



EUROPEAN COMMISSION

Brussels, 6 February 2009

**TREATMENT OF IMPAIRED ASSETS IN
THE EU BANKING SECTOR**

- Draft Commission Guidance Paper –

1. Introduction

Several Member States have announced their intention to provide relief on the impaired assets of banks, amid consideration of a similar initiative in the United States. These announcements have triggered a wider debate within the Union on the merits of such measures as a supplement to the national rescue packages agreed in October 2008. This paper has been prepared by the Commission services, in consultation with the ECB, as a contribution to that debate and it builds on the recommendations issued on 5 February 2008 by the Eurosystem¹.

The Eurosystem has identified seven guiding principles for bank asset support measures: (i) *eligibility of institutions*, which should be voluntary, with possible priority for institutions with large concentrations of impaired assets in case of constraints; (ii) relatively broad *definition of assets* eligible for support; (iii) *valuation of eligible assets* which is transparent, preferably based on a range of approaches and common criteria to be adopted across Member States, based on independent third-party expert opinions, use of models which use micro-level inputs to estimate the economic value of, and probabilities attached to, the expected losses, and of asset-specific haircuts on book values of assets when the assessment of market value is particularly challenging, or when the situation requires swift action; (iv) an adequate degree of *risk sharing* as a necessary element of any scheme in order to limit the cost to the government, provide the right incentives to the participating institutions and maintain a level playing field across these institutions; (v) sufficiently long *duration* of the asset support schemes, possibly matching the maturity structure of the eligible assets; (vi) *governance of institutions* which should continue to be run according to business principles, and favouring of schemes that envisage well defined exit strategies; (vii) *conditionality* of public support schemes to some measurable yardsticks, such as commitments to continue providing credit to appropriately meet demand according to commercial criteria.

The present paper provides further guidance relevant for the design of asset relief measure, including public finance considerations and the treatment of asset relief measures under the EC State aid rules.

Any public assistance in the form of asset relief measures must comply with the substance and procedures of State aid control, including the respect of the notification obligation and the standstill clause. Such compliance is needed to (i) minimise of the inherent competition distortions between aided and non-aided banks, between Member States, and between aided institutions with different degree of problems (ranging from fundamentally sound to distressed)², and tackle moral hazard; (ii) reduce the risk that action at the national level results in a fragmentation of the internal market; (iii) minimise the economic and budgetary cost of State intervention; and (iv) accelerate the recovery in the banking sector and promote a return to normal market conditions within a reasonable timeframe.

¹ Eurosystem, "Guiding principles for bank asset support measures", dated 5 February, 2009.

² In this context, it should be borne in mind that the size and duration of these competition distortions will determine the survivors and the structure of the future landscape of European banking.

The present guidance focuses on the issues that arise for Member States in considering, designing and implementing asset-relief measures. These include (a) the rationale for asset relief; (b) the benefits of a consistent approach to asset relief among Member States; (c) the budgetary context in which asset relief is to be provided; and (d) principles for designing asset-relief measures in terms of eligibility, valuation and management of impaired assets from a state-aid perspective; and (e) the relationship between asset relief and other measures and the restructuring of banks.

2. Rationale for asset relief in context of current crisis

In October 2008, the Heads of State and Government agreed to implement national rescue packages for the EU banking sector. The specific objectives of these rescue packages are to safeguard banking-sector stability, to restore the normal functioning of wholesale credit markets and to underpin the supply of credit to the real economy. It is too early to draw definitive conclusions on the effectiveness of the packages, but it is clear that they have averted the risk of financial meltdown and have contributed to a gradual improvement in the functioning of the important interbank markets. On the other hand, the evolution in lending to the real economy since the announcement of the packages has been less favourable.³ In many Member States, reports of businesses being denied access to bank credit are now widespread and it would seem that the squeeze on credit goes beyond that justified by cyclical considerations.

Against this background, several Member States have indicated that they will introduce new government measures to provide relief on the impaired assets of banks. The objective of these measures is to address uncertainty about the valuation and location of impaired assets which has been a source of problems in the banking sector since the beginning of the crisis but has become much more severe as the crisis has deepened and spread to the real economy.

Banks have already taken steps to address the problem of impaired assets, i.e. they have recorded substantial write-downs in asset values⁴, taken steps to limit remaining losses by reclassification of assets within their balance sheets and gradually put additional capital aside to strengthen their solvency positions. However, it seems that the problem has not been resolved to a sufficient degree. As market illiquidity has driven prices further down and the unexpected depth of the economic slowdown now threatens a

³ While official data for the euro area suggest that bank lending to businesses is still resilient, the underlying trend is weakening, with month-on-month growth rates in lending slowing markedly toward the end of 2008. In December 2008, bank loans to the private economy (i.e. loans to non-MFI excl. governments) fell by 0.4% relative to November.

⁴ From mid-2007 to date, there has been a total of USD 1063 billion in asset write-downs, of which USD 737.6 billion has been reported by US-based banks and USD 293.7 has been reported by European-based banks. Of the latter, USD 68 billion has been reported by banks and insurances in Switzerland. Despite the scale of asset write-downs already reported, the IMF currently estimates that the total bank losses related to asset impairment is likely to reach USD 2,200 billion. This figure is based on global holdings of U.S.-originated and securitized mortgage, consumer, and corporate debt. This estimate has been steadily rising since the beginning of the crisis and some market commentators suggest that total losses may be substantially higher. For example, Nouriel Roubini who has consistently argued that official estimates are too low now suggests that total losses could be USD 3,600 billion for the United States alone.

broader deterioration in credit quality and a further wave of defaults uncertainty about the asset quality of banks – despite early government support measures– remains. By removing the high uncertainty related to asset valuations through direct relief measures, it is expected that confidence in the banking sector can be restored and normal bank lending to the real economy will resume.

3. Ensuring the overall effectiveness of asset relief and contributing to market functioning in the long term

Any asset-relief measures must be designed and implemented in a manner that most effectively achieves the immediate objective of restoring confidence in the banking sector. One of the issues to be addressed in this context is how to ensure an adequate participation in the asset-relief measures, including by regulatory means.

However it is also important to take medium and long-term considerations into account. Otherwise important dangers for the efficient functioning for the banking sector and the broader economy will emerge. There is a risk of a serious distortion of competition between beneficiaries and non-beneficiary banks and among beneficiary banks with different degrees of need. Non-beneficiary banks which are fundamentally sound may feel obliged to consider seeking government intervention to preserve their competitive position in the market. Similar distortions in competition will arise among Member States, with the risk of a subsidy race between Member States (trying to save their banks without regard to the effects on banks in other Member States) and a drift towards financial protectionism and fragmentation of the Internal Market. The outcome of such medium and longer-term effects will be a structurally weaker EU banking sector, with negative implications for productive potential in the broader economy. Furthermore, there would be a likelihood of recurrent need for government intervention in the banking sector, implying a progressively heavier burden on public finances. Such risks are serious given the likely scale of State exposure.

In order to limit the risk of longer-term damage, government intervention in the banking sector should be appropriately targeted and accompanied by behavioural safeguards that align the incentives of banks with those of public policy. These measures should form part of an overall effort to restore the viability of the banking sector, based on necessary restructuring and consolidation. In order to monitor closely the viability of banks, those receiving government support should be obliged to make regular (e.g. weekly) disclosures to national authorities, based on banks' own internal daily portfolio valuations, in order to guarantee transparency and disclosure in the evolution of their asset valuations and losses.

4. Need for a consistent EU approach

To address these longer-term considerations and so ensure the overall effectiveness of asset-relief measures, there is a need for a consistent EU approach. Consistency would only be necessary at a general level and could be achieved while retaining sufficient flexibility to tailor measures to the specific situation in Member States and individual

banks. A consistent EU approach would help to maximise the overall effectiveness of asset relief measures and would be particularly important in:

- Limiting the extent of negative spillovers among Member States. Such spillovers could arise in a situation where the design and implementation of asset-relief measures by a first-mover Member State results in pressure on other Member States to follow suit, irrespective of their policy preferences and budgetary capacity. There seems to be a real danger of a "race to the top" leading to a subsidy race between Member States. This would have, inter alia, significant implications for public finances.
- Ensuring consistent treatment of assets in the case of cross-border banks: Many EU banks have very complicated cross-border structures and there is a risk that different approaches to asset relief among Member States could overlap or fail to address an important pool of impaired assets held under a different jurisdiction. Such concerns would argue for EU-wide agreement on as many aspects of asset relief schemes as possible, e.g. range of eligible assets and criteria for eligibility, valuation (i.e. accounting prices) of assets etc. to prevent that differences in approach result in opportunities for cross border arbitrage and competition distortions.
- Resisting financial protectionism and avoiding any breach of the Treaty. To ensure comparability of asset-relief measures across Member States there is a need for guidance on the key features of relief measures in order to avoid undermining the Internal Market for financial services.
- Facilitating compliance with state-aid control requirements by ensuring consistency among asset-relief measures, minimising competitive distortions and limiting moral hazard. In the absence of sufficient coordination ex ante, these tasks will require additional State aid control requirements ex post. Common guidance on the basic features of relief measures would help to minimise the need for corrections and adjustments as a result of assessment under the State aid rules in order to preserve a level playing field.

5. Budgetary context for providing asset relief

In considering the design and implementation of asset-relief measures, it is essential that Member States take account of the budgetary context. Estimates of total expected asset write-downs suggest that the budgetary costs – actual and contingent - of asset relief could be very large both in absolute terms and relative to GDP in Member States. It is essential that government support through asset relief should not be on a scale that raises concern about over-indebtedness or financing problems. Accordingly, the nature and scope of asset relief measures should be conditioned by (a) their implications for medium-term budgetary sustainability and sovereign credit quality; and (b) their implications for near-term gross financing requirements and the capacity for Member States to raise capital on the markets. Such considerations are particularly important in the current context of widening budget deficits, rising public debt levels and challenges in sovereign bond issuance.

More specifically, the budgetary situation of Member States will be an important consideration in the choice of management arrangement for assets subject to relief. Two broad approaches to managing assets subject to relief measures can be considered:

- A solution, which involves the segregation of impaired assets from good assets within a bank or in the banking sector as a whole. Several variants of this approach can be considered. An asset management company (bad bank or risk shield) could be created for each bank, whereby the impaired assets would be transferred to a separate legal entity, with the assets still managed by the ailing bank or a separate entity and possible losses shared between the good bank and the State. Alternatively, the State could establish a self-standing institution (often called an "aggregator bank") to purchase the impaired assets of either an individual banks or of the banking sector as a whole, thereby allowing the banks to return to normal lending behaviour unencumbered by the risk of asset write-downs. A bad bank approach could also involve prior nationalisation, whereby the State takes control of some or all banks in the sector before segregating their good and bad assets.
- An asset insurance scheme whereby the banks retain impaired assets on their balance sheets but are indemnified against losses by the State. In the case of asset insurance, the impaired assets remain on the balance sheet of banks, which are indemnified against some or all losses by the State. A specific issue concerning asset insurance is setting the appropriate premium for heterogeneous and complex assets, which should in principle reflect some combination of valuation and risk characteristics of the insured assets. Another issue is that insurance schemes are technically difficult to operate in situation where the insured assets are spread across a large number of banks rather than concentrated in a few larger banks. Finally, the fact that the insured assets remain on the balance sheets of the banks will leave the possibility for conflicts of interest and remove the important psychological effect of clearly separating the good bank from the bad assets.

The longer-term budgetary implications may not differ significantly between the various approaches to asset relief, as financial markets are likely to discount potential losses on a similar basis. However, an approach requiring the outright purchase of impaired assets would have a relatively more substantial budgetary impact in operational terms. Although assets purchases by government need not imply heavy budgetary costs in the longer term if the acquired assets can be subsequently sold at a profit (see US and Swedish examples in Annex 1), the short-term impact on the level of gross public debt and on gross financing needs could be very significant. In order to limit this budgetary impact, one could consider combining a bad-bank approach and asset insurance whereby bad assets are transferred to a separate entity which benefits in some way from a government guarantee. This approach combines many of the benefits of the bad-bank approach from the perspective of restoring confidence in the banking system, while limiting the budgetary impact.

The limitations on the budgetary capacity of some Member States in providing asset relief are already evident in a significant widening in the spreads on government bond yields relative to benchmarks. Even if the absolute level of yields remains low by

historical standards and the widening of spreads can be partly explained by technical factors⁵, it is clear that investors have become more discriminating among sovereign issuers on the basis of credit risk. In this context, it may be appropriate to focus asset-relief measures on those banks of systemic importance. For some Member States, it may be the case that asset relief for banks is no longer an option, due to their existing budgetary constraints and/or the size of their banks' balance sheet relative to GDP (i.e. the big bank-small country problem). The extent of any risks to the EU banking system as a whole from an inadequate response in these Member State needs to be considered, particularly in the case of cross-border banks.

6. Application of State aid rules to asset relief measures

6.1. Appropriate identification of the problem and options for solution: full ex-ante transparency and disclosure of impairments and an upfront assessment of eligible banks

Past experience shows that the decision to allow a bank to access an asset relief measure must be based on a clear understanding of the magnitude of the bank's asset-related problems, its intrinsic solvency prior to the support and its prospects for return to viability, taking into due consideration all possible alternatives. It is important to tackle the problems upfront and comprehensively in order to facilitate the necessary restructuring process, prevent distortion in the incentives of all players and avoid waste of State resources without contributing to resumption in the normal flow of credit to the real economy. In order to minimise the risk of a recurrent need for State interventions in favour of the same beneficiaries, the following would have to be ensured:

- The application for aid should be subject to full ex-ante transparency and disclosure of impairments by eligible banks on the assets which will be covered by the relief measures, based on adequate valuation, certified by recognised independent experts and validated by the relevant supervisory authority or another official independent body designated by the government, in line with the principles of valuation developed below. Such disclosure of impairments should take place prior to government intervention;
- The application for aid by a specific bank should be followed by a full review of that bank's activities and balance sheet, with a view to providing a basis for assessing of the contribution of the asset relief programme to that bank's prospects for future viability. This review would be started in parallel with the certification of the impaired assets covered by the asset relief programme but, given its scale, could be finalised after the bank's entering into the asset relief programme. It should feed into the future submission of a restructuring or liquidation plan to the Commission, and provide a basis for the Commission's assessment of that plan;

⁵ At least some of the widening in spreads appears to reflect reduced arbitrage activity, as many of actors typically involved in this activity (e.g. investment banks, hedge funds) are no longer so present in the market.

6.2. Burden-sharing of the costs related to impaired assets between the State, shareholders and creditors

As a general principle, the bank (its shareholders and creditors to different degrees), ought to share the losses associated with impaired assets. This is achieved through the application of the principles of transparency and fair accounting by requiring such valuation prior to government intervention, and by asking the bank for a correct remuneration for the asset relief measures, whatever its form. The application of this principle should ensure equivalence between the purchase and insurance approaches to asset relief schemes in the sense that shareholder's responsibility and burden sharing should remain the same irrespective of the exact model chosen.

For the specific case when the insured assets remain on the balance sheets of the bank, a mechanism needs to be put in place so as to minimise conflicts of interest in managing the impaired assets and the budgetary cost. This can be achieved through obligatory first and residual losses clauses: a clause of "first loss" to be born by the bank, and a clause of residual loss by which the bank participates to a percentage [e.g. 10%] of any exceeding losses.

For both insurance and purchase schemes, when fair valuation of all impaired assets would lead to the insolvency of systemically relevant banks and this outcome would be judged incompatible with preserving financial stability, the principle of burden sharing requires that the current shareholders and bondholders cover a significant part of the expected future losses on the impaired assets. Shareholders should be expected to bear losses at least until the regulatory limits of capital adequacy are reached, while holders of subordinated debt can be required to convert their holdings into share capital. In the case of insurance schemes, owners should incur at least a first loss, and share the cost of possible further losses. Similarly, estimation of the impact of the asset relief measures on the economic value of junior and senior creditors might allow appropriate burden sharing mechanisms, including claw-back clauses, to be designed.

Full burden sharing between the bank (up to the limits of regulatory capital) and government may not be possible or advisable, if a systemically important bank needs to maintain higher capital ratios in order to fulfil its function of lender to the real economy, prior to the raising of new funds from the market. In such exceptional and duly justified circumstances, a shareholders' contribution will be necessary at a later stage, in particular in the form of higher compensatory measures when assessing the necessary restructuring. Compensatory measures may involve downsizing or divestment of profitable business units or subsidiaries, or behavioural commitments to limit commercial expansion. Management remuneration and dividend policy will have to be aligned in order to ensure the fulfilment of the public policy objectives of the State interventions. Dividend distribution might need to be restricted until the reinforcement of the capital base and the opening of the beneficiary bank's capital to new owners.

6.3. Aligning incentives for banks to participate in asset relief with public-policy objectives

As a general feature, impaired asset relief programmes should have an enrolment window limited to six months so as to limit incentives for banks to delay necessary disclosures in the hope of higher levels of relief later on.

During the six months window, the banks would be able to present eligible assets baskets (i.e. existing on the balance sheet of the banks before the cut off date, see section 7.4 below) to be covered by the asset relief measures more than once ("multiple access"), in order to cater for situations when eligible asset basket is not considered in need for a relief measure at the beginning of the six months window but subsequently becomes in such need, either due to evolving market circumstances or delays in the valuation and certification process⁶.

Appropriate mechanisms may need to be conceived so as to ensure that the banks most in need of asset relief participate in the government measure. Such mechanisms could include mandatory participation in the programme or at least mandatory disclosure to the supervisors.

When the participation is not mandatory, the scheme may include appropriate incentives (e.g. provision of warrants or rights to the existing shareholders to participate at preferential terms in future private capital-raising) to facilitate take up by the banks without however derogating from the principles of transparency and disclosure, fair valuation and burden sharing.

If nevertheless a bank decides not to join an asset relief scheme during the allowed six months enrolment window, and finds itself subsequently asking for State aid, such aid could be allowed only in exceptional and unforeseeable circumstances for which the bank is not responsible⁷, and subject to stricter conditions.

As a further means to align banks' incentives with public-policy objectives, access to asset relief should be made conditional on a commitment to continue providing credit to appropriately meet demand according to commercial criteria.

6.4. Eligibility of assets

In deciding on the range of eligible assets for relief, a balance needs to be found between meeting the objective of immediate financial stability and the need to ensure the return to normal market functioning over the medium term. Assets commonly referred to as "toxic assets" (i.e. structured securities backed by US residential and

⁶ Similarly, duly justified problems in valuation and certification may justify allowing access to the scheme shortly after the expiry of the six month window.

⁷ An unforeseeable circumstance is the one which could in no way be anticipated by the company's management when deciding not to join the asset relief programme during the enrolment window and which is not due to negligence or errors of the company's management or decisions of the group to which it belongs. An exceptional circumstance is to be understood as exceptional above the already existing crisis. Member States wishing to invoke such circumstances shall notify all necessary information to the Commission.

commercial real estate loans [and associated hedges]), which have triggered the financial crisis and have largely become illiquid or subject to severe downward value adjustments, appear to account for the bulk of uncertainty and scepticism concerning the viability of banks. Restricting the range of eligible assets to such assets would limit the State's exposure to possible losses and contribute to the prevention of competition distortions⁸. However, an overly narrowly focused relief measure would imply the risk of falling short in restoring confidence in the banking sector, given the differences between the specific problems encountered in different Member states and banks and the extent to which the problem of impairment has now spread to other assets. This would plead in favour of a pragmatic approach including elements of flexibility, which would ensure that other assets could also benefit from relief measures to an appropriate extent where this is duly justified.

A consistent approach to the identification of the assets that are eligible for relief measures is necessary to prevent competitive distortions among Member States and within the EU banking sector, as well as to limit the incentives for cross-border banks to arbitrage among different national relief measures. To ensure consistency in the identification of eligible assets across Member States, 'baskets' of assets reflecting the extent of existing impairment should be developed. The use of baskets of assets would facilitate the comparison of banks and their risk profiles across the EU. Member States would then need to decide which baskets of assets could be covered and to which extent. A proportionate approach would need to be developed for example, as to allow Member States whose banking sector is additionally affected by other factors (such as the burst of a bubble in their own real estate market) to be able to extend eligibility to real estate assets. It could further be envisaged to leave the possibility for Member States to determine conditions for eligibility outside the scope set out above for a certain percentage of the overall assets covered by a relief mechanism [e.g. 10%] in view of the diversity of circumstances of different Member States and banks.

Any further broadening of eligibility criteria would have to be taken into account in the assessment of the extent of restructuring of a beneficiary bank that is considered necessary to avoid undue distortions of competition. In any case, it would be inappropriate to extend eligibility for relief measures to assets that have not already been on the balance sheet of the beneficiary bank at a specified cut-off date prior to the launch of the relief programme. Such eligibility criteria would imply inadmissible moral hazard by providing an incentive for the bank not to properly assess risks in future lending and other investments and thus repeat the very mistakes that have brought about the current crisis.

6.5. Valuation of assets eligible for relief

A correct and consistent approach to asset valuation is of key importance to prevent major and undue distortions of competition and to avoid subsidy races between Member States. In the case of cross border banks, valuation should take place at the EU level or at least be closely co-ordinated among the Member States in order to ensure maximum effectiveness of the asset relief measure and reduce the risk of damaging arbitrage. In

⁸ This would seem the approach chosen in the US for Citigroup and Bank of America.

any case, eligible banks should value their portfolios on a daily basis and to make weekly disclosures to the national authorities and to their supervisors.

As a general principle, asset values should be assessed and certified by an independent expert and validated by the relevant supervisory authority or another official independent body designated by the government prior to granting of the support. Any such valuation should comply with the principles and processes listed in annex 2.

As regards the asset relief schemes involving a State guarantee, in addition to valuation of assets, which are covered by the guarantee, there is a need to determine the appropriate level of the fee for such a guarantee. As a general rule the fee should reflect the expected future losses on the assets.

6.6. Management of assets subject to relief measures

As discussed in section 5, two broad approaches to managing assets subject to relief measures can be considered: an asset purchase scheme (typically in the form of a bad-bank), and an asset insurance scheme. A combination of the two has also been used in resolving banking crises in the past (see Annex 1).

It is up to Member States to choose the most appropriate approach in the light of the dimension of the problem of impaired assets, the situation of the individual banks concerned and budgetary considerations. The objective of the State aid control is to ensure that the features of the selected model are designed so to ensure equal treatment and no undue distortions of competition.

The same principles of transparency and full disclosure, definition of eligible assets and appropriate valuation should apply irrespective of the method by which relief is granted. While the specific pricing arrangements for an aid measure may vary, their distinctive features should not have an appreciable impact on the adequate burden sharing between the State and the shareholders and holders of subordinated debts of the beneficiary banks. On the basis of proper valuation, the overall financing mechanism of an asset management company, an insurance or a hybrid solution should ensure that the bank will have to assume the same proportion of losses at the end of the day. Clauses *de retour à meilleure fortune* can be considered in this context.

Whatever the model, in order to facilitate the focusing of the bank on the restoration of viability and to prevent possible conflicts of interest, it is necessary to ensure clear functional and organisational separation between the beneficiary bank and its impaired assets, notably as to their management, staff and clientele.

In exceptional cases, where it appears necessary and justified to deviate from these principles, a balance would need to be ensured by requiring additional safeguards or compensations in the context of the restructuring plan.

7. Follow-up measures – restructuring and return to viability

While the treatment of impaired assets along the above principles is a necessary step for a return to viability for the bank, it is not in itself sufficient to achieve that goal. Depending on their particular situation and characteristics, banks will have to take appropriate measures in their own interest in order to avoid the recurrence of similar problems and to ensure sustainable profitability. For banks that have already benefited from other forms of state aid, be it under approved guarantee, asset swaps or recapitalisation schemes or individual measures, any assistance granted under the asset relief scheme is to be reported also under the already existing reporting obligations so that the Commission has a complete picture of multiple state-aid measures benefiting an individual aid recipient.

The State aid rules contribute to attaining this objective while at the same time minimising the costs for Member States and preserving a level playing field. State aid control aims at ensuring the definitive separation of the risks related to a separate category of assets – representing a segment of past business activities – from the beneficiary banks and prepare a solid ground for return to long term viability without State support. Under the State aid rules such a structural operation requires a restructuring of the beneficiary bank, via the validation of a restructuring plan defining a suitable business strategy, for example by re-focussing on core business or other reorientations of business model possibly including the closure or divestment of business divisions/subsidiaries or changes in the asset-liability management. The plan must keep the amount of public funding to the minimum necessary and include appropriate steps to avoid undue distortions of competition, inter alia by means of compensatory measures.

As indicated above, the nature and extent of the required restructuring has to be determined separately for each individual case of support. The necessary follow-up to aid for impaired asset relief may range from adjustments of the risk management system with limited or no compensatory measures, over thorough restructuring to different degrees including compensatory measures such as divestitures of non-core activities, to the orderly winding-up of a bank's activities. The timing of any required measures to restore viability would take account of the specific situation of the bank concerned, as well as the overall situation in the banking sector.

The factors which will have to be taken into consideration in the assessment of the required degree of restructuring and its time profile primarily include: the nature and origin of the problems of the beneficiary bank as reflected in its results that have given rise to the need for impaired asset relief; the soundness of the bank's business model and investment strategy evaluated on the basis of the criteria set out in the Commission communication on the recapitalisation of banks and other appropriate parameters, including the degree of leverage and need for repeated state aid; the size of the aid globally received notably in the form of structural support; the specific features of the impaired asset relief granted, and their impact in terms of distortions of competition; the general situation in the banking sector particularly with regard to stability.

The Commission's assessment of the extent of the necessary restructuring, following the initial authorisation of the asset relief measures will be determined on a case by case basis. This determination will be guided by a set of criteria related to the proportion of the bank's assets subject to relief, the valuation of such assets, the size of the total State exposure relative to a bank's risk-weighted assets, etc. The need for an in-depth restructuring will be presumed where an appropriate valuation of impaired assets according to the principles set out above would lead to a situation of negative equity/technical insolvency without State intervention. Repetition in demands for aid and departure from the general principles set out in earlier sections will normally point to the need for such in depth restructuring.

In the assessment of the restructuring plans the three established principles of return to viability, necessary measures to compensate for competition distortions, and adequate contribution of the beneficiary to the costs of restructuring will be examined.

8. Procedural aspects

Member States notifying asset relief measures shall provide the Commission with comprehensive and detailed information on all the elements of relevance for their assessment under the State aid rules as set out above⁹. The Commission approval will be granted for 6 months, and conditional on the commitment to present a restructuring plan for each beneficiary institution within 6 months from the accession to the asset relief programme.

When a bank is granted aid under an approved asset relief scheme, the Member State should provide the Commission with the detailed information regarding the assets covered and its valuation at the time such individual aid is granted¹⁰.

For banks that have already benefited from other forms of state aid, be it under approved guarantee, asset swaps or recapitalisation schemes or individual measures, any assistance granted under the asset relief scheme is to be reported also under the already existing reporting obligations so that the Commission has a complete picture of multiple State aid measure beneficiating an individual aid recipient.

After the timely notification of a restructuring plan, the Commission will reassess the aid granted under the temporary approval in the light of the adequacy of the proposed restructuring.

Member States shall further provide a report to the Commission every six months on the functioning of the asset relief programmes and on the developments of the banks' restructuring plans.

⁹ Pre-notification contact are encouraged.

¹⁰ Such provision of information is not an individual notification and does not call into question the legality and compatibility of the individual aid granted in line with the approved scheme. It is to function as enhanced monitoring.

Use of bad-bank solutions in the United States, Sweden, France, Italy, Germany and Switzerland

In the United States, the Resolution Trust Corporation (RTC) was created as a government-owned asset-management company in 1989. The RTC was charged with liquidating assets (primarily real estate-related assets, including mortgage loans) that had been assets of savings and loan associations ("S&Ls") declared insolvent by the Office of Thrift Supervision, as a consequence of the Savings and Loan crisis (1989-1992). The RTC also took over the insurance functions of the former Federal Home Loan Bank Board. Between 1989 and mid-1995, the Resolution Trust Corporation closed or otherwise resolved 747 thrifts with total assets of \$394 billion. In 1995, its duties were transferred to the Savings Association Insurance Fund of the Federal Deposit Insurance Corporation. Overall, the cost to the taxpayers was estimated at \$124 billion in 1995 dollars.

The RTC operated via so-called equity partnership programs. All equity partnerships involved a private sector partner acquiring a partial interest in a pool of assets. By retaining an interest in asset portfolios, the RTC was able to participate in the extremely strong returns being realized by portfolio investors. Additionally, the equity partnerships enabled the RTC to benefit by the management and liquidation efforts of their private sector partners, and the structure helped assure an alignment of incentives superior to that which typically exists in a principal/contractor relationship. The various forms of equity partnerships are the following: Multiple Investment Fund (limited and selected partnership, unidentified portfolio of assets), N-series and S-series Mortgage Trusts (competitive bid for identified portfolio of assets), Land fund (to take profit from longer-term recovery and development of land), and JDC Partnership (selection of general partner on a "beauty-contest" basis for claims unsecured or of questionable value).

In Sweden, two bank asset management corporations (AMCs), *Securum* and *Retriva*, were set up to manage the non-performing loans of financial institutions as part of the resolution policy for the financial crisis in 1992/3. The assets of an ailing bank were split into "good" and "bad" assets, with the bad assets then transferred to one of the asset management corporations, mainly to *Securum*.¹¹ An important feature of the Swedish programme was to force banks to disclose expected loan losses in full and assign realistic values to real estate and other assets. For this, the Financial Supervisory Authority tightened its rules for the definition of probable loan losses as well as for the valuation of real estate. In order to obtain uniform valuation of the real estate holdings of banks applying for support, the Authority set up a Valuation Board with real estate experts. The low market values assigned to the assets in the due diligence process, effectively helped setting a floor for asset values. As market participants did not expect prices to fall below this level, trading was maintained.¹² In the long run, the two bank asset management corporations turned out to be successful in the sense that the

¹¹ See Bergström, Englund and Thorell (2002) and Heikensten (1998a and b).

¹² This is in sharp contrast to the Japanese policy setting too high values for "bad" assets, thus freezing the real estate market for about a decade.

budgetary cost of supporting the financial system was roughly balanced by the revenues received by the bank asset management corporations from the liquidation of their asset holdings.

In France, a public body enjoying an institutional unlimited State guarantee was created in the 1990s to take over and liquidate over time the bad assets of Credit Lyonnais. The bad bank financed the acquisition of the assets by means of a loan from Credit Lyonnais. The latter, therefore, could avoid recording losses on the assets and free capital for an equivalent amount of risk-weighted assets, as the loan to the bad bank could enjoy a 0% risk weight in view of the State guarantee. The Commission approved the bad bank as restructuring aid. A feature of the model was the neat separation between the good and the bad bank in order to prevent conflicts of interest and the clause de retour à meilleure fortune on the good bank's profit to the benefit of the State. After a few years, the bank was successfully privatised. However, transfer of the assets to the bad bank at book value sheltered the shareholders from responsibility for the losses and implied high cost for the State over time.

A couple of years later in Italy, Banco di Napoli was split into a bad bank and a good bank after the absorption of the losses by existing shareholders and a Treasury recapitalisation to the extent necessary to keep the bank afloat. Banco Napoli financed the bad bank's acquisition of the discounted but still impaired assets via a subsidised loan of the Central Bank counter-guaranteed by the Treasury. The cleaned bank was privatised one year later. In neither the case of Credit Lyonnais or Banco di Napoli was there an immediate budgetary outlay for the Treasury for the acquisition of the bad assets, over and above the provision of capital to the banks.

A soft form of bad bank has been recently used by Germany in dealing with the bad assets of their Landesbanken. In the SachsenLB case, the beneficiary was sold as a going concern after the bad assets of around € 17.5 billion were channelled into a special purpose vehicle (SPV) with the purpose to hold the assets until maturity. The former owners, the Land of Saxony, gave a loss guarantee for around 17 % of the nominal value, which was considered as the absolute maximum of possible losses in a stress test (the base case was estimated only at 2 %). The new owner took over most of the refinancing and covered the remaining risk. The aid amount was at least considered to go up to the worst case estimate of around 4%. In the WestLB case, a portfolio of assets of € 23 billion was channelled into an SPV and equipped with a government guarantee of € 5 billion so as to cover eventual losses and protect the balance sheet of adjusting the value of the assets according to IFRS. This allowed WestLB to remove the market volatility of the assets from its balance sheet. A guarantee fee of 0.5 % was paid to the state. The risk shield is still in place and is considered to be state aid.

In Switzerland, the government has created a new fund to which UBS has transferred a portfolio of toxic assets that was valued by a third party prior to the transfer. To ensure financing of this fund, Switzerland has first injected capital into UBS (in the form of notes convertible into UBS shares), which UBS has immediately written off and transferred to the Fund. The remainder of the financing of the Fund was ensured by a loan from the Swiss National Bank.

Valuation principles and processes

First of all, assets should be classified per IFRS categories for financial instruments. The first two categories, both of which include complex structured products, would be

(a) financial instruments in the "trading book" and those at fair value under the fair value option (approximately €13.7 trillion or equivalent to about 33% of EU bank balance sheets); and

(b) available for sale instruments (approximately €4.5 trillion, or equivalent to 11% on EU bank balance sheets)¹³.

The determination of the fair value of these assets is based on a three-level hierarchy, i.e. mark to market in active markets (Level 1); mark to model in inactive markets using observable inputs (Level 2) and mark to model without observable market inputs (Level 3). For other asset categories not at fair value (approximately €23 trillion, or equivalent to 56% of EU bank balance sheets), impairment should be measured on the basis of future cash flows.

Second, the valuation method to be applied to eligible assets at Level 2 and Level 3 should be agreed and could vary with the individual assets or baskets of assets concerned. The objective must be to overcome potential conflicts of interests for banks in disclosing the real value of assets and avoid a situation where banks present only their most impaired assets in relation to a given price.

In the past, several valuation options have been applied more or less successfully. Simple reverse auction procedure proved useful in the case of categories of assets where market values are reasonably certain. However, this approach failed in valuing more complex assets in the United States. More sophisticated auction procedures are more adapted when there is less certainty about market values and a more exact method of price discovery of each asset would be needed. Unfortunately, their design is not straightforward. The alternative of model-based calculations for complex assets presents the drawback of being sensitive to the underlying assumptions¹⁴.

¹³ The figures in this paragraph are based on a Commission sample of the use of fair value by European financial institutions, according to 2007 annual reports and financial statements. A high level sample covered 45% of total EU banking assets, while a more detailed sample investigated 25% of total EU banking assets. For more detail on the sample, please see Annex 3 of the note, "Treatment of Impaired Assets in the EU Banking Sector".

¹⁴ In any case, an auction would be possible only for homogeneous classes of assets and in case of a sufficiently large number of potential sellers. In addition a reserve price would need to be introduced to ensure the protection of the interest of the State and claw back mechanism in case the final losses would exceed the reserve price, so as to ensure a sufficient contribution by the beneficiary bank. In order to assess such mechanisms, comparative scenarios with alternatives guarantee/purchase schemes will have to be submitted, including stress tests, in order to guarantee their global financial equivalence.

Finally, the option of applying uniform valuation haircuts to all complex assets simplifies the process of valuation overall although it results in less accurate pricing of individual assets. Central banks have substantial experience on possible criteria and parameters for collateral pledged for refinancing, which could constitute useful reference and function as "safe harbours" in applying the haircut option, in so far as central banks may consider some types of impaired assets as collateral.