Basel Committee on Banking Supervision



Supervisory framework for measuring and controlling large exposures

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Supervisory framework for measuring and controlling large exposures

I. Introduction

A. Rationale and objectives of a large exposures framework

1. One of the key lessons from the financial crisis is that banks did not always consistently measure, aggregate and control exposures to single counterparties across their books and operations. And throughout history there have been instances of banks failing due to concentrated exposures to individual counterparties (eg Johnson Matthey Bankers in the UK in 1984, the Korean banking crisis in the late 1990s). Large exposures regulation has arisen as a tool for containing the maximum loss a bank could face in the event of a sudden counterparty failure to a level that does not endanger the bank's solvency.

2. The need for banks to measure and limit the size of large exposures in relation to their capital has long been recognised by the Basel Committee on Banking Supervision.¹ In particular, in 1991, the Committee reviewed supervisory practices and issued supervisory guidance on large exposures.² In a similar vein, the *Core Principles for Effective Banking Supervision* (Core Principle 19) require that local laws and bank regulations set prudent limits on large exposures to a single borrower or closely related group of borrowers.³ But neither the 1991 guidance nor the Core Principles set out how banks should measure and aggregate their exposures to a single counterparty, nor do they explain which factors they should take into account when considering whether separate legal entities form a group of connected counterparties. This has resulted in a considerable variation of practice across banks. A stocktaking of Committee member countries' regulation of large exposures, while showing considerable homogeneity in general approach (consistent with Core Principle 19), revealed material differences in important aspects such as: scope of application; the value of large exposure values; treatment of credit risk mitigation techniques; and more lenient treatments for certain types of exposures.

3. A large exposures framework complements the Committee's risk-based capital standard because the latter is not designed specifically to protect banks from large losses resulting from the sudden default of a single counterparty. In particular, the minimum capital requirements (Pillar 1) of the Basel capital framework implicitly assume that a bank holds infinitely granular portfolios, ie no form of concentration risk is considered in calculating capital requirements. Contrary to this assumption,

- ¹ The Basel Committee on Banking Supervision consists of senior representatives of bank supervisory authorities and central banks from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. It usually meets at the Bank for International Settlements in Basel, Switzerland, where its permanent Secretariat is located.
- ² The first Basel Committee guidance on this topic, *Measuring and controlling large credit exposures*, was published in January 1991 in an attempt to increase convergence in the supervision of large exposures while recognising the scope for variation according to local conditions. This best practice for bank supervisors in the monitoring and controlling of large credit exposures was developed in the context of the rules included in Basel I. They related to numerical limits as a percentage of Basel I capital, the definition of which has been subsequently revised in later vintages of the Basel capital framework and more recently and substantively in Basel III.
- ³ Principle 19 states "The supervisor determines that banks have adequate policies and processes to identify, measure, evaluate, monitor, report and control or mitigate concentrations of risk on a timely basis. Supervisors set prudential limits to restrict bank exposures to single counterparties or groups of connected counterparties." (*Core Principles for Effective Banking Supervision*, standards published by the Committee in September 2012, are accessible at www.bis.org/publ/bcbs230.pdf).

idiosyncratic risk due to large exposures to individual counterparties may be present in banks' portfolios. And although a supervisory review process (Pillar 2) concentration risk adjustment could be made to mitigate this risk,⁴ these adjustments are neither harmonised across jurisdictions, nor designed to control traumatic losses from a single counterparty default. For this reason, the Committee has concluded that the existing risk-based capital framework is not sufficient to fully mitigate the microprudential risk of exposures that are large compared to a bank's capital resources. That framework needs to be supplemented with a simple large exposures framework that protects banks from traumatic losses caused by the sudden default of a certain counterparty or group of connected counterparties. To serve as a backstop to risk-based capital requirements, the large exposures framework should be designed so that the maximum possible loss a bank could incur if a single counterparty or group of connected counterparties were to suddenly fail would not endanger the bank's survival as a going concern.

4. The treatment of large exposures could also contribute to the stability of the financial system in a number of other ways, a consideration that the Committee believes should be reflected in the design of the large exposures framework.

5. A separate key lesson from the crisis is that material losses in one systemically important financial institution (SIFI) can trigger concerns about the solvency of other SIFIs, with potentially catastrophic consequences for global financial stability. There are at least two important channels for this contagion. First, investors may be concerned that other SIFIs might have exposures similar to those of the failing institution. For example, in 2008, in response to the announcement of material losses on exposures to some asset-backed securities (ABS) and collateralised debt obligations (CDOs) incurred by a number of large banks, investors withdrew funds from other banks believed to have similar exposures, threatening their liquidity and solvency. Second, and more directly, investors may be concerned that other SIFIs have direct large exposures to the failing SIFI, in the form of either loans or credit guarantees. For example, one of the key concerns regarding AIG in September 2008 was that a number of SIFIs were believed to have bought large amounts of credit protection from AIG. The Committee is of the view that the large exposures framework is a tool that could be used to mitigate the risk of contagion between global systemically important banks, thus underpinning financial stability. Part V of this document contains proposals to that effect.

6. Finally, this consultation paper presents proposals in response to the Financial Stability Board's request to strengthen the oversight and regulation of the shadow banking system in relation to large exposures.⁵ In particular, the proposals that follow include policy measures designed to capture bank-like activities conducted by non-banks that are of concern to supervisors. The Committee has sought to do this through its proposals on large exposures to funds, securitisation structures and collective investment undertakings (CIU). These proposals include a requirement for banks to apply the look-through approach when feasible and to assess possible additional risks that do not relate to the structure's underlying assets, but rather to the structure's specific features and to any third parties linked to the structure. Once these risks are identified, a new exposure must be recognised, where appropriate, for large exposure purposes (see Part IV-D).

7. As part of the Committee's broader efforts to avoid adding unnecessary complexity to the Basel standards, the proposals in this document have adopted the principle of following, where practicable, existing rules in the Basel framework and departing from them only if this is necessary for the purpose of achieving the objectives of the large exposures framework outlined above are achieved. This principle

⁴ The market risk framework also explicitly requires that trading book models for specific risk capture concentration risk,

⁵ See FSB, *Shadow Banking: Strengthening Oversight and Regulation, Recommendations of the FSB*, October 2011, and in particular Recommendation 2, p 17.

was particularly relevant to the Committee's proposals on exposure measurement (see Part III-B to E), as well as on the definition of the appropriate capital base (see Part III-A).

B. Other types of concentration risk

8. The Committee recognises that the risk from concentrated exposures to single counterparties or groups of connected counterparties is not the only type of concentration risk that could undermine a bank's resilience. Other types include both sectoral and geographical concentrations of asset exposure, as well as reliance on concentrated funding sources.

9. Furthermore, a bank with a net short position in securities may incur losses if the price of these securities increases. But the Committee has decided to focus this consultation on losses incurred due to default of a single counterparty and not to take into account the type of position risk that is unrelated to the default of a counterparty. Thus, this consultative document focuses only on the concentration risk associated with the default of single third-party private sector counterparties. Exposures to sovereigns are not considered because the Committee believes that the appropriate treatment of concentrated sovereign exposures will need to be addressed as part of a broader review of the treatment of sovereign risk within the regulatory framework.

10. Similarly, intragroup exposures could be considered as another source of concentration risk that might potentially endanger banks' survival but such exposures have not been included in this framework.

11. The Committee will consider returning to types of concentration risk not covered in this consultation in future work.

II. Overall design of a prudential framework for large exposures

12. This section sets out the Committee's proposed approach to the overall structure of a large exposures framework. It covers the framework's scope and level of application, the nature of the large exposures limit, the definition of a large exposure, and the definition of connected counterparties.

A. Scope and level of application

13. The Basel framework for risk-based capital standards is applicable to all internationally active banks. This will also define the scope of institutions to which Basel Committee member countries are expected to apply the proposed large exposures framework. As with all other standards approved by the Committee, member countries have the option to set more stringent standards. They also have the option to extend the application to a wider range of banks, with the possibility – if they deem it necessary – to develop a different approach for banks that usually fall outside the scope of the Basel framework.⁶

14. Within a banking group, the Basel framework applies to full consolidated and sub-consolidated levels. Moreover, supervisors are required to test that individual banks are adequately capitalised on a

⁶ For instance, the Committee notes that physical collateral, which is not recognised in the large exposures framework proposed in this document, might deserve consideration in other contexts.

standalone basis.⁷ Given that the large exposures framework is constructed to serve as a backstop and complement to risk-based capital standards, it should apply at the same level as the risk-based capital requirements are required to be applied.

15. The Committee's stocktaking exercise of existing large exposure regulations applied by member jurisdictions shows that most jurisdictions currently operate their large exposures regulations on both a solo and consolidated basis. This is consistent with Principle 19 of the *Core Principles for Effective Banking Supervision*, which states that: "The supervisor determines that senior management monitors these limits and that they are not exceeded on a solo or consolidated basis."

16. The application of the large exposures framework at the consolidated level implies that a bank should consider all exposures to third parties across the relevant regulatory consolidation group and compare the aggregate of those exposures with the group's eligible capital base.

17. Application of the large exposures framework at a solo level is only required when the riskbased capital requirements are required to be applied at a solo level. However, even in the case where the large exposures framework does not apply at a solo level, a supervisor should still assess the large exposures of each bank within the group to ensure that there is no undue single name concentration risk, in analogy with Paragraph 23 of the Basel II framework.

B. Nature of a large exposure limit

18. The Committee has considered two approaches to breaches of a large exposures limit: whether the limit is a "hard limit" or a "soft/advisory limit" and, in each case, whether the Committee should set out a prescribed and harmonised supervisory response to the breach of a limit.

19. A "hard" or Pillar 1-type limit implies that the limit should be observed at all times. If a breach occurs, the bank must immediately notify the supervisor and rectify the breach. A "soft/advisory" limit implies that in some previously specified cases the limit might be breached, although senior management approval and supervisory agreement would generally be necessary.

20. The Committee believes that the large exposures framework should be based on a hard or Pillar 1-type limit, which would place it on the same footing as the Pillar 1 minimum capital requirements. This is to ensure that the large exposures standard is effective and consistent for internationally active banks. On this basis, breaches of the limit should be exceptional events, should be communicated immediately to the supervisor and should, normally, be rapidly rectified.

21. The Committee believes that it does not need to specify internationally harmonised supervisory actions to be taken when a bank breaches the limit. This treatment is consistent with the approach to breaches of certain other rules set by the Committee (eg breaches of minimum capital requirements).

C. Definition of a large exposure

22. In addition to applying a limit to the size of any exposure, most Committee member countries surveyed for the stocktaking follow the Basel Core Principles in defining a large exposure as 10% or more of eligible capital. The purpose of defining a "large exposure" is primarily to specify which exposures banks should report to their supervisor, who can then monitor these positions for risk assessment purposes. Furthermore, international guidelines and principles impose specific qualitative requirements in relation to appropriately defined large exposures. These requirements in turn require an

⁷ See paragraphs 20–24 of the Basel II framework (accessible at www.bis.org/publ/bcbs128.pdf).

internationally consistent definition. For example, the report by the Financial Stability Board *Principles for Reducing Reliance on CRA Ratings* (October 2010) recommends that banks internally assess all reported large exposures.⁸

23. The Committee believes that there is a strong case for strengthening the definition of a large exposure for reporting and supervisory monitoring purposes by introducing a lower threshold than the one contained in the Core Principles. The purpose of monitoring large exposures is to raise early warning flags that may then warrant further investigation by the supervisor. For these flags to be effective, monitoring limits need to be well below the large exposure limit. The distance between the threshold defining a large exposure and the large exposure limit needs to strike the appropriate balance between the benefits to supervisors of improving their monitoring processes and the additional reporting burden on firms.

24. Taking account of data provided by a number of Committee member jurisdictions and the considerations highlighted above, the Committee proposes that the threshold defining a large exposure should be set at 5% of a bank's eligible capital base. The eligible capital and the exposures values should be calculated on the lines set out in Part III of this paper. The Committee proposes that banks should report to their supervisor all their large exposures or, if the number of large exposures is less than 20, their largest 20 exposures irrespective of their size relative to the bank's capital base. The Committee is also of the view that the reporting of large exposures would be enhanced if the exposure is reported both before and after applying credit risk mitigation techniques. In addition, large exposures to counterparties to which the large exposure limit does not apply (eg sovereigns) should also be reported.⁹

25. The definition of a large exposure encompasses direct exposures to single counterparties or groups of connected counterparties as well as exposures to credit protection providers, which should also be viewed as counterparties for large exposure purposes. As a consequence, exposures arising through the purchase of credit protection (such as credit default swaps and guarantees) should be added to the total of any other direct exposures to the same counterparty.

1. The Committee welcomes views on the proposed definition of large exposures and on the proposal for reporting.

D. Definition of connected counterparties

26. In some cases, a bank may have exposures to a group of counterparties with mutual relationships or dependencies that imply that they are all likely to fail simultaneously. In other words, the group of counterparties poses a "single risk", akin to that of a single counterparty. Such a group is referred to as a group of connected counterparties. Thus, one of the main challenges in managing and controlling large exposures is the identification of groups of connected counterparties.

27. Reflecting the approach taken in many member countries, the Committee recommends that relationships of control and economic interdependence between counterparties may each alone provide

⁸ See FSB report *Principles for Reducing Reliance on CRA Ratings,* 27 October 2010, and in particular Principle III.2.a, "Banks' enhancement of internal credit risk assessment processes could be incentivised through restricting the proportion of the portfolio that is CRA rating-reliant, eg by requiring all large exposures (as defined under supervisory rules) to be internally assessed".

⁹ Banks must report all their large exposures, including those exempted from the limit. However, the largest 20 exposures should include only non-exempted exposures.

sufficient grounds for establishing connections among counterparties, so that they form a group of connected counterparties. Hence, the sum of a bank's exposures to the entities included within a group of connected counterparties is subject to the large exposure limit.

28. Two or more natural or legal persons shall be deemed a group of connected counterparties if at least one of the following criteria is satisfied:

- (a) Control relationship: one of them directly or indirectly, has control over the other(s).
- (b) Economic interdependence: if one of them were to experience financial problems, in particular funding or repayment difficulties, the other or all of the others would, as a result, also be likely to encounter funding or repayment difficulties.

29. The bank shall assess the relationship amongst clients with reference to (a) and (b) in order to properly assess the existence and the extent of a single risk.

30. The Committee's general approach to connected counterparties is to combine a rules-based approach, where this is possible, with a more guidance-based approach, where this is unavoidable. Notably, elements of a guidance-based approach are necessary because the possible instances of economic interconnectedness are too varied to be described comprehensively by a rule.

31. To assess connectedness through control, the Committee proposes that criterion (a) is met automatically if one entity owns more than 50% of the voting rights of another entity.

32. In addition, the Committee proposes a set of minimum guidelines that supervisors should expect banks to use when assessing connections between counterparties based on control. The guidelines comprise the following criteria:

- Voting agreements (eg control of a majority of voting rights pursuant to an agreement with other shareholders);
- Significant influence on the appointment or dismissal of an entity's administrative, management or supervisory body, such as the right to appoint or remove a majority of members in those bodies, or a majority of members have been appointed solely as a result of the exercise of an individual entity's voting rights;
- Significant influence on senior management, eg an entity has the power, pursuant to a contract or otherwise, to exercise a controlling influence over the management or policies of another person (eg through consent rights over key decisions);
- Banks are also expected to refer to criteria specified in appropriate internationally recognised accounting standards for further qualitatively based guidance when determining control.

33. Where control has been established based on any of these criteria, a bank may demonstrate to its supervisor that in exceptional cases, eg due to the existence of specific circumstances and corporate governance safeguards, this existence of control does not necessarily result in these parties forming a group of connected counterparties.

34. For guidance on establishing connectedness based on economic interdependence, banks should consider, at a minimum, the following qualitative criteria:

• Where a substantial part of one counterparty's gross receipts or gross expenditures (on an annual basis) is derived from transactions with the other counterparty (eg the owner of a residential/commercial property and the tenant who pays a significant part of the rent);

- One counterparty has fully or partly guaranteed the exposure of the other counterparty, or is liable by other means, and the exposure is so significant for the guarantor that it is likely to default if a claim occurs;
- A significant part of the counterparty's production/output is for a single customer which cannot easily be replaced;
- When the expected source of repayment for each loan is the same and neither counterparty has another source of income from which the loan may be fully repaid;
- Where it is likely that the financial problems of one counterparty would cause difficulties for the other counterparties in terms of full and timely repayment of liabilities;
- Where the funding problems of one counterparty are likely to spread to another due to a oneway or two-way dependence on the same main funding source, which may be the bank itself;
- Where the insolvency or default of one of them is likely to be associated with the insolvency or default of the other(s);
- When two or more counterparties rely on the same source for the majority of their funding and, in the event of the common provider's default, an alternative provider cannot be found.

35. There may, however, be some circumstances where some of these criteria might not automatically imply an economic dependence that results in two counterparties being connected. Provided that the bank can demonstrate to its supervisor that a counterparty who is economically closely related to another counterparty may overcome financial difficulties or even the second counterparty's default by finding alternative business partners or funding sources within an appropriate time period, the bank does not need to form a group of connected counterparties.

36. The Committee acknowledges that there are cases where a thorough investigation of economic interdependencies will not be proportionate to the size of the exposures. However, the Committee expects banks to actively seek to identify possible connected counterparties where the combined exposure to a set of counterparties is likely to reach the large exposure definition (5% of eligible capital base) once connected.

2. The Committee welcomes views on the criteria proposed for the identification of connected counterparties when they pose a single risk.

E. Level of large exposure limit

37. According to the stocktaking exercise, many member jurisdictions currently apply a large exposure limit of 25% of a bank's total regulatory capital. This value is consistent with both the Committee's 1991 large exposures guidance and the *Core principles for effective banking supervision*. Other member jurisdictions apply different limits from within a range of 10–50% of capital and/or they base the limit on a different definition of capital.

38. The Committee's 1991 Guidelines provide for a limit equal to 25% of total capital and its recent analysis suggests that there is scope for tightening this limit. The Committee therefore proposes that the large exposure limit should be 25% of Common Equity Tier 1 (CET1) or Tier 1 capital (see Part III-A). This represents a tightening of the recommended large exposure limit due to the tighter definition of capital employed.

39. A further potential tightening of the limit stems from the proposed methods for calculating the value of exposure, which were left unspecified in the 1991 Guidelines. In the proposals that follow, a prudent approach based on the maximum possible loss due to a counterparty failure has been adopted.

Furthermore, the proposals include the requirement to add exposures held in the banking book and in the trading book.

40. Nevertheless, the information that is currently available to the Committee about the size of banks' large exposures to private sector counterparties suggests that only a small number may be above this limit. The Committee recognises that such information, however, is incomplete and is based on data from the existing large exposures frameworks of different jurisdictions. It therefore intends to study the results of the quantitative impact study that it plans to carry out over the next few months before reaching a conclusion on the final value of the limit.

III. Definition and calculation of the large exposure limit

41. This section describes how banks would calculate eligible capital and exposure values for the large exposure limit.

42. In order to avoid undue complexity, the work of the Committee has been guided by three principles (a table showing a comparison of existing relevant frameworks and proposed large exposures framework is included in Annex 1):

- The proposed large exposures rules as far as possible follow the existing relevant frameworks, ie the risk-based capital requirements (as defined by the Basel II framework) and the leverage ratio (as defined by Basel III). Exceptions to this principle need to be justified in terms of the objectives of the large exposures framework. Adoption of such a principle keeps complexity to a minimum while ensuring that the large exposures standard is an effective backstop to the risk-based capital framework.
- Within the relevant frameworks, the simpler approach that already exists is chosen if there is a case for it, for example, to avoid model risk.
- Whenever the Committee has proposed that the large exposures framework should deviate from the relevant frameworks, a detailed explanation is provided.

A. Capital measure – definition of eligible capital

43. The aim of a large exposures standard is to ensure that a bank can absorb losses resulting from the sudden failure of a single counterparty or group of connected counterparties without itself failing (see paragraph 1). Consistent with this aim, the Committee believes that the capital base on which the large exposure limit is calculated should consist only of capital that can absorb unexpected losses on a going-concern basis.¹⁰ Thus, the Committee proposes that the limit be based on Common Equity Tier 1 (CET1) or Tier 1 capital as defined in Basel III rather than on total regulatory capital (as is currently the case in many Committee member jurisdictions). While general provisions also absorb losses on a going-concern basis and could be considered for inclusion in the definition of capital for large exposure purposes, unlike CET 1, the losses absorbed by general provisions are not unexpected. Rather the losses are expected, although not yet identified or incurred.

¹⁰ In the Basel III framework, the distinction between going-concern and gone-concern capital is presented from paragraph 49 of the framework (accessible at www.bis.org/publ/bcbs189.pdf). See, in particular, paragraph 60 for the treatment of general provisions for banks using the Standardised Approach to credit risk and paragraph 61 for banks using the IRB approach.

44. Consistent with the principles outlined in paragraph 42, the Committee found no compelling reason for departing from the definition of going-concern capital in the Basel III framework for large exposure purposes.

3. The Committee welcomes views and quantitative information on whether the limit should be based on CET1 or Tier 1.

B. Exposure measure – definition of exposure

General measurement principles

45. A large exposures standard requires a definition of exposure values for the assets and offbalance sheet items whose size it seeks to limit. As a general principle, the scope of the large exposures framework should include any exposure that attracts a capital requirement under the risk-based capital standards.

46. As a further general principle, the Committee's view is that credit quality and the amount expected to be recovered in the bankruptcy process should not be considered in a large exposures standard and, hence, not reflected in measures of exposure values. This is because the proposed standard is meant to serve as a simple backstop measure to limit the *maximum* possible loss that a bank could incur if a single counterparty or group of connected counterparties were to fail. The framework is not meant to replicate the best practice in banks' internal management of credit exposures (credit officers typically do consider the credit quality of their counterparty in setting internal limits). When banks use eligible credit risk mitigation techniques (funded or unfunded credit protection), the effects of these techniques on the maximum possible loss should be reflected in a reduction in the exposure value according to the proposals discussed below.

47. The use of internal model-based approaches to measuring exposures has both advantages and disadvantages. Internal models, if appropriately designed and applied, can take into account a wider variety of risk factors than can be accommodated by a standardised measure. In addition, for banks that have received supervisory approval for using internal models for Pillar 1 risk-based capital requirements purposes, the use of internal models would ensure consistency and limit the calculations that need to be carried out, reducing the IT burden. However, the use of internal models introduces model risk into the exposure measure and could generate differences in the way that individual banks measure similar exposures. Such variations would be inconsistent with the purpose of a large exposures framework as a simple, internationally harmonised backstop to risk-based capital requirements.

48. Balancing these considerations, the Committee has reached the view that model risk should have no bearing on exposure values in a large exposures framework.

49. In putting forward this proposal, the Committee was also mindful of international banks' own practices. In particular, in managing their exposures to single counterparties, banks often employ the same models they use for determining the probability of default (PD), loss-given-default (LGD) and exposure-at-default (EAD) inputs used to calculate their capital requirements, with some adjustments. In particular, a few banks reported that, rather than the metrics that drive risk-based capital requirements, they would use these models to compute maximum or peak losses. For example, to manage exposures through derivative positions, banks calculate peak future exposures over the life of the relevant contracts and/or stressed exposure values, which leads to values different from those used to determine capital requirements.

4. The Committee welcomes views on the extent and nature of the use of internal models (when they have received supervisory approval for being used for Pillar 1 capital requirements purposes) to measure large exposures.

50. Regarding items deducted from capital, the deducted amount should not be added to other exposures to the counterparty and subjected to the large exposures limit.¹¹ This is because, if an exposure has CET1 held against it equal to the value of the exposure, there is no prudential benefit from an added limit to the size of the exposure relative to capital.

Definition of exposure value

51. Following the principles stated earlier, the Committee's view is that a large exposures framework should follow as much as possible the risk-based capital or the leverage ratio frameworks in determining exposure values.

52. Exposures, in either the banking or trading books, that will be in the scope of the large exposures framework can be categorised and should be measured as follows:

- (a) *banking book on balance sheet non-derivative assets*, where the exposure measure is typically determined by accounting standards;
- (b) *banking book "traditional" off-balance sheet commitments*¹² where the exposure measure is the product of the notional amount of the commitment and the credit conversion factor (CCF) applied;
- (c) *positions in the trading book (excluding options)* where the exposure measure is based on the mark-to-market approach of the risk-based capital requirements;
- (d) *options in the trading book* where the exposure measure is based on a mark-to-market approach with a jump-to-default assumption; and
- (e) counterparty credit risk from derivatives, securities financing transactions, and long settlement transactions across both banking and trading books, where the counterparty credit exposure measure is determined by one of the methods of the counterparty credit risk framework.

Banking book on-balance sheet non-derivative assets

53. Under the risk-based capital framework, for banks using the Standardised Approach (SA) for credit risk, exposure values are net of specific provisions and value adjustments, while for banks allowed to use the internal ratings-based (IRB) approach, exposure values are gross of specific provisions, which are offset against the expected loss (EL) deduction. To achieve consistency and relative simplicity, the Committee proposes that all banks should net specific provisions from their exposures for large exposures purposes. But should this be operationally burdensome for IRB banks, they would have the option of using gross exposure values, which are a more conservative measure.

¹¹ This general approach is not extended to the case where an exposure is 1,250% risk-weighted. When this is the case, this exposure is still subject to the large exposures limit, except if specifically exempted for other reasons.

¹² This includes the items included in paragraphs 83 to 85 of the Basel II text (accessible at www.bis.org/publ/bcbs128.pdf).

Banking book and trading book OTC derivatives (and any other instrument with counterparty credit risk)

54. Derivatives create two types of exposures: an "on-balance sheet" present value reflecting the fair value of the contract; and a notional economic exposure representing the underlying economic interest of the contract.

55. Within the risk-based capital framework, the available options for measuring counterparty credit risk exposures for OTC derivatives are the Current Exposure Method (CEM), the Standardised Method and the Internal Models Method (IMM).

56. Given that the Standardised Method appears to be little used in many jurisdictions, mandating its use in a large exposures framework is likely to be operationally burdensome. This suggests that there are two practical alternatives to determining the exposure measure: allowing banks to use the same approach to exposure value as they adopt in the risk-based capital regime (including IMM), or requiring the use of a simple non-internal method (CEM, or a successor method).

57. The Committee proposes the latter course. Although the IMM is designed to deliver more risksensitive capital requirements than the CEM or the standardised approach, it is not designed to capture the type of peak loss exposures that the large exposures framework needs to capture. Non-internal model methods are better suited to meeting this objective while also avoiding model risk and ensuring consistency between banks internationally.¹³

58. But given the forthcoming review of the CEM (and the Standardised Method), until the successor to the CEM is approved, banks could use the same approach to measuring exposures for large exposures purposes that they adopt for risk-based capital requirements purposes (including the IMM) on an interim basis, if this is needed. Once the successor to the CEM (and the standardised method) has been approved, this method should be adopted by all banks for measuring OTC derivative exposure values in a large exposures framework.

5. The Committee welcomes views on the proposal to calculate exposure value of banks' investments in OTC derivatives.

Securities financing transactions

59. For securities financing transactions (SFTs),¹⁴ the options for measuring exposure under the risk-based capital framework are: the simple approach for collateralised transactions; the comprehensive approach for collateralised transactions with a bank's own estimates of haircuts or with supervisory haircuts; or a value-at-risk (VaR) model approach to calculate the potential volatility of the collateral in transactions covered by bilateral netting agreements on a counterparty-by-counterparty basis. Alternatively, subject to supervisory approval, banks may also calculate an expected positive exposure under the IMM.

60. Following the general approach of not permitting exposure values to be based on banks' internal models, the Committee believes that banks should use the comprehensive approach for SFTs,

Banks recognise this when using these models for purposes of controlling exposures to single counterparties (see paragraph 49).

¹⁴ SFTs are transactions such as repurchase agreements, reverse repurchase agreements, securities lending, securities borrowing, and margin lending transactions.

with supervisory haircuts, instead of allowing banks to use the exposure measures that they use for riskbased capital requirement purposes.

61. The deviation proposed from the risk-based capital requirement is needed in the case of SFTs: (i) to avoid the introduction of model risk, which is inconsistent with the purpose of an internationally consistent, backstop regime; (ii) to provide a simple and consistent exposure measure across all banks (following the risk-based capital requirement will lead to different banks using different methodologies, indeed, up to four variants); and (iii) to prevent IMM banks (IMM allows the exposure to be modelled together with the collateral) from benefiting from an approach that effectively grants them relief from a larger pool of eligible collateral than non-IMM banks, creating further inconsistency.

62. The disadvantage of this approach is that it requires a deviation from the risk-based capital requirement for those banks already allowed to apply their own estimates for haircuts or the IMM, and is more likely to produce less risk-sensitive estimates (albeit normally more conservative) of risk compared to approaches that permit the use of models-based valuations. The Committee believes that such a deviation is necessary to meet the objectives of the large exposures framework.

6. The Committee welcomes views on the proposal for how the exposure values of banks' investments in securities financing transactions should be calculated, in particular on the need to deviate from the risk-based capital requirement rules given the objectives of a large exposures framework.

Banking book "traditional" off balance sheet commitments: calculation of CCFs

63. Since the large exposures framework is focused on the maximum possible losses that could arise in the event of the sudden failure of a single counterparty, it is appropriate to assume that a counterparty will take all possible actions to prevent its failure. One can assume the counterparty would draw on any funds available to it in order to prolong its existence as a going concern. This implies that CCFs for the purpose of calculating a large exposure should be set to 100%.

64. Another option would have been to apply the standardised CCFs (20%, 50% or 100% under the risk-based capital requirement). However, the underlying rationale of applying specific CCFs for risk-based capital requirement purposes is based on the portfolio approach applicable: ie given that capital is being set for a large number of exposures, it is reasonable to assume that within a given class of off-balance sheet exposures over a period such as a year, some will be drawn upon but not every one of that type. But this approach does not apply in a single-name large exposures context as the principle of diversification is not relevant.

65. Applying a flat 100% CCF should not be a material operational burden on banks given that they should generally calculate exposure at default using a flat 100% CCF for leverage ratio purposes as well.¹⁵

66. However, the Committee considers it inappropriate to apply the flat 100% CCF to specific types of exposure if there is a risk that this could have material unintended consequences. This is the case for exposures linked to trade finance activities, where the application of a flat 100% CCF is likely to have a material adverse impact on an essential form of financing in some countries, in particular, in emerging markets. The Committee proposes to apply the CCF used for the standardised approach to credit risk to

¹⁵ The cases where a 10% CCF is applicable for the calculation of the leverage ratio are deemed globally irrelevant for large exposures purposes.

these exposures for large exposures purposes: a 20% CCF for short-term, self-liquidating letters of credit arising from the movements of goods, which will apply to both issuing and confirming banks; and a 50% CCF for other transaction-related contingent items related to particular transactions.¹⁶

7. The Committee welcomes views on the proposal to generally apply a 100% CCF for "traditional" off-balance sheet commitments.

C. Recognition of credit risk mitigation techniques

67. The Committee proposes to apply the same minimum requirements and eligibility criteria for the recognition of unfunded credit protection¹⁷ and financial collateral as under the standardised approach for risk-based capital requirement purposes because these are the most prudent as well as the simplest and least burdensome options available consistent with the objectives of a large exposures framework.

68. In the risk-based capital regime, there are essentially two forms of adjustments made to exposure values to reflect eligible credit risk mitigation (CRM):

- (i) The substitution approach, which is applied to unfunded credit protection (guarantees and credit derivatives) and in the "simple approach" to financial collateral; and
- (ii) The haircut-based approach, which is applied in the "comprehensive approach" to financial collateral.

69. Under the substitution approach, there is a one-for-one reduction in the underlying exposure by the amount of the hedge (guarantee, credit derivative or financial collateral). At the same time, the bank is required to risk-weight this amount using the risk weight of the credit risk mitigation provider. When the bank adopts such an approach for risk-based capital requirement purposes, it will also have to adopt it for large exposure purposes. In particular, the amount of the hedge should reduce the large exposure to the original debtor and be added to the exposures the bank has to the credit risk mitigation provider.

70. Under the haircut-based approach the collateral reduces the exposure value to the counterparty by the value of the collateral less the haircut but does not of itself create an additional exposure to the issuer of the asset that is being used as collateral.

71. When banks apply the "comprehensive approach" to financial collateral for risk-based capital requirement purposes, the Committee proposes a further development of the comprehensive approach that would fit better with the objective of the large exposures standard. In this case, a so-called hybrid approach is proposed. As the name suggests, this approach combines elements of both the haircut-based and the substitution approaches and is more prudent than either one.

72. The hybrid approach requires the original exposure to be reduced by the post-haircut amount of collateral (where the collateral is of the type recognised for risk-based capital requirement purposes under the standardised approach). For the purpose of the large exposures standard, the haircuts used to reduce the collateral amount are the supervisory haircuts used under the standardised approach, ie

¹⁶ See paragraphs 84 (ii) and 85 of the Basel II text.

¹⁷ Unfunded credit protection refers collectively to guarantees and credit derivatives the treatment of which is described in Part 2, Section D (The standardised approach – credit risk mitigation) of the Basel II text.

internally modelled haircuts cannot be used. In addition, the substitution approach should be applied, ie banks should treat the amount by which the underlying exposure has been reduced due to the existence of collateral as an exposure to the issuer of the collateral in its own right (and add it to any other exposures the bank may have to that issuer for the purpose of large exposures).

73. The Committee is proposing this substitution of exposures because exposures to a counterparty that arise from a bank's CRM activities could have a material impact on the extent to which a bank is exposed to losses in the event that a counterparty fails. Ignoring the covered part of the exposures may lead to the undesirable situation of a high concentration to issuers of collateral or providers of credit protection. This is, of course, one of the lessons of the recent financial crisis (see paragraph 5). Hence, these exposures should be considered within a large exposures framework.

8. The Committee welcomes views on the proposed hybrid approach for banks that apply the "comprehensive approach" to financial collaterals.

Physical collateral

74. The Committee believes that physical collateral should generally not be permitted to reduce exposure values for large exposures purposes because eligible collateral can mitigate the risk posed by the sudden failure of a counterparty only if it is immediately available and liquid, a condition that physical collateral is unlikely to fulfil.

Treatment of maturity mismatches in CRM

75. The Committee proposes to follow the risk-based capital requirement approach to mismatches between the maturity of an exposure and the maturity of the hedge against this exposure. In order for hedges with maturity mismatches to be recognised, their original maturities must be greater or equal to one year and the residual maturity of a hedge must be not less than three months.

76. If there is a maturity mismatch with credit risk mitigants (collateral, on-balance sheet netting, guarantees and credit derivatives) recognised in the risk-based capital requirement, the adjustment of the credit protection for the purpose of calculating large exposures is determined using the same approach as in the risk-based capital requirement.¹⁸

On-balance sheet netting

77. Where banks have legally enforceable netting arrangements for loans and deposits the Committee proposes that banks may calculate the exposure value for large exposures purposes according to the calculation they use for capital requirements purposes, ie on the basis of net credit exposures subject to the conditions set out in the risk-based capital requirement's approach to on-balance sheet netting.

D. Calculation of exposure value for trading book positions

78. Exposures to a single counterparty can arise in the trading book, and it is important that these exposures are added to any other exposures that lie within the banking book to calculate a bank's total exposure to a single counterparty, which is then subject to the large exposure limit.

¹⁸ See paragraphs 202-204 of the Basel II framework.

Scope of large exposures limits in the trading book

79. The proposals in this section pertain only to single-name concentration risk associated with the default of a counterparty for exposures included in the trading book (see paragraph 9). Therefore, positions in financial instruments such as bonds and equities should be constrained by the large exposure limit, but concentrations in a particular commodity or currency should not be. The rationale for this is that the purpose of the large exposures framework is to mitigate default risk, and hence should only consider position risk to the extent that losses arise because of a counterparty default. Although the Committee recognises that very large concentrations in a position subject to price variation (such as the variation in a commodity price) could lead to the failure of a bank given an adverse market event, Pillar 2 capital rather than the large exposures framework is considered by the Committee to be the most appropriate tool to mitigate this risk.

Calculation of exposure value for trading book positions

80. The Committee proposes to rely on the same exposure definitions as those used under the riskbased capital requirement where this makes sense when considering a sudden counterparty failure. This is the case for all relevant types of exposures in the trading book with the exception of options.

81. The exposure of straight debt instruments and equities should be identical to the market value of the respective instruments. The market value equals the maximum loss a bank could incur in case of the default of the issuer of a debt instrument or an equity (ie the value of debt and equity claims could fall to zero in the case of default).

82. Instruments such as swaps, futures, forwards and credit derivatives are alike in that their market value provides no information on the maximum loss that a bank could incur from dealing in them. Typically, the market value of a swap is zero at the outset of the trade but the actual potential loss may be much higher. In the risk-based capital requirement, these instruments are decomposed into their individual legs. A future on a stock X, for example, is decomposed into a long position in stock X and a short position in a risk-free interest rate exposure in the respective funding currency, or a typical interest rate swap is represented by a long position in a fixed and a short position in a floating interest rate exposure or vice versa. As this decomposition reflects the effective economic risk exposure, the Committee proposes to follow the same approach for the large exposures framework. Only legs representing an exposure subject to the large exposures framework need to be considered. In the case of credit derivatives that represent sold protection, the exposure to an underlying is equal to the amount due in the case that the respective underlying triggers the instrument, minus the absolute value of the credit protection.¹⁹ For credit-linked notes, the protection seller needs to consider positions both in the bond of the note issuer and in the underlying referenced by the note. For positions hedged by credit derivatives see paragraph 92.

83. Due to their distinct non-linear characteristics, options differ from other types of instruments. While the risk-based capital requirement approach tries to approximate the non-linear price changes of options resulting from underlying price changes by a set of alternatively available approaches, the approximation is only suitable for relatively small changes in the price of the underlying. But for the purpose of regulating large exposures, it is appropriate to consider a very large price movement; ie the sort of price movement that would occur if there were a jump-to-default by the underlying. Thus, the approaches used in the risk-based capital requirement are not appropriate. The same would apply for securitisations, hedge funds and CIU, where decomposition would technically not be feasible.

¹⁹ In the case that the market value of the credit derivative is positive from the perspective of the protection seller, such a positive market value would also have to be added to the exposure of the protection seller to the protection buyer. Such a situation could typically occur if the present value of already agreed but not yet paid periodic premiums exceeds the absolute market value of the credit protection.

84. The Committee therefore proposes to define the exposure values of options based on the change(s) in their prices that would result from a default of the respective underlying instrument. The exposure value for a simple long call option would therefore be its market value and for a short put option would be equal to the strike price of the option minus its market value. In the case of short call or long put options, a default of the underlying would lead to a profit (ie a negative exposure) instead of a loss which would result in an exposure of the option's market value in the former case and equal the strike price of the option minus its market value in the former case and equal the strike price of the option minus its market value in the latter case. The resulting positions will in all cases be aggregated with those from purely linear and other non-linear exposures. After aggregation, negative net exposures will be set to zero.

85. Regarding investments in index positions, securitisations, hedge funds or CIU, the large exposures framework will apply the same rules as for "instruments with underlying assets" in the banking book (see part IV-C hereafter). A transaction for which no single underlying asset is more than 1% of the total value of the transaction would be considered sufficiently granular and would therefore not need to be decomposed into their individual positions.

9. The Committee welcomes views on whether the approach proposed for calculating exposure values for trading book positions raises specific issues.

E. Offsetting long and short positions in the trading book

86. Both long and short positions in a single name may be present within a trading book. It is therefore necessary to consider to what extent short positions should offset long positions, when calculating the net exposure that is subject to the large exposure limit. This section considers whether offsetting should be allowed within the same issue of a financial instrument referencing a single name, between different issues referencing a single name, and between the banking book and trading book. When the result of the offsetting is a net short position with a single counterparty, this net exposure is not considered as an exposure for large exposure purposes (see paragraph 79).

Offsetting between long and short positions in the same issue

87. It seems highly unlikely that long and short positions in an identical instrument (with exactly the same issuer, coupon, currency and maturity) would not perform reliably as hedges, including for large exposures framework purposes. Therefore, the Committee proposes that offsetting between long and short positions in the same issue should be allowed, leading to a net position in the issue for the purpose of calculating a bank's exposure to a counterparty.

Offsetting between long and short positions in different issues

88. In the risk-based capital requirement, offsetting is usually restricted to matched positions in the same issue. No offsetting is permitted between different issues of the same issuer. This is appropriate because differences in the sensitivities of different issues to relevant market risk factors can lead to price changes in some issues that are not identical to price changes in another. This means that different issues may not perform reliably as hedges for each other given adverse market movements.

89. However, for large exposures purposes, the exposures in all financial instruments issued by a single counterparty should be aggregated. This naturally implies a need to consider both long and short positions in different issues of the same name and to assess when offsetting can be permitted. A core assumption of large exposures regulation is default with 100% LGD (see paragraph 46 above). Making this assumption for all issues at the same time does not represent the "worst case scenario" from a trading book perspective. This is because the trading book includes short positions, and these benefit from the default of the underlying name. It may be the case that short positions are more senior than

the long positions (for example, a short debt position hedging a long equity position). In this case, it is possible that the value of the (less senior) long position would fall to zero, but that positive value would remain in the (more senior) short position. This would lead to a loss on the position, which an assumption that both issues (debt and equity) default with 100% LGD would not recognise.

90. In the example above, the worst case occurs where there is a 100% loss on the long equity position, and no loss on the short debt position, rather than where there is 100% loss on both positions. This shows that the large exposures measure needs to capture the peak exposure (taking into account the seniority of different claims on the single name), rather than simply considering the case where all claims on a name default in their entirety.

91. The Committee proposes that, for the purpose of offsetting positions in different issues on the same name, a short position may only be netted against a long position if the short position is junior to the long position, or if they are of the same seniority. This recognises the potential for long and short positions of issues of different seniorities to be offsetting, while ensuring that the "worst-case scenario" exposure is captured.

92. For positions hedged by credit derivatives, the risk-based capital requirement differentiates between the recognition of a full allowance, an 80% offset and partial allowance.²⁰ As the large exposures framework focuses on a simpler jump-to-default perspective, the Committee proposes not to follow this offsetting approach but to follow the rule set out for large exposures purposes in paragraph 91. In addition, any reduction in exposure to the original counterparty will correspond to a new exposure to the credit protection provider following the logic of the substitution approach mentioned in paragraph 69.

93. The Committee recognises that determining the relative seniority of different claims on a counterparty may not always be straightforward. Therefore, in order to implement this approach, it is proposed that securities should be allocated into broad buckets of degrees of seniority (for example, "Equity", "Subordinated Debt", and "Senior Debt"). The Committee will provide detailed guidance setting out how to allocate different securities into each of these buckets.

94. For those banks that find it excessively burdensome to allocate securities to different buckets based on relative seniority, the default approach will be to recognise no offsetting of long and short positions in different issues of the same counterparty in calculating exposures.

Offsetting short positions in the trading book against long positions in the banking book

95. The Committee has concluded that netting across the banking and trading books should not be permitted. Banks typically risk-manage positions in the two books separately and the case for allowing short positions in the trading book to offset long positions in the banking book for the purpose of the large exposures framework does not seem sufficiently strong to justify a deviation from the wider regulatory approach in this area, which does not recognise netting across the two books.

10. The Committee welcomes views on the proposals for offsetting long and short positions, in particular when these positions are in different issues.

²⁰ See paragraphs 713, 714 and 715 of the Basel II text.

IV. Treatment of specific exposure types

96. Some types of exposure warrant special treatment in the large exposures framework because of their specific features or the potential effects on the functioning of certain markets if these exposures were treated like other exposures. All exposures that do not have a specific treatment will be fully subject to the large exposure limit (including, for example, non-central government public sector entities or multilateral development banks).

A. Sovereign exposures and entities connected with sovereigns

97. As set out in the introduction, the scope of this consultation document does not include the treatment of banks' exposures to entities considered as sovereigns, their central banks and public sector entities treated as sovereigns according to the risk-based capital requirement. However, these exposures should be reported by banks to supervisors. This should be the case even for jurisdictions in which these exposures are not subject to the large exposure limit.

98. Given that the treatment of sovereign exposures under the large exposures framework has not been considered yet, the Committee refrains at this stage from proposing specific requirements for the treatment of entities connected with sovereigns and on how to report these groups of connected counterparties.

B. Interbank exposures

99. The Committee proposes to apply the large exposure limit to interbank exposures in the same way that it is applied to any other exposures to third parties.

100. As a general principle, any exposure attracting a capital charge under the risk-based capital framework would be captured under the large exposures framework. This would include interbank exposures treated for risk-based capital requirement according to Annex 3 of the Basel II text (*Capital Treatment for Failed Trades and Non-DvP Transactions*). All transactions subject to a capital charge in this context must be added to exposures to the same banking counterparty under other provisions of the large exposures framework.

101. The Committee is nonetheless aware of potential constraints that banks may face given the different payment and settlement systems they operate in or in relation to monetary policy implementation and hence is seeking evidence to determine if exemptions for (i) intraday interbank exposures²¹ and (ii) some overnight interbank exposures would be needed beyond simple alignment with the risk-based capital framework.

102. The Committee acknowledges that the scope of such exemptions would need to be tightly defined and intends to develop conditions that would allow supervisors to verify that exposures subject to exemptions are unavoidable, or that the consequence of limiting these exposures would have unintended consequences on the smooth functioning of payment and settlement systems or in monetary policy implementation. The cumulative conditions that are contemplated and would need to be met so as to justify an exemption could include the following:

²¹ In the event that the Committee decides to exempt intraday exposures from the limit, the reporting requirement set out in paragraph 25 (footnote 8) will not apply to such exposures.

- The exposure relates to certain types of service, such as the provision of money transmission services including the execution of payment services, clearing and settlement and custody services and correspondent banking.
- The exposure would arise from client activity (exposures arising from proprietary trading activities will not be covered by such an exemption). It would, in particular, cover delayed receipts in funding and unexpected incoming flows where the bank is not in a position to reduce the resulting exposure before the end of the business day.
- The exposures would arise for the purpose of monetary policy implementation such as overnight interbank exposures to banks subject to reserve requirements.

103. The purpose of imposing a general limit to interbank exposures *ex ante* is to help reduce the frequency of interbank market disruptions. Nevertheless, it is not possible to rule out the possibility that such episodes may occur in the future. Therefore, the Committee recognises that supervisors may have to accept a breach of an interbank limit *ex post*, in tightly defined stressed circumstances, in order to help restore order in an already malfunctioning interbank market. The Committee intends to develop guidance for supervisors to allow breaching the limits in such exceptional circumstances.

11. The Committee welcomes comments on the proposal regarding interbank exposures and in particular in which cases specific exemptions would be warranted.

C. Collective investment undertakings, securitisations and other vehicles

104. An exposure relevant for large exposures purposes arises not only through a direct investment in a certain asset but also through an investment in a transaction through an entity which itself invests in assets. Such transactions include investments in funds, securitisations and other vehicles with underlying assets. For such transactions, the key question is where potential losses may originate. One answer is that losses can arise from the underlying assets and, hence, these exposures need to be captured under large exposures regulation. But, in addition, there may be other sources of risk inherent in the structured finance vehicle itself that could have a negative impact on the value of a bank's investment in the transaction. Hence, the Committee proposes that banks should assess investments in transactions where there are exposures to underlying assets, namely in CIU and structured finance products, following the sequential approach described below.

Determination of the relevant counterparty to be considered

(i) Identification of the underlying assets

105. Banks should endeavour to apply a look-through approach (LTA) to identify the underlying assets when they invest in transactions. By requiring look-through to the underlying exposures to counterparties and adding these to any direct exposures to the same counterparties, the objectives underlying the large exposures framework would be fully realised. In the absence of look-through, it would be impossible to identify the true concentration risk to a single counterparty, and banks could easily avoid large exposure limits by investing in multiple transactions with identical underlying assets.

106. The following decision tree illustrates the Committee's proposals on how banks should proceed when assessing these kinds of investments.





107. Although the Committee believes that ideally a bank would be able to look-through to the underlying exposures, it also recognised that there is an appropriate balance to strike between requiring banks to exert considerable effort to identify exposures in very granular portfolios and the financial stability benefits of capturing accurately all single-name concentration risks. The Committee has therefore decided that the transaction should first undergo a "granularity test" because it recognises that, for transactions with very small individual underlying assets, the effort of identifying them exceeds the likely financial stability benefits. Therefore, for those transactions that pass the granularity test (a YES under the granularity test in the decision tree above), a bank would not need to apply the LTA and the underlying names would not be recognised.

108. But since the consequence of not applying the LTA because the granularity test is passed is that the underlying exposures are ignored for the purpose of calculating large exposures, a bank should always be able to demonstrate that regulatory arbitrage considerations have not influenced the decision whether to look-through or not, eg that the bank has not circumvented the large exposure limit by (eg) investing in several granular transactions with identical underlying exposures. In addition, the granularity threshold should be set at a low enough level for banks and supervisors to be confident that there is no

material risk of understating large exposures if the underlying names are ignored. Finally, as explained in paragraph 120, any bank applying for the granularity exemption will still have to recognise an exposure to the particular transaction in which it invests. The granularity exemption is illustrated in Chart 2 below.



Chart 2: Granularity exemption for all transactions

109. The granularity threshold should be set at a level that ensures that the risks of understating large exposures due to the underlying exposures being ignored remain at acceptable levels. The Committee proposes a threshold of 1% of the total value of the transaction – ie a transaction may be considered sufficiently granular if its largest underlying exposure does not exceed 1% of the total value of the transaction (ie the threshold being applied to each individual underlying asset). In the case where one underlying asset is above the threshold, a bank is required to apply the LTA to all underlying assets. The Committee believes that this threshold should reduce the risk that large exposures are understated.

12. The Committee welcomes comments on the calibration of the granularity threshold and whether the mandatory application of the look-through approach to the transaction where an underlying exposure may exceed the granularity threshold will raise specific issues.

110. When the granularity test is not passed, banks should apply the LTA. The LTA implies that, for the underlying names identified, a bank shall add the exposures on these underlying assets to any other direct or indirect exposures to the same counterparty or group of connected counterparties.

111. The Committee recognises that the LTA may not always be feasible and that the underlying assets could remain fully or partially opaque. However, this situation is deemed undesirable and banks should be incentivised to look-through. Two options have been considered. The most prudent option would be for a bank to add the unknown exposure to each of its existing large exposures. This treatment would reflect the possibility that the opaque exposure might be on any one of the counterparties to which the bank is already exposed. This assumption, although conservative, is consistent with the intention that a large exposures framework should be a backstop regime that is calibrated on a worst-case scenario basis. However, given the very high degree of conservatism embedded in this option, the Committee proposes a less punitive treatment but one that nonetheless should still incentivise banks to look-through. For cases where a bank cannot look-through to all underlying assets, the Committee proposes that banks set up a separate client (designated as "the unknown client"). The bank will then aggregate all unknown exposures as if they related to a single counterparty (the unknown client) to which the large exposure limit would apply.

112. The implicit assumption behind this treatment is that a single client underlies all the various opaque exposures assigned to the unknown client. Clearly, this assumption would be unrealistic in many cases. However, the Committee cannot identify a viable alternative and therefore regards this treatment as a solution that adequately addresses the concerns of both supervisors and banks. On the one hand, this solution leaves room for banks to invest in structures where transparency cannot be established. On the other hand, supervisory concerns are also addressed because such investments are limited by the large exposure limit. Importantly, the Committee is of the view that the mechanism provides banks with a strong incentive to apply the LTA.

113. Chart 3 below illustrates how the proposal would work in the case of a transaction where the bank knows some but not all of the underlying counterparties. In the example shown, the value of the transaction is \in 100 and the bank can identify exposures on underlying counterparties A through G. But the bank cannot identify two exposures, of value \notin 20 and \notin 30, respectively. It adds the exposures to D and G to the other exposures it has to those counterparties. E is economically interdependent on counterparty H. Thus, the bank should include E in the H-group of connected counterparties and add \notin 3, its exposure to E via the transaction, to its exposure to the H-group. In addition, the other underlying exposures to A, B C and F should also be considered to be exposures to separate counterparties. The part of the portfolio that is not identified (\notin 50) should be assigned to the unknown client.





114. Structures where a bank is unable to identify any underlying exposures, and where the structure remains fully opaque, would be added in their entirety to the unknown client. As Chart 4 shows below, and as in the previous example, the unknown client is subject to the large exposure limit.





(ii) Identification of additional risks

115. There are also additional events, other than the default of the underlying obligors, that could result in a bank incurring losses on its investment in a transaction. These events relate to third parties

and may not constitute a source of credit risk in themselves but only when assessed in combination with the underlying assets. For example, the credit risk of all underlying assets may be correlated with that of a third party, so that this party constitutes a common risk factor that is relevant for the credit risk of all underlying assets. For instance, in the case of investment funds, the risk might arise that the bank suffers losses because of fraud on the part of the fund manager. Such losses might occur even in a situation where these funds are appropriately diversified and the assets are performing well in terms of returns. By investing in multiple funds managed by the same manager, a bank might become excessively concentrated vis-à-vis this individual manager.

116. In order to capture these risk factors, banks are required to assess possible additional risks that do not relate to the identification and exposure measurement of the structure's underlying assets, for example, risks arising from any agent taking a position or managing the risk of the transaction. Once these risks are identified, a new exposure must be recognised, where appropriate, for large exposures framework purposes. If this reveals a concentration risk through risk factors that are common to several transactions, banks should connect these transactions.

117. The Committee refrains from defining an exhaustive list of third parties playing a role in investment funds and from determining which roles pose an additional risk. This is because it judges that the different cases are heterogeneous enough to necessitate a case-by-case assessment. The third parties listed in Chart 1 should be interpreted as an illustrative set of examples of additional risk factors that banks are expected to assess. The examples include circumstances where the identity of the fund manager constitutes an additional risk, for example, due to the possibility of fraud. In such cases, the manager would have to be regarded as a distinct counterparty so that the bank's investments to all funds managed by this manager would be subject to the large exposure limit, with the exposure value being the total value of the investment. In other cases, the identity of the manager may not comprise an additional risk factor - for example, if the legal framework governing the regulation of particular funds requires separation between the legal entity that manages the fund and the legal entity that has custody of the fund's assets. In the case of structured finance products, the liquidity provider or sponsor of shortterm programmes (asset-backed commercial paper - ABCP - conduits and structured investment vehicles - SIVs) may warrant consideration as an additional risk factor (with the exposure value being the amount invested). Similarly, in synthetic deals, the protection providers (sellers of protection by means of CDS/guarantees) may be an additional source of risk and a common factor for interconnecting different transactions (in this case, the exposure value would be the percentage value of the underlying portfolio covered).

118. A bank may also have a direct exposure (such as a loan) to a third party that acts as a common risk factor in relation to the underlying transaction. Whether the exposures to such transactions should be added to any direct exposure would again depend on a case-by-case consideration of the specific structure of the transaction and on the role of the third party. In the example of the fund manager, adding together the exposures may not be necessary because potentially fraudulent behaviour may not necessarily affect the repayment of a loan. The assessment may be different where the risk to the value of investments underlying the transactions arises in the event of a third-party default. For example, in the case of a credit protection provider, the source of the additional risk for the bank investing in a transaction to the direct exposures to the credit protection provider since both exposures might crystallise into losses in the event that the protection provider defaults (ignoring the covered part of the exposures may lead to the undesirable situation of a high concentration risk exposure to issuers of collateral or providers of credit protection).

119. It is conceivable that a bank may consider multiple third parties to be potential drivers of additional risk. In this case, the bank should assign the exposure resulting from the investment in the relevant transactions to each of the third parties. Superficially, this may appear to lead to a single investment being recognised more than once (ie double counting). In fact, however, this approach is

necessary to support the objectives underlying a large exposures framework. The large exposure limit protects a bank against the risk of a set of a mutually exclusive series of failures of single-name counterparties, each of which, if it were to arise, could cause a bank to lose the value of its investments in transactions for which these counterparties are relevant third parties. Since the bank should be able to withstand the individual failure of any of these counterparties, it is appropriate to add the value of the bank's exposures to the transactions to each of its exposures to these counterparties.

120. In addition, when the LTA is not applied because the transaction satisfies the granularity test, the Committee recognises a need to limit the size of exposure created by additional risks inherent within the structure of the transaction. Thus, a requirement exists to recognise a structural risk inherent in the transaction instead of the risk stemming from the underlying exposures. As the decision tree in Chart 1 illustrates, this recognition of fund "XYZ" is required in addition to and regardless of whatever the general assessment of additional risks concludes.

13. The Committee welcomes comments on the proposals for the treatment of the identified additional risks in the large exposures framework.

Calculation of exposure value for transactions where there is an exposure to underlying assets

121. After having determined the relevant counterparty in the previous section, this section sets out how the values of the exposures to the underlying exposures to a transaction should be calculated when the granularity test is not passed and the LTA is applied.

122. Each of the underlying names is treated as an exposure equal to the pro-rata share that the investor holds in the transaction. Thus an investor holding a 1% share in a CIU or a securitisation, with 20 names of value 5 each, would have to recognise an exposure of 0.05 to each of the underlying names.

D. Exposures to central counterparties

123. Currently, in most jurisdictions, exposures to central counterparties (CCPs)²² are exempted from large exposure limits, mirroring the zero exposure value allocated to these exposures for risk-based capital requirement purposes.²³ The Committee has considered whether this is consistent with the objective of the large exposures framework, and whether it might be desirable to introduce a special treatment for them.

124. There are two options, each of which has pros and cons. The first option would be to apply limits to banks' exposures to qualifying central counterparties (Q-CCPs),²⁴ although the level of the limit may need to be higher than the general limit to take into account the fact that banks are obliged to clear

- ²³ This will not be the case going forward with the new capital requirements for risk-based capital requirement purposes defined in BCBS, *Capital requirements for bank exposures to central counterparties*, July 2012.
- ²⁴ The definition of Q-CCP for large exposures purposes is the same as the one used for risk-based capital requirement purposes. A Q-CCP is a licensed CCP that is based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established and publicly indicated that it applies to the CCP, on an ongoing basis, domestic rules and regulations that are consistent with the CPSS-IOSCO *International Principles for Financial Market Infrastructures*. Its use is incentivised through a preferential treatment in terms of risk weights (2% RW). The use of any other CCP (ie a non-Q-CCP) is discouraged and assimilated to a merely bilateral transaction, for which a 20% or a 100% risk weight (under the Standardised Approach) would apply depending on the statutory profile of the CCP in question.

²² Terms are used in this document with the same meaning as in other relevant Basel documentation. In this case, a CCP is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CCP becomes counterparty to trades with market participants through novation, an open offer system, or another legally binding arrangement.

specific trades through CCPs and that CCPs can contribute to reducing systemic risk. Limiting these exposures has the following advantages:²⁵

- Given that a CCP can fail, it is prudent to require banks to limit their large exposures to a CCP in order to avoid significant losses that could threaten their solvency if the CCP were to suddenly default.
- It would help ensure the stability and continuity of financial markets, should a CCP fail, by mitigating the risk that contagion spreads to bank members.
- Some CCPs may be systemic institutions and hence be perceived as "too big to fail", potentially creating moral hazard problems. Applying limits to banks' exposures to CCPs would, in principle, provide incentives for banks to diversify their use of CCPs, reducing the risk that a CCP could be seen as too big to fail.
- This option would also ensure a consistent treatment of CCP exposures across countries (which the second option defined below may not).

This option may require the application of a more lenient limit than the general one, to take into account that:

- The implementation of a hard limit may be in conflict with the G20 recommendation that all standardised products will need to be cleared through CCPs in order to reduce systemic risk and make financial institutions more resilient;
- Imposing limits that are too strict might cause the CCP to reduce initial margin and default fund requirements and thereby make the CCP less resilient.

125. The second option is that no Pillar 1 hard limit would apply to a bank's Q-CCP exposures. Banks would still be required to report all large exposures to Q-CCPs to their supervisors. National supervisors would have to monitor potential concentration risks and take appropriate supervisory actions where needed. Such an option has the following advantages:

- It does not conflict with the G20 recommendation that all standardised products should be cleared through CCPs.
- It reduces any potential impact on the structure of the CCP industry, as imposing a limit may (eg) lead to a more fragmented structure, which may actually increase the riskiness of the financial system;
- There may be practical problems if banks are obliged to clear standardised transactions through CCPs and if, at the same time, there are insufficient CCPs in some jurisdictions, or for some financial instruments, for banks to sufficiently diversify their exposures to comply with the large exposure limit.

126. Under either option, specific guidance is needed on the calculation of the exposure value to be reported by banks.

127. Banks may have many different types of exposures to a particular CCP. All should be aggregated to calculate the exposure value to be considered for large exposures purposes. For those exposures that are specific to banks' relationships with CCPs (ie trade exposures, initial margin and variation margin posted, default fund contributions, and equity stakes in the CCP), the Committee proposes that banks calculate the value of trade exposures ("based on their exposure at default", in line with the definition used for risk-based capital requirement purposes for exposures with counterparty

²⁵ Further work would still be needed to calibrate the level of the limit if this option was chosen.

credit risk),²⁶ initial margin (except if the initial margin posted is bankruptcy-remote),²⁷ default fund contributions and equity stakes²⁸ following the definition of exposure value set out in the risk-based capital requirement rules. In addition, for all other types of banks' exposures to CCPs, the general rules for measuring exposures for large exposures purposes would apply.²⁹

128. The Committee has considered the appropriate exposure treatment in the case of banks accessing CCPs indirectly. It has concluded that, when the transaction of a client with a clearing member is treated as one with a Q-CCP under the solvency regime, the client may also treat this exposure under the large exposures framework as one with the Q-CCP,³⁰ and not with the clearing member.

129. The application of the concept of connected counterparties used elsewhere in the large exposures framework is also relevant for these exposures. In principle, there may be reasons for two or more CCPs to be considered as a group of connected counterparties because they are so interconnected that the default of one CCP would almost certainly coincide with the default of the others. However, adding together exposures to connected CCPs might further increase the adverse effects of constraining large exposures to CCPs highlighted above.

130. Finally, in the case of non-Q-CCPs, and in the same vein as for solvency purposes, it is proposed to treat banks' exposures to non-QCCPs as bilateral transactions for large exposures purposes. This would effectively mean that a non-QCCP would be treated as a bank, if the CCP has a banking license or as financial institution if this is not the case.³¹

14. The Committee welcomes views on the options for the treatment of banks' exposures to CCPs.

V. Large exposures rules for global systemically important banks

131. Policymakers are concerned that the failure of large, global financial institutions could generate negative externalities that fall on the rest of the financial system and harm the real economy. To address the risks associated with banks whose failure would have a high systemic impact, the Committee has developed a framework for assessing the global systemic importance of banks and imposing additional

- ²⁸ If equity stakes are deducted from the level of capital the large exposure limit is based on, such exposures should be excluded from the definition of an exposure to a CCP.
- ²⁹ Other possible types of exposure such as funding facilities, credit facilities, guarantees etc should be also included in the large exposures framework, meaning that they would have to be added to the exposure values of exposures listed in paragraph 128 to calculate the "total exposure value" of a bank to a CCP. These exposures would be treated according to general rules defined in this framework, as set out in Part III, with no specific treatment.
- ³⁰ This means that if there is a preferential treatment of banks' exposures to Q-CCPs under the large exposures framework, this would be extended to those indirect transactions that are recognised for risk-based capital requirement purposes.
- ³¹ The implication of this is that, if a preferential treatment is finally proposed for banks' exposures to CCPs, this would only apply to Q-CCPs, whereas to non-Q-CCPs the general treatment would apply.

²⁶ Once the successor of the CEM is developed by the Committee, this should be used. For the interim period, banks will be allowed to use the same approach to measure exposure as they use for risk-based purposes (including IMM).

²⁷ When the initial margin (IM) posted is bankruptcy-remote from the CCP – in the sense that it is segregated from the CCP's own accounts, for example, when the IM is held by a third-party custodian – this amount cannot be lost by the bank if the CCP defaults; therefore, the IM posted by the bank can be exempted from the large exposures limit.

loss absorbency requirements on these firms.³² One of the reasons why a bank could be identified as a global systemically important bank (G-SIB) is that it is highly interconnected with the rest of the financial system. If a highly interconnected bank were to fail it might cause other banks that are exposed to it to suffer losses and potentially trigger their failure; ie there would be interbank contagion. The social cost of such contagion would be greater still if the banks that were to fail due to contagion were also G-SIBs (ie those banks whose failure has the greatest global systemic impact).

132. The Committee, taking these considerations into account, proposes that the appropriate large exposure limit applied to a G-SIB's exposure to another G-SIB should be between 10% and 15% of the eligible capital base (CET1 or Tier 1). A limit that is tighter than the general limit would reduce the risk of contagion occurring between the banks whose failure has the greatest global systemic impact. The limit would apply to G-SIBs as identified by the Basel Committee for loss absorbency requirements, including with respect to the grace period for complying with additional requirements when a bank become a G-SIB.³³

133. In addition, member countries retain the possibility to set more stringent standards, as with any other standards approved by the Committee. In particular, the avoidance of contagion logic that has led the Committee to propose tighter inter-G-SIB limits, applies, in principle, at the jurisdictional level to D-SIBs. The Committee therefore encourages jurisdictions to consider applying stricter limits to exposures to D-SIBs and to exposures of smaller banks to G-SIBs. The same logic would also be valid for the application of tighter limits to exposures to non-bank G-SIFIs, and such a limit might be considered by the Committee in the future.

134. The assessment of the systemic importance of G-SIBs is made using data that relate to the consolidated group and, consistent with this, the additional loss absorbency requirement will apply to the consolidated group.³⁴ But, consistent with the additional loss absorbency requirement for G-SIBs, the application of the inter-G-SIB limit at the consolidated level does not rule out the option for host jurisdictions of subsidiaries of a group that is identified as a G-SIB to also apply the limit at the individual legal entity or consolidated level within their jurisdiction; ie impose the inter-G-SIB limit on the subsidiaries' exposures to other G-SIBs (defined at the individual legal entity or consolidated level within their jurisdiction).

VI. Transitional arrangements

135. The Committee recognises that banks and supervisors would require time to transition to the large exposures regulation outlined in this consultative document. A transition period would ensure that the long-run benefits of the framework are achieved while mitigating any short-term costs incurred as the new rules are implemented.

136. The Committee proposes that all aspects of its proposals should be implemented in full by 1 January 2019. This is a natural milestone since, by this date, the Basel III definitions of capital on which the large exposure limit is based should be fully implemented and it is also the date at which the

³² See BCBS, *Global systemically important banks: assessment methodology and the additional loss absorbency requirement: rules text*, November 2011, available at www.bis.org/publ/bcbs207.htm.

³³ See paragraph 92 of BCBS, *Global systemically important banks: assessment methodology and the additional loss absorbency requirement: rules text*, November 2011.

³⁴ See paragraph 89 of BCBS, *Global systemically important banks: assessment methodology and the additional loss absorbency requirement: rules text*, November 2011.

transition to the G-SIB framework will be complete. Given the relatively long period until implementation, the Committee believes grandfathering arrangements for existing exposures would not be necessary.

137. Supervisors should nonetheless consider requesting that banks begin reporting to them large exposures on the basis of the Committee's proposals during a period up to 2019 to facilitate bank preparation and to identify any instances in which banks might have difficulties in transitioning to the new large exposures regulation.

Annex 1

Comparative synopsis of the large exposures proposal versus the relevant frameworks

Items of the risk-based capital framework	Integration in the large exposures framework	Comments / reasons for deviation	Deviation ³⁵							
Capital base CET1, Tier 1 or Total capital	Same	Limit will be expressed as either Tier 1 or CET1 capital.								
Measurement of exposures in the banking book										
<u>Measurement of</u> <u>exposure value</u> SA: Exposure value IRB: EAD	Same	PD and LGD estimates are not relevant in the context of large exposures.								
Treatment of specific provisions (SP) SA: Exposure value net of SP & valuation adjustments IRB: Exposure value gross of SP & valuation adjustments. SP offsets EL deduction	All banks adopt SA treatment.	Same approach taken for leverage ratio. IRB banks can opt for the same treatment as for solvency purposes (ie exposure value gross of specific provision and valuation adjustments) as outcome provides a more conservative exposure value.								
<u>Non-derivatives off-</u> <u>balance sheet</u> <u>commitments</u> SA: Standardised CCFs IRB: Modelled CCFs	General rule: flat 100% CCF. Exceptions: 20% CCF: short-term self- liquidating letters of credit 50% CCF: other transaction- related contingent items	100% CCF is consistent with approach for leverage ratio. Modelling and diversification benefits not recognised in the large exposures framework. Exceptions granted to address potential concerns related to trade finance activities.								
Credit risk mitigation (CF	RM)									
<u>Eligible collateral /</u> protection providers	Same except for physical collateral.	Physical collateral is unlikely to be sufficiently liquid to mitigate the sudden default of the counterparty.								
<u>Approach for</u> <u>recognition of CRM</u> Guarantees and credit derivatives : Substitution	Guarantees and credit derivatives: Same Financial collateral: Specific large exposures approach (hybrid approach) for all banks.	Hybrid approach based on the comprehensive approach, but is more conservative as it also captures exposure to protection provider. Banks should already have the calculation of the exposure to the collateral provider;								

³⁵ This fourth column is populated according to the following rule:

- Blank/white cell; when the large exposures framework integrates an existing rule from risk-based capital requirement or from the leverage ratio without any deviation.
- Grey cell; when the large exposures framework deviates from risk-based capital requirement or from the leverage ratio but no additional calculation is necessary.
- Black cell; when the large exposures framework deviates from risk-based capital requirement or from the leverage ratio and additional calculation is required from the bank.

<i>Financial collateral:</i> Simple or Comprehensive approach (SA) and LGD adjustments (A-IRB)		therefore, no additional calculation required.	
<u>Collateral haircuts</u> Supervisory, own estimates or VaR- model based haircuts.	Only standard supervisory haircuts.	Modelling and diversification benefits not recognised in the large exposures framework. Additional calculation required for banks authorised to use either own LGD estimates or own haircut estimates.	
Structured finance products No look-through requirement.	Look-through will be required where granularity threshold not met.	Look-through requirement reduces risk of banks circumventing the large exposures limit and is the base for applying the large exposures framework. The Committee is also considering a look- through requirement to determine capital treatment for equity investment in funds that may fall within this asset class.	
Measurement of exposur	res in the trading book		
Scope of exposures	All positions in bonds and equities, but not commodity or currency positions. Only net long positions in a single name considered. Net short positions are excluded.	Focus is on single-name default risk only.	
Measurement of exposure value Straight debt instruments and equities	Same		
Exposure value for swaps, futures, forwards and credit derivatives	Same		
Options	Specific calculation required (Value set at the price change assuming a jump to default of the underlying)	The risk-based capital requirement framework for options is appropriate only for small price changes whereas the large exposures framework focuses on a jump-to-default assumption.	
Offsetting Only allowed for long and short position in the same issue	Specific rules designed to also allow offsetting for different issues to the same name	Default assumption requires different offsetting rules.	

Exposure subject to counterparty credit risk						
Securities financing transactions (SFTs)	Comprehensive approach with supervisory haircuts (or simple approach).					
Simple approach or comprehensive approach (Supervisory, own estimates or VaR- model based haircuts) to calculate the potential volatility of collateral. Alternatively, can be allowed to calculate EPE under the IMM.		Modelling and diversification benefits not recognised in the large exposures framework Additional calculation required for banks authorised to use either own LGD estimates or own haircut estimates.				
OTC derivative transactions <i>Current Exposure Method (CEM)</i> <i>Standardised Method</i> <i>(SM) and Internal</i> <i>Models Method (IMM)</i> .	Interim measure: Use the risk- based capital requirement treatment. Long-term direction: Use of the new non-models-based approach	Adopts same approach as for the risk-based capital requirement.				