CPI COMPETITION POLICY INTERNATIONAL

Volume 5 | Number 2 | Autumn 2009

The Approach to State Aid in the Restructuring of the Financial Sector

Lorenzo Coppi & Jenny Haydock

Copyright © 2009
Competition Policy International, Inc.

Published in Competition Policy International (print ISSN 1554-0189, online ISSN 1554-6853), Autumn 2009, Vol. 5, No. 2. For articles and more information, visit www.globalcompetitionpolicy.org.

The Approach to State Aid in the Restructuring of the Financial Sector

*Dr. Lorenzo Coppi & Dr. Jenny Haydock**

The unprecedented nature of the financial crisis in autumn 2008 led the European Commission to approve a series of state support measures for the financial sector under Article 87(3)(b), which allows for aid to be considered compatible with the common market if it is "to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State." There was a consensus that the very serious financial crisis constituted a "serious disturbance" to the European economy.

There are minimal precedents on the use of Article 87(3)(b), and therefore the Commission has advanced a framework for the analysis, especially in its communication, *The Return to Viability and the Assessment of Restructuring Measures in the Financial Sector in the Current Crisis under the State Aid Rules*. This paper discusses that communication and the appropriate framework for analyzing aid to the financial sector given under Article 87(3)(b).

*Dr. Lorenzo Coppi is a Vice President in the London office of Charles River Associates, with over twelve years of experience in advising clients in Europe and in the United States on the economics of antitrust in a full range of competition cases. Dr. Jenny Haydock is a Senior Associate in the same office, where she has worked on a variety of cases, including State Aid investigations, mergers, allegations of abuse of dominance, and cartel behavior.

I. Introduction

In this article, we comment on the European Commission's Communication: *The Return to Viability and the Assessment of Restructuring Measures in the Financial Sector in the Current Crisis under the State Aid Rules*, (the "Restructuring Communication"), published by the European Commission (the Commission) on its website on July 23, 2009.

The unprecedented nature of the financial crisis in autumn 2008 led the Commission to approve a series of state support measures for the financial sector under Article 87(3)(b), which allows for aid to be considered compatible with the common market if it is "to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State." There was a consensus that the very serious financial crisis constituted a "serious disturbance" to the European economy. The effects of the crisis persist today and are likely to be felt for some time.

Given their urgency, the measures had to be approved without a full analysis of the State aid being granted, but the Commission set a timeframe of six months to review them and to determine whether they were compatible with State aid rules. The Commission is now in the process of carrying out this ex-post evaluation of the State aid provided to the financial sector.

There are minimal precedents on the use of Article 87(3)(b), and therefore the Commission has advanced a framework for the analysis in various communications. This paper discusses the appropriate framework for analyzing aid to the financial sector given under Article 87(3)(b) and concludes that:

- The recent financial crisis was an event of exceptional severity which had many characteristics of a market failure (major confidence crisis, evidence of panic, irrational behavior, bank runs, market breakdown).
- As a result of these market failures and of the significant risk to the economy that these represented, Member States provided aid to financial institutions which was approved under Art. 87(3)(b).
- Because, from the standpoint of economic efficiency, aid given to remedy a significant disturbance in the economy is much better justified than standard Rescue and Restructuring aid, aid given under Art. 87(3)(b) should be considered using a different approach from that of Rescue and Restructuring aid under Art. 87(3)(c).
- The appropriate approach to evaluating aid given under Art. 87(3)(b) is the Balancing Test indicated by the Commission in its *Common Principles for an Economic Assessment of the Compatibility of State Aid Under Article 87.3*.
- The Balancing Test requires the Commission to weigh the costs of the aid, in terms of market distortions, against the benefits in terms of

financial stability (the remedying of a "serious disturbance"), and not to require structural compensatory measures for their own sake.

- The Commission should distinguish between aid necessary to remedy the market failures of the financial crisis and aid given to banks to cover losses from flawed or risky business models. This article advances a framework for quantifying the proportionate and the additional tranches of aid.

THE COMMISSION SHOULD DISTINGUISH BETWEEN AID NECESSARY TO REMEDY THE MARKET FAILURES OF THE FINANCIAL CRISIS AND AID GIVEN TO BANKS TO COVER LOSSES FROM FLAWED OR RISKY BUSINESS MODELS.

- Banks that received only proportionate aid (or that can repay the additional aid in full) should be considered "structurally sound" (as defined in this article) and should not be required to present a restructuring plan. As illustrated in this article, this criterion is equivalent to one which considers as structurally sound only those banks that had enough capital to withstand the fair economic value of the losses that emerged during the financial crisis (that is, those banks which would have been solvent in the absence of the market failures which characterized the financial crisis).

- While both the proportionate aid and the additional aid should be considered compatible aid under Art. 87(3)(b), it is reasonable to require that they give rise to different levels of compensatory measures.

- Because proportionate aid only addresses an exceptional, systemic market failure, it is unlikely to result in appreciable moral hazard or distortion of competition in the relevant product markets, and thus—at most—only behavioral measures should be required for this type of aid.

- Additional aid, on the other hand, can be thought of as the aid necessary to bail-out financial institutions which were not structurally sound regardless of the crisis. It may be reasonable to impose some level of structural compensatory measures with regard to this type of aid, but these measures should be proportional to the tranche of additional aid granted, rather than to the full amount of aid.

- Even in the case of additional aid, because of the large number of institutions that received some form of aid and because of the specificities of the financial sector, moral hazard is often a more significant concern than distortions of competition in the relevant product markets, which are not likely to be significant.

- This suggests that—even in the case of additional aid—burden-sharing and behavioral measures (which target moral hazard directly) are often more appropriate than asset sales (which attempt to remedy distortions of competition in the relevant product markets).

- In addition to not being necessary, significant asset sales run the risk of endangering financial stability and slowing the return to fully-functional financial markets, thereby jeopardizing the very goal of the aid, and should therefore be considered very carefully.

The plan of the paper is as follows: In the next section we discuss the financial crisis and its market failure features. We then discuss the appropriate approach to evaluating state aid in the context of this exceptional financial crisis and we conclude that the standard Rescue and Restructuring ("R&R") framework developed in the context of Art. 87(3)(c) is wholly inadequate to assess aid given under Art. 87(3)(b). In section III, we propose a framework to analyze aid under Art. 87(3)(b) which is consistent with the Commission's own policy (the Balancing Test), and we devise a rigorous framework to identify the structurally unsound banks, as well as to separate the aid granted into a proportionate and an additional tranche. Section IV discusses the implications for the compensatory measures that the Commission is evaluating and Section V concludes.

II. The Inadequacy of the Standard Art 87(3)(c) R&R Framework to Analyze Aid under Art 87(3)(b)

For some months now, Europe and the rest of the world has been in the grip of a profound and pervasive financial crisis, more severe than any since the 1930s. As the European Commission stated in its April 2009 update of the State Aid Scoreboard, "The world economy is currently experiencing its severest financial and economic crisis in almost a century."[1]

As the Commission has highlighted, the crisis "equally affected financial institutions whose difficulties stemmed exclusively from the general market conditions which had severely restricted access to liquidity … the crisis hit also banks that could normally not be considered 'companies in difficulties'."[2] Several financial institutions that entered the crisis in good health saw their financial positions gradually deteriorate as a result of the worsening of the financial crisis and its effects on the real economy.

> IT IS INDEED THE CASE THAT THE FINANCIAL SECTOR IS UNIQUE, BOTH IN TERMS OF ITS ROLE IN THE ECONOMY AS A WHOLE AND, ALSO, IN TERMS OF THE INTERDEPENDENCE OF RIVAL FIRMS.

Faced with this unprecedented crisis, the European Commission provided guidance in the form of various communications to Member States as to the State aid rules applicable to State support for financial institutions during the crisis.[3] The Commission has recognized the exceptional nature of the crisis and the need for an unprecedented response, given the "systemic nature of the crisis" and to the "interconnectivity of the financial sector" which renders it unique.[4]

It is indeed the case that the financial sector is unique, both in terms of its role in the economy as a whole, and also in terms of the interdependence of rival firms.[5] As well as playing a crucial role in the economy as a whole, through the provision of loans and other banking services crucial to the running of any business, firms in the financial sector are interlinked and interdependent in a way that is not the case in other industries: first, because of interbank lending and other interactions; and second, because the reputation of and faith in the whole sector can be shaken by the removal of faith in just one institution.[6]

The Commission correctly stated that—given the exceptional nature of the crisis and the uniqueness of the financial sector—the R&R framework was not appropriate to analyze aid during the financial crisis and that the crisis required a fresh approach to State aid[7] and, for this very reason, the Commission resorted to Art. 87(3)(b).[8]

We agree with the Commission that the framework of R&R under Art. 87(3)(c) is not appropriate to analyze aid that has been given under Art. 87(3)(b). The rationale and context of Article 87(3)(b) is different from that of standard R&R aid. The role of ad-hoc R&R aid is to rescue and restructure firms that would have failed under normal market conditions. As indicated in the R&R guidelines, R&R aid is an extreme measure which usually is not consistent with the efficient functioning of a competitive market (see paragraphs 4 and 8 of the R&R guidelines).

WE AGREE WITH THE COMMISSION THAT THE FRAMEWORK OF R&R UNDER ART. 87(3)(C) IS NOT APPROPRIATE TO ANALYZE AID THAT HAS BEEN GIVEN UNDER ART. 87(3)(B).

There is broad economic consensus that ad-hoc R&R aid has tenuous justifications from the standpoint of economic efficiency and can, in fact, result in serious market distortions. By simply keeping an otherwise failed firm in business, or making it stronger in the market than it otherwise would be, the aid can create inefficiencies, in which less-efficient firms serve customers who could be more efficiently served by other firms. Furthermore, as with all aid, it can distort future incentives for firms as they anticipate future State aid and create moral hazard. Because of its tenuous justification from the perspective of market efficiency, ad-hoc R&R aid is subject to fairly strict (almost punitive) "compensatory" measures in order to ensure that the normal functioning of competitive markets is not hindered by State intervention.

This is not the case with aid awarded under Article 87(3)(b). This aid has a clear justification: "To promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State." A serious disturbance is likely to involve significant market failures; the correction of which is quite justified from an economic perspective since, properly performed, it renders the market more efficient, rather than less so.

Thus, while R&R aid is not consistent with the efficient functioning of markets, aid under Article 87(3)(b) is compatible with economic efficiency and, indeed, this aid attempts to return markets which have been hit by a serious disturbance to a normal and efficient situation. It is important that these observations are always carried forward in order to fully consider their implications in terms of the nature and motives of the aid and, thus, the appropriate action to be taken at the time.

The aims of restoring viability to the financial sector and protecting future financial stability, are sensible and well-justified goals and should constitute the guiding principle of any State aid analysis under Art. 87(3)(b). Of course, there may be costs involved in such interventions, but these may well be outweighed by the positive effects. And it is here that the analysis of such State aid must start, in line with the Commission's own "Balancing Test," as outlined in the Common Principles as an overarching methodology to assess State aid under Art. 87(3): "The assessment of the compatibility of an aid is fundamentally about balancing its negative effects on trade and competition in the common market with its positive effects in terms of a contribution to the achievement of well-defined objectives of common interest."

The application of the Balancing Test serves to ensure that three key objectives stated in the Restructuring Communication—stabilizing the financial system, ensuring that aid is kept to the minimum, and minimizing distortions of competition—do not clash against each other. In the next section, we apply the Balancing Test to the State aid given in the context of the financial crisis.

III. Applying the Balancing Test to Art. 87(3)(b)

The Balancing Test proposed by the Commission to analyze Aid under Art. 87(3) has three pillars, which can be formulated as three key sets of questions:

- Is the aid aimed at a well-defined objective of common interest? Why is the State aid needed? Why can the private sector not deliver the objective?
- Is the aid well designed to deliver the objective of common interest? Is aid appropriate? Is there a positive incentive effect? Is the aid proportionate to the problem tackled?
- Are distortions of competition and trade limited?

In the rest of the section we provide answers to these questions.

A. AID AIMED AT A WELL-DEFINED OBJECTIVE: THE FINANCIAL CRISIS AS A MARKET FAILURE

The Common Principles correctly state that the main economic rationale of State aid is to remedy a market failure (and/or to improve equity and social cohe-

sion). In this case, it is useful to distinguish between two types of market failures: those that lead to a breakdown of financial markets; and the negative externality that a failed financial institution imposes on other financial institutions and, ultimately, on the economy.

As to the market failures that led to the financial crisis, although the specific reasons for and the concatenation of events that led to the financial crisis in autumn 2008 are still being debated, it appears clear that risk mispricing, unrealistic expectations and short-termism, excessive leverage, asset price bubbles, and moral hazard followed by panic have been important elements of the financial crisis.

All these factors can be characterized as "market failures" in economic terms. As a result of these market failures, credit markets and, in particular, money markets had completely broken down in autumn 2008, endangering even structurally sound banks. Banks found their balance sheets interspersed with impaired assets for which there was no market, despite most of these assets having positive value outside of a crisis situation.

As a result of these market failures, credit markets and, in particular, money markets had completely broken down in autumn 2008, endangering even structurally sound banks.

It is a well-recognized problem in economics that information asymmetry may lead to market failure and, possibly, market breakdown. If a proportion of the goods available are known to be of low value, but these goods cannot be differentiated by buyers from goods of higher value, the price that buyers are willing to pay for the goods will fall to the point that no seller in possession of a higher-value product will offer it for sale, and so the market for the goods will shrink and may collapse. This is known as the "lemons" problem, after Nobel laureate George Akerlof's seminal contribution.[10] Thus, even those banks with certain valuable assets found it difficult or impossible to gain an acceptable price for them, because buyers could not distinguish them from so-called "toxic" assets which were of little or no value.

This "lemons" problem quickly spread from affecting single assets to affecting entire financial institutions. As investors became uncertain as to the quality of financial institutions' assets, concerns started to surface about the health and viability of financial institutions. As FED Chairman's Ben Bernanke stated: "At the root of the problem is a loss of confidence by investors and the public in the strength of key financial institutions and markets."[11] Once this crisis of confidence started to develop, investors became unwilling to lend to financial institutions, and financial institutions became unwilling to lend to each other, effectively precipitating the whole financial system into a potentially fatal liquidity crisis. At this point, the "lemons" problem had become a confidence crisis caused by uncertainty over whether the banks would survive.

While the "lemons" problem had, in part, caused the breakdown in financial markets, a second source of market failure exacerbated it and escalated it into a severe crisis. Given the interconnectivity of the financial system, the failure of one bank imposes a negative externality on another bank. In economics, a negative externality means that there is likely to be overprovision of a good if the market failure is not corrected, meaning in this case that banks would fail even when the failure was not efficient, from society's perspective. This second source of market failure is indeed what can potentially turn a financial crisis into a "serious disturbance of the economy," which requires State aid in order to be remedied.[12] However, this externality is a basic feature of the financial markets, and thus not exceptional (what was exceptional was the number of banks that could have failed and thus the potential severity of this negative externality).

Compare these market failures to the typical situation of ad-hoc R&R aid under Art. 87(3)(c), in which markets continue to function normally; there are no specific market failures such as externalities, asymmetric information, coordination failures, or incomplete markets. In that situation, it is typically a single firm—the recipient—that has failed to compete in normal market circumstances. It is clear that the justification for and the wider benefit of aid under those circumstances are significantly less compelling.

In the next section we propose a methodology for identifying aid to remedy the first type of distortion (the "lemons" problem)—which can be considered capital support provided by the state that is short-term in nature and a prudent bolstering of banks' capital positions—from "bail-out aid" to banks that did not have a viable business model (independently of the crisis) and thus should restructure.

B. AID AS A WELL-DESIGNED INSTRUMENT: EFFICACY AND PROPORTIONALITY

The second leg of the Balancing Test assesses whether the aid is a well-designed instrument. This requires aid to satisfy three principles: (i) that aid is an appropriate tool to tackle the market failure(s) identified; (ii) that aid can bring about a solution to the market failure problem; and—most importantly for the purpose of assessing aid under Art. 87(3)(b)—(iii) that aid is proportionate to the problem tackled.

1. Aid Was an Effective Tool to Tackle the Financial Crisis and Achieved its Goals

State aid has been provided to address the market failures discussed above and to avoid banks failing: the guarantees have been granted to avoid bank runs and to allow interbank markets to become more liquid; the impaired asset schemes have been introduced to allow a "fair value" pricing of illiquid assets; and the recapitalizations provisions have been necessary to allow banks to make risk provisions

to cover remaining impaired (or risky) assets in their balance sheets and because banks are now forced to put back more equity capital to cover their loans.

Aid was necessary in order to remedy the market failure and/or to avoid the risk of systemic financial failure. In particular, one of the most effective ways to solve the "lemons problem" is by means of an asset guarantee, as it removes the unobservable risk of default that is the root cause of the breakdown in financial markets.

Aid was necessary in order to remedy the market failure and/or to avoid the risk of systemic financial failure.

There is a consensus that these instruments were appropriate, and that the State support measures have been successful to bringing some degree of stabilization to the financial markets (even though financial markets are not yet completely back to normal). The first two criteria of the "appropriateness" leg of the Balancing Tests are therefore satisfied.

2. The Use of the Proportionality Principle to Differentiate Between Different Types of Aid

The proportionality principle requires that aid is kept to the minimum necessary to achieve its benefits. The reasoning behind this is perfectly legitimate. It is important to make sure that State support is not used to bolster a bank's financial position beyond what is required by the current market circumstances, and that it is not used to pay shareholders. In other words, even a serious crisis does not permit the writing of a "blank check."

In this context it is important to distinguish the aid that was proportionate to solve the crisis-specific market failures, from the additional aid that was necessary to rescue banks that would have been unviable in any case. While both types of aid can be provided "to remedy a serious disturbance in the economy of a Member State," the aid proportionate to solving the breakdown in financial markets (the "lemons problem" and the ensuing crisis of confidence) should be sufficient to allow structurally sound banks to return to viability, will result in only limited distortions of competition, and thus should not be subject to compensatory measures.

Any additional aid would be rendered necessary by the excessively risky actions of banks, rather than by the failure of the financial markets. Even if this additional aid was necessary to avert a potential catastrophe, it must be considered that the reason why this second type of aid was necessary was that some banks had overstretched themselves, and thus had contributed to creating the breakdown in financial markets in the first place. Thus this aid may warrant some compensatory measures, to avoid significant distortions of competition.

3. A Practical Approach to Applying the Proportionality Principle

A practical way to apply this proportionality principle, to distinguish between different tranches of aid, would be the following:

- Start from the bank's balance sheet before the financial crisis.
- The Committee of European Banking Supervisors (CEBS) and the European Central Bank (ECB) should establish the parameters of a "no financial crisis" market scenario.
- Value the bank's assets on the basis of commonly agreed "fair economic value" methodologies—this should result in a certain amount of required write-downs from the pre-crisis market value of the bank's asset base (the "fair economic value losses").
- For that part of the asset base which affects regulatory capital, calculate the difference between the value of the asset base during the crisis and the pre-crisis fair economic value of the asset base (the "market failure losses").[13]
- Calculate the amount of capital needed to bring the bank's capital from the previous regulatory minimum to the new level required by the market as the result of the crisis of confidence (the "crisis of confidence capital increase").[14]

The sum of the "market failure loss" and the "crisis of confidence capital increase" is the amount of aid proportionate to remedy the breakdown in financial markets. Any aid additional to this amount should be considered additional aid which the bank can either repay, or—if it cannot be repaid—it should be the basis on which structural compensatory measures should be calculated. As a corollary, if the bank can repay this additional aid, then it should be considered a structurally-sound bank that does not need to restructure. This is equivalent to saying that a bank is structurally sound if it had enough surplus capital (in addition to the regulatory minimum) to cover the fair economic value of its losses.

> THE SUM OF THE "MARKET FAILURE LOSS" AND THE "CRISIS OF CONFIDENCE CAPITAL INCREASE" IS THE AMOUNT OF AID PROPORTIONATE TO REMEDY THE BREAKDOWN IN FINANCIAL MARKETS.

A stylized example may help clarify this point. Imagine that before the crisis a bank had 100 in assets which had a market value of 100, and 100 in liabilities, of which 17 was in capital, well above the regulatory minimum of 5. Assume that after September 2008, the assets' market value fell to 70.[15] The reasons for this fall in value were two-fold. First, the assets were likely overpriced to some degree before the crisis; that is, they exceeded their fair economic value. We might therefore imagine that the fair economic value of the assets was, in fact, 90. However, the remainder of the fall in the value of the assets was a reflection of the market failure identified above; namely, that a "lemons" problem meant that potential purchasers were

unable to gauge the true value of the assets—the market had broken down to some degree—and assets were undervalued by 20 (this can be considered the "market failure loss"). In addition, as the result of the systemic crisis of confidence discussed above, the market was uncertain whether the bank would survive and thus required it to hold at least 10 in capital (in addition to any capital necessary to absorb the likely losses), instead of the regulatory minimum of 5.[16]

Assume that, in order to tackle the crisis, the State provided a recapitalization of 30. The proposed test would indicate that the amount of aid proportionate to remedy the breakdown in financial markets would be 25; that is: (i) the difference between the fair economic value of the assets pre-crisis, 90, and the market value of the assets during the crisis, 70, plus (ii) the 5 needed to bring the bank's capital from the previous regulatory minimum to the new level required by the market, 10, as the result of the crisis of confidence. In addition, there would be an amount of additional aid equal to 5 (the 30 of aid granted minus the proportionate tranche of 25).

In this specific example, the bank still has 17 of capital (as the 30 in losses were entirely covered by the State aid), which includes 12 of capital above the regulatory minimum ("surplus capital"). This amount of surplus capital is enough to cover the fair economic value losses of 10 (that is, the difference between the pre-crisis market value of the assets, 100, and their fair economic value, 90). This implies that the bank is structurally sound and it would have been able to cover its losses and survived in the absence of the market failures discussed above. Another implication of the bank having enough surplus capital, and thus being structurally sound, is that it would be able to repay the 5 of additional aid while maintaining the new minimum capital requirement of 10 (in fact—with 12 in capital after repaying the additional aid—the bank would even be above the new regulatory minimum). Thus a structurally sound bank only needed aid proportionate to remedy the temporary breakdown in financial markets.

This approach does not necessarily mean that a structurally sound bank would be able to repay the entire aid (including the proportionate tranche) once the crisis is over and the market value of the assets rises towards their "fair value."

In contrast, we can imagine a different example, in which a bank had only 10 of capital before the crisis—that is, 5 of surplus capital—and thus would not be able to cover all the fair economic value losses with its surplus capital, or to repay any of the additional aid. This second bank should not be considered structurally sound; it should be required to present a restructuring plan, and compensatory measures should be considered, although limited to the tranche of additional aid (i.e. 5).

This approach does not necessarily mean that a structurally sound bank would be able to repay the entire aid (including the proportionate tranche) once the

crisis is over and the market value of the assets rises towards their "fair value." In fact, the financial crisis, by spilling over to the real economy and by throwing it into one of the most severe recessions of the last fifty years, has changed the economic outlook and, thus, the fair economic value of the assets. This effect should also be ascribed to the market breakdown and—as we explain in the next section—should not result in a requirement to consider compensatory measures. To the extent that the market failures addressed by the aid are temporary in nature, it would be reasonable to expect that the State should be able to claw-back a certain amount of aid as the market failures diminish, allowing the value of the assets to climb towards their fair economic value. As the crisis of confidence eases, banks can go back to more efficient capital adequacy ratios.

Note that, for the sake of simplicity, we have assumed that the 30 in aid was a pure grant, without any form of remuneration or equity participation for the state. To the extent that some remuneration was received by the state (including equity participation), the value of this remuneration should be netted out of the aid, as financing should be considered aid only to the extent that it exceeded the value of the remuneration or equity participation.

> AID RENDERED NECESSARY BY THE CRISIS ITSELF IS UNPROBLEMATIC; WHILE AID RENDERED NECESSARY BY THE RECKLESS ACTIVITIES OF CERTAIN BANKS MUST BE SUBJECT TO FURTHER SCRUTINY.

The upshot of this analysis is much the same as the Commission's position: Aid rendered necessary by the crisis itself is unproblematic; while aid rendered necessary by the reckless activities of certain banks must be subject to further scrutiny. As a result, prudent banks will face fewer, if any, restructuring or compensatory measures than more reckless banks. But this analysis makes it clear that the relevant issue is the cause of the aid (to remedy a market failure or to cover real economic losses), rather than the form or the simple amount of the aid received—although the higher the amount of aid, the more likely it is that there is at least some additional aid. A more reckless bank will have received more additional aid than a less reckless bank, and some more prudent banks will have received no additional aid.

4. Using the Proportionality Principle to Distinguish Between "Structurally Sound" and "Structurally Unsound" Banks

The Commission's communications clearly identify the need to distinguish between banks that are "fundamentally sound" and whose difficulties stem exclusively from the general market conditions and those banks whose structural solvency problems are linked to their particular business models or investment strategies. It should be remembered that the purpose of such a distinction is to assess how best to respond to State aid measures, rather than to simply identify profitable and unprofitable banks under current circumstances (although such an analysis need not be irrelevant). The key is the soundness or otherwise of banks

at the point at which State aid was granted, since this sheds light on the motives of the aid.

From a policy perspective, it is important that those banks which have engaged in overly risky investment strategies or that had unsound business models are not allowed to receive aid without any compensatory measures being imposed on them. If no compensatory measures were imposed, the aid would create a significant moral hazard problem and would risk fostering another crisis like the one we are experiencing. Thus, this approach of differentiating between banks is—in principle—reasonable. However, the manner in which the Commission has made this distinction is too simplistic, and does not go to the heart of the purpose of such an analysis.

FROM A POLICY PERSPECTIVE, IT IS IMPORTANT THAT THOSE BANKS WHICH HAVE ENGAGED IN OVERLY RISKY INVESTMENT STRATEGIES OR THAT HAD UNSOUND BUSINESS MODELS ARE NOT ALLOWED TO RECEIVE AID WITHOUT ANY COMPENSATORY MEASURES BEING IMPOSED ON THEM.

First, it is too simplistic to consider all banks that have received certain types of aid, a certain amount of aid, or have received aid in different tranches, as necessarily "unsound," and all others as "sound."[17] While these simple screening devices may be useful to identify cases for more in-depth review, they should not constitute a presumption that the recipient is structurally unsound and would not have survived, even in the absence of the widespread market failures which characterized the financial crisis.[18] It is important to look more closely at the motives behind the aid and the reasons for its provision and, in particular, at whether it was justified on the basis of the market failures that led to the liquidity crisis and the general breakdown in confidence.

Second, and more importantly, even if a bank is not "structurally sound," it does not follow that all the aid given to the bank in question must be considered distortionary. Rather, some of the aid may very well be justified on the basis of the general market conditions and of the liquidity crisis, even if that amount would not have sufficed to maintain the solvency of the bank. Only the aid above and beyond what was justified on the basis of the breakdown of financial markets should be considered aid given for the purpose of sustaining a "structurally unsound" bank, and thus be subject to closer scrutiny.

The test we propose in this article provides a more analytical approach than that currently applied by the Commission, and it is very simple:

> "A bank should be considered structurally sound if, at the time of the crisis, it had sufficient "surplus capital" (i.e. above the regulatory minimum) to

absorb all future "fair economic value losses" (calculated adopting a scenario in which the financial crisis has not considerably affected the real economy and thus the economic outlook). If this test is passed, it must mean that a bank would have survived absent the market failures which characterized the recent financial crisis, and should therefore be considered structurally sound."

Only banks which did not have enough capital above the regulatory minimum to cover the fair economic value losses should be considered structurally unsound. These banks would have received some amount of additional aid and would not be able to repay it. Therefore, once the additional aid has been identified, the question must then be asked whether the bank can, or will be able to, repay that additional aid. If it can, we might consider that aid "erroneously" given, quite understandably, with a desire to ensure the bank's survival, but to an extent that actually overestimated that bank's exposure. The bank is still sound, it would have remained sound were it not for the "serious disturbance," and it should therefore not be expected to restructure or pay compensatory measures. There is also no reason not to allow the bank to choose the method of repayment: from its own resources, from those of debt holders, or from an asset sale on the open market.

On the other hand, if a bank did not have enough surplus capital to cover the fair economic value losses, it would not be in a position to soon repay the additional aid while remaining viable, and we must therefore consider that the additional aid was necessary because that bank had invested heavily in risky, overpriced assets. It should be given the possibility to repay—through its own choice of method—as much of the additional aid as possible while remaining viable. Then, as under the R&R guidelines, such a bank should be susceptible to demands to restructure and/or provide compensatory measures, but only to reflect the size of the remaining additional aid.

The reason for the different treatment of these two tranches of aid (the proportionate aid and the additional aid) lies in the different amount of distortions that these types of aid are likely to have, as we explain in the next section.

C. DISTORTIONS OF COMPETITION ARE LIMITED

It cannot be denied that State aid has potentially distortionary effects on the market, nor that economic efficiency demands that such distortions be minimized. The Communication points to various potential market distortions arising from State aid given to the banks: it may reinforce the market position of the aid recipient relative to that of its unaided competitors; it may help perpetuate failed business models; it may reduce the incentive to compete; and it may create moral hazard by encouraging excessive risk taking.

These distortions of competition may result in various types of market inefficiencies: allocative and productive inefficiencies (as non-efficient banks are shielded from competition); dynamic inefficiencies (as incentives to compete are reduced); and risks to financial stability (as the result of moral hazard).

It is quite correct for the Commission to be concerned about potential market distortions caused by State aid; indeed this is the key reason why, in economic terms, State aid can be problematic. In the Commission's own Common Principles, distortions of competition (along with effects on trade) are given as the negative effects of aid which must be weighed against the positive effects in the Balancing Test. While, in this case, the positive effects of avoiding an economic catastrophe must be considered to exceed any potential costs, it is not unreasonable to consider the distortions involved. Furthermore, when considering the appropriate measures to be taken in response to a finding of additional aid, the need to minimize distortions should be considered.

It is useful to distinguish between two main types of distortions of competition: those arising from moral hazard; and those arising from potential distortions of competitions in the product market(s).

1. Moral Hazard

In the context of financial markets, moral hazard is often identified as the most significant distortion that may be generated by the State aid. As several commentators have put it, there is the possibility that aid could "sow the seeds of the next crisis."[19] It is clear that an implicit promise of any aid in future may affect firms' incentives going forward. In particular, this promise may result in moral hazard, which arises when a firm or individual is protected from the "downside" of its risks, incentivizing inefficiently risky behavior. We believe that such possible moral hazard distortions are the most significant potential market distortion arising from the aid in this case.

In the context of financial markets, moral hazard is often identified as the most significant distortion that may be generated by the State aid.

The tranche of proportionate aid should not give rise to very significant moral hazard. This is because that aid is exceptional in nature, as it is only justified on the basis of a very unusual complete breakdown in financial markets. Thus, proportionate aid will only affect banks' expectations that, should another complete breakdown in financial markets arise in the future, aid of a similar magnitude could be granted to banks again. But banks should expect that, in normal circumstances, only the standard approach to bank restructuring will be applied. It is not clear why this set of expectations should reduce the incentives for dynamic competition or increase moral hazard. It is recognized that the severity of this crisis was exceptional, and that the government response to the crisis was exceptional as well. Proportionate aid should not substantially affect the way

banks behave in normal market circumstances, since it would not be seen as a precedent for intervention in such normal circumstances.

Banks may still expect that—should they fail in the absence of a complete breakdown in financial markets—additional aid would be provided to them in order to avoid the negative externality arising from the interconnected nature of financial institutions, and this may fuel moral hazard. In fact, the banks already had these expectations, and it was the realization that such expectations might be unfounded that made the bankruptcy of Lehman Brothers such a traumatic event for the financial system. Nonetheless, we discuss in section IV how carefully-considered and appropriate compensatory measures can be used to minimize the risk of moral hazard from additional aid.

2. Limited Distortions of Productive Efficiency in the Relevant Product Markets

The second type of distortion of competition is the productive inefficiency arising from allowing inefficient players to survive and to maintain their market share. In the case of systemic aid under Art. 87(3)(b), this source of distortion is less important than moral hazard. The aid received by banks, and especially proportionate aid, does not automatically result in a distortion of competition. The need for proportionate aid arises from the market failure that affected all banks; by definition, it is symmetric in nature.

> IN THE CASE OF SYSTEMIC AID UNDER ART. 87(3)(B), THIS SOURCE OF DISTORTION IS LESS IMPORTANT THAN MORAL HAZARD.

Unlike normal ad-hoc R&R aid, the entire sector has benefited from government intervention and aid was generally available to every bank that demanded it, and thus a level-playing field was largely preserved. This was especially the case when government intervention took the form of guarantee, asset purchase, or recapitalization schemes open to all banks operating in a Member State. In many cases banks were even encouraged to participate in aid schemes, regardless of their true need to receive it. Schemes open to all banks are, by nature, likely to be considerably less distortionary than aid reserved to a sub-set of institutions, who may then be unfairly advantaged in the market.[20]

Even when recapitalization has been carried out on an ad-hoc basis, it does not necessarily confer an advantage over competitors, given the strings attached to the State aid. Banks are often wary of accepting public money if they can avoid it, as they fear it will open the door to more public scrutiny of their policies and strategies. Most European banks that were in a position where they could opt out of the recapitalization and asset purchase schemes chose to do so. Ten U.S. banks have repaid the aid that they have received under the U.S. Troubled Asset Relief Program, ("TARP"). This illustrates that those schemes need not confer a com-

petitive advantage (otherwise all major banks would choose to participate in the schemes if possible).

In addition, to the extent that the aid actually remedied a systemic problem the banks faced—rather than simply being a hand-out—the aid arguably limited any negative impact on efficiency, in the sense of keeping inefficient firms alive. By remedying the problems caused by write-downs and a lack of faith in the financial sector, the aid actually removed some of the inefficiencies which had rendered it necessary in the first place. In this sense it was not the same as aid used, for example, to keep alive an inefficient manufacturer, which would lead to potentially significant productive inefficiencies.

This is indeed the very nature of aid under Article 87(3)(b): by remedying a true market failure, rather than "papering over the cracks" of a firm's failings, it may not create an efficiency imbalance in the market. Thus it is reasonable to conclude that there are no significant distortions in the relevant product market(s) associated with proportionate aid under Article 87(3)(b). It is interesting to note that much of the economics commentary on the banking crisis has focused on the need to minimize the cost to taxpayers, and the need to avoid moral hazard and thus a repeat of the crisis, with much less consideration given to the potential for productive inefficiencies or distortions of competition between market participants.[21]

This may be different in the case of additional aid, as—by its nature—it is aid given to rescue a structurally unsound bank. However, it is clear that, by preventing the collapse of large interconnected banks, the aid has avoided a disaster for the European banking sector. Unlike in the usual case of R&R aid ex Art. 87(3)(c), aid given under 87(3)(b) has an immediate and tangible benefit on competitors—in this case by preserving the stability of the financial system and avoiding the domino effect of bank failures.

The Commission cannot therefore simply assume that the sheer fact that some banks needed aid while others did not indicates that there was a distortion of competition in the relevant product markets: a careful and thorough analysis of the actual distortions of competition needs to be carried out in each case. In the case of additional aid, the assessment of whether the aid reinforces a recipient's market power needs to be made by reference to the competitive conditions in the particular markets in which the recipient is active, and requires a detailed analysis of: market definition, the recipients' market positioning and that of their rivals, barriers to entry and expansion, the presence of any friction in the market, and the degree of rivalry between market participants. In other words, in light of the externality that

The Commission cannot therefore simply assume that the sheer fact that some banks needed aid while others did not indicates that there was a distortion of competition in the relevant product markets.

interconnected banks impose on each other, a proper analysis needs to be carried out and distortions of competition in the product market(s) cannot simply be assumed.

In conclusion, proportionate aid is unlikely to result in a significant distortion of competition, but it is possible that some additional aid may create moral hazard and some distortions of competition in the relevant product market(s). Given the systemic nature of the crisis and several particular features of the financial systems, such distortions of competition are likely to be limited, and primarily related to moral hazard.

D. CONCLUSIONS ON THE BALANCING TEST

There can be little doubt that the positive effects of the aid outweigh the negative, distortionary effects, given the importance of avoiding a serious economic catastrophe. Furthermore, a proportion of the aid must be considered to pass the Balancing Test by being well-designed and proportionate to remedying a breakdown in financial markets. According to the Commission's own Common Principles, this implies that that aid should be compatible under Art. 87(3). There are two corollaries of this conclusion: Compatible aid does not require compensatory measures (see paragraph 73 of the Common Principles); and Compatible aid does not need to be repaid, or at least not immediately, as discussed in more detail in the next section.

We do however acknowledge—in line with the Commission's thinking on this issue—that additional aid used to rescue structurally unsound banks should be treated differently from proportionate aid given to remedy the breakdown in financial markets. Since additional aid was rendered necessary by the risky activities of the recipient bank, as opposed to the market failure which prompted the use of Article 87(3)(b), and to the extent that it is not repaid, it must be considered that it has more distortionary effects than proportionate aid. These distortionary effects may be mitigated by certain compensatory measures.

IV. The Implications for Compensatory Measures

The differences between ad-hoc R&R aid under Art. 87(3)(c) and stabilization aid under Art. 87(3)(b), as highlighted in the Communication, have important implications for determining the appropriate compensatory measures.

A. STRUCTURAL COMPENSATORY MEASURES ARE NOT APPROPRIATE IN THE CASE OF PROPORTIONATE AID

Structural compensatory measures (such as divestments and reductions in capacity) might have a place in ad-hoc R&R aid ex Art. 87(3)(c) as the rescued firm should have exited the market as a result of the normal exercise of market forces and, thus, competitors should be "compensated" for a rival remaining in the mar-

ket. Further, all firms must be diverted from the moral hazard associated with anticipating that they will be "saved." We note—however—that the Commission's Economic Advisory Group on Competition Policy ("EAGCP") has recently commented on R&R aid, noting that compensatory measures should serve to minimize distortions (moral hazard and "competitive externalities"), rather than being aimed *per se* at "compensating" competitors.[22] We agree entirely with this position.[23]

Nevertheless, structural compensatory measures are not justified in the case of proportionate aid under Art. 87(3)(b) where banks would not have failed had normal market forces continued to operate. This is implicitly recognized by the Commission in its assessment in the Restructuring Communication that only certain banks need to engage in "more substantial restructuring," and that such a measure is designed to "restore viability." There are at least three reasons why compensatory measures are not justified for proportionate aid under Art. 87(3)(b).

> THERE ARE AT LEAST THREE REASONS WHY COMPENSATORY MEASURES ARE NOT JUSTIFIED FOR PROPORTIONATE AID UNDER ART. 87(3)(B).

First, to the extent the Balancing Test has shown that the aid is compatible with Art. 87(3)(b), the Commission has no justification or power to demand compensatory measures. Second, even if the Commission had the power to impose them, compensatory measures might be conceivable only when a bank has benefited from the aid in a manner which is disproportionate with respect to benefit and support for the financial sector as a whole, whereas—in this case—the proportionate aid is common to most banks. Third, even if they were justified, it is not clear that structural compensatory measures are necessarily consistent with achieving the goals of the aid under Art. 87(3)(b), as stated at paragraph 2 of the Communication: (i) attain financial stability and maintenance of credit flows; (ii) limit distortion of competition and effects on trade; and/or (iii) limit moral hazard and maintain banks' competitiveness.

If concerns remain about distortions of competition—primarily driven by moral hazard issues—the fact that proportionate aid was rendered necessary by a sector-wide market failure leading to a sector-wide crisis means that regulation and behavioral compensatory measures, rather than mandated asset sales or other structural compensatory measures, would be most appropriate.

B. COMPENSATORY MEASURES MAY BE JUSTIFIED IN THE CASE OF ADDITIONAL AID BUT MUST BE DETERMINED CAREFULLY

We have explained that part of the aid granted may constitute additional aid and, as such, it may have more distortionary effects than proportionate aid. It may therefore be reasonable to try to minimize the distortionary effects by imposing some compensatory measures on banks which have received substantial addi-

tional aid, provided that these measures do not endanger the goal of achieving financial stability by returning banks to viability.

We emphasize that any such measures should apply only to the additional aid; a finding of additional aid should not mean that all the aid granted to an institution becomes susceptible to the same compensatory measures. It would be unreasonable to treat banks that received very small amounts of additional aid as harshly as banks that received large amounts of additional aid, even using the excuse that any level of additional aid means that the financial institution was kept alive by the aid, and that the market should be brought back to the "no aid counterfactual" in which the bank would have been liquidated. Consistent with the EAGCP recommendation, we believe that compensatory measures should only be undertaken to remedy as much as possible the loss in efficiency that the aid generated, and thus what is important is not simply the "no aid counterfactual" but the difference—in terms of departure from economic efficiency—between the situation generated by the aid and the no aid counterfactual. It is clear that keeping alive a very inefficient player (which requires large amounts of additional aid) creates a significantly larger departure from economic efficiency than keeping alive a marginal player (which requires very small amounts of additional aid), and thus the latter should be subject to significantly fewer compensatory measures.

C. ASSET SALES ARE UNLIKELY TO BE THE MOST EFFECTIVE COMPENSATORY MEASURE

While other burden-sharing measures may, to some extent, address moral hazard (which, we argue, is the most significant potential distortion of competition), it is difficult to see how compensatory measures involving asset sales can efficiently achieve this goal.

WHILE OTHER BURDEN-SHARING MEASURES MAY, TO SOME EXTENT, ADDRESS MORAL HAZARD (WHICH, WE ARGUE, IS THE MOST SIGNIFICANT POTENTIAL DISTORTION OF COMPETITION), IT IS DIFFICULT TO SEE HOW COMPENSATORY MEASURES INVOLVING ASSET SALES CAN EFFICIENTLY ACHIEVE THIS GOAL.

Asset sales tend to affect most directly the current shareholders of the bank. It is reasonable that shareholders bear the brunt of the losses incurred by banks. However, of all the stakeholders, this group is the one which is likely to be the least subject to moral hazard, for at least three reasons. First, asset sales target the current shareholders of a bank, which need not be the owners who were in place before and during the crisis. Numerous banks throughout Europe have changed hands in recent months, some now being partially or entirely state-owned. It is not clear that measures which are felt by those who did not own the banks while the risky behavior at issue took place will have a strong effect on moral hazard going forward.[24]

Second, shareholders have suffered significantly as a result of the crisis,[25] and while aid may have salvaged some shareholder value, the cost of such aid has been significant, so it is difficult to see how shareholders would be prone to significant levels of moral hazard.

Third, and perhaps more importantly according to many commentators, the most significant source of moral hazard has not come from distorted incentives for shareholders, but rather from distorted executive incentives and failings in bank's governance, which encouraged the pursuit of short-term profits and risk taking and which existed—and continue to exist—independent of any State aid.[26] Behavioral compensatory measures that align executives' incentives to the long-term profitability and viability of banks may be the best solution to the moral hazard problem, but these need to apply to all banks—sound and unsound, and regardless of whether they received aid—and thus should be imposed through sectoral regulation rather than on an ad-hoc basis using State aid law.[27]

Therefore, asset sales are unlikely to be the best way to tackle moral hazard while maintaining financial stability. One might take a somewhat different view of burden sharing which targets debt holders (particularly subordinated debt holders). Burden sharing may address moral hazard on the part of subordinated bondholders if the restructuring forces them to convert their bonds into stocks. Since, in many cases, the aid meant these debt holders kept all of their investment and continued receiving interest, it is important to consider the moral hazard they face. To the extent that these debt holders have a direct influence on banks' behavior, burden sharing to minimize the moral hazard they face going forward may be justified and effective. As to structural compensatory measures, the sale of assets would not directly impact debt holders or bank executive compensation.

As well as being ineffective in tackling the most significant source of potential inefficiencies, asset sales may also be damaging to the Commission's overall goal of financial stability. This is for several reasons. First, mandatory asset disposals may actually worsen a bank's solvency or future solvency if there is not a corresponding reduction in liabilities, assets are sold below book value, or the sales price is materially below the value of foregone earnings. Achieving the right balance between a combined disposal of assets and liabilities and ensuring the bank's solvency and viability is very difficult. In the current market circumstances, banks would most likely have to divest their most profitable assets, which would reduce the bank's ability to be viable and improve its solvency by retaining earnings. The result of assets sales would thus likely run counter to the aid's objectives.

As well as being ineffective in tackling the most significant source of potential inefficiencies, asset sales may also be damaging to the Commission's overall goal of financial stability.

A particular problem from the point of view of the bank sector is that—unlike any other sector—competitors can take on the divested assets only if they can

raise a corresponding amount of capital to maintain their capital adequacy ratios at a prudent level (which at the moment is above the minimum regulatory level). This tends to reduce the ability of competitors to take on divested assets, and thus to be "compensated." This is particularly important given that many banks suffer from re-ratings of their Risk Weighted Assets due to more prudent risk management policies, deteriorating asset prices, and the wave of downgrades of bonds by rating agencies. An added complication of compensatory measures during a systemic crisis is that there are many sellers and few buyers, so it may be difficult to sell a significant portion of assets without depressing their prices to a point which might create another financial crisis.

Another distortion of competition typical of the usual R&R aid ex Art. 87(3)(c) is that State aid may sustain the recipient's output and this may displace ("crowd out") the output that would have been provided by the recipient's competitors. For aid under Art. 87(3)(b) to have a "crowding out" effect, it must be the case that the aid recipient's rivals have the capacity and the willingness to increase lending. These conditions are not met in much of the European financial sector, as the credit contraction has limited banks' ability to lend. Wholesale funding markets still do not allow refinancing of long term wholesale funding and banks therefore need to rely heavily on the European Central Bank ("ECB") for their liquidity. This is likely to make asset sales even more difficult and closer to fire sales.

> PERHAPS MORE IMPORTANTLY, GIVEN THE MARKET CONSTRAINTS ON THE ABSORPTION OF DIVESTED ASSETS, IT IS VERY LIKELY THAT COMPENSATORY MEASURES WILL RESULT IN A REDUCTION IN THE LEVEL OF THE ASSETS AVAILABLE IN THE MARKET OVERALL.

Perhaps more importantly, given the market constraints on the absorption of divested assets, it is very likely that compensatory measures will result in a reduction in the level of the assets available in the market overall. As assets constitute, for the most part, short and long-term loans provided by the banking sector to the economy, this would have exacerbated the monetary contraction which is already very serious, potentially damaging the opportunity of recovery in the real economy.

V. Conclusions

In conclusion, while we think that some behavioral compensatory measures can be efficiently imposed on banks that received aid under Art. 87(3)(b), structural compensatory measures should only be considered with regard to the tranche of the additional aid; that is, that aid that was above and beyond what was necessary to remedy the effects of the market failures that lead to a breakdown of financial markets ("the proportionate aid").

Even in this case, other burden-sharing measures and measures focusing on governance and executive pay may be more efficient than asset sales in addressing the main distortionary effect of the aid: moral hazard. Finally, asset sales risk undermining the key goal of the aid granted under Art. 87(3)(b)—returning banks to viability and stabilizing the financial system—so they should only be imposed only when there is compelling evidence of distortions of competition in the product market(s).

---

1 *See* page 3 of the Scoreboard.

2 *See* page 8 of the Scoreboard.

3 The "Banking Communication" (October 2008), the "Recapitalisation Communication" (December 2008), the "Impaired Assets Communication" (February 2009), and the "Restructuring Communication" (July 2009).

4 As referred to in the Restructuring Communication.

5 For a discussion of the uniqueness of the financial sector and its implications for State aid policy, *see* Bruce Lyons, *Competition Policy, Bailouts and the Economic Crisis*, CCP Working Paper 09-4, 2009.

6 Another source of uniqueness of the financial sector is that banks have inherently unstable balances sheets with long-term assets (loans and investments) and short-term liabilities (deposits), which make them particularly vulnerable to crises of confidence.

7 "The general erosion of confidence within the banking sector in October 2008 led to serious difficulties in accessing liquidity. The crisis had become systemic and equally affected financial institutions whose difficulties stemmed exclusively from general market conditions severely restricting access to liquidity. It thus became doubtful whether the R&R Guidelines were still providing an appropriate framework to tackle the crisis, as the crisis also hit banks that could normally not be considered "companies in difficulties." Furthermore, urgent structural action became necessary in many cases." Spring 2009 update of the State Aid Scoreboard, page 8.

8 This framework is rarely applied; it is significant that there is no body of case law defining the relevant criteria to be applied under Art. 87(3)(b).

9 A market failure is a situation in which the market alone fails to provide the optimal level of a good or service (that is, a Pareto efficient solution). The concept of market failure is linked to the first fundamental theorem of welfare economics. The market fails to deliver an efficient outcome whenever there are incomplete markets, asymmetric information, coordination failures, consumers and producers do not behave competitively, and/or no equilibrium exists. In these circumstances all economic actors can, in principle, be made better off by removing the market failure, possibly through the use of state aid. For a definition of market failure, *see* John O. Ledyard, *Market failure*, The New Palgrave Dictionary of Economics, 2nd Ed., Steven N. Durlauf & Lawrence E. Blume eds., (2008).

10 George A. Akerlof, *The Market for 'Lemons': Quality Uncertainty and the Market Mechanism*, 84 Q. J. Econ. 3, pp. 488–500, (1970).

11 Bernanke's remarks at the President's Working Group Market Stability Initiative Announcement, Washington, D.C.,on Oct 14, 2008 (*available at* http://www.federalreserve.gov/newsevents/speech/bernanke20081014a.htm).

12 Charles Goodhart & Dirk Schoenmaker, *Fiscal Burden Sharing in Cross-Border Banking Crises*, 5 INT'L J. CENTRAL BANKING 1, pp. 141-165, (2009).

13 We understand that financial institutions need to perform credit analyses of credit related assets which are subsequently audited. These audited figures can be used to determine the true economic value of these assets.

14 Note that this amount should only consider the amount of extra capital that the market requires financial institutions to have as a result of the crisis of confidence discussed above, and should therefore exclude: (i) the additional capital necessary to cover the likely write-downs that can be expected as a result of the analysis in the previous points (both the fair economic value and the market failure losses); and (ii) any non-transitory increase in capital adequacy requirements in recognition of the fact that previous regulatory requirements were inappropriate, as any increase in capital required for these reasons should not be considered as having been caused by a market failure.

15 Note that we are assuming that the full amount of this revaluation directly affects regulatory capital.

16 Note that in this stylized example the increase in the minimum capital from 5 to 10 is the net of two effects: (i) the increase in the minimum capital adequacy ratio as a result of the crisis of confidence, and (ii) the reduction in the Risk Weighted Asset base as the result of the 30 losses, which tends to reduce the amount of necessary capital. Note also that—in this stylized example—we abstract from the fact that the book value of the capital may be different from its market value. We also assume that the "normal" regulatory minimum remains at 5: i.e. none of the increase from 5 to 10 can be considered a non-transitory increase in regulatory requirements as a result of a permanent change in regulatory policy.

17 The Commission explicitly mentions that institutions which have received a certain amount of aid, and institutions which have received asset relief in additional to some other aid, will be susceptible to restructuring demands. For example, *see* footnote 4 of the Restructuring Communication: "The criteria and specific circumstances which trigger the obligation to present a restructuring plan have been explained in the Banking Communication, the Recapitalisation Communication and the Impaired Assets Communication. They refer in particular, but not exclusively, to situations where a distressed bank has been recapitalised by the State, or when the bank benefiting from asset relief has already received State aid in whatever form that contributes to coverage or avoidance of losses (except participation in a guarantee scheme) which altogether exceeds 2% of the total bank's risk weighted assets. The degree of restructuring will depend on the seriousness of problems of each bank." *Also note* paragraph 55 of the Impaired Assets Communication: "In-depth restructuring would also be required where the bank has already received State aid in whatever form that either contributes to coverage or avoidance of losses, or altogether exceeds 2% of the total bank's risk weighted assets, while taking the specific features of the situation of each beneficiary in due consideration."

18 The Commission does not seem to take into consideration even relatively simple qualitative indicators of whether a bank was structurally sound, such as: absence of interventions or warnings by the financial regulators; absence of history of aid measures in the past; absence of indications from analysts and rating agencies that there would be anything wrong or particularly risky in a bank's strategy; and/or share price or traded debt movements indicating an early loss of confidence by investors. Although these qualitative indicators are imperfect and an analysis based on them would not be as rigorous as the approach outlined in this article, they would certainly provide a better measure of an institution's viability than the simplistic approach which the Commission seems intent on applying based on the form and amount of aid received.

19 For example, *see* Luigi Zingales, *Yes We Can, Secretary Geithner*, ECONOMISTS' VOICE, (February 2009). *Also see* Thomas F. Cooley, *Moral Hazard on Steroids*, FORBES, (March 2009).

20 Or, as John Vickers put it when writing about the October 8 U.K. scheme: "Given that the crisis is systemic and one of inadequate capital, not just insufficient liquidity, schemes on the lines of the U.K.

plan announced of October 8 make good economic sense. While state bailouts of arguably insolvent institutions are deeply unattractive, the realistic alternatives were still worse. The scheme is broadly competitively-neutral among U.K. institutions, and positive for other countries, many of whom have emulated the package. So while it is surely state aid, it is not seriously competition-distorting aid." John Vickers, *The financial crisis and competition policy: some economics*, GCP MAGAZINE, (Dec-08), *available at* www.globalcompetitionpolicy.org.

21 *See*, for instance, Jeremy Bulow & Paul Klemperer, *Reorganising the Banks: Focus on the Liabilities, Not the Assets*, ECONOMISTS' VOICE (March 2009); and Zingales, *supra* note 19. *Also see* Douglas Diamond, Steve Kaplan, Anil Kashyap, Raghuram Rajan, & Richard Thailer, *Fixing the Paulson Plan*, WALL STREET J, (September 26, 2008); and June 2009 comments by former Bank of England Deputy Governor John Gieve, reported at http://www.bloomberg.com/apps/news?pid=20601085&sid=a.sawnjO6kws.

22 *See* pp. 9 & 10 of the EAGCP Commentary on European Community Rescue and Restructuring Aid Guidelines, (February 2008).

23 This position also seems to be supported within the Commission. Georges Siotis, of the Chief Economist Team, noted that:

- "For non-financial institutions, compensatory measures typically consist of asset disposals and/or capacity reductions that "compensate" competitors for the survival of the distressed firm.
- For financial institutions, the disappearance or downsizing of a bank may actually hurt competitors"

See slide 18 of Georges Siotis, *The current financial crisis and EU Competition Policies*, at the ECRI/DIW/CEPS Conference, June 10, 2009 (*available at* http://www.ecri.eu/new/system/files/Siotis_2009-06-10.pdf).

24 In the case of banks in which the State is now a significant shareholder, compensatory measures may result in a "double-whammy" for tax payers: they had to bail-out banks and now they have to face a drop in the value of their "investment" as the result of asset sales.

25 For example, shares in RBS lost around 80 percent of their value over the 12 months to July 2009. AIG shares lost around 98 percent of their value in the same period.

26 *See*, for instance, Marco Becht, who highlights how the current crisis has "brought to light classic examples of board failure on strategy and oversight, misaligned or perverse incentives, empire building, conflicts of interest, weaknesses in internal controls, incompetence, and fraud." Marco Becht, *Corporate Governance and the Credit Crisis*, MACROECONOMIC STABILITY AND FINANCIAL REGULATION: KEY ISSUES FOR THE G20, Mathias Dewatripont, Xavier Freixas, &Richard Portes eds. CEPR, (2009).

27 It should be considered that a bank cannot unilaterally change its executive pay structure without incurring heavy costs in terms of lost talent. While it would be to the advantage of all bank shareholders to do so, there may be a coordination failure preventing imposing different incentive structures on the management. Regulation would be necessary to impose this more efficient incentive structure.