Consultation regarding further possible changes to the Capital Requirements Directive (CRD)
COMMISSION SERVICES STAFF WORKING DOCUMENT

POSSIBLE FURTHER CHANGES TO THE CAPITAL REQUIREMENTS DIRECTIVE

INTRODUCTION

This Commission Services Staff Working Document seeks views on further possible changes to Directives 2006/48/EC and 2006/49/EC (‘the Capital Requirements Directive’, ‘CRD’). These possible changes (‘CRD IV’) will supplement the two sets of revisions that have already been adopted or proposed: that is, the amendments agreed by Member States and the European Parliament in September 2009\(^1\) (‘CRD II’) and the proposal adopted by the Commission in July 2009\(^2\) (‘CRD III’).

The possible changes set out in this document are closely aligned with the expected amendments to the Basel II framework and the introduction of a global liquidity standard that are currently being drawn up and their impact assessed by the Basel Committee on Banking Supervision (BCBS).\(^3\) They also reflect commitments made by G-20 leaders in London on April 2, 2009 and in Pittsburgh on September 24-25, 2009 as regards building high quality capital, strengthening risk coverage, mitigating pro-cyclicality, discouraging leverage as well as strengthening liquidity risk requirements and forward-looking provisioning for credit losses.

The Commission strongly supports the work of the Basel Committee in these areas. In order to achieve the dual objective of improving the resilience of the global financial system and ensuring a level playing field, it is imperative that the more robust set of prudential capital requirements be applied consistently across the world.

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This document is organised in sections which discuss possible changes as follows:

- **Section I: Liquidity standards**;
- **Section II: Definition of capital**;
- **Section III: Leverage ratio**;
- **Section IV: Counterparty credit risk**;
- **Section V: Countercyclical measures**;
- **Section VI: Systemically important financial institutions**; and
- **Section VII: Single rule book in banking**

The sections contain specific questions on areas where the Commission services would particularly welcome views. The questions are summarised in Section VIII.

It is envisaged that in the second half of 2010 the Commission will publish a legislative proposal dealing with some or all of the areas discussed both in this document and the public consultation on amendments to the CRD that was conducted in July – September of 2009. Any such proposal will be developed in the light both of responses to the two documents and an impact assessment examining the anticipated effects of options for achieving the outlined policy objectives. The Commission services recognise that the cumulative effect of potential provisions covered by the two consultation documents might be substantial and could have implications for the amounts of funds that institutions have available to lend to businesses. Therefore, the Commission services have invited the Committee of the European Banking Supervisors (CEBS) to carry out the European Quantitative Impact Study to aid the assessment of the aggregate effect of the proposed revisions.

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**Important notice:**

This consultation paper contains 52 questions on the above outlined issues. In replying to these questions, please indicate what impact, including benefits and costs, would the potential changes described in each section of this paper have on your activities or activities of firms in your jurisdiction. When describing the costs please attempt, where appropriate, to assess them quantitatively by differentiating between different cost types, such as reporting, systems, personnel, capital costs, and between one-off implementation and on-going compliance costs. In addition, stakeholders are, in replying to these questions, invited to indicate their views on the optimal timing for implementation of the suggested measures, and whether their application should be sequenced.

The Commission Services welcome responses to the policy objectives and the questions raised in this paper by **16 April 2010**. Responses should be sent to the following email address: **markt-h1@ec.europa.eu**.

Responses will be published on the following website unless requested otherwise: [http://ec.europa.eu/internal_market/bank/regcapital/index_en.htm](http://ec.europa.eu/internal_market/bank/regcapital/index_en.htm)

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Consultation on proposed amendments relating to through-the-cycle expected loss provisioning; specific incremental capital requirements for residential mortgages denominated in a foreign currency; the removal of national options and discretions; and simplification of the Bank Branch Accounts Directive (89/117/EEC).
SECTION I
Liquidity standards for credit institutions and investment firms

1. Throughout the financial crisis, many credit institutions experienced liquidity problems that required unprecedented levels of public sector liquidity support. Prior to the crisis, liquidity risk and its management did not receive the same level of management and supervisory attention and priority as other risk areas. The crisis illustrated how quickly and severely liquidity risks can materialise and certain sources of funding can disappear, compounding concerns related to the valuation of assets and capital adequacy.

2. In recognition of the need for credit institutions to improve their liquidity risk management and control their liquidity risk exposures, the Capital Requirements Directive (CRD) was amended to include minimum qualitative standards for institutions' liquidity risk management and the supervisory review of that risk management. While many Member States impose some form of quantitative regulatory standard for liquidity, no harmonised regulatory treatment exists at European level. The Commission services believe that this lack of prudential policy coordination should be addressed in a way that is consistent with international developments, in particular recent proposals tabled by the Basel Committee.

3. To this end, the Commission services are considering a legislative proposal for two regulatory standards for liquidity risk in order to achieve two separate but complementary objectives. The first objective is to promote the short-term resilience of the liquidity risk profile of institutions by ensuring that they have sufficient high quality liquid assets to survive an acute stress scenario lasting for one month. This objective would be pursued by a Liquidity Coverage Requirement. The second objective is to promote resilience over the longer-term by imposing a Net Stable Funding Requirement and requiring institutions to fund their activities with more stable sources of funding on an ongoing structural basis. Both standards would be worded as requirements that credit institutions have to fulfil at all times. It is however clear that under stress, for instance because of a sudden loss of deposits, credit institutions could fail to meet the requirements. In such circumstances, credit institutions would be required to restore compliance over a short timeframe and competent authorities would be require to define a restoration plan and to follow its implementation up.

Liquidity Coverage Requirement

4. The Liquidity Coverage Requirement (LCR) requires credit institutions to match net liquidity outflows during a 30 day period of acute stress with a buffer of "high quality" liquid assets. The liquidity outflows during the period of stress would be completely defined in legislation, detailing inter alia what percentage of a given source of funding, such as different types of deposits, that a credit institution has to assume would be withdrawn from it. The outflows covered

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6 http://www.bis.org/publ/bcbs165.htm
would also include those resulting from liabilities and contingent liabilities, both contractual and non-contractual, coming due.

5. The specified 30 day stress scenario entails both institution-specific and systemic shocks built upon actual circumstances experienced in the global financial crisis which began in mid-2007:
   (a) a three-notch downgrade in the institution’s public credit rating;
   (b) run-off of a proportion of retail deposits;
   (c) a loss of unsecured wholesale funding capacity and reductions of potential sources of secured funding on a term basis;
   (d) loss of secured, short-term financing transactions for all but high quality liquid assets;
   (e) increases in market volatilities that have an impact on the quality of collateral or potential future exposure of derivatives positions and thus require larger collateral haircuts or additional collateral;
   (f) unscheduled draws on all of the institution’s committed but unused credit and liquidity facilities; and
   (g) the need for the institution to fund balance sheet growth arising from non-contractual obligations honoured in the interest of mitigating reputational risk.

6. There may be restrictions on the convertibility of currencies and the functioning of fx markets could be impaired under stress. Therefore, institutions should be able to meet their liquidity needs in each currency and maintain high quality liquid assets consistent with the distribution of their liquidity needs by currency. However, the Commission services would not suggest requiring the LCR to be calculated per currency, but envisage rather that the adequate currency distribution of buffer assets should be left to institutions, subject to supervisory review.

7. The 2007-2009 crisis underlined the need to examine carefully the liquidity of asset markets and the characteristics that allow some markets to remain liquid in times of stress without being misled by the wide range of liquid markets during booms. Markets may not always be able to provide liquidity against even what looks objectively like a high quality asset and that may require banks to access liquidity facilities offered by central banks under severe stress. Therefore, and in order to ensure liquidity under even the most severe market circumstances, the assets should as an additional characteristic, be eligible as collateral for central bank credit operations. The European Banking Authorities would be requested to develop technical standards specifying the list of eligible collateral for liquidity purposes which may differ from the list established by central banks. This eligibility would be an additional requirement for the assets held by European banks to meet their own liquidity coverage requirements, but where European banks have to comply with consolidated liquidity requirements that comprise subsidiaries outside the EU in countries with particularly narrow lists of central bank eligible assets, this characteristic could be waived for the assets held by those subsidiaries so that the assets would be available in order to meet the portion of the consolidated liquidity coverage requirement that stems from those subsidiaries.
8. The regulatory list of high quality liquid assets should ensure that the assets have the following characteristics:

**Fundamental characteristics**

- **Low credit and market risk**: assets which are less risky tend to have higher liquidity. As regards the credit risk, high credit standing of the issuer and a low degree of subordination increases an asset’s liquidity. As regards market risk, low duration, low volatility, low inflation risk and denomination in a convertible currency with low foreign exchange rate risk all enhance an asset’s liquidity.

- **Ease and certainty of valuation**: an asset’s liquidity increases if market participants are more likely to agree on its valuation. A liquid asset’s pricing formula must be easy to calculate and not depend on strong assumptions. The inputs into those pricing formula must also be publicly available. In practice this should preclude any exotic product from being considered as a high quality liquid asset.

- **Low correlation with risky assets**: the stock of high quality liquid assets should not be subject to wrong-way risk. Assets issued by financial firms (other than covered bonds backed by claims on obligors outside the sector), for instance, are more likely to be illiquid in times of liquidity stress in the banking sector.

- **Listed on a developed and recognised exchange market**: being listed increases an asset’s transparency.

**Market-related characteristics**

- **Active and sizable market**: the asset should have active outright sale and repo markets at all times (which means having a large number of market participants and a high trading volume). Market breadth (price impact per unit of liquidity) and market depth (units of the asset can be traded for a given price impact) should be good.

- **Presence of committed market makers**: quotes will always be available for buying and selling the asset.

- **Low market concentration**: diverse group of buyers and sellers in an asset’s market increases the reliability of its liquidity.

- **Flight to quality**: historically, the market has shown tendencies to move into some types of assets in a systemic crisis.

9. Based on the consultation and a quantitative impact study to be carried out by CEBS, further analysis of the trade-off between the severity of the stress scenario and the definition of the stock of liquid assets is needed. The final calibration of the outflow and inflow percentage factors, as well as the composition of the stock of liquid assets, should be sufficiently conservative to create strong incentives for institutions to maintain prudent funding liquidity profiles, while minimising any undesirable side effects. To this end, the impact of both a narrow regulatory definition of liquid assets composed of cash,

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7 Duration measures the price sensitivity of a fixed income security to changes in interest rate.
central bank reserves and high quality sovereign debt, as well as a somewhat broader definition which could also include a proportion of high quality corporate bonds and/or covered bonds, is proposed for consultation.

10. Annex I contains a tentative specification of such a Liquidity Coverage Requirement and lists the eligible assets for the buffer as well as the regulatory assumptions for net liquidity outflows.

**Question 1:** Comments are sought on the concept of the Liquidity Coverage Requirement and its likely impact on institutions' resilience to liquidity risk. Quantitative and qualitative evidence is also sought on the types and severity of liquidity stress experienced by institutions during the financial crisis and – in the light of that evidence – on the appropriateness of the tentative calibration in Annex I. In particular, we would be interested in learning how the pricing of banking products would be affected by this measure.

**Question 2:** In particular, views would be welcome on whether certain corporate and covered bonds should also be eligible for the buffer (see Annex I) and whether central bank eligibility should be mandatory for the buffer assets?

**Question 3:** Views are also sought on the possible implications of including various financial instruments in the buffer and of their tentative factors (see Annex I) for the primary and secondary markets in which these products are traded and their participants.

**Net Stable Funding Requirement**

11. The Net Stable Funding Requirement (NSFR) aims at ensuring a sound funding structure of an institution over one year in an extended firm-specific stress scenario where an institution encounters, and investors and customers become aware of:
   • A significant decline in profitability or solvency arising from heightened credit risk, market risk or operational risk or other risk exposures;
   • A potential downgrade in a debt, counterparty credit or deposit rating by any nationally recognised credit rating organisation; or;
   • A material event which calls into question the reputation or credit quality of the institution.

12. The assets currently funded and any contingent contractual and non-contractual obligations to fund have to be matched, to a predetermined extent depending on their liquidity profile at a one year horizon, with sources of funding that can be considered stable over the same one year horizon, where that horizon includes a portion of non-maturity and term deposits maturing before one year. The stable funding requirements and the degree to which sources of funding can be considered stable would be set out in legislation. Annex II contains a tentative specification of such a Net Stable Funding (NSFR).
Question 4: Comments are sought on the concept of the Net Stable Funding Requirement and its likely impact on institutions' resilience to liquidity risk. Quantitative and qualitative evidence is also sought on the types and severity of liquidity stress experienced by institutions during the financial crisis and – in the light of that evidence – on the appropriateness of the tentative calibration in Annex II. In particular, we would be interested in learning how the pricing of banking products would be affected by this measure.

Question 5: Comments are in particular sought on the merits of allowing less than 100% stable funding for commercial lending that has a contractual maturity of less than one year. Is it realistic to assume that lending is reduced under liquidity stress at the expense of risking established client relationships? Does such a differentiation between lending with more and with less than one year maturity set undesirable incentives that could discourage for instance long term funding of non-financial enterprises or encourage investment in marketable securities rather than loans?

Question 6: Views are sought on possible implications of inclusion and tentative "availability factors" (see Annex II) pertaining to various sources of stable funding for respective markets and funding suppliers. Would there be any implications of the tentative required degree of coverage for various asset categories for respective bank clients?

Completeness of legislative approach

13. While the Commission services envisage that all parameters of the liquidity requirements would be set out in legislation, national specificities relating in particular to certain specific categories of retail deposits may need to be reflected. The percentages specified in Annexes I or II have therefore to be considered minima for the LCR (and maxima for the NSFR) that apply to all deposits across all Member States that can be subsumed under the respective category. Where in practice higher run-off rates would be relevant for a specific sub-category, a higher level may have to be set to reflect that, even if that sub-category exists only in a single Member State.

14. In line with the EU Council’s desire for a single rule book, this should be done without the proliferation of new national options and discretions. Rather, the Commission services think that Technical Standards of the new European Banking Authority (EBA) could be used to avoid the inclusion of numerous parameters in the CRD and to facilitate timely updating of those parameters, while ensuring completeness and transparency of the applicable rules at European level. Cross-border banks would apply the parameters of the host country – specified in the single rule book – for contracts governed by the law of this host country.

Question 7: Do you agree that all parameters should be transparently set at European level, possibly in the form of Technical Standards by the EBA where parameters need to reflect specific sub-categories of retail deposits?

8 Council of the European Union, 10 July 2009
**Question 8:** In your view, what are the categories of deposits that require a different treatment from that in Annexes I and II and why? Please provide evidence relating to the behaviour of such deposits under stress.

**Scope of application**

15. In order to strengthen the resilience of European credit institutions against liquidity risk and to introduce a harmonised regulatory measure at European level, the Commission services believe that as a starting point, the standards should apply at the level of legal entities. Application at individual entity level within European groups is desirable so long as constraints on the transferability of assets, mutual support commitments and central liquidity risk management within groups continue to apply.

16. Against this background, the combination of the following might be appropriate levels for the application of the two requirements:
   a) credit institutions (both parent and subsidiaries) on an individual "stand-alone" basis **plus**
   b) EU parent credit institutions (as defined in Article 4(16) as a parent that is not a subsidiary of any other credit institution within the EU) on a consolidated level

Letter b) would apply irrespective of whether the EU parent credit institution is also the parent of an "internationally active banking group" within the meaning used by the Basel Committee. This scope would differ slightly from that of the solvency requirements as it does not encompass a mandatory sub-consolidation at the level of a parent in a member State where that parent is itself a subsidiary of a bank in another Member State. This mandatory sub-consolidation seems to be unnecessary as long as the legal entities in that Member State meet their requirements - by contrast to the capital rules, there is no double gearing under the liquidity standards that could be eliminated by an additional sub-consolidation.

17. The envisaged scope of application takes account of the fact that liabilities have to be repaid by legal entities in principle and that the liquidity to meet the resulting outflows should be available at the legal entity level. However, by derogation from letter a) above, application to individual firms could be waived by competent authorities provided that it is possible to identify a set of institutions belonging to the same group to which the requirements can be meaningfully applied on a consolidated basis because certain conditions are met. These conditions will have to be elaborated further, but would include the following:

   a) liquidity risks are managed centrally in the group;
   b) there are legally binding mutual commitments for liquidity support between the relevant institutions and assets are freely transferable between legal entities even when under stress; and
   c) the institution is subject to consolidated application of the requirements together with other credit institutions belonging to the same group;
18. A waiver might also be available for legal entities located in different Member States that are subject to consolidated liquidity standards (on the basis of conditions similar to those in paragraph 17). It must be noted that the conditions under b) pertaining to liquidity support and asset transferability are likely to involve substantial changes in terms of insolvency and company law along the lines outlined in the October 2009 Commission’s communication on “an EU framework for cross-border crisis management in the banking sector and its accompanying staff working paper”. The application of the waiver and the applicable criteria would have to be jointly assessed and agreed by the consolidating supervisor and the competent authorities responsible for the supervision of the subsidiary. In case of disagreement, the supervisors of the subsidiaries in question would take the final decision as to whether each subsidiary should be subject to liquidity standard on a stand-alone basis. The European Banking Authorities might be called upon to settle a disagreement in accordance with Article 11 of the proposal for a Regulation establishing a European Banking Authority.

19. The Commission services currently do not envisage making available a waiver for individual firms’ liquidity requirements based on consolidated liquidity supervision over a group comprising entities outside the EEA because the condition of free asset transferability mentioned in paragraph 17 could not be met for groups including institutions outside the EEA.

20. Investment firms are also subject to liquidity risk when they hold illiquid assets financed over the short term. The Commission services take the preliminary view that a liquidity standard should not apply to all investment firms, but only to those that deal on own account, and that investment firms with limited activities and initial capital requirements of 50K or 125K Euro might be scoped out. For the remaining investment firms - those with a 730K initial capital requirement - the requirements would apply in principle, but further exemptions may be worth investigating. However, the fact that some of these firms are small and have limited liquidity risk does not in itself a reason for an exemption. Low liquidity risk should make it easy to comply with the requirements and may justify a lower reporting frequency, but does not obviate the need for supervision. It could however be considered whether the standard should apply in a modified form to investment firms because the standard places particular emphasis on the reliability of certain retail deposits which by definition do not exist in investment firms.

Question 9: Comments are sought on the scope of application as set out above and in particular on the criteria referred to in point 17 for both domestic entities and entities located in another Member State.

Question 10: Should entities other than credit institutions and 730K investment firms be subject to stand-alone liquidity standards? Should other entities be included in the scope of consolidated liquidity requirements of a banking group even if not subject to

stand-alone liquidity standards (i.e. financial institutions or 50K or 125K investment firms)?

**Question 11:** Should the standard apply in a modified form to investment firms? Should all 730K investment firms be included in the scope, or are there some that should be exempted?

**Treatment of intra-group transactions and commitments**

21. When applying the requirements to individual legal entities that form part of a group, the treatment of deposits, loans and commitments between the group entities matters. In principle, all intra-group transactions could be treated as if they were transactions between third parties. However, for the LCR, this approach introduces certain inconsistencies when comparing requirements at individual and consolidated levels. Those inconsistencies result from an additional layer of conservatism built into the draft proposal, and may mean for instance that one group entity would have to assume outflows as a result of the drawing down of a liquidity line by another group entity while the entity to which the line is committed would not be allowed to assume a liquidity inflow from the credit line. This asymmetrical treatment is appropriately conservative at the financial system level as it reduces reliance on wholesale liquidity lines. However, within a banking group this approach means that some entities have to incur costs for holding additional liquid assets for their commitments to other group entities whereas the entities receiving the commitments have no benefit. The sum of the buffer requirements at entity level would then exceed the consolidated group level requirement, in consequence dis-incentivising group liquidity support commitments. For the NSFR, the treatment among third parties is symmetric and could apply in intra-group situations without creating distortions; however there may be a question about prudence if group entities would not withdraw funds and commitments from each other under stress.

22. Therefore, the Commission services would favour a symmetrical treatment of intra-group transactions under the LCR, meaning that the absence of an inflow for one group member is mirrored as the absence of a liquidity outflow for another. More specifically, for intra-group lines of credit, this could mean that an entity which has received such a commitment should assume that it cannot draw upon it. This approach would reflect concerns about asset transferability under stress conditions (if there were no such concern about asset transferability, the entities could be granted a waiver for individual liquidity requirements - see above). Symmetrically, the entity that has committed the intra-group line of credit would not be required to treat it as a liquidity outflow. For intra-group loans and deposits, it may be assumed that these are not withdrawn or repaid under stress: the entity that has received intra-group funding does not experience additional stress resulting from related liquidity outflows and the entity that granted the loan does not receive any inflows – which is different from deposits between third parties, where interbank monies coming due would be assumed to be repaid. This approach is prudent in that it would not create reliance on intra-group commitments, but it would by contrast to the approach outlined in paragraph 21 not discourage them either. It would however not give any credit for a central pool of liquid assets as the entities would be assumed not to be able to draw on that central pool. For loans and
deposits, the prudent assumption is that there cannot be reliance on a flow of funds that may not occur under stress. For the NSFR, a similar assumption could be made in the sense all outstanding intra-group loans and deposits would be rolled beyond the one year horizon.

23. An alternative symmetrical treatment would be to assume that even under severe stress, group entities would roll over their loans and deposits (this aspect is identical to the treatment in paragraph 22) and entities that have received a legally binding commitment from another group entity could assume that they are always able to draw upon it. The entity having granted the commitment would assume corresponding liquidity outflows. The competent authorities could be given the possibility to grant such a treatment – by derogation to the one described in paragraph 22 – to group entities where they consider that the commitments are going to be honoured under stress but where, at the same time, they would not be comfortable with a full waiver of solo requirements. This treatment would by contrast to the one described in paragraph 22 create a certain incentive for central pooling of liquidity, where individual entities receive a possibility to draw on that central pool. For the NSFR, it might be consistently assumed that intra-group commitments are a stable source of funding that the legal entity holding the group's pool commits to other group entities while itself relying on the deposits from other group entities – regardless of their tenor – as a stable source for refinancing these commitments.

24. Finally, an alternative but non-symmetrical treatment could also be considered for intra-group transactions and commitments by which a group entity would be required to consider all outflows under liquidity commitments made and intra-group deposits received that could legally be withdrawn within the relevant time horizon. However, it would not be allowed to consider any inflows from intra-group deposits due or commitments received. This last approach would essentially force group entities to lengthen the maturity profile of all intra-group funding beyond 30 days (for instance by including a notice period before an intra-group deposit could be withdrawn) in order to avoid additional buffer requirements, thereby allowing the entity and its supervisor that has received the monies to gain time in an actual stress scenario. Notably, such treatment would clearly discriminate against intra-group funding when compared to funding from third parties and it would discourage intra-group liquidity commitments as they would entail a cost but no benefit.

**Question 12:** Comments are sought on the different options and in particular for how they would operate for the treatment of intra-group loans and deposits and for intra-group commitments, respectively. Comments are also sought as to whether there should be a difference made between the liquidity coverage and the net stable funding ratio.  

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10. I.e., 30 days or 1 year, respectively, for NSFR and LCR
11. For instance in the sense that an entity that has received an overnight deposit from another group entity could be allowed to assume that that deposit would be rolled over during the 30 days stress, but that that same entity would not be allowed to treat any monies due to other group entities during a one year period as an element of stable funding.
Supervisory responsibility for branch liquidity

25. Article 41, first sub-paragraph, of Directive 2006/48EC provides that host Member States retain responsibility for the supervision of liquidity of branches of EU credit institutions, but only "pending further coordination". If "further coordination" is achieved by setting uniform liquidity standards in the EU, this sub-paragraph can be deleted, and supervisory arrangements for liquidity would no longer be different from those for solvency supervision. The liquidity standard would achieve the "essential harmonisation" (see recital 7 of Directive 2006/48/EC) on the basis of which mutual recognition is possible and supervisory responsibility for liquidity supervision could be entrusted to the home country supervisor, subject to the "close collaboration" between home and host supervisors that is required under Article 42 of that Directive. Minimum standards for this collaboration would have to be spelled out in the directive. They could for example entail – for significant branches\(^\text{12}\) – full ongoing access by the host supervisor to the home country supervisory reporting and the monitoring tools discussed in points 28 and 29.

26. Independent of the question of who performs supervision (i.e. home or host country supervisor or joint decisions), the question of separate requirements for liquidity risk at the level of a branch in another Member State needs to be considered. One question in this context is whether a branch as such can become illiquid. Legally, all obligations of a branch are obligations of the credit institution itself. Therefore, as long as the credit institution itself is liquid and able to fulfil its obligations, so is the branch. Furthermore, should obligations actually not be fulfilled, there is no separate bankruptcy procedure in Europe for the branch. Rather, under the Winding Up and Reorganisation Directive,\(^\text{13}\) a credit institution with branches in other Member States is subject to a unified insolvency procedure in which all obligations, whether incurred in the home or by a branch in the host country, are treated in accordance with the insolvency regime of the home Member State, subject to the mutual recognition of certain contractual and property rights that are governed by the law of another jurisdiction.

27. A different but related question about branches in different currency zones within the EU (such as a credit institution in the Euro area having a branch in the UK) is whether liquidity and the ability of a credit institution to meet the obligations incurred through a branch depends on its ability to access local currency, including the local payment system and the central bank facilities. Three considerations are relevant to this question. First, an obligation incurred through a branch is no different from a foreign currency obligation incurred by the credit institution in any other way; as long as the credit institution can fulfil its foreign currency obligations, it can by definition also fulfil those incurred through its branches. Second, a credit institution needs access to local payment systems in order to fulfil foreign currency obligations in any event, irrespective of whether some or all of its foreign currency obligations are incurred through a branch. Third, if a credit institution needed access to central

\(^{12}\) As defined in Article 42a of the CRD (as modified by 2009/111/EC)

\(^{13}\) Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions
bank facilities in order to receive liquidity in a foreign currency, it could have access to those facilities via its branch, but legally the credit institution rather than its branch – which does not have legal personality – would be the counterparty of the central bank in that transaction.

28. Given these considerations, the Commission services think that if a harmonised set of liquidity rules is in place, responsibility for supervision in this field could be given to the home country competent authorities, in close collaboration with the competent authorities of the host Member States. Thereby, liquidity supervision responsibility would be aligned with responsibilities in all other fields of ongoing supervision. Furthermore and separate from the question of who is responsible for liquidity supervision, the Commission services think that liquidity supervision at the level of a branch in another Member State will not be necessary anymore based on a harmonised liquidity standard and the progress that has been achieved already by the reorganisation and winding-up directive of 2001.

Question 13: Do stakeholders agree with the conclusion that for credit institutions with significant branches or cross-border services in another Member State, liquidity supervision should be the responsibility of the home Member State, in close collaboration with the host member States? Do you agree that separate liquidity standards at the level of branches could be lifted based on a harmonised standard and uniform reorganisation and winding-up procedures?

Monitoring Tools

29. At present, supervisors use a wide range of quantitative measures to monitor the liquidity risk profiles of institutions. These include both contractual and bank-estimated cash flows and maturity gaps across different time horizons; granular assessments of the liquidity implications of specific balance sheet profiles; and the use of market data to monitor potential liquidity risks at banks. Such metrics enable monitoring of trends both within banking organisations as well as within financial systems, for a more macro-prudential approach to supervision.

30. To introduce more consistency and to facilitate supervisory cooperation, a set of common metrics could be established in legislation that competent authorities would be required to use in monitoring the liquidity risk profiles of supervised entities. Annex III lists possible Monitoring Tools. An additional monitoring tool may be desirable for intraday liquidity risk where it constitutes a material risk for a given bank.

Question 14: Comments are sought on the merit of using harmonised Monitoring Tools, either in the context of Supervisory Review or as mandatory elements of a supervisory reporting framework for liquidity risk. Comments are also sought on the individual tools listed in Annex III, their quality and possible alternatives or complements.

Question 15: What could be considered a meaningful approach for monitoring intraday liquidity risk?
SECTION II

Definition of capital

Overview

31. This section of the consultation paper:
   a) explains the context of recent amendments to the CRD; and
   b) sets out the possible further changes the Commission Services are now considering to:
      − strengthen, harmonise and simplify the definition of capital;
      − specify explicit minimum capital limits; and
      − enhance disclosure requirements in respect of capital.

32. Before addressing the changes proposed, it is useful to identify the purpose of regulatory capital. The losses that an institution expects to make – expected losses – are not covered by regulatory capital, rather they must be covered by the income generated by the institution or by provisions.\textsuperscript{14} The purpose of regulatory capital is to absorb the losses that a credit institution or investment firm does not expect to make in the normal course of business, i.e. unexpected losses. There are two general types of regulatory capital:
   a) capital that absorbs losses on a going concern basis, allowing an institution to continue its activities and helping to prevent insolvency; and
   b) capital that absorbs losses on a gone concern basis, helping to ensure that depositors and senior creditors can be repaid in the event the institution is wound up.

33. During the financial crisis, institutions made significant unexpected losses. In many cases, the amount of going concern regulatory capital held was insufficient to absorb losses on a going concern basis, and created broader concerns about financial stability. As a result, significant government intervention was required to prevent the failure of certain institutions and to restore financial stability. It is evident from the experience of the financial crisis that European legislation must place greater emphasis on the importance of going concern capital; capital that can help to prevent an institution from becoming insolvent.

34. The CRD was recently amended to revise certain aspects of the definition of capital as part of a package of measures to amend the CRD (CRD II). CRD II will introduce important improvements to the definition of capital which will increase the emphasis placed on the loss absorbency of regulatory capital. However, there is a compelling need for more comprehensive review, in particular for: measures to ensure the effective loss absorbency of regulatory capital on a going concern basis; the harmonisation of prudential adjustments (filters and deductions); the application of filters and deductions generally to the highest quality element of capital in order to align capital ratios reported

\textsuperscript{14} Credit institutions and investment firms are referred to collectively here as ‘institutions’.
with an institution's ability to withstand losses; and comprehensive and consistent disclosure of the components of the regulatory capital structure.

**Recent changes to European requirements for own funds**

35. In 1998, the Basel Committee reached agreement on the treatment of hybrid capital instruments. The agreement became known as the "Sydney Press Release." The lack of rules at the EU-level in respect of hybrid capital resulted in wide variation in the prudential treatment of hybrid capital instruments at national level. The amendments under CRD II harmonise the requirements for hybrid capital in the EU and transposed the Sydney Press Release into EU legislation. The requirements of CRD II will apply from 31 December 2010. They will:

a) raise the quality of Core Tier 1 capital;

b) provide a common interpretation of the main eligibility criteria for hybrid capital: permanence, loss absorption and flexibility of payments;

c) establish harmonised quantitative limits for the extent to which hybrid capital instruments may be recognised as eligible regulatory capital; and

d) introduce grandfathering provisions to minimise disruption in the financial markets resulting from the revised definition of capital.

36. Article 63a of the amended CRD requires the Committee of European Banking Supervisors (CEBS) to provide guidelines on the convergence of supervisory practices in respect of the CRD II requirements for Core Tier 1 and Hybrid Tier 1 capital instruments, and to monitor the application of these requirements. In response to Article 63a of the CRD, CEBS has published:

a) guidance on supervisory practices in respect of hybrid capital instruments on 10 December 2009; and

b) a consultation paper on implementation guidelines for Core Tier 1 capital instruments under Article 57a.

37. CEBS' implementation guidance in these areas will also apply from 31 December 2010. In making further revisions to the CRD's own funds requirements, the Commission services will consider the guidelines issued by the CEBS and the potential need for further additional guidance in this area from the CEBS.

38. There will also be significant changes to the solvency requirements of insurance and reinsurance undertakings under Solvency II (Directive 2009/138/EC), which was published in the Official Journal on 17 December 2009 and which enters into force on 31 December 2012. In the area of own funds, the Solvency II Framework Directive sets out the high-level principles of

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15 A copy of the Sydney Press Release may be found at [http://www.bis.org/press/p981027.htm](http://www.bis.org/press/p981027.htm).


the characteristics that own fund items for insurers must display, including going concern loss absorbency and loss absorbency in a winding-up. The Commission services are in the process of developing level 2 implementing measures that will elaborate on these principles. In order to ensure the appropriate level of consistency, we will ensure co-ordination of the changes made to the definitions of capital for institutions under CRD IV and under Solvency II to ensure the appropriate degree of cross-sector consistency.

Revision of the regulatory capital structure

39. The Commission services propose that the capital structure be revised to comprise:
   a) Tier 1 – going concern capital:
      - Core Tier 1 – common equity\footnote{18}; and
      - Non-Core Tier 1 – hybrid capital;
   b) Tier 2 – gone concern capital.

40. The Commission services propose to apply criteria to define clearly the requirements to be met in order to qualify for inclusion in each element of the revised capital structure. These criteria are discussed in greater detail below. In simplifying the capital structure, we propose to eliminate the distinction for the purposes of capital limits between: upper Tier 2 (certain undated subordinated debt instruments); and lower Tier 2 – e.g. dated subordinated debt instruments. We also propose to eliminate Tier 3 capital – subordinated debt instruments with an initial maturity of at least 2 years - from the capital structure.

**Question 16**: What are your views on the prudential appropriateness of eliminating the distinction between upper and lower Tier 2, and of eliminating Tier 3 capital?

Proposed definition of Core Tier 1 Capital

41. The Commission services intend to require that Core Tier 1 capital must comprise common equity, as this is the element of capital that is the highest quality and the most effective in absorbing losses and enabling in institution to remain as a going concern.

42. Credit institutions often take the form of joint stock companies that are able to issue common shares. In order for an institution's common shares to be eligible for inclusion in Core Tier 1, they must meet the highest standards of permanence, loss absorbency and flexibility of payments. Annex IV sets out the eligibility criteria that the common shares would have to meet in order to be eligible for inclusion in Core Tier 1. These criteria define the characteristics of the highest quality common shares. The Commission services are conscious of the potential difficulties in defining particular capital instruments within a directive, as the nature of ostensibly similar instruments can vary across jurisdictions. The CRD has hitherto taken a principles-based approach. We are considering the optimal approach in an EU legislative context of limiting recognition of Core Tier 1 capital instruments to common shares.

\footnote{18 Common equity is defined here as common shares, the related share premium accounts, reserves and profits and losses brought forward as a result of the final application of profit and loss.}
43. Credit institutions also take the form of Non-Joint Stock (NJS) companies, such as mutuals, co-operative and savings institutions. Such institutions play a vital role in the financial system and the EU economy. However, owing to legal constraints and their constitution they are not able to issue common shares. Where the quality of NJS companies' capital instruments is of the highest quality, the Commission services consider it appropriate that they be recognised as Core Tier 1 capital. Recital 4 of CRD II addresses this issue explicitly, requiring the specific constitution of mutuals, co-operative and similar institutions to be taken into account, and defining the circumstances in which NJS companies' capital instruments may be included in Core Tier 1 capital under Article 57a.\textsuperscript{19}

44. In order both to ensure the robustness of Core Tier 1 capital for NJS companies and to afford appropriate recognition of NJS companies' loss absorbent capital instruments, the Commission services are considering developing further the approach of Recital 4 by amending it to require, at a minimum, that:

a) the criteria in Annex IV are also applied to non-joint stock companies, such as mutuals, savings institutions and co-operatives, taking into account their specific constitution and legal structure;

b) the application of the criteria should preserve the quality of the instruments by requiring that they are deemed fully equivalent to common shares in terms of their capital quality as regards loss absorption and do not possess features which could cause the condition of the institution to be weakened as a going concern during periods of market stress; and

c) supervisors will exchange information on how they apply the criteria.

45. It should be noted that Recital 4 potentially permits instruments providing preferential rights for dividend payment on a non-cumulative basis to be included in Core Tier 1. Such instruments would be excluded from Core Tier 1 by criterion 7 in Annex IV. We consider this necessary in order to ensure that only the highest quality capital is recognised in Core Tier 1.

Prudential filters and deductions

46. The Commission services consider it appropriate that prudential filters and deductions be made generally in respect of Core Tier 1 capital. Annex V lists the potential filters and deductions that could apply. The overall effect of the proposed treatment of prudential adjustments will be reviewed as part of impact assessment, as well as potential alternative approaches to the

\textsuperscript{19} The following extract from Recital 4 sets out the CRD2 treatment, "Original own funds referred to in Article 57(a) of Directive 2006/48/EC should also include any other instrument under a credit institution's statutory terms taking into account the specific constitution of mutuals, cooperative societies and similar institutions and which are deemed equivalent to ordinary shares in terms of their capital qualities in particular as regards loss absorption. Instruments that do not rank pari passu with ordinary shares during liquidation or which do not absorb losses on a going-concern basis pari passu with ordinary shares should be included in the category of hybrids referred to in Article 57(ca) of Directive 2006/48/EC."
treatment of certain aspects, including minority interests, deferred tax assets and investments in other institutions and insurance companies.

47. The crisis has highlighted the weakness of the accounting treatment of permitting unrealised gains on debt instruments, loans and receivables, equities, own use property and investment property to be included in regulatory capital. The Commission services shall consider further the possible removal of such gains from Core Tier 1. In doing so, account of relevant changes to International Financial Reporting Standards will be taken.

Non-Core Tier 1 Capital

48. In order for hybrid capital to qualify as eligible, it is essential that it will be available at all times and is effective in absorbing losses on a going concern basis. As part of the CRD II, the criteria for Tier 1 hybrid capital were tightened and explicit limits on different components of Tier 1 capital, e.g. convertible capital, innovative/dated hybrids and other hybrids, were introduced.\(^{20}\) Innovative hybrids have shown during the crisis not to be sufficiently effective in absorbing losses on a going concern basis. Therefore, we do not consider it appropriate that they continue to be recognised in non-Core Tier 1 capital. In ensuring that only the highest quality instruments may be eligible as going concern capital, we consider it necessary also to strengthen the requirements for permanence. Therefore, we now intend to tighten further the criteria for non-Core Tier 1 capital, including by eliminating innovative and dated hybrid instruments altogether. To this end, it is proposed to amend CRD to incorporate the criteria set out in Annex VI.

49. There are two aspects of our proposals that the Commission services will continue to review:

   a) the requirement for principal loss absorbency; and
   b) the use of call options.

Principal loss absorbency

50. Article 63a(4) of the CRD requires that the provisions governing a Tier 1 hybrid instrument's principal, unpaid interest or dividend to be such as to absorb losses and not to hinder the recapitalisation of the credit institution through appropriate mechanisms, as elaborated by CEBS.

51. In its implementation guidelines on hybrid capital, CEBS states that, "there must be a meaningful statutory or contractual mechanism that will make recapitalisation more likely by reducing the potential future outflows to the hybrid holders at a certain, prudent and timely enough trigger point. Possible mechanisms are, for example, the possibility of permanently or temporarily writing down the principal or of converting the hybrid into an instrument referred to in Article 57(a)."

\(^{20}\) Article 66(2) refers.
52. Criterion 11 in Annex VI would require debt instruments (for the purposes of insolvency law) in non-Core Tier 1 to have a principal write-down or conversion feature upon a pre-specified objective trigger. It would not require instruments that qualify as equity for the purposes of insolvency law to have a conversion or write-down feature. The Commission services consider it to be vital that all forms of going concern capital absorb losses effectively on a going concern basis. Therefore, the Commission services will consider further the potential need for all non-Core Tier 1 instruments to have a mandatory principal write-down or conversion feature.

53. In relation to the nature of the trigger required for conversion of a hybrid instrument to a Core Tier 1 instrument, the focus of the proposed requirements is upon an objective trigger for conversion, e.g. a fall in a capital ratio to a particular level. In Article 66 of CRD II, additional regulatory recognition is afforded through a limit of 50% of Tier 1 to convertible instruments that must be converted into Core Tier 1 instruments during emergency situations and may be converted at any time by the competent authority based on the solvency situation of the issuer. A number of different types of situation could precipitate a need to convert hybrid instruments. Such situations could, for example, include a fall in capital requirements to a pre-determined level, or possibly a projected shortfall in capital requirements in the near future. In light of the potential for different drivers of the need for conversion, the Commission services continue to believe that an element of discretion has a potentially useful role to play in triggering conversion. The Commission services will reflect further on the potential triggers for conversion in the context of a review of the role and potential nature of contingent capital.

Call options

54. A call option in a capital instrument can afford an institution useful flexibility in managing its capital structure, including potentially strengthening Core Tier 1 when the market price of hybrid instrument is advantageous. However, it can also provide a source of pressure on an institution: an institution may feel pressured to call an instrument at a time when it can ill afford to do so in order to send a signal of robust financial health to the market. Criterion 5 in Annex VI seeks to ensure that appropriate supervisory safeguards apply to the exercising of calls.

55. CEBS' implementation guidelines on hybrid capital instruments define a supervisory approval process for the call, redemption and buy-back of such instruments. They also prohibit buy-backs within 5 years of issue, except with prior replacement of the instrument with one of equivalent quality and subject to prior supervisory approval.

56. In raising the quality of capital, the Commission services are keen to ensure that there is an adequate strengthening of the permanence of capital and will continue to review the regulatory safeguards that are required to ensure the adequacy of the process for calling instruments, and to address situations in which an institution may experience pressure to call an instrument.
Tax deductibility of coupons / dividends

57. Some forms of hybrid capital have coupons or dividends that may be treated as tax-deductible in certain jurisdictions. The tax rules on hybrid instruments' coupons and dividends depend on national tax requirements and differ significantly between jurisdictions. Neither the current CRD nor CRD II include requirements in respect of the tax treatment of a hybrid instrument.

58. There is a potential risk that a possible preferential tax treatment of hybrid instruments could create incentives for institutions to develop hybrid instruments with the objective of maximising the preferential tax treatment, rather than ensuring their quality. Such a risk could be potentially mitigated by prohibiting recognition of instruments with tax deductible dividends / coupons from non-Core Tier 1 capital. The Commission services have reflected on the potential for perverse incentives that could arise from continued recognition of such instruments in non-Core Tier 1. We have also reflected on the potential level playing field implications in light of the range of tax regimes applied within Europe. We consider the harmonisation of European tax regimes to be a more far reaching topic than the definition of regulatory capital for institutions. Moreover, we continue to view the importance of going concern loss absorbency as paramount. In addition, the eligibility criteria proposed would require a significant improvement in the quality of eligible capital instruments. Therefore, on balance, the Commission services do not consider additional eligibility requirements in relation to the tax treatment of hybrid instruments to be required.

Tier 2 capital

59. As part of the simplification of the capital structure, the Commission services propose to rationalise Tier 2 capital by eliminating Upper Tier 2 from the capital structure. Annex VII sets out the potential eligibility criteria for Tier 2 capital.

Commitments of co-operative bank members and credit institutions organised as funds

60. Articles 57(g) and 64(1) permit the commitments of the members of credit institutions as cooperative societies – uncalled capital and commitments to make further non-refundable payments – to be included within lower Tier 2 capital provided they may be included in capital under national law. An identical treatment is afforded to the joint and several commitments of borrowers for credit institutions organised as funds.

61. The approach proposed in criterion 1 of Annex VII would exclude such commitments from Tier 2. The prudential rationale for this approach is that it is inappropriate to rely on capital that has not yet been paid up. The Commission services would welcome comments on this proposed approach and will consider its potential effects as part of impact assessment. The views of respondents on the role of such commitments in strengthening capital are welcome, including relevant evidence of the fulfilment of such commitments.
Call options

62. The combination of a call and an amortisation period (lower recognition of the instrument as regulatory capital in the 5 years before the repayment date) in lower Tier 2 instruments has created, in some cases, an incentive for institutions to redeem the instruments prior to the start of the amortisation period. This placed additional pressure on such institutions during the crisis. The Commission services will continue to review the appropriateness of the safeguards proposed to ensure the adequacy of the process for calling instruments, and to address situations in which an institution may be pressured to call an instrument.

Lock-in clause

63. A lock-in clause could be argued to be an additional measure that could enhance further the permanence of Tier 2 capital. Such a clause could afford the institution or competent authorities the ability to prevent Tier 2 instruments from being redeemed in times of stress. A similar clause is currently required of Tier 3 capital - Article 13(3) of 2006/49/EC refers. However, a lock-in clause could equally be argued not to be necessary in respect of a Tier 2 instrument, as the purpose of Tier 2 is to absorb losses on a gone concern basis. The Commission services would welcome comments on the appropriateness of a lock-in clause in respect of Tier 2 capital.

Tier 3 capital

64. Tier 3 capital comprises subordinated loan capital under the Capital Adequacy Directive (2006/49/EC). The Commission Services consider that Tier 3 should be eliminated, as it was shown not to perform a useful role during the crisis and facilitated gearing based on capital that was of insufficiently high quality to absorb losses on a gone concern basis. We consider that capital required to cover risks in the trading book should be of the same quality as that required to support risks in the non-trading book.

65. As a consequence of the elimination of Tier 3, institutions would be required to meet capital requirements for market risk, Large Exposures in the trading book and fixed overhead requirements using Tier 1 and Tier 2 capital only.

Question 17: Are the criteria proposed for Core Tier 1, non-Core Tier 1 and Tier 2 sufficiently robust and how might they be improved?

Question 18: In order to ensure the effective loss absorbency of non-Core Tier 1 capital, would it be appropriate under certain circumstances to require the write down of the principal amount of an instrument or its conversion to a Core Tier 1 instrument? To what extent should the trigger for write-down / conversion be determined objectively or at the discretion of an institution or its supervisor?

Question 19: Which of the prudential adjustments proposed have the greatest impact? What alternative, robust treatments might be considered and what is their prudential rationale?
**Question 20:** Are the proposed requirements in respect of calls for non-Core Tier 1 and Tier 2 sufficiently robust? Would it appropriate to apply in the CRD the same requirements to buy-backs as would apply to the call of such instruments? What restrictions on buy-backs should apply in respect of Core Tier 1 instruments?

**Question 21:** What are your views on the need for further review of the treatment of unrealised gains? What would be the most appropriate treatment of such gains?

**Implications for Large Exposures**

66. The purpose of the CRD's large exposures regime is to limit the maximum loss that an institution may incur through any single client or group of connected clients. CRD II includes measures further to harmonise and strengthen the Large Exposures regime in the CRD, which will be implemented from 31 December 2010.

67. In our recent review of the large exposures regime, we did not amend the basis on which large exposures were identified or limits applied. As a result, under CRD II own funds remains the basis of the identification of a large exposures and the calculation of the 25% limit that applies in the non-trading book and the trading book.

68. The revisions proposed to the definition of capital recognise the primary importance of going concern capital, as demonstrated during the crisis. The need for government intervention in many cases, to prevent insolvency and ensure financial stability, often rendered gone concern capital not prudentially useful. In light of these factors and for reasons of consistency of approach, we are considering aligning the basis of calculation of large exposures and limits thereon with the strengthened definition of going concern, Tier 1 capital to be used for solvency purposes.

69. Such an approach could help to ensure that that an institution's exposure concentrations were constrained based on its ability to absorb losses and remain solvent. It might involve identifying and limiting large exposures based on an institution's ability to absorb on a going concern basis the maximum loss that could be incurred from such exposures – i.e. identifying as a large exposure an exposure that exceeded 10% of Tier 1 capital, and applying a limit of 25% of Tier 1. The use of a going concern measure of the revised definition of going concern capital for large exposures purposes would increase the extent to which the large exposures limit acted as a constraint on exposure concentrations. Such a change could therefore also necessitate review of the 10% and 25% levels used respectively to identify and constrain large exposures.

**Question 22:** We would welcome comments on the appropriateness of reviewing the use of going concern Tier-1 capital for large exposures purposes. In this context, would it be necessary to review the basis of identification of large exposures (10% own funds) and the large exposures limit (25% own funds)?
Contingent capital

70. Contingent capital has the potential to play a significant role in the capital structure. This potential was recognised in the directive amendments made in CRD II, which afford greater recognition in Tier 1 capital to instruments that must be converted to Core Tier 1 capital in emergency situations or at supervisory discretion based on the institution's financial and solvency position.

71. In addition to the loss absorbency mechanism and triggers specified in CRD II, alternative mechanisms and triggers could be considered. For example, contingent capital could be structured with a mandatory permanent principal write-down feature. It might be appropriate also to consider alternative triggers.

72. The Commission services will reflect further on the potential role and characteristics of contingent capital, including instruments with a principal write-down or conversion feature, as part of the eligibility criteria for non-Core Tier 1 capital, Tier 2 capital, and its potential to be used to meet capital buffers. In doing so, we will consider explicitly the effect of the contingent capital instrument on the order of subordination of capital instruments and the adequacy of potential triggers. More generally, due considerations will be given to the objective of ensuring harmonised and comparable composition of capital among the EU institutions.

Minimum capital requirements and predominance

73. In revising the definition of capital, the Commission services intend to introduce explicit, higher minimum requirements for the minimum levels of the ratios of Core Tier 1, Tier 1 and total capital (net of deductions) to risk weighted assets. This approach is required in order to align minimum capital requirements more closely with an institution's ability to absorb losses. It also reflects the focus of the market on going concern capital in assessing an institution's financial and solvency position. The Commission services will reflect on whether the proportion of Tier 1 capital that must comprise Core Tier 1 capital – i.e. the required level of predominance of Core Tier 1 - should be raised above the current level of 50%. The Commission services will also consider the potential for the minimum ratios for Core Tier 1 and Tier 1 to be used to deliver the requisite level of predominance.

74. CEBS' quantitative impact assessment will be used to determine the appropriate calibration of these regulatory minima, and the nature and extent of any changes required to the level of predominance.

Implementation timing, grandfathering and transitional provisions

75. The G20 leaders have stated that the new capital rules will be phased in as financial conditions improve and economic recovery is assured, with the aim of implementation by end-2012. The Commission services agree strongly with such an approach to phasing in and with the aim that the further changes to the definition of capital be implemented by end-2012.
76. It should be noted that CRD II will introduce grandfathering arrangements from 31 December 2010 in respect of instruments issued before this date that do not meet the Core Tier 1 or hybrid capital requirements under Article 57a and Article 63a (Article 154 of CRD II). The CRD allows such instruments to be grandfathered over a 30-year period, subject to certain restrictions in the first 10 years, and with declining, limited recognition in the second and third 10-year periods. We are conscious that institutions may seek, or need, to issue capital instruments ahead of the implementation of CRD IV, and are very keen for early clarity on the grandfathering provisions that would apply, including in respect of the implications for CRD II. The Commission services will define suitable arrangements for the phasing-in of the new capital requirements under CRD IV, as well as for the grandfathering of existing instruments, taking into consideration:

a) in the context of the need to raise the quality of capital, the appropriate interaction of the grandfathering requirements under CRD II and CRD IV;

b) the speed, nature and extent of financial and economic recovery; and

c) the results of cumulative impact assessment.

Disclosure

77. Under CRD II, firms will be required to disclose from end-2010 additional information on their regulatory capital instruments, including:

a) summary information on the terms and conditions of the main features of all capital instruments; and

b) the amount of Core Tier 1 capital, with separate disclosure of all positive items and deductions.

78. In order to address the lack of transparency that has arisen in respect of the composition of capital, the Commission services are considering strengthening further the disclosure requirements of CRD II by also requiring disclosure of:

c) a full reconciliation of all regulatory capital elements back to the balance sheet in the audited financial statements;

d) a description of all limits and minima, identifying the positive and negative elements of capital to which the limits and minima apply; and

e) institutions which disclose ratios involving components of regulatory capital (e.g. “Equity Tier 1”, “Core Tier 1” or “Tangible Common Equity” ratios) to accompany these with a comprehensive explanation of the basis of the ratios’ calculation.

Question 23: What is your view of the purpose of contingent capital? What forms and triggers would be most appropriate?

Question 24: How should the grandfathering requirements under CRD II interact with those for the new requirements? To what extent should the grandfathering provisions of CRD II be amended to bring them into line with those of the new capital requirements under CRD IV?
SECTION III

Leverage ratio

Overview

79. The years preceding the crisis were characterised by a significant build up in institutions' leverage. The losses made during the crisis forced institutions to reduce significantly the extent of their leverage in a short period. This process adversely impacted the availability of credit to the real economy and further compounded the adverse effects of the crisis. The risk-based minimum capital requirements of the CRD are essential to ensure the closer alignment of regulatory capital and the underlying risk. However, risk-based capital requirements alone are not able to prevent institutions from taking on excessive leverage. As a result, the Commission services consider that a leverage ratio is required to supplement risk-based minimum capital requirements by:

a) measuring leverage in a way that facilitates meaningful comparison across jurisdictions, and is fully adjusted for accounting differences; and

b) acting as a potential constraint on excessive growth in institutions' on- and off-balance sheet assets.

80. The ratio that is being considered is a non-risk based, gross leverage ratio that is based on going concern regulatory capital, incorporates an institution's on- and off-balance sheet assets and applies at the same level as minimum capital requirements, i.e. at the solo, consolidated and sub-consolidated levels. Annex VIII summarises the elements of the ratio the Commission services propose.

Implementation

81. The G20 leaders intend that a leverage ratio be introduced by end-2012. The Commission services are mindful of the need to ensure that the ratio is phased-in in such a way as not to impede financial and economic recovery. The appropriate approach to phasing in of the ratio will depend on its final design and calibration, and the extent of financial and economic recovery.

Calibration

82. The leverage ratio will be calibrated after detailed impact assessment, with a view to ensuring that it operates effectively to supplement the risk-based minimum capital ratio across the economic cycle, and as part of a balanced package of prudential reforms. In calibrating the leverage ratio, close attention will be paid to its interaction with the risk-based minimum capital ratio.
Design

83. There are two key elements to the leverage ratio:
- a) the measure capital used – the numerator; and
- b) the measure of total exposure used (on- and off balance sheet assets) – the denominator.

Capital measure

84. It is useful when measuring leverage to link the size of on- and off-balance sheet assets explicitly to an institution's ability to effectively absorb losses arising on a going concern basis. Therefore, the Commission services propose to employ a going concern measure of capital in the leverage ratio: Core Tier 1 or Tier 1 capital, as defined in Section II of this consultation paper. The capital measure used would be net of the relevant prudential adjustments.

85. The definition of capital used in the leverage ratio will be one of the key drivers of the value of an institution's leverage ratio. The results of impact assessment will inform the Commission services' decision on the most appropriate aspect of capital to use for these purposes. The potential impact of using total capital (Tier 1 plus Tier 2 capital) will also be considered.

Overall approach to measuring total exposure

86. In measuring total exposure in the ratio, the Commission services propose:
- a) generally to use accounting measures of an institution's assets;
- b) to measure total exposure net of value adjustments;
- c) generally to measure exposure on a gross basis, i.e. not to recognise credit risk mitigation for these purposes, e.g. collateral, netting and synthetic securitisation; and
- d) to ensure a symmetric treatment of capital and exposure by deducting assets that are deducted from capital also from the total exposure measure;

87. It should be noted that the approach to exposure measurement laid out below is solely for the purposes of calculating the value of the leverage ratio and is without prejudice to the basis of exposure calculation under minimum risk-based capital requirements.

On-balance sheet assets

88. In line with the need for a leverage ratio to be non-risk based, the exposure arising from on-balance sheet assets based on their accounting value, with no exemptions, would be measured. Such an approach would entail high quality liquid assets (as defined in Section I), such as cash or government bonds, being included fully in the total exposure amount. In order to ensure that the interaction of our requirements in respect of leverage and liquidity is appropriate, we will measure during impact assessment the potential effect of excluding high quality liquid assets from the total exposure measure.
89. The potential risk mitigating effects of collateral, netting and synthetic securitisation would not be recognised in measuring the total exposure amount. The Commission services consider this to be appropriate as it would provide a better reflection of underlying leverage.

**Securitisation**

90. As a result of using the accounting measure of exposures, an institution's assets that met the relevant accounting criteria for de-recognition of financial assets would not be included in the measure of total exposure. Retained tranches of such securitisations, and credit enhancements provided by the issuer would be included, as would assets that did not meet the relevant de-recognition criteria.

91. In addition, during impact assessment the relative merits of the alternative approach of treating all securitised assets originated by the institution as remaining on its balance sheet when calculating the total exposure amount will be considered. Such an approach could help to ensure the international consistency of the ratio.

**Netting**

92. The extent of netting that is permitted for accounting purposes varies significantly between accounting regimes. For netting to be recognised for accounting purposes under IFRS, an institution must always have the "intent" to settle on a net basis; broadly, US GAAP permits the netting of derivatives and of repos where they are subject to master netting agreements. This difference in accounting rules can result in substantial differences in the measure of total exposure and is a key accounting difference that must be adjusted for. In principle, this can be achieved either by requiring all such exposures to be measured on a gross basis, or by specifying a single, common approach to netting for the purposes of calculating leverage.

**Repurchase transactions and securities lending transactions**

93. Repurchase transactions and securities lending transactions play a significant role in contributing to an institution's leverage. Therefore, the Commission services propose that they be captured in the leverage ratio based on their accounting value and on a gross basis. A gross treatment would ensure the international consistency of the measure of exposure under such transactions.

94. As part of impact assessment, the potential impact of permitting regulatory netting of repurchase transactions and securities lending transactions, as per the CRD, will also be considered.

**Derivatives**

95. The Commission services are considering two potential options to measuring derivatives exposure:

   a) the gross positive fair value of a derivatives contract; and
   b) the replacement cost of a derivatives contract calculated using the Mark-to-Market method of Annex III, part 3 of the CRD.
96. A gross positive fair value measure would potentially provide a more accurate reflection of underlying leverage than a net measure (in which the leverage measure would be very substantially reduced as a result of offsetting contracts), as well as facilitating the international comparison of the leverage ratio.

97. In light of the fact that a derivatives contract's fair value can initially be very low (reflecting only the premium paid) and potentially volatile, the Commission services are also considering using a replacement cost approach which would apply a regulatory add-on to the contract's value to reflect the potential future exposure. The Commission services believe that a supervisory approach would be required to calculate replacement cost and therefore propose to use the Mark-to-Market method.

98. The approach ultimately used to measure derivatives exposure will be a key driver of the value of an institution's leverage ratio. During impact assessment, the effect of measuring derivatives exposure on a net fair value basis and a net replacement cost basis will also be considered. Such approaches would also facilitate international comparison.

Credit derivatives

99. The Commission Services consider that providing credit protection through writing a credit derivative is economically equivalent to providing a guarantee. Both would result in the transfer of risk from the underlying borrower to the guarantor or protection provider. Therefore, a written credit derivative should be treated in the same way as a guarantee for the purposes of calculating leverage, with the exposure under a written credit derivative measured as its notional value, the amount that the institution could be liable to pay under the terms of the protection. In order to ensure that the leverage ratio accurately reflects underlying leverage, the netting of credit derivatives exposure would not be permitted.

Other off-balance sheet items

100. Other off-balance sheet items – such as commitments, undrawn credit facilities, guarantees, and letters of credit - potentially also give rise to leverage and therefore warrant inclusion in a leverage ratio. The Commission services propose that, for the purposes of calculating the exposure amount in the leverage ratio, the items listed in Annex II of the CRD that have not been discussed above be included in the total exposure amount with a 100% Conversion Factor.

101. The Commission services will consider as part of impact assessment the alternative approach of calculating the exposure amount for other off-balance sheet items using the conversion factors under Annex II of the CRD that would apply under the Standardised and Foundation Internal Ratings Based approaches to credit risk.
Changes to accounting standards

102. The Commission services will monitor closely relevant developments in accounting standards, and will evaluate whether further changes are required to the design of the ratio as a result.

Risk management and supervisory review

103. It will vital to ensure that institutions themselves have a clear and accurate understanding of the extent of their leverage, including at the most senior levels, as well as of policies and processes for measuring and managing leverage. The Commission services propose to amend Annex V of the CRD on the organisation and treatment of risks to this end.

104. The leverage ratio also represents an important addition to the regulatory toolkit. Supervisors’ use of the information provided by the ratio will be at least as important as the design and calibration of the ratio itself. In order to ensure a harmonised supervisory approach to leverage in Europe, Annex XI of the CRD - which lists the risks to be reviewed and evaluated by supervisors - would be amended explicitly to include review of:

a) an institution’s approach to monitoring, managing and controlling its leverage; and
b) the extent of an institution’s leverage and changes therein.

Disclosure

105. It is our view that the key elements of the leverage ratio should be disclosed under Pillar 3. Section II covers the disclosures that we propose to require in relation to the elements of the capital structure. Annex XII of the CRD would be amended also to include information on the components of the total exposure amount used in the leverage ratio.

Question 25: What should be the objective of a leverage ratio?

Question 26: Which element of going concern capital do you consider would be a more appropriate basis for the leverage ratio? What is your rationale for this view?

Question 27: What is your view on the proposed options for capturing the overall extent of an institution’s derivatives business in the denominator of the leverage ratio?

Question 28: What is your view of the proposed approach to capturing leverage arising from credit derivatives?

Question 29: How could the design of the leverage ratio ensure that it would act as an effective constraint only in benign economic conditions?

Question 30: What would be the appropriate calibration of a leverage ratio?
SECTION IV

Counterparty credit risk

106. Efficient, safe and sound derivatives markets are imperative. Markets are looking for better risk management of derivative positions and the Commission services are committed to facilitating this through appropriate regulatory changes. One such change would impose different capital requirements for centrally cleared derivatives and non-centrally cleared derivatives.

107. The Commission services are considering a legislative proposal amending the treatment of counterparty credit risk (CCR) in the Capital Requirements Directive. The purpose of such proposal would be to strengthen the capital requirements for counterparty credit exposures arising from institutions’ derivatives, repo and securities financing activities. The objective of these amendments – that would seek consistency with the changes to the Basel II framework in this area as proposed in the Basel Committee’s consultative document of 17 December 2009 - would be to raise the capital buffers backing these exposures, reduce procyclicality and provide additional incentives to move OTC derivative contracts to central counterparties, thus helping reduce systemic risk across the financial system. They would also provide incentives to strengthen the risk management of counterparty credit exposures.

108. This review is fully in line with the objectives of the Commission’s Communications on derivatives of July and October 2009. The latter set out a number of future policy actions that the Commission intends to propose to increase transparency of the derivatives market, reduce counterparty and operational risk and enhance market integrity and oversight. The possible amendments to the Capital Requirements Directive in the area of counterparty credit risk outlined in this Section form an integral part of the Commission's initiatives in this area.

Key problems identified

109. The crisis revealed a number of shortcomings in the current regulatory treatment for counterparty credit risk exposures arising from derivatives, repos and securities financing activities:

- The existing framework did not ensure that institutions were adequately capitalised against the risks that materialised during the crisis:

21 Counterparty credit risk is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending institution faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.

22 http://ec.europa.eu/internal_market/financial-markets/derivatives/index_en.htm#communications
(i) The framework did not adequately capture the generalised wrong-way risk, i.e. a situation where the probability of default of counterparties is adversely correlated with general market risk factors. During the crisis, a key observation was that defaults and deteriorations in the creditworthiness of trading counterparties occurred precisely at the time when market volatilities, and therefore counterparty exposures, were higher than usual. The observed generalized wrong-way risk was not adequately incorporated into the framework.

(ii) The framework did not directly require capital for mark-to-market losses due to credit valuation adjustments (CVA). Roughly two-thirds of counterparty credit losses were due to CVA losses and only one-third were due to actual defaults. The current framework addresses CCR as a default and credit migration risk, but does not fully account for market value losses short of default.

(iii) Large financial institutions were more interconnected than reflected in the capital framework. As a result, when markets entered the downturn, institutions’ counterparty exposures to other financial firms also increased. During the crisis, financial institutions proved to be relatively more sensitive to systemic risk than non-financial firms and their credit quality deteriorated simultaneously. The evidence suggests that the asset values of financial firms are more correlated relative to those of non-financial firms.

(iv) The close-out period for replacing trades with counterparties with large netting sets or netting sets consisting of complex illiquid trades extended beyond the horizon required for the capital calculation, with the result that the regulatory capital charge significantly underestimated the incurred losses.

(v) Securitisation bonds when used as collateral were often treated as if they had the same risk exposure as a similarly rated corporate debt instrument. In the aftermath of the crisis, securitisations have continued to exhibit much higher price volatility than similarly rated corporate debt.

(vi) Use of own estimate of Alpha: There is an extremely high uncertainty about the accuracy of firms’ own estimates – there can be significant variation in such estimates arising from the mis-specification of the underlying models used in the estimation process.

- The existing framework did not provide sufficient incentives to move bilateral OTC derivative contracts to multilateral clearing through central counterparties (CCPs). Consequently, CCPs were not widely used to clear trades.

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23 Alpha is a multiplier applied to Effective EPE to determine EAD. Alpha may be set using an own estimate with a floor of 1.2 instead of a fixed factor of 1.4.
The existing framework calculating capital based on Effective Expected Positive Exposure (EPE)\(^{24}\) did not provide sufficient incentives for posting adequate initial margins at all points of the cycle. Initial margining was typically very low at the start of the crisis and increased rapidly during the turmoil. The raising of initial margin during the crisis served to protect the institutions, but may also have had the consequence that many counterparties failed or had to reduce positions, thus exacerbating the crisis.

110. The crisis also revealed a number of significant shortcomings in institutions’ risk management of counterparty credit exposures, including in particular the areas of back-testing, stress testing, addressing wrong way risk and collateral management:

(i) Back-testing: The difficulties in statistical interpretation of back-testing results for counterparty credit risk suggest that many firms did not appropriately consider problems that were identified by back-testing. The use of models with poor back-testing results contributed to an underestimation of potential losses.

(ii) Stress testing: Stress testing of counterparty credit risk was not comprehensive; was run infrequently, sometimes on an ad hoc basis; and, in many institutions, provided inadequate coverage of counterparties or the associated risks.

(iii) Addressing wrong-way risk: Transactions with counterparties, such as financial guarantors, whose credit quality is highly correlated with the exposure amount, contributed to the losses during the crisis.

(iv) Collateral management: The crisis highlighted a number of areas of concern that were related to the management and operation of the collateral management process.\(^{25}\)

\(^{24}\) Expected Positive Exposure (EPE) is the weighted average over time of expected exposures where the weights are the proportion that an individual expected exposure represents of the entire time interval. When calculating the minimum capital requirement, the average is taken over the first year or, if all the contracts in the netting set mature before one year, over the time period of the longest-maturity contract in the netting set.

\(^{25}\) For instance, the operational effectiveness of institutions’ collateral departments was often inadequate as they experienced substantial problems with respect to systems and data integrity, levels of staffing, risk reporting, and adhesion to the legal terms of collateral agreements. The increased number of large and lengthy collateral disputes across the industry often has been a consequence of these underlying issues. Also during the market crisis, institutions applying the Internal model method (IMM) experienced losses or liquidity strains due to the reuse (eg rehypothecation or reinvestment) of collateral assets (both cash and non-cash) received from counterparties and the subsequent requirement to return collateral on short notice.
Possible amendments to the counterparty credit risk framework

111. Against the above identified shortcomings, there are five key areas where possible amendments to the counterparty credit risk framework are envisaged by the Commission services:

(i) Improved measurement or revised metric to better address counterparty credit risk (including wrong-way risk, mark-to-market losses due to credit valuation adjustments, highly leveraged counterparties and firms' own estimates of Alpha);

(ii) A multiplier for the asset value correlation for large financial institutions;

(iii) Collateralised counterparties and margin period of risk;

(iv) Central counterparties;

(v) Enhanced counterparty credit risk management requirements.

112. The following section highlights the key elements of the possible amendments to the counterparty credit risk framework in these five areas. Further details about the possible approach to be proposed in these areas are set out in Annex IX.

(i) Improved measurement/revised metric to better address counterparty credit risk (including. wrong-way risk, mark–to-market losses due to credit valuation adjustments, highly leveraged counterparties and firms' own estimate of Alpha)

113. The suggested approach\(^{26}\) in this area would:

a) Require that the Effective EPE metric be calculated on data that includes a period of stress to address general wrong-way risk;

The significant general wrong-way risk that was evidenced during the recent market crisis calls for a strengthening of the point-in-time estimate of average future exposure, such as Effective EPE as the basis for determining exposure at default (EAD) for counterparties.

One possible way to address the concerns regarding general wrong way risk is to require institutions to calibrate the respective input parameters, such as volatilities and correlations, on the more conservative of a historic period that includes stress or the most recent period of experience. Hence, instead of Effective EPE, the Stressed Effective EPE would be applied.

The stressed period to be used for calibration under this proposal should be consistent with the recent revisions to the Market Risk framework for stressed VaR. Accordingly, the stressed Effective EPE would be based on model parameters calibrated over a three-year period that includes the one-year stressed period used for Stressed VaR for credit assets.

\(^{26}\) The suggestions below might, in some cases, need to be adapted to properly apply to the standardised approach to credit risk and current exposure methods of calculating counterparty credit risk. In this context, a review of the interaction of the three methods of calculating such risk will be required.
This proposal would address concerns about capital charges becoming too low during periods of compressed market volatility and help address procyclicality. The approach, which is similar to what has been introduced for market risk, would also promote more integrated management of market and counterparty credit risk.

b) Incorporate a simple capital add-on to better capture credit valuation adjustment risk that recognises a clearly defined set of hedges;

Institutions would be subject to a capital charge for mark-to-market losses (i.e. CVA risk) associated with deterioration in the creditworthiness of a counterparty. As mentioned above, while the current regulatory standards cover the risk of a counterparty default, they do not address such CVA risk, which has been a greater source of losses than those arising from outright defaults.

One way to design such capital charge would be – as an interim measure\textsuperscript{27} - to use a bond\textsuperscript{28} equivalent as a proxy for CVA risk. Specifically, given that the risks are very similar, an appropriate amount of regulatory capital for CVA would be determined using the specific market risk capital charge\textsuperscript{29} required for a hypothetical bond-equivalent position, where:

- the notional of the “bond” would be the total EAD of a counterparty (treated as fixed);
- the maturity of the “bond” would be the Effective Maturity (M) of the longest dated netting set of a counterparty; and
- the time horizon would be one year, as opposed to the market risk framework’s 10-day time horizon.

Since the counterparty’s total EAD is used as the notional amount of the “bond” and it is based on future exposure, the EAD will factor in upfront some potential adverse future variations in exposure, which can be a source of CVA mark-to-market losses. Moreover, given that the spread of the counterparty is used directly, the bond equivalent approach fully reflects the spread risk of CVA, which has been the major source of CVA-related losses over the recent market turbulence. However, the extent of CVA losses might be understated by the fact that the value of the notional is held fixed when determining the capital charge. Nevertheless, the notional amount of the hypothetical bond will be updated as EAD changes whenever the capital charge is calculated for regulatory purposes. An advantage of this approach is that it can be implemented by firms using their current measurement systems. Subject to the emergence of more consistent industry practices, due considerations will be given to other

\textsuperscript{27} Further work will be needed to develop an approach that would be more equivalent to the VaR of the CVA on an OTC derivative.

\textsuperscript{28} Assuming a hypothetical bond issued by the counterparty.

\textsuperscript{29} Covering the 99\% worst-case CVA profit and loss. The market risk charge applied to the bond equivalent amount would not include the Incremental Risk Charge because the default risk is already addressed by the revised trading book framework.
internal approaches\(^{30}\) that might more accurately reflect the risk from change in exposure.

Under the bond equivalent approach, single-name credit default swap (CDS) hedges that reference the counterparty to which the institution is exposed will be recognised. This should provide an incentive for institutions to hedge the CVA risk, which many failed to do prior to the crisis. In addition, the market risk charge applied to the bond equivalent amount would not include the Incremental risk charge (IRC) because the default risk is already addressed by the revised trading book framework.\(^{31}\)

c) Implement an express Pillar 1 capital charge for specific wrong-way risk\(^{32}\)

Transactions with counterparties, such as financial guarantors, whose credit quality was correlated with the exposure amount, contributed to the losses during the crisis. Current rules require monitoring of specific wrong way risk. However, no standard practice method for monitoring this type of risk has been developed among institutions. Shortcomings in industry practices resulted in many firms entering into transactions with substantial exposure to wrong-way risk, particularly arising from the purchase of credit protection via credit default swaps from monoline insurers.

On top of this requirement, the proposal would be to apply a capital charge for each counterparty for which there exists a legal relationship that gives rise to measurable wrong-way risk. More specifically, for single-name credit default swaps (CDS) where there exists a legal connection between the counterparty and the underlying issuer, the notional of the CDS would be used as the EAD of the counterparty. In addition, for equity derivatives referencing a single company where there exists a legal connection between the counterparty and the underlying company, the value of the derivative under the assumption of default of the underlying entity would be used as the EAD of the counterparty.

d) Add a qualitative requirement indicating that the Probability of Default (PD) estimates for highly leveraged counterparties should reflect the performance of their assets based on a stressed period

Because highly leveraged counterparties (e.g. hedge funds) are usually margined, the possible proposals suggesting a more appropriate capital requirement for margined counterparties (e.g. the use of an increased margin period of risk outlined in section iii-a) would already address some concerns relating to such counterparties.

\(^{30}\) Such as modelling of CVA VaR etc.

\(^{31}\) That is, under this proposal, the general market risk charge is to be applied to the bond-equivalent amounts and associated single-name CDS hedges, separately from the rest of the market risk exposures, rather than incorporating these into the firm’s overall VaR methodology and thereby allowing for other types of offsets.

\(^{32}\) Specific wrong-way risk arises when the exposure to a particular counterparty is positively correlated with the probability of the default of the counterparty due to the nature of the transactions with that counterparty. Specific wrong-way risk typically arises from poorly constructed transactions.
Nevertheless, with a view to improving the existing framework further, the Commission services are considering the addition of a qualitative requirement for institutions applying the IRB approach, indicating that the PD estimates for highly leveraged counterparties should reflect the performance of their assets based on a stressed period.

e) Place additional constraints on firms’ own estimates of Alpha to avoid mis-specification of the risk and promote greater consistency across firms

The proposal would suggest strengthening requirements for the supervisory review of institutions’ use of own estimates of Alpha, where institutions are permitted to use them. This would ensure that supervisors are alerted to the significant variation in estimates of Alpha that arises from the opportunity for significant mis-specification in the respective models. Alternatively, prohibition of the use of own estimates of Alpha might be considered.33

Question 31: Views are sought on the suggested approach regarding the improved measurement or revised metric to better address counterparty credit risk. With respect to suggestion to incorporate - as an interim measure - a simple capital add-on by means of calculating the loan-equivalent CVA charge, views are sought on the implications of using VaR models for these purposes instead.

Question 32: Stakeholders are invited to express views on whether the use of own-estimates of Alpha should continue to be permitted subject to supervisory approval and indicate any evidence in support of those views.

(ii) A multiplier for the asset value correlation for large financial institutions

114. To address the systemic risk within the financial sector, the proposal would suggest raising the risk weights on exposures to financial institutions relative to the non-financial corporate sector, as financial exposures are more highly correlated than non-financial ones. Specifically, the proposal would suggest applying a multiplier to the asset value correlation of exposures to regulated financial firms (with assets above a certain threshold) and to all exposures to unregulated financial firms (regardless of size). A further analysis will be needed to assess the appropriate calibration of the proposed multiplier and asset size threshold.

115. During the crisis, financial institutions’ credit quality deteriorated in a highly correlated manner and they proved to be more sensitive to systemic risk than non-financial firms. As a result, financial institutions were more correlated than reflected in the current Basel II internal ratings based (IRB) framework. The evidence suggests that Asset Value Correlations (AVCs) for financial firms were, in relative terms, 25% or more higher than for non-financial firms.

33 In this context, Alpha might be considered as a tool for recalibration of the proposal following the results of the impact assessment. As a result, an improved understanding on the significance of the total capital effect of the proposed changes gained during the impact assessment process might possibly lead to an adjustment of the existing levels of Alpha.
This higher degree of correlation with the market needs to be reflected in the IRB capital framework\textsuperscript{34}.

A possible way to capture this higher degree of correlation would be to introduce a multiplier to be applied to the AVC of financial firms. The level of this multiplier will have to carefully calibrated, on the basis of the feedback to the public consultation and a quantitative impact study to be carried out by CEBS. For illustrative purposes, assuming a multiplier of [1.25], the AVCs between financial firms would range from [15\% to 30\%], as opposed to the 12-to-24\% range for corporates under the current Basel II framework.

Financial firms would be broadly defined to include institutions, broker-dealers, insurance companies, and highly leveraged entities, such as hedge funds and financial guarantors, since all of these firms exhibited heightened sensitivity during the crisis. However, exposures to smaller institutions, broker-dealers and insurance companies did not exhibit this sensitivity to the same extent. Accordingly, the application of the multiplier would be limited to exposures to institutions, broker-dealers and insurance companies with assets above a certain threshold. Further analysis will have to be conducted to determine the appropriate calibration of the proposed threshold. Under this proposal, exposures to unregulated financial intermediaries, including highly leveraged entities that derive the majority of their revenues from financial activities, such as hedge funds and financial guarantors, would always be subject to the higher AVCs, regardless of asset size.

Question 33: Views are sought on the suggested approach regarding the multiplier for the asset value correlation for large financial institutions, and in particular on the appropriate level of the proposed multiplier and the respective asset size threshold. In addition, comments are sought on the appropriate definitions for regulated and unregulated financial intermediaries.

(iii) Collateralised counterparties and margin period of risk

Standards for collateral management and initial margining have to be strengthened. In light of the recent crisis, the Commission services will consider modifying the existing requirements and introducing new standards where warranted. Consequently, the proposals under consideration in this area would:

\textsuperscript{34} Further work will be needed to evidence the magnitude and scope of any recalibration prior to full consideration.
a) **Increase the margin period of risk for certain netting sets (in particular with large, illiquid or hard-to-replace trades);**

The supervisory floors for margin periods of risk for both OTC derivatives and securities financing transactions would be extended to 20 days for netting sets:
- where the number of trades exceeds 5,000; or
- that contain illiquid collateral or OTC derivatives that cannot be easily replaced in the marketplace (e.g. so-called bespoke or exotic derivatives).

While management action to extend the margin period of risk beyond the regulatory minimum for complex or illiquid transactions was an integral part of the regulatory requirements, recent experience has demonstrated the need for additional bright line indicators of when to compel institutions to extend the margin period of risk. In addition, this proposed capital treatment would create an incentive to reduce the size of netting sets, which should make them easier to close out when necessary thus reducing the relative level of CCR. Illiquid collateral and OTC derivatives that cannot be easily replaced will be characterised by the absence of active markets with sufficient depth and liquidity to enable a counterparty, within two days or fewer, to obtain multiple price quotations that do not move the market or represent a price reflecting a market discount (in the case of collateral) or premium (in the case of an OTC derivative).

The proposal would also require institutions which have a history of margin call disputes on a netting set that exceeds the margin period of risk to double the applicable margin period of risk for the affected netting set. In particular, if over the previous two quarters an institution has engaged in more than two disputes regarding a particular netting set that last longer than that netting set's margin period of risk (e.g. 5 business days), then the margin period of risk for that netting set would double (e.g. 10 business days) for the following two quarters. Such a requirement would capture the additional risk of long disputes and provide incentives for institutions to limit such events.

b) **Create a separate supervisory haircut category for repo-style transactions using securitisation collateral and prohibit re-securitisations as eligible financial collateral for the purposes of regulatory capital**

Since the crisis, the valuation of securitisation exposures has become substantially more volatile than similarly rated corporate debt. The Commission services are considering the creation of a separate supervisory haircut category for repo-style transactions of (eligible) securitisations. The new haircuts for these exposures would be at least

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35 The time period from the last exchange of collateral covering a netting set of transactions with a defaulting counterpart until that counterpart is closed out and the resulting market risk is re-hedged.

36 An increase from the 5 and 10 business day margin period of risk for securities financing transactions and OTC derivatives respectively.
double\textsuperscript{37} the supervisory haircuts applied to corporate debt. Furthermore, re-securitisations would no longer be eligible as collateral.

c) Amend the "shortcut method" so that more realistic simplifying assumptions are taken into account to estimate Effective EPE when an institution cannot model margin requirements along with exposures

The “shortcut” method in the existing framework allows firms to calculate future exposure as the sum of the margin threshold and the expected change in exposure over the margin period of risk. This implicitly assumes that all collateral has been received and does not reflect margin call disputes in the exposure measurement. Some very significant and long-running disputes have been observed in the past year, and without adjustment from firms this approach could have resulted in substantial understatements of EAD. The formulation of the shortcut method would be amended to address the weaknesses identified.

Annex IX provides further details on the suggested approach in this area.

d) Implement various improvements in the calculation of exposure at default (EAD) to strengthen collateral management practices and the operations and risk analysis supporting the collateral management process. Specifically, the proposal would introduce the following additional standards:

- Prevent the reflection in EAD of any clause in a collateral agreement that requires further collateral to be provided when a counterparty’s credit quality deteriorates (i.e. downgrade triggers);
- Enhance the controls regarding the reuse (i.e. rehypothecation and reinvestment) of collateral by firms applying the Internal Model Method;
- Require institutions to model non-cash collateral jointly with underlying securities for OTC derivatives and securities financing transactions;
- Use the supervisory haircuts when transforming non-cash collateral for OTC derivatives into cash-equivalent when they are unable to model the collateral jointly with the exposure;
- Enhance the operational performance of the collateral department; and
- Revise the credit risk mitigation section of the framework to add qualitative collateral management requirements.

Annex IX provides further details on these possible new standards.

\begin{center}
\textbf{Question 34:} Views are sought on the suggested approach regarding collateralised counterparties and margin period of risk. Views are particularly sought on the appropriate level of the new haircuts to be applied to repo-style transactions of (eligible) securitisations. In this context, what types of securitisation positions can, in your view, be treated as eligible collateral for purposes of the calculation of the regulatory requirements? Any qualitative and/or quantitative evidence supporting your arguments would be greatly appreciated.
\end{center}

\textsuperscript{37} Further analysis will be needed to calibrate the final proposal.
(iv) Central counterparties

119. A central counterparty (CCP) is an entity that interposes itself between counterparties to a contract traded within one or more financial markets, becoming the buyer to every seller and the seller to every buyer. A CCP can play an important role in the efforts to reduce the systemic risk arising from the web of exposures formed by holdings of derivatives products by banks and other financial institutions. However, a CCP also concentrates risk, which means that a CCP with insufficiently robust risk management processes can actually increase the systemic risk. In order to avoid such a situation, supervisors need to ensure that a CCP has in place strong risk management procedures and is, more generally, subject to and complies with strict rules/standards governing all aspects of its operations.

120. In addition to existing national rules governing CCP activities, there exists a set of international recommendations, developed by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO). On the basis of these recommendations, the European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR) have developed a more detailed set of recommendations for CCPs. The CPSS-IOSCO recommendations for CCPs are currently being updated and the concerned stakeholders, including the Basel Committee on Banking Supervision, are expected to contribute to this effort with the goal of establishing a single set of high standards for CCPs that also can be used for regulatory capital purposes. Among others, the Basel Committee on Banking Supervision and the Commission services consider that the following risk management elements should be addressed in the enhanced standards for CCPs:

- Establish a high specific level of initial margin and ongoing collateral posting requirements.

38 http://www.cesr.eu/popup2.php?id=5775
39 The initial reason behind the launch of the revision of the recommendations was the need to assess whether they already covered the specificities of OTC derivatives central clearing. Later on, the process was broadened to a full revision of the recommendations. The OTC derivatives related revision process for the ESCB-CESR recommendations has already been concluded.
40 The Commission has contributed to the Basel Committee’s work on this topic.
41 Interoperability is generally considered as a way to stimulate competition between CCPs. There is a risk that this requirement could have negative consequences for existing interoperability agreements and discourage future ones. There are several ways in which CCPs can manage inter-CCP exposures in interoperability agreements and not all of them foresee the exchange of initial margin between interoperating CCPs (see 2008 report prepared by Joint Regulatory Authorities of LCH.Clearnet Group). If some of the existing agreements are of this latter type, then participating CCPs would not comply with the above requirement. As a consequence, an institution using a CCP involved in such agreement - that may currently enjoy the favourable capital charge by using the CCP - would lose the favourable capital treatment once the requirement takes effect. Concerning future agreements, this requirement would increase the costs of interoperability (CCPs would need to post initial margin with one another to maintain the favourable capital treatment for the institutions that use them) and could therefore discourage CCPs from pursuing it. A possible way around this problem could be to exclude inter-CCP exposures from the initial margin calculations, provided that sufficient other safeguards are put in place by the interoperating CCPs.
- Require a rigorous schedule for calculating margin requirements, monitoring exposures and conducting back-testing exercises, and a rigorous process for managing such risks;
- Require that procedures be in place to identify, monitor and limit the amount of specific wrong way risk, investment risk, settlement risk and default/guarantee fund risk to which a participant can be exposed;
- Require that a CCP has the financial resources necessary to withstand the default of the \([n]\) (e.g. 2) largest participants (in terms of exposure) under exceptional risk circumstances;
- Require that stress testing includes an analysis of the potential losses, the size of default fund needed, and the mechanics of accessing such a default fund under exceptional risk circumstances; and
- Clarify the responsibility for the supervision of CCPs.

121. Currently, banks’ exposures to central counterparties (CCPs) generally attract a zero EAD; few requirements are placed on CCPs in order for banks to use a zero EAD in calculating their exposures to such entities. The Commission services will consider establishing that only institutions with counterparty collateral and mark-to-market exposures to CCPs that meet the enhanced standards as outlined above would qualify for a zero percent risk weight. Counterparty credit exposures to CCPs that do not meet these high standards would be treated as bilaterally cleared exposures. Other exposures to CCPs, such as default or guarantee fund exposures, would require a capital charge that is higher than the current effective capital requirement of zero. Equity investments in CCPs would continue to receive equity treatment under Basel II/CRD.

122. This proposal would reinforce the existing incentive for institutions to use CCPs for OTC derivatives as the proposed revisions would increase the assessed capital requirements against such exposures if completed on a bilateral basis rather than through a CCP.

**Question 35**: Views are sought on the suggested approach regarding central counterparties and on the appropriate level of the risk weights to be applied to collateral and mark to market exposures to CCPs (on the assumptions that the CCP is run to defined strict standards) and to exposures arising from guarantee fund contributions.

**Question 36**: Views are sought on the risk management elements that should be addressed in the strong standards for CCPs to be used for regulatory capital purposes discussed above. Furthermore, stakeholders are invited to express their views whether the respective strong standards for CCPs to be used for regulatory capital purposes should be the same as the enhanced CPSS-IOSCO standards.
Enhanced counterparty credit risk management requirements

123. The proposal in this area would enhance counterparty credit risk management requirements by in particular:

a) Making the qualitative requirements for stress testing more explicit;

Stress testing is an important risk management tool and this is especially true for counterparty credit risk management. Despite the importance of this tool, the development of stress testing for counterparty credit lags behind the development of stress testing for market risk or for traditional credit risk. Development of stress testing of counterparty credit risk has been hindered by several difficulties: the multiplicity of counterparties makes it difficult to develop easily understandable stress tests, and exposure measures are still developing.

For these reasons, the proposal would suggest expanding and making more explicit the qualitative requirements in the CRD for stress testing that institutions must perform when using the internal modelling method.

Furthermore, in order to improve the identification and monitoring of wrong-way risk, the Commission services are considering an express requirement for institutions that would reinforce the importance of stress testing and stress analysis in the identification of risk factors that are positively correlated with counterparty credit worthiness.

Further details about the suggested qualitative requirements for stress testing are set out in Annex IX.

b) Revising the model validation standards

Institutions that are permitted to use internal model methods (IMM) to calculate counterparty credit risk regulatory capital are required to carry out on-going validation of their counterparty credit risk exposure models. The Basel II framework and CRD require IMM firms to back-test their EPE models, where back-testing is defined as the comparison of the IMM model’s output against realised values.

Back-testing is only one element of the validation process and recent experience with IMM firms has highlighted significant shortcomings in their ability to conduct appropriate back-testing. In addition, the approach to VaR back-testing is inappropriate for back-testing the internal models used for counterparty credit risk calculations. Due to the identified shortcomings in back-testing practices and inappropriate use of VaR back-testing for purposes of CCR, the proposal would:

- Revise the model validation requirements of the CRD; and

- Add a new operational requirement for EPE models for institutions to have an independent risk control unit responsible for the design and implementation of the institution’s CCR management system.

In this context, the Basel Committee is expected shortly to issue additional guidance to strengthen the backtesting of internal assessments of counterparty credit risk exposure.
Further details about the suggested approach with respect to back-testing are set out in Annex IX.

**Question 37:** Views are sought on the suggested approach regarding enhanced counterparty credit risk management requirements.

Do the above proposed changes to the counterparty credit risk framework (in general, i.e. not only related to stress testing and backtesting) address fully the observed weaknesses in the area of risk measurement and management of the counterparty credit risk exposures (both bilateral and exposures to CCPs)?
SECTION V
Countercyclical measures

124. This section covers two possible counter-cyclical measures, which are not necessarily cumulative:

- Through-the-cycle provisioning for expected credit losses (Part 1)
- Capital buffers and the cyclicality of minimum requirements (Part 2)

Part 1 - Through-the-cycle provisioning for expected credit losses

125. During the crisis several EU banks made significant write downs on trading instruments, but it also became clear that banks had not set aside sufficient levels of provisions for credit risks on loans originated during the 'good' economic years.

126. Many international institutions and committees\(^\text{42}\) have emphasised the importance of inclusion of counter-cyclical buffers in the prudential framework in order to reduce excessive pro-cyclicality within financial systems. Several estimates by the IMF, the outcome of the CEBS stress testing exercise and DG MARKT's own sample indicate a potentially very significant "under-provisioning" by EU banks. The Commission Communication for the Spring European Council called for any excessive pro-cyclicality to be mitigated, through measures which should include the possibility of building up additional reserves in good times.

127. The main conclusions\(^\text{43}\) of the final report from the EFC\(^\text{44}\) working group on pro-cyclicality called for a system of "dynamic" provisioning "in order to address credit risk and enhance transparency". Following that report, the Ecofin Council of July 7, 2009 called in its conclusions\(^\text{45}\) for "the introduction of forward looking provisioning, which consists in constituting provisions deducted from profits in good times for expected losses on loan portfolios, and which would contribute to limiting pro-cyclicality".

128. Importantly in a press release\(^\text{46}\) the Group of Central Bank governors and heads of supervision pointed out that accounting standards should recognise the use of through-the-cycle approaches on credit loss provisioning.

\(^{42}\) G20, de Larosière report, Financial Stability Board, Financial Crisis Advisory Group, the EFC working group

\(^{43}\) EFC Working Group on Pro-cyclicality, Final Report of the EFC Working Group on Pro-cyclicality to the EFC / ECOFIN, 23 June 2009

\(^{44}\) EFC - the Economic and Financial Committee conducts preparatory work for the Council of the European Union on the economic and financial situation, the euro exchange rate and relations with third countries and international institutions. This advisory committee also provides the framework for preparing and pursuing the dialogue between the Council and the ECB.


\(^{46}\) http://www.bis.org/press/p100111.htm
The case for "dynamic provisioning": Market behaviour

129. Insufficient, and therefore pro-cyclical, provisioning for credit risks during good times is mainly driven by the behaviour of market participants, and more specifically, their misperceptions of risk or inappropriate responses to risk which essentially changes the reported risk return ratio of banks. Banks are also susceptible to strong competitive pressures and short time horizons in their incentive schemes, which may in turn prompt herding behaviour. Borio et al 2001 showed that behaviour of banks in provisioning translated into a clear pro-cyclical pattern in bank profitability in countries that experienced problems in the banking system in the 1990s, which encouraged pro-cyclical lending practices. Similar problems manifested themselves in the current financial crisis.

130. The Commission services propose that credit loss provisioning should have the objective of "ensuring that credit institutions make timely and adequate provisions for all credit risks they are exposed to in a counter-cyclical way." As an important principle an approach on credit loss provisioning should use existing Basel approaches including the Internal Ratings Based approach to the maximum extent possible.

Commission contribution to improving loan loss provisioning

131. The Commission services consulted stakeholders in July on a proposal for through-the-cycle provisioning – largely inspired by the Spanish model which has proven effective. In the absence of any such measure in accounting standards at the time, and in line with the ECOFIN conclusions, the envisaged proposal suggested that regulatory dynamic "provisioning" should be above the line, thus dampening the volatility of bank profits.

132. The majority of responses to the consultation called for a cautious approach in introducing EU measures on dynamic provisioning affecting financial reporting, suggesting that it would be better to wait for the outcome of the pending changes to IAS 39 on loan loss provisioning. Several respondents pointed at the difficulty of combining investor-oriented financial reporting with supervisory concerns for financial stability in accounting standards. They argued that supervisory prudence would undermine the "true and fair view" of the financial position and economic performance and therefore prefer a separate regulatory approach mainly via capital requirements. There was broad support for allowing the use of internal models for dynamic provisioning on the grounds that internal models would better capture the specific risk

47 C. Borio, C. Furfine and P. Lowe, Procyclicality of the financial system and financial stability issues and policy options, BIS Papers No 1, 2001; (Borio et al 2001)
49 Tendency of market participants to conform their behaviour with that of their peers
50 Borio et al 2001 also found that provisions are highly negatively correlated with the business cycle and typically do not increase until after economic growth has slowed down significantly and often not until the economy is in recession.
profile, make sense for banks with IRB portfolios, and could alleviate problems with the availability of historic credit loss data. See Annex X for a more detailed summary of comments to the consultation.

133. Inspired by earlier FSB recommendations on enhancing loan loss provisioning, in April 2009 the G20 recommended that the IASB should work in co-operation with the Basel Committee of Banking Supervisors on improving the accounting standards (IAS 39) for loan loss provisioning in order to allow an earlier recognition of expected credit losses. Since spring 2009 the IASB has been exploring the Expected Cash Flow (ECF) model and in November issued an Exposure Draft with a consultation period ending in June 2010.

134. In the Exposure Draft the IASB emphasised that through-the-cycle or "dynamic provisioning" will not be possible under the proposed ECF method. The ECF method differs from the Basel II expected loss approach for IRB banks due to differences in the Cash Flow / loss estimation period and Basel's use of more prudent expected loss data. The Exposure Draft considerably improves disclosures on loans, provisions and write-downs. The IASB acknowledges the operational cost and difficulties of the ECF approach and has therefore proposed an extended comment period of eight months during which an Expert Advisory Panel will work on operational aspects.

135. The Basel Committee outlined in its December 2009 consultation on "Strengthening the Resilience of the Banking Sector" the objective of improving the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy. In a separate press release the Group of Central Bank governors and heads of supervision pointed at the use of through-the-cycle approaches on credit loss provisioning and indicated to make concrete proposals to the IASB by April.

136. In December 2009, the Commission services set up a technical group of Member State experts on credit loss provisioning. Without any prejudice to the independence of the IASB, the purpose of the working group is to provide constructive input to the debate on the final shaping of the IASB standard on impairment.

137. The working group is currently focussing on the following:

(a) Assessing the extent to which the proposed Expected Cash Flow method meets the objective of dampening cyclicalities and developing suggestions on how cyclicalities might be further limited by using through-the-cycle data based on prudent approaches within the proposed ECF method;

(b) Assessing systems for through-the-cycle provisioning that have been developed in the context of the current incurred loss event approach under IAS 39 - which is commonly considered as "too little too late".

52 http://www.bis.org/press/p100111.htm
Assessing the Expected Cash Flow method

138. The proposed ECF impairment method will be assessed in particular with reference to: 1) the reliability and timing of credit risks provisions, 2) the impact on the volatility of reported income, 3) disclosures, 4) alignment with Basel II approaches on credit risks and 5) the impact on regulatory capital.

139. The Exposure draft contains five high level measurement principles that reporting entities should use in combination with the principles-based application guidance to determine the amortised cost.

140. Under the IASB's proposed ECF method banks would:

(a) Initially estimate the expected cash flows for the (remaining) life of the financial instrument, including the expected credit losses (taking into account the collateral).
(b) Calculate the “effective interest rate” (= internal rate of return) on the basis of the expected cash flows. The effective interest rate would be lower than the contractual interest rate because estimated credit losses are taking into account.
(c) Review subsequently at each reporting date its initial cash flow and credit loss expectations and revise when necessary.

141. The working group is carrying out a comparative analysis to assess the cyclical impact of the various approaches to expected credit loss provisioning on the basis of a common set of data and assumptions. The following impairment approaches are being compared:
1. The ECF method as proposed by the IASB in the Exposure Draft on amortised cost and impairment;
2. The incurred loss approach of current IAS 39;
3. The IRB method of the Basel II framework for accounting provisioning

Question 38: The Commission services invite stakeholders to perform a comparative assessment of the three different methods (ie ECF, incurred loss and IRB expected loss if it could be used for financial reporting) for credit loss provisioning from 2002 onwards based on their own data.

Assessing through the cycle approaches

142. As indicated, the Commission has already consulted on the current Spanish system of dynamic provisioning, and the technical group is now looking into a revised approach that may overcome potential problems with the availability of data and would cater better for entity specific credit risks.

143. In line with the principle that credit institutions should use existing regulatory approaches to credit loss provisioning, the working group started exploring a revised approach of through-the-cycle loan loss provisioning based on the IRB approach. The Commission services see merit in using data available under banks' Internal Rating Based approaches to credit risk (IRB)
for accounting purposes. IRB systems are currently validated and assessed on an ongoing basis by banking supervisors to calculate banks' unexpected (UL) and expected loss (EL) for capital adequacy purposes in accordance with Annex VII of the CRD. Banks' expected losses are calculated as follows: EL = PD*LGD*EAD. PD (probability of default) and LGD (Loss Given Default) are parameters of banks' IRB systems.

**Banks using the IRB approach**

144. The simplest way of determining the increase or decrease of "already existing" but "not-yet-manifested" credit losses in a performing loan portfolio is to compare annually the IRB expected loss amounts (EL: on the stock of performing loans) at the beginning of the year with the subsequent annual flow of losses actually materialised during the year (= Net Specific Provisions for non performing loans):

- Typically during an upswing the flow of Net Specific Provisions for non-performing loans (NSP) recognised in the year is lower than the IRB Expected Losses (for performing loans) at the beginning of the year, the difference increases the cumulative stock of "already existing" but "not-yet-manifested" credit losses of the performing loan portfolio. The cumulative stock of general provisions (for performing loans) will increase by that amount.

- If the flow of Net Specific Provisions for non performing loans (NSP) in the year is higher than the IRB Expected Losses of the performing loan portfolio at the beginning of the year, the cumulative stock of "already existing" but "not-yet-manifested" credit losses of the performing loan portfolio decreases in the same proportion.

145. The rationale behind this is that if the IRB system using through the cycle PDs and LGDs is well calibrated, there is only a timing difference in the recognition of credit losses. Where for a given year NSP are lower than EL, higher NSP (compared with EL) are expected in the future. This will offset the lower NSP recorded previously. In the long term, the average annual NSP for non performing loans and the average annual EL amounts for performing loans should converge. This through the cycle provisioning system will allow to better accrue the costs of credit losses incurred by banks through the economic cycle and, by doing so, will help reflect more accurately the annual economic performance and the value of bank loan portfolios at any moment in the cycle.
Where EL > NSP, i.e. in 'favourable' periods, the annual increase of the general provision will be:

Delta General provision for a given year = EL beginning of the period – NSP during the period.

With:

EL: the expected loss amounts for non-defaulted assets of performing loans at the beginning of the year;
NSP (Net Specific Provision): the amount of net specific provisions (flow) charged to profit and loss (income statement) each year.

Where NSP > EL, i.e. in 'unfavourable' periods, the annual decrease of the general provision will be:

Delta General provision for a given year = EL beginning of the period – AL during the period

In a downturn, when the NSP > EL, the bank will use the general provision for the difference between EL and AL for a given year and as a maximum for the cumulative general provision.

146. The approach outlined above is a simplified model. It will require the use of "incurred loss model" data for determining net specific provisions on non-performing loans. In Annex XI, a numerical example explains how the mechanics of the model work.

147. In that example, it must be noted that each year the EL for performing loans at the beginning of the year should be compared with the “total amount” of NSP made during the year for non-performing loans, which includes the “specific provisions for new non performing loans” plus the “additional specific provisions for old non performing loans”.

148. Views of shareholders are sought on the general direction of travel of this provisioning approach. Technical details would have to be further worked out. In particular, further consideration needs to be given to the following issues:

- Under the CRD, banks are required to use a 'downturn' LGD while this model assumes an 'expected' LGD;
- Should the model consider changes in the risk profile of the portfolio each year?
- Should the model specifically consider the growth of the portfolio?
- Need to consider the calibration of the general provision: possible ceiling and floor, possible adjustment factor to only increase or decrease the stock of general provisions by a fraction of the above mentioned difference between NSP and EL, in order to make the system more 'linear' over time.
• Would the use of regulatory LGD for banks using the Foundation IRB result in higher general provisions compared to Advanced IRB banks using their own estimate of LGD?
• Should off-balance sheet items be excluded since they are only partly and differently recognised under accounting frameworks?

**Banks using the revised standardised approach**

149. The model outlined above does not lend itself to banks using the revised standardised approach. In lieu of estimated PD and LGD, credit institutions under the revised standardised approach could use 'EL' that are 'embedded' in risk-weights laid down in Annex VI of the CRD.

150. By way of example, the following ELs have been derived from the IRB risk-weighting function for exposures to corporates, institutions and central government and central banks\(^{53}\). They are provided for illustrative purposes, and further granularity would be needed to make EL for IRB banks and for RSA banks consistent.

<table>
<thead>
<tr>
<th>RW</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>35%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
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<td>0,01%</td>
<td>0,02%</td>
<td>0,05%</td>
<td>0,1%</td>
<td>0,23%</td>
<td>0,48%</td>
<td>1,88%</td>
</tr>
</tbody>
</table>

**'Capital' treatment**

151. Because provisions – whether specific, general or 'dynamic' – are supposed to cover expected losses, provisions whatever their form should not count as regulatory capital. Regulatory capital covers unexpected losses. Against this background, a system of 'dynamic provisioning' would have to be coupled and articulated with the review of the definition of capital. The suggestion is to exclude general provisions from regulatory capital. Otherwise, the model would lose a great deal of its "countercyclicality" character as the depletion of the general provision in a crisis would reduce at the same time the solvency ratio of banks. However, should an "expected" LGD be used for determining the above mentioned through-the-cycle provisioning then there would be differences between the “expected” EL for this provisioning purpose and the “downturn” EL (based on downturn LGDs) used in the regulatory capital framework. These differences should be considered in order not to reduce the actual EL + UL losses coverage.

152. Supplementary general provisions beyond the annual net specific provisions could be subject to different tax treatments within the EU. If supplementary general provisions for expected losses are not tax deductible, differences would occur as deferred tax assets (because the bank expects actual tax deduction in the future). Under the new proposals on the definition of ELs have been calculated using the IRB risk-weighting function for exposures to corporates, institutions and central government and central banks (Annex VII of the CRD, section 1.1) with the risk-weight of the Standardised Approach as an output, and assuming a LGD of 45% and a maturity of 2,5 years as an input. To obtain the 'regulatory' EL, the PD corresponding to those parameters (risk-weight as an output, LGD, and M as an input) has been multiplied by a LGD of 45%.
of capital (see section II and Annex V) deferred tax assets should be deducted from capital and will therefore lower core Tier 1 capital. This would lead to a double effect: deduction of the supplementary general provision from net income and deduction of the deferred tax assets from core Tier 1 capital. Where the constitution of a dynamic provision gives rise to a deferred tax asset, these deferred tax assets should not be deducted from own funds.

**Question 39:** Views are sought on the suggested IRB based approach with respect to the through-the-cycle provisioning for expected losses as outlined above.

**Expected cash flow approach**

153. In paragraph 47 of the section on the definition of capital it has been indicated that the Commission will assess permitting unrealised gains on debt instruments, loans and receivables, equities, own use property and investment property to be included in regulatory capital and work on possible deduction from core Tier 1 capital. The ECF, if endorsed, would be an example of such a deduction. The ECF method requires a re-assessment of (initially) expected credit losses at the reporting date and eventual changes ("value adjustments") shall be recognised in the P&L account. So, revising credit loss expectation downwards (taking a more optimistic view on expected credit losses) may result in a higher carrying amount of the loan with the corresponding change leading to an increase in reported profits. In other words value adjustments of the carrying amount of a loan (portfolio) due to revised cash flow expectations are presented in the P&L. This looks somewhat similar to "level 3" ("mark to myself") fair value changes flowing through the P&L for instruments measured at amortised cost. Therefore, the proposal would be to deduct the sum of positive (or a net positive) ECF re-valuations from core tier 1 capital.

**Part 2 - Capital buffers and the cyclicality of minimum requirements**

154. It is not possible to achieve a greater sensitivity of regulatory capital requirements to risk profiles of institutions at a given point of time without introducing a certain degree of cyclicality in the minimum capital requirements over time. The policy objective should not, therefore, be to eliminate completely the cyclicality of minimum capital requirements. On the other hand, the current downturn has shown the importance of continued credit flows to EU enterprises and consumers. While the Commission is aware that monetary and fiscal policies have a significant impact on the business cycle, amendments to current EU banking legislation may be necessary to address "excessive" pro-cyclical feedback mechanisms arising from regulation.

155. The Commission is considering the introduction of instruments that will move in a counter-cyclical fashion to the capital levels of banks, i.e., will increase during economic upturns and will decrease in downturns. This should provide for supplementary or micro variable buffers in addition to minimum capital requirements aimed at ensuring the financial soundness of institutions throughout economic cycle.
156. In the proposed framework based on capital buffers, two complementary elements are identified. The first element stipulates a fixed target buffer (capital conservation buffer) over the regulatory capital minimum that is available to absorb losses in "stressed" periods. Banks would be expected to build up such capital in good times. Banks that are below the fixed target would face constraints on capital distributions (i.e., dividend payments, share buybacks) until fixed target buffers are reached. This would ensure that the banking sector builds up capital buffers when it has the earnings capacity to do so and uses those buffers in periods of stress. Requiring capital to rise during periods of strong earnings would help dampen excessive banking sector credit extension and leverage. The risk that this measure would increase the use of contingent capital and convertible instruments will be mitigated by the new eligibility criteria for these instruments to count as non-core Tier 1 and Tier 2 capital (see section II).

157. The second element stipulates a counter-cyclical capital buffer. It is designed to achieve the broader macro-prudential goal of protecting the banking sector from periods of excessive credit growth and support bank lending in the economic downturn. It would work by extending the size of the capital buffer range established by the capital conservation buffer. The target level of counter-cyclical capital buffer would vary over time and would be set as a function of a macro variable(s) chosen to act as an indicator of build-up of risks at a macro level (e.g. excessive level of credit growth). Deviation of the macro variable from its long-term average would indicate periods of build-up of macro risks, leading to the extension of the range of capital conservation buffer.

**Capital Conservation Buffer**

158. Under the proposed approach, a buffer range would be established above a credible regulatory minimum and capital distribution constraints would be imposed on the bank when capital levels fall into this range. Banks would be able to conduct business as normal when their capital levels fall into this range as they experience losses: the constraints imposed would relate only to distributions, and not the operation of the bank.

159. The table below illustrates how this framework could operate (numbers in the table are illustrative and do not represent a proposed calibration). The restriction on capital distribution depends on the distance to the target – if a bank incurs losses and its capital level falls within the range between the minimum and the target the bank would be required to conserve a percentage of its earnings in the subsequent year.
Individual bank minimum capital conservation standards

<table>
<thead>
<tr>
<th>Capital conservation range is established above the minimum requirement</th>
<th>Minimum Capital Conservation Ratios (expressed as a percentage of earnings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount by which a Bank’s capital exceeds the minimum requirement in terms of a percentage of the size of the conservation range</td>
<td>[&lt; 25%] [100%]</td>
</tr>
<tr>
<td></td>
<td>[25% - 50%] [80%]</td>
</tr>
<tr>
<td></td>
<td>[50% - 75%] [60%]</td>
</tr>
<tr>
<td></td>
<td>[75% - 100%] [40%]</td>
</tr>
<tr>
<td></td>
<td>[&gt; 100%] [0%]</td>
</tr>
</tbody>
</table>

160. There are a number of important aspects that have to be addressed.

**Calibration**

- The guiding principle would be that the buffer must be large enough to enable banks to remain above the minimum requirement in the face of losses expected to be incurred in a foreseeable severe downturn.

- In addition, the level of restrictions imposed within the buffer range need to be calibrated. This calibration would have to take into account evidence from distribution rates during periods of economic and financial stress.

- To ensure that the buffer created can be drawn down, the capital used to comprise the buffer needs to be capable of absorbing losses on a going concern basis. Therefore, the buffer would be based on Tier 1 capital rather than total capital.

**Elements subject to the restriction on distributions**

Items considered to be subject to restrictions would include ordinary dividends and share buybacks, discretionary payments on other Tier 1 capital instruments and discretionary bonus payments to staff.

**Definition of earnings**

To be consistent, earnings would be distributable profits calculated prior to the deduction of elements subject to the restriction on distributions. However, it is obvious that different financial reporting frameworks in addition with different company tax regimes could create significant differences in the amount of reported net profits available for profit distribution. This should be addressed properly in order to ensure a single (international) level playing field between banks.
Solo or consolidated application

The framework would be applied at the consolidated level, i.e., restrictions would be imposed on distributions out of the consolidated group. National supervisors would have the option of applying the regime at the solo level to conserve resources in specific parts of the group. It should be pointed out that dividends are normally based on the statutory financial statements of subsidiaries and the parent undertaking and not on the consolidated accounts. Therefore it is important to find pragmatic solutions to reconcile the solo and consolidated accounts.

Additional supervisory discretion

Although the buffer must be capable of being drawn down, banks should not choose in normal times to operate in the buffer range simply to compete with other banks and win market share. To ensure that this does not happen, supervisors would have the additional discretion to impose time limits on banks operating within the buffer range on a case-by-case basis. In any case, supervisors would ensure that the capital plans of banks seek to rebuild buffers over an appropriate timeframe.

Counter-cyclical Buffer

161. The counter-cyclical capital buffer would work by adjusting the size of the buffer range established by the capital conservation buffer. This would be implemented through a buffer add-on during periods when there are significant risks that the stock of credit has grown to historically high levels. The consequences of not meeting the counter-cyclical capital buffer would be largely the same as not meeting the capital conservation buffer (i.e., constraints on distributions of capital).

162. The proposal is currently at an early stage of development and further work is needed to fully specify the details of how it would operate. However, to promote discussion on this proposed approach, the following key elements are put forward:

(i) A macro-economic variable or group of variables would be identified and used to assess the extent to which in any given jurisdiction there is a significant risk that credit had grown to excessive levels. This would need to take into account the variations in the stages of development of financial sectors across jurisdictions. As an example, one variable which is being considered is the difference between the aggregate credit-to-GDP ratio and its long term trend.

(ii) For each jurisdiction, when the variable breaches certain pre-defined thresholds this would give rise to a benchmark buffer requirement. This could then be used by national jurisdictions to expand the size of the capital conservation buffer.

(iii) Banks with purely domestic lending would be subject to the full expanded buffer. Internationally active banks would be required to look at the geographic location of their credit exposures and calculate their buffer as
a weighted average of the buffers which are being applied in jurisdictions to which they have exposures.

(iv) The proposal under development would not be implemented as a strict rules-based regime since such an approach would require a high degree of confidence that the variables used would under all circumstances perform as intended and would not send false signals. This level of confidence will not be possible. Consequently, a benchmarking approach is being considered where the buffer generated is simply the starting point. The option will exist for authorities to increase or decrease the buffer as appropriate, taking into account the broader range of information which supervisors and central banks will be able to consider in the context of the circumstances which prevail at the time.

(v) Outside of periods identified as having a significant risk that credit had grown to excessive levels, the capital conservation range will remain at its target level above the minimum requirement.

**Question 40:** Do you agree with the proposed dual structure of the capital buffers? In particular, we would welcome your views on the effectiveness of the conservation buffer and the counter-cyclical buffer, separately and taken together, in terms of enhancing the resilience of banking sector going into economic downturn and ensuring the flow of bank credit to the "real economy" throughout economic cycle.

**Question 41:** Which elements should be subject to distribution restrictions for both elements of the proposed capital buffers and why?

**Question 42:** What is the appropriate timing – following the breach of capital buffer targets – for the restriction to capital distributions to start? Should the time limits for reaching capital buffer targets be determined by supervisors on a case-by-case basis or harmonised across EU?

**Question 43:** What is the most suitable macro variable (or group of variables) that may be used in the counter-cyclical buffer to measure the dynamics of macro-level risks pertinent to the banking sector activities?

**Question 44:** What are the relative merits and drawbacks of capital buffers versus through-the-cycle provisioning for expected losses with respect to minimising procyclical effects of current EU banking regulation?

**Cyclicality of the minimum requirement**

163. The CRD introduced a number of safeguards to address excess cyclical of the minimum requirement. They include the requirement to use long term data horizons to estimate probabilities of default, the introduction of so called downturn loss-given-default estimates, and the appropriate calibration of the risk functions, which convert loss estimates into regulatory capital requirements. Banks are also required to conduct stress tests that consider the downward migration of their credit portfolios in a recession.
164. The BSC (Banking Supervision Committee of the ECB) / CEBS (the Committee of European Banking Supervisors) task force has put in place a comprehensive data collection initiative to assess the impact of the Basel II / CRD framework on its member countries over the credit cycle. Given that credit losses in the banking book subject to the Basel II framework are only now moving to their peak loss levels and that the availability of consistent data is subject to a time lag, it is still too early to take a firm view on whether the framework is proving to be more cyclical than expected. Should the cyclicality of the minimum requirement be greater than supervisors deem appropriate, the Commission services will consider additional measures to dampen such cyclicality. However, it should be noted that under the Basel II framework, banks and national supervisors are already able to require downturn or through-the-cycle probabilities of default (PDs) to dampen the cyclicality of the minimum capital requirement.

165. There are a number of additional measures that supervisors could take to achieve a better balance between risk sensitivity and the stability of capital requirements, should this be considered necessary. In particular, the range of possible measures includes an approach by the CEBS to use the Pillar 2 process to adjust for the compression of PD estimates during benign credit conditions. The UK Financial Services Authority (FSA) has proposed a variant to this approach that provides a simple scalar to translate point-in-time loss estimates into through the cycle estimates. An alternative to dampening the volatility of the inputs to the Basel II capital requirement could be to dampen the output through a time-weighted averaging process.

**Question 45:** Do you consider that it would be too early to fully assess the cyclicality of the minimum capital requirement?
SECTION VI

Systemically important financial institutions

166. A key shortcoming of the prudential regime in place prior to the crisis was a lack of explicit focus on the nature, scale and build up of systemic risk. This led to a situation in which there was insufficient monitoring and control of systemic risk. The distress or failure of Systemically Important Financial Institutions (SIFIs) necessitated unprecedented government intervention in order to restore financial stability.

167. The Commission services are currently reviewing the potential policy approaches required to ensure that prudential requirements for SIFIs are commensurate with the risks they pose. We consider that a package of tougher prudential requirements is needed to reduce the frequency and severity of financial crises. We consider it unlikely that it would be possible to eliminate the chance of some form of financial crisis from occurring in the future. Therefore, the development of resolution tools and an effective framework for cross border resolution should be central elements of any potential package of measures to address systemic.

168. In addition to the prudential measures needed to address the risks posed by SIFIs, there has been particular focus recently on possible structural reforms, such as limits on the scope of permissible activities or on the size of financial institutions. In respect of the appropriate scope of banking business, we intend to consider further the nature and potential effect of the potential measures available.

169. On the issue of the size of SIFIs, the Commission services' considers that size is a key driver of systemic importance, but is not the only such driver. The extent of a financial firm's interconnectedness with other financial firms, the financial infrastructure and the real economy matters enormously in determining the systemic a SIFI might pose; as does the ease with which the functions performed by an institution could be substituted by another. In addition, the objective of EU competition policy, as set out in the Treaty on the Functioning of the European Union, is to prevent companies with a dominant position in their economic sector from abusing this position and from distorting competition in intra-Community trade. Applying a restriction on the size of a SIFI without regard to whether it had and was abusing a dominant market position would not be consistent with the EU approach.

170. It should be noted that the types of entity that could be considered to be systemically important could potentially go beyond credit institutions and investment firms. In considering further our approach to systemic importance, we will have regard to the fundamental differences in risk between financial sectors.
<table>
<thead>
<tr>
<th>Question 46:</th>
<th>What is your view of the most appropriate means of measuring and addressing systemic importance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 47:</td>
<td>How could the Commission services ensure a consistent prudential treatment of systemic importance across financial sectors and markets?</td>
</tr>
</tbody>
</table>
SECTION VII

Single rule book

171. The public consultation on possible amendments to the CRD in the area of options and discretions that was conducted in July – September of 2009 met with great support. Most stakeholders agreed with the removal of options and national discretions and shared the objective of ‘full harmonisation’. A summary of responses to the public consultation is set out in Annex XII.

172. The Commission services would like to emphasise that a single rule book does not mean uniform rules regardless of specific national circumstances. Rather, it should encompass the necessary differentiation according to national or product circumstances. But at the same time, it makes sure that same things are treated the same way, i.e. that a product, specific as it may be to a national market, is treated the same by whoever offers that product and independent of in which Member State that bank is authorised.

Areas where more stringent requirements are necessary

173. In general terms, respondents representing the industry appreciated the fact that Member States and competent authorities will be prevented from 'gold plating' or imposing super-equivalent requirements in 'fully harmonised areas'. On the other hand, some stakeholders mentioned that keeping the ability of applying stricter rules was needed to ensure financial stability. Nevertheless, the Commission services have not received concrete evidence of areas where full harmonisation is not appropriate yet. This consultation seeks to concretely identify the areas where national or other circumstances necessitate a more stringent treatment so that such treatments can be incorporated in the single rule book, alongside the circumstances under which they would apply. The Commission services would also note that where specific circumstances have to be addressed at a (number of) credit institutions, Pillar 2 of the Basel/CRD framework provides national authorities with a powerful tool. Pillar 2 enables addressing specific shortcomings or instances of elevated levels of risk. As part of the supervisory package establishing a European Banking Authority (EBA), the Commission has proposed that the EBA should develop draft technical standards on Pillar 2.

Question 48: In which areas are more stringent general requirements needed given national or other circumstances? Is Pillar 2 a sufficient tool to address specific negative circumstances at credit institutions and if not, how could it be strengthened?

54 http://ec.europa.eu/internal_market/consultations/2009/capital_requirements_directive_en.htm Consultation on proposed amendments relating to through-the-cycle expected loss provisioning; specific incremental capital requirements for residential mortgages denominated in a foreign currency; the removal of national options and discretions; and simplification of the Bank Branch Accounts Directive (89/117/EEC).
Treatment of real estate lending

174. Many respondents mentioned that Member States’ real estate markets are not homogeneous, and that national discretions in particular in relation to real estate reflect the specificities of local markets, and should be therefore kept.

175. The Commission services recognise that the suggested amendments to the preferential treatment of exposures secured by real estate property, in particular a fully harmonised treatment based on very tight LTV requirements, failed to recognise circumstances in well developed real estate markets and therefore a revision of the suggested approach in this respect would be warranted. Nevertheless, the Commission services still consider that the respective preferential prudential treatment of exposures secured by real estate property should be harmonised along the following lines:

As to residential real estate:

- Introducing a “hard test”\(^{55}\) when waiving the independence criterion\(^ {56}\) for the preferential treatment of exposures secured by mortgages on residential property\(^ {57}\). Comments are requested whether the limits in point 58 of Annex VI, Part 1 are appropriate for these purposes.

In addition, as empirical evidence suggests that both LTV and LTI are important risk drivers in residential real estate lending, the Commission services will consider:

- Whether a specific maximum harmonised Loan To Income (LTI) ratio (e.g. 33.3\%-50\%)\(^ {53}\) and/or any other appropriate indicator(s) should be introduced as an additional precondition for the application of the preferential treatment of exposures secured by residential real estate;

- Whether a specific maximum harmonised LTV value (e.g. 80\%)\(^ {58}\) replacing the current vague requirement for a ‘substantial margin’\(^ {59}\) should be introduced as a precondition for the application of the preferential treatment of exposures secured by residential real estate.

As to commercial real estate:

\(^{55}\) Requiring that a well-developed and long-established real estate market is present in the respective territory with loss rates which do not exceed certain limits.

\(^{56}\) “the risk of the borrower does not materially depend on the performance of the underlying property,” a criterion which in less developed residential markets excludes loans for income producing residential real estate from the preferential treatment, unless the borrower has other means for repaying the loan.

\(^{57}\) As already suggested in the Commission services’ public consultation paper published on 24 July 2009.

\(^{58}\) The appropriate value of the respective benchmark will need to be calibrated.

\(^{59}\) The CRD currently requires that the value of the property should exceed the exposure by a substantial margin (Annex VI, Part 1, point 48(d)).
• Introducing a hard test as a general condition for the preferential treatment of exposures secured by mortgages on commercial real estate;52

• Considering whether to amend the existing levels of the LTV and/or mortgage lending value benchmarks and/or whether to introduce any other indicators as additional preconditions for the application of the preferential treatment of exposures secured by mortgages on commercial real estate;

• Considering whether the existing preferential risk weight applied to exposures secured by mortgages on commercial real estate should be increased.

Subject to the relevant conditions being met, the respective treatment for exposures secured by mortgages on residential property and commercial real estate would then become mandatory rather than a national discretion.

**Question 49:** What is your view of the suggested prudential treatment for exposures secured by mortgages on residential property outlined above? What indicators and their respective values do you consider appropriate as possible preconditions for the application of the preferential treatment of exposures secured by mortgages on residential property?

**Question 50:** What is your view of the suggested prudential treatment for exposures secured by mortgages on commercial real estate outlined above? What indicators and their respective values do you consider appropriate as possible preconditions for the application of the preferential treatment of exposures secured by mortgages on commercial real estate? In particular, are additional preconditions needed to ensure the soundness of this treatment? Do you believe that the existing preferential risk weight applied to exposures secured by mortgages on commercial real estate should be increased?

For both questions, any qualitative and/or quantitative evidence supporting your arguments would be greatly appreciated.

**Question 51:** Should the prudential treatment for exposures secured by mortgages on residential property be different from the prudential treatment for exposures secured by mortgages on commercial real estate? If so, in which areas and why?

**Treatment of real estate lending throughout the economic cycle**

176. In the EU, several Member States experienced housing bubbles, which, after the burst, have cause serious problems not only at the macro-economy level, but to the individual debtors as well. The regulation must thus reflect on these bitter lessons.

177. In designing the appropriate prudential treatment of real estate lending, a question arises as to what extent the relevant regulatory requirements should reflect the different stages of the economic cycle and thus contribute to
financial stability by preventing market excesses and reducing the risk of asset bubbles.

178. Against this background, the Commission services are currently in the process of considering the merits of possible measures that would help to address real estate lending throughout the economic cycle. Measures that might be considered for this purpose include the following:

- An adjustment factor applied to property price increases when calculating the relevant indicators (such as the LTV) for the regulatory requirements in order to contribute to reducing the risk of building real estate market bubbles; alternatively, the LTV benchmark relevant for the application of the preferential treatment could vary according to the different stages of the economic cycle and the situation on the respective real estate market;

- A more extensive use of the mortgage lending value\(^{60}\) which is supposed to reflect the value of the respective property over a longer period of time. This could, for instance, mean introducing an explicit value of the mortgage lending value as a condition for the preferential treatment of exposures secured by residential mortgages, possibly together with other relevant indicator(s), such as the Loan-to-Value. In case of exposures secured by mortgages on commercial real estate, thought could be given to calibration of the appropriate level of such an indicator and its interaction with other indicator(s) being used for the same purposes;

- The possible introduction of additional provisions into the Pillar 2 framework dealing explicitly with exposures arising from mortgage lending and reflecting the different stages of the economic cycle in estimating the resulting regulatory capital levels.

**Question 52**: What is your view of the merits of introducing measures that would help to address real lending throughout the economic cycle? Which measures could be used for such purposes? What is your view about the effectiveness of the possible measures outlined above?

\(^{60}\)‘Mortgage lending value’ defined by the Directive 2006/48/EC as the value of the property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, the normal and local market conditions, the current use and alternative appropriate uses of the property. Speculative elements must not be taken into account in the assessment of the mortgage lending value.
SECTION VIII

Summary of questions

! Important notice:
This consultation paper contains the following 52 questions on the above outlined issues. In replying to these questions, please indicate what impact, including benefits and costs, would the potential changes described in each section of this paper have on your activities or activities of firms in your jurisdiction. When describing the costs please attempt, where appropriate, to assess them quantitatively by differentiating between different cost types, such as reporting, systems, personnel, capital costs, and between one-off implementation and on-going compliance costs. In addition, stakeholders are, in replying to these questions, invited to indicate their views on the optimal timing for implementation of the suggested measures, and whether their application should be sequenced.

Section I: Liquidity standards

Question 1: Comments are sought on the concept of the Liquidity Coverage Requirement and its likely impact on institutions' resilience to liquidity risk. Quantitative and qualitative evidence is also sought on the types and severity of liquidity stress experienced by institutions during the financial crisis and – in the light of that evidence – on the appropriateness of the tentative calibration in Annex I. In particular, we would be interested in learning how the pricing of banking products would be affected by this measure.

Question 2: In particular, views would be welcome on whether certain corporate and covered bonds should also be eligible for the buffer (see Annex I) and whether central bank eligibility should be mandatory for the buffer assets?

Question 3: Views are also sought on the possible implications of including various financial instruments in the buffer and of their tentative factors (see Annex I) for the primary and secondary markets in which these products are traded and their participants.

Question 4: Comments are sought on the concept of the Net Stable Funding Requirement and its likely impact on institutions' resilience to liquidity risk. Quantitative and qualitative evidence is also sought on the types and severity of liquidity stress experienced by institutions during the financial crisis and – in the light of that evidence – on the appropriateness of the tentative calibration in Annex II. In particular, we would be interested in learning how the pricing of banking products would be affected by this measure.

Question 5: Comments are in particular sought on the merits of allowing less than 100% stable funding for commercial lending that has a contractual maturity of less than one year. Is it realistic to assume that lending is reduced under liquidity stress at the expense of risking established client relationships? Does such a differentiation between lending with more and with less than one year maturity set undesirable incentives that could discourage for instance long term funding of non-financial enterprises or encourage investment in marketable securities rather than loans?
Question 6: Views are sought on possible implications of inclusion and tentative "availability factors" (see Annex II) pertaining to various sources of stable funding for respective markets and funding suppliers. Would there be any implications of the tentative required degree of coverage for various asset categories for respective bank clients?

Question 7: Do you agree that all parameters should be transparently set at European level, possibly in the form of Technical Standards by the EBA where parameters need to reflect specific sub-categories of retail deposits?

Question 8: In your view, what are the categories of deposits that require a different treatment from that in Annexes I and II and why? Please provide evidence relating to the behaviour of such deposits under stress.

Question 9: Comments are sought on the scope of application as set out above and in particular on the criteria referred to in point 17 for both domestic entities and entities located in another Member State.

Question 10: Should entities other than credit institutions and 730K investment firms be subject to stand-alone liquidity standards? Should other entities be included in the scope of consolidated liquidity requirements of a banking group even if not subject to stand-alone liquidity standards (i.e. financial institutions or 50K or 125K investment firms)?

Question 11: Should the standard apply in a modified form to investment firms? Should all 730K investment firms be included in the scope, or are there some that should be exempted?

Question 12: Comments are sought on the different options and in particular for how they would operate for the treatment of intra-group loans and deposits and for intra-group commitments, respectively. Comments are also sought as to whether there should be a difference made between the liquidity coverage and the net stable funding ratio.

Question 13: Do stakeholders agree with the conclusion that for credit institutions with significant branches or cross-border services in another Member State, liquidity supervision should be the responsibility of the home Member State, in close collaboration with the host member States? Do you agree that separate liquidity standards at the level of branches could be lifted based on a harmonised standard and uniform reorganisation and winding-up procedures?

Question 14: Comments are sought on the merit of using harmonised Monitoring Tools, either in the context of Supervisory Review or as mandatory elements of a supervisory reporting framework for liquidity risk. Comments are also sought on the individual tools listed in Annex III, their quality and possible alternatives or complements.

Question 15: What could be considered a meaningful approach for monitoring intraday liquidity risk?
Section II: Definition of capital

Question 16: What are your views on the prudential appropriateness of eliminating the distinction between upper and lower Tier 2, and of eliminating Tier 3 capital?

Question 17: Are the criteria proposed for Core Tier 1, non-Core Tier 1 and Tier 2 sufficiently robust and how might they be improved?

Question 18: In order to ensure the effective loss absorbency of non-Core Tier 1 capital, would it be appropriate under certain circumstances to require the write down of the principal amount of an instrument or its conversion to a Core Tier 1 instrument? To what extent should the trigger for write-down / conversion be determined objectively or at the discretion of an institution or its supervisor?

Question 19: Which of the prudential adjustments proposed have the greatest impact? What alternative, robust treatments might be considered and what is their prudential rationale?

Question 20: Are the proposed requirements in respect of calls for non-Core Tier 1 and Tier 2 sufficiently robust? Would it appropriate to apply in the CRD the same requirements to buy-backs as would apply to the call of such instruments? What restrictions on buy-backs should apply in respect of Core Tier 1 instruments?

Question 21: What are your views on the need for further review of the treatment of unrealised gains? What would be the most appropriate treatment of such gains?

Question 22: We would welcome comments on the appropriateness of reviewing the use of going concern Tier-1 capital for large exposures purposes. In this context, would it be necessary to review the basis of identification of large exposures (10% own funds) and the large exposures limit (25% own funds)?

Question 23: What is your view of the purpose of contingent capital? What forms and triggers would be most appropriate?

Question 24: How should the grandfathering requirements under CRD II interact with those for the new requirements? To what extent should the grandfathering provisions of CRD II be amended to bring them into line with those of the new capital requirements under CRD IV?

Section III: Leverage ratio

Question 25: What should be the objective of a leverage ratio?

Question 26: Which element of going concern capital do you consider would be a more appropriate basis for the leverage ratio? What is you rationale for this view?

Question 27: What is your view on the proposed options for capturing the overall extent of an institution’s derivatives business in the denominator of the leverage ratio?

Question 28: What is your view of the proposed approach to capturing leverage arising from credit derivatives?
Question 29: How could the design of the leverage ratio ensure that it would act as an effective constraint only in benign economic conditions?

Question 30: What would be the appropriate calibration of a leverage ratio?

Section IV: Counterparty credit risk

Question 31: Views are sought on the suggested approach regarding the improved measurement or revised metric to better address counterparty credit risk. With respect to suggestion to incorporate - as an interim measure - a simple capital add-on by means of calculating the loan-equivalent CVA charge, views are sought on the implications of using VaR models for these purposes instead.

Question 32: Stakeholders are invited to express views on whether the use of own-estimates of Alpha should continue to be permitted subject to supervisory approval and indicate any evidence in support of those views.

Question 33: Views are sought on the suggested approach regarding the multiplier for the asset value correlation for large financial institutions, and in particular on the appropriate level of the proposed multiplier and the respective asset size threshold. In addition, comments are sought on the appropriate definitions for regulated and unregulated financial intermediaries.

Question 34: Views are sought on the suggested approach regarding collateralised counterparties and margin period of risk. Views are particularly sought on the appropriate level of the new haircuts to be applied to repo-style transactions of (eligible) securitisations. In this context, what types of securitisation positions can, in your view, be treated as eligible collateral for purposes of the calculation of the regulatory requirements? Any qualitative and/or quantitative evidence supporting your arguments would be greatly appreciated.

Question 35: Views are sought on the suggested approach regarding central counterparties and on the appropriate level of the risk weights to be applied to collateral and mark to market exposures to CCPs (on the assumptions that the CCP is run to defined strict standards) and to exposures arising from guarantee fund contributions.

Question 36: Views are sought on the risk management elements that should be addressed in the strong standards for CCPs to be used for regulatory capital purposes discussed above. Furthermore, stakeholders are invited to express their views whether the respective strong standards for CCPs to be used for regulatory capital purposes should be the same as the enhanced CPSS-IOSCO standards.

Question 37: Views are sought on the suggested approach regarding enhanced counterparty credit risk management requirements.

Do the above proposed changes to the counterparty credit risk framework (in general, i.e. not only related to stress testing and backtesting) address fully the observed weaknesses in the area of risk measurement and management of the counterparty credit risk exposures (both bilateral and exposures to CCPs)?
Section V: Countercyclical measures

Part 1 - Through-the-cycle provisioning for expected credit losses

Question 38: The Commission services invite stakeholders to perform a comparative assessment of the three different methods (i.e. ECF, incurred loss and IRB expected loss if it could be used for financial reporting) for credit loss provisioning from 2002 onwards based on their own data.

Question 39: Views are sought on the suggested IRB based approach with respect to the through-the-cycle provisioning for expected losses as outlined above.

Part 2 - Capital buffers and cyclicality of the minimum requirement

Question 40: Do you agree with the proposed dual structure of the capital buffers? In particular, we would welcome your views on the effectiveness of the conservation buffer and the counter-cyclical buffer, separately and taken together, in terms of enhancing the resilience of banking sector going into economic downturn and ensuring the flow of bank credit to the "real economy" throughout economic cycle.

Question 41: Which elements should be subject to distribution restrictions for both elements of the proposed capital buffers and why?

Question 42: What is the appropriate timing – following the breach of capital buffer targets – for the restriction to capital distributions to start? Should the time limits for reaching capital buffer targets be determined by supervisors on a case-by-case basis or harmonised across EU?

Question 43: What is the most suitable macro variable (or group of variables) that may be used in the counter-cyclical buffer to measure the dynamics of macro-level risks pertinent to the banking sector activities?

Question 44: What are the relative merits and drawbacks of capital buffers versus through-the-cycle provisioning for expected losses with respect to minimising pro-cyclical effects of current EU banking regulation?

Question 45: Do you consider that it would be too early to fully assess the cyclicality of the minimum capital requirement?

Section VI: Systemically important financial institutions

Question 46: What is your view of the most appropriate means of measuring and addressing systemic importance?

Question 47: How could the Commission services ensure a consistent prudential treatment of systemic importance across financial sectors and markets?
Section VII: Single rule book

Question 48: In which areas are more stringent general requirements needed given national or other circumstances? Is Pillar 2 a sufficient tool to address specific negative circumstances at credit institutions and if not, how could it be strengthened?

Question 49: What is your view of the suggested prudential treatment for exposures secured by mortgages on residential property outlined above? What indicators and their respective values do you consider appropriate as possible preconditions for the application of the preferential treatment of exposures secured by mortgages on residential property?

Question 50: What is your view of the suggested prudential treatment for exposures secured by mortgages on commercial real estate outlined above? What indicators and their respective values do you consider appropriate as possible preconditions for the application of the preferential treatment of exposures secured by mortgages on commercial real estate? In particular, are additional preconditions needed to ensure the soundness of this treatment? Do you believe that the existing preferential risk weight applied to exposures secured by mortgages on commercial real estate should be increased?

For questions 49 and 50, any qualitative and/or quantitative evidence supporting your arguments would be greatly appreciated.

Question 51: Should the prudential treatment for exposures secured by mortgages on residential property be different from the prudential treatment for exposures secured by mortgages on commercial real estate? If so, in which areas and why?

Question 52: What is your view of the merits of introducing measures that would help to address real lending throughout the economic cycle? Which measures could be used for such purposes? What is your view about the effectiveness of the possible measures outlined above?
ANNEX I: Possible specification of the Liquidity Coverage Requirement

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor (to be multiplied against total amount)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stock (&quot;buffer&quot;) of &quot;high quality liquid assets&quot;</strong></td>
<td></td>
</tr>
<tr>
<td>Cash and qualifying central bank receivables (including reserves to the extent that they can be drawn down in times of stress)</td>
<td>100%</td>
</tr>
<tr>
<td>Qualifying marketable securities from sovereigns, central credit institutions, public sector entities, and multi-lateral development banks that could receive a 0% risk weight for credit risk under the standardised approach</td>
<td>100%</td>
</tr>
<tr>
<td>Domestic sovereign or central bank debt in domestic currency</td>
<td>100%</td>
</tr>
<tr>
<td>For not more than 50% of the buffer, the following additional assets could be considered:</td>
<td></td>
</tr>
<tr>
<td>Corporate bonds not issued by institutions rated AA or higher A- to AA-</td>
<td>80% 60%</td>
</tr>
<tr>
<td>Covered bonds not issued by the institution itself rated AA or higher A- to AA-</td>
<td>80% 60%</td>
</tr>
<tr>
<td>to the extent that those corporate and covered bonds are traded in large, deep and active markets characterised by a low level of concentration and a bid-ask-yield spread that has not exceeded 40 bsp (assigned a 20% haircut) or 50 bsp (assigned a 40% haircut) neither during all of the last 10 years nor during a relevant period of significant liquidity stress. Furthermore, the maximum historic decline of price or increase in haircut over a 30-day period neither during the last 10 years nor during a relevant period of significant liquidity stress may not exceed 10%.</td>
<td></td>
</tr>
<tr>
<td><strong>Cash Outflows over 30 days under the regulatory stress scenario, taking into account the earliest possible call or termination date for the funding</strong></td>
<td></td>
</tr>
<tr>
<td>Retail deposits placed by a natural person (rather than a legal entity), but excluding deposits placed by sole proprietorships and partnerships. However deposits by a legal entity, sole proprietorship or partnership where the reported sales for the consolidated group of which the firm is a part are less than €50 million and the total aggregated funding raised from one such customer is less than €1 million may be treated as retail</td>
<td>7.5%</td>
</tr>
<tr>
<td>- stable deposits that are both covered by an EEA deposit insurance scheme (or a non-EEA scheme recognised as effective by competent authorities) and are made in transactional accounts (e.g. accounts where salaries are automatically credited) or the depositors have other established relationships with the same bank which make deposit withdrawal highly unlikely;</td>
<td>7.5%</td>
</tr>
<tr>
<td>- less stable retail deposits [additional sub-categories to be determined]</td>
<td>15% or higher for possible sub-categories</td>
</tr>
<tr>
<td><strong>Unsecured wholesale funding:</strong></td>
<td></td>
</tr>
<tr>
<td>- non-financial corporates, no operational (cash management, salary disbursement etc. to be defined further) relationship with credit institution</td>
<td>75%</td>
</tr>
<tr>
<td>- non-financial corporates, sovereigns, central banks</td>
<td>25% of deposits needed for operational purposes</td>
</tr>
<tr>
<td>Item</td>
<td>Factor (to be multiplied against total amount)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>and public sector entities with operational relationships</td>
<td></td>
</tr>
<tr>
<td>- other legal entity customers and sovereigns, central banks, and PSEs without operational relationships</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Secured funding:</strong></td>
<td></td>
</tr>
<tr>
<td>Funding from repo of assets not eligible for the buffer and securities lending/borrowing transactions where assets not eligible for the buffer are lent out</td>
<td>100%</td>
</tr>
<tr>
<td>Liabilities related to derivative collateral calls related to a downgrade of up to 3-notches</td>
<td>100% of collateral that would be required to cover the contracts in case of up to a 3-notch downgrade</td>
</tr>
<tr>
<td>Market valuation changes on derivatives transactions requiring additional collateral/margin</td>
<td>treatment still to be determined</td>
</tr>
<tr>
<td>Valuation changes on posted non-cash or non-high quality sovereign debt collateral securing derivative transactions</td>
<td>20%</td>
</tr>
<tr>
<td>ABCP, SIVs, Conduits, etc:</td>
<td>100% of maturing amounts and 100% of returnable assets</td>
</tr>
<tr>
<td>Term ABS (incl. structured covered bonds)</td>
<td>100% of maturing amounts</td>
</tr>
<tr>
<td>Currently undrawn portion of committed credit and liquidity facilities to:</td>
<td></td>
</tr>
<tr>
<td>- retail clients</td>
<td>10% of outstanding lines</td>
</tr>
<tr>
<td>- non-financial corporates; credit facilities</td>
<td>10% of outstanding lines</td>
</tr>
<tr>
<td>- non-financial corporates; liquidity facilities</td>
<td>100% of outstanding lines</td>
</tr>
<tr>
<td>-- other legal entity customers</td>
<td>100% of outstanding lines</td>
</tr>
<tr>
<td>Other contingent funding liabilities (such as guarantees, letters of credit, revocable credit and liquidity facilities etc)</td>
<td>treatment still to be determined</td>
</tr>
<tr>
<td>Planned outflows related to renewal or extension of new loans (retail or wholesale) and any other cash outflows (including planned derivative payables)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Cash Inflows</strong></td>
<td></td>
</tr>
<tr>
<td>Amounts receivable from retail counterparties</td>
<td>100% of planned inflows from performing assets</td>
</tr>
<tr>
<td>Amounts receivable from wholesale counterparties</td>
<td>100% of planned inflows from performing wholesale customers</td>
</tr>
<tr>
<td>Receivables in respect of repo transactions backed by assets not eligible for the buffer and securities lending/borrowing transactions where assets not eligible for the buffer are borrowed.</td>
<td>100%</td>
</tr>
<tr>
<td>Receivables in respect of repo and reverse repo transactions backed by assets eligible for the buffer and securities lending/borrowing transactions where assets eligible for the buffer are borrowed.</td>
<td>0%</td>
</tr>
<tr>
<td>Undrawn portion of liquidity lines or other facilities committed to the institution</td>
<td>0%</td>
</tr>
</tbody>
</table>
ANNEX II: Possible specification of the Net Stable Funding Requirement

<table>
<thead>
<tr>
<th>Sources of stable funding available for purposes of the requirement</th>
<th>Availability Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own funds eligible instruments and other liabilities &gt; 1 year residual term</td>
<td>100%</td>
</tr>
<tr>
<td>Stable deposits of retail and small business customers (non-maturity or residual maturity &lt; 1 year)</td>
<td>85%</td>
</tr>
<tr>
<td>Less stable deposits of retail and small business customers (non-maturity or residual maturity &lt; 1 year)</td>
<td>70%</td>
</tr>
<tr>
<td>Wholesale funding provided by non-financial corporate customers (non-maturity or residual maturity &lt; 1 year)</td>
<td>50%</td>
</tr>
<tr>
<td>All other liabilities and equity not included above</td>
<td>0%</td>
</tr>
</tbody>
</table>

Required degree of coverage by the above sources of stable funding:

- All cash immediately available to meet obligations not held for operational purposes, not currently encumbered as collateral and not held for planned use as contingent collateral.
- All short-term unsecured instruments and transactions with outstanding maturities of less than one year.\(^{61}\)
- All securities with stated remaining maturities of less than one year with no embedded options that would increase the expected maturity to more than one year.
- All securities held where the institution has an offsetting reverse repurchase transaction when the security on each transaction has the same unique identifier (e.g. ISIN)
- All loans to financial entities with effective maturities of less than one year that are not renewable and for which the lender has an irrevocable right to call. When the loan is secured, the underlying collateral must have a maturity of less than one year.
- Unencumbered marketable securities with residual maturities over one year representing claims on or claims guaranteed by sovereigns, central banks, BIS, IMF, EC, non-central government public sector entities (PSEs) or multilateral development banks which are rated AA or higher and are assigned a 0% risk-weight under the credit risk standardised approach, provided that active repo-markets exist for these securities.
- Unencumbered corporate bonds\(^{62}\) or covered bonds\(^{63}\) satisfying all of the following conditions:
  - Central bank eligibility for intraday liquidity needs or overnight liquidity shortages in relevant jurisdictions.\(^{64}\)

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\(^{61}\) Such instruments include but are not limited to: short-term government and corporate bills notes and obligations; commercial paper; negotiable certificates of deposits; reserves with central banks and sale transactions of such funds (e.g. fed funds sold); bankers acceptances; money market mutual funds.

\(^{62}\) Corporate bonds are plain vanilla assets whose valuation is easy and standard and does not depend on private knowledge, i.e. no complex structured products, no subordinated debt.

\(^{63}\) Covered bonds eligible point 68 of Annex VI of Directive 2006/48/EC
- Not issued by a credit institution, investment or insurance or financial services firm and in particular not issued by the respective firm itself
- Low credit risk: assets have a credit assessment by a recognised ECAI equivalent to at least AA, or do not have a credit assessment by a recognised ECAI and are internally rated as having a PD equivalent to that associated with a AA credit assessments of ECAIs
- Proven record as a reliable source of liquidity in the markets (repo and sale) even during stressed market conditions: i.e. maximum price change or increase in haircut over a 30-day period during the last 10 years or during a relevant period of significant liquidity stress not exceeding 10%.
- Traded in large, deep and active markets characterised by a low level of concentration. The bid-ask-yield spread has not exceeded 40 bsp during the last 10 years or during a relevant period of significant liquidity stress.

- Unencumbered gold, corporate bonds, covered bonds, and equity securities that satisfy all of the following conditions:
  - Central bank eligibility for intraday liquidity needs or overnight liquidity shortages in relevant jurisdictions.\(^{64}\)
  - Not issued by a credit institution, investment, insurance, or financial services firm (except in the case of covered bonds).
  - Not issued by the respective firm itself
  - Low credit risk: assets have a credit assessment by a recognised ECAI of at least single A, or do not have a credit assessment by a recognised ECAI and are internally rated as having a PD equivalent to that associated with a single A credit assessments of ECAIs conform the Basel II Accord.
  - Traded in large, deep and active markets characterised by a low level of concentration. The bid-ask-yield spread has not exceeded 50 bsp during the last 10 years or during a relevant period of significant liquidity stress.
  - Listed on a recognised exchange and included in a large cap market index.

- All assets held in the trading book that are not securities or loans that satisfy all of the following conditions.
  - The instrument’s fair value can be determined based on inputs that are quoted prices (unadjusted) in active markets for

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\(^{64}\) **Central bank eligibility:** This is an optional criterion for jurisdictions whose list of central bank eligible assets is only very narrowly defined. In those jurisdictions, the relevant supervisors may exercise discretion to allow non-central bank eligible corporate bonds provided that they meet the other respective criteria above.

\(^{65}\) **Central bank eligibility:** This is an optional criterion for jurisdictions whose list of central bank eligible assets is only confined to tier 1 assets. In those jurisdictions, the relevant supervisors may exercise discretion to allow non-central bank eligible corporate bonds provided that they meet the other respective criteria.
identical assets at the measurement date.

- Traded in large, deep and active markets characterised by a low level of concentration. The bid-ask-spread has not exceeded 50 bsp during the last 10 years or during a relevant period of significant liquidity stress.

- Listed on a recognised exchange in multiple time zones and included in a main index.

- Loans to non-financial corporate clients having a maturity of less than one year.

- Loans to retail clients (ie natural persons) having a maturity of less than one year. 85%

- All other assets not included in the above categories. 100%
ANNEX III: Additional monitoring tools

a. Contractual maturity mismatch: As a baseline to gain an understanding of the basic, least complex aspects of a bank’s liquidity needs, banks should frequently conduct a contractual maturity mismatch assessment. This metric provides an initial, simple baseline of contractual commitments and is useful in comparing liquidity risk profiles across institutions, and to highlight to both banks and supervisors when potential liquidity needs could arise.

b. Concentration of funding: This metric involves analysing concentration of wholesale funding provided by specific counterparties, instruments and currencies. A metric covering concentration of wholesale funding assists supervisors in assessing the extent to which funding liquidity risks could occur in the event that one or more of the funding sources are withdrawn. The monitoring of this aspect of liquidity risk mirrors the monitoring of large exposures on the assets side of banks' balance sheets.

c. Available unencumbered assets: This metric measures the amount of unencumbered assets a bank has which could potentially be used as collateral for secured funding either in the market or at standing central bank facilities. This should make banks (and supervisors) more aware of their capacity to raise additional secured funds, keeping in mind that in a stressed situation this potential may decrease.

d. Market-related monitoring tools: In order to have a source of instantaneous data on potential liquidity difficulties, the Commission services suggests utilising market-based data as a valuable supplement to the metrics set out above. Useful data includes monitoring market-wide data on asset prices and liquidity, institution-related information such as credit default swap (CDS) spreads and equity prices, and additional institution-specific information related to the ability of the institution to fund itself in various wholesale funding markets and the price at which it can do so.
ANNEX IV: Proposed eligibility criteria for Core Tier 1 capital

1. Represents the most subordinated claim in liquidation of the institution.

2. Entitled to a claim of the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation, i.e. has an unlimited and variable claim, not a fixed or capped claim.

3. Principal is perpetual and never repaid outside of liquidation, setting aside discretionary repurchases or other means of effectively reducing capital in a discretionary manner that is allowable under national law.

4. The institution does nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled nor do the statutory or contractual terms provide any feature which might give rise to such an expectation.

5. Distributions are paid out of distributable items (retained earnings included). The level of distributions are not in any way tied or linked to the amount paid in at issuance and are not subject to a cap, except to the extent that an institution is unable to pay distributions that exceed the level of distributable items.

6. There are no circumstances under which distributions are obligatory. Non-payment is therefore not an event of default.

7. Distributions are paid only after all legal and contractual obligation have been met and payments on more senior capital instruments have been made. There are no preferential distributions, including in respect of other elements classified as the highest quality issued capital.

8. It is the issued capital that takes the first and proportionately greatest share of any losses as they occur. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and pari passu with all the others.

9. The paid in amount is recognised as equity capital (i.e. not recognised as a liability) for determining balance sheet insolvency.

10. The paid in amount is classified as equity under the relevant accounting standards.

11. It is directly issued and paid-up.

12. The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity or subject to any other arrangement that legally or economically enhances the seniority of the claim.

13. It is only issued with the approval of the owners of the issuing institution, either given directly by the owners or, if permitted by applicable law, given by the Board of Directors or by other persons duly authorised by the owners.

14. It is clearly and separately disclosed on the institution's balance sheet.
ANNEX V: Proposed prudential filters and deductions

Stock surplus
Stock surplus (i.e. share premium) may be included in Core Tier 1 only if the shares giving rise to the stock surplus qualify as Core Tier 1 capital.

Stock surpluses relating to shares excluded from Core Tier 1, e.g. preference shares, shall be included in the same elements of capital as the shares to which they relate.

Minority interests
Minority interests may not be included in Core Tier 1.

Unrealised gains and losses on debt instruments, loans and receivables, equities, own use properties and investment properties
At this stage we do not propose to apply an adjustment to remove from Core Tier 1 unrealised gains or losses recognised on the balance sheet. As part of our continuing review of our proposals to strengthen the definition of capital, the Commission services will consider further the appropriate treatment of unrealised gains and losses and take account of relevant changes to International Financial Reporting Standards.

Goodwill and other intangibles
Goodwill and other intangibles shall be deducted from Core Tier 1 capital. The amount deducted shall be net of any associated deferred tax liability that would be extinguished if the goodwill became impaired or derecognised under the relevant accounting standards.

Deferred tax assets
Deferred tax assets that rely on future profitability of the institution to be realised shall be deducted from Core Tier 1. The amount deducted shall be net of deferred tax liabilities.

Deferred tax assets that do not rely on the future profitability of the institution to be realised - e.g. prepayments to tax authorities – shall be assigned the relevant sovereign risk weighting under the institution's approach to credit risk for the sovereign asset class, i.e. Standardised or Internal Ratings Based Approach.

Investments in own shares (treasury stock)
An institution’s investments in its own common shares shall be deducted from Core Tier 1 capital (unless already derecognised under the relevant accounting standards). Any own stock which the institution could be contractually obliged to purchase shall be deducted from Core Tier 1 capital. The treatment described would apply irrespective of the location of the exposure in the non-trading book or the trading book. In addition:

• gross long positions shall be deducted net of short positions only if the short positions involve no counterparty risk; and
• institutions shall look through holdings of index securities to deduct exposures to own shares.
Investments in the common shares of certain banking, financial and insurance entities which are outside the regulatory scope of consolidation

Institutions shall apply a ‘corresponding deduction approach’ to investments in the capital of other credit institutions, other financial institutions and insurance entities where they fall outside of the regulatory scope of consolidation. The deduction shall be applied to the same component of capital for which the capital would qualify if it were issued by the institution itself.

All holdings of capital which form part of a reciprocal cross holding agreement or are investments in affiliated institutions (e.g. sister companies) shall be deducted in full on a corresponding basis. For all other holdings, the corresponding deduction approach would apply when the holdings exceeded certain thresholds. For holdings of common stock the thresholds shall be as follows:

- if an institution has holdings of common stock in other credit and financial institutions which exceed 10% of the common stock of the other credit and financial institutions then the full amount of this holding shall be deducted from the institution's Core Tier 1 capital; and
- if a institution has holdings of common stock in other credit and financial institutions which in aggregate exceed 10% of the institution’s Core Tier 1 (after applying all other regulatory deductions) then the amount above 10% shall be deducted from the institution's Core Tier 1 capital.

This treatment described shall apply irrespective of whether the exposure is assigned to the non-trading book or the trading book. In addition:

- gross long positions may be deducted net of short positions only if the short positions involve no counterparty risk; and
- institutions shall look through holdings of index securities to deduct relevant exposures to financial institutions which exceed the threshold limits.

Shortfall of the stock of provisions to expected losses

Any shortfall in the stock of provisions compared with the expected loss amount under the Internal Ratings Based (IRB) approach shall be made from Core Tier 1 capital.

(As part of impact assessment, we will consider the inclusion of excess expected loss amounts over the stock of provisions in Tier 2 capital, and the caps of 1.25% and 0.6% of credit risk weighted assets that apply under the Standardised Approach and IRB approaches respectively).

Cash flow hedge reserves

The positive and negative cash flow hedge reserve should be removed from Core Tier 1 capital where it relates to the hedging of projected cash flows that are not recognised on the balance sheet.

Gains and losses due to changes in own credit risk on fair valued financial liabilities

All gains and losses resulting from changes in the fair value of liabilities that are due to a changes in the institution's own credit risk shall be removed from Core Tier 1 capital.
Defined benefit pension fund assets and liabilities

- No filter shall be applied to net defined benefit pension fund liabilities.
- The value of any defined benefit pension fund net asset should be deducted from Core Tier 1 capital. Subject to supervisory approval, assets in the fund to which an institution has unfettered access could be permitted to offset the deduction. Such offsetting assets should be assigned the risk weight they would receive if they were owned directly by the institution.

Remaining 50:50 deductions

All remaining deductions currently made 50% from Tier 1 and 50% from Tier 2, and which are not addressed elsewhere in the proposal, should receive a 1,250% risk weight. These include:

- certain securitisation exposures;
- certain equity exposures under the Probability of Default / Loss Given Default approach;
- free deliveries; and
- significant investments in commercial entities.
ANNEX VI: Proposed eligibility criteria for Non-Core Tier 1 capital

1. Issued and paid-up.
2. Subordinated to depositors, general creditors and subordinated debt of the institution.
3. Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis institution creditors.
4. Is perpetual: there is no maturity date and no incentive to redeem.
5. May be called at the initiative of the issuer only after a minimum of five years.
   a. To exercise a call option an institution must receive prior supervisory approval.
   b. An institution shall do nothing that creates an expectation that the call will be exercised.
   c. An institution shall not exercise a call unless:
      i. it replaces the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the institution; or
      ii. the institution demonstrates fully to the competent authorities that its capital position would be well above the minimum capital requirements after the call option is exercised.
6. Any repayment of principal (e.g. through repurchase or redemption) shall be subject to prior approval by the competent authorities. An institution shall not assume or create market expectations that such approval will be granted.
7. Dividend/coupon discretion.
   a. An institution shall have full discretion at all times to cancel distributions / payments.
   b. Cancellation of discretionary payments shall not be an event of default.
   c. An institution shall have full access to cancelled payments to meet obligations as they fall due.
   d. Cancellation of distributions / payments shall not impose restrictions on the institution except in relation to distributions to common shareholders.
8. Dividends / coupons shall be paid out of distributable items.
9. The instrument shall not have a credit sensitive dividend feature, that is a dividend that is reset periodically based in whole or in part on the current credit standing of the institution's or that of its group.
10. The instrument shall not contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law.
11. An instrument classified as a liability for the purposes of national insolvency law shall have principal loss absorption through either: conversion to common shares at an objective pre-specified trigger point or a write-down mechanism that allocates losses to the instrument at a pre-specified trigger point.
A write-down shall:

a. reduce the claim of the instrument in liquidation;
b. reduce the amount re-paid when a call is exercised; and
c. partially or fully reduce coupon / dividend payments on the instrument.

12. The issuing institution or a related party shall not knowingly purchase, or directly or indirectly fund the purchase of, the instrument.

13. The instrument shall not have any feature that could hinder recapitalisation, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified period.

14. If an instrument is not issued out of an operating entity in the consolidated group (e.g. a Special Purpose Vehicle or holding company), proceeds must be immediately available without limitation to an operating entity in the consolidated group in a form which meets or exceeds all of the other eligibility criteria for non-Core Tier 1 Capital.

**Additional requirements**

The criteria above shall also apply to an instrument that appears in the consolidated accounts as a minority interest.

This element of capital shall be net of the appropriate corresponding deductions related to holding of non-common equity capital instruments in other financial institutions.
ANNEX VII: Proposed eligibility criteria for Tier 2 capital

1. Issued and paid-in.

2. Subordinated to depositors and general creditors of the institution

3. Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis depositors and general institution creditors

4. Maturity
   a. Has a minimum original maturity of at least 5 years.
   b. Recognition in regulatory capital in the remaining 5 years before the repayment date will be amortised on a straight line basis.
   c. There are no incentives to redeem.

5. May be callable at the initiative of the issuer only after a minimum of five years.
   a. To exercise a call option an institution must receive prior approval by the competent authorities.
   b. An institution shall not do anything that creates an expectation that the call will be exercised.
   c. Institutions shall not exercise a call unless:
      i. they replace the called instrument with capital of the same or better quality, and the replacement of this capital is done at conditions which are sustainable for the income capacity of the institution; or
      ii. the institution demonstrates fully to the competent authorities that its capital position would be well above the minimum capital requirements after the call option is exercised.

6. An investor in the instrument shall have no rights to accelerate the repayment of future scheduled payments (coupon or principal), except in bankruptcy and liquidation.

7. The instrument shall not have a credit sensitive dividend feature, that is a dividend that is reset periodically based in whole or in part on the institution's current credit standing or that of its group

8. The institution or a related party shall not have knowingly purchased, or directly or indirectly have funded the purchase of, the instrument

9. If the instrument is not issued out of an operating entity in the consolidated group (e.g. a Special Purpose Vehicle or holding company), the proceeds shall be immediately available without limitation to an operating entity in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 Capital

Additional requirements

- These criteria shall also apply to instruments which appear in the consolidated accounts as minority interest.

This element of capital will be net of the appropriate corresponding deductions related to holding of non-common equity capital instruments in other financial institutions.
## ANNEX VIII: Summary of proposed design of leverage ratio

<table>
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<th>Item</th>
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<th>Additional option for impact assessment</th>
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<td><strong>Capital measure</strong></td>
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<td>Definition of Capital</td>
<td>Core Tier 1 capital and Tier 1 capital</td>
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<td><strong>Total exposure measure</strong></td>
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<td></td>
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<tr>
<td>Exposure measurement: general</td>
<td>Use accounting data, i.e. net of provisions and other valuation adjustments.</td>
<td>-</td>
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<tr>
<td>Items deducted from the capital measure</td>
<td>Deduct also from the exposure measure.</td>
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<td>Cash and cash-like instruments</td>
<td>Include without exception.</td>
<td>Exempt high quality liquid assets from the exposure measure.</td>
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<tr>
<td>Credit risk mitigation and on-balance sheet netting</td>
<td>No recognition.</td>
<td>-</td>
</tr>
<tr>
<td>Securitisations</td>
<td>Use accounting data.</td>
<td>Include the underlying assets from all securitisations, including those that have been derecognised for accounting purposes.</td>
</tr>
<tr>
<td>Repurchase transactions and securities finance transactions</td>
<td>No recognition of netting.</td>
<td>Allow netting as per the CRD.</td>
</tr>
<tr>
<td>Derivatives</td>
<td>Two options for measuring derivatives will be considered:</td>
<td>-</td>
</tr>
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<td></td>
<td>- gross positive fair value of derivatives; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- replacement cost calculated using the Mark-to-Market method in Annex 3, Part 3 of the CRD.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No recognition of netting.</td>
<td>Recognise regulatory netting as per the CRD.</td>
</tr>
<tr>
<td>Other off-balance sheet items and written credit derivatives.</td>
<td>Include the other off-balance sheet items listed in Annex II of the CRD using a 100% Conversion Factor. Written credit protection shall be included at notional value.</td>
<td>Apply the conversion factors from Annex II of the CRD that would apply under the Standardised Approach and Foundation IRB approach to credit risk.</td>
</tr>
</tbody>
</table>
ANNEX IX: Possible contours of changes to the counterparty credit risk framework – further details

(i) Revised metric to better address counterparty credit risk (including wrong-way risk, mark to market losses due to credit valuation adjustments, highly leveraged counterparties and firms' own estimate of Alpha)

a) Requirement to calculate the Effective EPE metric on data that includes a period of stress to address general wrong-way risk

Institutions must use the maximum of the portfolio-level capital charge based on Effective EPE using current market data and the portfolio-level capital charge based on Effective EPE using the three year period that includes the one year stressed period that is used for the Stressed VaR calculation in the updated trading book rules for market risk.

The internal model must also employ data from a three-year period that includes the one-year stressed period that is used for the market risk Stressed VaR calculation for credit assets.

b) Requirement to incorporate a simple capital add-on to better capture CVA risk that recognises a clearly defined set of hedges

Treatment of mark-to-market counterparty risk losses

In addition to the capital requirements for counterparty risk determined based on the standardised or internal ratings-based (IRB) approaches for credit risk, an institution must calculate an additional capital charge to cover mark-to-market unexpected counterparty risk losses. This additional charge must be calculated by treating counterparty exposures as bond-equivalents, and is determined by applying the applicable regulatory market risk charge to such bond-equivalents, after excluding the Incremental Risk Charge (IRC).

The additional capital charge should be calculated as the stand-alone market risk charge (excluding IRC) for a set of bonds and associated hedges. In this set there is one bond per OTC derivative counterparty, and this bond has the following characteristics:

- Notional of the bond: the current total EAD of the counterparty across all its OTC derivative netting sets. This EAD should be calculated in accordance with the applicable Basel II/CRD CCR approach for OTC derivatives used by the firm (CEM, Standardised or IMM).

- Maturity of the bond: the longest Effective Maturity across OTC derivative netting sets with this counterparty. The Effective Maturity should be calculated according to the applicable Basel II/CRD CCR approach for firms under the IMM or IRB approaches. Firms that are not using the IMM or IRB approaches can use the estimates of Effective Maturity, or a fixed value to be used as the maturity of the bond.\(^{66}\)

- Type of bond: zero-coupon.

- Spread used to discount the bond-equivalent: the spread used to calculate the Credit Valuation Adjustment (CVA) of the counterparty. Whenever the CDS spread of the counterparty is available this must be used. Whenever the CDS spread is not available, the proxy spread used to determine the CVA for fair-value accounting purposes must be used as the spread of the bond.

This market risk charge consists of both general and specific risks, including Stressed VaR but excluding the IRC. In applying this charge, both general interest rate and credit spread risks must be taken into account. If the firm has VaR approval for bonds then the charge should be calculated using the firm’s authorised VaR model for such bonds. If not,

\(^{66}\) The fixed value to be used as the maturity of the bond will be calibrated as part of impact assessment exercise.
the standardised general market risk charge should be used. The stress period to use for
the Stressed VaR component of this market risk charge is the stress period that the firm
uses for credit assets for market risk regulatory capital purposes.

The liquidity horizon to use for this market risk charge is one year, instead of the 10-day
horizon used for market risk capital purposes. If the firm’s VaR model does not calculate
the one-year VaR directly, and in the case of the standardised approach, this one-year
liquidity horizon should be calculated by multiplying the 10-day market risk charge by 5
(the square root of 25).

This capital charge should be calculated in a standalone manner on the portfolio
composed of the set of bond-equivalents described above and their eligible hedges. No
offset against other instruments on the firm’s balance sheet should be reflected. For this
capital charge, the only eligible hedges that can be recognised are single-name CDSs,
single-name contingent CDSs or other equivalent hedging instruments directly
referring to the counterparty. For contingent CDSs, the notional should be treated as
fixed and equal to its current value. Other types of hedges should not be offset against
the bond-equivalents within this charge, and these other hedges should be treated as any
other instrument in the firm’s exposures for regulatory capital purposes.

c) **Requirement to implement an explicit Pillar 1 capital charge for specific wrong-way risk**

[Institutions must have policies acceptable to its supervisor regarding the treatment of
individual entities in a connected group, covering circumstances under which the same
rating may or may not be assigned to some or all related entities.] Those policies must
include a process for the identification of specific wrong way risk for each legal entity.
Transactions with counterparties where specific wrong-way risk has been identified need
to be treated differently when calculating the EAD for such exposures.

For single-name credit default swaps where there is a legal connection between the
counterparty and the underlying issuer, and where specific wrong way risk has been
identified, EAD equals the notional amount of the contract. For equity derivatives
referencing a single company where there is a legal connection between the counterparty
and the underlying company, and where specific wrong-way risk has been identified,
EAD equals the value of the derivative under the assumption of default of the underlying
entity.

d) **Qualitative requirement indicating that the PD estimates for highly leveraged
counterparties should reflect the performance of their assets based on a stressed period**

PD estimates for counterparties that are highly leveraged or for counterparties whose
assets are predominantly traded assets should reflect the performance of the
counterparty’s assets based on periods of stressed volatilities.

e) **Additional constraints on firms’ own estimates of Alpha to avoid mis-specification of the
risk and promote greater consistency across firms**

Supervisors should be alert to the significant variation in estimates of alpha that arises
from the opportunity for mis-specification in the models used for the numerator, especially
where convexity is present.

(ii) **A multiplier for the asset value correlation for large financial institutions**

A multiplicative factor of [X.XX – TO BE CALIBRATED] applies to the formula used to
calculate the correlation for exposures to financial intermediaries that are regulated
institutions, broker-dealers and insurance companies with assets of at least [EURXX billion –
TO BE CALIBRATED], and for exposures to other (unregulated) financial intermediaries,
including highly leveraged entities that generate the majority of their revenues from financial
activities, such as hedge funds and financial guarantors. Exposures to regulated institutions, broker-dealers and insurance companies that have assets below the [EURXX billion – TO BE CALIBRATED] threshold would, for the purpose of calculating the asset value correlation, be exempt from using the adjustment and receive the same treatment as other non-financial firms. Unregulated financial intermediaries would include [TO BE DEFINED], but would exclude [TO BE DEFINED].

(iii) Collateralised counterparties and margin period of risk

a) Increasing the margin period of risk for certain netting sets (in particular with large, illiquid or hard-to-replace trades)

For transactions subject to daily re-margining and mark-to-market valuation, a supervisory floor of five business days for netting sets consisting only of repo-style transactions, and 10 business days for all other netting sets is imposed on the margin period of risk used for the purpose of modelling EAD with margin agreements. In the following cases a higher supervisory floor is imposed:

- For all netting sets where the number of trades exceeds 5,000 at any point during a quarter, a supervisory floor of 20 business days is imposed for the margin period of risk for the following quarter.

- For netting sets containing one or more trades involving collateral that is illiquid, or an OTC derivative that cannot be easily replaced, a supervisory floor of 20 business days is imposed for the margin period of risk. Illiquid collateral and OTC derivatives that cannot be easily replaced will be characterised by the absence of active markets with sufficient depth and liquidity so that a counterparty can, within two days or fewer, obtain multiple price quotations that do not move the market or represent a price reflecting a market discount (in the case of collateral) or premium (in the case of an OTC derivative). Examples of situations where trades are deemed illiquid for this purpose include, but are not limited to, trades that are not marked daily and trades that are subject to specific accounting treatment for valuation purposes (e.g. OTC derivatives or repo-style transactions referencing “Level 3” securities). Liquidity for vanilla transactions can also be affected during volatile market conditions, for example, when multiple firms have to liquidate or replace large volumes of transactions at the same time, thereby depressing the market. For this purpose, the liquidity of trades must be determined in the context of stressed market conditions.

- In addition, an institution must consider whether trades or securities it holds as collateral are concentrated in a particular counterparty and if that counterparty exited the market precipitously whether the institution would be able to replace its trades.

If an institution has experienced more than two margin call disputes on a particular netting set over the previous two quarters that have lasted longer than the applicable margin period of risk (before consideration of this provision), then the institution must reflect this history appropriately by using a margin period of risk that is double the supervisory floor for that netting set for the subsequent two quarters.

For re-margining with a periodicity of N-days, irrespective of the shortcut method or full IMM model, the margin period of risk is determined to be equal to the supervisory floor, F, minus one day plus the N days. That is,

\[
\text{Margin Period of Risk} = (F-1) + N.
\]

Firms using this method must ensure that the model accounts for the effects on exposure due to all cashflows, path dependent effects of transactions, expiry of trades, and changes in sensitivities during the margin period of risk.
b) **Creating a separate supervisory haircut category for repo-style transactions using securitisation collateral and prohibit re-securitisations as eligible financial collateral for regulatory capital treatment purposes**

The standardised supervisory haircuts to be applied to repo-style transactions using securitisation (eligible) collateral would be at least double the standardised supervisory haircuts applied to ‘Other Issuers’ at a given issue rating for debt securities.

Re-securitisations, irrespective of any credit ratings, are not eligible financial collateral. This prohibition applies whether the institution is using the supervisory haircuts method, the own estimates of haircuts method, the repo VaR method or the internal model method.

c) **Amending the "shortcut method" so that more realistic simplifying assumptions are taken into account to estimate Effective EPE when an institution cannot model margin requirements along with exposures**

[An institution that can model EPE without margin agreements but cannot achieve the higher level of modelling sophistication to model EPE with margin agreements may use the following method for margined counterparties subject to re-margining with frequency, N, and daily mark-to-market. [The method is a simple approximation to Effective EPE and sets Effective EPE for a margined counterparty equal to the lesser of:

a) Effective EPE without a margin agreement; or]

b) The threshold (T) plus the minimum transfer amount (MTA) under the margin agreement or, if it is larger, the current mark-to-market (MTM) minus the variation margin (VM). An add-on is applied to either amount that reflects the potential increase in exposure over the margin period of risk and incorporates the effect of initial margin (IM). The add-on is computed as the expected increase over the margin period of risk in the netting set’s exposure, where initial margin and current MtM has been subtracted from the distribution of exposures. The following formula describes the calculation:

\[
\text{Effective EPE} = \max (T + \text{MTA}, \text{MTM} - \text{VM}) + \text{add-on(IM)}
\]

Where add-on(IM) = \(E\{ \max\{ \text{MtM}(t=s) - \text{MtM}(t=0) - \text{IM} , 0 \} \}

MtM: Mark to market of all trades, excluding collateral
s: Margin period of risk
E[...]: expectation (= average over scenarios)
IM: Initial Margin

d) **Implementing various improvements in the calculation of EAD to strengthen collateral management practices and the operations and risk analysis supporting the collateral management process. Specifically, the proposal would suggest introducing the following additional standards:**

- Preventing the reflection in EAD of any clause in a collateral agreement that requires receipt of collateral when a counterparty’s credit quality deteriorates (i.e. downgrade triggers)

Institutions using the internal models method must not capture the effect on EAD of any clause in a collateral agreement that requires additional collateral to be provided when counterparty credit quality deteriorates.

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67 Further analysis will be needed to calibrate the final proposal.
68 Securitisation collateral rated [BB+] or lower is not eligible.
- Enhancing the controls regarding the reuse (i.e. rehypothecation and reinvestment) of collateral by IMM firms

An institution employing the internal models method must ensure that its cash management policies account simultaneously for the liquidity risks of potential incoming margin calls in the context of exchanges of variation margin or other margin types, such as initial or independent margin, under adverse market shocks, potential incoming calls for the return of excess collateral posted by counterparties, and calls resulting from a potential downgrade of its own public rating. The institution must ensure that the nature and horizon of collateral reuse is consistent with its liquidity needs and does not jeopardise its ability to post or return collateral in a timely manner.

- Requiring institutions to model non-cash collateral jointly with underlying securities for OTC derivatives and Security Financing Transactions

If the internal model includes the effect of collateral on changes in the market value of the netting set, the institution must model collateral other than cash of the same currency as the EAD jointly with the exposure in its EAD calculations for securities-financing transactions.

- Using the supervisory haircuts when transforming non-cash collateral for OTC derivatives into cash-equivalent when they are unable to model the collateral jointly with the exposure

For an institution to recognise in its EAD calculations for OTC derivatives the effect of collateral other than cash of the same currency as the EAD, if it is not able to model collateral jointly with the exposure then it must use either haircuts that meet the standards of the financial collateral comprehensive method with own haircut estimates or the standard supervisory haircuts.

- Enhancing the operational performance of the collateral department

Institutions applying the internal model method must have a collateral management unit that is responsible for calculating and making margin calls, managing margin call disputes and reporting levels of independent amounts, initial margins and variation margins accurately on a daily basis. This unit must control the integrity of the data used to make margin calls, and ensure that it is consistent and reconciled regularly with all relevant sources of data within the firm. This unit must also track the extent of reuse of collateral (both cash and non-cash) and the rights that the institution gives away to its respective counterparties for the collateral that it posts. These internal reports must indicate the categories of collateral assets that are reused, and the terms of such reuse including instrument, credit quality and maturity. The unit must also track concentration to individual collateral asset classes accepted by the firms. Senior management must allocate sufficient resources to this unit for its systems to have an appropriate level of operational performance, as measured by the timeliness and accuracy of outgoing calls and response time to incoming calls. Senior management must ensure that this unit is adequately staffed to process calls and disputes in a timely manner even under severe market crisis, and to enable the firm to limit its number of large disputes caused by trade volumes.

The firm’s collateral management unit must produce and maintain appropriate collateral management information that is reported on a regular basis to senior management. Such internal reporting should include information on the type of collateral (both cash and non-cash) received and posted, as well as the size, ageing and cause for margin call disputes. This internal reporting should also reflect trends in these figures.
The organisation of the collateral management unit and the accurate reflection of legal terms in collateral and netting agreements into exposure measurements must be an integral part of an independent regular review of the counterparty credit risk management system through the institution's internal auditing process.

- Revising the credit risk mitigation section of the framework to add qualitative collateral management requirements

Institutions must ensure that sufficient resources are devoted to the orderly operation of margin agreements with OTC derivative and securities-financing counterparties, as measured by the timeliness and accuracy of its outgoing calls and response time to incoming calls. Institutions must have collateral management policies in place to control, monitor and report: the risk to which margin agreements expose them (such as the volatility and liquidity of the securities exchanged as collateral), the concentration risk to particular collateral asset classes, the reuse of collateral (both cash and non-cash) including the potential liquidity shortfalls resulting from the reuse of collateral received from counterparties and the surrender of rights on collateral posted to counterparties.

(iv) Enhanced counterparty credit risk management requirements

a) Making the qualitative requirements for stress testing more explicit

Institutions must have a comprehensive stress testing program for counterparty credit risk. The stress testing program must include the following elements:

- Institutions must ensure complete trade capture and exposure aggregation across all forms of counterparty credit risk (not just OTC derivatives) at the counterparty-specific level in a sufficient time frame to conduct regular stress testing.

- For all counterparties, institutions should produce, at least monthly, exposure stress testing of principal market risk factors (e.g., interest rates, FX, equities, credit spreads, and commodity prices) in order to identify, and when necessary, reduce outsized concentrations to specific directional sensitivities.

- Institutions should apply multifactor stress testing scenarios and assess material non-directional risks (such as yield curve exposure, basis risks) at least quarterly. Multiple-factor stress tests should, at a minimum, aim to address scenarios in which a) severe economic or market events have occurred; b) broad market liquidity has decreased significantly; and c) the market impact of liquidating positions of a large financial intermediary. These stress tests may be part of firm-wide stress testing.

- Stressed market movements have an impact not only on counterparty exposures, but also on the credit quality of counterparties. At least quarterly, institutions should conduct stress testing applying stressed conditions to the joint movement of exposures and counterparty creditworthiness.

- Exposure stress testing—including single factor, multifactor and material non-directional risks—and joint stressing of exposure and creditworthiness should be performed at the counterparty-specific, counterparty group (e.g. industry and region), and aggregate firm-wide CCR levels.

- Stress tests results should must? be integrated into regular reporting to senior management. The analysis should capture the largest counterparty-level impacts across the portfolio, material concentrations within segments of the portfolio (within the same industry or region), and relevant portfolio and counterparty specific trends.

- The severity of factor shocks should be consistent with the purpose of the stress test. When evaluating solvency under stress, factor shocks should be severe enough to capture historical extreme market environments or extreme but plausible stressed
market conditions. The impact of such shocks on capital resources should be evaluated, as well as the impact on capital requirements and earnings. For the purpose of day-to-day portfolio monitoring, hedging, and management of concentrations, institutions should also consider scenarios of lesser severity and higher probability.

- Institutions should consider reverse stress tests to identify extreme, but plausible, scenarios that could result in significant adverse outcomes.
- Senior Management must take a lead role in the integration of stress testing into the risk management framework and risk culture of the firm and ensure that the results are meaningful and used to manage counterparty credit risk. At a minimum, the results of stress testing for significant exposures should be compared to guidelines that express the institution’s risk appetite and elevated for discussion and action when excessive or concentrated risks are present.

Institutions should consider reverse stress tests to identify extreme, but plausible, scenarios that could result in significant adverse outcomes.

Senior Management must take a lead role in the integration of stress testing into the risk management framework and risk culture of the firm and ensure that the results are meaningful and used to manage counterparty credit risk. At a minimum, the results of stress testing for significant exposures should be compared to guidelines that express the institution’s risk appetite and elevated for discussion and action when excessive or concentrated risks are present.

- Institutions must identify exposures that give rise to a greater degree of general wrong-way risk. Stress testing and scenario analyses should be designed to identify risk factors that are positively correlated with counterparty credit worthiness. Such testing needs to address the possibility of severe shocks occurring when relationships between risk factors have changed. Institutions should monitor general wrong way risk by product, by region, by industry, or by other categories that are relevant to the business. Regular reports should be provided to senior management and the appropriate committee of the Board on wrong-way risks and the steps that are being taken to manage that risk.

**b) Revising the model validation standards**

It is important that supervisory authorities are able to satisfy themselves that institutions using models have counterparty credit risk management systems that are conceptually sound and implemented with integrity. Accordingly the supervisory authority will specify a number of qualitative criteria that must be met before institutions are permitted to use a models-based approach. The extent to which institutions meet the qualitative criteria may influence the level at which supervisory authorities set the multiplication factor Alpha. Only those institutions that fully meet the qualitative criteria will be eligible for application of the minimum multiplication factor. The qualitative criteria include the following:

- The institution must conduct a regular programme of back-testing, i.e., an ex-post comparison of the risk measures generated by the model against realised risk measures, as well as hypothetical changes based on static positions.
- The institution must carry out an initial validation and an on-going review of the IMM model and all the models that input into the calculation of EPE that is independent of the model developers.
- Board of directors and senior management should be actively involved in the risk control process and must regard risk control as an essential aspect of the business to which significant resources need to be devoted. In this regard, the daily reports prepared by the independent risk control unit must be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual traders and reductions in the institution’s overall risk exposure.

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69 The “risk measures” refers not only to EEPE, the risk measure used to derive regulatory capital, but also to the other risk measures used in the calculation of EEPE such as exposure distribution, the positive exposure distribution, the market risk factors used to derive those exposures and the values of the constituent trades.
The institution’s internal risk measurement model must be closely integrated into the day-to-day risk management process of the institution. Its output should accordingly be an integral part of the process of planning, monitoring and controlling the institution’s counterparty credit risk profile.

The risk measurement system should be used in conjunction with internal trading and exposure limits. In this regard, exposure limits should be related to the institution’s risk measurement model in a manner that is consistent over time and that is well understood by both traders and senior management.

A routine and rigorous programme of stress testing should be in place as a supplement to the risk analysis based on the day-to-day output of the institution’s risk measurement model. The results of stress testing should be reviewed periodically by senior management, used in the internal assessment of capital adequacy, and reflected in the policies and limits set by management and the board of directors. Where stress tests reveal particular vulnerability to a given set of circumstances, prompt steps should be taken to manage those risks appropriately (e.g. by hedging against that outcome or reducing the size of the institution’s exposures, or increasing capital).

Institutions should have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system. The institution’s risk measurement system must be well documented, for example, through a risk management manual that describes the basic principles of the risk management system and that provides an explanation of the empirical techniques used to measure counterparty credit risk.

An independent review of the risk measurement system should be carried out regularly in the institution’s own internal auditing process. This review should include both the activities of the business trading units and of the independent risk control unit. A review of the overall risk management process should take place at regular intervals (ideally no less than once a year) and should specifically address, at a minimum:

- The adequacy of the documentation of the risk management system and process;
- The organisation of the risk control unit;
- The integration of counterparty credit risk measures into daily risk management;
- The approval process for counterparty credit risk models used in the calculation of counterparty credit risk used by front office and back office personnel;
- The validation of any significant change in the risk measurement process;
- The scope of counterparty credit risks captured by the risk measurement model;
- The integrity of the management information system;
- The accuracy and completeness of position data;
- The verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;
- The accuracy and appropriateness of volatility and correlation assumptions;
- The accuracy of valuation and risk transformation calculations; and
- The verification of the model’s accuracy.
The on-going validation of counterparty credit risk models, including back-testing, must be reviewed periodically by a level of management with sufficient authority to decide the course of action that will be taken to address weaknesses in the models.

Firms must document the process for initial and on-going validation of their IMM model and the models that input into the calculation of EPE to a level of detail that would enable a third party to recreate the analysis. This document must set out the frequency with which back-testing analysis and any other on-going validation will be conducted.

Firms must define criteria with which to assess their EPE models and the models that input into the calculation of EPE and have a written policy in place that describes how unacceptable performance will be determined and addressed. The definitions of acceptable and unacceptable performance must be unambiguous.

Firms must define how representative counterparty portfolios are constructed for the purposes of validating an EPE model and the relevant models that input into the calculation of EPE.

When validating EPE models and the models that input into the calculation of EPE that produce forecast distributions, validation must assess the whole forecast distribution.

As part of the initial and on-going validation of an IMM model and the models that input into the calculation of EPE, each of the following requirements must be met:

- A firm must carry out back-testing of its EPE model and all the relevant models that input into the calculation of EPE using historical data on movements in market risk factors prior to Supervisory approval. The back-testing must consider a number of distinct time horizons out to at least one year, over a range of start dates and covering a wide range of market conditions.

- The pricing models used to calculate counterparty exposure for a given scenario of future shocks to market risk factors must be tested as part of the initial and on-going model validation process. These pricing models may be different from those used to calculate Market Risk over a short horizon. Pricing models for options must account for the nonlinearity of option value with respect to market risk factors.

- An EPE model must capture transaction specific information in order to aggregate exposures at the level of the netting set. Institutions must verify that transactions are assigned to the appropriate netting set within the model.

- Historical back-testing on representative counterparty portfolios must be a part of the validation process. The representative portfolios must be chosen based on their sensitivity to the material risk factors and correlations to which the institution is exposed. In addition, IMM firms need to conduct back-testing on hypothetical portfolios that are designed to test risk factor model assumptions, e.g. the modelled relationship between tenors of the same risk factor, and the modelled relationships between risk factors. Significant differences between the realised exposures and the forecast distribution could indicate a problem with the model or the underlying data that the supervisor would require the institution to correct. Under such circumstances, supervisors may require additional capital to be held.
For IMM models based on the modelling of market risk factors, historical backtesting on market risk factor models must be a part of the validation process. Market risk factor model back-testing must be capable of identifying poor performance in the predictions of individual risk factors.

Firms must validate their EPE models and all relevant models that input into the calculation of EPE out to time horizons commensurate with the maturity of trades covered by the IMM waiver.

Firms must also back-test their EPE models and all relevant models that input into the calculation of EPE, including market risk factor models, out to long time horizons of at least one year.

Firms must back-test their EPE models and market risk factor predictions for a number of distinct time horizons using forecasts initialised on a number of historical dates.

The pricing models used to calculate counterparty exposure must be regularly tested against appropriate independent benchmarks as part of the on-going model validation process.

The on-going validation of a firm’s EPE model and the relevant models that input into the calculation of EPE must be based on an assessment of recent performance.

The frequency with which the parameters of an EPE model are updated needs to be assessed as part of the validation process.

The on-going assessment of model performance needs to cover all counterparties for which the models are used.

The validation of IMM models must assess whether or not the firm level and netting set exposure calculations of EPE are appropriate.

The institution must have an independent risk control unit that is responsible for the design and implementation of the institution’s counterparty credit risk management system. The unit should produce and analyse daily reports on the output of the institution’s risk measurement model, including an evaluation of the relationship between measures of counterparty credit exposure and trading limits. The unit must be independent from the business trading units and should report directly to senior management of the institution.
ANNEX X: Summary of responses to public consultation on dynamic provisioning

The consultation on proposed measures for the 'CRD IV' package concerning through-the-cycle expected loss provisioning, capital requirements for mortgage lending (including residential mortgages denominated in a foreign currency) and the remove of national options and discretions, ran from 24th July until 4th September. 52 responses were received. The broad thrust of those responses is as follows:

- Many respondents (all accountants and most banks) emphasised that dynamic provisioning should not interfere with investor oriented reporting (IFRS) because it could undermine the true and fair view of financial statements.
- Several respondents underlined that dynamic provisioning should be dealt with through regulatory (capital) requirements outside financial reporting and possibly through 'Pillar 2' requirements, rather than through accounting standards or Pillar 1 requirements under the CRD.
- Many respondents noted that the working assumption of the consultation paper - that pending revisions to accounting standards (IAS 39) would accommodate dynamic provisioning - was no longer valid.
- Many respondents (including some supervisors and authorities) suggested that the Commission should wait for the outcome of the revised IAS 39 (October) before considering whether or how to introduce dynamic provisioning, including how to deal with remaining differences. Since dynamic provisioning is for the next upswing there is no immediate need for action. Some stakeholders also argued that further work should wait for the outcome of Basel work on countercyclical capital measures.
- Several respondents were concerned about an EU regional approach which could lead to competitive disadvantages for EU institutions as compared with third country competitors.
- A few respondents pointed to the lack of detail on the calibration which made it impossible to provide meaningful data on the expected impact of dynamic provisioning.
- There was broad support for allowing the use of internal models for dynamic provisioning. Internal models would better capture the specific risk profile, make sense for banks with IRB portfolios, and could alleviate problems with the availability of historic credit loss data of third countries. However, some respondents were strongly against the use of internal models because it would lead to modelling arbitrage and competitive distortion.
- Broad support for the proposal that the dynamic provisioning should not count as regulatory capital, and for use of the proposed IRB exposure mapping.
- Nearly unanimous support for using the location of the borrower to determine the through the cycle credit risk and the coverage of off-balance sheet items.
- Mixed views on use of the simplified method versus the Spanish method (slight majority in favour of the simplified model).
- A few banks indicated that the introduction of dynamic provisioning may lead to lower lending volumes.

ANNEX XI: A numerical example demonstrating the mechanics of the suggested approach with respect to loan provisioning for expected credit losses under the IRB approach

<table>
<thead>
<tr>
<th>Balance sheet at beginning of the year</th>
<th>ASSETS</th>
<th>LIABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan portfolio at the beginning of the year</td>
<td>10,000,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Performing loans.</td>
<td>9,000,0</td>
<td>Specific provisions for nonperforming loans</td>
</tr>
<tr>
<td>Nonperforming loans</td>
<td>1,000,0</td>
<td></td>
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</tbody>
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<thead>
<tr>
<th>Additional information at the beginning of the year:</th>
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<tr>
<td>LGD of performing loans</td>
<td>50,00%</td>
</tr>
<tr>
<td>PD of performing loans</td>
<td>2,00%</td>
</tr>
<tr>
<td>Expected defaults in the year (9000*2%)</td>
<td>180,0</td>
</tr>
<tr>
<td>Expected loss at the beginning of the year (9000*2%*50%)</td>
<td>90,0</td>
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<tr>
<th>Additional information at the end of the year:</th>
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<tbody>
<tr>
<td>&quot;New&quot; nonperforming loans in the year (based on incurred loss model data)</td>
<td>120,0</td>
</tr>
<tr>
<td>Additional specific provisions for &quot;old&quot; non performing loans</td>
<td>10,0</td>
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</tbody>
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<tr>
<th>P&amp;L of the year, before through the cycle provisioning (loss):</th>
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<tbody>
<tr>
<td>Specific provisions for &quot;new&quot; non performing loans (120*50%)(loss)</td>
<td>60,0</td>
</tr>
<tr>
<td>Additional specific provisions for &quot;old&quot; non performing loans (loss)</td>
<td>10,0</td>
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### Balance sheet at the end of the year before through the cycle provisioning

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<td>Loan portfolio at the end of the year</td>
<td>General provisions for performing</td>
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<tr>
<td></td>
<td>loans</td>
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<tr>
<td>Perform ing loans (9000-120)</td>
<td>10,000,0</td>
</tr>
<tr>
<td>Nonperforming loans (1000+120)</td>
<td>8,880,0</td>
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<tr>
<td></td>
<td>Specific provisions for nonperforming loans</td>
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<tr>
<td></td>
<td>1.120,0</td>
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<td>(500+60+10)</td>
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**Actual loss in the year**

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<th>70,0</th>
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<td>+60+10</td>
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**P&L of the year due to through the cycle provision (loss)**

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<thead>
<tr>
<th></th>
<th>20,0</th>
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<td>+90-70</td>
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### Balance sheet at the end of the year after through the cycle provisioning

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<tr>
<th>ASSETS</th>
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<tr>
<td>Loan portfolio at the end of the year</td>
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</tr>
<tr>
<td></td>
<td>1.120,0</td>
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Regulatory capital for real estate lending

Treatment of exposures secured by mortgages on residential property and by mortgages on commercial real estate, provided in the currency of the income of the borrower (under the standardised approach):

- While some stakeholders appreciated the risks arising from exposures related to real estate lending (and in particular from exposures secured by mortgages with high loan-to-value ("LTV") ratios), most respondents expressed their strong disagreement with the proposed tightening of the minimum requirements (LTV limits) for the application of the preferential risk weights to exposures secured by both residential and commercial mortgages provided in the currency of the income of the borrower. Estimated impact: increase of regulatory capital by 40% with the likely consequent negative impact on banks' lending capacity.

- Strong opposition was expressed by most respondents to the proposal for introducing a "hard test" when applying the preferential treatment to exposures secured by mortgages on residential property and the proposal for introducing a hard test as a condition for the preferential treatment of exposures secured by commercial real estate.

- A number of respondents criticised the lack of evidence underpinning the proposal. The notion of the proposal that "residential real estate is at the very heart of the crisis [in Europe]" is "totally misguided"; in their view, the crisis is driven by other factors such as liquidity problems and difficulties in raising funding.

- Several respondents have argued that considerable differences in real estate markets across Europe justify the need to maintain the existing treatment based on options and discretions that had been introduced due to historic and structural reasons; a unique LTV benchmark across the EU would be inappropriate.

- Some respondents have highlighted that the measure would put institutions applying the standardised approach at a competitive disadvantage vis-à-vis institutions applying the IRB approaches.

Treatment of exposures arising from residential mortgages denominated in currency other than that of the income of the borrower:

- While some stakeholders appreciated the risks arising from these types of mortgages, there was strong disagreement with the regulatory response: the concern that substantial foreign currency lending to households may expose the borrower to foreign exchange risk can not be regarded as a prudential issue but rather as a

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71 The proposal entails lowering the thresholds of 50% LTV and 60% of the mortgage lending value for exposures secured by mortgages on commercial real estate to 40% and 50% respectively, while applying these new thresholds also as a requirement for the application of the preferential treatment of exposures secured by mortgages on residential property (currently not harmonised, only a requirement of a 'substantial margin').

72 Requiring that a well-developed and long-established real estate market is present in the respective territory with loss rates which do not exceed certain limits.
matter for consumer protection pertaining to responsible lending and conduct of business rules.

- Most respondents have argued that the proposal would generate capital requirements that are disproportionate to the underlying foreign exchange risk (no quantitative indications were provided); the proposal would cause long-lasting effects on the supply and demand of mortgage products.

- Some respondents have argued that the impact of the proposal on some new Member States may be 'devastating', drastically limiting the flow of foreign capital to these countries; non-Euro zone area Member States would be at competitive disadvantage.

- Several respondents criticised the lack of evidence for higher default rates among foreign currency loans (residential mortgages).

- Some respondents have mentioned that the loan-to-value ratio does not indicate the creditworthiness of the borrower; concerns about the possible pro-cyclicality of the proposal that is linked with the LTV ratios.

- Some respondents have argued that the interference in internal models by institutions applying the IRB approaches is not appropriate.

National options and discretions – single rule book

Maximum harmonisation

In general terms, respondents from the industry appreciated the fact that Member States and competent authorities will be prevented from ‘gold plating’ or imposing super-equivalent requirements in ‘fully harmonised areas’. A single rule book will contribute further to the achievement of the internal market. Some stakeholders mentioned that it should be possible to set higher capital requirements for systemically important banks on financial stability grounds. The Commission services would like to emphasise that the Pillar 2 of the Basel framework seems best suited to this approach. Some stakeholders stressed that maximum harmonisation also require a flexible legislative process so as to respond to developments in financial markets.

Some respondents stressed that the scope of maximum harmonisation might have been more ambitious. This particularly holds true for hybrid capital instruments which have been harmonised by CRD II. Other stakeholders emphasised that a more harmonised approach to Pillar 2 was absolutely necessary. The Commission services fully agree with this objective and technical standards should be suggested in that field.

Against this background, the Commission services intend to enlarge the suggested scope of maximum harmonisation – limited to Pillar 1 minimum capital requirements and Pillar 3 in the text under consultation – to hybrid capital instruments.

Removal of options and national discretions

In general terms, respondents from the industry very much welcomed the degree of ambition of the draft proposal which goes further than CEBS technical advice in reducing the number of options and discretions. Nevertheless, many respondents mentioned that Member States’ markets are not homogeneous, and that national discretion in particular in relation to real estate reflect the specificities of local markets (see Part A of the paper).
In particular, comments were received in relation to the following points:

- **Treatment of 'certain equity exposure'** in Article 154(6). Views of stakeholders were mixed. Most respondents of the industry suggested either a longer transitional period (2014) or making the discretion a general treatment. In particular, it was stressed that an earlier transition period (2012 instead of 2017) will cause uncertainty in the market. Convincingly, others mentioned that the development of internal models may take some time. Therefore, the Commission services are considering postponing the deadline to 31 December 2013.

- **Treatment of past due items** under Annex VI, Part 1, points 63, 64 and 67. It was argued that sufficiently secured items should continue to be subject to preferential risk-weights. Removal of this option after a transitional period was suggested by CEBS on prudential grounds.

- Some stakeholders stressed that Article 33(3) of 2006/49 should not be deleted as this would eliminate the alternative methods of valuation in the absence of available market prices. New requirements for valuation were introduced in Annex VII of 2006/49 making this 'old' national discretion no longer relevant.

- Respondents questioned the treatment of high risk items (Annex VI, Part 1, point 66) suggested by CEBS' second technical advice on the grounds that this may result in eliminating the possibility of applying lower risk-weight. The Commission services would like to reiterate that harmonisation should only take place upwards, and share CEBS' approach to the treatment of high risk items that should be further specified by technical standards.

- While most respondents supported a single approach to banks' risk-weighting, some stakeholders stressed that the credit assessment methods which uses the External Credit Assessment Institutions' (ECAs) rating should be maintained in particular for non Euro zone countries. Other suggested that the use of the country assessment method could however be permitted where Credit Rating Agencies ("CRA") ratings are not available. This approach may nevertheless be conducive to regulatory arbitrage, and is explicitly excluded by the Basel 2 framework.

- Some stakeholders expressed the view that current transitional discretions relating to real estate and covered bonds should be maintained. The Commission does not intend to extend what was agreed in the form of transitional national discretions.

- Regarding the reduced specific risk requirement for covered bonds booked in the trading book (Article 19(2) of 2006/49/EC), some stakeholders mentioned that the new prudential treatment will result in a doubling of capital requirements, while others suggested maintaining the discretion as the treatment is not sufficiently sound.

As to whether the suggested timeline (2012) for a single definition of default is appropriate, most respondents agree that the transition period would be appropriate and necessary to avoid competitive distortions. Some stakeholders suggested keeping a longer definition for retail and sovereign because of local practices. It was argued that the methods of transition towards this new rule are to be specified. This is an issue pertaining to supervisory practices and would be addressed by CEBS (or the European Banking Authority ("EBA"), once established). Views were mixed as to whether an earlier definition of default is likely to reduce the capital requirements because of the interaction between probability of default (PD) and loss given default (LGD).
Technical standards

Respondents stressed the need for further criteria to best apply some prudential treatments. The Commission services suggest that the European Banking Authority may be asked to come up with technical standards in the following areas:

- On the definition of short term exposures for which $M$ shall be at least one-day (Annex VII, Part 2, point 14), further reviews may be needed to determine whether there are valid additions that should be made to such a list, in particular with respect to short term money market facilities.

- As to the recognition of other physical collateral, many stakeholders suggested further specification of the criteria that CEBS provided in the context of its second technical advice to make the prudential treatment more operational.

Some stakeholders stressed that CEBS guidelines referred to in the text under consultation were not legally binding, and that national legislation cannot refer to them. The Commission services suggest that technical standards would have to be developed by the European Banking Authority in areas where the text under consultation refers to CEBS guidelines to best promote the convergence of practices and ensure a uniform application of the Directive.

Involvement of the European Banking Authority

As to the assessment of third country for risk-weighting purposes – for which CEBS would be responsible – some respondents asked for further clarity about the process. This task should be entrusted to the EBA with legally binding powers after full consultation with relevant competent authorities.

In the consultation document, it was suggested that if an ECAI seeks to be recognised as eligible in more than one Member State, the Committee of European Banking Supervisor should carry out the evaluation process and the "mapping" of ratings. In line with the conclusions of the European Council of June 2009 and the general approach reached in the Council on the ESMA Regulation on 2 December 2009 it is intended to revise the Regulation on CRA is to be revised in order to introduce centralised oversight of CRA operating in the EU. The European Securities and Markets Authority ("ESMA") is to assume general competence on matters relating to the registration and on-going supervision of registered CRA. CRD II has already specified that where an ECAI is registered as CRA, the competent authorities should consider the requirements of objectivity, independence, ongoing review and transparency with respect to its assessment methodology to be satisfied. As clarified by the CRD II, banking supervisors are only responsible for the mapping (Annex VI, Part 2, section 3) and the compliance with requirements relating to individual credit assessments (Annex VI, Part 2, section 2), but not with the methodology (Annex VI, Part 2, section 1). It is suggested that the mapping and compliance with criteria relating to individual credit assessments of ECAI registered as CRA should be carried out by the EBA. The EBA would also have to liaise with the ESMA when carrying out the assessment of individual credit assessments.