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# Netting and Offsetting: Reporting derivatives under U.S. GAAP and under IFRS

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*The paper is intended to give the reader an insight into the different offsetting requirements under IFRS and U.S. GAAP and their impact on the new Basel III Leverage Ratio.*

*ISDA believes that net presentation, in accordance with U.S. GAAP, provides the most faithful representation of an entity's financial position, solvency, and its exposure to credit and liquidity risk. Individual derivative transactions that are subject to enforceable master netting agreements should be eligible for netting in the balance sheet on the basis that such financial statement presentation is most faithfully representative of an entity's resources and claims and provides the most useful information for investment decisions.*

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**Abbreviations:**

<b>CCP</b>	Central Counterparty
<b>CDS</b>	Credit Default Swap
<b>BCBS</b>	Basel Committee on Banking Supervision
<b>BoE</b>	Bank of England
<b>FASB</b>	Financial Accounting Standards Board
<b>FPC</b>	Financial Policy Committee
<b>FSB</b>	Financial Stability Board
<b>FX</b>	Foreign Exchange
<b>G20</b>	The Group of Twenty <sup>1</sup>
<b>GNFV</b>	Gross Negative Fair Value
<b>GPFV</b>	Gross Positive Fair Value
<b>IASB</b>	International Accounting Standards Board
<b>IFRS</b>	International Financial Reporting Standards
<b>MNA</b>	Master Netting Agreement
<b>NCCE</b>	Net Current Credit Exposure
<b>OCC</b>	United States Office of the Comptroller of the Currency
<b>OTC</b>	Over-the-Counter
<b>Repo</b>	Repurchase and Reverse Repurchase transactions
<b>The Boards</b>	The Board of the IASB and the Board of the FASB
<b>U.S. GAAP</b>	U.S. Generally Accepted Accounting Principles
<b>VaR</b>	Value at Risk

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<sup>1</sup> The G20 is the international economic forum, which includes 19 country members and the European Union, that represents around 90 per cent of global GDP, 80 per cent of global trade and two-thirds of the world's population.

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## Executive summary

Historically, the Europe-based International Accounting Standards Board (IASB) has permitted significantly less balance sheet offsetting than the U.S.-based Financial Accounting Standards Board (FASB).

This paper sets out the key differences between these approaches and explains the reasoning that leads to the current position. The terms of netting, offsetting and set-off are often used to express the same notion but they are very different concepts. A better understanding of the terminology and the way in which derivatives are traded, managed and settled provides an understanding of why U.S. GAAP accounting standard setters have consistently agreed to reporting derivatives net rather than gross on the balance sheet and why this differs from reporting under International Financial Reporting Standards (IFRS).

The paper covers the following topics:

- Why is netting/offsetting an issue?
- Differences between securities, loans, receivables and derivatives
- Portfolio management
- The Interest Rate Swap and Credit Default Swap markets
- The efficacy of netting and collateral as risk mitigation techniques
- The offsetting rules under U.S. GAAP and IFRS
- Criteria for derivatives and repo markets
- New offsetting disclosures
- The new Basel III Leverage Ratio

The paper is intended to give the reader an insight into the different offsetting requirements under IFRS and U.S. GAAP and their impact on liquidity, collateral and the new Basel III Leverage Ratio. The paper articulates the reasons ISDA favours reporting derivatives ‘net’ instead of ‘gross’ on the face of the balance sheet.

ISDA believes that net presentation, in accordance with U.S. GAAP, provides the most faithful representation of an entity’s financial position, solvency, and its exposure to credit and liquidity risk. Individual derivative transactions that are subject to enforceable master netting agreements should be eligible for netting in the balance sheet on the basis that such financial statement presentation is most faithfully representative of an entity’s resources and claims and provides the most useful information for investment decisions.

The basis for our view is that, upon termination of transactions subject to a master netting arrangement, the individual derivative receivables do not represent resources to which general creditors have rights and individual derivative payables do not represent claims that are pari-passu to the claims of general creditors. Upon termination of a contract by the nondefaulting party, derivative asset “resources” are unavailable to satisfy other claims; further, the net termination amount (including the collateral amounts) under the Close Out Netting provisions

of the ISDA Master Agreement is not subject to stay under bankruptcy laws which govern the most significant capital markets, unlike other claims. Accordingly, we believe that the current U.S. GAAP principles are superior.

The paper is recommended for anyone seeking a deeper understanding of the practical application of the offsetting rules and the new disclosure requirements for derivatives and other financial instruments published by the FASB and the IASB in December 2011.

## Background

In January 2011, to address the differences between International Financial Reporting Standards (IFRS) and U.S. Generally Accepted Accounting Principles (U.S. GAAP), the IASB and the FASB (the Boards) issued a joint exposure draft that proposed new criteria for offsetting. The proposed guidance was narrower than the existing rules under U.S. GAAP, and also under IFRS.

In response to the feedback received on the proposals, in June 2011 the Boards decided to retain their existing models and instead align their disclosure requirements to enable users to better compare financial statements prepared in accordance with IFRS and those prepared in accordance with U.S. GAAP. The IASB also separately provided additional guidance on the application of its offsetting criteria in IAS 32 “Financial Instruments: Presentation” to address some divergence in practice that was highlighted during the outreach on the exposure draft.

The proposal was important because it had the potential to change “total assets” significantly in those countries reporting under U.S. GAAP. In the U.S. in particular, regulators and supervisors<sup>2</sup> were concerned about the number of key ratios based on total assets,<sup>3</sup> including the proposed Basel III leverage ratio, and the impact on the minimum capital adequacy requirements based on regulatory netting.

The Basel Committee on Banking Supervision (BCBS) expressed their willingness to consider the use of accounting standards for the calculation of the leverage ratio based on the expected convergence of accounting standards. The BCBS also stated that they will monitor accounting standards and practices to address any differences in national accounting frameworks (also known as local GAAP) that are material to the definition and calculation of the leverage ratio.

The Federal Reserve stated in their letter to the accounting standard setters that they believe that the offsetting criteria should be based on the legal enforceability and the economic substance of an entity’s exposures to and from its counterparties. They had significant concerns with the proposal, which they believed would impair rather than improve financial reporting by providing less relevant information to financial statement users.

The Bank of England (BoE) announced the establishment of a Financial Policy Committee (FPC) on February 17, 2011, with the objective of identifying systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The FPC uses indicators

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<sup>2</sup> Federal Reserve letters to IASB/FASB dated May 6, 2011 and June 10, 2011.

<http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175822465270&blobheader=application%2Fpdf>  
<http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175822620500&blobheader=application%2Fpdf>

<sup>3</sup> In the U.S., by law, the accounting standards applicable to regulatory reports to be filed with the Federal Reserve System (the regulatory agencies) by banks, savings associations and credit unions, including the amounts reported for total assets, can be no less stringent than those prescribed in U.S. GAAP.

that are intended to provide a snapshot of financial institutions, including an un-weighted leverage ratio that ‘nets’ derivatives. The FPC’s un-weighted leverage ratio is defined<sup>4</sup> as assets divided by capital. Assets are adjusted for cash items, tax assets, goodwill and intangibles. Capital includes total shareholders’ equity adjusted for minority interests, preferred shares, goodwill and intangibles. Assets are also adjusted on a “best-efforts basis” to achieve comparability between U.S. GAAP and IFRS with respect to derivatives and off- balance-sheet vehicles, confirming that the net presentation is more relevant.

Given the statutory basis of the various ratios (including the proposed leverage ratio) in many countries and the potential magnitude of the necessary adjustments, many regulators and supervisors were troubled by the impact of reporting derivatives and repurchase agreements gross rather than net. Furthermore, regulators (aligned with U.S. GAAP offsetting principles) require written legal opinions that confirm the enforceability of the close-out netting provisions of master netting arrangements in order to obtain regulatory capital relief against offsetting derivatives positions with a counterparty.

#### Conclusion:

As discussed with the FASB and the IASB during the outreach process, ISDA was concerned that the balance sheet gross-up that would have resulted from application of the exposure draft’s provisions would have misrepresented and obscured the real economic risks of companies which use derivatives for various business purposes.

Consequently, other financial assets that may bear more credit and liquidity risk (e.g., certain loans receivable, certain debt securities, etc.) may have appeared less significant in relation to balance sheets that are substantially larger in size due to the gross-up of derivatives and repurchase agreements (which, in many cases, are secured by cash collateral or similar security interests).

We believe that the most effective method for transparently portraying the underlying risks (including credit, liquidity and market risks) associated with derivative and repurchase activities is through a combination of qualitative and quantitative disclosures similar to those finally agreed by the Boards.

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<sup>4</sup> See BoE’s “Financial Stability Report,” December 2011, Issue No. 30, page 16, which is available at <http://www.bankofengland.co.uk/publications/Documents/fsr/2011/fsrfull1112.pdf>.

## 1) Reporting net vs. gross

The different offsetting requirements result in a significant difference between amounts presented in statements of financial position prepared in accordance with IFRS and amounts prepared in accordance with U.S. GAAP, particularly for entities that have large derivative activities.

During the 2008/2009 financial crisis, the G20 set up the requirements for global regulators. The Financial Stability Board (FSB) was established to address the vulnerabilities of the financial system and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability.

In September 2009, the G20 representatives required that global standard setters should “make significant progress towards a single set of high quality global accounting standards.”<sup>5</sup> The FSB’s progress report stated: “Moreover, continuing differences in accounting requirements of the IASB and FASB for netting/offsetting of assets and liabilities also result in significant differences in banks’ total assets, posing problems for framing an international leverage ratio.”

Ever since the introduction of IFRS in Europe, the offsetting of financial assets and liabilities on the balance sheet has been a controversial issue. The ability to offset under IFRS is limited in comparison with U.S. GAAP, especially for derivatives traded with the same counterparty under an ISDA Master Netting Agreement (MNA). This is shown in Table No. 1 below.<sup>6</sup> This highlights the magnitude of the difference in gross assets, and the disclosed amounts of offset applied to derivatives, for selected financial institutions based on their published December 31, 2009 year-end financial statements.

<b>Table No. 1: Reported gross assets and the effect of offsetting derivative contracts for selected banks in 2009</b>				
US\$ billion	Potential Impact of Grossing Up	Reported Derivatives	Other Assets	Total Assets
BNP Paribas (IFRS)		527	2,415	2,942
RBS (IFRS)		711	2,021	2,732
HSBC (IFRS)		251	2,114	2,365
Barclays (IFRS)		671	1,549	2,220
DB (IFRS)		863	1,283	2,146
JP Morgan (U.S. GAAP)	1,485	80	1,952	2,032
Citi (U.S. GAAP)	600	67	1,789	1,856
BoA (U.S. GAAP)	1,414	81	2,143	2,224

<sup>5</sup> Financial Stability Board progress report to the G20 leaders, September 2009, “Improving Financial Regulation,” [http://www.financialstabilityboard.org/publications/r\\_090925b.pdf](http://www.financialstabilityboard.org/publications/r_090925b.pdf).

<sup>6</sup> Source: E&Y’s report – Supplement to IFRS Outlook / Issue 96, January 2011, [www.ey.com/ifrs](http://www.ey.com/ifrs),



For example, reporting under IFRS, Deutsche Bank's total assets amounted to US\$2,146 billion, of which 40 per cent (or US\$863 billion) were derivatives. In contrast, reporting under U.S. GAAP, J.P. Morgan's total assets amounted to US\$2,032 billion, of which only 4 percent (or US\$80 billion) were derivatives. Furthermore, should J.P. Morgan have to report under IFRS, they would have reported US\$1,485 billion of additional assets.

The potential impact of grossing up derivatives across the banking sector in many countries outside the IFRS environment would have added pressure to the worldwide recession as financial institutions would have been required either to increase their capital or deleverage their balance sheets in order to comply with minimum capital adequacy requirements.

In June 2010, the G20, represented by the FSB,<sup>7</sup> also required reporting derivatives to trade repositories and pointed out that "one reason for mandatory trade reporting of OTC derivatives transactions, whether centrally cleared or bilaterally settled, is to enable authorities to assess the build-up of potential systemic risk (further discussed in section 5.1). There is agreement that central banks, supervisors, and regulators globally should have access to the data from central counterparties (CCPs) and repositories to support them in carrying out their respective mandates. One area in which views differ between authorities is on the merits of global versus local CCPs and trade repositories. Some authorities stress the benefit of additional netting in a global CCP while others are concerned about concentration risk.

## 2) Fundamental concepts: netting, offsetting and set-off

To understand the way in which derivatives are reported for accounting purposes, it is important to clarify the terminology first. The terms netting, offsetting and set-off are often used by practitioners to express the same notion, but they are in reality very different concepts. Clarifying the terminology<sup>8</sup> may also help to explain the reasons the FASB has consistently agreed to reporting derivatives net rather than gross on the face of the balance sheet.

### 2.1) Set-off

A right to set-off is a legal right. It is a debtor's legal right, by contract or otherwise, to settle or otherwise eliminate all or a portion of an amount due to a creditor by applying against that amount all or a portion of an amount due from the creditor or a third party. It is the right that one party has against another to use its assets (amount owed to it by the creditor or another party) in full or partial payment (or satisfaction) of what it owes the creditor.

A right of set-off may arise as a result of a provision in law (or a regulation) or it may arise as a result of a contract. Because the right of set-off is a legal right, the conditions supporting the right may vary from one legal jurisdiction to another.

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<sup>7</sup> Financial Stability Board progress report to the G20 leaders, June 2010, "Improving Financial Regulation," [http://www.financialstabilityboard.org/publications/r\\_100627c.pdf](http://www.financialstabilityboard.org/publications/r_100627c.pdf).

<sup>8</sup> This paper focuses on the general terminology of netting/offsetting from an accounting perspective, leaving aside all legal and/or regulatory aspects.

Moreover, in particular cases, the laws of a jurisdiction about the right of set-off may provide results different from those normally provided by contract or as a matter of common law. Similarly, the bankruptcy or insolvency laws of a jurisdiction may impose restrictions on or prohibitions against the right of set-off in bankruptcy, insolvency or similar events in some circumstances.

Thus, whether an entity's right of set-off meets the legally enforceable right of set-off criterion will depend on the law governing the contract and the bankruptcy regime that governs the insolvency of the counterparties.

Enforceability in this context comprises two elements: first, enforceability as a matter of contract law under the governing law of the contract (typically English law or New York law); second, consistency with the bankruptcy laws of the jurisdiction where the counterparty is located. The latter is critical since, regardless of the law selected to govern the contract, local insolvency law in an insolvent party's jurisdiction will always override in the event of an insolvency.

ISDA is not aware of any instances in which the close-out netting provisions (see below) of the ISDA Master Agreement were found to be unenforceable in instances in which ISDA has published a legal opinion confirming such enforceability. This is not surprising, since the ISDA netting opinions are obtained on a very conservative basis. Finally, we cannot fail to mention that it would not be wise to trade derivatives in a jurisdiction that does not recognize the right to set-off.

## 2.2) Netting

Derivatives are typically traded under master netting agreements. The ISDA MNA establishes the terms and conditions of the derivatives transactions, both with other financial institutions and with end-users. The ISDA MNA sets forth the terms that apply to all (or a subset of) transactions between derivative counterparties. Future transactions between the parties are made subject to the ISDA MNA, typically through the use of confirmations. This is a fundamental concept that sets derivatives apart from any other type of security, debt or other financial instruments (this will be discussed in section 3).

The ISDA MNA creates a single contract between the two parties under which all transactions under the ISDA MNA between the parties can offset each other. Therefore, each day, the ISDA MNA allows for (i) the aggregation of all trades, and (ii) the replacement with a single net amount.

Netting is, therefore, the termination or cancellation of reciprocal obligations, the valuation of terminated obligations and its replacement by a single payment obligation. Netting takes mainly two forms in the ISDA MNA:

- a) Settlement netting (or payment netting) takes place during the normal business of a solvent firm, and involves combining offsetting cash flow obligations between two parties on a given day in a given currency into a single net payable or receivable; payment netting is essentially the same as set-off. Payment netting is optional.<sup>9</sup>
- b) Close-out netting is the cancellation of open unperformed contracts between parties with a single net balance owing to one or the other party. Close-out netting is usually applied in the event of default or other termination of transactions outside the normal course of business. If one party becomes insolvent or otherwise defaults on its obligations, close-out-netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions' marked-to-market values so that a single sum will be owed by, or owed to, the non-defaulting party.<sup>10</sup>

Close-out netting is a contractual mechanism that may enable unilateral termination of the trades in the case of a bankruptcy or other event stipulated in the ISDA MNA. It is the replacement of individual positions by a new amount, usually referred to as the termination amount, determined by taking into account market prices. The market price set in this manner is then converted into one currency and the net position established. A net payment is then made at this time. The party that is out of the money may be obligated under the master agreement to pay the net amount to the party in the money.

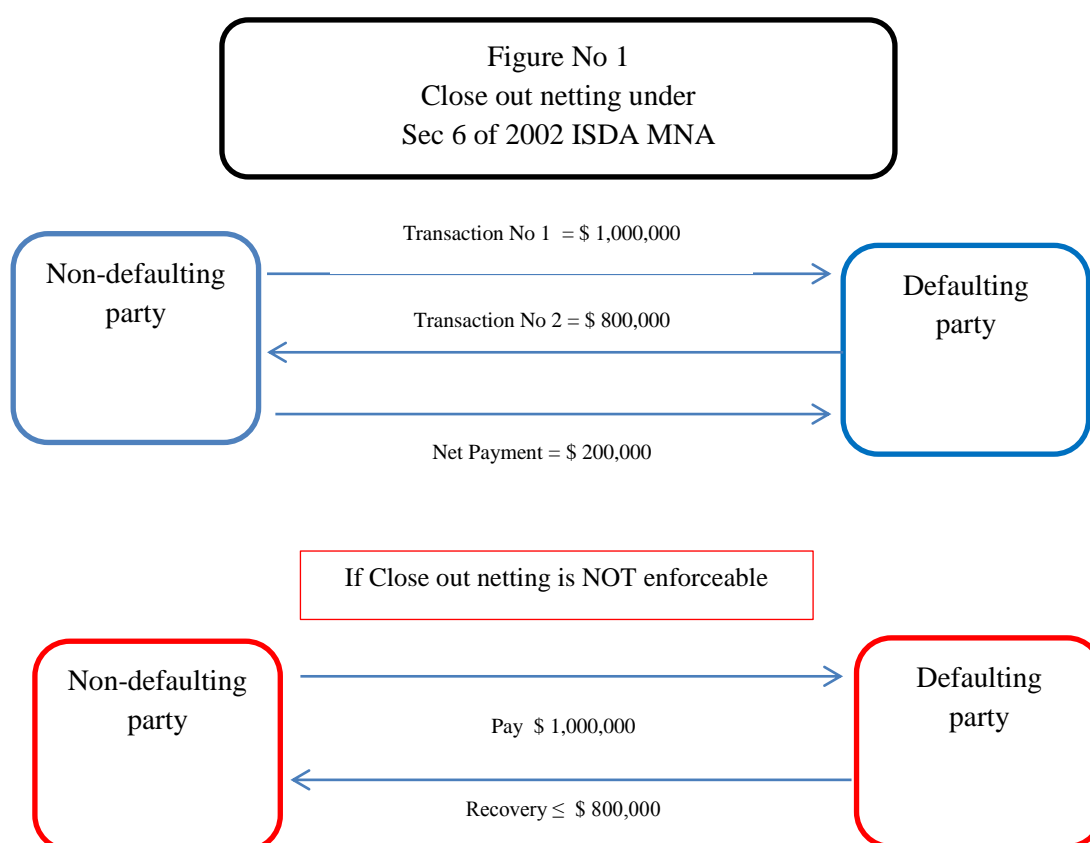
Figure No. 1 shows how netting works. The defaulting and non-defaulting parties are engaged in two swap transactions: For the non-defaulting party, Transaction 1 has a negative replacement cost of US\$1 million, while Transaction 2 has a positive replacement cost of US\$800,000. If close-out netting is enforceable, the non-defaulting party is obligated to pay the net difference of US\$200,000 to the defaulting party. Had the net amount favoured the non-defaulting party, the non-defaulting party would become a general creditor to the defaulting party for the net obligation. But if close-out netting is not enforceable, the non-defaulting party would be obligated immediately to pay US\$1 million to the defaulting party but then wait, possibly months or years, for whatever fraction of the US\$800,000 gross amount it recovers in bankruptcy. The result of close-out netting is to reduce credit exposure from gross to net exposure. This is necessary as a result of the way that derivatives contracts are traded (further discussed in section 4).

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<sup>9</sup> Section 2 of the ISDA MNA, titled "Obligations," addresses payment offset. This provision ensures automatic offset of each party's obligation to make payments (automatic satisfaction and discharge) and replacement with an obligation to make payment or a right to receive payment of the net sum. This provision may be applied to cash flows resulting from multiple transactions where payments occur on the same date and in the same currency.

<sup>10</sup> The non-defaulting party thus avoids the risk that the defaulting party's bankruptcy representative may enforce those transactions that have a negative market value for the non-defaulting party and repudiate those that have a positive market value for the non-defaulting party.

The close-out-netting process involves three steps: termination, valuation and determination of net balance. Termination means that the non-defaulting party puts an end to the obligations under the agreement. The second step, valuation, is the process of determining the replacement cost of each transaction under the contract. Finally, determination of net balance means that positive values—those owed to the non-defaulting party—and negative values—those owed by the non-defaulting party—are netted against each other under the single agreement in order to determine a final close-out amount. The market price set in this manner is then converted into one currency and the net position established. A net payment is then made at this time, which corresponds to the termination amount.



What happens next depends on which party owes the netted close-out amount to the other. If the defaulting party owes the close-out amount to the non-defaulting party, the non-defaulting party can apply the value of collateral posted by the defaulting party to the net obligation; collateral in excess of the net obligation must be returned to the insolvency administrator. The non-defaulting party's residual claim after netting and application of collateral will be treated the same as other unsecured claims and will be paid at the same time as other unsecured claims as determined by a bankruptcy court. But if the non-defaulting party owes the close-out amount to the defaulting party, the non-defaulting party will pay to the insolvency administrator any net close-out amount remaining after set-off.

## 2.3) Offsetting

Offsetting is a concept used for accounting and reporting purposes only. It refers to the net presentation of financial assets and financial liabilities on the face of the financial statement as a result of an entity's right of set-off.

When the right to set-off is enforceable in a jurisdiction, the derivatives trading partners under a master netting agreement have either a net asset or a net liability, but not both.

There are three groups of financial instruments that are primarily affected by offsetting rules: OTC derivatives, repurchase and reverse repurchase agreements, and exchange-traded derivatives (see section 6.1).

## 2.4) A risk management tool

The right to set-off is a risk management tool that is used by entities to (i) reduce counterparty credit risk, and (ii) manage liquidity risk.

The ISDA MNA is grounded on the legal concept of set-off, which depends on the law of each particular jurisdiction. The enforceability of the set-off rights varies by contract and jurisdiction. ISDA has been working globally to ensure that netting is legally enforceable, as evidenced by netting legislation in 38 jurisdictions and the 55 legal opinions the Association has procured. ISDA has also been actively involved in the industry's efforts to collateralize exposures arising out of transactions with active users of derivatives, which further reduces counterparty risk.

## 2.5) Existing offsetting models

The existing offsetting models result in a significant quantitative difference between the amounts presented in the balance sheets prepared in accordance with IFRS and the amounts presented in accordance with U.S. GAAP.

However, it is important to clarify that both U.S. GAAP and IFRS focus on similar criteria for offsetting to take place: primarily the existence of the legal right to set-off under a particular jurisdiction. The detailed requirements of each set of guidance (and exceptions under U.S. GAAP) for transactions executed under an ISDA MNA result in significant differences in the application of offsetting for financial reporting purposes (further discussed in section 6.4).

Nonetheless, independent of the gross or net approach to the presentation of derivatives in the balance sheet, derivatives are generally traded, managed, cleared, valued and settled on a net basis, and under U.S. GAAP they are reported on a net basis too.

### 3) Why are derivatives different?

Derivatives are different from other financial instruments such as loans or securities. Their inherent characteristics are very different; the value of a derivative is dynamic as it responds to an underlying (commodity, interest rate, credit rating, index, etc.); generally derivatives require no initial investment and, in the case of a swap, their value at inception is generally zero while other securities (loans, bonds and other types of debt) are usually fully funded.

As a result, credit risk in derivatives differs from credit risk in securities due to the different nature of the potential credit exposure. For example, with a loan, the amount at risk is the amount advanced to the borrower. The credit risk is unilateral; the bank faces the credit exposure of the borrower.

However, in most derivatives transactions, such as swaps (which make up the bulk of bank derivatives contracts), the credit exposure is bilateral. Each party to the contract may (and, if the contract has a long enough tenor, probably will) have a current credit exposure to the other party at various points in time over the contract's life; derivatives may shift from being assets to liabilities and vice versa. Moreover, because the credit exposure is a function of movements in market factors, financial institutions can only estimate how much the value of the derivative contract might be at various points of time in the future.

In derivative instruments, two-way cash flows are very common throughout the term of the agreement. This is different for most other assets and liabilities recognized on the balance sheet, as an asset generally solely represents a right to receive cash in the future, and a liability generally solely represents an obligation to pay cash in the future.

Strictly speaking, derivatives are not bought or sold as other financial instruments. Derivatives are "entered into" and they are carried at fair value and may be managed on a portfolio basis. The risk of holding a derivative may be similar to the risk of holding a bond, but the management of derivatives, for the reasons mentioned above, is very different. For example, if an entity buys an IBM bond, it is exposed to the risk of default of IBM. If the entity sells the bond, both the (i) risk of default and the (ii) bond disappear from its balance sheet. In contrast, if an entity executes a derivative contract that exposes the entity to the risk of default of IBM, the entity may not sell the derivative; it may enter into an offsetting derivative contract. The two contracts must remain in the balance sheet until maturity. However, the entity will not have a risk of default of IBM anymore. As derivatives contracts are usually traded in large numbers throughout the day, the result may be an accumulation of transactions<sup>11</sup> in the balance sheet even when the risks are cancelled out.

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<sup>11</sup> As stated, the master agreement allows for the aggregation of all trades and the replacement with a single net amount each day. Each confirmation is an independent "unit of account" for valuation and measurement purposes, but they are generally settled on a portfolio basis. Each confirmation adds a new transaction to the portfolio and may shift the value of the entire book.

## 4) How derivatives are managed

To explain the way that derivatives are traded and managed, we can look at the single-name credit default swap (CDS)<sup>12</sup> market for its simplicity. Note that other types of derivatives, such as interest rates, foreign exchange or commodities, work in substantially the same way.

We will succinctly describe the single-name CDS's main characteristics and then its cash flows to show how derivatives are generally managed. Only then will we be able to address the accounting implications.

### 4.1) Main characteristics

A single-name CDS is a bilateral contract<sup>13</sup> that allows the contracting entities to trade or hedge the risk that an underlying entity (reference entity) defaults. There are two sides entering into the contract: the protection buyer and the protection seller.

#### a) Obligor risk:

To get protection for a reference entity (obligor risk), a buyer makes periodic payments to the seller, and in return receives a payoff if an underlying financial instrument experiences a defined credit event. The protection buyer pays the premium and the protection seller assumes the financial loss in the case that a credit event materializes.

The reference entity is not a party to the contract. The buyer makes regular premium payments based on a notional amount (that does not exchange hands) to the seller; the premium amounts constituting the spread are charged by the seller to protect against a credit event. The spread measures the risk premium of the reference entity over the so-called risk-free rate. If the reference entity defaults, the protection seller pays the buyer the par value of the bond in exchange for physical delivery of the bond, although settlement may also be net.

A default is often referred to as a credit event and includes such events as failure to pay, restructuring and bankruptcy, and can include a severe drop in the borrower's credit rating. Most CDSs are in the US\$10–20 million range, with maturities between one and ten years. Five years is the most typical maturity.

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<sup>12</sup> A credit derivative is an agreement designed explicitly to trade credit risk between the parties; its value is derived from the credit performance of one or more corporations, sovereign entities or debt obligations. Credit derivatives arose in response to demand by financial institutions, mainly banks, for a means of hedging and diversifying credit risks similar to those already used for interest rate and currency risks. But credit derivatives also have grown in response to demands for low-cost means of taking on credit exposure. The result has been that credit has gradually changed from an illiquid risk that was not considered suitable for trading to a risk that can be traded much the same as others. David Mengle, "Credit derivatives: An overview," Federal Reserve Bank of Atlanta, Economic Review, Fourth Quarter 2007, [http://www.frbatlanta.org/filelegacydocs/erq407\\_mengle.pdf](http://www.frbatlanta.org/filelegacydocs/erq407_mengle.pdf).

<sup>13</sup> The Big Bang protocol introduced new CDS market trading conventions that standardized trading in most single-name products. For example, for standard North America corporate products, the protocol introduced four standard effective and maturity dates, two standard coupon levels, etc. For more information, see [http://www.isda.org/bigbangprot/bbprot\\_faq.html](http://www.isda.org/bigbangprot/bbprot_faq.html).

b) Counterparty credit risk:

When entering into a CDS in the OTC market, both the buyer and seller of credit protection take on counterparty risk:

- The buyer takes the risk that the seller (usually a bank) may default. If the bank and the underlying obligor default simultaneously (double default), the buyer loses its protection against default by the reference entity. If the bank defaults but the obligor does not, the buyer might need to replace the defaulted CDS at a higher cost.
- The seller takes the risk that the buyer may default on the contract, depriving the seller of the expected revenue stream. More important, a seller (usually a market maker) normally limits its risk by buying offsetting protection from another party—that is, it hedges its exposure. If the original buyer drops out, the seller squares its position by either unwinding the hedge transaction or by selling a new CDS to a third party. Depending on market conditions, that may be at a lower price than the original CDS and may therefore involve a loss to the seller.

Today, however, most single-name CDS instruments have standardized terms and many are traded and settled via central counterparties, and in this case there will no longer be counterparty risk, as the risk of the counterparty will be held with the CCP.

c) Collateral posting:

As is the case with other forms of derivatives, single-name CDS trading usually involves posting collateral between the counterparties. If one or both parties to a CDS contract post collateral, there can be margin calls requiring the posting of additional collateral. The posting of new collateral amounts may vary over the life of the contract if the market price changes, or the credit rating of one of the parties, or that of the reference entity changes.

In the OTC market, collateral posting reduces liquidity risk and counterparty credit risk, and when collateral covers 100 per cent of the exposures, the counterparty credit risk may be reduced to zero (this will be discussed in section 5.3).

Of course, counterparty credit risk will also be determined by the ease of finding an adequate replacement for a contract. Through trading, the CDS market generally becomes more liquid, improving not only the chances of protection buyers and sellers finding contract replacements, but also enhancing pricing discovery.



## 4.2) Portfolio management

Derivatives are managed net; this means that they are managed on a portfolio basis. Netting and collateralization reduce the liquidity risk and the counterparty credit risk of a portfolio of derivatives.

For a portfolio of contracts with a single counterparty where a financial institution has a legally enforceable bilateral netting agreement, contracts with negative values may be used to offset contracts with positive values.

This process generates a net current credit exposure (NCCE), as shown in the example below:

<b>Counterparty A Portfolio:</b>	<b>No. of Contracts:</b>	<b>Value of Contracts:</b>	<b>Credit Measure/Metric:</b>
Contracts with Positive Value	6	\$500	Gross Positive Fair Value (GPFV)
Contracts with Negative Value	4	\$350	Gross Negative Fair Value (GNFV)
Total Contracts	10	\$150	Net Current Credit Exposure (NCCE) to Counterparty A

A financial institution's NCCE across all counterparties will therefore be the sum of the gross positive fair values for counterparties without legally certain bilateral netting arrangements (this may be due to the use of non-standardized documentation or jurisdiction considerations) and the net positive fair values for counterparties with legal certainty regarding the enforceability of their netting agreements.

## 4.3) Cash flows

To continue with the same example used previously with the IBM bond, assume an investor buys a CDS from a bank, where the reference entity is IBM. The buyer of protection will make regular payments to the bank—the seller of protection. If IBM defaults on its debt, the investor receives a one-time payment from the bank, and the CDS contract is terminated. The fee or spread of a CDS is the annual amount the protection buyer must pay the protection seller over the length of the contract, expressed as a percentage of the notional amount.

For example, if the CDS spread of IBM is 50 basis points, or 0.5 per cent (1 basis point = 0.01 per cent), then an investor buying US\$10 million worth of protection from the bank must pay the bank US\$50,000 per year (see Trade 1 in Table No. 2 below). These payments continue until either the CDS contract expires or IBM defaults. Payments are usually made on a quarterly<sup>14</sup> basis.

Table No 2: Derivatives Fair Values								
Highly Rated Bank	Trade	No	Maturity	Notional	Fee	Annually		Counterparty
Position	Date	Contracts	Date		%	Gross Positive Fair Value	Gross Negative Fair Value	
Sell	02/03/2009	1	19/02/2015	10,000,000	0.50%	50,000		A
Buy	02/01/2010	1	18/03/2013	-10,000,000	2.60%		-260,000	A
				0			-210,000	
Buy	02/06/2010	1	05/04/2014	-10,000,000	3.50%		-350,000	A
Buy	02/12/2010	1	15/02/2013	-10,000,000	5.90%		-590,000	A
Sell	01/03/2011	6	19/01/2015	60,000,000	0.50%	300,000		A
Sell	02/05/2011	4	19/14/2013	40,000,000	0.15%	60,000		A
Sell	06/07/2011	1	19/11/2014	10,000,000	1.20%	120,000		A
Sell	06/09/2011	1	15/10/2017	10,000,000	1.90%	190,000		A
Sell	11/11/2011	4	19/08/2016	40,000,000	1.50%	600,000		A
Notional				140,000,000				
GPFV						1,320,000		
GNFV							-1,200,000	
NCCE						120,000		
Netting Benefit in %						90.9%		
Collateral						108,000		
Collateral as % of NCCE						90%		
Net exposure						12,000		
All amounts in US dollar								

Table No. 2 shows the net exposure between two counterparties. Derivatives are traded and risk managed on a portfolio basis using a master netting agreement. Buying and selling CDS result in each market participant having a number of line items in the portfolio and contractual cash flows with each other. For example, to hedge out a previous trade (Trade 1), the bank may enter into a new transaction buying a CDS contract on IBM (Trade 2). If the CDS spread of IBM increases to 260 basis points, or 2.6 per cent, then an investor selling US\$10 million

<sup>14</sup> Single-name CDS markets have standard payment dates, namely March, June, September and December. Standard payment dates usually serve as maturity dates too. A CDS with a five-year maturity agreed to on May 1, 2007, for example, would become effective on May 2 with the accrued premium due on June 20; subsequent payments would occur on regular dates until maturity on June 20, 2012. If the spread for a distressed credit is sufficiently high, the CDS will trade “up front”—that is, the buyer will pay the present value of the excess of the premium over 500 basis points at the beginning of the trade and pay 500 basis points per annum for the life of the swap (Taksler, Glen, Credit default swap primer, 2<sup>nd</sup> ed. Debt research, Bank of America, 2007).

worth of protection to the bank must receive US\$260,000 per year. From the financial institution's perspective, the cash flows are netted to a payable of US\$210,000 and the position is flat from an obligor risk basis at this date.

From a counterparty risk perspective, the bank is exposed to the risk of default of counterparty A, but this risk will be mitigated by netting and posting collateral. As time passes, the exposure changes, and by November 11, 2011 (the last trade recorded), the two counterparties have traded a number of times.

As Table No. 2 shows, the actual risk for the bank is not reflected on the notional, which amounts to US\$140,000,000, since the notional does not exchange hands; the risk is not the gross positive exposure since the counterparties have been trading and they would have to net their respective gross negative exposures. Therefore, the risks are netted to the NCCE that amounts to US\$120,000 as of November 11, 2011.

The actual risk that the bank is running against this counterparty is further reduced by the collateral posted by counterparty A, which amounts to US\$108,000. Therefore, the actual risk for the bank is the net amount of US\$12,000. This represents only 0.9 per cent of the GPFV. Therefore, reporting the GPFV position in the balance sheet would overstate the bank's resources that are available to general creditors.

Dealers are market makers who provide liquidity by offering a two-way market. When a dealer takes on risk from a client, the dealer typically hedges the risk with another client. Trading desks tend to remain flat by buying and selling continually instead of taking large open long or short positions.

## 5) The efficacy of netting and collateral as risk mitigation techniques

The United States Office of the Comptroller of the Currency (OCC) publishes a quarterly report<sup>15</sup> that provides useful information with respect to the credit risk and the efficiency of enforceable master netting arrangements as risk mitigation techniques in the U.S. banking system.

### 5.1) Systemic risk

The OCC's report confirms that the NCCE is the first or primary metric used to evaluate risks in derivatives across all asset classes. The report states that NCCE for U.S. commercial banks was US\$353 billion in the first quarter of 2011, after netting derivatives receivables and payables (see Table No. 3).

The OCC's report endorses the efficacy of netting with legally enforceable netting agreements, which allows counterparties to reduce GPFV exposures by 90.4 per cent in the first quarter, the

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<sup>15</sup> Office of the Comptroller of the Currency, OCC's Quarterly Report on Bank Trading and Derivatives Activities, First Quarter 2011, <http://occ.gov/topics/capital-markets/financial-markets/trading/derivatives/dq111.pdf>.

second consecutive decline in this metric since it peaked at 92.1 per cent set in the third quarter of 2010.

<b>Table No. 3</b>				
<b>US\$ in billions</b>	<b>Q111</b>	<b>Q410</b>	<b>Change</b>	<b>%</b>
<b>Gross Positive Fair Value (GPFV)</b>	3,687	4,198	(540)	-12%
<b>Netting Benefits (GNFV)</b>	3,335	3,822	(487)	-13%
<b>Netted Current Credit Exposure (NCCE)</b>	353	375	(23)	-6%
<b>Netting Benefit in %</b>	90.4%	91.1%	-0.6%	-1%
<b>Source OCC</b>				

The OCC's report shows that the netting benefit was greater than 90 per cent of all derivatives contracts traded, indicating that the net amounts are more relevant when reporting derivatives than the gross amounts when evaluating and measuring derivative exposures. Similarly, the total NCCE amounting to US\$353 billion of credit risk should have to be divided among all counterparties trading in derivatives regulated by the OCC.

The report demonstrates the extent to which systemic risk is mitigated by netting in the derivatives markets in the U.S. Furthermore, this potential risk is reduced further by the amount of collateral posted by the counterparties.

The OCC's report states: "The notional amount of a derivative contract is a reference amount from which contractual payments will be derived, but it is generally not an amount at risk. The credit risk in a derivative contract is a function of a number of variables, such as whether counterparties exchange notional principal, the volatility of the underlying market factors (interest rate, currency, commodity, equity or corporate reference entity), the maturity and liquidity of the contract, and the creditworthiness of the counterparty."

## **5.2) Volatility**

The second important metric that is used to evaluate and measure derivatives portfolios is the volatility (or market risk) of the portfolio. This is measured by estimating how much the value of a given derivative contract might change in the bank's books over the remaining life of the contract. Risk-based capital rules using value at risk (VaR) permit financial institutions to use this measure for regulatory capital purposes.

Volatility is driven by the risk of open market positions and the potential changes in net asset values and not the size of gross derivatives amounts. For example, in a perfectly matched derivative portfolio with no net open market risk, derivative receivables would grow equivalent with derivative payables based on movements in market indices, and there would not be any effect in the solvency of the entity. Major derivative dealers typically dynamically hedge market risk and manage it on a net basis to a relatively low open position risk (as evidenced by low VaR relative to gross assets). Therefore, gross balance sheet amounts are not particularly useful indicators of how much net derivative asset values would have to change before solvency is affected.

Market risk cannot be adequately communicated through either gross or net presentation, since it represents the sensitivity of potential future changes in the underlying, which cannot be expressed as a point-in-time amount on the balance sheet. A portfolio of derivatives may be immune to market risks, yet has a large amount of assets and liabilities on a gross basis; or a portfolio of derivatives may be significantly exposed to market risks, yet has virtually no current fair value on a gross (or net) basis.

### **5.3) Liquidity and collateral**

Finally, the OCC's report identifies collateral as the third most important metric when evaluating the risks implicit in a given derivative portfolio. The OCC's report states that in the U.S.: "Banks held collateral against 72% of total NCCE at the end of the first quarter 2011. Credit exposures to banks/securities firms and hedge funds are very well secured. Banks held collateral against 93% of their current exposure to banks and securities firms." Thus, banks demand more collateral from other banks and securities firms than from other types of clients.

For derivatives, the nature of risk management practices, legal and collateral agreements and cash settlement procedures result in a liquidity profile that is more aligned with net presentation. Funding requirements for derivatives arise from the need to supply cash collateral as a result of market movements, and such collateral requirements are calculated on a net basis. Cash would only be required to be posted to a counterparty if, on a net basis, derivative payables exceed derivative receivables on a particular day.

In conclusion, the OCC's report gives important guidance to evaluate and measure derivatives:

- (i) First, the report clarifies that the notional amounts are not directly relevant and this is easy to understand since these amounts do not change hands.
- (ii) Second, the report clarifies that net figures are by far more relevant metrics than the gross amounts. Naturally, this comes about from looking to the way that derivatives are traded under an enforceable master netting agreement. The master netting agreement allows for the aggregation of all trades and the replacement by a single net amount.
- (iii) Third, volatility is a relevant indication of risk. However, the inability to communicate this risk through the balance sheet should not preclude to report derivatives adequately and pursuing the relevant presentation. Net presentation is a more relevant metric to evaluate and measure derivatives portfolios on the balance sheet.
- (iv) Finally, collateral amounts further reduce the risks and have to be taken into consideration for reporting derivatives.

## 6) Two different accounting models

This section summarizes the current IFRS and U.S. GAAP requirements for netting financial instruments in the statement of financial position and gives an overview of the different models. In the second half of 2011, the IASB and the FASB rejected a joint proposal on offsetting intended to reduce the differences in their models, and instead the Boards issued common offsetting disclosures.

Although both IFRS and U.S. GAAP focus on similar criteria for offsetting to take place (primarily the existence of the legal right to offset), the detailed requirements of each set of guidance create significant differences in the amounts presented in the balance sheet.

The IFRS offsetting model requires an entity to offset a financial asset and a financial liability when, and only when, an entity currently has a legally enforceable right of set-off and intends either to settle on a net basis or to realize the financial asset and settle the financial liability simultaneously.

The U.S. GAAP offsetting model, while similar to the model in IFRS, provides a specific exception to the intent requirement for derivatives instruments, permitting entities to present the fair value of derivative assets and derivative liabilities net in the statement of financial position when each of the two parties owes the other determinable amounts and the right to offset is enforceable by law. This enforceable right to set-off is typically found in master netting arrangements. Offsetting under the U.S. GAAP model is an accounting policy election while under the IFRS model it is a requirement.

Finally, U.S. GAAP gives guidance to define master netting arrangements: a master netting arrangement exists if the reporting entity has multiple contracts, whether for the same type of derivative instrument or for different types of instruments, with a single counterparty that are subject to a contractual agreement that provides for the net settlement of all contracts through a single payment in a single currency in the event of default on or termination of any one contract.

### 6.1) Scope

Offsetting primarily affects financial instruments that are subject to a master netting agreement and include:

- (i) OTC derivatives;
- (ii) Repurchase and reverse repurchase agreements; and
- (iii) Exchange-traded derivatives, which are those derivatives that are traded on or novated into an exchange.

Examples of financial instruments that are generally not within the scope may include loans and customer deposits that are not generally set-off in the statement of financial position, and

financial instruments that are subject only to a collateral agreement but are not subject to a master netting agreement (unless they meet the offsetting criteria).

## 6.2) The IFRS offsetting model

There is not a separate financial reporting standard for offsetting under IFRS. The current IFRS offsetting guidance is included within IAS 32 “Financial Instruments: Presentation” that was updated with the amendment published by the IASB in December 2011 to address certain inconsistencies found in different jurisdictions when applying the offsetting criteria in practice.

The IFRS criteria for offsetting financial assets and financial liabilities focus on two principles:

- a) A currently enforceable legal right to offset; and
- b) An intent either to settle net or simultaneously.

- a) A currently enforceable legal right to offset:

The 2011 amendment clarified the meaning of currently enforceable : The right to set-off must be legally enforceable at all times and not conditional or based on future events, even if it is only the event of default or bankruptcy of the counterparty. To meet the criterion, the right to set-off:

- a) Must not be contingent on a future event<sup>16</sup>; and
- b) Must be legally enforceable in all of the following circumstances:
  - (i) The normal course of business;
  - (ii) The event of default; and
  - (iii) The event of insolvency or bankruptcy, of the entity and all of the counterparties.

Therefore, the laws applicable to the relationships between the parties (for example, contractual provisions, the laws governing the contract or the default, insolvency or bankruptcy laws applicable to the parties) need to be considered to ascertain whether the right of set-off is

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<sup>16</sup> The FASB Board concluded that a conditional right of set-off, such as close-out netting in a master netting arrangement, fundamentally changes the economics of a going-concern entity and deserves special presentation requirements (ASU No. 2011-11 – BC15). The FASB Board considered the cost versus the benefits of the offsetting model as outlined in the Exposure Draft. The FASB issued Interpretation 39 and Interpretation 41 to address concerns expressed at the time that the gross reporting of arrangements meeting very restrictive criteria was misleading, primarily by overstating credit risk and an entity’s obligations. As noted previously, users of financial statements expressed the need for both gross information and net information about offsetting positions, but there was not a strong demand for a change to the balance sheet reporting of these arrangements. The Board noted that the change would require, at a minimum, updates to systems and an analysis of all financial instruments and other derivative instruments under new netting guidance to determine whether each of the instruments was required to be offset. The Board also considered the benefit of having consistent international guidance for offsetting of financial instruments and other derivative instruments. On the basis of the considerations outlined, the Board concluded that there was not an adequate basis to change the offsetting model in the United States (BC 16). Furthermore, the FASB clarified that, “when the MNA conditional provisions are invoked, net presentation would be more relevant.” (ASU No. 2011-11, paragraph no: 270-10-50-1)

enforceable in the normal course of business, in an event of default and in the event of insolvency or bankruptcy, of the entity and all of the counterparties.

ISDA does not expect that this amendment will require entities to reassess their current analysis of the legal documentation on the enforceability of the set-off rights in those jurisdictions where ISDA has provided legal opinions.

b) An “intent” either to settle net or simultaneously:

The 2011 amendment also clarified this principle. The intention is required even without the operational ability either to settle net or simultaneously, and, therefore, showing the amounts net would not be reflective of the expected underlying cash flows that would be settled gross.

The amendment clarified that although the entity may have a right to settle net, it may still realize the asset and settle the liability separately. However, if an entity can settle amounts in a manner such that the outcome is, in effect, equivalent to net settlement, the entity will meet the net settlement criterion. This is in fact an exception to this principle.

This will occur if, and only if, the gross settlement mechanism has features that eliminate or result in insignificant credit and liquidity risk, and that will process receivables and payables in a single settlement process or cycle. For example, a gross settlement system that has all of the following characteristics would meet the net settlement criterion:

- a) Financial assets and financial liabilities eligible for set-off are submitted at the same point in time for processing;
- b) Once the financial assets and financial liabilities are submitted for processing, the parties are committed to fulfil the settlement obligation;
- c) There is no potential for the cash flows arising from the assets and liabilities to change once they have been submitted for processing (unless the processing fails—see (d) below);
- d) Assets and liabilities that are collateralized with securities will be settled on a securities transfer or similar system (for example, delivery versus payment), so that if the transfer of securities fails, the processing of the related receivable or payable for which the securities are collateral will also fail (and vice versa);
- e) Any transactions that fail, as outlined in (d), will be re-entered for processing until they are settled;
- f) Settlement is carried out through the same settlement institution (for example, a settlement bank, a central bank or a central securities depository); and
- g) An intraday credit facility is in place that will provide sufficient overdraft amounts to enable the processing of payments at the settlement date for each of the parties, and it is virtually certain that the intraday credit facility will be honoured if called upon.

This amendment is in fact an exception similar to the exception provided by the FASB under the FIN 41 guidance (see below). The amendment can be considered in two different ways:



- First, it closes the gap with the provisions set up under the U.S. GAAP rules regarding the application of offsetting to clearing houses and depository houses settling gross through a settlement mechanism. The FASB concluded that clearing and settlement mechanisms with certain characteristics constituted the functional equivalent of net settlement. For example, Repo transactions executed under a master netting arrangement through specific transfer systems with associated banking arrangements in place and the presence of an intraday credit facility that permits to fund (or to receive) only a single net amount at the end of each day (see below).
- Second, the amendments may require entities to reassess their current procedures and make sure that they are aligned with the clarifications made. Some CCPs may not meet all the new requirements such as the same point in time for processing all the cash flows when due.

### **6.3) The U.S. GAAP offsetting model**

The U.S. GAAP offsetting guidance is set out within ASC 210-20 “Balance Sheet – Offsetting” and ASC 815-10 “Derivatives and Hedging – Overall” (previously known as FIN 39 and FIN 41). This guidance permits to offset only if there are determinable amounts, the right of offset is legally enforceable and the reporting party intends to offset.

U.S. GAAP reporters that meet the criteria for net presentation have an accounting policy choice to present in the statement of financial position either on a gross or net basis; however, the policy selected should be applied consistently across all eligible transactions.

U.S. GAAP requires that all evidence that is available to support or question enforceability is considered and that offset is only appropriate if such evidence indicates that there is a “reasonable assurance that the right of offset would be upheld in bankruptcy.”

The requirements that permit offset also include the entity’s intention to offset; however, U.S. GAAP provides an exception from this requirement for derivative instruments. Therefore, derivative transactions subject to an enforceable master netting agreement may be presented net in U.S. GAAP balance sheets when all other criteria are met.

An entity that reports its derivative instruments net is required to also offset the fair value amounts recognized for the cash collateral pledged or received with the same counterparty, against the fair value amounts recognized for the derivatives under the same master netting agreement.

For repurchase and reverse repurchase agreements, U.S. GAAP considers the “intent” criterion to be met if all the following conditions are met:

- a) The repurchase and reverse repurchase agreements are executed with the same counterparty.

- b) The repurchase and reverse repurchase agreements have the same explicit settlement date specified at the inception of the agreement.
- c) The repurchase and reverse repurchase agreements are executed in accordance with a master netting arrangement.
- d) The securities underlying the repurchase and reverse repurchase agreements exist in book entry form and can be transferred only by means of entries in the records of the transfer system operator or securities custodian.
- e) The repurchase and reverse repurchase agreements will be settled on a securities transfer system (for which specific operational conditions are described) and the enterprise must have associated banking arrangements in place (also described in detail). Cash settlements for securities transferred are made under established banking arrangements that provide that the enterprise will need available cash on deposit only for any net amounts that are due at the end of the business day. It must be probable that the associated banking arrangements will provide sufficient daylight overdraft or other intraday credit at the settlement date for each of the parties.
- f) The enterprise intends to use the same account at the clearing bank or other financial institution at the settlement date in transacting both (1) the cash inflows resulting from the settlement of the reverse repurchase agreement and (2) the cash outflows in settlement of the offsetting repurchase agreement.

If the repurchase and reverse repurchase agreements have determinable amounts, an enforceable legal right to offset and meet the above criteria, then their fair values may be presented net in the statement of financial position.

#### **6.4 Differences between IFRS and U.S. GAAP**

The key differences between the models relate to (i) the existing exception for derivatives in relation to the intent criterion and (ii) the conditional right to set-off (under a master netting agreement) criterion under U.S. GAAP.

- (i) The different interpretation on “intent” between the two models for derivatives traded over-the-counter with the same counterparty is probably based in large part on the view that gross presentation of these transactions more accurately conveys the resources and cash flows of an entity and the claims against it.

Inherent to this view is the assumption that derivatives receivables, aggregated using fair values calculated on a trade-by-trade basis, represent resources to creditors other than the derivatives counterparties, and that derivatives payables, calculated individually, represent claims against the entity.

We believe that this assumption is simply not true in bankruptcy or on a going-concern basis because in both cases the derivative payments are only available to derivatives counterparties and only the net remaining cash flows would be available to the general creditors. This is also true of the collateral posted by the counterparties.

- (ii) For derivatives and repurchase agreements, existing U.S. GAAP, which permits net presentation on the basis of a conditional right of set-off (for example, close-out netting in a master netting arrangement that would be upheld in the event of bankruptcy), taking into account cash collateral posted, more faithfully represents both the economic substance of the overall arrangement and how the entities manage their business and risk exposures.

Table No. 4 summarizes the key differences for derivatives between current IFRS and U.S. GAAP:

<b>Table No. 4</b>		
	<b>IFRS</b>	<b>U.S. GAAP</b>
<b>General Criteria</b>	<p>Two conditions must exist to offset a financial assets and a financial liability:</p> <ul style="list-style-type: none"> <li>- Currently legally enforceable right of set-off exists in all circumstances; and</li> <li>- There is an intent to settle net or simultaneous settlement</li> </ul> <p>IAS 32 amendment: “Currently” have a legally enforceable right to set-off means that the right to set-off:</p> <ul style="list-style-type: none"> <li>- Must not be contingent on a future event, and</li> <li>- Must be legally enforceable in the following circumstances:               <ul style="list-style-type: none"> <li>(i) In the normal course of business</li> <li>(ii) In the ‘event’ of default</li> </ul> </li> </ul> <p>The ‘event’ of insolvency or bankruptcy of the entity, and of all counterparties</p>	<p>A right of offset exists when all of the following conditions are met:</p> <ul style="list-style-type: none"> <li>- Each of the two parties owes the other determinable amounts</li> <li>- The reporting party has the right to offset the amount owed by the other party</li> <li>- The reporting party intends to offset</li> <li>- The right of offset is enforceable by law</li> </ul> <p>The “intent” criterion is not required for derivative instruments.</p>
<b>Accounting Policy</b>	Offsetting is not optional; therefore, it is not an accounting policy option. Offsetting is required when the conditions are met.	Offsetting is option; the accounting policy must be applied consistently to the same class of transactions.
<b>Number of Counterparties</b>	Two or more	Only two
<b>Rights to Set-off</b>	Unconditional	Conditional
<b>Focus</b>	Gross fair values	Net fair values

As a separate final point, it would be important to mention that the IAS 32 Amendment may require entities and CCPs to reassess their current procedures and make sure that they are aligned with the clarifications made. Some clearing houses and central counterparties may not meet all the new requirements, such as legal enforceability and the “same point in time for processing” all the cash flows when due.

## 6.5) Specific application guidance

This section summarizes the specific guidance applicable to the different transactions and structures under the two models:

<b>Table No. 5</b>		
	<b>IFRS</b>	<b>U.S. GAAP</b>
Derivative financial instruments under Master Netting Agreements	Master netting agreements do not provide a basis for offsetting unless both criteria for offset have been satisfied.	The guidance provides an exception from the “intent” criterion for derivative instruments. The entity may offset: <ul style="list-style-type: none"> <li>- Fair value amounts recognized for derivative instruments.</li> <li>- Fair value amounts (or amounts that approximate fair value) recognized for the right to reclaim cash collateral or the obligation to return cash collateral arising from derivative instruments.</li> </ul>
Repurchase and reverse repurchase agreements and derivatives settled through clearing houses	No specific application guidance with respect to repurchase agreements (the Board decided not to refer specifically to clearing houses or central counterparties). Such instruments therefore should only be offset if they meet the offsetting criteria.	The guidance allows the “intent” criterion to be met when the six criteria (previously discussed) are met, for repurchase and reverse repurchase agreements executed under a master netting agreement.
Collateral	No special consideration or application guidance is given to collateral that can be offset when the general criteria is met.	It generally permits offsetting of fair value amounts recognized for multiple derivative instruments executed with the same counterparty under a master netting arrangement and fair value amounts recognized for the right to reclaim cash collateral (a receivable) or the obligation to return cash collateral (a payable) arising from the same master netting arrangement as the derivative instruments.
Unit of account	Although the concept was not mentioned in the original IAS 32, the Board clarified it in the amendment published in December 2011. The Boards clarified that the focus of offsetting are the expected future cash <sup>17</sup> flows (Amendment BC 107). However, the Board felt that it would be necessary to consider an exemption from this requirement on the basis of the operational complexity and that it would result in the offsetting requirements being applied differently between entities (BC 110).	Not mentioned.

<sup>17</sup> Note that the IASB has de-facto renounced its original idea that offsetting should be primarily based on the fair value of expected cash flows based on the “unit of account” and effectively substituted this concept by requiring the gross amounts as a “proxy” (which, generally, do not represent the actual or expected cash flows) to be reported in the balance sheet.

## 6.6) Advantages and disadvantages

To evaluate the advantages and disadvantages between net or gross presentation, it is essential to consider the information content of the figure presented on the face of the balance sheet as it relates to economic substance, legal, operational, liquidity, solvency, market and credit risk (see the comparative table in the Annex).

The balance sheet can only show one amount. Furthermore, the profit and loss account shows primarily the income generated by an entity while the balance sheet shows primarily the resources of an entity. As the balance sheet can only portray one figure, it is important to present this information accurately, without either over- or under-stating. Additional disclosures can be given in the notes.

In order to develop their models, standard setters have focused on the Conceptual Framework. The Conceptual Framework explains that for financial information to be useful, it must not only provide relevant information, it must also faithfully represent the phenomena that it purports to represent. In other words, the economic substance of the financial instrument is as important as its contractual form.

ISDA favours reporting derivatives 'net' instead of 'gross' on the face of the balance sheet. ISDA believes that the current U.S. GAAP principles are superior because they provide robust offsetting principles to facilitate investors' evaluation of relative balance sheet size, leverage, returns on investment and overall financial condition. We believe that U.S. GAAP provides the best reflection of an entity's solvency and its exposure to credit and liquidity risks for both derivatives and repurchase agreements.

The FASB issued Interpretation 39 and Interpretation 41 to address concerns expressed at the time that gross reporting of arrangements meeting very restrictive criteria was misleading, primarily by overstating (i) credit risk, (ii) an entity's obligations and (iii) an entity's financial resources in the balance sheet.

The U.S. GAAP model discloses the gross amounts in the notes rather than the face of the balance sheet. The main reasons that favour net presentation are:

a) Generation of future cash flows:

Derivatives financial instruments are required to be reported at fair value, which is the net amount that reflects the net present value of expected net cash inflows and outflows of the contracts that are traded under an enforceable master netting agreement. Although the fair value of a derivative is an estimation (or probability weighted estimation) of the expected net future cash flows at a point in time, the conditional and leverage nature of the derivative contracts means that the actual future cash flows are not discernible from the measure of fair value. Therefore, even for a single contract, additional disclosures would be required to truly provide information about the nature, timing, volatility and extent of future cash flows (and other risks) relating to the derivative financial instrument. As a result, it is difficult to observe information about the entity's ability to generate future cash flows based on the gross values.

b) Credit risk:

Derivative instruments are typically subject to a master netting arrangement. The failure to make one payment under the master netting agreement would entitle the counterparty to terminate the entire arrangement and demand the net settlement of all underlying transactions. The notion that a conditional right of set-off, such as close-out netting in a master netting arrangement, fundamentally changes the economics of a going-concern entity and deserves special presentation requirements is wrong. A net presentation in these circumstances appropriately reflects the amount of credit exposures and the nature of the entity's economic resources and claims with respect to its derivative financial instruments.

c) Liquidity risk:

For collateralized derivative contracts subject to a master netting agreement, collateral is posted daily based on the net fair value of open positions with each counterparty. As a result, collateral is transferred between derivative counterparties on a net basis each day.

For example, consider an entity that enters into a forward agreement that requires one cash settlement at its maturity in three years. That entity may or may not have other derivative contracts with the same counterparty with different tenors and has executed a master netting agreement that requires the posting of collateral. Throughout the life of that three years, derivative financial instrument collateral is transferred on a daily basis based on the net exposure to the counterparty. As a result, a net presentation would provide liquidity information that is more reflective of the entity's expected cash flows for every day of that derivative transaction's life. This is an important point if we consider that one of the principal differentiating factors in a financial institution's ability to weather the past financial crisis was its ability to meet the daily collateral requirements on their net position, and not on the gross settlements at contract maturity.

The issue that remains is that the IASB has issued new guidelines requiring and confirming that the balance sheet must show the gross, rather than the net, amounts for derivatives markets in the face of the balance sheet, which is at odds with the FASB and also with regulators and preparers and with the way that derivatives are generally traded, managed and valued.

## 7) Common offsetting disclosures

Offsetting (netting) assets and liabilities is an important aspect of presentation in financial statements. The differences in the offsetting principles in U.S. GAAP and the offsetting principles in IFRS account for a significant difference in the amounts presented in the statements of financial position prepared in accordance with each of them.

The objective of the Boards when they began the project of improving the offsetting models in 2010 was to converge the two models and reduce the differences in the statement of financial

position. The project was not successful and the convergence of the two models, requested by the G20 and the FSB, was not achieved.

As a result, the Boards decided during the outreach period of the project that the differences should be addressed by converging their disclosure requirements.

## 7.1) Scope

Entities are required to disclose both gross information and net information about instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to a master netting agreement or agreement similar to a master netting arrangement.

The scope of the disclosure guidance includes derivatives, repurchase agreements and reverse repurchase agreements, securities borrowing and securities lending arrangements, and requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position.

The objective of this disclosure is to facilitate comparison between those entities that prepare their financial statements on the basis of U.S. GAAP and those entities that prepare their financial statements on the basis of IFRS.

These disclosures apply to recognized financial instruments that are subject to an enforceable master netting arrangement or similar agreement, irrespective of whether they are set-off or not. This information will enable users of an entity's financial statements to evaluate the effect or potential effect of netting arrangements on an entity's financial position, including the effect or potential effect of rights of set-off associated with certain financial instruments and derivative instruments.

## 7.2) Disclosures

An entity shall disclose, at the end of the reporting period, the following quantitative information separately for recognized financial assets and recognized financial liabilities that are within the scope:

- a) The gross amounts of those recognized financial assets and recognized financial liabilities;
- b) The amounts that are set-off in accordance with the criteria of U.S. GAAP and IFRS when determining the net amounts presented in the statement of financial position;
- c) The net amounts presented in the statement of financial position;
- d) The amounts subject to an enforceable master netting arrangement or similar agreement:
  - (i) Amounts related to recognized financial instruments that do not meet some or all of the offsetting criteria in U.S. GAAP and IFRS, and

- (ii) Amounts related to financial collateral (including cash collateral); and
- e) The net amount after deducting the amounts in (d) from the amounts in (c) above.

The information required shall be presented in a tabular format, separately for financial assets and financial liabilities, unless another format is more appropriate. The total amount disclosed in accordance with paragraph (d) for an instrument shall be limited to the amount in paragraph (c) for that instrument.

An entity shall include a description in the disclosures of the rights of set-off associated with the entity's recognized financial assets and recognized financial liabilities subject to enforceable master netting arrangements and similar agreements that are disclosed, including the nature of those rights.

As financial instruments within the scope of the disclosures may be subject to different measurement requirements (for example amortized cost or fair value), an entity shall describe any resulting measurement difference in the related disclosures.

Finally, the converged offsetting disclosure requirements will not allow users to reconcile directly the U.S. GAAP amounts shown in the financial statements with those presented in accordance to IFRS.

## 8) Un-weighted leverage ratio

U.S. banks have been subject to a leverage ratio for some time even though this policy instrument has not, to date, formed part of the Basel regulatory framework. The Basel Committee on Banking Supervision (BCBS) has now agreed, as part of the Basel III framework, on a definition of the leverage ratio as "total tier 1 capital to total un-weighted assets" of at least 3 per cent. The ratio<sup>18</sup> is computed using the existing Basel II netting requirements<sup>19</sup> largely because accounting offsetting rules currently differ significantly between jurisdictions.

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<sup>18</sup> The un-weighted leverage ratio rules are set out in "Basel III: A global regulatory framework for more resilient banks and banking systems" (December 2010), which is available at [www.bis.org/bcbs/189.htm](http://www.bis.org/bcbs/189.htm).

<sup>19</sup> In order to obtain regulatory capital relief against offsetting derivatives positions with a counterparty, financial institutions are subject to prudential capital requirements that require to obtain reasoned, written legal opinions that confirm the enforceability of the close-out netting provisions of master netting agreements that they use (the ISDA MNA being by far the most widely used). They must obtain such opinions in respect of all relevant jurisdictions: their home jurisdiction, the jurisdiction of incorporation of their counterparty, each jurisdiction in which the counterparty has a branch through which it trades under the agreement and the jurisdiction of the governing law of the agreement. In response to this requirement, ISDA commissions and publishes legal opinions in a standard format as to the enforceability of the close-out netting provisions of the ISDA MNA, in relation to a wide range of entity types in various jurisdictions. *U.S. GAAP's offsetting requirements are aligned with the regulatory requirements while IFRS's rules are not.*



The BCBS is planning to test the un-weighted leverage ratio over a transition period running from January 1, 2013 to 2017 before its implementation. The BCBS will track the ratio, its component factors and impact over this period and will require bank-level disclosure of the ratio and its factors from January 2015. Final adjustments (based on the results of the test run) to the ratio will be carried out in the first half of 2017, and thereafter, the ratio will be fully effective from January 1, 2018, based on appropriate calibration and review.

The key regarding this new BCBS's un-weighted leverage ratio is its heavy dependency on the accounting standards used. The use of a particular accounting model would influence the extent to which offsetting would be used in the calculation of the ratio. There is obviously a possibility that the local regulators will continue applying local rules that will make these ratios obsolete even before being published for comparison purposes.

**ANNEX**  
**ADVANTAGES AND DISADVANTAGES**  
**COMPARATIVE TABLE**

	<b>Net Presentation in the Balance Sheet</b>	<b>Gross Presentation in the Balance Sheet</b>
Economic substance and impact on balances	- The net amounts represent the economic substance of the transaction.	- The gross amounts distort the economic substance by overstatement. - The magnitude of gross balances may mask other relevant financial information that may become immaterial.
Resources	- Net amounts accurately reflect the resources of an entity and claims against it.	- Gross amounts do not accurately convey the resources and cash flows of an entity and the claims against it. The assumption that derivatives receivables, aggregated using fair values calculated on a trade-by-trade basis, represent resources to creditors other than the derivatives counterparties, and that derivatives payables, calculated individually, represent claims against the entity is wrong. - Gross amounts do not represent the resources both in bankruptcy and/or on a going-concern basis because in both cases the derivative payments are only available to derivatives counterparties (which would eventually settle net) and only the remaining net amounts would be available to the general creditors. This is also true for the collateral posted by the counterparties.
Solvency risk	- Net amounts more accurately reflect the solvency of an entity.	- Gross amounts distort the entity's resources and therefore the solvency by overstatement. - Upon insolvency, the termination amounts (gross amounts of all individual trades) are not subject to remain for all creditors under the laws of most jurisdictions. Therefore, reporting derivatives on a gross basis would mislead users of financial statements. - Gross amounts would accurately reflect the solvency of an entity when the rights to set-off are not enforceable under the law of a particular jurisdiction.

	<b>Net Presentation in the Balance Sheet</b>	<b>Gross Presentation in the Balance Sheet</b>
Credit risk	<ul style="list-style-type: none"> <li>- It is consistent with valuation of derivatives and, therefore, net presentation better reflects the credit risk exposure for derivatives under a master netting agreement.</li> <li>- By netting collateral against the fair value of the exposures, the balance sheet shows the actual credit and liquidity risk.</li> <li>- Net presentation better reflects the credit risk exposure for derivatives under MNAs. In the event of default of a counterparty, derivatives under MNAs would be settled net.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross presentation is not aligned with how credit risk is managed by entities.</li> <li>- Gross presentation overstates the credit risk.</li> </ul>
Going concern and gone concern	<ul style="list-style-type: none"> <li>- Under both going concern and gone concern, derivatives would generally be managed on a net basis when the right to set-off is enforceable.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross amounts would accurately reflect the exposures of an entity when the rights to set-off are not enforceable under the law of a particular jurisdiction.</li> </ul>
Cash flows	<ul style="list-style-type: none"> <li>- Net presentation portrays the actual cash flows in the balance sheet better since derivatives are two-way transactions very different from other transactions recognized in the balance sheet that represent solely an asset or a liability.</li> <li>- Derivatives are required to be reported at fair value, which is already a net amount that reflects the present value of the expected net cash inflows and outflows of the contract.</li> <li>- Given the conditional and leveraged nature of derivative contracts, the actual cash flows are not discernible from the fair value of that contract.</li> <li>- The net amount of credit risk exposure, which is the loss that the entity might incur if the counterparties of their derivatives failed to perform, is generally the best indicator of the uncertainty of future cash flows from those instruments.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross amounts do not represent the actual cash flows in the balance sheet nor the expected cash flows in the future.</li> <li>- Additional disclosures would be required in order to obtain information about the nature, timing and extent of future cash flows (and other risks) relating to derivatives.</li> <li>- Only in the rare occasion that the instruments are delivered in their entirety, gross amounts would represent true cash flows.</li> </ul>
Market risk	<ul style="list-style-type: none"> <li>- Market risk is the sensitivity of potential future changes in the underlying, which cannot be expressed as an amount on the balance sheet (balance sheets can only portray amounts at a point in time).</li> </ul>	

	<b>Net Presentation in the Balance Sheet</b>	<b>Gross Presentation in the Balance Sheet</b>
Liquidity risk	<ul style="list-style-type: none"> <li>- For derivatives, the nature of risk management practices, collateral agreements and settlement procedures result in a liquidity profile that are more aligned with economic substance and net presentation.</li> <li>- Collateral is posted daily based on the net fair value open positions with a counterparty. Net presentation is consistent with the way collateral is calculated and therefore provides better information on liquidity.</li> <li>- Derivatives are required to be presented at fair value, which reflects the expected net cash inflows and outflows of the contract at a point in time. Therefore, even a single derivative contract would require supplemental disclosure to provide information about liquidity risk, including the timing and uncertainty of cash flows relating to derivatives.</li> <li>- Collateral requirements for margining and trading purposes are calculated on a net basis.</li> <li>- Under a CSA, cash is required to be posted only when derivative payables exceed derivative receivables (on a net basis).</li> </ul>	<ul style="list-style-type: none"> <li>- On a going-concern basis (and also bankruptcy), collateral is not available for all creditors; it cannot be taken as part of the cash available for purposes other than derivatives counterparties. Cash is not freely available as there are restrictions on transferring these amounts to third parties.</li> <li>- Collateral requirements for margining and trading purposes are not calculated on a gross basis.</li> <li>- Gross figures do not portray the available liquidity for general creditors and therefore may mislead the users of financial statements.</li> </ul>
Legal	<ul style="list-style-type: none"> <li>- Net presentation accurately reflects the characteristics of an enforceable master netting arrangement if derivatives are traded where the right to set-off exists under the law of the jurisdiction.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross amounts are narrow focused.</li> <li>- Gross amounts are only accurate in jurisdictions where the law may limit the right to set-off.</li> </ul>
Regulatory capital	<ul style="list-style-type: none"> <li>- Net presentation is aligned with the regulatory rules used for the calculation of the minimum capital adequacy requirements.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross presentation requires making adjustments with the regulatory capital.</li> </ul>
Bank leverage ratio	<ul style="list-style-type: none"> <li>- Net presentation is consistent with the valuation of derivatives.</li> </ul>	<ul style="list-style-type: none"> <li>- Gross presentation is inconsistent with valuation of derivatives.</li> <li>- Gross presentation may require bank leverage ratios to be rescaled for the negative impact of larger balance sheets.</li> </ul>