also to the general public).

¹² See, for example, CGFS (2011b).

Group members have costed these proposals with their reporting financial institutions. The enhancements involve a significant additional reporting burden for banks in some countries (as well as for central banks and the BIS). However, based on its own analysis and feedback from reporting institutions, the Group believes that it has struck a reasonable balance between analytical value and reporting burden.

3.2.2 Stage 2 implementation

Consistent with the existing approach for central banks' reporting of the IBS, the Stage 2 enhancements should be implemented by central banks as soon and as fully as possible. There are two elements to this: (i) the comprehensiveness of the data provided, and (ii) the starting date for reporting. The majority of Group members (and, according to current indications, most of the other reporting central banks) expect to be able to provide the additional data items for these proposed enhancements to the IBS. With some limited flexibility in the start date for reporting of the additional data items, most central banks expect to start from the Q4 2013 reporting quarter, but some beginning reporting during the following year.

4. Possible future work on IBS enhancements

In agreeing the enhancements covered in this report, there was a considerable amount of discussion in the Ad-hoc Group about how to best position the IBS for the future. As a result, the Group developed several additional enhancements to the IBS that it thought were potentially worthwhile to pursue over the medium to longer term. These additional enhancements were not recommended for immediate implementation as: (i) they imposed a very large reporting burden on banks in some countries at a time when banks are already being asked by regulators to provide significant amounts of additional data; and/or (ii) they would need considerable additional analysis and discussion before any implementation decisions could be made. The Group hopes that these extensions, which are outlined below, might help to guide future work on improving the IBS.¹³

First, the Group agreed that a direct measurement of banks' maturity mismatches for their assets and liabilities (and by currency) is important for financial stability analysis. As discussed above, large maturity mismatches and the freeze-up of wholesale markets during the crisis created severe liquidity pressures, especially in US dollars, for many internationally-oriented banks. Moreover, the existing BIS data on banks' external funding risks are somewhat limited. However, this is a reasonably large change to the IBS and there was no clear consensus in the Group about how to proceed. The Basel Committee on Banking Supervision (BCBS) is also currently working with national regulators to develop new data returns in this area as part of the implementation of the new liquidity and stable funding ratios for banks, and the Group did not want to duplicate or complicate this process (see BCBS (2009, 2010)).

Second, the Group thought that, in principle, achieving a better alignment between the IBS and supervisory data would be important, as it could enhance the credibility of both datasets and make it easier for users to move between aggregate and institution-level data in their analysis. However, this would require, amongst other issues, revisiting the current "ultimate

¹³ In addition to highlighting the desire for a more granular counterparty sector breakdown as discussed above, some further suggestions for improving the IBS are included in Box 1 of Hoggarth et al (2010). However, these suggestions come from a users' perspective only, and some of them would be costly for banks to implement. They have not been endorsed by the Group at this time.

risk” definition in the consolidated banking statistics. At this juncture, a majority of Group members thought that it would take some time to carefully think through and resolve the conceptual and practical issues, and that this would have materially delayed the implementation of the Stage 2 enhancements.¹⁴ In some countries, changes to the ultimate risk statistics would also need to be coordinated with bank supervisors and would impose a large reporting burden on banks. The Group thus concluded that, in the near term, central banks could manage the differences between the IBS and supervisory data through effective communication with other authorities, data users and the broader public.

Third, the Group saw merit in central banks doing further work to harmonise the definition of bank consolidation in the IBS, so as to enhance the cross-country comparability of the statistics. Because of differences in national reporting systems and accounting rules, and also some political sensitivities, it may be difficult to achieve full consistency in the level and scope of consolidation across reporting countries. However, as suggested in the Group’s proposals (Proposal 3 in Appendix 2), it would be good for central bank statisticians to develop for the IBS a “best practice” definition of consolidation on which countries can converge over time.

Finally, individual central banks are encouraged to continue to work towards implementing the components of the more detailed sector splits in the locational and consolidated statistics (see Proposals 4 and 8 in Appendix 2). As already discussed, these more detailed sector splits will further improve the usefulness of the IBS for assessing banks’ country credit risk and for monitoring the size and volatility of cross-border borrowing by the domestic non-financial private sector. However, the Group recognised that these counterparty sector splits impose a significant reporting burden on banks in some countries, and that it is for national central banks to decide when these counterparty sector splits are introduced.

The Group proposes that these four additional potential extensions be revisited at some point in the future once implementation of the current round of enhancements is fully completed. As a first step, they will be examined by the BIS (together with interested central banks) and discussed at a future biennial meeting of central bank statistics experts.

¹⁴ The IBS definition of ultimate risk would also need to be consistent with that being considered in other data initiatives, such as the FSB Data Gaps Group’s proposed reporting templates for systemically important banks.

References

The Banker (2011): *Top 1000 World Banks*, July.

Bank for International Settlements (2009): "Guide to the international financial statistics", Monetary and Economic Department, July.

——— (2010): "Why do the BIS data on public sector foreign claims differ from the CEBS data on sovereign exposures?", *BIS Quarterly Review*, December.

——— (2011): "The BIS international banking statistics: uses and enhancements", *81st Annual Report*, 26 June.

Basel Committee on Banking Supervision (2009): "Consultative proposals to strengthen the resilience of the banking sector announced by the Basel Committee", 17 December.

——— (2010): "The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package", 26 July.

Cecchetti, S, I Fender and P McGuire (2010): "Toward a global risk map", in ECB (ed), *Central bank statistics: what did the financial crisis change?*, February, pp 73–100.

Committee on the Global Financial System (2000): "Report of the Working Group on the BIS international banking statistics", *CGFS Papers*, no 15, September.

——— (2010a): "The role of margin requirements and haircuts in procyclicality", *CGFS Papers*, no 36, March.

——— (2010b): "The functioning and resilience of cross-border funding markets", *CGFS Papers*, no 37, March.

——— (2011a): "The impact of sovereign credit risk on bank funding conditions", *CGFS Papers*, no 43, July.

——— (2011b): "Global liquidity – concept, measurement and policy implications", *CGFS Papers*, no 45, November.

Eichner, M, D Kohn and M Palumbo (2010): "Financial statistics for the United States and the crisis: what did they get right, what did they miss, and how should they change?", *Finance and Economics Discussion Series*, no 2010–20, Washington DC.

Fender, I and P McGuire (2010), "Bank structure, funding risk and the transmission of shocks across countries: concepts and measurement", *BIS Quarterly Review*, September.

Financial Stability Board and International Monetary Fund (2009): "The financial crisis and information gaps", Report to the G20 Finance Ministers and Central Bank Governors, October.

——— (2010): "The financial crisis and information gaps: Progress Report, Action Plans and Timetables", May.

——— (2011): "The financial crisis and information gaps: Implementation Progress Report", June.

Hoggarth, G, L Mahadeva and J Martin (2010): "Understanding international bank capital flows during the recent financial crisis", Bank of England, *Financial Stability Papers*, no 8, September.

McGuire, P and G von Peter (2009): "The US dollar shortage in global banking and the international policy response", *BIS Working Papers*, no 291, October.

McGuire, P and P Wooldridge (2005): "The BIS consolidated banking statistics: structure, uses and recent enhancements", *BIS Quarterly Review*, September.

Appendix 1 Details of the specific proposals – Stage 1¹⁵

Building the full balance sheet for internationally active banks

To better capture the entire balance sheets of internationally active banks, it is proposed that central banks start reporting banks' domestic positions (positions in domestic currency against residents of the reporting country) in the locational (by residence and nationality) statistics.¹⁶

By nationality, this allows a fuller analysis of banks' sources and uses of particular currencies, and measurement of the aggregate amount of currency transformation in the global banking system. In addition, for a consistent sample of banks, it allows the size of their international activities to be compared with those of their domestic activities. These domestic positions would come with a counterparty sector breakdown, which is important as it allows claims and liabilities against banks (both intragroup and other banks) to be separated from those against other sectors.

By residence, it allows an analysis of banks' intermediation between residents and non-residents across different currencies. This ties into countries' financial accounts and balance of payments statistics.

Proposal 1

The Group recommends that central banks start reporting banks' domestic currency positions (claims and liabilities) against domestic residents in the locational (by residence and nationality) statistics with the same sectoral breakdown as for their international positions [ie "all sectors, non-banks" in the residence statistics and "all sectors, banks" (with "Of which: Related offices, Official monetary authorities") in the nationality statistics].¹⁷

The Group also proposes to enhance the currency breakdown in the locational by nationality statistics by asking central banks to start reporting banks' GBP and CHF positions, in addition to banks' home currency, USD, JPY and EUR positions, which are already reported. This expansion of the currency breakdown is useful, as one of the key lessons from the recent financial crisis was the need for better data on possible mismatches in the currency and maturity of assets and liabilities of major banking systems.

¹⁵ As approved by the CGFS in April 2011.

¹⁶ The inclusion of banks' domestic currency positions against residents in the locational (residency and nationality) statistics does not simply duplicate existing statistics on national banking system balance sheets. The locational (nationality) statistics include a bank nationality dimension. Also, the banking system coverage is different for some countries, with only the internationally active banks (not all banks) being included in the locational statistics.

¹⁷ It may be difficult for some central banks to start reporting domestic positions in mid-2012, as it requires significant IT system changes. These central banks will thus try to provide these data as part of Stage 2.

Proposal 2

The Group recommends that central banks start separately reporting to the BIS banks' GBP- and CHF-denominated positions in the locational by nationality statistics. This is in addition to banks' home currency-, USD-, JPY- and EUR-denominated positions, which are already reported. This expanded currency breakdown is consistent with that in the locational by residency statistics.¹⁸

At the discretion of individual central banks, positions in additional individual currencies could also be reported to the BIS.

The Group also encourages central banks to try to improve the completeness and consistency of data already being reported to the BIS under the existing locational by nationality and locational by residency templates. This should allow for a better reconstruction of the global balance sheet for any one bank nationality using data from other reporting countries. At present, incomplete and inconsistent reporting makes it difficult to track accurately banks' global balance sheet positions. There is strong interest in these data, with central banks from several countries requesting BIS data on the global balance sheets of their national banks.

Proposal 3

To improve the existing IBS data, the Group recommends that central banks:

- *revise their reporting practices for the locational by nationality statistics, with a view to providing the BIS with as much data as possible within the existing template, without collecting additional data from financial institutions.*
- *ensure that coverage of banks' debt securities liabilities in the locational (by residency and nationality) statistics is as complete as reasonably possible. At a minimum, the total amount of outstanding debt securities liabilities, with the currency breakdown and the nationality of the issuing bank, should be reported, with the securities included in the "unallocated by vis-à-vis country", "all sectors" category.¹⁹ In addition, if central banks are already reporting the "counterparty sector" and "vis-à-vis country" of the holders of the debt securities to the BIS, they should continue with their current practice.*
- *work with the BIS to identify and resolve very large inconsistencies in banks' inter-office figures in the locational (nationality) statistics that affect the interpretation of the aggregate data.²⁰ Individual central banks would choose their own level of participation in resolving data inconsistencies, based on available resources, legal and confidentiality constraints, and the size of data inconsistencies for their banking systems.*

¹⁸ Ideally central banks should report the same banking system totals for claims and liabilities by currency in the locational (nationality) and the locational (residency) statistics. Any estimation that is necessary to report positions in individual currencies is left up to the discretion of the individual central bank.

¹⁹ Debt securities liabilities are a separate instrument in the residency statistics, and should be included in total liabilities in the nationality statistics.

²⁰ The process would be similar to that already used for the locational (residency) statistics for discrepancies in interbank positions (loans and deposits). Here, BIS statisticians prepare reconciliation tables that show the vis-à-vis positions between banks (loans and deposits) at a country level. The reports, with a breakdown in all currencies, USD and EUR, are based on "free" and "restricted" data and are made available to central banks on eBIS. National central banks are encouraged to investigate the discrepancies bilaterally and report any data revisions to the BIS.

Addition of a vis-à-vis country dimension to the locational (nationality) statistics

The addition of a vis-à-vis country dimension to the locational by nationality statistics is also proposed for Stage 1. For most national central banks, the current locational by residency and locational by nationality statistics are different slices of the same underlying dataset (though some central banks do have separate data collection systems). The locational by residency statistics show the aggregate claims and liabilities of *all banks* resident in a given reporting country against counterparties in *individual countries around the world*. The locational by nationality statistics show the claims and liabilities of banks resident in a given reporting country, by the *nationality* of the headquarters of the reporting bank office, against counterparties in *all other countries combined*.

The key motivation for adding a vis-à-vis country in the locational by nationality statistics is that it makes it possible to better see the geography of banks' international activities, and hence better analyse the transmission of funding shocks across countries through banks. The proposal below will provide a vis-à-vis country breakdown by bank nationality for about 95% of banks' total assets and liabilities for *the major bank nationalities in each reporting country*. For all other bank nationalities, the existing minimum requirements will continue to be reported in order to (i) cover all bank nationalities in each reporting country, and (ii) retain consistency in total claims and total liabilities between the two sets of locational banking statistics.

The addition of a vis-à-vis country dimension in the locational by nationality statistics also goes a considerable way towards unifying the two locational datasets (residency and nationality), as considered in more detail as part of the Stage 2 IBS enhancements (see Appendix 2).

In preparation for this possible future merging of the two locational datasets, the BIS will design a new data structure definition and the associated mapping, to facilitate central banks' reporting of the expanded nationality statistics and the current residency statistics. There will be upfront IT system costs for central banks in Stage 1, but central banks should not need to significantly change their production systems a second time when the Stage 2 proposals are implemented.

Proposal 4

The Group recommends the introduction of a vis-à-vis country breakdown for the claims and liabilities of the major bank nationalities operating in each reporting country in the locational by nationality statistics.

This bank nationality/vis-à-vis country matrix would be reported by central banks on a best efforts basis. The Group recognises that some central banks may not be able to provide all of the data in the matrix due to data availability or confidentiality restrictions, or may start reporting after the target start date of mid-2012.²¹

To keep the reporting burden and confidentiality issues manageable, the size of the matrix will be 16 bank nationalities and 76 vis-à-vis countries. The BIS is willing to accept a full breakdown of bank nationalities and vis-à-vis countries if this is easier for individual central banks to report.

*Central banks would report a vis-à-vis country breakdown for **16 bank nationalities**.²² These are: banks with the nationality of the home (reporting) country (ie domestic banks), 12 core bank nationalities and the three next largest bank nationalities in the reporting country.²³ This approach maximises the coverage in the IBS, especially of bank nationalities that are important in particular regions but less so globally.*

*There would be **76 vis-à-vis countries** or residual country groups (68 countries, six regional residuals, international institutions and unallocated by country). The vis-à-vis countries list includes all BIS reporters, and those countries with sizeable cross-border positions with BIS reporting banks or that are an important global or regional economy. Furthermore, all 27 EU countries are separately included in the list. A full list of bank nationalities and vis-à-vis countries is provided in Appendix 3.*

For all other bank nationalities, claims and liabilities would be separated into those against “residents” and those against “non-residents” of the reporting country. This is consistent with the current reporting in the locational by nationality statistics.

Central banks would report to the BIS the bank nationality/vis-à-vis country matrix data for the full population of banks that they currently include in the locational by nationality statistics.²⁴ The additional data would be classified using the same “unrestricted”, “restricted” and “confidential” classifications that are currently used in the IBS, with much of the data potentially being marked as confidential due to its high granularity.

²¹ The Federal Reserve’s data provision would potentially be severely limited, due to the strict confidentiality rules that they operate under. However, the Federal Reserve is endeavouring to get these restrictions relaxed.

²² Central banks with particularly important financial centres within their jurisdiction (for example, the Bank of England and the Cayman Islands Monetary Authority) could be asked to report data for a slightly longer list of up to 20 bank nationalities.

²³ One Group member was against this treatment, citing concerns about: (i) inconsistency derived from reporting countries changing the three next largest bank nationalities over time; and (ii) cross-sectional inconsistency across reporting central banks, with them reporting different three next largest bank nationalities.

²⁴ This means that central banks would apply their national confidentiality tests for **reporting** data to the BIS at the bank level (ie a minimum of three banks of a given nationality in the reporting country) not at bank/vis-à-vis country level (ie at least three banks of a given nationality in the reporting country that have claims on a given vis-à-vis country). However, these more granular data could have a higher **confidentiality** marking – ie “confidential” or “restricted”.

Appendix 2 Details of the specific proposals – Stage 2²⁵

Maximising the usefulness of the existing BIS data requirements

This first set of proposals focuses on making the data in the existing IBS requirements more useful by improving the completeness and accessibility of the data. The IBS are already a very powerful dataset, so it makes sense to try to fill in existing gaps before looking to significantly expand the statistics.

There are three main challenges to maximising the benefits of the existing IBS: (i) confidentiality restrictions mean that some IBS data are available only to the BIS or to reporting central banks, and not to the general public; (ii) some reporting central banks do not meet all of the existing data requirements, and some major EMEs do not participate in the collection; and (iii) there is no commonly agreed level or scope of consolidation for the consolidated statistics. The Group's proposals try to address all of these issues.

The first proposal is that central banks review their current confidentiality classifications with a view to making data more widely available. The global financial crisis of 2007–09 and the current sovereign debt crisis have been accentuated by uncertainty caused by the limited public information on the exposures of financial institutions, both individually and in aggregate. The IBS are a key source of aggregate data on banks' balance sheets, but transparency is somewhat of an issue – although most data are available to reporting central banks, far fewer observations are available to the general public. And there is clearly a strong demand for the IBS from outsiders – from January 2010 to July 2011, the BIS received about 2,500 public enquiries and there were an estimated 170,000 data downloads from the BIS website.

It is important that central banks can protect the confidentiality of their national data, and the main purpose of the IBS is to inform central bank and BIS analyses, so a Group priority has been that confidentiality concerns do not impede the provision of additional data. However, where possible, there should be a continued push for greater data transparency by current reporters. A recent step in this direction was the publication of more granular data on banks' consolidated (ultimate risk) exposures to individual countries and counterparty sectors on the BIS website.²⁶ This is clearly a topic of great interest at present.

Proposal 1

The Group recommends that central banks review their current confidentiality classifications with a view to making data more widely available. CGFS central banks would lead by setting their confidentiality classifications at the minimum level necessary to comply with national confidentiality rules. Other reporting central banks would be encouraged to do the same.

Second, the Group proposes that the CGFS support BIS efforts to close gaps in countries' reporting of the existing IBS requirements. This involves the BIS working with existing

²⁵ As approved by the CGFS in January 2012.

²⁶ See "Table 9E: Consolidated foreign claims and other potential exposures – ultimate risk basis" on the BIS statistics website www.bis.org/statistics/consstats.htm. This table was first published in June 2011.

reporters to meet more of the existing IBS requirements; and encouraging major (non-reporting) EMEs to start reporting the IBS.²⁷

Encouraging existing central bank reporters to meet all of the IBS requirements is important. Incomplete reporting in the consolidated (ultimate risk) statistics by six countries means that the IBS can give a distorted picture of banks' exposures to countries with large financial centres. In the locational (nationality) statistics, some advanced countries with large financial centres do not report the full currency, instrument, sector and nationality breakdowns requested in the existing framework. This makes it difficult to get a complete picture of the financial assets and liabilities of banks operating in these countries.

In addition to giving support to the BIS's efforts, central banks represented in the Group are working towards closing gaps in their existing reporting over the next few years. Data improvements planned by individual central banks include: the Bank of France and the HKMA reporting local claims in foreign currency in the consolidated statistics; the Bundesbank improving the quality of its ultimate risk data in the consolidated statistics; the Federal Reserve reporting estimates of banks' assets and liabilities against individual countries by major currency in the locational statistics; and the Bank of Japan providing a breakdown of banks' assets and liabilities by instrument in the locational statistics. These additional data will improve the IBS.

Encouraging large EMEs to start reporting is also important, as their banking systems are becoming bigger and more integrated into the global financial system. By way of an example, Chinese banks accounted for 11% of the total assets of the top 1,000 global banks as at end-December 2010, which is only a little short of the 13% share of US banks and the 12% share of Japanese banks (see *The Banker* (2011)).

Proposal 2

The Group recommends that the CGFS support BIS efforts to close gaps in countries' reporting of the existing IBS requirements. The BIS is both (i) working with existing reporters to fill in more of the existing IBS requirements and (ii) encouraging major EMEs to start reporting the IBS gradually based on their domestic situations.

Central banks represented on the Group commit to closing some of their key reporting gaps as soon as practicable.

Another issue that somewhat hampers the information value and comparability of the consolidated banking statistics is a lack of consistency in the level and scope of consolidation across reporting countries. At present, legal and practical constraints on the collection of data by individual central banks have meant that the consolidation rules are left to national discretion, with reporters free to follow national supervisory or accounting practices. In terms of the level of consolidation, some countries report their data on a fully consolidated basis – ie consolidated at the level of the banking group or bank holding company – while other countries report their data consolidated only at the level of the highest-ranking bank. In terms of the scope of consolidation, some countries consolidate banking groups' bank or credit

²⁷ This is part of Recommendation #10 from the FSB-IMF Data Gaps report to G20 Ministers and Governors, which encourages all G20 economies to participate in the IBS (see FSB-IMF (2009)). At present, four G20 countries – Argentina, China, Russia and Saudi Arabia – do not participate in the IBS, although all have expressed an interest in participating. Indonesia joined the reporting population for the locational banking statistics in June 2012.

institution subsidiaries only, while others consolidate a much broader range of financial subsidiaries (basically everything except insurance companies).

To help correct this situation over time, the Group proposes two enhancements to the IBS. First, that the BIS add a table in the Guidelines to the Consolidated Banking Statistics stating central banks' current consolidation practices. This will make users aware of the differences in the current IBS reporting across countries. This table will be based on information gathered through a BIS survey of reporting central banks that was agreed at the March 2011 biennial meeting, and which was conducted in August 2011.

Second, the Group proposes that a "best practice" definition of consolidation be developed over the next one to two years (see Section 4 on possible future work). Individual central banks would then try to converge on this definition over time. The specific details of this "best practice" definition would be decided by interested central banks and the BIS.²⁸ It would take into account work by the Inter-Agency Group on Economic and Financial Statistics on developing reporting guidelines for non-bank financial institutions. Standardising the consolidation rules will improve the cross-country comparability of the IBS, and go part of the way to aligning them with national and international supervisory statistics.

Proposal 3

To improve the consistency and comparability of the consolidated statistics, the Group recommends that:

- *the BIS add a table in the Guidelines to the Consolidated Banking Statistics that documents banks' current consolidation practices; and*
- *a "best practice" consolidation definition be developed over the next one to two years. Individual central banks would try to converge on this definition over time.*²⁹

Better measurement of country credit risk

The second set of enhancements is designed to improve the usefulness of the IBS for assessing the credit risk faced by national banking systems. The consolidated (ultimate risk) statistics are already widely used by central banks, the BIS and others for this type of analysis. For instance, recently the data have been extensively used to assess the exposures of different bank nationalities to governments and banks in some euro area countries.

However, the current data are limited in some respects. First, the counterparty sector breakdowns are relatively broad – banks, public sector and the non-bank private sector. Second, the statistics do not cover banks' claims against domestic residents – these are often the largest part of the balance sheet and hence important for assessing credit risk, and are also useful for putting banks' foreign claims into an overall balance sheet perspective.

²⁸ Elements of this consolidation definition that some Group members thought are important, and could perhaps be considered in future central bank and BIS work on this issue, are: (i) banks being recorded under the nationality of their controlling parent, be it bank or non-bank; and (ii) the consolidation definition being at the bank group/holding company level, and including broad coverage of banks' non-insurance financial subsidiaries (not just credit institutions).

²⁹ While some members were strongly in favour of promoting the prudential definition of consolidation as the final convergence target, others highlighted difficulties, such as required IT developments, to achieve this goal over the short and even medium term.

The proposed enhancements address both of these issues. To improve the granularity of the counterparty sector splits, the Group proposes that: (i) “non-bank financial institutions” be added as an additional counterparty sector within the consolidated statistics on a required basis; and (ii) for exposures to the private non-financial sector, two additional “of which:” categories be added for non-financial corporations and for households, with these data reported on an encouraged basis.³⁰

This facilitates a much more meaningful analysis of banks’ exposures to the non-bank private sector. For example, it allows for a better monitoring of banks’ large claims to the shadow banking system (such as special purpose vehicles, securities brokers, hedge funds and other non-bank financials).³¹ Similarly, for countries that provide the full sector breakdown, it will be possible to track banks’ exposures to households and non-financial corporations. This has been of interest over recent years, with countries such as the United States and Ireland experiencing large housing market corrections, and households in the Baltic states borrowing heavily from overseas banks in foreign currencies. The addition of the non-bank financial institutions sector on a required basis also satisfies Recommendation #11 in the G20 Data Gaps report (see FSB-IMF (2009)).³²

Proposal 4

The Group recommends that “non-bank financial institutions” be added as an additional counterparty sector on a required basis so that central banks start reporting the following, more granular, counterparty sector split in the consolidated (both immediate borrower and ultimate risk) statistics. The required sector split would be: (i) banks; (ii) official sector (general government and OMAs); (iii) non-bank financial institutions; (iv) private non-financial sector; and (v) unallocated.³³

In addition, central banks would endeavour to report (on an encouraged basis) additional “of which:” categories within the private non-financial sector for (i) non-financial corporations and (ii) households.

Given that up to now the IBS have been focusing on data describing cross-border lending and funding activity, it is proposed that central banks start reporting banks’ domestic exposures (ie exposures against residents of the banks’ home country) in the consolidated statistics, to better capture the full financial exposures of internationally active banks. The domestic exposures would have the same counterparty sector breakdowns as banks’ international/foreign exposures. These exposures are generally large and thus should be included in any assessment of banks’ overall credit risk. For example, during the current

³⁰ BIS and national guidelines would be revised to ensure that the new counterparty sector allocation is aligned with other international statistics guidelines, such as the SNA classifications. However, to reduce the burden on reporting institutions, some flexibility in sector definitions would be allowed at national level.

³¹ It will not be possible to measure exposures to the shadow banking system accurately as exposures to “non-bank financial institutions” also contain exposures to, for example, pension funds or insurers. It may, therefore, be useful to add in the future an additional “of which” category to this exposure class.

³² This recommendation was for the BIS/CGFS to consider separately identifying non-bank financial institutions in the consolidated statistics.

³³ The sector split proposed for the consolidated statistics differs slightly from the sector split proposed for the locational statistics and that in SNA, in that “general government” and “OMAs” are combined into “official sector”, rather than reported separately. The Group’s rationale for this was that the credit risk on “general government” and “OMAs” is similar, and that it reduced the reporting burden for banks.

European sovereign debt crisis, it would be valuable to be able to compare banks' claims on their home sovereign on a consistent basis with their claims on foreign sovereigns, as, for several of the more vulnerable countries, banks' domestic claims are larger than their claims on all foreign countries combined (see CGFS (2011)).

Proposal 5

The Group recommends that central banks start reporting banks' domestic exposures (claims against residents of the banks' home country) in the consolidated (immediate borrower and ultimate risk) statistics with the same counterparty sector breakdowns as for their international/foreign positions.

The Group also proposes to expand the available data on banks' total equity, Tier 1 capital and total assets. At a minimum, central banks would start reporting their domestic banks' total equity in the consolidated (immediate borrower) statistics. To lessen the reporting burden, the definition of total equity would be based on accounting standards – either IFRS or national standards.

In addition, all central banks are encouraged to report their domestic banks' Tier 1 capital, total assets and risk-weighted assets (for the same sample of domestic banks as in their consolidated statistics) in the BIS's existing database on banks' capital and assets. This database was established in 1999 by the Euro-currency Standing Committee to collect data for 12 large national banking systems, and a majority of Group members recommend expanding it to cover banks headquartered in all BIS reporting countries. The Tier 1 capital and assets data would ideally be reported on a quarterly frequency, but if this were not feasible, at a semi-annual frequency.³⁴ These data would be available only to central banks and the BIS, but not to the broader public.³⁵ The definitions of Tier 1 capital and total and risk-weighted assets would be the current national supervisory ones, but would eventually evolve into the Basel III definitions.

These equity, Tier 1 capital and assets data would be valuable for at least two reasons. First, they allow banks' exposures to a particular country or counterparty sector to be scaled by the total size of their balance sheet or their equity/capital base. This provides a (crude) measure of the potential impact on different bank nationalities if there is a credit event.³⁶ Such data would be a good complement to the existing data on the absolute values of bank nationalities' exposures.

³⁴ The 12 large central banks that already contribute to this data collection would continue to provide data on Tier 1 and Tier 2 capital, as well as total assets and risk weighted assets.

³⁵ Each central bank would apply a confidentiality setting to its banks' Tier 1 capital and assets data, which would determine how those data could be combined with IBS exposures data in BIS and central bank external publications. This approach is identical to that currently used for the 12 central banks that report these Tier 1 capital and assets data to the BIS,

³⁶ There are limitations to the use of equity and capital as a measure of banks' loss absorbency capacity. First, the definition of equity differs across countries. Second, loan loss provisions and some other loss absorbency measures are not included in the IBS. Third, prudential ratios are defined in terms of risk-weighted assets, while the exposures reported under the IBS are unweighted. Users of data may therefore end up computing their own ratios with an inadequate measure of equity and/or non-risk-weighted assets. In order to mitigate such risks, it is therefore suggested to report also the value of the solvency ratio and the associate adequate confidentiality indicators to these reported data.

Second, the total assets and equity data would allow basic leverage ratios to be calculated for major bank nationalities. This is important, as a feature of the lead-up to the financial crisis was a sharp run-up in bank leverage.

Proposal 6

The Group recommends that central banks start reporting their domestic banks' total equity in the consolidated (immediate borrower) statistics. The definition of total equity would be based, ideally, on International Financial Reporting Standards or, as a second best, on national accounting standards as applicable.

In addition, all central banks are encouraged to report their domestic banks' Tier 1 capital, total assets and risk-weighted assets (for the same sample of domestic banks as in their consolidated statistics) in the BIS's existing database on banks' capital and assets.

Monitoring trends in the supply of bank credit and banks' funding patterns

The third set of enhancements is designed to make the IBS more useful for monitoring trends in the supply of bank credit to different countries (both cross-border and domestically sourced) and banks' funding patterns.

At present, there are no easily available cross-country comparative data on the financial assets and liabilities of locally operating foreign banks, split between subsidiaries and branches. Yet these data are potentially important for several reasons. Subsidiaries' interaction with domestic residents is sometimes thought to be larger and stickier than that of foreign branches. Moreover, from a policy perspective they have different regulators (host for foreign subsidiaries and home for branches) and can have different funding structures, with branches relying more on intragroup funding and not always having capital.

To meet this data need, the Group proposes that central banks start reporting their country's locational (by residency) statistics for three separate categories of banks: (i) domestic banks; (ii) foreign subsidiaries (all nationalities together); and (iii) foreign branches (all nationalities together). This proposal does not entail any additional reporting burden for financial institutions, only a reorganisation of existing data by central banks and the BIS. Nor should it create significant data confidentiality issues, as branches and subsidiaries from all nationalities are combined in their respective subgroups.

Proposal 7

The Group recommends that central banks start reporting the locational (by residency) statistics for three categories of banks – foreign branches, foreign subsidiaries and domestic banks – in addition to their existing reporting of positions for “all banks”.³⁷

To better measure the size and volatility of cross-border borrowing by the resident non-financial private sector from non-resident banks, and how it compares with borrowing from resident banks, it is proposed that a more granular sector breakdown be introduced to

³⁷ The “all banks” category may not always be the sum of the “foreign branches”, “foreign subsidiaries” and “domestic banks” categories because in some cases there are “consortium banks” with mixed nationalities (eg domestic and foreign nationalities without a clear majority of any single nationality).

the locational (nationality and residency) statistics. Cross-border borrowing is likely to become very important from a policy perspective going forward if central banks start making more use of macroprudential policy tools aimed at, for example, smoothing bank lending to the non-financial private sector. Notably, the currently available data suggest that, in many countries, cross-border lending to the domestic economy was considerably more procyclical than domestic lending in the recent boom and bust.³⁸

To improve the granularity of the counterparty sector splits in the locational (nationality and residency) statistics, the Group proposes that: (i) “non-bank financial institutions” be added as an additional counterparty sector on a required basis; and (ii) for claims and liabilities against the non-financial sector, three additional “of which:” categories be added for “general government”, “non-financial corporations” and “households”, with these data reported on an encouraged basis. An “unallocated” sector would also be added.

The separate identification of “non-bank financial institutions” will allow central banks to track banks’ lending to and borrowing from the shadow banking system. Moreover, if most countries provide the full counterparty sector breakdown, it will be possible for individual countries to monitor the size and country source of offshore borrowings by their households and non-financial corporations.

Proposal 8

The Group recommends that central banks start reporting the locational (nationality and residency) statistics with the following enlarged counterparty sector breakdown on a required basis: (i) all sectors; (ii) banks; (iii) of which: intragroup banks; (iv) of which: OMAs (on an encouraged basis); (v) non-bank financial institutions; and (vi) other.³⁹

In addition, central banks would endeavour to report, on an encouraged basis, additional “of which:” categories within the other sector for (i) general government, (ii) non-financial corporations and (iii) households. They would also add an “unallocated” counterparty sector.

These counterparty sector splits would apply to both sides of banks’ balance sheets – their claims and their liabilities (except debt securities liabilities – see Proposal 10). They would also be provided separately for each currency (at a minimum, domestic currency and major foreign currencies such as USD, EUR, JPY, GBP and CHF). In the locational (residency) statistics, they would also apply to each funding and lending instrument.

³⁸ See CGFS (2011b).

³⁹ It is recognised that the reporting of detailed counterparty country information by bank nationality for some of these sectoral breakdowns – notably “(iii) of which: related offices (intragroup banks); (iv) of which: “OMA” – could raise confidentiality concerns for certain reporting countries. The implementation of the appropriate specifications to manage this confidentiality issue will be discussed at the expert level. The draft for the updated locational banking statistics guidelines therefore proposes that central banks report detailed counterparty data with appropriate confidentiality flags (where data marked “confidential” would be accessible to the BIS only) along with, as minimum, aggregated data with counterparty breakdowns limited to the categories “residents of the reporting country”, “unallocated” and “rest of the world” (non-residents). Statistical experts will also propose confidentiality rules to ensure that potentially confidential information about deposits by central banks in their domestic banks would not be made accessible. In particular, these rules may include the possibility for a reporting central bank to request the BIS that locational information of bank exposures vis-à-vis itself (reported by other central banks) be marked as confidential.

Better measurement of banks' funding risk

The fourth set of enhancements is designed to improve the available data on banks' funding risk, which proved to be a significant issue in the global financial crisis of 2007–09. During this period, large maturity mismatches and the freezing-up of wholesale markets created severe liquidity pressures, especially in US dollars, for many internationally oriented banks. The existing IBS were useful in measuring these funding mismatches, but they had limitations. The proposals outlined below go some way to addressing these limitations.

First, as mentioned in Proposal 8, we suggest introducing a more granular counterparty sector breakdown for banks' assets and liabilities in the locational statistics. This is important for improving the existing BIS measures of banks' asset/liability mismatches by currency, as these calculations rely on the counterparty sector being a reasonable proxy for the maturity of banks' funding (ie funding from households is assumed to have a longer maturity than funding from unrelated banks or non-bank financial institutions).

Second, the Group proposes to extend the consolidated (immediate borrower) statistics to include some basic information on banks' aggregate funding. This is important because the consolidated group is the level of aggregation that is most relevant for assessing banks' funding risk (although office location-level data are also important) and there is currently nearly no information on banks' liabilities in the consolidated statistics.

The Group proposes to introduce a simple breakdown of banks' on-balance sheet financial funding by instrument type – deposits, short-term debt securities, long-term debt securities, derivatives (negative market values only), other liabilities and total equity. There would be no currency, counterparty country or counterparty sector breakdown for these liability items and equity. The Group's view was that country and sector breakdowns are less important for banks' funding than for their assets. Moreover, for some instrument types – particularly debt securities, which are tradable – these breakdowns are very difficult for banks to report accurately. A currency breakdown of funding is of limited value as there is no corresponding currency breakdown of claims in the consolidated statistics.

These additional data would be quite valuable. First, data on the composition of banks' funding – consistent across countries for a large sample of banks – would allow cross-country comparisons of the structure of funding for different bank nationalities, as increasingly required by regulators, rating agencies and banks themselves.

Second, it is a more direct approach to measuring the funding side of banks' balance sheets than the current one of aggregating office-level data from the locational statistics. And if banks' actual global balance sheets from the consolidated data closely match the estimates from the locational data, analysts could be more confident about using the currency breakdowns in the locational statistics to estimate banks' funding mismatches.

Third, it provides information on the total size of banks' consolidated balance sheets. Since balance sheets must balance, the sum of banks' liabilities and equity will be equal to banks' total assets – both financial and non-financial.

Proposal 9

The Group recommends that central banks start reporting basic data on banks' funding in the consolidated (immediate borrower) statistics. Banks' funding would be disaggregated by instrument type – deposits, short-term debt securities (up to and including 12 months on a remaining maturity basis), long-term debt securities (greater than 12 months on a remaining maturity basis), derivatives (negative market values only), other liabilities and total equity. There would be no currency, counterparty country or counterparty sector breakdown for these items; just the totals would be reported. The appropriate periodicity and dissemination rules remain to be specified to the extent that some data on the liabilities side of the balance sheet (namely, other liabilities and equity) may not be available from banks under the same conditions as data on deposits, debt securities liabilities and other debt liabilities.

Lastly, the Group recommends that a maturity split be introduced for debt securities liabilities in the locational (residency and nationality) statistics. The maturity split would be “total debt securities liabilities” and “up to and including 12 months” on a remaining maturity basis, with the BIS calculating the “greater than 12 months” split as a residual. This maturity split would replace the current sector and vis-à-vis country split of debt securities liabilities in the residency statistics, where bank reporting difficulties mean that these data are often incomplete (see below).⁴⁰ In the nationality statistics, the maturity split will be an additional memo item for the debt securities liabilities that are already being reported.⁴¹ For both the residency and the nationality statistics, the maturity split will be embedded within the existing currency split for debt securities liabilities. So this proposal gives us a maturity breakdown, by currency, for banks' debt securities liabilities.

This change should improve the usefulness of the debt securities liabilities data in the IBS, particularly for measuring banks' funding risk. At present, the debt securities data are of limited value, as about three fifths of the value of outstanding positions are reported as unallocated by country and counterparty sector, as banks are unable to identify who holds these liabilities. By switching to a maturity split, data should be much easier for banks to report, and also valuable information on the remaining maturity of banks' wholesale liabilities by currency will be available. Moreover, from a bank funding risk perspective, relatively little information is lost if the counterparty sector and vis-à-vis country data are removed, as what really matters is the maturity of the liabilities (who holds them is only important to the extent that it affects the likelihood of the liabilities being rolled over).

Proposal 10

The Group recommends that central banks introduce a “total debt securities liabilities” and “up to and including 12 months” maturity split in the locational (nationality and residency) statistics.

In the residency statistics, this maturity split would replace the current sector and vis-à-vis country split. In the nationality statistics, it would be an additional memo item, with data being reported in the “unallocated by vis-à-vis country” cell.

⁴⁰ If individual central banks want to continue to report a country and counterparty sector breakdown, in addition to the new maturity breakdown, the BIS is very happy to accept these data.

⁴¹ The maturity split will be reported in the “unallocated by vis-à-vis country” category, and so there will be no country breakdown for these statistics.

Appendix 3

Proposed nationality and vis-à-vis breakdowns for the locational (nationality) statistics

The proposed list of **16 bank nationalities** is:

- banks with the nationality of the reporting country;
- 12 core global bank nationalities (ie Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States); and
- the three next largest foreign bank nationalities in the reporting country.

The proposed list of **76 vis-à-vis countries/regional residuals** is shown in Table A.1 below.

Table A.1: External positions of BIS reporting banks vis-à-vis all sectors
As of end-March 2012; Amounts outstanding in billions of US dollars, based on locational by residence statistics

Vis-à-vis country name	Amount outstanding		% share in total	
	Assets	Liabilities	Assets	Liabilities
Total external	30,787.6	29,432.5	100.0	100.0
A. BIS reporting countries	27,844.4	23,693.1	90.4	80.5
Australia	400.0	210.3	1.3	0.7
Austria	245.8	114.7	0.8	0.4
Bahamas	391.7	464.9	1.3	1.6
Bahrain	41.9	34.1	0.1	0.1
Belgium	457.7	546.9	1.5	1.9
Bermuda	94.2	82.6	0.3	0.3
Brazil	290.8	91.4	0.9	0.3
Canada	388.8	250.0	1.3	0.8
Cayman Islands	1,724.0	1,628.0	5.6	5.5
Chile	54.6	31.2	0.2	0.1
Chinese Taipei	77.8	115.8	0.3	0.4
Curaçao	41.1	91.5	0.1	0.3
Cyprus	54.9	53.0	0.2	0.2
Denmark	302.5	182.2	1.0	0.6
Finland	244.4	104.6	0.8	0.4
France	1,662.0	1,371.7	5.4	4.7
Germany	1,956.9	1,839.8	6.4	6.3
Greece	100.9	88.9	0.3	0.3
Guernsey	111.1	163.5	0.4	0.6
Hong Kong SAR	463.5	490.8	1.5	1.7
India	205.4	35.0	0.7	0.1
Indonesia	67.2	20.5	0.2	0.1
Ireland	711.3	578.2	2.3	2.0
Isle of Man	34.2	69.2	0.1	0.2
Italy	751.7	359.7	2.4	1.2
Japan	968.3	729.1	3.1	2.5
Jersey	203.8	345.6	0.7	1.2
Luxembourg	940.2	794.6	3.1	2.7
Macao SAR	19.8	50.7	0.1	0.2
Malaysia	55.1	32.6	0.2	0.1
Mexico	125.3	102.9	0.4	0.3
Netherlands	1,238.5	685.4	4.0	2.3
Norway	254.7	159.6	0.8	0.5
Panama	106.1	88.9	0.3	0.3
Portugal	174.7	96.9	0.6	0.3
Singapore	524.2	461.8	1.7	1.6
South Africa	34.3	38.8	0.1	0.1
South Korea	205.4	63.1	0.7	0.2
Spain	709.3	310.7	2.3	1.1
Sweden	321.6	262.1	1.0	0.9
Switzerland	614.9	913.3	2.0	3.1
Turkey	164.9	43.0	0.5	0.1
United Kingdom	4,977.5	5,027.8	16.2	17.1
United States	5,331.4	4,467.4	17.3	15.2
B. BIS non-reporting countries	2,943.2	5,739.5	9.6	19.5
Malta	37.7	22.6	0.1	0.1
Slovakia	22.6	6.3	0.1	0.0
Slovenia	25.6	3.9	0.1	0.0
<i>Other developed countries</i> ¹	<i>86.8</i>	<i>71.6</i>	<i>0.3</i>	<i>0.2</i>
<i>Other offshore centres</i> ¹	<i>208.8</i>	<i>374.2</i>	<i>0.7</i>	<i>1.3</i>
Bulgaria	17.5	10.2	0.1	0.0
Czech Republic	46.3	25.6	0.2	0.1
Estonia	11.2	4.2	0.0	0.0
Hungary	58.7	14.4	0.2	0.0
Latvia	13.6	6.2	0.0	0.0
Lithuania	13.4	5.5	0.0	0.0
Poland	122.5	18.1	0.4	0.1
Romania	53.5	3.2	0.2	0.0
Russia	153.5	134.3	0.5	0.5
<i>Other developing Europe</i> ¹	<i>73.3</i>	<i>44.9</i>	<i>0.2</i>	<i>0.2</i>
Argentina	16.1	26.2	0.1	0.1
Peru	24.6	19.4	0.1	0.1
<i>Other developing Latin America & Caribbean</i> ¹	<i>105.9</i>	<i>186.6</i>	<i>0.3</i>	<i>0.6</i>
Iran	10.1	15.4	0.0	0.1
Israel	18.7	32.0	0.1	0.1
Kuwait	18.6	62.6	0.1	0.2
Nigeria	7.9	26.1	0.0	0.1
Qatar	74.1	52.1	0.2	0.2
Saudi Arabia	82.5	216.8	0.3	0.7
United Arab Emirates	100.4	85.2	0.3	0.3
<i>Other developing Africa & Middle East</i> ¹	<i>148.7</i>	<i>319.4</i>	<i>0.5</i>	<i>1.1</i>
China	530.6	376.7	1.7	1.3
Philippines	28.1	15.8	0.1	0.1
Thailand	50.0	28.9	0.2	0.1
<i>Other developing Asia & Pacific</i> ¹	<i>108.3</i>	<i>213.4</i>	<i>0.4</i>	<i>0.7</i>
Unallocated location	483.9	3,063.4	1.6	10.4
International organisations	189.6	254.2	0.6	0.9
Sum of individual countries listed above	29,382.3	24,904.9	95.4	84.6

¹ Regional residuals.

Appendix 4

Members of the CGFS Ad-hoc Group on Statistics

Swiss National Bank	Werner Hermann (Chair)
Bank of Canada	Marianne Johnson Virginie Traclet
European Central Bank	Henning Ahnert Patrick Sandars
Bank of France	Alain Christophory Vichett Oung
Deutsche Bundesbank	Winfried Rudek
Hong Kong Monetary Authority	Brian Ng
Bank of Italy	Pietro Franchini
Bank of Japan	Shun Kobayashi Takashi Moriguchi
Bank of Korea	Jong-Ho Choi Bok-Yong Jung
Netherlands Bank	Marion Heijmans Tijmen Swank
Bank of Spain	Luis Derecho Cristina Luna
Swiss National Bank	Iva Cecchin Stefanie Schnyder
Bank of England	Gordon Cherry Glenn Hoggarth
Board of Governors of the Federal Reserve System	Sally Davies
Bank for International Settlements	Michael Davies/Mathias Drehmann (Secretaries) Ingo Fender Swapan Pradhan Patrick McGuire Philippe Mesny Karsten von Kleist