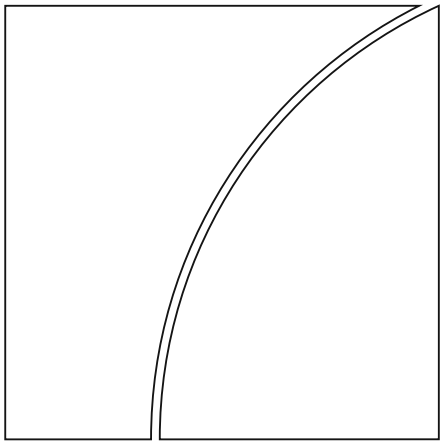
BANK FOR INTERNATIONAL SETTLEMENTS



Potential enhancements to the BIS international banking statistics

Report submitted by a Study Group established by the BIS

March 2017

The Study Group welcomes comments on this report. Comments should be sent by 31 May 2017 by email to the Chair of the Study Group, Philip Wooldridge (philip.wooldridge@bis.org).

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

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Contents

[1] The views expressed in this report are those of the members of the Study Group and do not necessarily reflect those of the institutions with which they are affiliated.

Abbreviations

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
CBS	Consolidated banking statistics
CGFS	Committee on the Global Financial System
FSB	Financial Stability Board
GAAP	generally accepted accounting principles
G20	Group of Twenty
GPFV	gross positive fair value
IBS	International banking statistics
IC	immediate counterparty
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LBS	Locational banking statistics
NPFV	net positive fair value
OECD	Organisation for Economic Co-operation and Development
OTC	over-the-counter
OTCD	OTC derivative statistics
UR	ultimate risk

Executive summary

In the wake of the 2007–09 global financial crisis, the Committee on the Global Financial System (CGFS), which oversees the collection of the BIS international banking statistics (IBS), approved a major set of enhancements to the IBS aimed at filling long-standing data gaps and better capturing the new financial landscape. Notwithstanding the ambition of these enhancements, they left unaddressed some gaps in the available data. The BIS was tasked with forming a study group to explore options for further enhancing the IBS.

This report summarises the discussions and recommendations of the Study Group. The recommendations focus on clarifying the reporting guidelines and supplementing the existing statistics with data that are readily available. The Study Group considered several major changes: for example, expanding the consolidated banking statistics (CBS) on an immediate counterparty basis while discontinuing the CBS on an ultimate risk basis. However, the Group concluded that the costs of implementing major changes outweighed their analytical benefits.

The Study Group agreed on the following recommendations:

A. The consolidation perimeter for reporting the CBS should be aligned with the national prudential perimeter.

B. The horizon over which banks should converge on the national prudential perimeter will depend on circumstances in each country.

C. The BIS should enhance the metadata that it collects and publishes on consolidation practices.

D. In the LBS banks should report derivatives separately from other instruments, on a gross basis with a very limited geographical breakdown between local positions (on residents) and cross-border positions (on non-residents). A detailed breakdown of derivatives by country and sector of counterparty and currency should be encouraged. Countries that do not yet include derivatives in their LBS reporting should consult with the BIS about the impact before expanding their reporting.

E. In the CBS on an ultimate risk basis derivative assets with a country breakdown should be reported on a net basis.

F. The BIS should enhance the metadata that it collects and publishes about how derivatives are reported.

G. Credit protection sold should be reported on a net basis (as part of guarantees extended).

H. In the CBS derivative assets with a country breakdown should continue to be reported on an ultimate risk basis.

I. In the CBS the BIS should continue to publish claims excluding derivatives and to show derivatives separately.

J. Higher priority should be given to improvements to the CBS on an immediate counterparty basis than on an ultimate risk basis and in this context a separate reporting of inward and outward risk transfers should be encouraged.

K. Inward and outward risk transfers should refer to country risk transfers, excluding transfers between sectors in the same country, and metadata should be improved to clarify where reporting practices differ. The BIS should publish inward and outward risk transfers, confidentiality restrictions permitting.

L. The eligibility criteria for risk transfers should be aligned with the BCBS's standards for risk mitigants.

M. To better recognise their limitations, relabel the CBS on an UR basis as the CBS on a guarantor basis.

N. On an ultimate risk basis, repos should be reported against the collateral. Metadata should be improved to clarify where reporting practices differ.

O. In the CBS, an instrument breakdown of total worldwide assets should be reported, without further breakdowns of the instruments by currency, counterparty or remaining maturity

P. In the CBS, repurchase agreements should be separately reported in the instrument breakdown of total assets and liabilities, without country or sector breakdowns.

Q. The BIS should work with reporting authorities to develop more detailed guidance to help distinguish between resident and non-resident holders of debt securities.

R. In the CBS, banks' local claims and liabilities in local currency should refer to the residence and currency of the borrower (or for liabilities, creditor). The separate reporting of local deposits and loans in local currency as an of which item under local claims and liabilities should be encouraged.

S. Additional sectoral breakdowns should not be considered until the reporting of the current encouraged sectoral breakdowns is sufficiently complete.

T. The IBS reporting guidelines should prioritise requirements by distinguishing more clearly between required data and encouraged data.

U. In the CBS, banks should continue to report positions gross of provisions, on both an IC basis and an UR basis.

V. In the CBS, the reporting of short sales of securities should be aligned with national accounting standards. Metadata should be improved to clarify reporting practices.

1. Introduction

The BIS international banking statistics (IBS) have been enhanced several times in recent decades to better capture the financial landscape and associated risks. The latest enhancements were agreed by the Committee on the Global Financial System (CGFS) in 2011–12, in the wake of the 2007–09 global financial crisis.[2] These enhancements represented a major expansion of the statistics, yet they left unaddressed some gaps in the available data. The BIS was tasked with forming a study group to explore options for further enhancements to the IBS.

The work of the Study group was guided by three considerations. The first was to follow up on the ideas for extensions identified by the CGFS's Ad-hoc Group on Statistics, which designed the 2011–12 enhancements. The Ad-hoc Group had identified four possible extensions to the IBS as worthwhile to pursue over the medium to longer term, after implementation of the 2011–12 enhancements was completed: information on banks' maturity mismatches; a more granular sectoral classification of counterparties; a harmonised definition for the perimeter of consolidation; and a better alignment between the IBS and supervisory data (CGFS (2012)).

A second consideration, closely related to the question of aligning the IBS and supervisory data, was the increased use of the consolidated banking statistics (CBS) by prudential supervisors. In recent years several initiatives by the Basel Committee on Banking Supervision (BCBS) have made explicit reference to the CBS. For example, under the Basel III countercyclical capital buffer, banks' geographic credit exposures are calculated with reference to the location of ultimate risk, where "The concepts of 'ultimate risk' and 'immediate risk' are those used by the BIS' International Banking Statistics" (BCBS (2015b), p. 5). Similarly, the cross-jurisdictional activity indicators used by the BCBS to assess the systemic importance of banks make reference to the CBS. The increased use of the CBS for regulatory and supervisory purposes raises questions about the extent to which the guidelines for reporting the CBS should be aligned with prudential standards.[3]

A third consideration guiding the work of the Study group was to improve the comparability of data across countries. Differences in data classifications at best complicate cross-country analysis and at worst contribute to misleading conclusions. Some classifications are reasonably comparable across countries, such as cross-border loans and deposits in the locational banking statistics (LBS) or international claims in the CBS, but other classifications can differ in important ways. The most significant differences concern derivatives, where the lack of international harmonisation in accounting standards impedes the compilation of comparable data. The need to make progress on this front was highlighted in the second phase of the G20 Data Gaps Initiative, which includes a recommendation inviting the "BIS to review the derivatives data collected for the International Banking Statistics and the semi-annual over-the-counter derivatives statistics survey" (FSB and IMF (2016), p 24).

This report summarises the discussions in the Study Group and presents recommendations for changes to the reporting guidelines. These recommendations focus on clarifying the guidelines and supplementing the existing statistics with data that are readily available. The Study Group considered several major changes to the guidelines: for example, expanding the CBS on an immediate counterparty basis while discontinuing the CBS on an ultimate risk basis. However, the Group concluded that the costs of implementing major changes outweighed their analytical benefits.

[2] For a summary of the enhancements, see Avdjiev, McGuire and Wooldridge (2015).

[3] For the purpose of this report, no distinction is made between the terms prudential, regulatory and supervisory; they are used interchangeably.

Further consultation is required before any changes to the reporting guidelines are implemented. The Study Group's recommendations will be discussed at the meeting of central bank experts on BIS international banking and financial statistics in February 2017 and subsequently reviewed by the CGFS.

2. Alignment with other international standards

The compilation of the IBS has always been a collaborative, international undertaking, where the greatest benefits come from the aggregation of comparable national data. Arguably, the IBS pursued international convergence earlier than standards in many other areas. For example, the IBS were first compiled in 1964, whereas the IMF's first guide to money and banking statistics was published in 1984 and the BCBS first agreed on capital standards in 1988. Moreover, the IBS remain at the cutting edge of international statistical standards in important respects, particularly with their focus on nationality, which provides insights about who makes the underlying economic decisions (Borio (2013)).

There now exists a comprehensive body of international financial and statistical standards, which overlap with the IBS in some areas. Achieving a closer alignment between the IBS and other standards could bring analytical benefits as well as reduce reporting costs. However, different statistics are designed for different purposes, and thus alignment is only beneficial if it supports the purpose of the statistics.

The purpose of the LBS is to capture the currency and geographical composition of internationally active banks' balance sheets – assets as well as liabilities. The LBS are compiled according to the residence of banks on an unconsolidated basis. As such, they complement balance of payments and financial accounts data. Indeed, balance of payments compilers in many countries make use of the LBS to improve their estimates of 'other investment' in particular. For these reasons, the concepts and classifications underlying the LBS are in principle aligned with those in the IMF's *Balance of Payments and International Investment Position Manual* (BPM6).

The purpose of the CBS is to capture the country risk exposures of internationally active banks.[4] They are compiled according to the nationality of banks on a worldwide consolidated basis. The CBS provide simple measures of risk that are intended to be comparable across the banking systems of different countries. However, full comparability is difficult to achieve owing to differences in risk management practices across banks and accounting and prudential standards across countries.

Historically the reporting guidelines for the CBS tended to give preference to data that were already compiled by banks. This was done to reduce reporting costs and promote data quality. For example, the CBS started in the 1970s as an extension of the LBS to capture banks' offices in offshore financial centres. When the CBS on an ultimate risk basis were introduced after the 1997–98 Asian financial crisis, they were designed with a strong preference for "data that could be assembled from information compiled by the banks for internal risk management purposes" (CGFS (2000), p 2).

Following the 2007–09 crisis, views of data compilers and users evolved. There is now agreement in principle that "achieving a better alignment between the IBS and supervisory data would be important" (CGFS (2012), p 7). Such an alignment would bring benefits for users, who may be confused about differences between the CBS and exposure data disclosed by banks. It would also reduce costs for banks, who could report the same data for multiple purposes. However, alignment has costs and thus should be

[4] The BCBS defines country risk as the risk "that sovereign borrowers of a particular country may be unable or unwilling, and other borrowers unable, to fulfil their foreign obligations for reasons beyond the usual risks which arise in relation to all lending" (BCBS (1982), p 1). Under this definition, country risk encompasses sovereign credit risk, transfer and convertibility risks (the risk that a government imposes capital or exchange controls, which prevent an entity from converting local currency into foreign currency or transferring funds to creditors located outside the country), and cases of force majeure (eg, war, expropriation, revolution, civil disturbance, floods, earthquakes).

considered carefully. In particular, alignment with prudential standards should be secondary to the objective of compiling data that are comparable across the banking systems of different countries.

3. Perimeter of consolidation

The Study group identified the perimeter of consolidation as one of the most important issues to address to improve the comparability of data. Differences in the types of business and entities that fall within the perimeter are mainly an issue when reporting the CBS, although even in the LBS comparability is an issue because of structural differences across countries in the range of activities conducted by banks.

3.1 Prudential approach to consolidation

At the firm level, there are two alternative approaches to consolidation: prudential and accounting.[5] The prudential (regulatory reporting) approach to consolidation, as defined by the BCBS, focuses on the risks inherent in a type of activity. The BCBS requires that all entities conducting banking and other relevant financial activities, which are majority-owned or otherwise controlled by the group – irrespective of whether the entities are regulated – should be within the consolidation perimeter, such that the perimeter captures the risk of the whole banking group (BCBS (2006)). Notably, insurance entities as well as non-financial commercial entities are explicitly excluded from the perimeter.

In contrast to the BCBS's approach, accounting (financial reporting) standards for consolidation take control as their only criteria, rather than both control and the type of activity. Under accounting standards, the parent of a banking group is expected to consolidate all entities that it controls, including insurance and non-financial entities. Annex A presents a graphical representation of the prudential and accounting approaches to consolidation. In countries where banks engage in very limited business outside of banking, then the accounting and prudential perimeters will coincide. But in countries where banks control large insurance subsidiaries or non-financial interests, or banks are controlled by non-financial firms, or there is a significant difference between the prudential and accounting treatment of special purpose vehicles or minority investments, then the two perimeters will diverge.

To delineate the perimeter of consolidation, the BCBS focuses on two aspects: the activities of the entities controlled by the banking group, and the threshold for control. Entities within the perimeter include those engaged in banking, securities and other financial activities. Other financial activities are defined as "financial leasing, issuing credit cards, portfolio management, investment advisory, custodial and safekeeping services and other similar activities that are ancillary to the business of banking" (BCBS (2006), p 7).

Regarding the threshold for control, the BCBS states that "majority-owned or -controlled … entities should generally be fully consolidated" (BCBS (2006), p 7). This leaves room for differences across countries in how the threshold for control is defined. National supervisors typically apply the same threshold for prudential consolidation as specified in national accounting standards.

In late 2015 the BCBS issued for public consultation additional proposals related to the perimeter of consolidation (BCBS (2015c)). These focus on identifying entities that are currently outside the perimeter but might pose a risk to the bank through expectations of financial support in the event that the entity experiences difficulties (so-called step-in risk). The 2007–09 crisis demonstrated that banks have incentives beyond contractual obligations and equity stakes to support entities to which they are connected but are not within the usual perimeter of consolidation. The proposals aim to ensure that all relevant activities tied

[5] At the sectoral level, there is a third, statistical approach to consolidation. See Inter-Agency Group on Economic and Financial Statistics (2015).

to banks are taken into account when assessing the risks of the banking group, with a particular focus on banks' relationships with shadow banking entities. Yet, they do not alter the BCBS's general approach to consolidation, which continues to leave significant room for national interpretation.

3.2 Reporting practices for consolidation

The reporting guidelines for the CBS are vague about the perimeter of consolidation. While banks are encouraged to follow prudential standards, specific guidelines are left to national discretion. Consequently, there are considerable differences across countries. Based on a sample of the largest CBS-reporting countries, banks in about half of the countries are required to follow the prudential perimeter, in a few they follow a perimeter defined for statistical purposes, and the rest follow the accounting perimeter (Annex B). European countries tend to follow the prudential perimeter and others the accounting one, although practices are not uniform in any region. In some cases, even banks within the same country follow different approaches to consolidation.

The most significant differences concern the inclusion of non-bank financial affiliates and non-financial entities in the perimeter. In most CBS-reporting countries, banks consolidate non-bank financial entities engaged in securities and other financial business ancillary to banking but do not consolidate their insurance or non-financial affiliates. This is consistent with the BCBS's approach. However, there are exceptions. In Germany, CBS-reporting banks do not include the positions of their securities and other non-bank financial affiliates, which are large. In Belgium, Canada, Japan and the United States, banks consolidate all entities controlled by the banking group, including non-financial entities. In these latter cases, the non-banking entities are small relative to the banking business of the group and so divergent approaches may have less significant consequences for the comparability of data than seems at first glance.

3.3 Recommendations

The Study Group considered the benefits and costs of defining a statistical perimeter of consolidation. A clear, detailed definition for statistical purposes is one way to improve the cross-country comparability of data. However, if the statistical perimeter were to differ from either the prudential or accounting perimeter, then for banks the costs of implementation would be very high. High costs would reduce the likelihood and consistency of implementation, which would negate the benefits of a statistical definition. Also, considering the challenges that prudential supervisors face in defining the prudential perimeter, the Study Group was sceptical whether agreement on a statistical perimeter would be any easier to achieve.

Instead, the Study Group proposed aligning the perimeter with the prudential approach to consolidation. The prudential approach, with its focus on the risks inherent in banking and similar activities, fits best with the purpose of the CBS, ie to capture the exposures of banks. Furthermore, the objective of compiling data that are comparable across banking systems is better achieved through the prudential approach than the accounting approach because the former separates banking activities from a group's other activities, which in some countries account for a sizeable share of a group's business. Finally, the prudential perimeter is already the one agreed for reporting by global systemically important banks to the International Data Hub.

A. *The consolidation perimeter for reporting the CBS should be aligned with the national prudential perimeter.*

The Study Group acknowledged that alignment with the prudential perimeter will not necessarily ensure comparability. The BCBS's definition of the consolidation perimeter, even if part of a BCBS standard, contains significant leeway for national interpretation and, as such, does not lead to uniform implementation. The risks that an activity poses to a bank vary by bank, and consequently similar activities may not be consolidated similarly across banks. Moreover, implementation of the BCBS's

recommendations varies by country. In some countries the national prudential perimeter includes insurance firms, while in others it excludes non-bank financial entities.

While the benefits of aligning the CBS with the national prudential perimeter are clear, the costs will vary by country and bank. Therefore, it is impractical to set a timetable for CBS-reporting banks to converge on the prudential perimeter. It will be for each country to decide the optimal way to trade off the benefits and costs and decide the pace at which to converge.

B. The horizon over which banks should converge on the national prudential perimeter will depend on circumstances in each country.

Metadata is important to help users understand the comparability of data across countries. Metadata on consolidation practices have been collected by the BIS since 2011. The Study Group emphasised the importance of making these data more accessible to users, including their publication in a simplified, standardised format. An example of such a format is shown in Annex B.

C. *The BIS should enhance the metadata that it collects and publishes on consolidation practices.*

4. Derivatives

Another area where comparability in the LBS and CBS is very challenging is the reporting of derivatives. Comparability is impeded by differences in accounting standards for derivatives, notably the treatment of bilateral netting agreements that enable counterparties to cancel offsetting trades and settle on a net basis.

4.1 Derivatives in the international banking statistics

Derivatives are captured in several BIS datasets, with important differences across them in how data are compiled and what details are collected (Wooldridge (2016)). Derivatives captured in the IBS appear to be less comparable across countries than derivatives captured in other datasets, suggesting that more could be done to improve the banking statistics.

Table 1 summarises where derivatives are captured in the CBS. Derivative assets – contracts with a positive fair value to the reporting bank – are reported with a breakdown by country of ultimate obligor. Credit derivatives bought to hedge a position in the banking book – ie those not held for trading – are excluded from derivative assets and instead reported as risk transfers at gross notional value. Derivative liabilities – contracts with a negative fair value to the reporting bank – started to be reported in the CBS in 2013 as part of the recent enhancements. Only total worldwide liabilities are reported without any breakdown by counterparty. Banks also report the notional value of credit derivatives sold, although only as part of guarantees extended and not separately.

There are conceptual similarities between the CBS and the BIS's semiannual statistics on over-the-counter derivatives (OTCD). In particular, both are compiled on a consolidated basis. Yet, in practice the OTCD statistics are more comparable across countries than the CBS. As shown in the left-hand panel of Graph 1, derivative assets in the CBS lie above the OTCD statistics reported at net fair value but below those at gross fair value. This is because banks follow different netting practices across CBS-reporting countries, whereas netting agreements are taken into account in a comparable way in the OTCD statistics. The centre panel shows similar discrepancies for derivative liabilities. The right-hand panel illustrates that historically the CBS were a poor proxy for the OTCD statistics on credit default swaps sold, although since 2014 the two series have tracked each other more closely.

Reporting of derivatives in the consolidated banking statistics

Table 1

	Immediate counterparty	Ultimate risk	Valuation
Derivative contracts with a positive fair value	*included in* Total assets[1]		Fair value
excluding credit derivatives bought to hedge claims in the banking book		Derivative assets	Fair value
Credit derivatives bought to hedge claims in the banking book	*included in* Inward or outward risk transfers		Gross notional value
Derivative contracts with a negative fair value	Derivative liabilities *included in* Total liabilities		Fair value
Credit protection sold (contingent liability)		Guarantees extended	Gross notional value

[1] In the CBS on an immediate counterparty basis, derivative assets are included in total assets but excluded from total claims, ie total assets equals total claims plus derivative assets plus non-financial assets.

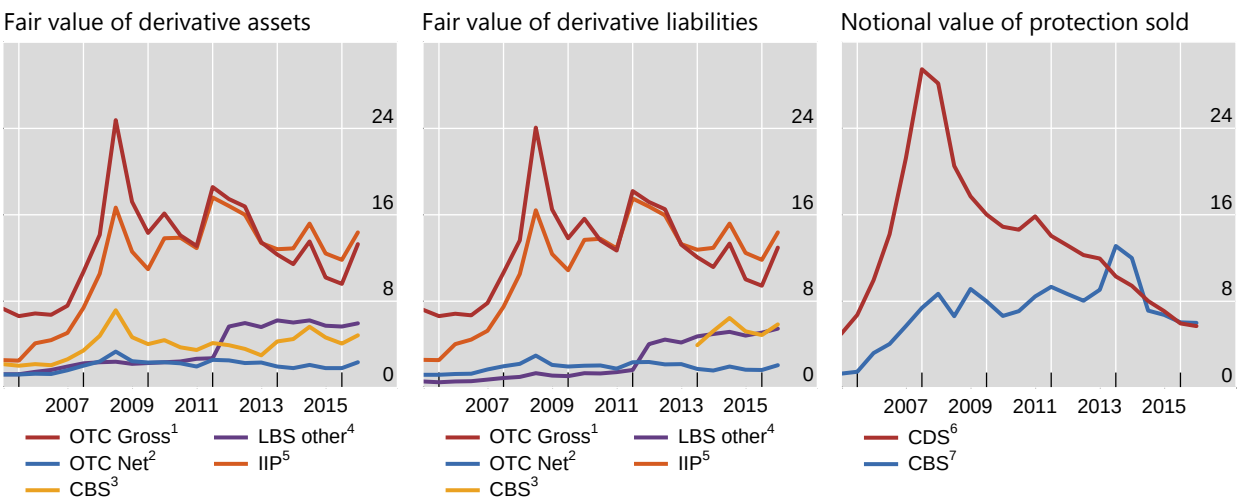
Derivatives are also captured in the LBS, where they are compiled according to the same methodology as derivatives in the international investment position (IIP) statistics: unconsolidated positions on a gross basis by residence of counterparties. However, in practice the correlation between derivatives in the LBS and those in the IIP statistics is very low, as shown in Graph 1. This is mainly because the coverage of derivatives in the LBS is poor. Several of the largest LBS-reporting countries do not report derivatives, including Germany, the United Kingdom and the United States (see Annex C.1). Also, in the LBS derivatives are not separately identified; they are reported under "other instruments", mixed with equities and instruments other than loans, deposits and debt securities.

Derivatives do not account for a large proportion of most banks' assets, but they are much more volatile than other instruments. The left-hand panel of Graph 2 shows the ratio of derivative assets to other financial assets – mainly loans and holdings of debt securities – for the foreign portfolios of banks that

Derivatives statistics

Outstanding positions, in trillions of US dollars

Graph 1

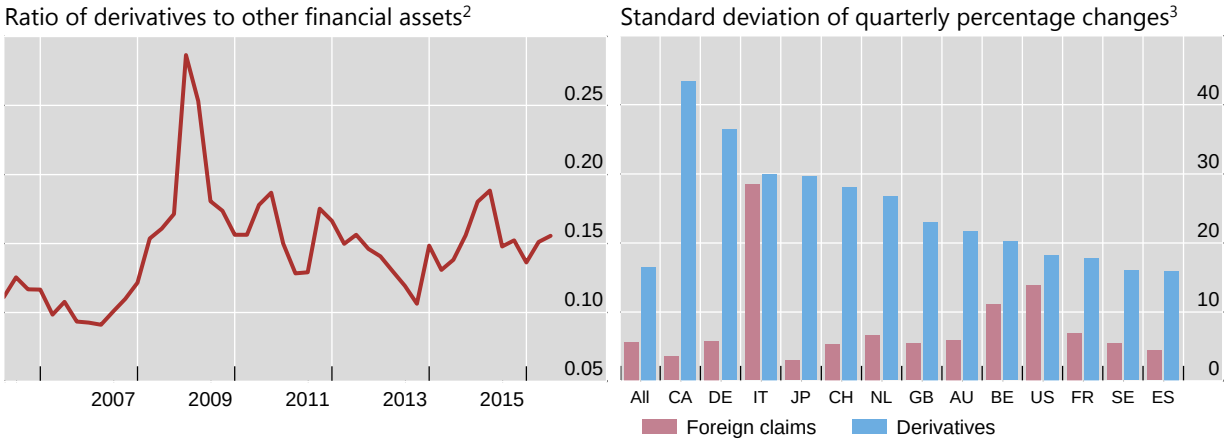


[1] Gross fair value of outstanding OTC derivatives. [2] Net fair value of outstanding OTC derivatives. [3] Not adjusted for discontinuities in coverage, notably in 2013–14 when banks started to report derivative assets on counterparties in their home country. [4] Other instruments, including derivatives. Not adjusted for discontinuities in coverage, notably in 2012 when banks started to report derivative positions on residents of the reporting country. [5] Financial derivatives and employee stock options. Excludes derivative positions of residents on residents. [6] Credit default swaps sold. [7] Guarantees extended.

Sources: National data; IMF; BIS consolidated banking statistics; BIS locational banking statistics; BIS OTC derivatives statistics.

Volatility of derivative assets

Foreign assets of CBS-reporting banks, on an ultimate risk basis[1] Graph 2



ALL = all CBS-reporting banks; AU = Australia; BE = Belgium; CA = Canada; CH = Switzerland; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; IT = Italy; JP = Japan; NL = Netherlands; SE = Sweden; US = United States.

[1] Excluding domestic assets, ie excluding derivatives and other claims on residents of banks' home country. [2] Other assets refer to foreign claims excluding derivatives. [3] Calculated over the period end-March 2005 to end-June 2016. Quarterly changes are not adjusted for methodological breaks or movements in exchange rates.

Source: BIS consolidated banking statistics.

report the CBS on an ultimate risk basis.[6] The ratio averaged 0.15 over the 2005–15 period but jumped dramatically during periods of market stress, owing mainly to changes in the market value of derivative assets. The ratio ranged from lows of about 0.1 in 2006 to a high of almost 0.3 in late 2008, at the peak of the global financial crisis.

The right-hand panel of Graph 2 compares the volatility of derivative assets and other assets (as measured by foreign claims) for a selection of CBS-reporting banks. The standard deviation of quarterly percentage changes is much higher for derivative assets than foreign claims: about three times higher for all CBS-reporting banks collectively, and more than nine times higher for Canadian and Japanese banks.

4.2 Prudential and accounting standards for derivatives

International standards concerning the reporting of derivatives are largely aligned for prudential purposes but not for accounting purposes. The main difference is whether derivative assets and liabilities can be offset.

Requirements for offsetting are typically stricter under international financial reporting standards (IFRS) than under national accounting standards. Under IFRS, counterparties must have a legally enforceable, unconditional right to offset contracts as well as an intent to settle on a net basis. Under some national accounting standards, either or both of these requirements is less stringent. For example, under US generally accepted accounting principles (GAAP), there must be reasonable grounds for assuming that the right to offset will be upheld in the event that the counterparty defaults, and derivatives are exempted from the requirement concerning the intention to settle net. Owing to such differences, under IFRS

[6] Any analysis of the time series properties of the CBS should be interpreted with caution because the data are not adjusted for either methodological changes or movements in exchange rates.

derivatives tend to be reported on a gross basis, whereas under GAAP they tend to be reported on a net basis.[7]

Prudential standards for offsetting are closer to US GAAP than IFRS. For the purposes of calculating capital adequacy and leverage ratios, the BCBS allows banks to offset derivative contracts, provided that a number of conditions are met (BCBS (2014b), p 5; BCBS (2016), p 23). Contracts subject to novation may be netted if any obligation between a bank and its counterparty to deliver a given currency on a given date is automatically amalgamated with all other obligations for the same currency and value data, legally substituting one single amount for the previous gross obligations. A bank may also net transactions that are subject to a legally valid form of bilateral agreement. To qualify for this latter treatment, the bank must satisfy its national supervisor that the bilateral netting agreement creates a single legal obligation such that the bank would have either a claim to receive or obligation to pay only the net amount in the event that the counterparty defaults. Furthermore a legal opinion is required to confirm that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be the net amount under all relevant laws. Finally, the national supervisor must be satisfied that the netting agreement is enforceable under the laws of each of the relevant jurisdictions and that procedures are in place to ensure that the relevant laws are kept under review in case of changes that might affect netting arrangements.

4.3 Reporting practices for derivatives

The reporting guidelines for the LBS and CBS do not explicitly state what standards should be followed when reporting derivatives. In most jurisdictions authorities require their banks to follow accounting standards. Banks in roughly half of the sample of CBS-reporting countries surveyed follow IFRS when reporting derivatives, while those in the other half, including Japan and the United States, follow national GAAP (Annex C.2).

As a general principle, the reporting guidelines require all assets and liabilities to be reported on a gross basis, without any offsetting. However, an exception is made for derivatives, which may be offset where this is consistent with national accounting standards: "Reporting of 'net positions' is allowed only if the national accounting practice allows netting [of offsetting positions] with the same counterparty that are covered under a legally enforceable netting agreement" (BIS (2013), p 33).

There are important differences among reporting countries regarding the conditions under which offsetting is permitted. In almost all jurisdictions, the existence of a legally enforceable bilateral netting agreement is a necessary condition. Some require the netting sets to be with the same legal entity, whereas others permit the netting set to cover all entities within the same group. Offsetting is typically permitted even if the contracts are settled in different currencies.

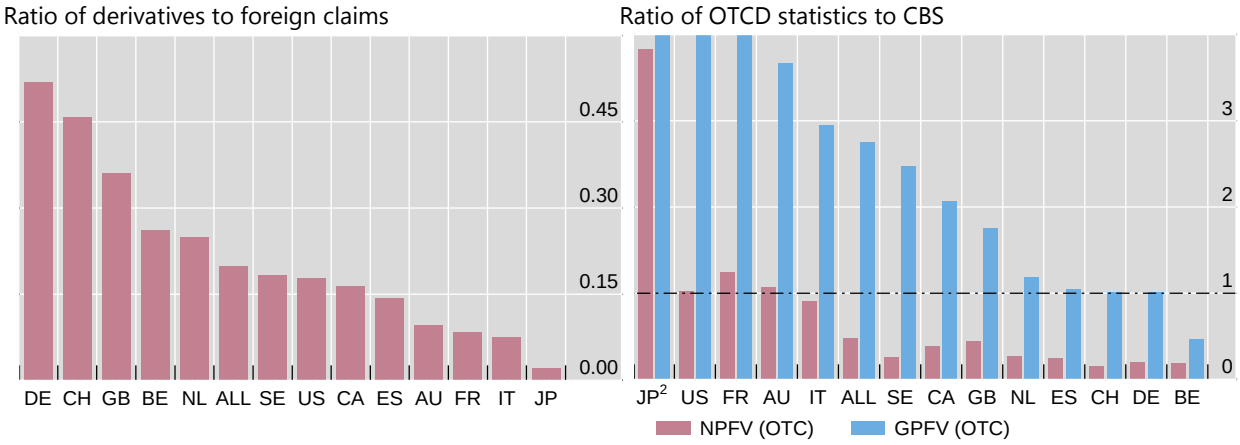
Differences in conditions for offsetting result in derivatives data that are not comparable across countries. This is mainly an issue in the CBS because in the LBS derivatives are typically reported on a gross basis, in line with BPM6 – if they are reported at all. The left-hand panel of Graph 3 shows the ratio of derivative assets to foreign claims (excluding derivatives) for a sample of banks that report the CBS on an ultimate risk basis. At end-June 2016, this ratio ranged from a low of 0.02 for Japanese banks to 0.5 for German banks. While business models explain part of this cross-sectional variation, the prevalence of offsetting is also very important.

The OTCD statistics help to shed light on differences in reporting in the CBS. The right-hand panel of Graph 3 compares the gross and net positive fair value of derivatives reported in the OTCD statistics to derivative assets reported in the CBS. A ratio of around one indicates that the CBS are close to the OTCD

[7] Encouraged by the G20 and the Financial Stability Board (FSB), accounting standard setters are working to reduce or eliminate differences between IFRS and US GAAP. While convergence work is nearing completion, the outcome is two different models for financial instruments and insurance contracts (FSB (2014)).

Positive fair value of derivatives[1]

Graph 3



ALL = all CBS-reporting banks; AU = Australia; BE = Belgium; CA = Canada; CH = Switzerland; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; GPFV = gross positive fair value of OTC derivatives; IT = Italy; JP = Japan; NL = Netherlands; NPFV = net positive fair value of OTC derivatives; SE = Sweden; US = United States.

[1] Amounts outstanding at end-June 2016. CBS refer to derivative claims on an ultimate risk basis. [2] In Japan, the reporting population for the OTC derivatives statistics includes non-bank financial institutions, such as securities dealers, that do not report the CBS. In addition, positions with central counterparties in Japan are not included in the CBS. Consequently derivative positions reported in the OTC derivatives statistics are substantially higher than in the CBS.

Sources: BIS consolidated banking statistics; BIS OTC derivatives statistics.

statistics. In countries to the left of the graph, the ratio is much higher than one when comparing the CBS to the gross fair value of derivatives and close to one when comparing to the net fair value. This suggests that, in these countries, the CBS are reported at net fair value. In the countries to the right of the graph, the ratio is close to one when comparing to the gross fair value, suggesting that in these countries the CBS are reported a gross fair value. In a few countries, the CBS and OTCD statistics are significantly different – neither ratio is close to one – perhaps owing to differences in the respective reporting populations, as in Japan.

Credit derivatives reported under guarantees extended are consistently reported at notional value across countries, but again offsetting affects comparability (Annex C.3). Some countries report on a gross basis, without any offsetting, while others report on a net basis. Among those that report on a net basis, in some purchased and sold contracts are required only to be with the same counterparty, while in others they are required also to reference the same underlying legal entity.

In addition to offsetting, the cross-country comparability of derivatives data is affected by practical difficulties categorising counterparties consistently. For derivatives (and other contracts eligible for close-out netting), banks typically identify the counterparty based on netting sets, which bundle all contracts that are subject to the same legally enforceable bilateral netting agreement. The netting set usually excludes contracts governed by the laws of a jurisdiction where the legal certainty of netting agreements is not ensured. Sometimes netting sets themselves are bundled under a separate legally enforceable netting agreement. Therefore, depending under which netting set a contract falls, the counterparty to a derivatives contract may be identified as the immediate counterparty (for example, if excluded from a netting set), an intermediate parent (for example, if the netting set covers a legal entity within a single jurisdiction) or an ultimate parent (for example, if the netting set covers legal entities in multiple jurisdictions but within a single group).

Table 2 shows the range of practices for reporting derivatives in the CBS on an ultimate risk basis. For contracts where the immediate counterparty is a branch (ie not a legal entity), derivatives are typically reported against the parent, even if the parent resides in a different country and the derivatives are reported on a gross basis. Where there is a netting agreement with the ultimate parent, contracts may still

Range of practices for reporting derivatives in the CBS Table 2

		Parent in country A	Subsidiary in country B	Branch in country C
Derivatives on an IC basis	Gross claims (positive fair value)	40	100	60
	Gross liabilities (negative fair value)	50	70	30
Derivatives on an UR basis	Claims before netting	100 = 40 + 60	100	Transferred to parent
	Claims after single jurisdiction netting (by legal entity)	20 = (40-50) + (60-30)	30 = 100-70	Transferred to parent
	Claims after multiple jurisdiction netting (by ultimate parent)	50 = (40-50) + (100-70) + (60-30)	Transferred to parent	Transferred to parent

be reported against an intermediate parent because cross-country offsetting may not be permitted or practiced. Indeed, the most common practice seems to be offsetting at the level of legal entities within a single jurisdiction. US banks appear to be the only ones that offset derivatives across multiple jurisdictions and assign all positions to the ultimate parent.

Another area where reporting practices vary is the deductibility of collateral. In many countries, banks are not permitted to deduct the value of collateral when reporting the fair value of derivatives contracts. In a few, they are allowed to do so for some types of collateral (eg cash) and in certain circumstances.

4.4 Recommendations

In the LBS, the case for enhancing the reporting of derivatives is finely balanced. Arguments in favour include improving the completeness of the LBS and strengthening their usefulness as complements to balance of payment statistics. Considering the paucity of data available about the derivative positions of non-bank counterparties and the potential risks to financial stability that such positions pose, some members supported reporting derivatives in the LBS separately from other instruments, with a detailed breakdown by country.[8] A detailed breakdown of derivatives is arguably of greater analytical use than the existing breakdown of other instruments, considering the mixed quality and coverage across reporting countries of the residual assets and liabilities reported under other instruments.

Arguments against enhancing the reporting of derivatives in the LBS include doubts about the quality and comparability of data across reporting countries. The Study Group agreed that, in principle, the most comparable data are derivatives reported on a gross basis on the immediate counterparty. However, the Group questioned the quality of such data in practice. If national accounting standards do not require derivatives to be reported on a gross basis on the immediate counterparty, then their quality might not be as high as data on a net basis.

The Study Group also questioned the usefulness of derivatives on a gross basis, which is how they should be reported in the LBS. For prudential and risk management purposes, net values are typically used to measure banks' exposures. Furthermore, users of the LBS seem to be primarily interested in loans

[8] The G20 Data Gaps Initiative identifies derivatives statistics as a key data gap (FSB-IMF (2016)).

and debt securities, which are already reported separately. Finally, for analysing the derivative positions of banks' counterparties, other sources of data are available, in particular the CBS.[9]

On balance, the Study Group concluded that the costs of major changes to the reporting of derivatives in the LBS outweighed the benefits. That said, the Study Group saw merit in reporting data that would help to monitor the proportion of derivatives in banks' portfolios, although for this purpose the counterparty breakdown could be very limited. In most countries, the derivative assets and liabilities of banks on non-residents are readily available: for example, they are collected to compile the international investment position.

D. In the LBS banks should report derivatives separately from other instruments, on a gross basis with a very limited geographical breakdown between local positions (on residents) and cross-border positions (on non-residents). A detailed breakdown of derivatives by country and sector of counterparty and currency should be encouraged. Countries that do not yet include derivatives in their LBS reporting should consult with the BIS about the impact before expanding their reporting.

In the CBS, the Study Group agreed in principle that derivatives should be reported on a net basis. In keeping with the purpose of the statistics, net values provide a more meaningful measure of country risk exposures. Derivatives on a gross basis are also informative, especially for analysing liquidity risks. For example, when counterparties start to lose confidence in a bank's ability to meet its obligations, attention will focus on gross values as counterparties seek to reduce their exposure and changes in net values trigger margin calls. But for analysing credit risks net values are more meaningful because netting agreements (and collateral) are important tools for mitigating risks.

E. In the CBS on an ultimate risk basis derivative assets with a country breakdown should be reported on a net basis.

One way to promote consistency in netting conditions is to align them with prudential standards, in particular the BCBS's treatment. However, this might be at the cost of reduced data quality. If the BCBS's netting conditions differ significantly from those of accounting standards, then alignment with the former could impact the availability and quality of data. The details required in the CBS, in particular the categorisation of counterparties by country, are usually not available from prudential reports.

While currently there is no plan for achieving convergence in netting conditions between IFRS and US GAAP, the increased use of central clearing is likely to reduce differences between them. The shift to central clearing is a key element of financial system reforms in the aftermath of the 2007–09 crisis, and the share of OTC derivatives cleared through central counterparties has increased significantly since the crisis. Central clearing reduces gross derivatives exposures by facilitating trade compression to eliminate redundant contracts. According to Trioptima (2016), in 2015 compression eliminated contracts totalling almost $200 trillion in gross notional.

Furthermore, central clearing facilitates reporting on a net basis. Effective from 1 January 2014 the relevant parts of IFRS were amended to clarify offsetting requirements and improve related disclosures. The amendments reduced ambiguity about whether derivatives cleared through central counterparties satisfied the offsetting requirements. In effect, they clarified that gross settlement through central counterparties could be considered equivalent to net settlement.

[9] Also, enhancing data on derivatives in the LBS could make changes in claims and liabilities more difficult to interpret. Most users of the LBS are interested in the flows estimated by the BIS. The BIS estimates flows by adjusting changes in amounts outstanding between periods for movements in exchange rates and methodological breaks in reported data. This estimation does not take into account changes in valuation. If more derivatives were reported on a gross basis in the LBS, then valuation changes could come to dominate changes between periods. Owing to the volatility of derivatives, even positions reported on a net basis could have a large impact on changes in amounts outstanding. That said, valuation changes affect all negotiable instruments reported in the LBS, which account for an ever larger proportion of banks' assets and liabilities. Over time this will undermine the robustness of adjusted changes as a proxy for underlying flows.

Overall, the Study Group had mixed views about whether netting conditions for derivatives should be aligned with prudential or accounting standards. Net values might be more comparable under prudential standards, but potentially at the cost of reduced data quality and availability. Moreover, in the medium term central clearing is likely to result in an expansion of reporting on a net basis under IFRS, thereby reduce the practical consequences of differences in netting conditions across accounting standards.

Rather than aligning netting conditions with particular standards, the Study Group emphasised the importance of publishing more detailed metadata to help users understand the comparability of derivatives data across countries. Annex C provides examples of metadata that could be collected regularly.

F. *The BIS should enhance the metadata that it collects and publishes about how derivatives are reported.*

The reporting of credit protection sold on a net basis poses challenges that go beyond those posed by differences in accounting standards. There are several different criteria that can be applied to determine whether protection bought and sold can be netted. First, are the contracts with the same counterparty, under a legally enforceable bilateral netting agreement? Second, do they refer to the same underlying entity? Finally can contracts of different maturities be netted? In the BIS credit default swap statistics, net market values take account of the counterparty only. In the CBS, the reference entity is also important because a geographic breakdown of the underlying credit risk should be reported. If contracts are netted by counterparty without regard for the reference entity, then the resulting geographic breakdown either understates the underlying credit exposures (because unrelated reference entities may have been offset) or incorrectly refers to counterparty exposures.

The Study Group agreed in principle that credit protection sold should be reported on a net basis, after taking account of the counterparty and the reference entity. However, if such netting were impractical, then data on a gross basis could also be reported. The metadata should clearly indicate whether data are reported on a gross or net basis and, if on a net basis, whether netting takes into account both the contractual counterparty and the underlying, as illustrated in Annex C.3.

G. Credit protection sold should be reported on a net basis (as part of guarantees extended).

The Study Group also discussed whether the categorisation of derivatives counterparties by country could be made more consistent by reporting on an immediate counterparty basis. Owing to the practical difficulties of allocating to the immediate counterparty derivatives covered by netting agreements, it was not clear that such a change would result in more comparable data. To be sure, banks also face practical difficulties allocating to the ultimate parent because cross-country netting is not common. Weighing the costs and benefits, the Study Group agreed that derivatives should continue to be reported on an ultimate risk basis.

H. *In the CBS derivative assets with a country breakdown should continue to be reported on an ultimate risk basis.*

In the CBS, data published by the BIS on total claims do not include derivatives. Instead, claims cover all financial assets excluding derivatives. A baseline measure combining claims and derivatives would give a more comprehensive measure of banks' exposure to a particular country. Indeed, when the ultimate risk data were introduced following the Asian financial crisis, the CGFS recommended that the baseline measure for reporting banks' exposures should be claims plus derivatives (CGFS (2000)). Some CBS-reporting countries include derivatives in the baseline measure that they publish.[10]

[10] For example, US data published by the Federal Financial Institutions Examination Council in the E.16 Statistical Release include derivatives exposures in its headline "country risk claims" (see column D on page 2 at http://www.ffiec.gov/E16.htm).

The Study Group identified several drawbacks to adding derivative assets to claims. First, as discussed above, derivatives are considerably more volatile than claims. As a result, fluctuations in the combined measure would be difficult to interpret. Second, to the extent that netting practices for derivatives differ across reporting countries, adding derivatives could reduce the comparability of exposures across national banking systems.[11]

I. *In the CBS the BIS should continue to publish claims excluding derivatives and to show derivatives separately.*

5. Risk transfers

Since their introduction in 2005, the CBS on an ultimate risk (UR) basis have been widely used to gauge the final exposure of banking systems to different countries and sectors. Yet, these statistics have limitations, which complicate their interpretation. For example, they are not aligned with either banks' own or prudential measures of exposures; reporting practices differ across countries in some key respects, particularly the treatment of collateral; and the quality of data reported by banks is perceived to be lower than the CBS on an immediate counterparty (IC) basis. The Study Group assessed the benefits and costs of improving the UR data and concluded that resources are better directed towards improving the IC data.

5.1 Measuring banks' country risk exposures

Claims on an IC basis are useful to identify which banks are the main sources of foreign bank credit to particular countries and sectors, as well as to monitor the overall indebtedness of borrowers. However, they are not necessarily representative of banks' country risk exposures. Risk transfers – guarantees, credit derivatives (protection purchased) or collateral – shift a bank's exposure from one counterparty to another. They introduce a wedge between banks' claims on an IC basis and their ultimate exposures; the country or sector where the ultimate risk lies may be very different from that of the immediate borrower.

The CBS on an UR basis incorporate risk transfers and thus provide a measure of banks' final exposure. It is a statistical measure, which differs from measures of credit risk based on banks' internal risk management systems. The advantage of a statistical measure is that it promotes comparability. The CBS on an UR basis are calculated using a common, transparent methodology, which has strengths and weaknesses that are well understood. By contrast, banks' internal measures of credit risk can be based on methodologies that vary from bank to bank, and it can be difficult to understand the strengths and weaknesses of each bank's methodology.

A limitation of the CBS on an UR basis is that the quality of the underlying data is lower than for statistics compiled by banks for risk management or financial reporting purposes. The compilation of UR data is complex and consequently more prone to errors than the compilation of IC data.

Furthermore, UR data provide only part of the information relevant for analysis of credit risk exposures. Information about probabilities of default and losses given default would be needed to estimate expected losses or conduct stress tests, and about business strategies to understand how banks might respond to developments abroad.

While the CBS on an UR basis are useful as a starting point for a fuller analysis based on more detailed data, they at best oversimplify and at worst misrepresent underlying exposures. Two banks with

[11] Another drawback of adding derivative assets to claims is related to the treatment of off-balance sheet positions. Derivatives in the CBS on an UR basis should refer to on-balance sheet positions. However, banks in some CBS-reporting countries, including Japan and Switzerland, include off-balance sheet positions (eg trustee positions), which can be sizable. As a consequence, for these countries derivative assets overstate the "actual" derivative exposures of reporting banks.

the same UR claims may in fact have very different exposure to country risk depending on the characteristics of the risk transfers and their effectiveness as hedges. Risk transfers do not eliminate risk; they redistribute risk across counterparties. For every outward transfer of risk from one counterparty there is an inward transfer to the counterparty or collateral that guarantees the claim. In the CBS, claims on an UR basis take into account both inward risk transfers (from counterparties abroad to those in country *i*) and outward risk transfers (from counterparties in country *i* to those abroad):

$$\text{UR claims}_i = \text{IC claims}_i + (\text{Inward risk transfers}_i - \text{Outward risk transfers}_i)$$

$$= \text{IC claims}_i + \text{Net risk transfers}_i$$

While UR data take account of net risk transfers, for some purposes it is useful to consider inward and outward risk transfers separately. The effectiveness of risk transfers depends on the probability of a double default, where a default by one counterparty is highly correlated with a default by another. Correlated risks are of concern for guarantees provided by parent companies to their affiliates. In particular, a default by a bank increases the likelihood that its branches in other countries will also default. In such cases, country risk exposures are best measured by taking into account inward risk transfers to the parent. This reasoning was emphasised by the BCBS as early as 1982 in its first recommendations about managing country risk (BCBS (1982)). However, if the probability of a default by the immediate counterparty is weakly correlated with the probability of a default by the guarantor or collateral, then net risk transfers can overestimate the risk of loss.

To illustrate why it can be important to consider inward and outward risk transfers separately, consider two banks with the same exposure to Venezuela on an UR basis. The exposure of the first bank takes the form of a loan to a company in Venezuela. The exposure of the second bank takes the form of a loan to a company in the United States that is guaranteed by an unrelated company in Venezuela. In the event of default by the company in Venezuela, the first banks will suffer losses, whereas the second bank will not unless the company in the United States also defaults. In this case, excluding inward risk transfers would provide a better measure to compare the two banks' exposure to Venezuela.

5.2 Size of risk transfers

While conceptually the CBS on an UR basis provide a better measure of banks' country risk exposures than the CBS on an IC basis, an assessment of benefits should also consider whether this makes a practical difference for analysis. Do UR claims change our understanding of vulnerabilities apparent in IC claims? Amounts reported on an IC basis tend to be similar to those on an UR basis, which weakens the case for collecting both. Yet, they are far from identical, and for some purposes the CBS on an UR basis add information not available in the IC data.

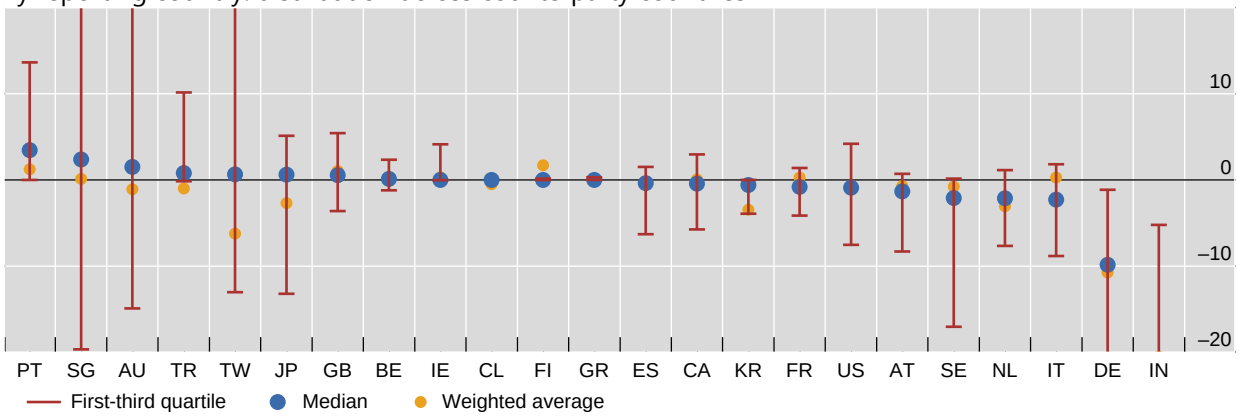
Graph 4 shows net risk transfers as a percentage of foreign claims on an IC basis for a sample of 23 banking systems (from CBS-reporting countries) and 40 counterparty countries, excluding domestic claims on borrowers in banks' home country. The top panel shows the distribution for a given banking system. As illustrated by the interquartile range, there is substantial variation in the relative importance of net risk transfers. However, this variation arises principally from small claims. For a majority of banking systems, the weighted average percentage, which takes account of the size of claims, is smaller than the median percentage, indicating that net risk transfers are relatively more important where claims are small. The weighted average percentage is typically less than 5%. The most notable exceptions are German and Indian banks, which report net risk transfers exceeding 10% of IC claims.

The results are similar when viewed from the perspective of a given counterparty country, as shown in the bottom panel of Graph 4. In a majority of counterparty countries, banking systems' risk transfers equal less than 5% of their IC claims. There are some exceptions. Banks' claims on borrowers in Korea and Brazil are around 10% higher on an UR basis than an IC basis, while those on financial centres like the Cayman Islands, Hong Kong SAR and British Virgin Islands are substantially lower.

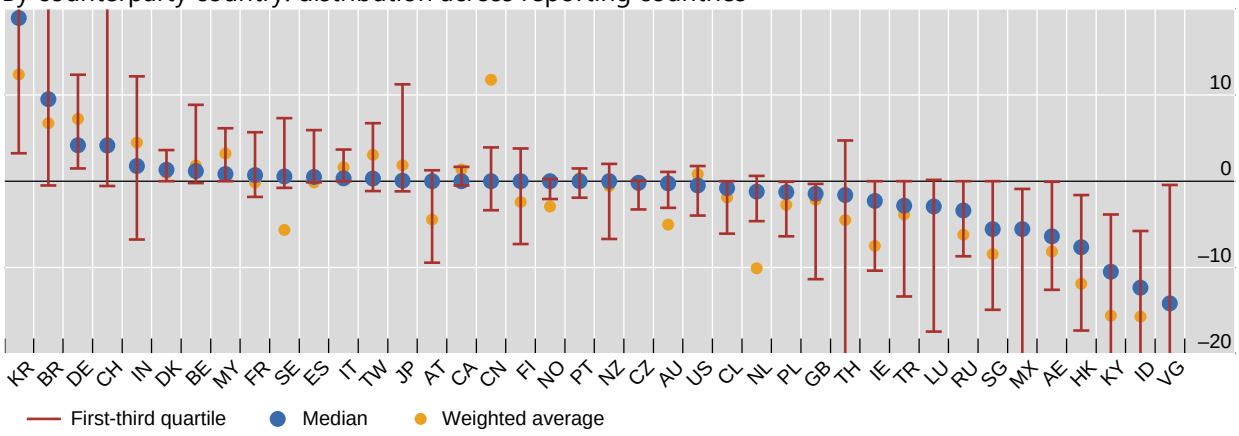
Relative importance of net risk transfers

Inward minus outward risk transfers, as a percentage of foreign claims on an IC basis[1] Graph 4

By reporting country: distribution across counterparty countries



By counterparty country: distribution across reporting countries



AE = United Arab Emirates; AT = Austria; AU = Australia; BE = Belgium; BR = Brazil; CA = Canada; CH = Switzerland; CL = Chile; CN = China; CZ = Czech Republic; DE = Germany; DK = Denmark; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; GR = Greece; HK = Hong Kong SAR; ID = Indonesia; IE = Ireland; IN = India; IT = Italy; JP = Japan; KR = Korea; KY = Cayman Islands; LU = Luxemburg; MX = Mexico; MY = Malaysia; NL = Netherlands; NO = Norway; NZ = New Zealand; PL = Poland; PT = Portugal; RU = Russia; SE = Sweden; SG = Singapore; TH = Thailand; TR = Turkey; TW = Chinese Taipei; VG = British Virgin Islands (as proxied by the BIS aggregate 1Z capturing several islands of the Lesser Antilles in the Caribbean); US = United States.

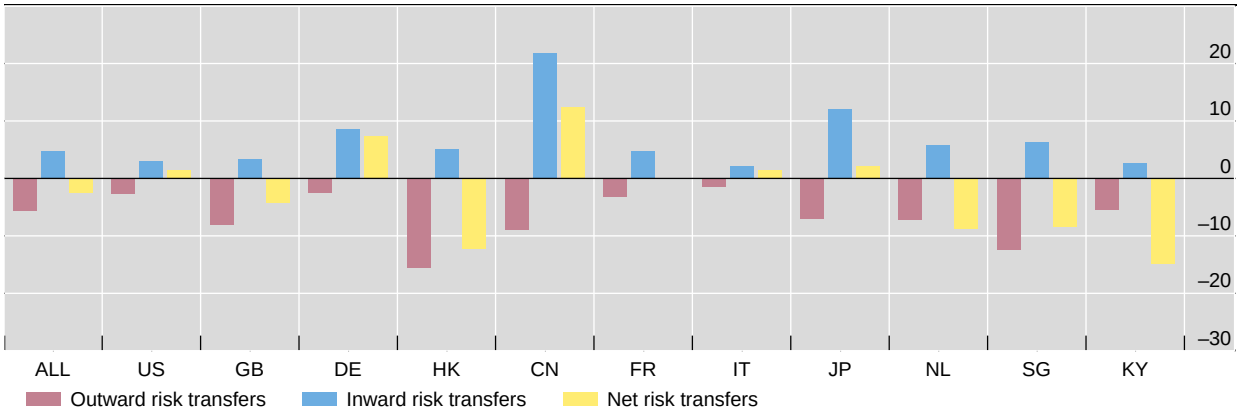
[1] Amounts outstanding at end-June 2016.

Source: BIS consolidated banking statistics.

Net measures can understate the importance of risk transfers because large outward transfers might offset large inward transfers. At a global level, outward and inward risk transfers are several times larger than net risk transfers: outward risk transfers equal 5.6% of foreign claims and inward transfers 4.8%, compared to net risk transfers of 2.5%. At the level of counterparties in individual countries, the relative magnitude of inward and outward risk transfers is even larger. For example, inward risk transfers exceed 10% of foreign claims on countries that are home to large multinational companies that borrow offshore, such as China and Japan (Graph 5). For financial centres, such as Hong Kong SAR and Singapore, outward risk transfers amount to more than 10% of foreign claims.

Inward and outward risk transfers on selected counterparty countries

As a percentage of foreign claims on an immediate counterparty basis[1] Graph 5



ALL = All counterparty countries; US = United States; GB = United Kingdom; DE = Germany; HK = Hong Kong SAR; CN = China; FR = France; IT = Italy; JP = Japan; NL = Netherlands; SG = Singapore; KY = Cayman Islands.

[1] Amounts outstanding at end-June 2016.

Source: BIS consolidated banking statistics.

The magnitude of risk transfers for some counterparty countries points to an important use of the CBS on an UR basis: to provide a broader perspective on borrowing countries' external vulnerabilities (McGuire and Wooldridge (2005)). For example, banks' UR claims shed light on potential drains on foreign currency liquidity arising from contingent liabilities, which might not be captured in external debt statistics. In particular, inward risk transfers might indicate borrowing by offshore affiliates that is guaranteed by the parent. Also, risk transfers might provide an earlier warning of perceived changes in borrowers' creditworthiness than is evident from on-balance sheet claims because banks can change their exposure more quickly using credit derivatives than by cutting credit.

5.3 Prudential standards for risk transfers

A wide range of risk transfer mechanisms exist, from guarantees and insurance to credit derivatives. Prudential supervisors have established criteria for determining which mechanisms are eligible as credit risk mitigants for the purpose of calculating risk-weighted exposures. The BCBS's capital adequacy framework distinguishes among (and has differing capital treatment of) four types of risk transfer mechanisms:[12]

- *Parent guarantees to branches*. Exposures to bank branches are automatically transferred to the parent in all cases and without any conditionality (BCBS (2006)).
- *Parent guarantees to subsidiaries*. Banks are allowed to recognise explicit parent guarantees to subsidiaries as long as the parent has a lower risk weight (ie a higher credit quality) than the immediate counterparty (BCBS (2006), p 48, par 195).
- *Third-party guarantees and credit derivatives*. There are number of conditions that have to be satisfied for third-party guarantees and credit derivatives to be recognised as risk mitigants (BCBS (2006), p 46–7, par 190-1; p 35, par 140). Most importantly, eligible guarantees have to be direct, explicit, irrevocable, unconditional, and legally enforceable in all relevant jurisdictions. Also, only guarantees

[12] The criteria given below for recognising risk mitigants refer to the standardised approach to credit risk. The criteria are somewhat different in the internal rating based approach (BCBS (2006), par. 211-537). For example, the internal rating based approach permits recognition of a greater range of collateral.

issued by, or protection provided by, entities with a lower risk weight than the counterparty are considered eligible.

- *Collateral*. The BCBS specifies a number of criteria for collateral to be an eligible risk mitigant and provides a list of eligible financial collateral instruments (BCBS (2006), p 35, par 145-6). The list is more or less limited to cash and securities. One of the most imporant eligibility criteria is that the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. For example, securities issued by the counterparty – or by any related group entity – would provide little protection and so would be ineligible (BCBS (2006), p 33, par 124). Another important criteria is that banks must have the right to liquidate or take legal possession of the collateral in a timely manner in the event of the default, insolvency or bankruptcy of the counterparty (BCBS (2006), p 33, par 123).

5.4 CBS guidelines for reporting risk transfers

In the CBS, the eligibility criteria for risk transfers are similar to those in the BCBS's framework, with some important exceptions. The key similarities and differences are summarised in Table 3.

The treatment of banks' branches is the same in the CBS and the BCBS framework. In the CBS, claims on branches are always considered as being guaranteed by the parent, even if there is no legal guarantee (BIS (2013), p. 29). For example, a claim on the New York branch of a French bank would automatically result in a risk transfer from the branch in the United States to the parent in France. The rationale for this treatment is that the final risk must lie with a legal entity and branches are not separate legal entities.[13]

For other guarantees – from parents to subsidiaries, or from third parties – the eligibility criteria in the CBS are similar to those in the BCBS framework but less strict. Where they are the same is that the guarantee must be direct, explicit and irrevocable (BIS (2013), p. 29; BIS (2014), p. 14). Unlike in the case of banks' branches, claims on subsidiaries are not considered as being guaranteed by the parent unless there is an explicit guarantee. Moreover, to be an eligible risk transfer, the guarantee cannot be unconditionally cancellable by the guarantor; it must be irrevocable.

Where the CBS differ from the BCBS framework is criteria about credit quality and legal enforceability. The BCBS framework only recognises guarantees to the extent that the parent or third party has a higher credit quality (ie a lower risk weight) than the immediate counterparty; there is no such requirement in the CBS. For example, if the credit rating of a subsidiary were AAA and that of the parent only A, then the BCBS framework would not recognise any guarantee by the parent whereas the CBS would permit the risk to be transferred to the country of the parent.

The BCBS framework also requires that guarantees be legally enforceable in all relevant jurisdictions. This requirement is especially relevant for the eligibility of credit derivatives as risk transfers. Under the BCBS framework, for a contract to be considered an eligible risk transfer supervisors must be satisfied that it is binding on all parties and enforceable under the laws of each of the relevant jurisdictions. The CBS apply looser criteria, requiring only that credit derivatives be used to mitigate the credit risk associated with claims in the banking book, ie credit derivatives held for trading purposes are not eligible risk transfers.

For most types of collateral, the eligibility criteria in the CBS and the BCBS framework are in principle aligned. However, any divergence between national supervisory standards and the BCBS framework will impact the comparability of risk transfers in the CBS. The CBS state that "collateral may be considered as an indicator of where the final risk lies to the extent that it is recognised as a risk mitigant

[13] This rationale does not hold in all cases. In some countries, the liability of a bank to meet the obligations of its branches is limited to the obligations that a bank in the country where the branch is located must meet under the laws of that country. In other words, the parent may not be liable in cases where the authorities in the host country impose payment restrictions.

Risk transfers: comparison of eligibility criteria Table 3

	Basel Committee on Banking Supervision	Same (=) or different (< >)	BIS Consolidated Banking Statistics
Parent guarantees to branches	implicit	=	implicit
	unconditionally recognised	=	unconditionally recognised
Parent guarantees to subsidiaries	explicit	=	explicit
	lower risk weight for parent	< >	
Third-party guarantees and credit derivatives	direct	=	direct
	explicit	=	explicit
	irrevocable	=	irrevocable
	unconditional	=	unconditional
	legally enforceable in all relevant jurisdictions	< >	
	lower risk weight for guarantor	< >	
Collateral	liquid/tradable	< >	recognised as risk mitigant by supervisors in the reporting country
	lack of material positive correlation		
Memo: Repurchase agreements	risk allocated to counterparty after deducting collateral	< >	risk allocated to counterparty (or to its parent) without any deductions

according to the supervisory instructions in the reporting country" (BIS (2013), p. 29). Unlike the BCBS framework, the CBS guidelines do not list specific collateral instruments that are considered eligible for recognition as risk transfers.

Notwithstanding the alignment of criteria for recognising collateral, there is a very important difference between the CBS's and the BCBS's treatment of collateral. In contrast to its treatment of other types of risk transfers, for collateral the BCBS does not follow the substitution approach. Instead, banks are permitted to reduce their exposure by the amount of the collateral, adjusted for haircuts (BCBS (2006), p 37, para 147). By contrast, in the CBS banks substitute the collateral for their exposure to the immediate counterparty.

The CBS make an exception for repurchase (repo) agreements. Funds lent under repo agreements are reported against the counterparty (or the parent of a bank's branch) and not against the collateral, even if the securities meet the criteria for eligible collateral (BIS (2014), p. 17). This differs from the BCBS framework, where securities purchased under (reverse) repo agreements are typically eligible to reduce credit exposures, like for any other collateralised transaction.

In the CBS, the reason that repos are reported against counterparties rather than collateral is that the prevailing practice among banks active in the repo market – indeed, in credit markets in general – is to assess the credit quality of counterparties before assessing that of the collateral. The value of the collateral fluctuates and, in the event of default by the counterparty, liquidation of the collateral can be delayed by operational and legal problems. Therefore, the primary exposure in a repo is counterparty risk (ICMA (2015)). During the global financial crisis, concerns about the creditworthiness of counterparties, coupled with uncertainty about the ability to realise the value of the collateral in a sale, impaired the functioning of repo markets because participants did not want to be left holding collateral (Hördahl and King (2008)).

5.5 Reporting practices for risk transfers

The extent to which authorities in reporting counties follow the CBS-reporting guidelines varies depending on the risk transfer mechanism.[14] On the one hand, authorities adhere to the guidelines for the reporting guarantees and credit derivatives. On the other hand, the recognition of collateral varies considerably across reporting countries.

Reporting practices for parent and third-party guarantees are broadly consistent across countries. All reporting banks treat claims on branches as being guaranteed by the parent bank even if there is no explicit guarantee. For other guarantees, the majority of those surveyed recognise a risk transfer only if the guarantee is explicit and irrevocable. Consistent with the CBS guidelines but not with the BCBS's framework, most do not condition recognition of a guarantee on the credit quality of the guarantor, ie even if the credit quality of the guarantor is lower than that of the immediate borrower, a risk transfer may still be recognised.

For credit derivatives too, reporting practices are typically consistent with the CBS guidelines. In almost all countries surveyed, credit protection bought is recognised as a risk transfer only if it hedges – effectively guarantees – an existing claim. In addition, no reporting banks recognise as risk transfers credit derivatives purchased for trading purposes or to offset credit derivatives sold.

There is a substantial variation in reporting practices for collateral. Only three of the ten countries surveyed are aligned with the BCBS's requirement that collateral should be liquid and readily realisable to be recognised as a risk transfer. Four reporting countries have no such requirement, while in three more banks follow different practices. Only two countries require that the collateral be realisable outside the country of residence of the immediate counterparty, and only three require that its value not be highly correlated with the credit quality of the immediate counterparty. Finally, nine of the eleven reporting countries surveyed cap at the value of the claim the amount of risk transferred via collateral; the other two have no cap.

Like for collateral, the treatment of repurchase agreements and securities lending arrangements varies considerably. In four of the countries surveyed, banks transfer the credit risk to the counterparty, in line with the CBS-reporting guidelines. In three countries, banks transfer the risk to the collateral. In a further four countries, practices vary across banks in the country.

5.6 Recommendations

The Study Group was not convinced that the benefits of investing resources to improve the CBS on an UR basis would outweigh the costs. On the one hand, conceptually UR claims provide a better measure of exposures than IC claims. On the other hand, they are most useful as a starting point for a fuller analysis using more detailed data, but as such did not add significantly to analysis that could be done with the IC data, which are of better quality. On balance, the Study Group concluded that the guidelines for reporting the CBS on an UR basis should be clarified, but resources to improve reporting would be better directed towards the CBS on an IC basis.

Subject to this caveat, the Study Group attached higher importance to reporting inward and outward risk transfers by counterparty country – as is currently requested in the CBS on an IC basis – than reporting UR claims. The purpose of collecting data on risk transfers is to track the movement of credit risk from its origin to its final location. Net risk transfers (from the UR data) mask some movements, whereas the separate reporting of inward and outward transfers enables users to calculate different measures of country risk exposures.

[14] The discussion in this section is based on a survey of reporting practices in 11 CBS-reporting countries (see Annex D).

J. *Higher priority should be given to improvements to the CBS on an immediate counterparty basis than on an ultimate risk basis and in this context a separate reporting of inward and outward risk transfers should be encouraged.*

To track the movement of risk across borders, ideally inward and outward risk transfers should refer to country risk, excluding risks transferred between sectors in the same country. This was the basis on which inward and outward risk transfers were first reported in 2000 (BIS (2000)). The CBS on an UR basis, which started to be reported later, capture the reallocation of risk across sectors as well as countries. Consequently, in some reporting countries inward and outward risk transfers include sectoral transfers. The usefulness and comparability of the data are best served by focussing outward and inward risk transfers on country risk, excluding risk transfers between sectors in the same country, but the Study Group recognised that the potential costs of disentangling country and sectoral transfers might make this impractical.

K. Inward and outward risk transfers should refer to country risk transfers, excluding transfers between sectors in the same country, and metadata should be improved to clarify where reporting practices differ. The BIS should publish inward and outward risk transfers, confidentiality restrictions permitting.

Regarding how to improve the quality and comparability of the CBS on an UR basis, the Study group agreed that the eligibility criteria for risk transfers should be clarified by aligning the CBS-reporting guidelines with the BCBS's framework (see section 5.3). This would reduce uncertainty among banks about how to compile the data and among users about their advantages and disadvantages.

L. The eligibility criteria for risk transfers should be aligned with the BCBS's standards for risk mitigants.

Notwithstanding such clarification, the UR data would continue to have important limitations. A revised label might help to highlight these limitations. The label "ultimate risk" is potentially misleading because the data provide an incomplete picture of risk exposures. Also, most claims continue to be allocated to the immediate counterparty even after adjusting for risk transfers because only a small proportion of claims are covered by risk transfers.

M. To better recognise their limitations, relabel the CBS on an UR basis as the CBS on a guarantor basis.

Furthermore, to the extent that national prudential standards differ from the BCBS's framework, differences in reporting practices will persist. For example, whereas the BCBS's framework limits eligible collateral to cash and securities, in countries that do not require collateral to be liquid risk transfers will be larger. Also, reporting practices are likely to continue to diverge from the BCBS's requirement that guarantees or collateral be of higher credit quality than the immediate borrower. Many of the reporting banks surveyed indicated that this would be costly to implement because information about the credit quality of the guarantor or collateral was not easily linked to that about the credit quality of the immediate borrower.

Alignment with the BCBS's framework has significant consequences for the recognition of risk transfers associated with repos and securities lending. Whereas the current guidelines do not recognise repo collateral as a risk mitigant, the BCBS's framework treats repo collateral like any other form of collateral. For CBS-reporting banks that currently do not transfer risk from the repo counterparty to the collateral, it is likely to be costly, and may be impractical, to change. For example, some of the reporting banks surveyed indicated that it would be difficult to reallocate the risk for repos backed by pools of collateral, ie repos where the collateral satisfies pre-defined credit, liquidity and concentration constraints but is not linked to specific securities. Consequently, the Study Group agreed that the horizon over which banks would align with the BCBS's standards for risk mitigants will depend on circumstances in each country. Better metadata would help users interpret differences, along the lines of the example in Annex D. Additional guidelines about how exposures backed by asset-back securities and other forms of pooled

collateral should be transferred would also to help improve the comparability of data, together with more examples of how different types of exposures should be reported.

N. *On an ultimate risk basis, repos should be reported against the collateral. Metadata should be improved to clarify where reporting practices differ.*

6. Funding and maturity data

The CBS have historically focussed on the asset side of banks' balance sheets. The 2007-09 crisis turned attention to funding and liquidity risks. Large maturity mismatches and the freeze-up of wholesale markets during the crisis created severe liquidity pressures for many international banks, especially in US dollars. This led to requests from users for more data about the liability side and maturity structure of banks' balance sheets.

6.1 Assessing funding and liquidity risks

In the CBS, very limited information about liabilities is reported. Local liabilities in local currency have been reported since the 1980s, and an instrument breakdown of total worldwide liabilities was introduced in 2013. In contrast, the LBS have always covered both sides of the balance sheet. The currency breakdown of assets and liabilities from the LBS proved especially useful during the 2007–09 crisis to estimate funding gaps by currency (McGuire and von Peter (2012)). The 2011-12 enhancements agreed by the CGFS improved the completeness of these data.

One extension of the LBS often requested by users is information on the maturity structure of banks' cross-border claims. This request is motivated by the risks that maturity mismatches in assets and liabilities pose to borrowing countries, as opposed to the risks posed to creditor banks. Data on the maturity profile of countries' external liabilities are often incomplete, or available only by original maturity and not remaining maturity, and consequently analysts look to creditor-side data to fill the gap.

While the data needed for meaningful analysis of maturity mismatches go well beyond bank lending, bank lending is typically one of the most volatile components of external debt. The maturity profile of banks' claims is available in the CBS on an IC basis, where banks report their international claims by remaining maturity, split into three buckets: up to and including one year, between one and two years, and over two years. Owing to shortcomings in external debt data, short-term claims from the CBS are widely used to assess countries' vulnerability to external shocks (BIS (2002)).

For understanding the funding and liquidity risks faced by banks – as opposed those faced by borrowers – the maturity structure of claims is of limited use. What matters for banks in times of crisis is not so much the remaining maturity of the instruments they hold but rather their liquidity. While it is true that, when facing liquidity problems, banks can simply let some of their very short-term claims mature without rolling them over, the time horizon over which liquidity pressures are experienced is usually much shorter than one year, which is the usual statistical definition of short-term.

Furthermore, other sources of information about funding and liquidity risks will soon become available. As part of the BCBS's liquidity regulations, starting in 2018 banks will be required to disclose their liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) according to a common data template (BCBS (2014a), BCBS (2015a)).

6.2 Recommendations

Weighing the mixed benefits against the potentially large costs of collecting additional data by maturity, the Study Group concluded that no new breakdowns by maturity should be introduced. The existing maturity breakdown in the CBS on an IC basis was sufficient for analysis of borrower's exposure to rollover risk. That said, the Study Group saw benefits in enhancing the CBS-reporting guidelines in three areas: instrument composition of assets, repo assets and liabilities, and local liabilities.

The introduction of an instrument breakdown of total liabilities in 2013 provided what were admittedly very basic information about banks' funding structure. The Study Group identified additional data that could be reported at relatively low cost to support a richer analysis of funding and liquidity risks: data readily available from financial statements, but not as detailed as the BCBS's data template for the LCR and NSFR. First, the instrument breakdown in the CBS could be expanded to assets, to complement the liability data already reported. The main instruments on the asset side of the balance sheet would be reported – loans and deposits (excluding reverse repos), repo assets, debt securities, derivatives, equity investments, allowances for credit losses and other assets – but only totals, without further breakdowns of these instruments by currency, counterparty, or remaining maturity.

O. *In the CBS, an instrument breakdown of total worldwide assets should be reported, without further breakdowns of the instruments by currency, counterparty or remaining maturity.*

Second, the instrument breakdown of liabilities could be expanded to identify repos separately. According to the CBS-reporting guidelines, repos are included with loans and deposits. This limits the usefulness of the instrument breakdown for analysing funding and liquidity risks because customer deposits and repos are not similar. Whereas customer deposits are usually considered stable sources of funding, repos can be very volatile sources.

P. *In the CBS, repurchase agreements should be separately reported in the instrument breakdown of total assets and liabilities, without country or sector breakdowns.*

Like for derivatives, netting practices have a significant impact on the cross-country comparability of repo reporting. Ideally repos would be reported on a net basis, as recommended by the Study Group for derivatives, but if this diverged from financial statements then the data would be more costly for banks to compile and potentially of lower quality. Consequently, the Study Group agreed that banks could following national accounting standards when reporting repos.

Finally, the Study Group considered ways to improve the quality of liability data allocated by counterparty. Many banks find it difficult to identify the holders of their debt securities and other tradeable instruments. In the LBS, 25% of liabilities in the form of debt securities are unallocated by residence of the holder, whereas less than 1% of deposits are similarly unallocated. In the CBS, such difficulties undermine the quality and comparability of data on local liabilities in local currency, ie the liabilities of banks' affiliates to residents of the country where the affiliate is located, denominated in the currency of that country.

One alternative for improving the compilation of liability data is to make use of mirror data reported by creditors. Authorities in reporting countries often have additional information, not available to banks, that could help to identify holders: for example, assets reported by banks in other LBS-reporting countries or reported by portfolio investors in the IMF's Coordinated Portfolio Investment Survey. These data are unconsolidated and so are more useful for improving the LBS than the CBS.

Another alternative is to provide more detailed guidance about how to identify holders of debt securities. The market of issue is a possible proxy for the holder. Historically domestic debt securities tended to be held by residents and international ones by non-residents, although the growing openness

of local markets to foreign investors and issuers has weakened the reliability of this proxy (Gruic and Wooldridge (2012)).[15]

Q. *The BIS should work with reporting authorities to develop more detailed guidance to help distinguish between resident and non-resident holders of debt securities.*

In the CBS, another option for simplifying the compilation of liability data is to redefine local liabilities in local currency. For example, debt securities and other tradeable instruments denominated in the local currency could either be reported without regard for the country and sector of the holder or, alternatively, excluded altogether. However, both options would reduce the analytical value of these data. Compiling local liabilities with reference only to the currency and not the holder would result in a very large increase for banks with debts denominated in international currencies. Alternatively, excluding tradeable instruments would neglect an important funding source. In the CBS, the purpose of collecting data on local liabilities is to estimate the gap between local assets and local liabilities that might be funded from abroad: what proportion of banks' local assets is exposed to the risk of restrictions on cross-border payments? Limiting the coverage of liabilities to deposits would present a misleading picture of the funding gap.

That said, the guidelines for reporting local assets and liabilities in the CBS could benefit from greater clarity. First, local can be defined with reference to the residence of counterparties. Therefore, banks' local assets are claims on residents – and local liabilities debts to residents – of the country where the affiliate that booked the claim is located. Local currency is the currency of resident borrowers (for claims) or holders (for liabilities). Second, the instrument coverage of local claims should be the same as for other types of claims in the CBS, ie financial assets excluding derivatives. For consistency, local liabilities should exclude derivatives, as well as equity. Separate reporting of loans and deposits would provide additional information to help assess the coverage and quality of data on local assets and liabilities.

R. *In the CBS, banks' local claims and liabilities in local currency should refer to the residence and currency of the borrower (or for liabilities, creditor). The separate reporting of local deposits and loans in local currency as an of which item under local claims and liabilities should be encouraged.*

7. Sectoral classification of counterparties

A key enhancement agreed by the CGFS in 2011-12 was the expansion of the sectoral classification of counterparties, in particular the separate identification of non-bank financial institutions. This was motivated by the growing role of such institutions in the provision of credit, especially the role of shadow banking institutions such as hedge funds and special purpose vehicles. The sectoral classification of non-financial entities was also expanded to distinguish non-financial corporations from households and general government. Such details would help monitor vulnerabilities arising from offshore borrowing. Considering the reporting burden, the CGFS agreed to encourage reporting authorities to work toward the reporting of non-financial sub-sectors but did not require their reporting as part of the enhancements (Table 4).

Notwithstanding the reporting burden, a majority of LBS- and CBS-reporting countries, representing a majority of claims, have reported all subsectors – required and encouraged. In the CBS 18 countries, representing 57% of international claims on an IC basis, have implemented the required and

[15] To distinguish domestic from international issues, the BIS considers three characteristics of each debt security: the registration domain (ISIN), listing place and governing law. In the absence of other information, the currency of issue is also sometimes seen as a way to identify the market of issue. However, the currency is a poor proxy for the residence of the holder because in countries with open capital accounts, a significant share of debt securities denominated in local currency are likely to be held by non-residents, while in countries with dollarized economies a significant share of debt securities denominated in foreign currency are likely to be held by residents.

Reporting requirements for the sectoral classification of counterparties Table 4

Locational banking statistics		Consolidated banking statistics	
Sector and sub-sector	Enhancement	Sector and sub-sector	Enhancement
All sectors (A=B+N+U)	pre-existing	All sectors (A=B+R+O+U)	pre-existing
Bank sector (B=I+J+M)	required		
Intra-group (I)	required		
Unrelated banks (J)	encouraged	Unrelated banks (B)	pre-existing
Central banks (M)	encouraged		
Non-bank sector (N=F+P)	pre-existing		
		Non-bank private sector (R=F+S)	pre-existing
Non-bank financial institutions (F)	required	Non-bank financial institutions (F)	required
Non-financial sector (P=C+H+G)	required		
		Non-financial private sector (S=C+H)	required
Non-financial corporations (C)	encouraged	Non-financial corporations (C)	encouraged
Households, incl. NPISH (H)	encouraged	Households, incl. NPISH (H)	encouraged
		Official sector, incl. central banks (O)	pre-existing
General government (G)	encouraged		
Unallocated by sector (U)	required	Unallocated by sector (U)	pre-existing

encouraged sectoral breakdowns (Annex E.1). A further five countries implemented only the new required breakdown for non-bank financial institutions. In the LBS 24 countries, representing 56% of cross-border claims, have reported all required and encouraged subsectors, and a further seven countries implemented only the required breakdown (Annex E.2).

Nevertheless, the additional sectoral details are still too incomplete for aggregates of all reporting countries to be considered representative. As of late 2016, eight CBS- and 15 LBS-reporting countries had not reported any new sectoral breakdowns. Some are planning to start reporting in 2017.

The CGFS report had raised the possibility of eventually introducing a more detailed breakdown of non-bank financial institutions. The motivation would be to measure exposures to the shadow banking system more accurately: for example, by separately identifying claims on insurance companies and pension funds, which are typically not considered part of the shadow banking system. The latest international standards for national accounts identify seven sub-sectors within the non-bank financial sector.

While the Study Group agreed that more details about non-bank financial institutions would be useful, it attached higher priority to completing the implementation of the encouraged breakdowns. The Study Group identified two conditions that should be met before considering any further expansion of the sectoral breakdown. First, more authorities should implement the encouraged breakdowns. Based on authorities' current plans it is unclear when coverage of the encouraged breakdowns will increase sufficiently to be considered complete, eg when coverage will exceed 85% of total claims reported (see Annex E). Second, a more detailed definition of the shadow banking system is needed. While there is agreement on a functional definition of the shadow banking system, work is ongoing to provide more details for the non-bank financial sector in the context of national accounts. The OECD is working on this issue as part of the work led by the FSB on the monitoring of developments in the shadow banking system.

S. *Additional sectoral breakdowns should not be considered until the reporting of the current encouraged sectoral breakdowns is sufficiently complete.*

8. Other issues

8.1 Prioritisation of reporting requirements

Following the 2011-12 enhancements, the volume, complexity and confidentiality of the IBS pose greater compilation challenges than before. Guidance about what data gaps and quality issues to address first – on a best efforts basis – would help to overcome these challenges.

Any prioritisation must balance users' preference for granular data against the compilation challenges. Furthermore, it should not add new reporting requirements but rather facilitate efforts to implement existing requirements as soon and as fully as possible.

The typical uses of the IBS suggest prioritising the reporting of breakdowns in the following descending order: counterparty country, counterparty sector, currency, instrument and maturity. A detailed prioritisation was proposed by the BIS in 2014, but should be reviewed periodically in the light of the evolving uses of the IBS (BIS (2014)).

T. *The IBS reporting guidelines should prioritise requirements by distinguishing more clearly between required data and encouraged data.*

8.2 Provisions

Provisions are amounts that banks set aside in expectation of losses. In effect, provisions are a way of recognising changes in the fair value of a claim. Consequently, at the time that a loss materialises, the financial impact on the bank is limited to the face value of the claim minus any provisions.

The LBS and CBS guidelines recommend that claims be reported gross of provisions, ie allowances for credit losses should not be subtracted. However, for the purpose of analysing banks' country risk exposures, claims net of provisions arguably provide a better measure. Indeed, prudential standards measure exposures after adjusting for expected losses.[16]

The Study Group considered the benefits of reporting claims net of provisions and concluded that they did not outweigh the costs of such a significant change. First, a substantial portion of provisions tend to be general provisions that are not allocated to a specific country or sector. Therefore, in practice banks are likely to report similar country and sectoral exposures whether gross or net of provisions. Second, countries have different definitions of provisions, and so including provisions would undermine the comparability of country and sectoral breakdowns across banking systems. A lower cost option is to report allowances for credit losses and provisions separately in the instrument breakdown of total assets and liabilities, respectively, without any country or sectoral breakdown. This was the option preferred by the Group, as discussed in section 6.2 with respect to recommendation O.

U. In the CBS, banks should continue to report positions gross of provisions, on both an IC basis and an UR basis.

8.3 Short sales

Reporting practices for short sales – sales of securities that a bank does not own – currently vary across countries. One reason for the variation is the differing treatment of short sales in statistical and accounting

[16] Under the BCBS's standardised approach for measuring counterparty risk, exposures at default are net of specific provisions (BCBS (2006), p. 19, par. 52). Under the internal ratings-based approach, exposures at default are measured gross of provisions, but an adjustment is applied directly to eligible capital if the provisions a bank holds in respect of its exposures are different from the expected loss that a bank is required to calculate using its estimates for probability of default and loss given default.

standards. In the balance of payments methodology short sales are reported as negative assets, whereas under accounting standards they are typically regarded as liabilities.

In the LBS short sales should be reported as negative assets so as to remain aligned with balance of payments statistics. This can result in negative amounts for debt securities and equities (other instruments). For consistency with the LBS, some countries also report short sales as negative assets in the CBS. However, there is no good reason to align the CBS with the balance of payments methodology and doing so complicates the reconciliation of the CBS with accounting information. For these reasons, for Phase 3 of the institution-to-aggregate data collection the International Data Hub clarified that short sales should be treated as liabilities and reported against the issuer of the security sold short (as opposed to the counterparty to which the security was sold).

Changing the reporting of short sales in the CBS could have a significant impact on some banks' claims on selected countries. While the separate reporting of short sales by country and sector of the issuer of the security sold would help users to understand the impact, it would be costly to implement in reporting countries where such detailed data are not already collected. The Study Group agreed that more information about data availability and practices was needed to assess the benefits and costs of the separate reporting of short sales.

V. *In the CBS, the reporting of short sales of securities should be aligned with national accounting standards. Metadata should be improved to clarify reporting practices.*

9. Future consultation

This report responds to the CGFS's request that the BIS form a study group to follow up on potential enhancements identified by the CGFS Ad Hoc Group on Statistics. The recommendations in this report require further consultation before they can be considered approved for implementation. The recommendations will be discussed at the meeting of central bank experts on BIS international banking and financial statistics in February 2017 and subsequently reviewed by the CGFS.

The financial landscape and associated risks will continue to evolve. To ensure that the international banking statistics remain a key source of data to monitor this evolution and assess risks to financial stability, their structure should be regularly reviewed. The meeting of central bank experts provides a forum for such a review. Significant changes in the structure of the statistics should be infrequent, considering the high costs of changing reporting systems, and considered carefully by a small group of reporting central banks, like this Study Group, before being proposed to the larger meeting of experts. The BIS maintains a list of questions about the reporting guidelines, which can help to identify areas where revisions or clarifications are needed.

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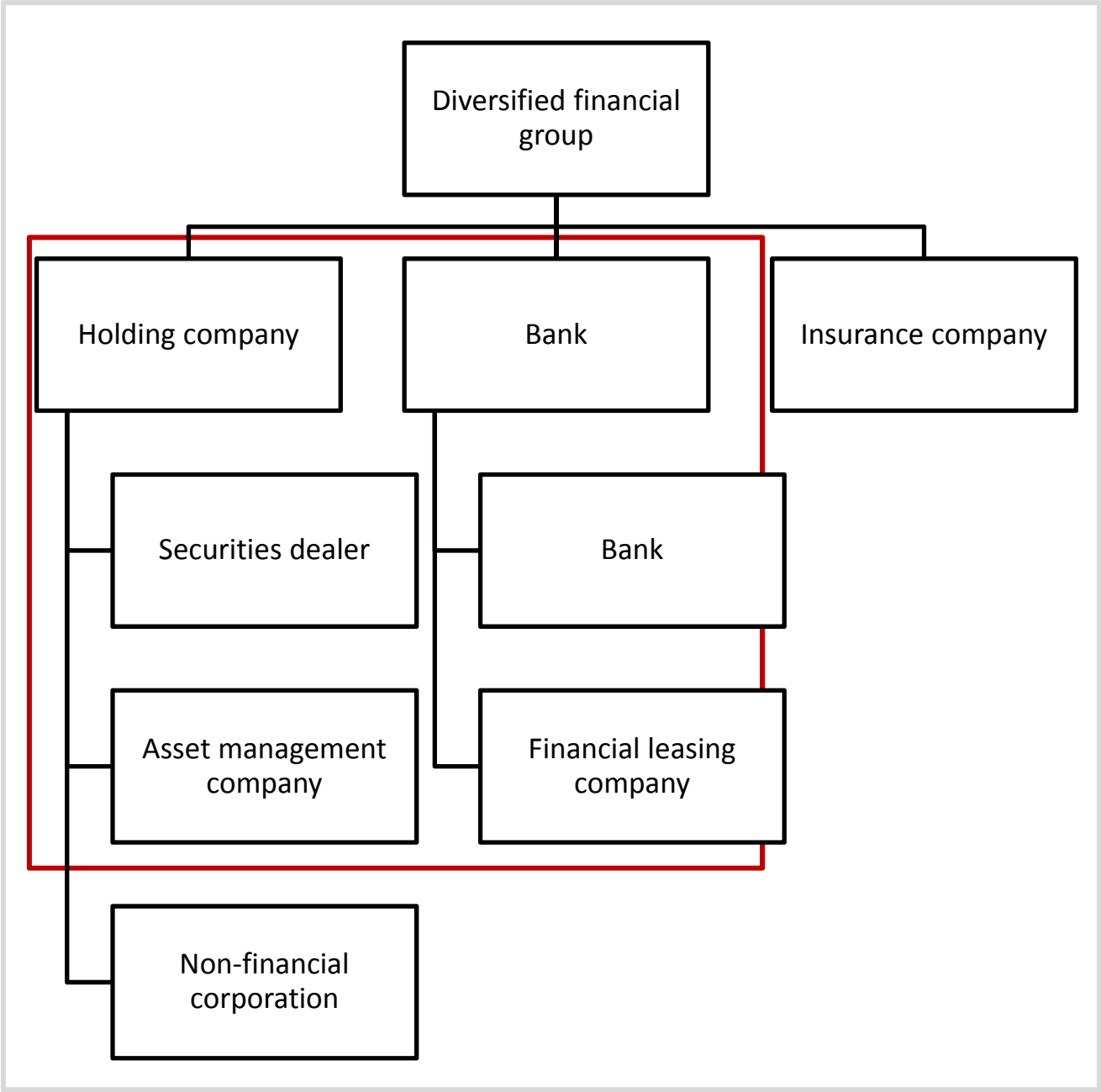
Annex A: Approaches to the perimeter of consolidation

Accounting perimeter (all entities controlled by the group's parent)

Prudential perimeter of the predominant banking group (all entities controlled by the group that are engaged in banking and other relevant financial activities)



Annex B: Reporting practices for consolidation

CBS: Perimeter of consolidation — Annex B

Reporting country	Consolidation framework for reporting CBS	Are non-bank entities included in the consolidation perimeter?			
		Non-bank financial institutions			Non-financial corporations
		Securities dealers	Insurance companies	Other financial entities[2]	
Current guidelines	*Prudential*				
Revised guidelines	*Prudential*	*Yes*	*No*	*Yes*	*No*
Australia	Accounting (IFRS)	Yes		Yes	No
Belgium	Prudential	Yes		Yes	Yes[3]
Canada	Accounting (IFRS)[1]	Yes	No	Yes	Yes[3]
France	Prudential	Yes	No	Yes	No
Germany	Statistical guidelines	No	No	No	No
Italy	Prudential	Yes	No	Yes	No
Japan	Accounting (GAAP)	Yes		Yes	Yes[3]
Netherlands	Prudential	Yes		Yes	No
Spain	Prudential	Yes	No	Yes	No
Sweden	Statistical guidelines[4]	No	No	No	No
Switzerland	Accounting (IFRS or GAAP)	Yes		Yes	No
United Kingdom	Statistical guidelines	Yes	No	Yes	No
United States	Prudential[1]	Yes	Yes	Yes	Yes[3]

[1] Prudential framework for consolidation is aligned with the national accounting framework. [2] Entities engaged in financial leasing, credit card issuance, asset management, investment advisory, custodial and safekeeping services or other activities that are ancillary to the business of banking. [3] Positions are insignificant compared to those of the consolidated group (<5% of the group's assets). [4] Deposit taking corporations and similar institutions.

Source: CBS-reporting practices, concept CBS-09; CBS-reporting authorities.

Annex C: Reporting practices for derivatives

LBS: Reporting of derivatives under other instruments — Annex C.1

Reporting country	Are derivatives included in total assets and liabilities, as a component of other instruments?		Are derivatives reported at gross fair value?		Are derivatives held in trust accounts included?
	Exchange-traded derivatives	OTC derivatives	Fair value	Gross value, without netting assets and liabilities	
Current guidelines	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Australia	Yes	Yes	Yes		
Belgium	Yes[1]	Yes[1]	Yes		
Canada	No	No	–	–	–
France[2]	No	No	–	–	–
Germany	No	No	–	–	–
Italy	No	Yes	Yes		
Japan	Yes	Yes	Yes		
Netherlands	Yes	Yes	Yes		
Spain	No	No	–	–	No
Sweden	Yes	Yes	Yes	Yes	-
Switzerland	Yes	Yes	Yes	No	Yes
United Kingdom	No	No	–	–	–
United States	No	No	–	–	–

– = not applicable or no information.

[1] Derivatives held for trading purposes. Derivatives held for hedging purposes are excluded; they are recorded off the balance sheet.
[2] France will report derivatives starting with data for end-September 2017.

Source: LBS-reporting practices, concept LBS-07; LBS-reporting authorities.

CBS: Reporting of derivative assets by counterparty country

Annex C.2

Reporting country	Are credit derivatives held for hedging purposes excluded?	Are derivative assets reported at net positive fair value[1]?			Conditions that must be met to offset derivative liabilities against assets		
		Fair value	Net value[2]	Without deducting the value of collateral	What standards are followed when netting?	Is a legally enforceable bilateral netting agreement required?	Must netting sets be with the same legal entity?
Current guidelines	*Yes*	*Yes*	*Yes*				
Revised guidelines	*Yes*	*Yes*	*Yes*	*Yes*		*Yes*	*Yes*
Australia		Yes		Yes	IFRS	Yes	No
Belgium	Yes	Yes	Yes		IFRS		
Canada		Yes		Varies	IFRS	No	Yes
France		Yes[3]		Yes	IFRS	Yes	Yes
Germany	Yes	Yes	No	Yes	IFRS	-	-
Italy		Yes		Yes	IFRS	Yes	No
Japan		Yes		Yes	GAAP	Yes	Yes
Netherlands		Yes		Varies	IFRS	Yes	Yes
Spain		Yes	No	Yes[4]	IFRS	Yes	Yes
Sweden		Yes	No		IFRS	Yes	Yes
Switzerland		Yes		Yes	IFRS or GAAP	Yes	Yes
United Kingdom		Yes		Yes		Yes	Yes
United States	No	Yes	Yes	Varies	GAAP	Yes	No

– = not applicable or no information.

[1] Also known as net current credit exposure. Under certain conditions, contracts with gross negative fair value may be offset against contracts with gross positive fair value. [2] Derivative liabilities are offset against derivative assets. [3] Some derivatives are valued at historical cost, depending on the purpose. [4] Under specific conditions, derivative assets are reduced by the amount of risk transferred to the collateral.

Source: CBS-reporting practices, concept CBS-11; CBS-reporting authorities.

CBS: Reporting of credit derivatives under guarantees extended

Annex C.3

Reporting countries	Reporting of credit protection sold		Valuation of credit protection sold			
	Included in guarantees extended	By country of underlying reference entity	Notional value	Gross value or net value	Conditions for offsetting protection bought against protection sold	
					Same underlying reference entity	Same counterparty
Current guidelines	*Yes*	*Yes*	*Yes*	*Gross*		
Revised guidelines	*Yes*	*Yes*	*Yes*	*Net*	*Yes*	*Yes*
Australia	Yes	Yes	Yes	Net		
Belgium	Yes	Yes	Yes	Net		Yes[1]
Canada	Yes	Yes	Varies by bank[2]	Varies by bank[2]	Yes	Yes
France	Yes	Yes	Yes	Gross	–	–
Germany	Yes	Yes	Yes	Gross	–	–
Italy	Yes	Yes	Yes	Net	No	Yes
Japan	Yes	Yes	Yes	Net	No	Yes[1,3]
Netherlands	No	–	–	–	–	–
Spain	Yes	Yes	Yes	Gross	–	–
Sweden	Yes	Yes	Yes	Gross	–	–
Switzerland	Yes	Yes	Yes	Gross	–	–
United Kingdom	Yes	Yes	Yes	Gross	–	–
United States	Yes	Yes	Yes	Net	Yes	Yes

– = not applicable or no information

[1] A legally enforceable bilateral netting agreement is required. [2] Some banks report net fair value. [3] Most credit protection sold is not subject to a legally enforceable netting agreement and, therefore, most contracts are reported at gross value.

Source: CBS-reporting practices, concept CBS-10; CBS-reporting authorities.

Annex D: Reporting practices for risk transfers

CBS: Recognition of guarantees as risk transfers

Annex D.1

Reporting country	Parent bank guarantees to branches	Parent company guarantees and third-party guarantees		
	Are claims on branches considered as being guaranteed even if there is no explicit guarantee?	Must guarantees be explicit?	Must guarantees be irrevocable?	Must guarantees be provided by entities that are of higher credit quality than the immediate counterparty?
Revised guidelines	*Yes*	*Yes*	*Yes*	*Yes*
Australia	Yes	Yes	Yes	No
Belgium				
Canada	Yes	Yes	Varies by bank	Varies by bank
France	Yes	Yes	Yes	Yes
Germany	Yes	Yes	No	No
Italy	Yes	Yes	Yes	No
Japan	Yes	Yes	Yes	Varies by bank
Netherlands	Varies by bank	Yes	Varies by bank	Varies by bank
Spain	Yes	Yes	Yes	Yes[1]
Sweden	Yes	Yes	Varies by bank	No
Switzerland	Yes	Yes	Yes	No
United Kingdom	Yes	Yes	Yes	No
United States	Yes	Yes	Yes	No

[1] Entities providing guarantees must have a higher credit quality than the immediate counterparty and to transfer country risk must be based in the Australia, Canada, the European Economic Area, Japan, New Zeeland, Switzerland or the United States.

Source: CBS-reporting authorities.

CBS: Recognition of credit derivatives as risk transfers

Annex D.2

Reporting country	Recognition of credit derivative contracts to transfer risk from the underlying reference entity to the seller of protection		
	Must contracts be **legally enforceable** in all relevant jurisdictions?	Must contracts **hedge** an existing claim, ie effectively guarantee a claim?	Are contracts purchased to offset credit derivatives sold recognised as risk transfers?
Revised guidelines	*Yes*	*Yes*	*No*
Australia		No	No
Belgium			
Canada		Yes	No
France		Yes	No
Germany	Varies by bank	Yes	No
Italy		Yes	No
Japan		Yes	No
Netherlands		Yes	Varies by bank
Spain	Yes	Yes[1]	Yes[2]
Sweden		Yes	No
Switzerland		Yes	No
United Kingdom		Yes	No
United States	Yes	Yes	No

[1] Hedge an existing claim or an off balance sheet position. [2] Yes, when the reference entity is the same and the counterparty has a higher credit quality than the reference entity.

Source: CBS-reporting authorities.

CBS: Recognition of collateral as risk transfers

Annex D.3

Reporting country	Eligible collateral		Is the credit risk associated with claims arising from **repurchase and securities lending agreements** transferred to the collateral (as opposed to reported against the counterparty)?
	Must collateral be **liquid** and readily realisable, eg only cash and securities?	Must collateral be **realisable outside the country** where the immediate counterparty resides?	
Revised guidelines	*Yes*	*Yes*	*Collateral*
Australia	Yes	No	Counterparty
Belgium			
Canada	Varies by bank	Varies by bank	Varies by bank
France	Yes	No	Collateral
Germany	No	No	Collateral
Italy	No	No	Counterparty
Japan	Yes	Yes	Varies by bank
Netherlands	Varies by bank	Varies by bank	Varies by bank
Spain	No	Yes	Yes[1]
Sweden			Varies by bank
Switzerland	No	No	Collateral
United Kingdom	No	No	Counterparty
United States	Yes	Yes[2]	Counterparty

[1] Starting with data at end-December 2016. [2] For within-country risk transfers, collateral does not need to be realisable outside the country of the immediate counterparty.

Source: CBS-reporting authorities.

Annex E: Reporting practices for sectoral classifications

CBS: sub-sectors reported[1]

Annex E.1

Reporting country	Bank sector	Nonbank financial sector	Non-financial sector		Official sector	*Memo*: allocated subsectors[2]
			Non-financial corporations	Households		
Australia	✓				✓	48 %
Austria	✓				✓	48 %
Belgium	✓	✓	✓	✓	✓	100 %
Brazil	✓				✓	59 %
Canada	✓	✓	✓	✓	✓	100 %
Chile	✓				✓	61 %
Chinese Taipei	✓	✓	✓	✓	✓	100 %
Denmark	✓	✓	✓	✓	✓	99 %
Finland	✓	✓	✓	✓	✓	100 %
France	✓	✓	✓	✓	✓	100 %
Germany	✓	✓			✓	57 %
Greece	✓	✓	✓	✓	✓	100 %
Hong Kong SAR	✓	✓			✓	57 %
India	✓	✓	✓	✓	✓	98 %
Ireland	✓	✓	✓	✓	✓	100 %
Italy	✓	V	✓	✓	✓	100 %
Japan	✓	✓			✓	65 %
Korea	✓	✓	✓	✓	✓	100 %
Luxembourg	✓	✓	✓	✓	✓	100 %
Mexico	✓				✓	63 %
Netherlands	✓	✓	✓	✓	✓	100 %
Norway	✓	✓	✓	✓	✓	100 %
Panama	✓				✓	67 %
Portugal	✓				✓	43 %
Singapore	✓	✓			✓	50 %
Spain	✓				✓	46 %
Sweden	✓	✓	✓	✓	✓	100 %
Switzerland	✓	✓	✓	✓	✓	99 %
Turkey	✓	✓			✓	59 %
United Kingdom	✓	✓	✓	✓	✓	100 %
United States	✓	✓	✓	✓	✓	100 %
Memo: All[3]	$ 3.6	$ 3.1	$ 2.2	$ 0.3	$ 3.0	83 %

[1] Sectoral breakdowns reported by domestic banks for international claims on foreign residents at end-June 2016. [2] Sum of bank sector, non-bank financial sector, non-financial subsectors (corporations, households) and official sector, as a percentage of international claims on foreign residents. [3] Domestic banks in all CBS-reporting countries, in trillions of US dollars.

LBS: sub-sectors reported[1]

Annex E.2

Reporting country	Bank sector		Nonbank financial sector	Non-financial sector			*Memo*: allocated subsectors[2]
	Total	Of which: Intra-group		Non-financial corporations	Households	Government	
Australia	✓	✓					63 %
Austria	✓	✓					43 %
Bahamas	✓	✓	✓	✓	✓	✓	100 %
Bahrain	✓						0 %
Belgium	✓	✓	✓	✓	✓	✓	100 %
Bermuda	✓	✓	✓	✓	✓	✓	77 %
Brazil	✓						0 %
Canada	✓	✓	✓	✓	✓	✓	100 %
Cayman Islands	✓						0 %
Chile	✓						0 %
China	✓	✓	✓				57 %
Chinese Taipei	✓	✓	✓	✓	✓	✓	99 %
Curacao	✓						0 %
Cyprus	✓	✓	✓	✓	✓	✓	96 %
Denmark	✓	✓	✓	✓	✓	✓	100 %
Finland	✓	✓	✓				84 %
France	✓	✓	✓	✓	✓	✓	97 %
Germany	✓	✓	✓	✓	✓	✓	100 %
Greece	✓						0 %
Guernsey	✓	✓	✓	✓	✓	✓	100 %
Hong Kong SAR	✓	✓	✓				72 %
India	✓	✓	✓	✓	✓	✓	100 %
Indonesia	✓						4 %
Ireland	✓	✓	✓	✓	✓	✓	100 %
Isle of Man	✓	✓	✓	✓	✓	✓	100 %
Italy	✓	✓	✓	✓	✓	✓	100 %
Japan	✓	✓	✓				55 %
Jersey	✓						0 %
Korea	✓	✓	✓	✓	✓	✓	84 %
Luxembourg	✓	✓	✓	✓	✓	✓	99 %
Macao	✓	✓	✓				58 %
Malaysia	✓						0 %
Mexico	✓						0 %
Netherlands	✓	✓	✓	✓	✓	✓	79 %
Norway	✓	✓	✓	✓	✓	✓	91 %
Panama	✓						0 %
Portugal	✓	✓	✓	✓	✓	✓	100 %
Russia	✓	✓	✓	✓	✓	✓	98 %
Singapore	✓						0 %
South Africa	✓	✓	✓	✓	✓	✓	100 %
Spain	✓						0 %
Sweden	✓	✓	✓	✓	✓	✓	100 %
Switzerland	✓	✓	✓	✓	✓	✓	100 %
Turkey	✓	✓	✓				82 %
United Kingdom	✓	✓	✓	✓	✓	✓	99 %
United States	✓	✓	✓				85 %
Memo: All[3]	$ 15.2	$ 8.1	$ 4.9	$ 2.2	$ 0.2	$ 1.1	77 %

[1] Sectoral breakdowns reported for cross-border claims on all countries at end-June 2016, from the LBS by residence. [2] Sum of bank subsectors (intragroup, other), non-bank financial sector, and non-financial subsectors (corporations, households, government), as a percentage of cross-border claims on all countries. [3] All LBS-reporting countries, in trillions of US dollars.

Annex F: Members of the Study Group

Chair	Philip Wooldridge (BIS)
Bank of Canada	Jana Sigutova
	James Younker
European Central Bank	Rodrigo Oliveira Soares
Financial Stability Board	Gianmatteo Piazza
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Bank of Italy	Maria Grazia Miele
Bank of Japan	Kyosuke Shiotani
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Bank of Spain	Cristina Luna
Svierges Riksbank	Israel Rubio
Swiss National Bank	Dominik Salierno
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Bank of England	John Lowes
Federal Reserve Bank of New York	Jamie Ferkov
Federal Reserve Board	Sally Davies
Bank for International Settlements	Stefan Avdjiev
	Koon Goh