



Appendix CA-1

Minority interest illustrative example

This Appendix illustrates the treatment of minority interest and other capital issued out of subsidiaries to third parties.

Illustrative example

A banking group consists of two legal entities that are both banks. Bank P is the parent and Bank S is the subsidiary and their unconsolidated balance sheets are set out below.

Bank P balance sheet		Bank S balance sheet	
Assets		Assets	
Loans to customers	100	Loans to customers	150
Investment in CET1 of Bank S	7		
Investment in the AT1 of Bank S	4		
Investment in the T2 of Bank S	2		
Liabilities and equity		Liabilities and equity	
Depositors	70	Depositors	127
Tier 2	10	Tier 2	8
Additional Tier 1	7	Additional Tier 1	5
Common equity	28	Common equity	10

The balance sheet of Bank P shows that in addition to its loans to customers, it owns 70% of the common shares of Bank S, 80% of the Additional Tier 1 of Bank S and 25% of the Tier 2 capital of Bank S. The ownership of the capital of Bank S is therefore as follows:

Capital issued by Bank S			
	Amount issued to parent (Bank P)	Amount issued to third parties	Total
Common Equity Tier 1 (CET1)	7	3	10
Additional Tier 1 (AT1)	4	1	5
Tier 1 (T1)	11	4	15
Tier 2 (T2)	2	6	8
Total capital (TC)	13	10	23

The consolidated balance sheet of the banking group is set out below:



Consolidated balance sheet	
Assets	
Loans to customers	250
Liabilities and equity	
Depositors	197
Tier 2 issued by subsidiary to third parties	6
Tier 2 issued by parent	10
Additional Tier 1 issued by subsidiary to third parties	1
Additional Tier 1 issued by parent	7
Common equity issued by subsidiary to third parties (ie minority interest)	3
Common equity issued by parent	26

For illustrative purposes Bank S is assumed to have risk weighted assets of 100. In this example, the minimum capital requirements of Bank S and the subsidiary's contribution to the consolidated requirements are the same since Bank S does not have any loans to Bank P. This means that it is subject to the following minimum plus capital conservation buffer requirements and has the following surplus capital:

Minimum and surplus capital of Bank S		
	Minimum plus capital conservation buffer	Surplus
CET1	7.0 (= 7.0% of 100)	3.0 (=10 – 7.0)
T1	8.5 (= 8.5% of 100)	6.5 (=10 + 5 – 8.5)
TC	10.5 (= 10.5% of 100)	12.5 (=10 + 5 + 8 – 10.5)



The following table illustrates how to calculate the amount of capital issued by Bank S to include in consolidated capital:

Bank S: amount of capital issued to third parties included in consolidated capital					
	Total amount issued (a)	Amount issued to third parties (b)	Surplus (c)	Surplus attributable to third parties (ie amount excluded from consolidated capital) (d) =(c) * (b)/(a)	Amount included in consolidated capital (e) = (b) – (d)
CET1	10	3	3.0	0.90	2.10
T1	15	4	6.5	1.73	2.27
TC	23	10	12.5	5.43	4.57

The following table summarises the components of capital for the consolidated group based on the amounts calculated in the table above. Additional Tier 1 is calculated as the difference between Common Equity Tier 1 and Tier 1 and Tier 2 is the difference between Total Capital and Tier 1.

	Total amount issued by parent (all of which is to be included in consolidated capital)	Amount issued by subsidiaries to third parties to be included in consolidated capital	Total amount issued by parent and subsidiary to be included in consolidated capital
CET1	26	2.10	28.10
AT1	7	0.17	7.17
T1	33	2.27	35.27
T2	10	2.30	12.30
TC	43	4.57	47.57



Appendix CA-2

Treatment of counterparty credit risk and cross-product netting

1. This Appendix outlines the permitted method for estimating the exposure amount for Shari'a compliant hedging instruments with counterparty credit risk (CCR) in Module CA (see CA-4.5.16 in particular). Islamic banks should use the current exposure method for such exposures.

Comment [RE1]: IFSB15 Appendix C p1.

I. Definitions and general terminology

2. This section defines terms that will be used throughout this text.

A. General terms

- **Counterparty Credit Risk (CCR)** is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a bank's exposure to credit risk through a financing facility, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.
- **Current Exposure** is the larger of zero, or the market value of a transaction with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy. Current exposure is often also called Replacement Cost.



II. Scope of application

3. The method for computing the exposure amount under the current exposure method described in this Appendix is applicable to OTC Shari'a compliant hedging transactions.
4. Such instruments generally exhibit the following abstract characteristics:
 - The transactions generate a current exposure or market value.
 - The transactions have an associated random future market value based on market variables.
 - The transactions generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment.
 - The transactions are undertaken with an identified counterparty against which a unique probability of default can be determined.
5. Other common characteristics of the transactions to be covered may include the following:
 - Collateral may be used to mitigate risk exposure and is inherent in the nature of some transactions.
 - Netting may be used to mitigate the risk.
 - Positions are frequently valued (most commonly on a daily basis), according to market variables.
6. An exposure value of zero for counterparty credit risk can be attributed to Shari'a compliant hedging contracts or SFTs that are outstanding with a central counterparty (e.g. a clearing house). This does not apply to counterparty credit risk exposures from transactions that have been rejected by the central counterparty. Furthermore, an exposure value of zero can be attributed to banks' credit risk exposures to central counterparties that result from the transactions that the bank has outstanding with the central counterparty. This exemption extends in particular to credit exposures from clearing deposits and from collateral posted with the central counterparty. A central counterparty is an entity that interposes itself between counterparties to contracts traded within one or more financial markets, becoming the legal counterparty such that it is the buyer to every seller and the seller to every buyer. In order to qualify for the above exemptions, the central counterparty CCR exposures with all participants in its arrangements must be fully collateralized on a daily basis, thereby providing protection for the central counterparty's CCR exposures. Assets held by a central counterparty as a custodian on the bank's behalf would not be subject to a capital requirement for counterparty credit risk exposure.
7. The exposure amount for counterparty credit risk is zero for Shari'a compliant hedging instruments where they are treated in the framework as a guarantee provided by the bank and subject to a credit risk charge for the full notional amount.
8. Under the Current Exposure Method identified in this Appendix, the exposure amount for a given counterparty is equal to the sum of the exposure amounts for all OTC contracts for that counterparty.



III. Current Exposure Method

9. Under the Current Exposure Method, banks must calculate the current replacement cost by marking contracts to market, thus capturing the current exposure without any need for estimation, and then adding a factor (the "add-on") to reflect the potential future exposure over the remaining life of the contract. Thus the credit equivalent amount of these instruments is the summation of the following two factors:
- The total replacement cost (obtained by "marking to market") of all its contracts with positive value (using a zero for contracts with negative replacement costs); and
 - An amount for potential future credit exposure calculated by multiplying the total notional principal amount of each contract in its book by an "add-on factor", split by residual maturity as follows:

Comment [RE2]: IFSB15 Appendix C p2

	Shari'a compliant Profit Rate Swaps	Shari'a compliant Foreign Currency Swaps	Other Shari'a compliant Hedging contracts
One year or less	0.0%	1.0%	10.0%
Over one year to five years	0.5%	5.0%	12.0%
Over five years	1.5%	7.5%	15.0%

Comment [RE3]: IFSB15 Appendix C p3

Notes:

1. For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract.
2. For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of Shari'a compliant profit rate swaps with remaining maturities of more than one year that meet the above criteria, the add-on factor is subject to a floor of 0.5%.
3. Forwards, swaps and similar contracts not covered by any of the columns of this matrix are to be treated as "other hedging contracts".
4. No potential future credit exposure would be calculated for single currency floating/floating profit rate swaps; the credit exposure on these contracts would be evaluated solely on the basis of their mark-to-market value.
10. Add-ons should be based on effective rather than apparent notional amounts. In the event that the stated notional amount is enhanced by the structure of the transaction, banks must use the effective notional amount when determining potential future exposure.
11. Banks can obtain capital relief for eligible collateral as defined in Section CA-4.7 of Module CA. The methodology for the recognition of eligible collateral follows that of the applicable approach for credit risk.

Comment [RE4]: IFSB15 Appendix C p4

Comment [RE5]: IFSB15 Appendix C p5



Bilateral netting

12(i). Careful consideration has been given to the issue of bilateral netting, i.e. weighting the net rather than the gross claims with the same counterparties arising out of the full range of forwards, swaps, and similar contracts.¹ The CBB is concerned that if a liquidator of a failed counterparty has (or may have) the right to unbundle netted contracts, demanding performance on those contracts favourable to the failed counterparty and defaulting on unfavourable contracts, there is no reduction in counterparty risk.

12(ii). Accordingly, for capital adequacy purposes:

- (a) Banks may net transactions subject to novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.
- (b) Banks may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.
- (c) In both cases (a) and (b), a bank will need to satisfy the CBB that it has:²

- (i) A netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;

- (ii) Written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:

- The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
- The law that governs the individual transactions; and
- The law that governs any contract or agreement necessary to effect the netting.

The CBB, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions;³

- (iii) Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.

12(iii). Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements pursuant to this Framework. A walkaway clause is a provision which permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor.

¹ Payments netting, which is designed to reduce the operational costs of daily settlements, will not be recognised in the capital framework since the counterparty's gross obligations are not in any way affected.

² In cases where an agreement as described in 12(ii) (a) has been recognised prior to July 1994, the CBB will determine whether any additional steps are necessary to satisfy itself that the agreement meets the requirements set out below.

³ Thus, if any of these supervisors is dissatisfied about enforceability under its laws, the netting contract or agreement will not meet this condition and neither counterparty could obtain supervisory benefit.



12(iv). Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (ANet) will equal the weighted average of the gross add-on (AGross)⁴ and the gross add-on adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

$$ANet=0.4*AGross+0.6*NGR*AGross$$

where :

NGR=level of net replacement cost/level of gross replacement cost for transactions subject to legally enforceable netting agreements⁵

12(v). The scale of the gross add-ons to apply in this formula will be the same as those for non-netted transactions as set out in paragraphs 9 to 12 of this Appendix. The CBB will continue to review the scale of add-ons to make sure they are appropriate. For purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.

Risk weighting

12(vi). Once the bank has calculated the credit equivalent amounts they are to be weighted according to the category of counterparty in the same way as in the main framework, including concessionary weighting in respect of exposures backed by eligible guarantees and collateral. The CBB will keep a close eye on the credit quality of participants in these markets and reserves the right to raise the weights if average credit quality deteriorates or if loss experience increases.

⁴AGross equals the sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors set out in paragraph 9 of this Appendix) of all transactions subject to legally enforceable netting agreements with one counterparty.

⁵ The CBB may permit a choice of calculating the NGR on a counterparty by counterparty or on an aggregate basis for all transactions subject to legally enforceable netting agreements. If the CBB permits a choice of methods, the method chosen by an institution is to be used consistently. Under the aggregate approach, net negative current exposures to individual counterparties cannot be used to offset net positive current exposures to others, i.e. for each counterparty the net current exposure used in calculating the NGR is the maximum of the net replacement cost or zero. Note that under the aggregate approach, the NGR is to be applied individually to each legally enforceable netting agreement so that the credit equivalent amount will be assigned to the appropriate counterparty risk weight category.



Appendix CA-3

The 15% of common equity limit on specified items

1. This Annex is meant to clarify the calculation of the 15% limit on significant investments in the common shares of unconsolidated financial institutions (banks, insurance and other financial entities); mortgage servicing rights, and deferred tax assets arising from temporary differences (collectively referred to as specified items).

2. The recognition of these specified items will be limited to 15% of Common Equity Tier 1 (CET1) capital, after the application of all deductions. To determine the maximum amount of the specified items that can be recognised*, banks must multiply the amount of CET1** (after all deductions, including after the deduction of the specified items in full) by 17.65%. This number is derived from the proportion of 15% to 85% (i.e. $15\%/85\% = 17.65\%$).

3. As an example, take a bank with BD85 of common equity (calculated net of all deductions, including after the deduction of the specified items in full).

4. The maximum amount of specified items that can be recognised by this bank in its calculation of CET1 capital is $BD85 \times 17.65\% = BD15$. Any excess above BD15 must be deducted from CET1. If the bank has specified items (excluding amounts deducted after applying the individual 10% limits) that in aggregate sum up to the 15% limit, CET1 after inclusion of the specified items, will amount to $BD85 + BD15 = BD100$. The percentage of specified items to total CET1 would equal 15%.

* The actual amount that will be recognised may be lower than this maximum, either because the sum of the three specified items are below the 15% limit set out in this appendix, or due to the application of the 10% limit applied to each item.

** At this point this is a "hypothetical" amount of CET1 in that it is used only for the purposes of determining the deduction of the specified items.



Appendix CA-4

Capital treatment for failed trades and non-DvP transactions

Overarching principles

1. Banks should continue to develop, implement and improve systems for tracking and monitoring the credit risk exposures arising from unsettled and failed transactions as appropriate for producing management information that facilitates action on a timely basis.
2. Transactions settled through a delivery-versus-payment system (DvP)⁶, providing simultaneous exchanges of securities for cash, expose firms to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, gold, or commodities) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or free-delivery) expose firms to a risk of loss on the full amount of cash paid or deliverables delivered. The current rules set out specific capital charges that address these two kinds of exposures.
3. The following capital treatment is applicable to all transactions on securities, foreign exchange instruments, and commodities that give rise to a risk of delayed settlement or delivery. This includes transactions through recognized clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment⁷.
4. Failure of counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this Module.

⁶ A mechanism in an exchange-for-value settlement system that ensures that the final transfer of one asset occurs if and only if the final transfer of (an) other asset(s) occurs. Assets could include monetary assets (such as foreign exchange), securities or other financial instruments. For the purpose of this Module, DvP transactions include payment-versus-payment (PvP) transactions (A mechanism in a foreign exchange settlement system which ensures that a final transfer of one currency occurs if and only if a final transfer of the other currency or currencies takes place).

⁷ All repurchase and reverse-repurchase agreements as well as securities lending and borrowing, including those that have failed to settle, are treated in accordance with relevant sections in other modules.

Capital requirements

- For DvP transactions, if the payments have not yet taken place five business days after the settlement date, firms must calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate factor, according to the Table 1 below.

Table 1

Number of working days after the agreed settlement date	Corresponding risk multiplier
From 5 to 15	8%
From 16 to 30	50%
From 31 to 45	70%
46 or more	100%

- For non-DvP transactions (i.e. free deliveries), after the first contractual payment/delivery leg, the bank that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business days. This means that a bank under the standardized approach will use the standardized risk weights set forth in this Module. However, when exposures are not material, banks may choose to apply a uniform 100% risk-weight to these exposures, in order to avoid the burden of a full credit assessment. If five business days after the second contractual payment/delivery date the second leg has not yet effectively taken place, the bank that has made the first payment leg will risk weight the full amount of the value transferred plus replacement cost, if any at 1,250%. This treatment will apply until the second payment/delivery leg is effectively made.

⁸ If the dates when two payment legs are made are the same according to the time zones where each payment is made, it is deemed that they are settled on the same day. For example, if a bank in Tokyo transfers Yen on day X (Japan Standard Time) and receives corresponding US Dollar via CHIPS on day X (US Eastern Standard Time), the settlement is deemed to take place on the same value date.