



15 June 2007

CEBS Consultation Paper (CP14)
On the
First Part of its advice to the European
Commission on large exposures

Executive summary

1. This consultation paper sets out CEBS's initial orientation in respect of some of the key concepts underpinning the regulation of large exposures. It is intended to form the basis for early engagement between CEBS and interested stakeholders in respect of CEBS's response to the European Commission's Call for Technical Advice (No. 7) on the review of the Large Exposures Rules¹.
2. CEBS is developing its advice in a manner consistent with the Commission's better regulation agenda. In particular we are following, subject to the time constraints prevailing, the draft impact assessment guidelines that have been developed by the 3L3 committees (CESR, CEIOPS and CEBS).
3. Section III sets out CEBS's views on the purposes of large exposures regulation. Here we identify and discuss the concept of 'unforeseen event' risk which we consider to be the main focus of such regulation.
4. Section IV sets out our market failure analysis (MFA) and regulatory failure analysis (RFA). We set out what we consider to be the potential market failures in this area and the ways in which market features and practices might be argued to eliminate or mitigate these failures. We reach the interim conclusion that market failure does persist to a certain degree in this area. However we are interested in receiving respondents' views on this aspect and – in particular in receiving any further input or evidence that stakeholders can provide on this question. Our MFA remains partial as a number of important aspects will not be considered until we address Part 2 of the Commission's Call for Advice.
5. Section V considers evidence of past failures and difficulties arising from single name concentration risk. There appear to have been only a limited number of such failures or difficulties. However it is difficult to draw conclusions about this given the long-standing existence of large exposures regulation. We provide examples of two cases of difficulties or failures associated with large exposures to groups of connected counterparties.
6. In Section VI we provide an update of our work on cost benefit analysis. Due to the time constraints it has not been possible to complete this work at this stage. A questionnaire is currently with a sample of institutions which seeks to obtain information about the costs of compliance with the LE regime. However this information will not be available until later in the summer. Accordingly the orientations set out in the CP remain provisional and will be reviewed in the light of the cost data when it is available, and respondents comments on this CP.
7. In Section VII we set out a summary of our analysis of the approach to large exposures in other jurisdictions. Although there are differences in the details, our analysis suggests that the different regimes are consistent

¹ <http://www.c-eps.org/Advice/advice.htm>

in their broad outlines and that European institutions will not be systematically disadvantaged by differences in regulation.

8. Section VIII considers the current large exposures limits. The first issue we consider is whether counterparty credit quality should be recognised in the large exposures limits. Our analysis suggests that given the nature of unforeseen event risk arising from default on large exposures, and having regard to the low but material default rates of highly rated entities, we are not persuaded that counterparty credit quality should be reflected in the regulation of this risk.
9. In Section VIII we also give consideration to the 800% aggregate limit on large exposures. We consider the purposes of this limit and request respondents views in respect of it.
10. Section IX considers the calculation of exposure values. We consider whether it is possible to achieve closer convergence between institutions' approach to these calculations for internal purposes and the regulatory requirements. We set out a number of principles which we consider may be appropriate to allow more sophisticated institutions to use their own internal calculations.
11. For less complex institutions we set out the current position on the use of national discretions in respect of conversion factors for off-balance sheet items. We seek respondents' views as to the how these items are treated for internal limits purposes, the perceived importance of these national discretions, and the basis upon which convergence might be achieved.
12. Finally, we seek to develop a small number of principles to govern the approach to the treatment of exposures to collective investment schemes, structured finance transactions, and other transactions where there is exposure to underlying assets.
13. CEBS submits its initial views for public consultation which will run until **15 August 2007**. Comments should be sent to the following e-mail address: cp14@c-eps.org . Comments received will be published on CEBS website unless respondents request otherwise.
14. The CEBS standard consultation period has been shortened due to the tight deadline set up by the European Commission. The European Commission expects CEBS to report back by the end of September 2007.
- 15.** When elaborating its views, CEBS has benefited from the input already gathered in the context of its survey of industry practices published on http://www.c-eps.org/Advice/LE_industryreport.pdf . **Moreover, a public hearing is being organised on 11 July at CEBS premises from 9:30 to 12:30 in order to allow all interested parties to share their views to CEBS.**
16. CEBS would particularly welcome market participants' views on a number of issues and questions including:

- 1. Do you agree with our analysis of the prudential objectives of a large exposures regime?**
- 2. With regard to the market failure analysis set out in Section IV, do you agree with the analysis that there remains a material degree of market failure in respect of unforeseen event risk?**
- 3. Do you have any further evidence that you consider useful for deepening the market failure analysis?**
- 4. Do you agree with our perception that there are broad consistencies between the EU LE regime and those in other jurisdictions such that there is no systematic competitive disadvantage for EU institutions? If not, could you please provide us with a detailed explanation of where you consider that competitive distortions arise?**
- 5. What are your views in respect of the analysis of the recognition of credit quality in large exposure limits and our orientation not to reflect further the credit quality of highly rated counterparties in large exposure limits?**
- 6. What do you consider to be the risks addressed by the 800% aggregate limit? What are your views as to the benefits of the 800% limit?**
- 7. What principles or criteria might be applied for an institution to demonstrate its ability to measure and manage the relevant risks?**
- 8. Do you consider that the principles outlined with respect to off-balance sheet items would be suitable to govern the calculation of exposure values by institutions using the Advanced IRB Approach for Corporate exposures and/or the Internal Models Method (EPE) for financial derivatives and/or securities financing transactions?**
- 9. Do you support harmonisation of the conversion factors applied to the off-balance sheet items set out in Section IX.II? How important are these national discretions?**
- 10. How are these facilities, transactions etc regarded for internal limits-setting purposes? What conversion factors do you consider appropriate?**
- 11. In the above analysis we have not given consideration to the appropriate treatment of either (a) liquidity facilities provided to structured finance transactions or (b) nth-to-default products. How do you calculate exposure values for such products for internal purposes?**
- 12. Do you consider the suggested principles set out in Section IX.III appropriate for application to institutions' exposures to collective investment schemes and/or structured finance transactions?**

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I. Introduction

17. Article 119 of Directive 2006/48/EC ('BCD') and Article 28 of Directive 2006/49/EC ('CAD') require the European Commission (the 'Commission') to submit to the European Parliament and to the Council a report on the functioning of the Large Exposures provisions of the CRD. A review of the large exposures framework is therefore being carried out by the Commission together with the European Banking Committee (EBC).
18. In December 2005, the Commission issued a first Call for Advice to CEBS on this matter². This requested CEBS to carry out a stocktake of current supervisory practices and a consultation on current industry practices. In response to this request CEBS has provided to the Commission, and published, a Supervisory Stock Take on Large Exposures³ and a Report on Industry Practices⁴.
19. In January this year the Commission issued a second Call for Advice to CEBS⁵. This requested CEBS's advice on substantive aspects of the large exposures framework. This advice is called for in two parts:
 - Part 1 of the advice is requested by end September 2007 - on the objectives and purposes of a large exposures regime; the purpose, need for and appropriate levels of large exposures limits; whether the large exposures regime can be considered to be achieving its objectives; examination of the 'metrics' for the calculation of exposure values; and consideration of the extent to which the credit quality of the counterparty can or should be recognised.
 - Part 2 of the advice is requested by end February 2008 - on the questions of credit risk mitigation; indirect concentration risk; intra-group exposures and other group-related issues; trading book aspects; reporting requirements; and consistency of definitions. In Part 2 it is also requested to address the question whether 'one size fits all' or whether a differentiated approach is desirable - for example in respect of more sophisticated and less sophisticated institutions, and having regard to the different types of institutions, particularly those that engage in specialised activities or services'. The question whether there is further scope for the incentivisation and reward of good credit risk management is also to be considered.
20. This Consultation Paper (CP) provides an early opportunity for stakeholders to provide their views and comments on key aspects of Part 1 of the Commission's second Call for Advice. The timescales within which CEBS's advice has been requested are extremely tight. Accordingly the considerations set out in this CP represent the initial thinking of CEBS on some of the key concepts underpinning a large exposures framework. To

² Call for Advice (No. 5) to CEBS on the review of the Large Exposures rules, 1 December 2005

³ Final Report - Supervisory Stock Take on Large Exposures, 2 April 2006, http://www.c-ebs.org/Advice/LE_report.pdf

⁴ Call for Advice from the European Commission on large exposures - Report on industry practices, 31 August 2006, http://www.c-ebs.org/Advice/LE_industryreport.pdf

⁵ Call for Advice (No. 7) to CEBS on the review of the Large Exposures rules, 4 January 2007

the extent to which the evidence gathered to date permits us, we also set out here our initial indications of the appropriate way forward. Thus, the document is not designed to set out an institution policy position but rather to present for comment CEBS's early views on some of the central conceptual aspects.

21. Also due to the tight timescales, several important issues have not been considered as part of this CP. These include group-related issues, whether further reliance on institutions' internal methods is achievable (though some important aspects of this question are dealt with in this CP – see for example sections VIII and IX below), reporting requirements, trading book treatment, collateral and unfunded protection, etc.. These issues will be considered as part of CEBS's response to Part 2 of the Call for Advice.

II. Better regulation

22. CEBS is developing its advice in this area in a manner consistent with the Commission's better regulation agenda. We are doing this by following, subject to the time constraints, the draft impact assessment guidelines that have been developed by the 3L3 committees⁶. The draft guidelines are consistent with the Commission's own IA methodology but have been refined to take account of the regulatory objectives of the committees and their existing working practices.
23. Central to the analysis set out in this CP is the use of market failure/regulatory failure analysis as a means of identifying the problem or problems that a large exposures regime could seek to address (in other words it helps us identify the purpose of the regime). We identify the potential sources of market or regulatory failure and describe the evidence of market /regulatory failure(s) gathered to date in the next section.
24. Cost benefit analysis (CBA) also forms a key part of the impact assessment process. We have developed a questionnaire that seeks to establish the incremental costs that the current regime imposes on institutions. The questionnaire, which has been distributed to a representative sample of institutions in 15 EEA Member States⁷, is attached at Annex 1.
25. We are also assessing the costs that the current regime imposes on the supervisory authorities charged with implementing it. These costs are being collected directly from the supervisory authorities. An initial read-out is included in Section VI.
26. Finally, we are using reporting returns in order to develop as full a picture as possible of the extent to which the current regime's limits constrain institutions' lending behaviour. An initial read-out of this is also included in Section VI.

⁶ This methodology is currently the subject of a separate 3L3 consultation paper 'Impact Assessment Guidelines for EU Level 3 Committees' May 2007, <http://www.ceiops.org/media/files/consultations/consultationpapers/CP%2021/CP3L3.pdf>

⁷ BE, FI, FR, DE, EL, HU, IE, IT, LU, NL, NO, PT, ES, SE, UK

27. Due to the short timescales imposed on us, we have not yet been able to complete our data and evidence gathering. Accordingly the findings set out in this CP should be considered provisional in the absence of such data. A number of indicators are available on the broad level of costs of the current regime and these have been taken into consideration. Nonetheless the preliminary views set out here will be reviewed not only in light of the responses received to this CP but also in the light of the cost data which will become available during the summer.
28. Effective stakeholder consultation is a central part of any impact assessment methodology. A further consultation on aspects of the large exposures regime not covered in this CP will be carried out during the next stage.

III. Objectives and purposes of a large exposures regime

29. The concept of large exposures fits within the more general concept of concentration risk.
30. We consider that concentration risk consists of three general aspects:
 - 1) undiversified idiosyncratic risk that makes a material contribution to unexpected losses within a chosen confidence interval (and in particular that represents a degree of non-diversification which is not reflected in credit risk capital requirements – e.g. the IRB capital requirement);
 - 2) sectoral and geographic concentration risk – that is the risk that exposures and correlations within and between the sectors and geographies represented within an institution's portfolio are such that they are 'understated' in the assumptions underpinning credit risk capital requirements; and
 - 3) what might be termed 'unforeseen event' risk - broadly speaking the risk of incurring a traumatic loss due to the occurrence of an event which is outside the parameters of portfolio capital allocation – whether that be regulatory or economic capital allocation.

III.I Undiversified idiosyncratic risk

31. It is clear that many institutions are now in a much better position to isolate, measure, and manage the effects of undiversified idiosyncratic risk than they were a few years ago.
32. Moreover, the IRB framework – with its assumption of a well diversified portfolio - makes it possible to think of this risk to a certain extent in additive terms: to the extent that a portfolio is not well diversified in terms of single names then the capital charge delivered by the IRB formula may be argued to be sub-optimal to the same extent (subject to what is said below about sectoral and geographic concentration risk).
33. There are in broad terms two options for how this risk can be addressed. First, we could seek to develop a 'granularity adjustment' which could be

incorporated within the 'Pillar 1' capital charge calculation. In this regard the recent work carried out by the Basel Research Task Force is particularly relevant - see BCBS Working Paper No. 15 'Studies on Concentration Risk'.⁸

34. Second, this aspect can continue to be dealt with under institutions' ICAAPs and the Supervisory Review process as envisaged under the CRD.
35. CEBS has formed an initial view that a Pillar 1-type granularity adjustment should not be developed at this stage and that it is a matter which is appropriately dealt with under the ICAAP/SREP process. The reasons for this include the fact that we remain at an early stage in the implementation of the new Pillar 1 and Pillar 2 charges under the CRD which should be given the opportunity to 'bed down' before any changes are considered. This is reinforced by the absence of international discussions and consensus around such a proposal. In addition, we consider it to be unproven that the benefits of the addition of such a Pillar 1 adjustment would outweigh the administrative and other burdens.
36. Accordingly CEBS's orientation is that the LE review should not focus on seeking to develop a Pillar 1 treatment (such as a granularity adjustment) for undiversified idiosyncratic risk.

III.II Sectoral and geographic concentration risk

37. Sectoral and geographic concentrations impact an institution's exposure to systematic risk. The composition of an institution's portfolio and the correlations between and within sectors and geographies may mean that an institution is exposed to systematic risk in ways that are not accurately reflected in its Pillar 1 capital calculation.
38. The modelling of these aspects of systematic risk is advancing – and indeed this has been a focus of the work of the BCBS's Risk Modelling and Management Group. The issue has also been considered by the BCBS's Research Task Force in Working Paper No 15.
39. While it remains very challenging to measure this risk accurately – in particular for data reasons and the difficulty of developing reliable correlation factors – nonetheless the issue has become much more clearly identifiable and discussable as a result of the introduction of the IRB approach (and using the IRB calculation as a reference point) and forms an important aspect of ongoing work and discussions.
40. CEBS has formed the preliminary view that it would not be practicable, given the state of the art and major impact on the workings of the recently introduced IRB formula, to seek to develop a pillar 1 treatment for sectoral and geographic risk within the context of the large exposures review. (Note that this does not prejudice the consideration of sectoral and geographic aspects as part of Part 2 of the call for advice.) We also

⁸ November 2006. See also Gordy 'Granularity Adjustment in Portfolio Credit Risk Measurement' in Szego, *Risk Measures for the 21st Century*, (Wiley 2004), Emmer and Tasche (2003) 'Calculating credit risk capital charges with the one-factor model' *Journal of Risk*, vol 7, no 2, pp 85-101.

note the argument that there can be a degree of trade-off between sectoral and/or geographic concentration and specialisation.

III.III Unforeseen event risk

41. CEBS considers that the central purpose of a large exposures framework is to limit the degree to which institutions are exposed to incidents of traumatic loss, likely to threaten their solvency, due to the occurrence of an event which is outside the parameters of portfolio capital allocation – whether that be regulatory or economic capital allocation.
42. We believe that while the advances in credit risk modelling and in regulatory capital calculation over past years have been significant, they have not removed this risk of traumatic loss due to 'unforeseen events'.
43. Risk measurement and capital allocation models can broadly be considered as consisting of two elements. The first of these is the 'inputs'. In the case of credit risk models these include the institution's estimates of PD, LGD and EAD together with the maturity of the exposure. Secondly, there are the outputs, or more particularly the formulae, by which are determined what is the incremental capital required for a given exposure in order to ensure that the portfolio remains capitalised at a given confidence interval.
44. We consider that while an institution may be 'adequately capitalised' at portfolio level, nonetheless events can occur which such a model is not (well) designed to capture.
45. An example of such an event would be the failure of a highly rated counterparty. This could be because an 'error' has occurred in providing the 'inputs' to the model so that a highly rated counterparty is in fact, and unknown to the institution, much closer to default than imagined. This could occur for example because the institution's credit analysis was flawed, because of fraudulent activity within the counterparty, etc. This may be the case even when the model is operating properly for the calculation of capital at the portfolio level.
46. Moreover, significant exposures to unforeseen events can be an important source of breach in the underlying assumptions of a model. For instance, concentrations to high-quality counterparties can result in important 'humps' or 'spikes' far into the tail of the loss distributions. These humps are difficult to capture in risk models and may give rise to very 'inaccurate' risk estimates.
47. In this context a key purpose of an LE regime can be considered to be to limit the fall-out for the exposed institution in the event of such an 'unforeseen' event arising from the failure of a single counterparty or group of connected counterparties.
48. Accordingly, CEBS has formed the view that an important prudential objective is to ensure that the risk of an institution incurring a traumatic loss due to the occurrence of an event which is outside the parameters of portfolio capital allocation is appropriately limited. It is with this objective

in view that we are carrying out our market failure, regulatory failure and cost benefit analysis and that we have reached the initial positions set out below on some of the key aspects of a large exposures framework.

49. For clarity, where we refer to 'single name concentration risk' in the remainder of this paper we are referring to unforeseen event risk related to large single name concentrations.

Q1. Do you agree with our analysis of the prudential objectives in this context?

IV. Market Failure / Regulatory Failure Analysis

50. As indicated above, CEBS is developing advice firmly within the principles of better regulation. A key aspect of this is that the review of the large exposures regime should be grounded in the concepts of market failure analysis (MFA) and regulatory failure analysis (RFA) and that the advice provided should reflect findings from that work as well as cost benefit analysis (CBA).⁹
51. For these purposes our MFA seeks to determine the nature and extent of the problems (i.e., inefficiencies) in the markets directly affected by the existing LE regime and the CRD in particular. RFA seeks to determine whether existing regulation is proportional in dealing with the issues identified by the market failure analysis. Our final RFA will incorporate outputs of our CBA which is currently under way – see Section VI. Our analysis includes an overview of the key markets affected by the LE regime, a description of the potential market/regulatory failures within these markets, and a discussion of other market mechanisms that may address these problems. Findings from this work underpin our consideration of the purpose of a large exposures regime more broadly.
52. At this stage, our MFA/RFA should be considered to be work in progress. As indicated, there are several aspects of the LE regime that will be considered in more depth under Part 2 of the Commission's Call for Advice. These include, for example, proposals on whether a 'one size fits all' regime may be efficient or whether more tailored regimes for, say, large and small institutions may be more appropriate. We are also interested in the views of stakeholders on aspects of the MFA. In particular, we have identified areas where further information and evidence would be beneficial in deepening our analysis as set out below. Stakeholders should however feel free to comment on any aspect of the MFA.

IV.I What are the relevant markets?

53. The LE regime essentially limits the extent to which institutions can be exposed to a single counterparty or group of connected counterparties. As such, it regulates the market for the provision of credit.

⁹Market failures broadly refer to departures from market efficiency and to situations in which there is a welfare loss. Regulatory failures are cases where regulation introduced to address a market failure is producing net costs or where the benefits are not as great as originally expected.

54. The large exposures framework currently applies to all banks and investment firms falling within the scope of the CRD. This includes the full range of banks from large systemically important institutions to small cooperative banks and the full range of CAD investment firms from the large broker-dealers to small brokers and asset managers. The appropriateness of adopting a differentiated approach to institutions of differing levels of complexity and types of business will come under consideration in Part 2 of the Call for Advice. The MFA carried out to date does not consider all these types of institutions specifically. However, the types of issues that we have discussed in the MFA, and the areas where we seek further clarification, could potentially apply to all types of institution.

IV.II What are the potential market/regulatory failures?

55. The stability of the financial system and integrity of financial markets are of significant concern to financial regulators. Any problems in the markets that have the potential to cause significant disruption to the workings of the financial system, or affect the integrity of financial markets, will be of concern to the regulator(s). Consumer protection is also a relevant consideration as the failure of an institution has the potential to significantly impact its depositors and other customers. Large exposures are a potential problem because they can be a source of difficulties or failure for an institution and, through contagion, can be a source of risk to other institutions in the system.
56. There appear to be two broad market failures that need to be considered in the context of the Large Exposures regime. In economic terms these can be described as 'negative externalities' and 'information asymmetries'. On the other hand, to the extent that these market failures could be considered to be remedied by mechanisms operating outside the scope of the regime it may be the case that the LE regime itself, or parts of it, represents a case of 'regulatory failure'. As mentioned, the purpose of our MFA/RFA is to provide insights into the extent of these problems as a step toward shaping our response to the Commission's Call for Advice.
57. The LE framework as it currently exists may be considered to represent a regulatory response to perceptions of market failure with regards to the management of large exposures and concentration risk.
58. In respect of 'negative externalities', it may be the case that institutions do not take into consideration the costs they impose (e.g., due to the risk of their failure) on third parties when making decisions about extending credit to single-name borrowers or in managing concentration risk. In other words they may fail to 'internalise' the social costs of the risks they undertake as part of their business.
59. Information asymmetries may arise between institutions and their key stakeholders, including investors, creditors, rating agencies, customers and supervisors, regarding both the extent of their large, single-name exposures, concentration risk and loan portfolio management practices more broadly. This may be exacerbated to the extent that an institution's

management does not act in the best interests of key stakeholders (i.e., when principal/agent problems arise).

60. If the potential market failures that have been identified are remedied by some other mechanisms that are operating in the market, then it is likely that the LE regime, or parts of it, represent a case of regulatory failure. Because the LE regime covers a wide variety of institutions, both in terms of institution size and institution type, it is possible that the LE regime may be a regulatory failure for some types of institutions but not for others. Understanding and establishing the extent to which these other mechanisms may be capable of achieving outcomes in line with the regulatory objectives outlined above are key objectives of our MFA.
61. It is also possible that the LE regime seeks to address a regulatory failure of the capital requirements provisions in that the CRD may not sufficiently address unforeseen event risk. Again, our MFA seeks to identify the extent of the problems related to unforeseen event risk and establish whether other mechanisms mitigate concerns in this area.

IV.III Evidence that suggests there is/is not a market failure?

62. The control of unforeseen event risk has been identified as the primary purpose of the LE regime. In undertaking the market-failure analysis we seek to determine the extent to which this issue is addressed by other mechanisms that operate in the absence of regulation. We have considered a variety of evidence in this regard. However, we are using this Consultation Paper to call for any further evidence and input from respondents on the extent to which the potential market failures outlined above can be shown to be resolved without the need for regulatory intervention.

Industry practices

63. It is clear from the 'Report on industry practices' that we published last year that single name concentration risk forms an important component of the institutions' internal credit risk management. We do not set out again here all the findings of that report. In addition to information provided by banking associations, CEBS collected information from more than one hundred banks and investment firms located in nineteen Member States. We note below some of the key findings which included:
 - a wide diversity of practices amongst institutions;
 - the use of limits by the vast majority of institutions. The most common practice is to set limits as a fraction of total capital. Some institutions express limits in terms of total assets. A few use limits based on the capital or assets of the counterparty;
 - a broad distinction between many larger/more sophisticated institutions and smaller/less complex institutions – with the former adopting internal practices operating in parallel to and separate from the regulatory requirements and the latter very often using internal approaches based on the regulatory framework;

- the belief amongst many institutions that their internal limits were more conservative than the regulatory limits in the great majority of cases;
 - the recognition by many institutions of counterparty credit quality in the setting of internal limits;
 - a wide range of internal policies for reporting large exposures, depending on the type of institution and the type of exposure. Generally regular reporting upwards of large exposures. Most institutions have formal policies and procedures requiring committee review and/or delegated authority approved by the Board prior to granting of credit in excess of stipulated sizes; and
 - a variable picture in respect of stress-testing.
64. Subsequent discussions with a small sample of large, internationally active banks confirmed our view of the important role that the management of concentration risk plays in institutions' risk management practices.
65. We noted with interest that, while practices varied, in a material number of cases the banks we spoke to set their limits in terms of a maximum amount of economic capital to be allocated to any single counterparty or group of connected counterparties or in terms of some concept derived from this. This means that the credit quality of the counterparty, together very often with estimates of other risk parameters, are integrated into the setting of such limits.
66. We noted that institutions using limits of this type often supplement their economic capital limits with limits based on the nominal amount of the exposure.
67. It was also confirmed to us that while institutions' internal limits were generally not absolute limits – in the sense that they could not be exceeded in any circumstances – they should not necessarily be termed 'soft' limits, since there are generally strict approval requirements for those limited number of cases where the internal limits may be exceeded. Though again practice in respect of the nature of limits varies.
68. It is clear to us that many institutions pay significant attention to and have well-considered policies and practices in relation to the management of concentration risk including single-name concentration risk.¹⁰ A key question for us therefore is whether these internal management practices left to themselves may be considered to deliver the regulatory objectives outlined above. This raises the question whether institutions' incentives and risk appetite can be considered in all material cases to be aligned with the incentives and risk-appetite necessary to achieve the internalisation of the social risks inherent in their activities.

¹⁰ It was noted for example that in respect of the significant large corporate defaults of recent years no banks experienced significant solvency difficulties. These defaults included ENRON whose ratings moved from BBB+ to D between Oct 16 and Dec 3 2001 and Parmalat which also had an investment grade rating (BBB-) not long before the difficulties emerged.

69. Institutions may have incentives to manage their risks in accordance with the regulatory risk appetite for a variety of reasons. These include:
- market discipline exerted on institutions by key stakeholders such as ratings agencies, lenders, shareholders, supervisors; and
 - management incentives to increase the value of their remuneration packages through, for instance, reduced earnings volatility and diversification of the balance sheet;

These incentives are considered in further detail below.

Management compensation and incentives

70. It is possible that the remuneration structures for institutions' senior management result in incentives for them to manage unforeseen event risk and limit their exposures to single-name counterparties. Parts of management remuneration are often linked to the performance of the share price of the institution. These remuneration packages are often designed to try and align the interests of senior management with the interests of shareholders. One way that institutions' management can try to maximise the share price is by reducing earnings volatility. Institutions with lower earnings volatility are generally seen as being less risky and so stable earnings are rewarded by the market in the form of higher share prices. As such, senior management may have an incentive to control exposures so as to limit the earnings volatility of the institution and increase their expected remuneration.
71. It is possible that the risk of criminal penalties for financial mismanagement may play a deterrent role. We are interested in whether respondents consider this to be a material factor.

Market discipline imposed by rating agencies

72. The market discipline imposed by ratings agencies may be one factor that incentivises institutions to consider the implications of unforeseen event risk. Many institutions target a particular rating, which is often higher than the implicit rating that might be considered to equate with regulators' risk appetite. Institutions will thus be keen to make sure that the rating agency is satisfied that its risk controls are sufficient to achieve the desired rating. This means that the approaches taken by rating agencies on this subject are relevant.
73. We have had meetings with two large rating agencies to explore their approach and views on these matters. We set out below a brief summary of our findings.
74. It is clear that concentration risk forms an important part of their assessment of a financial institution's risk profile.
75. Rating agencies adopt a mixture of quantitative and qualitative approaches with the balance between these varying.

76. Consideration of the institution's risk management processes and abilities forms a central aspect of the analysis.
77. The assessment of an institution's exposures to single name concentration risk generally commences with provision by the financial institution of a list of large exposures to counterparties or groups of related counterparties – e.g. top 20 large exposures. This list is comprised of 'gross exposures' – i.e., without taking account of risk mitigation such as collateral or the credit quality of the counterparty.
78. Such a list forms the basis for initial consideration. If it prompts material cause then the initial analysis will be overlain with further discussions with the institution. Such discussions take into consideration the institution's risk management abilities, risk mitigation practices, including the use/requirement of collateral, and the nature of the exposures, including the credit quality of the counterparties, the liquidity of the position, etc.
79. One rating agency which integrates a 'scoring' aspect to help inform its methodology indicates that an initial score is based on the level of a institution's top twenty group exposures. This score, however, may be adjusted where the exposures have a very high investment grade rating.
80. Another rating agency, which does not adopt a formalised scoring approach, incorporates factors such as the credit quality of the counterparties in discussions with the institution when forming a judgement on the overall risk situation. This agency noted that single name risk concentration was in general terms a 'negative' component of the overall rating assessment. In other words, an unduly risky position would tend to affect the rating unfavourably.
81. When questioned whether it was more appropriate to focus on levels of large exposures regardless of the credit quality of the counterparty or to focus on such levels taking into account credit quality, rating agencies indicated that this was a difficult issue. In general, they felt that it was relevant to focus on both aspects, a practice that is consistent with their own rating practices.
82. On the current regulatory large exposures framework, one rating agency commented that it felt that the 10%/ 800% 'definition' was in its view too high.
83. The conclusion is that ratings agencies do take into account concentration risk in their analysis of institutions. If it were the case that ratings agencies did not consider this risk in their assessment of institutions, then this would not act as a disciplining mechanism for institutions who are trying to achieve a certain rating and avoid higher funding costs. Many of the largest and most systemically important banks in the EU are rated by at least one of the three dominant rating agencies. In the light of these agencies' consideration of large exposures, rated institutions have incentives to ensure sufficient management of large exposures and single-

name concentration risks in particular to avoid rating downgrades and the higher funding costs that may result.¹¹

84. Against this we note that the regulatory and supervisory context within which a financial institution carries out its business is a material component of rating agencies' assessment of the credit quality of that institution. In other words there is likely to be a significant symbiotic interaction between the assessment of rating agencies and the existence of a high quality regulatory and supervisory regime. This interaction can produce significant benefits in the context of a resource-constrained world.
85. It is also the case of course that the perceived likelihood of government support for troubled banks is reflected in some ratings which can give rise to a circularity in terms of reliance on the discipline imposed by such ratings.
86. We note also that the perspective of rating agencies may be different from that of supervisors charged with appropriately protecting the public interest. Supervisors seek to ensure an appropriate level of prudential soundness of regulated institutions. Rating agencies may be said to provide opinions as to the relative probability that financial obligations will be met in a timely manner.
87. Moreover, rating agencies are not empowered to limit rated entities' risk exposure. Not only may the riskiness of a rated entity change and be reflected in a rating migration, it may also change quite rapidly and be difficult to observe so that it is not immediately reflected in the institution's rating. The question of how the dynamic of a large exposure might threaten a institution's solvency is discussed further below.

Other stakeholders

88. It may also be possible that other key stakeholders can contribute to the market's delivery of outcomes in line with prudential objectives by imposing market discipline on institutions' behaviour. Among others, these may include debt holders and uninsured depositors, particularly wholesale depositors and, perhaps to a lesser extent shareholders, acting to protect their interests. To the extent that these stakeholders consider the risk management practices of institutions in respect of concentration risk this may mitigate risk-taking incentives in regard to large exposures. This discipline may manifest itself in the form of lower funding supply and higher funding costs. The extent of such discipline depends on the degree to which these stakeholders both have access to information about an institution's large exposures and assess that an institution's risk management practices are not commensurate with these reported exposures.
89. The effectiveness of market discipline depends on two components. First, the availability of accurate and timely information to enable key

¹¹ Indeed, exposures that are excessive do seem to prompt further scrutiny by the ratings agency. It is reasonable therefore to assume that excessive concentrations could have an adverse impact on a firm's rating.

stakeholders to form a meaningful view on the issue in question (e.g., single name concentration risk). And second, the presence and effective engagement of a sufficiently large body of liability holders with the ability and willingness to process and act upon the available information.

90. It is our belief that the information concerning single name concentration risk which is made publicly available by institutions is relatively limited. We note that under Annex XII of the CRD, institutions' are required to disclose:
- the geographic distribution of their exposures, broken down in significant areas by material exposure classes; and
 - the distribution of the exposures by industry or counterparty type, broken down by exposure classes, and further detailed if appropriate.
91. This tends to suggest that, at present, the information available to liability holders as the basis of which they could formulate a considered view of the exposure of an institution to single name counterparty risk is either sparsely available, or not (at least directly) available at all. This of course could be changed by the introduction of further disclosure requirements if such action were considered desirable.
92. Generally, wholesale liability holders are better able than retail liability holders to manage and monitor their exposures to banks, and their incentives to do so may be stronger because, for example, their exposures are not protected by deposit insurance schemes. They are also more likely to withdraw or scale back funding as an immediate response to adverse news regarding the possible default of a counterparty to whom a bank is thought to, or known to, have a large exposure (if such information becomes available to them). Therefore wholesale funding may impose some discipline on banks to control their large exposures, amongst other things.
93. It is clear that, in aggregate, a significant proportion of European banks' funding is drawn from wholesale investors. EU banks had a total of approximately €12.2tn debt securities and interbank deposits outstanding to EU residents, against an approximate balance sheet total of €34.8 trillion, at end-February 2007¹². We consider that a large majority of holders of debt securities could be accurately described as "wholesale" investors. Additionally, a substantial proportion of deposits are likely to be held by large corporate entities or public sector bodies that would also fit that description.
94. However, the presence of wholesale non-equity liability holders who may potentially be in a position to exert discipline on banks does not guarantee that it will in actual fact be exerted, even if the relevant information is available to them because the costs of doing so may outweigh the private benefits. There are a number of reasons for this.

¹² UK data are for end-2006, and debt securities and bank deposits are not limited to liabilities held by EU residents. Data exclude Cyprus banks.

95. First, they may have taken risk-mitigating action, for example taking collateral or entering into netting agreements with their counterparties. Second, their ability significantly to reduce or withdraw their funding at very short notice may simultaneously act in the opposite direction to that described above, as it may make liability holders ultimately less exposed to a default of their counterparty. Third, the moral hazard of perceptions of implied government guarantees of support for their counterparty may also dilute incentives to exert influence. This issue may be particularly true, for example, in regard to institutions with exposures to systemically important banks. Fourth (and as suggested above), because assessing and analysing the information is costly, some may be content effectively to delegate monitoring to rating agencies, and to rely on their credit ratings.
96. Furthermore, private investors' risk appetite (which naturally has a bearing on their cost / benefit calculus of whether to exert influence) may not be aligned with that of supervisors whose task it is to protect the social interest.

IV.IV Interim conclusions and request for input

97. As discussed above we consider that there is a prima facie case of market failure in respect of unforeseen event risk – that is we consider that in the absence of either regulation or evidence to the contrary institutions will not automatically internalise the social costs of the risks of their failure. We are keen to obtain respondents' views and further input on this analysis.
98. We have seen that there are a number of market features which may mitigate this potential market failure. These include institutions' own practices and internal incentives, the activities of rating agencies, and the control potentially exercisable by other stakeholders such as debt-holders.
99. The question that falls to be answered therefore is whether the effect of these market practices is such that the incentives and risk appetite of institutions can be considered to be fully aligned with the objectives and risk appetite of supervisors.
100. At this stage, on the evidence available, we do not consider this to be the case for the following reasons.
101. In normal circumstances, institutions' own incentives combined with market discipline may lead them to adopt risk management practices well within the regulatory minimum. We see, for example, that institutions' own internal limits on most single name exposures are usually tighter than current regulation requires. However, this on its own is insufficient to demonstrate that regulation of large exposures is not necessary. There are a number of possible reasons why institutions' incentives may sometimes lead them to take on excessive single-name risk.
102. It appears that to a significant extent banks set limits to manage earnings volatility (and to satisfy the demands of external investors and credit rating agencies), whereas the current regulatory limits are designed to

reduce the risk of insolvency. In a benign macroeconomic environment in which banks' earnings are stable and healthy, such as that which is generally currently enjoyed by most European banks, this is likely to result in internal limits that are tighter than those demanded by regulators because the internal limits are designed to mitigate less extreme risks. But in a situation in which earnings have *already* become volatile and particularly under adverse macroeconomic conditions, banks' incentives may change. In such a situation, banks' managers may gamble for resurrection or stardom by extending a large amount of credit to a single name and thus taking on higher risk in an attempt to restore earnings to targeted levels.

103. Furthermore, in a hostile environment of this kind new profitable lending opportunities may be limited, and at least some existing clients are likely to be seeking further extensions of credit to help them trade through the macroeconomic difficulties. It is in such an environment that large exposures are most problematic, because it is in macroeconomic downturns, of course, that both the probability of default and of loss, given default, are likely to rise.
104. The cases of Johnson Matthey Bankers in the UK in 1984 and BAWAG in Austria in 2005/6 demonstrate that, when a bank gets into difficulties, its incentives may change whatever the wider macroeconomic climate. It demonstrates in particular that the vested interest that banks have in the survival of struggling counterparties to whom they are already substantially exposed can skew their incentives.
105. A lender exposed in this way may come to identify too closely with the borrower and the business 'vision' of its owners or managers. This can develop into an inclination to lend more, to preserve the value of what's already been lent ("putting good money after bad"), and/or to enable debt servicing to continue and so delay or avoid the need to make provisions.
106. A further argument is that for a minority of exposures, the internally determined and desired limits may be insufficiently tight even in normal circumstances. This may be the case for banks' exposures to other banks, particularly to large banks that might be those perceived to have implicit government guarantees of support or companies which may be considered "national champions".¹³
107. We note also that there is in many cases a close relationship between regulatory standards and bank behaviour: banks' internal limits may be influenced by regulatory limits (this appears to be particularly true for smaller European banks). If there were no large exposures regulation institutions' internal limits might change.
108. We have also noted that a large number of smaller institutions use the regulatory requirements as the basis for their internal large exposures risk management and control.

¹³ See, for example, see Acharya and Yorulmazer (2007), "Too Many to Fail – An Analysis of Time Inconsistency in Bank Closure Policies", *Journal of Financial Intermediation*, 16 (1), pages 1-31.

109. As we have discussed above, while the 'controls' deriving from the scrutiny of stakeholders such as rating agencies and other stakeholders can have a significantly beneficial effect, we do not at this stage consider, for the reasons set out above, that these controls will necessarily be effective in the absence of regulation to ensure that the regulatory objectives are achieved during those times when they might be most at risk – that is in the context of a troubled economy.
110. The evidence may however suggest that a relatively 'light touch' regulatory regime is appropriate in this context. Such a light touch regime may for example be considered to be embodied in a large exposures framework (such as the current one) where the regulatory limits operate as a 'regulatory backstop' creating a wide space within which institutions' are expected to manage the risks through their own systems, policies and practices. This might suggest that a beneficial aim would be to remove unnecessary 'frictions' between the regulatory framework and institutions' own internal practices, as for example is discussed below in respect of the calculation of exposure values.
111. As we have indicated our evidence gathering and analysis has been carried out within a very tight timetable in order to give stakeholders an early opportunity to have sight of our thinking and to provide comments and input and any further evidence that they consider relevant to the analysis outlined above.

Q2. Respondents are asked for their comments on the market failure analysis set out above. Do you agree with the analysis that there remains a material degree of market failure in respect of unforeseen event risk?

Q3. Respondents are asked for any further evidence that they consider useful for deepening this analysis.

V Evidence of institution failures or difficulties

112. As part of our analysis, we have considered the extent to which there have been incidents of institution failures or difficulties arising from single name concentration risk. We have reviewed research done previously into causes of bank failures and we have surveyed a number of supervisors in respect of their more recent experience. It should be noted that this review should not be considered exhaustive or comprehensive but rather designed to provide an indicative view of the matter.
113. We have reviewed work carried out by the Groupe de Contact and completed in 1999 in respect of the causes of banking failures and difficulties in the EEA 1988-1998.¹⁴ We have also reviewed the Basel Committee's Working Paper on Bank Failures in Mature Economies.¹⁵

¹⁴ Groupe de Contact Paper for the Banking Advisory Committee: The Causes of Banking Difficulties in the EEA 1988-1998. Unpublished.

¹⁵ BCBS Working Paper No 13 : Bank Failures in Mature Economies, April 2004, http://www.bis.org/publ/bcbs_wp13.htm

114. The Groupe de Contact case study sample comprised 117 cases, contributed by 17 countries together with national reports on banking difficulties from a limited number of countries. However, it is important to note that, for reasons of data manageability, Members agreed to restrict the number of cases to a maximum of ten from each country (and a minimum of five was suggested). Therefore, the sample represented only a proportion of the total number of difficulties experienced in the EEA banking sector over the time covered by the exercise (albeit the "most representative" cases for each country). Furthermore, there is likely to be a degree of bias in the sample towards larger and/or more "abnormal" cases. This should be borne in mind when considering the results. Notwithstanding this, 117 is not an insignificant number of cases, and the Groupe considered that the sample should be reasonably representative of cases of difficulty over the period.
115. Credit risk problems appear to have been a significant factor in a significant number banking difficulties.
116. While failures/difficulties have occasionally occurred where a key cause was single name concentration risk, difficulties arising from single name concentration risk do not appear to have been a significant factor within this risk category during the coverage of the reports in question. (Groupe de Contact: 1988-1999; the BIS Working Paper examined a number of banking crises in different countries from the 1970s to the 1990s). The Groupe de Contact report indicates that only in 3 out of the 117 cases considered was concentration risk to a small number of counterparties or the failure of a main creditor cited as a causal factor.¹⁶
117. Both the Groupe de Contact's work and the BCBS report indicate that difficulties arising from other types of concentration risk – e.g. arising from sectors, in particular the housing sector – appear to have been a more frequent cause of difficulties.
118. Credit risk problems in many cases appear to have been a symptom or result of another risk crystallising. Weak management and control appears to have been a frequent underlying problem.
119. We have not found evidence that there has been a significant number of failures/difficulties caused by a single name concentration risk in the period since 1999. However, the case of BAWAG which is described in the box below appears to be an important example of a large exposure to a counterparty or group of counterparties being a significant factor in the occurrence of solvency-threatening difficulties for a bank.
120. In respect of the relatively small number of occurrences arising from single name concentration risk during the periods covered by the reports, it is difficult to derive clear conclusions. This is because the large exposures directive was introduced in the EEA in 1994 with a Commission

¹⁶ The paper described the concept of "difficulty" as being taken to cover a wide range of events, including, for example, cases of bankruptcy, payment default, problems leading to forced merger, injection of capital or temporary State support, problems leading to a significant decline in profits and even losses, problems in a particular area of business which were compensated by profits in other areas.

Recommendation having been in place since 1986/87 and many countries having introduced large exposures regimes from the mid-1980s.

121. A brief description of two significant cases of institution failure or difficulties arising from large exposures are set out in the box below together with a summary of the experience in Norway in respect of the introduction of the Directive requirements in 1997.

JOHNSON MATTHEY BANKERS (JMB)

Johnson Matthey Bankers (JMB) was the banking, gold bullion and commodity trading subsidiary of the Johnson Matthey Group. JMB compensated for diminishing trading profits in gold bullion in the early 1980s by expanding its other lines of business, particularly commercial lending. As a result, JMB's loan & overdraft portfolio grew from £34mn in 1980 to £309mn in March 1984. Profits were good and capital adequacy was sound throughout.

JMB's loan book continued to grow in 1984. A substantial part of this growth was due to two large commercial exposures, which were loosely connected with one another and both of which were not of first-class credit quality. From 26% and 13%, respectively, of JMB's capital base in June 1983, they had grown to 76% and 39% of the capital base by June 1984. JMB had increased its exposure to these counterparties because previous loans made to them had begun to look doubtful: JMB hoped that lending further funds would enable the debtors to trade themselves out of trouble.

However, JMB did not make adequate provisions for these doubtful debts. On 25 September the auditors (following prompting by JMB's regulator) reported that substantial provisions were required against the two largest exposures and it became clear in the following days that JMB would no longer be able to carry on trading as a result of these and other provisions. The Bank of England, with the support from JMB's parent, the clearing banks and the gold bullion market, rescued JMB on 2 October.

Following the Bank's acquisition of JMB, it became clear that the roots of its problems were more deep-seated than the provisioning for the large exposures which triggered its failure. Systems and controls were inadequate, management was weak, exposures were insufficiently monitored and mitigated and the provisioning policy was insufficiently robust.

Prior to JMB, the UK large exposures regime was non-statutory, and limited to the supervisory guidance that "exposures to one customer or group of customers should not normally exceed around 10% of an institution's capital base". Following the failure of JMB it was decided in the UK that exposures over 10% of the capital base should incur additional capital requirements, and only in the most exceptional circumstances should exposures be allowed to exceed 25%. These rules remained in place in the UK until the implementation of the EU Large Exposure Directive.

BAWAG-P.S.K.

Before the crisis materialized BAWAG-P.S.K. was the 4th biggest bank in Austria with total asset of above EUR 50 billion and 1.3 million customers. The banking group was 100% owned by the Austrian Trade Unions and was primarily focused on the Austrian retail market.

The problems of BAWAG-P.S.K. **started in October 2005** with the bankruptcy of the world's biggest futures and commodities brokerage firm Refco following a massive accounting scandal. Phillip Bennett, the former chief executive at Refco was charged with securities fraud. Refco said the accounting problem went back at least to 1998. BAWAG-P.S.K. group had a long business relation with Refco and Refco's CEO Phillip Bennet. From 1999 until June 2004 BAWAG held a 10% stake in Refco, which was sold to an US buy-out firm. On 16 October 2005 it became known that BAWAG-P.S.K. had granted a EUR 350 million credit line to Phillip Bennet on 9 October 2005, just one day before the news about the Refco fraud was released. BAWAG had open credit lines to Refco in the total amount of EUR 420 million. The collateral BAWAG had on its books to secure the credit (Refco shares) turned out to be worthless. Despite these losses BAWAG-P.S.K. was confident that it would reach a positive pre-tax profit for the year 2005 and that its capital ratios would stay well above the regulatory requirements.

The BAWAG-P.S.K. case *came to the forefront of attention again at the end of March 2006*, when it was revealed that between 1997 and 2000 BAWAG had lost approx. EUR 1.3 billion in speculative trading activities. *The situation escalated at the end of April 2006* when US Refco's creditors claimed USD 1.3 billion in damages from BAWAG on alleged complicity in Refco's deception. In addition, Refco's bankruptcy judge decided to freeze BAWAG's US-assets (approx. USD 1 billion). The creditors claimed that BAWAG's business relation with Refco was much closer than previously stated.

Beginning of May 2006 the Austrian Chancellor and the Austrian Finance Minister together with the biggest Austrian banking and insurance groups agreed on a rescue package for BAWAG. It was decided that the state would give BAWAG a EUR 900 million guarantee to stop the massive outflow of funds that nearly brought down the bank. The guarantee has been valid until 1st July 2007. After the announcement of the state guarantee the outflow of customer funds stopped, the liquidity situation of the bank stabilized in the following months. End of December 2006 BAWAG was sold for EUR 3.2 billion to a consortium headed by Cerberus Capital Management LP, a private investment firm headquartered in New York.

The impact of introducing the regulation of large exposures in Norway in May 1997¹⁷

¹⁷ Before 1997, single-name risk was regulated by Norwegian bank laws, but the 1997 regulation meant a considerable lowering of limits, eradication of exemptions and collateral accepted.

In 1997, there were almost 200¹⁸ institutions under supervision. 134 of them were savings banks and 14 commercial banks. Many of the institutions were small. Ahead of the introduction of the LE regime, there was frequent dialogue between the two Norwegian trade associations and FSA Norway. Many questions were solved before the actual implementation and so the banks were well prepared for the new regime and its interpretation. Transitional rules allowed the institutions to have exposures larger than the 25% limit for a certain period of time after the new legislation was introduced.

The first reports from the banks in 1997, showed that 19 savings banks and 5 commercial banks at that point breached the 25% limit. Some of the banks had more than one net exposure above 25% of own funds. As the institutions had had some time to adjust, we believe that they had a larger number of exposures breaching the 25 % limit before the new regime was introduced. The same is the case with the number of exposures above 10 %. There were no banks close to the 800% limit at the first reporting date.

The connected clients requirement was the part of the new regulation that created most problems in the first two years, 1997 and 1998. Some of the smaller savings banks, operating in a limited geographic area with a small number of individual investors who were involved in most economic activity in the region, had great problems with applying the rule. In general, many of the banks did not adhere to the connected client requirements. They did report a reduction in the number of large exposures and breaches of limits, but when the FSA performed on-site inspections, they discovered in several banks that their interpretation of connected clients was rather liberal. Nevertheless, during 1999 and 2000 they managed to reach a common understanding with the institutions when it came to regarding clients belonging to the same group as connected. The need to regard partly owned companies who are also clients of the bank as connected risk is still frequently being questioned.

By the end of 1998, the commercial banks managed to build the 25 percent limit into their internal risk management routines. The savings banks did not fully adapt to the new regime until the end of 2001, although some breaches of limits occurred later than this. The 800 percent limit continued to effect only a very few institutions. Most of these institutions were small savings banks.

Conclusion

The introduction of the large exposure regulation resulted in a significant reduction in single-name concentration risk in Norwegian institutions. Commercial and larger banks adjusted to the regulation in a couple of years, medium-sized and small savings banks needed 3-4 years. 10 years later, supervisors still have discussions with the institutions about the connected clients requirement and are not confident that compliance with

¹⁸ Including also mortgage companies and finance companies, but not investment firms or branches.

this rule is satisfactory. The number of large exposures (above 10 % of own funds) has steadily decreased since 2003.

Ways the institutions have adapted

The LE regime made it necessary for the institutions to cooperate in a manner that might not have happened without the legislation. After it was implemented, the supervisors answered questions from typically medium sized banks asking whether they were allowed to share exposures in particular ways.

Some of the medium sized banks in the Norwegian market would prefer to be allowed to have larger exposures than the 25 % limit, and consider themselves sufficiently advanced to manage higher risk concentrations than the regulation allows. Most Norwegian banks, however, have internal controls that are in line with the large exposures regime and would not anyway increase their concentration risk. All the larger banks did adapt to the LE regime immediately and seem never to have any difficulties or restrictions on their business which incurred extra costs related to the LE regime.

Some of the smallest savings banks have disappeared. For quite a few of these, the large exposures regime effectively limited their capacity to extend exposures to their largest clients and eventually caused them to merge or accept buy-outs. For others, increasing their own funds has been the solution.

Example - XY Bank

XY Bank is a small, local savings bank. At year-end 2002 it had total assets of less than 90 million €. It reported at the same time a capital ratio (net own funds) of 10,37%. It is now among the 30 smallest Norwegian banks (out of 160).

In 2000, the bank reported three breaches of the 25 % limit. The exposure to one of these corporations breached the same limit 2 years earlier. In 2000, FSA Norway pointed out the breach of the regulation to the bank in a formal letter, and required it immediately to reduce the exposures and to establish routines to make sure that the large exposure regulation would be adhered to in the future. An on-site inspection was performed in 2001, with the focus on large exposures and credit management/loss. A copy of the report from the inspection was sent to the bank's Control Committee where the responsibility of the Control Committee was made clear. During the following two years, the bank was repeatedly breaching the 25 % limit and was instructed by FSA Norway to reduce/transfer the exposures and even threatened with fines. The bank's assessment of the credit quality of the large clients was very different from that of the supervisors. The reductions that were made, happened through selling the exposures with the lowest risk – because they were the only ones that had any buyers.

In the summer of 2002, the newspapers reported a serious internal fraud by an employee of one of the corporations on the bank's list of breaches of the 25 % limit. Simultaneously, the Control Committee, now being very much aware of its responsibility, informed FSA Norway of the bank's failure to consolidate connected clients. A new on-site inspection was completed at short notice, and FSA Norway concluded that the board and management of XY Bank should be replaced and that considerable loan loss provisions needed to be made. The need to question the board's performance was communicated to the supervisory board. This in turn led to the replacement of the board (with one exception) immediately afterwards. The new board had confidence in the manager of the bank for quite some time, but after approximately 9 months he was also replaced.

Surprisingly, the bank was able to carry through an equity issue with local investors and friendly banks as the main contributors. This should be seen against the background of strong local support of the bank. At the same time, large loan loss provisions were made. The bank is still in business and is not regarded as being at risk of failure as it has improved its credit management considerably.

VI. Cost Benefit Analysis

122. Having identified whether a market or regulatory failure exists, the next step in any impact assessment is to consider the ways in which this might be addressed and the costs and benefits of the alternative ways of doing so.
123. However, since a key part of the Call for Advice is an ex post evaluation of the existing large exposures regime the approach that we have adopted is to seek to establish in the first instance the costs of the current regime. This will provide information against which the benefits of the regime may be compared and a benchmark against which possible changes to the regime can be assessed.
124. Due to the very tight timescales involved, it is not possible to present at this stage the results of our cost-gathering exercise. An EU costs assessment is currently underway, which seeks to identify the costs incurred by institutions in order to comply with the regime. A questionnaire designed to identify all the costs of the current regime has been sent by members of the CEBS LE WG to a representative sample of institutions in each of their jurisdictions.
125. This costs assessment exercise is not intended to deliver very high levels of accuracy in the costs assessment – in part because of the difficulties in quantifying some of the costs involved e.g. the opportunity costs – nor to be exhaustive – for example not all countries are included in the assessment. It is however intended to deliver a good and fit for purpose overall view of the nature and level of the costs associated with compliance with the current regime. This questionnaire is attached for information at Annex 1.

126. It may be noted, however, that there is some information to hand on the costs of the current regime. In response to a request from the EBC, ISDA, LIBA and the BBA surveyed a small number of institutions in order to identify the ongoing incremental compliance and opportunity costs imposed by the regime. Their tentative conclusion was:

'Assuming a population of 30 large, internationally active, diverse financial institutions...the total cost of the LE regulation across the EU, could be as much as €255MM a year. This consists of operational costs of €75MM and a conservative estimate of opportunity costs of €180MM (€6MM per financial group...).'

It should be noted that the cost estimates in respect of opportunity costs in the ISDA/LIBA/BBA survey were very diverse and likely to be quite fragile. Responses indicated 'a range for the average total opportunity cost of approximately €0.06MM – €350MM'

127. This suggests that it would not come as a surprise if our own cost-gathering exercise concluded that, for the more complex institutions involved, the incremental costs of the regime are material but relatively modest.
128. For the many smaller/less complex institutions subject to the regime, we suspect that it does not impose material incremental costs. This is because they utilise the LE regulatory framework as the basis for their own risk management and would continue to incur the same costs in the absence of the LE regime.
129. It must be stressed however that the above are not conclusions that CEBS has yet reached. The views set out in this CP will be reviewed once the cost-gathering exercise has been completed.
130. We are also assessing the supervisory costs of the current framework. These will be incorporated alongside the industry compliance costs in the costs benefits analysis which will form an important component of CEBS's advice to the European Commission. We have collected data as set out in summary form below. However we have not yet had the opportunity to review or analyse this data.
131. We collected indicative high level cost data for the supervision of large exposures and used the year to 31 December 2006 as the basis for its estimates. Eleven members supplied cost data which had been prepared on a 'best effort' or estimated basis. Five members did not consider it possible to isolate the costs in a meaningful way, and of these, one considered the costs to be negligible.
132. Of those members that supplied cost data, the number of institutions they supervise that are subject to the large exposure rules is approximately 4400 and the range of institutions supervised by these members ranged from approximately 80 to 1800 institutions. The majority of members that supplied cost data supervised between 200 - 400 institutions. Some supervisors participating in the exercise supervise only credit institutions

while others have responsibility for a range of credit institutions, investment institutions and asset management firms.

133. The total cost for the eleven members that provided cost data was estimated to be in the region of €3.4 million. This cost includes supervision activity specifically in relation to large exposures and systems costs and time associated with the monitoring of large exposure reports.
134. The average cost per institution when comparing an individual members' estimated costs to the number of institutions that member supervises for the purposes of the large exposure rules ranged from approximately €170 to €2800 for the year. But it is important to note that in preparing the estimates of costs, members took different factors into account. Also, the average cost figures do not reflect that the intensity of supervisory effort and action in respect of large exposure issues may vary for example as a result of the size and nature and the particular circumstances and risk profile of an institution and the availability and use of different supervisory tools and methodologies.
135. Overall, the estimated costs for the supervision of large exposures appear to be modest. But in making their responses, members commented that large exposure issues form just one part of the ongoing relationship of the relationship between a supervisor and an institution.
136. Quarterly reporting returns are being used to compile information on the extent to which institutions reported large exposures during 2006. This will help us consider the extent to which the current limits constrain institutions' lending decisions. We have had an opportunity to have an early look at the figures gathered. However we have not yet had an opportunity to review these figures in detail or to analyse them.
137. We collected data for the four quarters of 2006 on large exposures from 16 member countries. Averages are calculated across all four quarters. The total number of institutions included to date is 143 banks and 31 investment firms (including four asset management firms). This sample is of course not large enough to be representative for European institutions. However, the groups aim has been to obtain a general picture of the number of large exposures divided into 10-20% of own funds, 20-25 %, and above 25 % of own funds. We have only looked at gross amounts when it comes to individual exposures, but we have looked at the impact of the permitted exemptions and partial exemptions for the sum of large exposures per institution.
138. For all categories of banks in this sample, the average number of large exposures between 10-20 % of own funds is 13. There was an average of 1.5 exposures in the band between 20-25 % and 2.8 above 25 %. Investment firms appear to have a lower number of large exposures than banks. The average number of large exposures for this type of institutions is 6,65, independently of size of the exposure.
139. On average, the net sum of large exposures amounts to 48% of the gross amount. This means, that application of permitted exemptions and partial

exemptions reduces the large exposures by 52%. As a percentage of own funds, the average net sum of large exposures is 133% for all banks.

VII. Other jurisdictions

140. In considering the market failure/regulatory failure analysis, we have also to consider the approach to the regulation of single name counterparty risk in a number of other jurisdictions. It is clearly of interest to see whether other jurisdictions have concluded that single name concentration risk represents an aspect of market failure that requires regulation and if so whether that is to a greater or lesser degree than in the EU.
141. We have reviewed to the extent practicable the regimes in operation in the US, Canada, Japan, Switzerland and Australia. In general we have found significant degrees of similarity between the regimes in operation in these countries. This likely reflects to a material degree the influence of a 1991 paper of the Basel Committee on large exposures.¹⁹ In particular all set limits on the maximum amount of exposure to a counterparty or group of connected counterparties. And in general these limits are no higher and in some cases are lower than the limits in operation in the EU. The credit quality of the counterparty is not taken into account, except in one jurisdiction where the domestic regime for smaller banks allows risk weights to be applied. A range of exemptions is permitted. Further details of our analysis are set out in Annex 2.

Q4. Respondents are asked whether they agree with our perception that there are broad consistencies between the EU LE regime and those in other jurisdictions such that there is no systematic competitive disadvantage for EU institutions? To the extent that you do not agree with this we would be grateful for a detailed explanation of where you consider that competitive distortions arise.

VIII. The large exposures limits

142. This section considers some alternatives for the modification of the system of large exposures limits as they currently apply in the non-trading book.

VIII.I. The recognition of credit quality in large exposures limits

143. In our contacts with industry – in the context of compiling the Report on Industry Practices and elsewhere – one of the common suggestions made by industry participants is that any limits designed to determine the maximum exposure to a single counterparty should incorporate the credit quality of the counterparty in determining the maximum size of such a limit.
144. CEBS thinks it is important to give careful consideration to this question having regard to the objectives of a large exposures regime as set out above – that is to ensure that the risk of an institution incurring a

¹⁹ Basel Committee on Banking Supervision – Measuring and controlling large credit exposures (January 1991)

traumatic loss due to the occurrence of an event which is outside the parameters of portfolio capital allocation is appropriately limited.

145. For the purposes of this section, it is assumed that a system of limits will be retained going forward. We do not consider here whether there may be alternative approaches available for more sophisticated institutions.
146. It should be noted that we do not deal here with the question of whether institutions' own estimates of PDs and/or LGDs should be recognised for the purpose of large exposure limits²⁰. Rather we confine the argument to the general question of the extent to which, in principle, the credit quality of the counterparty should be recognised in such limits.
147. If we consider that the aim of the LE regime is to protect against the impact of unforeseen events, a key question is which events should be considered sufficiently plausible to include. It would be inefficient to seek to protect against all events no matter how implausible their occurrence. This is already recognised in the CRD where exposures to sovereigns risk-weighted at 0% under the Standardised Approach may be excluded from the limits, along with a number of other exposure types.
148. In this respect, arguments might be identified for giving recognition, to a greater or lesser extent, to the credit quality of the counterparty in the setting of the limits. The central argument would be that the creditworthiness of some counterparties may be considered of such a quality that their likelihood of default should be considered sufficiently low not to give rise to a need for restriction under large exposures regulation.
149. Putting this another way, if a central part of the 'unforeseen event' risk we are concerned with is the possibility that a counterparty rated, say, AA, to which the institution has a large exposure will default, how plausible is it that that counterparty will in fact default.
150. By way of illustration we have considered the 'default risk' associated with the different rating grades of two rating agencies. We observe one year cumulative average default rates for corporates in the following ranges based on 23 and 25 years of data respectively. (Please note all figures given are general approximations.)
151. AAA 0%
- AA c. 0.01%
- A 0.02% - 0.06%
- BBB 0.20% - 0.24%
- BB 1.07% - 1.27%
- B 4.99% - 5.26%

²⁰ Note however that the question of firms' own calculations of exposure values is addressed at section IX.

C [c. 20%-30%]

152. Taken on their own these figures might suggest that the likelihood of any investment grade, or at least A- or better-rated counterparty, defaulting is sufficiently low for supervisors to consider that an institution's probability of remaining solvent despite holding large exposures to such an counterparty is appropriately high (assuming appropriate levels of capital at portfolio level etc).
153. However, this picture is complicated by two aspects. The first is the fact that such figures represent *average* default rates. And the second is the fact that even assuming no correlation between such defaults, for each doubling of the number of large exposures to, say, AA-rated counterparties, the likelihood of experiencing a large exposure default is also doubled.
154. If we look at default rates for particular years however, the picture is different. While there have been no corporate defaults in the AAA category the number of rated issuers in this category is relatively small. It is likely that the 'true' default probability for this 'low default portfolio' is higher than this. In respect of AA-rated entities, 1989 saw a default rate of 0.596% for one agency, while 1999 saw a default rate of 0.17% for another. For A-rated entities 1982 saw default rates above 0.2% for both agencies considered and 2001 showed default rates of 0.35% for one agency and 0.155% for the other. Similarly BBB-rated entities showed default rates materially higher than the 1-year cumulative average in a material number of years.
155. Such default rates suggest that there remains a material risk of traumatic loss in the case of very large exposures to such counterparties. We note also that many institutions themselves appear to use nominal amount limits in addition to, for example, limits reflecting economic capital absorption.
156. We have also carried out some further analysis to assess whether it might be considered that in respect of unforeseen event risk there may be material differences between different rating grades in the investment grade category sufficient to justify different weightings for the purposes of any large exposures limits
157. It should be noted that the scenarios examined are highly stylised and the simplifying assumptions made considerable. Accordingly the conclusions drawn should be pressed no further than considering whether we observe significant differences for 'unforeseen event' risk between AAA, AA, A and BBB ratings. Our analysis is set out in the box below.

Stylised scenario analysis

Amongst the highly stylised parameters set for the purposes of this analysis are the following:

- the defaults of obligors occur independently. In fact such defaults will be materially correlated;

- we have used for our analysis the 'worst year' default rates for each rating grade, using just the default data of one rating agency;
- in both scenarios we assume that all exposures of the institution are of the same rating grade;
- in scenario (1), we have assumed that the aggregate size of all credit risk exposures would equal the capital of the institution;
- in scenario (2), we fix the numbers for the bank at between 1 and 100 exposures and assume that all exposures are of the same size.

Accordingly the analysis has no meaning in terms of 'absolute' riskiness, it is purely relevant to the relative riskiness of large exposures of different credit qualities.

Assuming that a large exposure regime is attempting to prevent the risk that unforeseen defaults of one or a few counterparties could make a bank insolvent, we will assume that we want the bank to remain solvent with 99.5% probability in any given year. This probability interval is taken for illustrative purposes only and should not be taken as an indication of an actual solvency probability target.

Scenario 1: For a given aggregate size of all credit risk exposures, how does the minimum acceptable number of exposures vary depending on the rating of the counterparties?

The smaller the proportion of its capital base used by any single exposure, the less likely it is that a few unforeseen defaults will make the bank insolvent. Accordingly it is worth investigating, under our stylized assumptions, whether we observe that the number of exposures of a particular rating grade which an institution's capital would need to be divided across in order to remain below the acceptable risk threshold is significantly different across, say, investment grades.

In a very stylised model we consider that the aggregate size of all credit risk exposures would equal the capital of the bank, so that it needs all these exposures to default to become insolvent:

$$P(\text{Bank defaults}) = P(\text{Capital wiped out}) = P\left(\sum_{\text{Defaults}} EAD = \text{Capital}\right)$$

In order to make the calculations straightforward, we assume that the defaults of obligors occur independently. We also assume that all exposures have the same rating and the same size. This is also unrealistic but allows easy calculations. It is also unrealistic to assume that the aggregate exposure is equal to the capital of the bank. Typically it will be larger. However these stylised assumptions do not necessarily impair the ability of the model to provide an answer to the question posed, i.e. whether a given exposure should be partitioned between more or less counterparties depending on their rating.

Capital is partitioned into N_R exposures, independent, of rating R. The probability that all N_R exposures default together is equal to the probability that the bank defaults:

$$(PD_R)^{N_R} = P(\text{Bank defaults})$$

If an insolvency risk appetite were 99.5% then we must have N_R such that:

$$(PD_R)^{N_R} \leq 0.5\% \Rightarrow N_R \ln(PD_R) \leq \ln(0.005) \Rightarrow N_R \geq \frac{\ln(0.005)}{\ln(PD_R)}$$

This means that the higher the probability of unforeseen default of the bank's counterparties, the more the capital base will need to be partitioned. The following figures illustrate the extent to which this varies across ratings. As mentioned earlier the proxies used for the unforeseen default rates were the observed default rates in any given year. We have used the default rates published by S&P since 1981. No default has ever been observed in the S&P AAA cohorts since 1981, so we have used a linear extrapolation from the rest of the rating scale.

	Highest default rate since 1981*	NR
AAA	[0.09%]	[0.76]
AA	0.17%	0.83
A	0.35%	0.94
BBB	1.00%	1.15
BB	4.20%	1.67
B	13.80%	2.68
CCC/C	44.95%	6.63

Values of NR below 1 mean that capital can be taken up entirely by just one such exposure and the 99.5% solvency target will be met. So for example for B, $N = 2.68$, which means that capital ought to be divided into 2.68 single exposures, or equivalently that any single B exposure should take no more than $1/2.68 = 37\%$ of the capital.

Again the assumptions are too simplistic (independence, homogeneity of exposures, etc.) for the results to be relied on in absolute terms. However the one possible conclusion to take away from this analysis is that the results do not appear to vary substantially from AAA to BBB. It is only after BB that different ratings start pointing to different answers.

Scenario 2: For a given number of exposures, does the maximum proportion of capital that they can take up vary across ratings?

In this configuration we are fixing the number of exposures and letting the aggregate exposure size vary. The starting point is the same, i.e. the probability that the bank defaults is equal to the probability that the sum of the exposures of its credit risk defaults exceeds its capital base:

$$P(\text{Bank defaults}) = P\left(\sum_{\text{Defaults}} EAD \geq \text{Capital}\right)$$

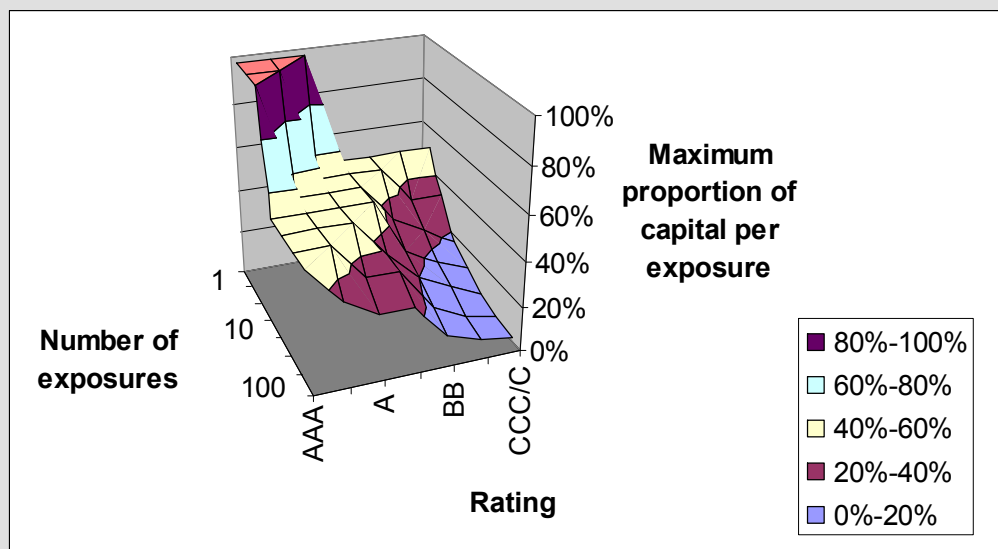
Again assuming that all exposures are homogeneous in terms of size (E) and rating (R), and still with a solvency target of 99.5%, we have:

$$P(\text{Bank defaults}) = P\left(\sum_{\text{Defaults}} E \geq \text{Capital}\right) = P\left(\# \text{defaults} < \frac{\text{Capital}}{E}\right) \leq 99.5\%$$

If the defaults are assumed to occur independently then this boils down to finding the 99.5% quantile of the binomial distribution with parameter PD (the probability of unforeseen default in a rating grade) and N (the number of exposures). Adopting the same PD estimates as in the previous analysis, we get the following results:

Counterparties	1	2	5	10	20	50	100
AAA	100%	100%	100%	50%	50%	50%	50%
AA	100%	100%	50%	50%	50%	50%	33%
A	100%	50%	50%	50%	50%	33%	25%
BBB	50%	50%	50%	50%	33%	25%	20%
BB	50%	50%	33%	25%	20%	14%	9%
B	50%	33%	25%	17%	13%	7%	4%
CCC/C	50%	33%	17%	11%	6%	3%	2%

The percentages are the maximum proportion of the capital that can be taken up by a single exposure with a 99.5% solvency target. Again, as in the previous analysis, reliance should not be placed on the absolute magnitude of the figures.



One conclusion that can be taken away from this very stylised analysis is that the number of counterparties does appear to make a difference. As

against this, for say 10 exposures the insolvency risk would be the same for all investment grade ratings.

158. On the basis of our analysis to date, CEBS has formed the opinion that it does not seem justified to introduce counterparty credit quality so as to relax or remove the regulatory large exposures limits for highly rated counterparties.
159. While there is little or no evidence of defaults in the AAA category, this can be considered a classic 'low default portfolio' situation where it is simply the lack of data/as yet unrealised default rate that is causing the appearance of such exposures being without risk. The analysis provided suggests that the actual default likelihood in the context of AAA entities should not be considered to be of a wholly different order of magnitude to AA entities.
160. In respect of other investment grade entities there is evidence of material levels of default in particular years. The greater the number of such large exposures held by an institution, the more significant the risk.
161. Moreover an important consideration in respect of a regime where large exposure limits would vary by rating is that in a downturn counterparties would be downgraded, and as a result the bank would be forced to reduce its exposure to them, thereby potentially accelerating their deterioration and amplifying the magnitude of the crisis. Factoring in this aspect would mitigate any benefits that might derive from such an approach.
162. Our view is that 25% of own funds remains a large amount. We note that an exposure equal to 25% of own funds, could equal 50% of Tier 1 capital under the Directive provisions. We believe that default of a counterparty exposure of this size should be considered in itself close to the threshold of what an institution could sustain without its solvency being seriously threatened. This contributes to our view that it would be undesirable to increase the limit for high credit quality counterparties.
163. It is also our view that in respect of certain types of unforeseen event – e.g. the default of a counterparty due to fraud – it is not clear that in principle it would be appropriate to distinguish between counterparties by rating grade. To the extent that credit quality is considered relevant to unforeseen event risk, some members have noted that it might appear that this is most material at the sub-investment grade level.
164. It might be considered, as mentioned above, that the 25% limit operates as a long back-stop regulatory limit, which provides a very wide space within which reliance is placed on institutions to manage single-name concentration risk, alongside other forms of concentration risk, within their own risk management systems.
165. The above analysis is provided without prejudice to, for example, the current potential exclusion from large exposures limits of 0% risk weighted sovereigns. It is considered that there are likely to be cases of

extremely high quality counterparties with such distinctive features that the risk of default is so minimal that exemption can be justified.

Q5. Respondents are asked for their views in respect of the analysis set out above and our orientation not to reflect further the credit quality of highly rated counterparties in large exposure limits.

VIII.II The 800% limit

166. The LE Directive imposes an 800% aggregate limit on large exposures (i.e. exposures >10% of own funds shall not exceed 800% in total).
167. We have given some consideration to the purposes of this aggregate limit. To the extent that an institution's portfolio exhibits a significant degree of 'lumpiness' this means that the idiosyncratic risk of the portfolio has not been diversified away. In such a case the 'Pillar 1' capital requirements may not be sufficient to cover the unexpected loss on the portfolio. Accordingly, the 800% limit might be argued to be a mechanism for limiting the extent to which losses not covered by Pillar 1 capital requirements are inherent in the portfolio.
168. There is also the question of concentration risk arising from an institution's portfolio being non-optimally diversified due to excessive concentration in a given sector or sectors, or geographically. It may however be argued that, having regard to this aspect, the unexpected loss on a group, say, of 80 exposures will be the same as the unexpected loss on a group of 800 (where the total amount of exposure is the same). And that any differences in unexpected loss in such cases will derive from the difference in the idiosyncratic risk aspect of the portfolios and not from the sectoral/geographic correlation aspects per se.
169. We have not yet reached an institution view concerning the benefits of the 800% aggregate limit. On the one hand it may be that the 800% limit provides a useful regulatory backstop limit in particular for smaller and less complex institutions. On the other, there are arguments that this rule might be replaced by a more principles-based approach to be given effect under Pillar 2, possibly for qualifying institutions.
170. We are interested in respondents' views on the benefits of the 800% aggregate limit.
171. We are also interested in obtaining respondents' views concerning possible principles that might be applied to determine that an institution has sufficient ability to measure, manage, and appropriately allocate capital to the risks targeted by the 800% limit. Such principles would ideally draw upon the methodologies that institutions use internally for addressing, for example, undiversified idiosyncratic risk.

Q6. What do you consider to be the risks addressed by the 800% aggregate limit? What are your views as to the benefits of the 800% limit?

Q7. What principles or criteria might be applied for an institution to demonstrate its ability to measure and manage the relevant risks?

IX. Calculation of exposure values

172. An important issue in the review of the large exposures framework is the calculation of exposure values. In CEBS's review of industry practices carried out during 2006 it emerged that many institutions – in particular more complex institutions – calculate exposure values for their internal risk management and limits systems in manners that are different to that required for the large exposures requirements.
173. For many smaller and less complex institutions it appears that this is a lesser issue as many of them use the large exposures framework as the basis for their internal risk management.
174. In respect of the more complex institutions, there appears to be a fairly wide diversity of approaches as explained further below.
175. The purpose of this Part is to consider the merits of modifying the exposure calculation requirements under the LE framework to bring them more into alignment with institutions' internal risk management and measurement systems.
176. Four broad categories of exposure are relevant for the purposes of this note – (1) on-balance sheet items; (2) off-balance sheet items other than financial derivatives and securities financing transactions; (3) financial derivatives and securities financing transactions; (4) collective investment undertakings, structured transactions and other arrangements where there is exposure to underlying assets.
177. It should be noted that it is not the purpose of this document to consider the question of the effect of collateral (or LGDs) on the calculation of exposure values (except in relation to aspect (3) above where it is appropriate to consider the effects of collateral as an integral aspect of the exposure value calculation).

IX.I Current requirements and practices

(1) On-balance sheet items.

178. The CRD does not expressly specify how to calculate exposure values in respect of these items. However this has not been problematic as most institutions and supervisors take the view that, consistent with the CRD requirements for solvency purposes exposure, values for these items should be based on relevant accounting standards.

(2) Off-balance sheet items (other than financial derivatives and securities financing transactions).

179. For credit risk capital requirements purposes the CRD provides a list of High, Medium, Medium/Low, and Low risk items and requires banks to apply conversion factors (CFs) to the nominal amount to arrive at a Credit Equivalent Exposure amount (CEE) for the purposes of calculating risk weighted assets. Under the Standardised Approach the CFs are 100%, 50%, 20% and 0% respectively. For the FIRB the categorisation is different and there is an additional conversion factor of 75%. For the AIRB institutions are, in general, required to estimate their own conversion factors.
180. For LE purposes the general principle is that the exposure amount is taken as the full nominal amount without the application of conversion factors. There are however national discretion options to apply conversion factors in certain cases. So for example (a) medium/low-risk items may be taken at 50% of their nominal amount; and (b) low risk items may be taken at 0% to the extent that the counterparty has agreed not to allow the exposure to breach the large exposure limits.
181. The available information on industry practices is not particularly clear (with only a few respondents having addressed this aspect in their response to the CEBS industry stocktake questionnaire). However the picture appears to be a mixed one – with many institutions applying the full nominal amount of the item for internal purposes and others using the regulatory conversion factors or internally estimated credit conversion factors.

(3) Financial derivatives and securities financing transactions.

182. For solvency purposes there are a range of ways of calculating exposure values for financial derivatives and securities financing transactions. These include the Mark to Market method, the Standardised Method and the Internal Models Method for financial derivatives; and various volatility adjustment methods, VaR modelling and the Internal Models Method for securities financing transactions.
183. The most significant issue here is likely to be whether or not use of the Internal Models Method (EEPE) is appropriate for large exposures purposes. This method was developed for credit risk capital requirement purposes under the Trading Book Review late in the finalisation of the CRD. It was decided to make it available for large exposures purposes also – but in the knowledge that the issue would be looked at as part of the Large Exposures review.
184. Institutions approved to use the Internal Models Method are permitted to model the potential distribution of future values for a given netting set. For EEPE purposes they take the average positive amount (50% confidence interval) of these exposure values, time weight them, and then scale up for roll-over risk and wrong way risk to arrive at the exposure value to be used.
185. Although the Trading Book Review refers to the concept of 'peak exposure' as a comparison with 'expected exposure', 'peak exposures' are

not required to be used for CRD purposes. 'Peak exposure' is described as 'a high percentile (typically 95 per cent or 99 percent) of the distribution of exposures at any particular future date....' as compared with 'expected exposure' which is the 'mean (average) of the distribution'.

186. In respect of institutions' current internal practices, it does not appear that they are yet using expected exposure-based modelling on a widespread basis for securities financing transactions calculations (although with the CRD now allowing them to, this can be expected to develop over the coming period).
187. For financial derivatives, the internal practices picture across the EU appears to be varied and difficult to generalise. It can be expected that a large number of less complex institutions are using the straightforward 'mark to market' method set out in the CRD.
188. Many of the more sophisticated institutions appear to use internal models for the calculation of potential future exposures. In the ISDA/LIBA/BBA report on industry practices²¹ it is stated that 'beyond the netting of current market values, institutions are increasingly focusing on the netting of future exposure, and this is likely to become easier through the use of a common measure of FE such as EPE'.
189. Significantly a substantial number of institutions which use an internal modelling approach appear to use some form of 'peak exposure'-based methodology rather than the expected (average) exposure approach. It remains unclear the extent to which institutions use an expected exposure approach for these purposes. Different confidence intervals were used – (60%), 95%, 98%, 99% - with often more than one being calculated.

(4) Collective investment undertakings, structured transactions and other arrangements where there is exposure to underlying assets.

190. Neither the CRD nor the BCD before it prescribes the mode of application of large exposures requirements to schemes, structures or transactions (for ease referred to hereafter as 'schemes') where there are a number of underlying assets which are the key drivers of the risk of loss. Examples of such schemes include collective investment undertakings, securitisations, basket credit derivatives, etc. For the purposes of this paper we will draw a broad description between 'tranching schemes' (such as securitisations) and untranching schemes (such as many collective investment schemes).
191. In the absence of CRD provisions in relation to this aspect, supervisors have adopted a variety of approaches. Some supervisors have left the matter in the first instance to institutions and provided individual 'substance of the risk' guidance where requested. Other supervisors have to a greater or lesser extent provided general guidance, for example on the treatment of tranching schemes.

²¹ 'Managing Concentration Risk – A Review of Industry Practice: A survey of leading financial institutions' (August 2006).

192. Industry internal practices seem to vary and, it appears, often follow a case-by-case approach depending, for example, on the information available and/or on the economic substance of the situation. For example it is stated in the CEBS report on industry practices that 'in broad terms, half of the institutions surveyed use a 'look-through' approach for structured transactions some of the time. In particular, large respondents reported that with regard to structured transactions work is done up front and the look-through approach is used on a case-by-case basis depending upon the information they get to look through the structure. Above all it is difficult to form a clear view of industry practices, because the approaches used differ considerably.'

IX.II Off-balance sheet items - proposed way forward

193. In determining an appropriate converged approach to the calculation of exposure values one objective is to arrive at exposure value calculations which are fit for the purpose which they are meant to serve. Consistent with this, the mode of calculation of exposure values should minimise the additional burden placed on institutions.

Advanced Approach Institutions

194. As noted, many institutions appear to take a considered approach to the calculation of exposure values for the purposes of their internal limits. This suggests that there may be an opportunity to move away from the situation where institutions are required to calculate three exposure values – one for capital requirements, one for internal limits, and one for the large exposures requirements.
195. CEBS considers that a fruitful approach to this question might be to develop a small number of principles, on the basis of which institutions would be permitted to use their own exposure calculations. While there has not been a great deal of time available to develop such principles, we have set out below for the purpose of early consultation a draft set of what such principles might look like:
- 1) institutions using the Advanced IRB Approach for corporate exposures and/or the Internal Models Method for the purposes of calculating credit risk capital requirements are permitted to use their own exposure value measurements for the purposes of the large exposures rules (this does not include recognition of risk weighting based on counterparty creditworthiness);
 - 2) such exposure values must be demonstrated to the competent authority to be suitable for use in the context of a framework designed to limit the losses to an institution in the event of the unforeseen default of a counterparty. (Without prejudice to the general requirement set out in this paragraph, the competent authority shall be satisfied on the matters set out in paragraph 4.);
 - 3) such exposure values must be arrived at consistently with the approach that the institution uses for estimating exposure values in the context of its internal approach to setting maximum limits for

exposures to single counterparties (or group of connected counterparties.); and

4) in determining whether it is satisfied with the suitability of the institution's exposure values as set out in paragraph 1, the Competent Authority shall be satisfied at least on the following matters:

a) that the institution either (i) can demonstrate that size of the exposure is not a material driver or (ii) has effectively incorporated size of exposure as a material driver in its values; and

b) that the institution has carried out effective stress tests and/or scenario analyses to confirm that the exposure values it uses for these purposes are robust and reliable – in particular that in the context of the default of a large single counterparty (or group of connected counterparties) the exposure amount can be expected with a high degree of confidence to be no more than the value used.

Q8. Respondents are asked whether they consider that principles along these lines would be suitable to govern the calculation of exposure values by institutions using the Advanced IRB Approach for Corporate exposures and/or the Internal Models Method (EPE) for financial derivatives and/or securities financing transactions.

Less complex institutions

196. For less complex institutions (or indeed more complex institutions that choose not to adopt the approach suggested above), it does not seem desirable to permit the use in all cases of the same exposure calculations as are used for credit risk capital requirements purposes, as these institutions will not be able to satisfy the principles underlying the requirements set out in the previous paragraphs and it does not seem to be justified by institutions' internal practices.

197. It might therefore be considered desirable to take a prudent approach and require such institutions always to use the 'worst case scenario' numbers – that is a 100% conversion factor for all commitments, facilities, lines etc. – particularly as many institutions appear to adopt a conservative approach to the conversion factors that they use for their internal limits purposes.

198. However, we note that there are different risk characteristics associated with different types of off-balance sheet items and that some differentiation might therefore be justified.

199. We also note that the discretions currently made available by the Directive have been exercised differently in different jurisdictions. We regard it as likely to be an important aim to seek convergence on this aspect.

200. The current situation across Europe is as follows:

Medium/Low risk items:

These include:

- documentary credits under which the underlying shipment acts as collateral and other self-liquidating transactions;
- undrawn facilities with an original maturity < 1year which are not unconditionally cancellable; and
- other items carrying medium/low risk communicated to the Commission.

Currently out of the 29 CEBS authorities which responded, 23 exercise (or in some cases partially exercise) or propose to exercise the discretion to allow a 50% conversion factor and 6 do not and require 100%.

Low risk items:

These include:

- undrawn facilities which are unconditionally cancellable; and
- other items carrying low risk communicated to the Commission.

Out of the 28 authorities which responded, 16 exercise or propose to exercise the discretion to allow a 0% conversion factor and 11 do not and require 100%. One authority was undecided at the time.

201. It should be noted that in respect of the low risk items a 0% conversion factor can only be used where 'an agreement has been concluded with the client or group of connected clients under which the exposure may be incurred only if it has been ascertained that it will not cause the limits applicable under Article 111 (1) to (3) to be exceeded.¹²²
202. However the picture is muddled by the fact that the M/L and L categories have been somewhat re-drawn with the introduction of the CRD – in particular with the introduction of non-cancellable < 1 year facilities in the M/L category and the removal of a one year maximum maturity requirement for the inclusion of unconditionally cancellable facilities in the L category.
203. We have not yet sought to achieve agreement on what might be an appropriate set of harmonised conversion factors to be used for off-balance sheet items.
204. In respect of these items the exercise of national discretions indicates that some countries consider that the risk of such items giving rise to 100% loss in the event of default are either considerably reduced (in the case of some or all of the medium/low risk items) or removed altogether in the

²² Article 113(3)(t)

case of low risk items (subject as appropriate to the Article113(3)(to) contractual condition).

205. Other countries, however, believe that for large exposures purposes such items should be taken at their full nominal value. In respect of unconditionally cancellable facilities, in addition to concerns around monitoring and timing, these countries consider that, while in principle the institution will retain the legal right to cancel at any time, the commercial and other pressures to maintain the availability of credit may often be significant.
206. At this stage we are very interested to learn stakeholders' views in relation to this aspect. Do stakeholders consider that national discretions should be retained in this area? Or should a harmonised set of conversion factors be sought? We would be interested in learning whether these national discretions are regarded as very important or not? For example, are there in fact a material number of unconditionally cancellable facilities that are of a size to give rise to potential conflict with the large exposure limits?
207. We would be interested in learning whether there is convergence in institutions' internal practices in respect of the conversion factors applied to such items? Are certain types of facilities considered to be 'risk free' for limits purposes (other than because of the credit quality of the counterparty)? If so we would be grateful for clear explanation.
208. Concerning the condition in Article 113(3)(t), do respondents consider that this provides risk-reducing effects while maintaining the flexibility associated with such facilities?
209. If convergence is considered to be important in this area, what conversion factors would respondents propose?

Q9. Do respondents support harmonisation of the conversion factors applied to the off-balance sheet items set out above? How important are these national discretions?

Q10. How are these facilities, transactions etc regarded for internal limits-setting purposes? What conversion factors do respondents consider appropriate?

Q11. In the above analysis we have not given consideration to the appropriate treatment of either (a) liquidity facilities provided to structured finance transactions or (b) nth-to-default products. We are interested in receiving views from respondents on how they calculate exposure values for such products for internal purposes.

IX.III Collective investment undertakings, structured transactions and other arrangements where there is exposure to underlying assets – proposed way forward

210. As we have seen there is currently considerable variation in the approaches adopted by supervisors and institutions to the determination

of whether or not there is an exposure in the context of schemes (tranchéd or untranchéd) with underlying assets.

211. We believe that there is scope to achieve a degree of principles-based agreement which could significantly enhance supervisory convergence in the EU without prescribing detailed rules or imposing undue burdens on the industry.

212. CEBS considers that the following principles may provide a good basis for convergence:

a) institutions should identify whether the risk of incurring a loss from an exposure to a scheme relates to the possibility of default caused by the underlying assets or of the scheme itself, or both. The institution should determine its exposure accordingly;

b) without prejudice to the need for an institution to have, and implement,, an effective and appropriate internal policy for the management of single name concentration risk, for the purposes of the large exposures regime an institution need only take into account exposures arising from positions in such schemes in circumstances where it is at material risk of incurring or having incurred a large exposure to the counterparty or group of connected counterparties in question. For these purposes 'at material risk' includes circumstances where the institution cannot state with confidence that its exposure to the counterparty or group of connected counterparties is less than 5% of own funds;

c) the institution's exposure to an underlying asset (or item) shall be either (i) the amount which the institution knows it to be; or (ii) where the institution does not know the amount of the exposure, the amount larger than which the institution knows that the exposure cannot be (due for example to the prospectus, governing legislation, etc); and

d) in respect of tranchéd transactions -

i. to the extent that the institution holds a position in the first loss tranche it has an exposure in the amount of that position to each of the underlying to the extent that each such underlying can cause loss to the first tranche; and

ii. to the extent that the institution holds a position in a non-first loss tranche the principle in i) applies subject to a deduction of the amount of any losses from the exposure that would be absorbed by more junior tranches.

213. By way of example in respect of tranchéd transactions, take the following structure

Counterparty	Amount	Tranche
A	20	

B	20	90 senior
C	15	
D	10	
E	5	
F	5	
G	5	
H	5	
I	5	
J	5	10 junior
K	5	

214. In this simplified structure if the institution holds the total junior tranche it would recognise the following exposures: 10 against counterparty A, 10 against B, C and D, and 5 against E to K.
215. If the institution holds a position of 10 in the senior tranche it would recognise the following exposures: 10 against counterparties A and B, 5 against C, and 0 against the others.

Q12. Respondents are asked whether they consider these suggested principles appropriate for application to institutions' exposures to collective investment schemes and/or structured finance transactions?

Annex 1 – Industry Costs Questionnaire

<p style="text-align: center;">REVIEW OF EU LARGE EXPOSURES FRAMEWORK</p> <p style="text-align: center;">IMPACT ASSESSMENT – SURVEY OF INDUSTRY COSTS OF CURRENT FRAMEWORK</p> <p style="text-align: center;">INDUSTRY COSTS QUESTIONNAIRE</p>

Information Sheet

Thank you for agreeing to take part in the exercise to gather cost data in respect of the large exposures regime in Europe. The data is needed in support of work that CEBS is undertaking in response to Call for Advice 7 from the European Commission.

This information sheet sets out some background information and comments on how to complete the questionnaire.

Background

The European Commission is undertaking a review of the current large exposures regime contained in the Capital Requirements Directive. As part of that review the Commission has asked CEBS to provide technical advice on a number of issues as set out in the Commission's Call for Advice 7.

CEBS (Committee of European Banking Supervisors) is committed to the principles of better regulation and in line with this seeks to take an open, transparent and evidenced based approach to its work. In addition to market failure analysis, cost benefits assessment is a key component of the CEBS approach to the large exposures review. In order to consider the effectiveness and appropriateness of the current regime, it is important that CEBS obtains a view of the costs that the current large exposures regime imposes on industry.

In forming its policy advice and/or proposals, it is important that CEBS has an understanding of how the costs impact alongside the benefits. This survey is designed to obtain a view of the industry costs of the current framework – and this will provide the benchmark for considering the impact of any CEBS advice to the Commission for change. It will also inform considerations of the desirability of change as requested by the Commission in its Call for Advice 7.

In designing and undertaking the questionnaire, CEBS is mindful of the better regulation objective of proportionality. This is important not only in the context of proportionality in the burdens of implemented policy but also in the policy development process. Thus the survey has been designed to be “fit for purpose” and to minimise the burdens on industry participants.

In drawing up this questionnaire, we consulted with a number of European trade associations. Members of the CEBS LE Working Group have identified a representative sample of industry participants for their country's industry by size and type/range of activity.

The Questionnaire

The questionnaire seeks to identify key areas of cost deriving from the current large exposures regime. It identifies costs under four broad headings (1) administrative and

reporting costs: (2) opportunity costs; (3) compliance and other costs, and (4) costs in relation to intra group limits

You are requested to complete each part of the questionnaire as completely as possible. We understand that this is not in all respects a straightforward task as some areas of costs are more easily identified than others. Accordingly, in some places it may be necessary to provide more crude estimates than in others. Where this is the case, it is important that your estimates are neither unduly towards the lower end or the higher end of the range of reasonable estimates. We ask you in such cases to base your estimate on the median or mid-point of the range of reasonable estimates.

Please note, that all questions apply to trading and non trading book activities, except where specifically stated to relate to one category.

Where the question asks for cost information, please complete this using the currency you would normally use to report to your supervisory authority. Please specify on the front sheet of the questionnaire the currency that you have used.

If your firm is part of a financial services group we would ask you to complete the form on the basis of total costs at the EU Group level – except where otherwise indicated.

Please complete the form on the basis of the costs incurred during the year to 31 December 2006.

Confidentiality

CEBS is aware that it is asking for confidential information. And for this reason requests that you send your response to your supervisor. They will ensure that data is appropriately anonymised before it is sent to CEBS. Any reference to cost data that is included in the CEBS advice will be on an anonymised basis.

**REVIEW OF EU LARGE EXPOSURES FRAMEWORK
 IMPACT ASSESSMENT – SURVEY OF INDUSTRY COSTS OF CURRENT
 FRAMEWORK
 INDUSTRY COSTS QUESTIONNAIRE**

Front Sheet

To be completed by Respondent	
Name of firm	
Contact at firm:	
Description of activities:	
Currency used to complete questionnaire:	

<i>To be completed by National Supervisor</i>	
<i>Type of firm</i>	
<i>Size of firm</i>	

Questionnaire

(Section 1) Administrative and Reporting Costs

This section of the questionnaire is designed to obtain information about the costs your firm incurs as a result of complying with the administrative and reporting requirements of the European large exposures regime.

Note: Please do not include the costs associated with intragroup exposures in this Section as questions about intra group exposures are included in Section 4 of this questionnaire.

(Q 1.1) In Box 1, please note the number of 'full time equivalent' persons dedicated to gathering and reporting data and otherwise ensuring compliance for purposes of large exposures regulation

Note: Your answer may be less than 1 – e.g. 0.02 full time equivalent persons.

(Box 1): Number of full time equivalent persons:

(Q 1.2): In Box 2, please note the total remuneration costs in respect of the full time equivalent persons you indicated at Box 1.

(Box 2) Total remuneration costs (monetary - '000s):

(Q 1.3): In Box 3 please note annual systems costs (excluding personnel costs) associated with gathering and reporting data and otherwise ensuring compliance for purposes of large exposures regulation.

Note: Your figure should include annual amortization of build costs; maintenance costs, renewal costs, etc

(Box 3): Annual systems costs (monetary cost - '000s)

(Q 1.4): In Box 4, please note other direct expenditures and/or costs directly related to satisfaction of the reporting, notification and other administrative requirements of the large exposures regulation. And in Box 5, please explain the nature of these costs.

Note: Please include in your response any administrative etc costs not captured under Box 1, Box 2 or Box 3 and not included elsewhere in Sections 1,2,3 or 4 of this questionnaire.

(Box 4): Other direct expenditures and/or costs (monetary - '000s)

(Box 5): Explanation:

(Q 1.5): In Box 6, please note the total gross administrative and reporting costs. This is calculated as follows: $\{(\text{Box 2})+(\text{Box 3})+(\text{Box 4})\}$

(Box 6): Total gross administrative and reporting costs (monetary cost - '000s)

(Q 1.6): In Box 7, please note the percentage of the costs you indicated at Box 6 that you estimate you would have incurred anyway even if there was no large exposures regulation in place.

Notes:

For example if you use the large exposures regulatory requirements as the basis of your internal single name risk management system you are likely to consider that you would incur a significant amount of the costs indicated at (Box 6) even in the absence of the large exposures regulation.

It is possible that you might consider that the large exposures regulation saves you money in that it provides a framework for the management of single name risk that you would otherwise have had to develop for yourself. In this case (ie where you consider the European large exposures regime provide s a benefit to you) the percentage you include in (Box 7) should be a negative figure.

For certain respondents for whom the large exposures regulation does not form the basis of their internal risk management system, nonetheless it is likely that certain aspects of the work done for compliance with the large exposures regulation would in any event require to be done for the purposes of internal risk measurement and management. Such firms are asked to indicate the percentage of the total costs indicated at (Box 6) above that they would in any event have incurred.

Similarly, if you are an international group, it might be the case that even if there were no European large exposures regulatory regime you would in any event have to comply with the large exposures requirements of other non European jurisdictions' competent authorities.

(Box 7): Percentage of costs (%)

(Q1.7): Please include in Box 8 narrative that explains how you arrived at the percentage figure you included in Box 7.

(Box 8): Explanation:

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(Q1.8) Please note in Box 9 the administrative and reporting costs directly and uniquely arising from the requirements of European / National large exposures regulation.

Note: This is calculated as follows: (100% minus the percentage figure you noted at Box 7) multiplied by (the figure you noted Box 6).

(Box 9): Administrative and reporting costs (monetary -'000):

(Q1.9) Please note in Box 10 the percentage of the costs you noted in Box 9 that would no longer be incurred if there were no differences between the large exposure regulatory requirements applied in the different European Member States.

Note: This question asks you to indicate the percentage of the costs indicated at Box 9 that are attributable to having to comply with different regimes in different EU countries.

(Box 10): Percentage of the costs (%)

(Q1.10): Please set out in Box 11 an explanation of the main aspects of differences between the frameworks in different EU countries that cause your firm to incur additional administrative and reporting costs. Please indicate in Box 12 how many EU countries your firm/group is active in for these purposes.

(Box 11): Explanation of main aspects:

(Box 12): Number of EU countries

(Q1.11) Box 13 is provided for you to note your additional comments on matters dealt with in Section 1 of this questionnaire

(Box 13): Additional comments - Section 1:

(Section 2) Opportunity Costs

Section 2 of the questionnaire is designed to obtain information as to the profits foregone due to having to comply with the requirements of the European large exposures regulations. In respect of some aspects of this information we understand that firms will not be able to provide more than estimated numbers. As indicated above however we request firms in such cases to provide numbers that they consider to be in the middle of the range of reasonably accurate estimates and that may be considered to be consistent with their profile as represented in their large exposure reporting returns.

Note: Costs relating to intra-group exposures should not be included in Section 2. This is because questions about costs for intra group exposures are included in Section 4 of this questionnaire

(Q2.1) In Box 14, please note how many transactions you rejected or partially rejected during the 12 months to 31 December 2006 because to enter into them would have resulted in your breaching large exposure regulatory limits.

Note: This question relates to concrete opportunities to enter into transactions that were rejected by your firm.

(Box 14): Number of transactions

(Q2.2) In Columns 15 – 21, please indicate the type and nominal amount of each transaction you noted in Box 14. Please also indicate whether the transaction was wholly or partially rejected (Column 20). Please indicate your estimate of the profits foregone (Column 21):

Column 15	Column 16	Column 17	Column 18	Column 19	Column 20	Column 21
Transaction	Type of transaction <i>(e.g. corporate loan, underwriting, highly leveraged buy out, private equity deal, exposure to US mortgage agency, etc)</i>	Nature of potential counterparty <i>– e.g. bank, investment bank, corporate, etc</i>	Rating of potential counterparty	Nominal amount of potential transaction <i>(‘000)</i>	Wholly or partially rejected?	Estimated profits foregone <i>(‘000)</i>
Transaction 1						
Transaction 2						
Transaction						
Transaction						

Transaction "n"						
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(Q 2.3) In Box 22, please set out the total estimated profits foregone from rejected transactions indicated in the previous question (Q 2.2 - ie columns 15 – 21).

(Box 22): Total estimated profits foregone (monetary – ‘000)

(Q2.4): In Box 23, please include narrative that explains the basis upon which you have estimated the profits foregone in the rejected transactions you indicated in Box 22)

(Box 23): Explanation

(Q2.5) In Box 24, please note your response to the following question: Do you consider that in respect of the transactions you rejected in the year ended 31 December 2006 because of the impact of the European large exposures rules that firms that are subject to non EU regulatory regimes were able to enter into those transactions? In Box 25, please explain the basis for your view.

(Box 24): View

(Box 25): Explanation:

(Q2.6): It has been suggested that as well as the transactions actually rejected, firms may be experiencing profits foregone because in general, given the long-standing effects of the European large exposures framework, transactions of a certain size do not arise and therefore are not available to be rejected. In other words, certain business may simply not be arising to be done due to the impact of the European large exposures regime. If you believe this to be the case, please respond to question Q2.7 – Q2.11 – and complete Boxes 26 – 30.

(Q2.7) In Box 26, please describe the types of transaction you believe would arise more frequently if there was no EU large exposures regime in place.

(Box 26): Description

(Q2.8) In Box 27, please describe the extent to which entering into the transactions you note in Box 26 would be in compliance with your own internal risk management policies

(Box 27): Description:

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(Q2.9) In Box 28, please set out and explain your estimate of the additional volumes of the transactions you note in Box 26 that you would enter into if there was no European large exposures regime.

(Box 28): Estimate / Explanation

(Q2.10) In Box 29, please note your estimate of profits foregone during the year to 31 December 2006 as a result of a general reduction in business opportunities due to the impact of the European large exposures regime.

Note: This should not include the costs set out in Box 22.

(Box 29): Estimate of profits foregone (monetary– ‘000):

(Q2.11) In Box 30, please note other costs not already included in your responses noted in Boxes 26 – 29 that you consider relevant. Please explain.

(Box 30): Other costs / Explanation:

(Q2.12) In Box 31, please set out your response to the following:

Do you consider that you entered into some transactions during the year to 31 December 2006 that arose as a result of other regulated firms having to comply with EU large exposure limits (and hence not being able to take on all/part of a transaction). For example, all banks and investment firms within the scope of the BCD and CAD are subject to the same large exposure limits. Do you consider that you receive business as a result of the transactions - that would otherwise have gone to one firm - being divided amongst two or more firms? Do you consider that in general additional business received in this way equals the business lost owing to your having to comply with the EU large exposure limits? Please explain your answer

(Box 31) View/Explanation

(Q2.13) Box 32 is provided for you to note your additional comments on matters dealt with in Section 2 of this questionnaire

(Box 28):Additional comments - Section 2:

(Section 3) Compliance and other costs

In this section we are seeking information as to costs incurred by your firm in complying with the EU large exposures framework other than those already covered in Sections 1 and 2.

Note: Costs relating to intra-group exposures should not be included in Section 3. This is because questions about costs for intra group exposures are included in Section 4 of this questionnaire.

(Q3.1) In Box 33, please note in respect of any trading book activities that you might have, the average amount of capital that you were required to hold against large exposures during the year to 31 December 2006.

Note – Compliance costs average capital – this is the aggregate sum of capital requirements at all reporting dates divided by the number of reporting dates

(Box 33): Average amount of capital (monetary – ‘000)

(Q3.2) In Box 34, please indicate the cost to you of holding the capital you noted in Box 33. In Box 35, please explain how you derived this cost.

(Box 34): Cost of holding the capital noted in Box 33 (monetary - ‘000)

(Box 35) Explanation of how the cost noted in Box 34 was derived.

(Q3.3) In respect of your trading book activity during the year to 31 December 2006, please tell us (in Box 36) the average amount of capital that you would have held for your internal purposes in respect of that trading book activity. Please explain how you derived this figure.

In Box 37, please tell us what the cost of holding that capital (as noted in Box 36) would have been. Please explain how you derived the figures

(Box 36): Amount of capital you would have held for internal purposes (monetary - ‘000)

(Box 37): Please explain how you derived the figure you have noted in Box 36

(Box 38): Cost of holding the capital figure you noted in Box 36

(Box 39): Please explain how you derived the figure you have noted in Box 38

(Q3.4) In Box 40, in respect of all large exposures subject to the EU large exposures regime that were in excess of the regulatory limits during the year to 31 December 2006, please indicate the average amount of collateral held by you purely to achieve compliance with the EU large exposures regulatory limits.

Note: You should not include here figures for collateral that you would in any event have held e.g. for compliance with internal policies and procedures.

(Box 40): Average amount of collateral held (monetary – ‘000)

(Q3.5) In Box 41, please indicate the cost of holding the collateral you have noted in Box 40. Please explain how you derived this figure.

(Box 41) Cost of holding the collateral (monetary – ‘000)

(Box 42) Please explain how you derived the figure you have noted in Box 41.

(Q3.6) In Box 43, in respect of all large exposures in excess of the EU regulatory limits during the year to 31 December 2006, please indicate the average amount of unfunded credit protection held by you purely to achieve compliance with the large exposures regulatory limits.

Note: You should not include here figures for unfunded credit protection that you would in any event have held e.g. for compliance with internal policies and procedures.

(Box 43): Average amount of unfunded credit protection (monetary – ‘000)

(Q3.7) In Box 44, please indicate the cost of holding the unfunded credit protection you have noted in Box 43. Please explain how you derived this figure.

(Box 44) Cost of holding the unfunded credit protection (monetary – ‘000)

(Box 45) Please explain how you derived the figure you have noted in Box 44

(Q 3.8) In Box 46 please explain any other large exposure regulation compliance costs of this broad nature which you incurred during the year to 31 December 2006 to ensure compliance with the EU large exposures regime.

(Box 46) Other costs / Explanation

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(Q3.9) In Box 47, please indicate the costs associated with your response noted in Box 46. Please explain how you derived this figure.

(Box 47): Costs (monetary – ‘000)

(Box 48): Please explain how you derived the figure you have noted in Box 47.

(Q3.10) In Box 49, please note the total 'compliance' costs. This is the sum of the costs you noted in boxes: (Box 34)+(Box 41)+(Box 44)+(Box 47) less the cost of holding capital that you would have held for internal purposes (as noted in Box 36)

(Box 49): Total compliance cost

(Q3.11): In Box 50, please indicate the amount of the costs that you noted you noted in Box 49, that would have been incurred even if there had been no EU large exposures requirements in place, but you still had to comply with large exposure requirements of a non EU country. Please explain how you derived this figure.

(Box 50) Costs (monetary- '000) / Explanation

(Q3.12) Box 51 is provided for you to note your additional comments on matters dealt with in Section 3 of this questionnaire

(Box 51) Additional comments – Section 3

(Section 4) Costs in relation to intra-group limits

Industry representatives have indicated that in addition to the types of costs indicated in Sections 1,2 and 3 of this questionnaire, costs also arise from having to comply with the large exposure rules on an individual firm basis and subject to limitations on the scale and size of intra-group exposures. Due to its complexity this issue is dealt with separately in Section 4 of this questionnaire.

Note: In Sections 1,2 and 3 we asked that you exclude costs associated with intra group exposures and the EU large exposures regime. Respondents are asked to ensure that there is no double-counting of such costs in this questionnaire.

(Q 4.1) In order to enter into transactions and to continue to comply with the EU large exposures regulatory limits, your firm as a result of the action of the large exposures rules may have entered into intra-group transactions, capital allocations, etc which were designed and entered into solely or primarily to maintain compliance with the solo- and group-level capital requirements.

In Box 52, please set out an explanation of the extent to which this has been done by your firm during the year ended 31 December 2006. Please note the number and type of such transactions.

(Box 52) Explanation

(Q4.2) In Box 53, in respect of the arrangements you describe in Box 52, please note the nature of the costs to which those arrangement give rise e.g. administrative costs.

Note: As a reminder please note that costs identified here should not be included in costs provided in response to previous questions in Sections 1,2, and 3 of this questionnaire.

(Box 53) Nature of costs

(Q 4.3) In Box 54, please indicate your estimate of total costs arising from the arrangements you note in Box 52.

(Box 54) Estimated total cost (monetary -'000)2

(Q 4.4) In Box 55, please indicate your estimate of the amount of the costs you noted in Box 54 which are attributable to the management of exposures purely within the domestic (sub) group.

(Box 55) Estimate of costs – domestic (sub) group (monetary – '000)

(Q4.5) In Box 56, please indicate your estimate of the amount of the costs you noted in Box 54 which are attributable to the management of such exposures purely within the EU (sub) group but not within the domestic (sub) group.

(Box 56) Estimate of costs – EU (sub) group (monetary –'000)

(Q4.6) Some firms have suggested that the presence of intra-group large exposures limits restricts their ability to carry out their group treasury and liquidity management functions. If this applies to your firm, please set out in Box 57 – 60 your response to the following: (i) an explanation of the ways in which you think this applies to you and; (ii) how you have addressed the difficulties to which it gives rise; (iii) the nature and extent of additional costs to which this has given rise. (iv) please explain how you derived this figure.

(Box 57) (i) an explanation of the ways in which you think this applies to you and

(Box 58) (ii) how you have addressed the difficulties to which it gives rise

(Box 59) (iii) the additional costs to which this has given rise.

(Box 60) (iv) please explain how the cost figure noted in Box 62 was derived

(Q4.7) In Box 61, please indicate your estimate of the amount of the costs you noted in Box 59 which are attributable to the management of exposures purely within the domestic (sub) group

(Box 61) Estimate of costs (monetary –'000)

(Q4.8) In Box 62, please indicate your estimate of the amount of the costs which are attributable to the management of the costs you noted in Box 59 in respect of exposures purely within the EU (sub) group but not within the domestic (sub) group

(Box 62) Estimate of costs (monetary –'000)

(Q4.9) Some firms have said that they incur additional cost arising from the difference between the LE limits applicable to intra group exposures and the LE limits applicable to exposures to third parties. In some EU jurisdictions exposures to non group counterparties have a 25 % limit applied to them, but intra group exposures have a 20% limit applied to them. Please tell us in Box 63 about any costs that arise as a result. Please explain the types of cost that arise (eg extra reporting and system costs)

(Box 63) Costs (monetary – '000) / explanation

(Q4.10) Industry representatives have indicated that to a material extent costs in respect of intra-group exposures result from the fact that different approaches are adopted in different EU countries. Please indicate in Box 64 if this applies to your situation and describe the extent and nature of the problem. In Boxes 65 and 66 please note the percentage of the costs you noted at Box 54 and Box 59 which can be attributed to such differences between countries

(Box 64): Does situation apply?/ Description of nature and extent of problem

(Box 65) Percentage of costs in Box 54 which can be attributed to such differences between countries

(Box 66) Percentage in Box 59 which can be attributed to such differences between countries

(Q4.11) Box 67 is provided for you to note your additional comments on matters dealt with in Section 4 of this questionnaire.

(Box 67): Additional comments – Section 4

Annex 2 - Non EU Large Exposure Regimes

Introduction

1. This paper provides an overview of the approach to large exposures in a number of non-EU jurisdictions (Australia, Canada, Japan, Switzerland, USA).

Scope of the regime

2. The scope of the non EU-LE regimes generally cover financial institutions but the exact scope varies depending on the scope of the regulator. For example, in Canada the LE regime covers domestic banks, foreign banks' business in Canada and federal trust and loan companies. Under the US regime there are various national and state regulators that amongst other issues are concerned with banking regulation. The SEC is primarily concerned with the oversight of the securities market.

Definitions

3. **An exposure** is generally defined as any claim on an entity including irrevocable commitments or contingent liabilities. The general case is that in calculating the size of an exposure the regimes do not take account of credit worthiness or risk weight the counterparty.
4. The exception is within the Swiss regime which has two approaches to large exposures: the International Approach and the Swiss Approach. The International Approach is consistent with the EU regime and must be used by banks using the International Standardised Approach and the Internal Ratings Based Approach to credit risk. Under this approach risk weights cannot be used for the purpose of calculating large exposures. However banks using the 'Swiss Standardised Approach'²³ to credit risks may take account of risk weights for the purpose of measuring and calculating the size of large exposures
5. **A related counterparty:** These are identified where exposures constitutes a common risk. Common features were found to include: financial interdependency, cross guarantees and common ownership or management.
6. **A large exposure** is generally defined as an exposure above 10% of the institution's capital base or own funds. The Canadian regime does not require an LE to be identified but it has a limit structure based on comparing the size of an exposure to the capital base of the institution extending the credit.

Limits

7. **All of the regimes reviewed include a limit framework, though the details differ.** The Australian and Japanese regimes set different limits according to whether the exposure is to a group member or to a third party outside the group. The Swiss limit framework is the same as the EU LE regime.

²³ The approach is generally used by smaller banks.

	Definition of a large exposure	Limits
Switzerland	Exposure \geq 10% of bank's own funds.	An LE must not exceed 25% of own funds. The total amount of large exposures may not exceed 800% of own funds.
Canada	No requirement to identify exposures as large.	The aggregate exposure of a bank to any entity or connection shall not exceed 25% of total capital on a consolidated basis. Subject to conditions, potentially higher limits for certain intra-group exposures.
Australia	Exposure \geq 10% of an authorised deposit-taking institution's (ADI's) capital base.	Limits on aggregate exposures of an ADI to a counterparty: (i) external parties (other than governments, central banks and ADIs or equivalent overseas deposit-taking institutions) unrelated to the ADI – 25% of capital base; (ii) unrelated ADI (or equivalent overseas deposit-taking institution) and its subsidiaries – 50% of capital base, with aggregate exposure to non-deposit-taking subsidiaries capped at 25% of capital base; and (iii) foreign parents and their subsidiaries – 50% of capital base, with aggregate exposure to non-deposit-taking subsidiaries capped at 25% of capital base.
Japan	Exposure \geq 40 % of bank's capital to a related party and \geq 25 % of bank's capital if to a non related counterparty.	A large exposure may not exceed 25% of own funds per customer and 40% for a group of related customers.
USA	Various state and federal laws and regulations establish maximum legal	A national bank's total outstanding loans and extensions of credit to one borrower may not exceed 15% of the bank's capital and surplus,

	lending limits.	<p>plus an additional 10% of the bank's capital and surplus, if the amount that exceeds the bank's 15% general limit is fully secured by readily marketable collateral. To qualify for the additional 10% limit, the bank must perfect a security interest in the collateral under applicable law and the collateral must have a current market value at all times of at least 100% of the amount of the loan or extension of credit that exceeds the bank's 15% general limit.</p> <p>Under the SEC's capital regime unsecured exposures are required to be deducted 100% from own funds.</p>
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Exceeding the Limit

8. The non-EU regimes reviewed do not generally permit the limits to be exceeded. If they are exceeded then action is required. In the Swiss regime an excess is allowed if it is entirely covered by own funds. Canada does not allow excesses. Australia permits excesses on an exceptional basis and with the prior approval of the supervisor. The Japanese regime requires the institution to explain how it will bring the exposure(s) back into compliance with the limits.

Notification and Reporting

9. Reporting of LE and other financial information is required by all of the regimes reviewed. The frequency of reporting varies across the regimes: Switzerland and Australia require quarterly reporting; the US reporting regime is more complex as there are different state and federal reporting requirements – but most also include regular dialogue between the institution and supervisor. Canada does not specify a reporting regime – instead it is for the Board of Directors of an institution to set its own reporting periods having taken account of the supervisory guidelines.

Exemptions to the regime

10. All regimes reviewed permitted some exemptions to the LE limits, but they varied in nature across the regimes. In a number of cases, exposures were considered exempt if fully deducted from own funds or secured by cash, government securities or a guarantee from a central bank. In Japan, exposures to the state are considered exempt, as well as those to local public authorities, financial public institutions and other public entities and agencies.
11. In the US exemptions are available for exposures to counterparties (banks) with sufficient capitalisation (see 12 CFR, Ch II, Sec 206.5).

Intra-group aspects

12. Intra-group exposures are exempt under the Swiss regime if the group is fully consolidated. As noted in the section on limits, some regimes apply different limits to intra group exposures compared to exposures to non-group counterparties.

Conclusions

13. The non-EU LE regimes that were reviewed have a common core of concerns in that they all seek to define an exposure; to take account of single name exposure and to identify related counterparties that in effect represent a single exposure. They also seek to set appropriate limits and thresholds with the intention of promoting diversification and encouraging the appropriate management of risk. These concerns are similarly contained within the EU LE regime.

14. The non-EU regimes reviewed and the EU regime reflect concerns and approaches set out in various Basle Committee publications²⁴

²⁴ For example: Basel Committee on Banking Supervision – Measuring and controlling large credit exposures (January 1991), Core Principles for effective banking supervision (Basle Core Principles) September 1997) and continue to be in alignment with the updated publication -Core Principles for Effective Banking Supervision (October 2006).