BANQUE CENTRALE DU LUXEMBOURG
EUROSYSTÈME

EUROSYSTEM RECOMMENDATIONS

ON

THE PRICING OF RECAPITALISATIONS

18 December 2008

2, boulevard Royal • L-2983 Luxembourg • Téléphone (+352) 4774-1 • Télécopie (+352) 4774-4901 • E-mail: sg@bcl.lu

Recommendations

1. It is desirable that a consistent approach is employed in defining the conditions for recapitalisations and the pricing of the instruments to provide Tier 1 capital to financial institutions, in order to support the implementation of the Paris declaration of 12 October 2008. Accordingly, in setting the conditions for capital injections, governments should consider in a consistent manner the following factors:

   i) The *market situation of each institution*. The valuation of the instruments chosen for injecting capital should be based on (i) market pricing in line with the level of subordination and corresponding risk of the specific instrument, and (ii) the specific risk of the institution.

   ii) The *effectiveness of recapitalisation measures*. The measures should facilitate the objective of allowing financial institutions to continue to ensure the proper financing of the economy on the basis of appropriate regulatory capital through an increase of own funds. The pricing should therefore provide a reasonable basis for institutions to seek the needed recapitalisation measures, while avoiding as much as possible (i) a potential increase in the pressure to which the financial system is subject, (ii) a negative impact on the institutions' attractiveness to investors in the foreseeable future, and (iii) a stigma on institutions seeking public recapitalisation. Therefore, the pricing should take as much as possible "normal market conditions" as the reference point, thus avoiding periods of excessive volatility.

   iii) The *interest of taxpayers*. The pricing and other conditions of capital injections should protect the interest of taxpayers, namely by minimising the potential for losses and ensuring an equitable return on public investment.

   iv) The *level-playing field among institutions*. Safeguards should be in place against market abuse and competitive advantages by beneficiary institutions.

   v) The *exit of recapitalisation measures*. Terms should be set on the redemption or conversion of the instruments either on the basis of a period of time or evolution of market conditions, so as to retain the temporary nature of the State's involvement and discourage financial institutions from maintaining such involvement for an extensive period of time.

2. Member States have announced plans to provide Tier 1 capital through different instruments. Capital injections will be made for the most part through the acquisition of preferred shares or other hybrid

2, boulevard Royal • L-2983 Luxembourg • Téléphone (+352) 4774-1 • Télécopie (+352) 4774-4901 • E-mail: sg@bcl.lu

instruments which fulfil the conditions for Tier 1 capital.[2] Some Member States have considered the provision of capital through the acquisition of ordinary shares. The conditions attached to the instruments - such as the required rate of return and redemption and repurchase terms - may vary across Member States and also depend on the situation of the individual beneficiary financial institution.

Against this background, the required rate of return by the government on the recapitalisation instruments - preferred shares and other hybrid instruments - could be determined on the basis of a "price corridor" defined by: (i) the required rate of return on subordinated debt representing the *lower bound*, and (ii) the required rate of return on ordinary shares representing an *upper bound*.

3. The required rate of return on *subordinated debt* would be determined as the sum of the following components:

   i) the government bond yield of the country where the bank is domiciled. This would represent the relevant minimum risk yield at the time that the capital is provided by the State, and it also measures the funding cost of the government;[3]

   ii) the issuing bank's 5 year CDS spread on subordinated debt, where representative data is available, in order to account for the credit risk of the individual institution;[4]

   iii) an add-on fee of *200 basis points per annum* to cover operational costs and provide banks with adequate incentives (i.e., discourage excessive demand for government support and encourage early exit of the State from the bank's capital), as well as to avoid significant discrepancies with the observed average yield on subordinated debt in the euro area.

*This methodology leads to an average required rate of return on subordinated debt of **6%**, comprising 3.27% average euro area government bond yield, 0.73% median of all A CDS subordinated debt spreads, and an add-on fee of 2.00%.*

---

[2] For the purpose of regulatory capital, the Capital Requirements Directive (Art. 66) covers only fixed-term cumulative preferred shares by setting a ceiling of 50% for their recognition in Tier 1. The CRD is under review with the aim also to address the capital treatment of hybrid instruments in general. The advice given by the CEBS in this respect in March 2008 is that hybrid capital instruments should only be eligible as Tier 1 capital if they meet all the following requirements: (i) they must be issued and fully paid up, (ii) be publicly disclosed and easily understandable; (iii) be permanent, (iv) can absorb losses in liquidation and on a going concern basis and allow the cancellation of payments; (v) in stress situations, the instrument should help prevent the bank's insolvency and make the recapitalisation of the issuer more likely.

[3] The government bond yield would be computed as the sum of (i) the average yield on the EMU benchmark 5-year bond over the 20 business days prior to the capital injection, and (ii) the average sovereign yield spread for the country of domicile of the financial institution over the reference period 1 January 2007 through 31 August 2008.

[4] The calculation of CDS spreads should be based on (i) the median value of 5 year CDS spreads over a sample period starting on 1 January 2007 and ending on 31 August 2008, or (ii) the median value of the 5 year CDS spreads during the same sample period for the rating category of the bank concerned, whichever is the lower. The calculation of CDS spreads for banks without CDS data, or without representative CDS data, with or without a credit rating, would be made similarly to the Governing Council's recommendations on the framework for government guarantees.

4. The required rate of return on *ordinary shares* would be determined as the sum of the following components:

   i) the government bond yield of the country where the bank is domiciled. This would represent the relevant minimum risk yield at the moment that the capital is provided by the State, and it also measures the funding cost of the government;[5]

   ii) an equity risk premium of *500 basis points per annum*. This represents a measure of the realised nominal return on euro area banks' ordinary shares in excess of a minimum risk yield over an extended span of time, in order to avoid periods of excessive volatility;[6]

   iii) an add-on fee of *100 basis points per annum* to cover operational costs and provide banks with adequate incentives (i.e., discourage excessive demand for government support and encourage an early exit of the State from the bank's capital). A lower add-on fee is considered appropriate for ordinary shares for several reasons, including the fact that they represent higher quality (core Tier-1) capital.

*This methodology leads to an average rate of return on ordinary shares relating to euro area banks of **9.3%**, comprising a 3.27% average euro area government bond yield, an equity risk premium of 5.00%, and an add-on fee of 1.00%.*

5. The required rate of return on preferred shares and other hybrid instruments to be selected by governments would be determined in relation to the specific features of the instruments concerned, including the redemption and repurchase conditions.

   (i) For preferred shares and other hybrid instruments having economic features similar to those of subordinated debt (i.e. not redeemable by the issuer before a fixed period and redeemable at par value), the required minimum rate of return would be determined by adding to the lower bound an *add-on component of 100 basis points*. This is intended to reflect the higher degree of seniority and related risk of preferred shares and other hybrid instruments in comparison with subordinated debt.[7]

   (ii) For preferred shares and other hybrid instruments having economic features similar to those of ordinary shares (i.e. non-cumulative, without the possibility of pay back, or perpetual

[5] The government bond yield would be computed as the sum of (i) average yield on the EMU benchmark 5-year bond over the 20 business days prior to the capital injection, and (ii) the average sovereign yield spread for the country of domicile of the financial institution over the reference period 1 January 2007 through 31 August 2008.

[6] An equity risk premium of 500 basis points is considered appropriate as it is consistent with the results computed with reference to three benchmark measures of equity risk premium over time periods of twenty and thirty years.

[7] In the US, where relevant data on preferred shares are available, in the period 31 December 1998-28 February 2007 the difference between the average yield of preferred stock (6.45%) and of bonds (5.45%) for the corporate market as a whole was 1%.

instruments with convertibility to ordinary shares), the required rate of return should be close to the upper bound.

(iii) Specific features of preferred shares and other hybrid instruments, such as exit clauses, can significantly increase the overall cost of capitalisation. These features should be appropriately chosen so that, while encouraging an early end of the State's capital support of banks, they should not result in an excessive increase in the cost of capital.

6. The parameters of the pricing of recapitalisation instruments could be revised after a period of 6 months to reflect changes in market conditions.

7. Concerning other features of recapitalisation instruments, their temporary nature should be ensured by providing financial institutions with incentives to redeem such instruments as early as possible after a certain period of time, e.g. through step-up or payback clauses.

2, boulevard Royal • L-2983 Luxembourg • Téléphone (+352) 4774-1 • Télécopie (+352) 4774-4901 • E-mail sg@bcl.lu