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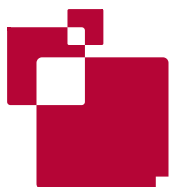
THE ROLE OF STATE AID CONTROL IN IMPROVING BANK RESOLUTION IN EUROPE

MATHIAS DEWATRIPONT, GREGORY NGUYEN, PETER PRAET
AND ANDRÉ SAPIR

Highlights

- The financial crisis has demonstrated the inadequacy of Europe's banking resolution framework. An effective new European framework should achieve three major objectives: avoid single market distortions; mitigate moral hazard; and coordinate the resolution efforts of national authorities.
- During the crisis, the European Commission, through its assessment of state aid cases, contributed effectively to meeting the first two objectives. The creation of a single European resolution authority would be a major step towards meeting the third objective. Unfortunately this is likely to be a long and uncertain process.
- Europe must therefore put an alternative strategy in place. The European Commission, through its state aid control discipline, can play a crucial role in the new crisis resolution architecture: as a complement to the European resolution authority when it is set up, and as a partial substitute to improve coordination among member states in the meantime.

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THE ROLE OF STATE AID CONTROL IN IMPROVING BANK RESOLUTION IN EUROPE

MATHIAS DEWATRIPONT, GREGORY NGUYEN, PETER PRAET AND ANDRÉ SAPIR,
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THE EUROPEAN UNION'S STATE AID DISCIPLINE and how the European Commission applies it have played two crucial roles during the banking crisis. First, the European competition authority carried out its normal role of ensuring that state aid provided by member states to support their distressed financial institutions did not result in distortions of the level playing field within the single market. In addition, the European Commission, by imposing strict restructuring plans on banks that received state aid, helped to mitigate the risk of moral hazard associated with the bail-out of financial institutions.

Successful interventions by the European competition authority during the banking crisis do not imply however that Europe is well equipped to resolve future banking crises. On the contrary, the crisis has exposed the glaring absence of a European banking resolution authority. There is no centralised European framework, and responsibility for crisis resolution remains a purely national competence. In this situation there is a tension between a single European banking market in which cross-border banks have become an important feature, and a set of national authorities with domestic mandates. The current set-up, with limited or no coordination between national resolution authorities, which sometimes have different objectives, has been exposed by the crisis as having limits. The Icelandic banking debacle in particular has illustrated the shortcomings¹.

One potential solution to the coordination problem would be to centralise the responsibility for crisis

management and resolution in the hands of a European resolution authority. Several policy-makers have proposed this, including International Monetary Fund managing director Dominique Strauss-Kahn [2010]. Despite its appeal, it is far from clear, however, if such a solution has any chance of being put into place.

This policy contribution argues that even if the EU succeeds in rapidly setting up a European banking resolution authority, the European Commission, in its role as the EU's competition authority, must continue to play an important part in crisis resolution through exercising its state aid control powers. This will not only help to prevent distortions in the single market but will also limit moral hazard. In the post-Lehman world of 'too big to fail', the risk of moral hazard could be heightened because governments might engage in excessive injections of public money. Hence, although a European banking resolution authority would have to be able to offer reassurance to banks in terms of the credibility of its rescue operations, it would also need to be suitably tough towards bank management, shareholders and subordinated creditors in order to limit moral hazard.

In case a European banking resolution authority were judged not to be politically feasible, or should its creation be delayed, we propose (along the lines of Nguyen and Praet, 2010) that the European competition authority carry out a second function; namely it would coordinate between national resolution authorities, by taking full advantage of its state aid control mandate. In this

1. See Pisani-Ferry and Sapir (2010) for an extensive discussion of EU banking crisis management.

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case, state aid control would be used not only to mitigate moral hazard, by imposing 'remedies' on proposed bailouts, but would also help address the coordination issue, by fostering cooperation between member states in the case of cross-border bank failures.

State aid control thus has a crucial role to play in the future European banking crisis landscape. If a European banking resolution authority can be established rapidly, state aid control will complement it. If a European banking resolution authority cannot be established, state aid control will be a partial substitute.

This policy contribution is structured as follows. Section 1 defines the role of a resolution authority. Section 2 presents the current variety of situations in Europe and describes the central role played by the European Commission through its exercise of state aid powers. Section 3 explores the extent to which the European crisis management framework could further benefit from state aid control. Section 4 concludes.

1 WHAT IS THE ROLE OF A RESOLUTION AUTHORITY?

In order to determine how the competition authority could better contribute to the crisis resolution framework, it is first necessary to define the various stages of the resolution process, and the different roles the resolution authority would play. When faced with a systemically important ailing institution, a resolution authority works like a team of doctors in an emergency room. The emergency physician first stabilises the patient. Then, in a second stage, the surgeon may operate to restore the patient's long-term health. If the disease is incurable, palliative measures may be applied so the patient can depart in peace.

These different stages are familiar to resolution

authorities. In an urgent situation, the resolution authority, like an emergency physician, first attempts to *rescue* the ailing bank. The emergency arises from the fact that the charter value of a bank can rapidly be destroyed if its reputation cannot be restored. The resolution authority's objective will be to do what is needed to stabilise the situation and keep the bank afloat if possible. The actions taken by the resolution authority at this stage will therefore pave the way for an orderly resolution. A private sector solution is generally preferred but may be impossible, for example due to lack of time, to an excessively risk-averse financial sector or if the ailing bank is too large to be absorbed by a competitor. In such cases, the stabilisation process will require public funds.

Once the ailing bank has been stabilised, the resolution authority works to *restructure* it. In this phase, the authority, if it undertakes an open-bank resolution, restructures the bank's assets and liabilities and reviews its business strategy. The primary objective will be to restore the long-term viability of the ailing institution. The restructuring of assets will aim to offload risks, and divest unprofitable activities. Additionally, the authority may want to restructure liabilities to make sure that uninsured creditors and shareholders effectively contribute to the resolution and share part of the burden.

Alternatively, if viability cannot be restored, the resolution authority will move to a closed-bank solution, aimed at orderly liquidation. The ailing institution will be wound up by the authority which will make sure that systemic functions are maintained. Systemic functions can be transferred to another institution that will be able to assume responsibility for them. Similarly, insured depositors will be either passed to a sound institution or paid off. Finally, in order to minimise the use of state resources, losses will be transferred to

shareholders and creditors, who will split them on the basis of seniority.

2 THE SITUATION IN EUROPE

Unlike the United States, where the Federal Deposit Insurance Corporation (FDIC) is in charge of resolving most banking crises, Europe has no single authority responsible for crisis resolution. Rather, the framework is decentralised, with significant differences between member states. In some countries there is a single resolution authority. In general, however, crisis management responsibilities are allocated to different authorities including the supervisor, the central bank, the finance ministry, the deposit guarantee scheme or judicial bodies, such as a commercial court or a receiver. Because cooperation between these national authorities is difficult, various coordinating structures, such as *domestic standing groups*, have been proposed, but with limited and variable success [see for example ECFIN, 2008].

In a decentralised setting, an international-coordination framework is also needed so that there can be orderly resolution of a crisis affecting a cross-border institution. Even though there are many different coordination bodies already active at the European level, none is specifically in charge of crisis resolution. In the recent crisis, therefore, cooperation had to be partly improvised by bodies such as the European Commission, the European Council and the ECOFIN Council.

An interesting feature of Europe's decentralised resolution system, which has gone largely unremarked during the recent crisis, is that it might, in theory, have some 'disciplining effect' on banks. Indeed, just as the multiplicity of creditors makes debt restructuring more complex – which is why bond restructuring is harder than bank-debt restructuring for nonfinancial firms, thereby

'hardening the budget constraint'² – having multiple bailout agencies may complicate the refinancing of an ailing bank. On balance, however, the European experience during the crisis has shown that, while there is too little rather than too much centralisation, national authorities end up having no alternative to the bailing-out of systemically important institutions. Therefore, progress towards centralised or coordinated resolution should be designed with the need to reduce moral hazard kept firmly in mind.

In this connection, Europe can make use of one of its specificities, namely the fact that state aid must be authorised by the European Commission. This feature is not specific to the financial sector and is justified by a desire to avoid distortions to the single market that would arise from differences in member states' willingness and capacity to support firms in distress with state aid. Therefore, an ex-post check by the European Commission of any aid granted by a member state takes place, in an attempt to minimise distortions and to avoid subsidy races.

In this context, any aid granted by a member state during the crisis to support its financial sector or to rescue one of its financial institutions was reviewed and assessed by the European Commission and had to be rubberstamped before it could be implemented. The way the European Commission's state aid control powers are structured, with a focus on individual state aid cases, may not have been particularly suited to addressing a systemic crisis. However, the Commission interpreted state aid control with adequate flexibility at the height of the crisis in the autumn of 2008³, giving primacy to stability concerns. This allowed the Commission to play an important role in coordinating member states' actions, minimising distortions of the internal market and mitigating moral hazard.

2. See for example Bolton and Scharfstein [1996].

3. See Beck et al [2010] for a detailed discussion of state aid control in banking in the recent crisis.

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3 BUILDING ON EUROPE'S STRENGTHS

The role of the European Commission in the recent banking crisis

Table 1 compares the European Commission with a resolution authority in terms of their role in banking resolution. Surprisingly, the Commission's powers resemble somewhat those of a resolution authority, especially in the *restructuring phase* associated with state aid. Indeed, even though the Commission does not intervene directly to manage a crisis case, the Competition Directorate-General nevertheless assesses the viability and the restructuring plans of institutions to which aid is granted. If the Commission judges

that viability cannot be restored, it will normally not authorise state aid and may require a liquidation plan.

The Commission's role in crisis management derives from its intervention in the *restructuring phase*. The major difference between the Commission and a banking resolution authority is that the Commission is not called on to intervene directly in the *rescue phase*, because it cannot provide public funds. Yet, it has undoubtedly influenced how national resolution authorities behaved in the rescue phase during the crisis. The Commission's decisions have created a jurisprudence that allows national authorities to infer how DG Competition would be likely to assess their case.

Table 1: Comparison of the European Commission role in the context of state aid assessment with the role of a resolution authority

	European Commission	Resolution Authority
<i>Nature of authority</i>	Politically-led supranational authority with regulatory powers.	Authority with regulatory, administrative or judicial powers, depending on the chosen framework.
<i>Timing of intervention</i>	Art 108 (3) of the Treaty foresees that member states will inform the European Commission in sufficient time of any plan to grant an aid. The Commission may decide to open a procedure if it considers that the aid is not compatible with the internal market. In such case, the member state shall not put its proposed measure into effect before the final decision of the Commission. However, during the crisis, given the emergency situation, in many instances, state aid was granted and effective before the release of the Commission's final decision, with the risk to having to discontinue or to recover aid in case of non-compliance with EU rules.	The intervention of a resolution authority is structured in two phases : <ul style="list-style-type: none"> Rescue phase: a resolution authority should be able to act preventively, before state aid is granted, to initiate, eg a private sector solution. Rescuing the bank may also require to mobilise public funds. Restructuring phase : in the restructuring phase, the authority should be able to act in a way that restores the long term viability (open-bank resolution) and that embeds state aid control principles (viability, restructuring cost burden sharing with incumbent owners, and remedies for competitive distortions). <p>If restoring the long term viability is not possible, the resolution authority could act as a receiver or liquidating agent (closed bank resolution) and wind up the institution.</p>
<i>Interested parties</i>	The European Commission is the arbiter between: <ul style="list-style-type: none"> Banks that receive state aid and their competitors. Member states. 	The resolution authority is arbiter between: <ul style="list-style-type: none"> The different stakeholders of the ailing institution: the resolution authority either ensures that long term viability is restored and restructure liabilities so as to make shareholders and uninsured creditors participate to the burden; or liquidates the institution (maximises the return on the sale) and distributes the proceeds according to seniority rights.
<i>Assessment criteria</i>	In order to be compatible with the internal market, state aid must <ul style="list-style-type: none"> Be necessary to prevent serious disturbances in the economy. Be limited to the minimum necessary. Not result in unacceptable distortions of competition. 	The resolution authority can be required to opt for the least cost solution, even though exemptions can be foreseen for systemically important institutions.
<i>Funding</i>	The European Commission role does not require any specific funding.	The resolution authority needs to be able to tap public funds.

4. See the European Commission's communications on: the return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the state aid rules (22 July 2009); the treatment of impaired assets in the Community banking sector (25 February 2009); the recapitalisation of financial institutions in the current financial crisis: limitation of aid to the minimum necessary and safeguards against undue distortions of competition (5 December, 2008); and the application of state aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis (13 October, 2008).

5. *Ibid.*

6. *Ibid.*

7. Currently, the Commission is only responsible for competition and not explicitly for financial stability. However throughout the crisis, the Commission's policy has effectively been to support financial stability, while trying to minimise single market distortions. The objective of the Commission was to balance short-term stability problems with medium-term competition concerns. If crisis resolution and competition powers were gathered within a single body, the mandate of this body should nevertheless explicitly address this balance and specify how this authority should solve the potential trade-off.

In addition, the Commission has published several communications describing its assessment criteria for different interventions, including recapitalisations, funding guarantees and the treatment of impaired assets⁴. For each of these rescue operations, the Commission explains in detail the minimum requirements that state aid must fulfil in order to be compatible with the internal market. For instance, the communication of 5 December 2008⁵ specifies a pricing methodology for recapitalisation operations, which establishes an illustrative corridor of acceptable prices based on government bond yields, credit default swap spreads and equity risk premiums. The methodology also covers step-up features that incentivise the exit of public capital over time. Depending on the nature of the capital provided, the price has to be closer to the upper or lower bound of the corridor adopted. The communication goes as far as calculating indicative average required rates of return. Similarly, the communication of 13 October 2008⁶ lists some behavioural constraints that should be respected by institutions benefiting from state guarantees. The constraints include restrictions on commercial conduct, advertising and balance-sheet growth.

That said, despite its influence on the rescue and restructuring process, the Commission is clearly not a resolution authority, as it does not decide upon the resolution path nor does it pay the final bill. At most, it acts as a referee and provides a dispute-prevention mechanism, both for member states and for institutions receiving aid and their competitors. Assigning the Commission the full role of a resolution authority would require eliminating hurdles that would be both politically difficult and economically unsound as it would create a conflict of interest for an institution that would have the double mission of protecting competition and guaranteeing financial stability⁷.

However, as explained in the remainder of section 3, the way forward, we believe, is to give DG Competition a more explicit and enhanced role in state aid control role, regardless of the degree of centralisation. We examine what this role could be using two scenarios: a single European resolution

authority, and a decentralised system.

A first model: state aid control as a complement to a European Banking Resolution Authority

In the first model, a single resolution authority would be established. Two independent authorities would then coexist, one responsible for crisis resolution and the other – the European Commission – for competition, and, in particular, state aid control. This coexistence of two separate agencies would allow a distinction to be made between ex ante rescue measure design and ex post assessment and control.

Clearly, establishing a new independent crisis resolution authority will not be easy, at least in the short term. It will necessitate addressing several challenging issues. First, a resolution authority must have access to public funds. Different options might be considered, including creating a European resolution fund financed by the private sector, as recently suggested by EU Internal Market and Services Commissioner Michel Barnier (2010). The creation of such a fund, however, raises a number of difficult questions about its funding, its governance, the incentives it creates and its broader impact on the financial industry. Yet, the combination of a single resolution authority and a single resolution fund, if sufficiently capitalised, would be a clear and consistent model.

Second, the respective missions of the two institutions would need to be clearly defined⁸, and the accountability issue addressed. In theory, defining the responsibilities of each institution could be relatively easy since the resolution authority acts first, and the competition authority second. Therefore, the resolution authority should make sure that it embeds in its decisions the EU state aid control principles – relating to viability, the sharing of the restructuring costs with the incumbent owners, and other measures to remedy competitive distortions. It would indeed always be possible for the European Commission to challenge ex post a decision of the resolution authority to bail out a particular institution, either on its own initiative or following a complaint of unfair

competition by another financial institution. However, because the competition authority would always have the last word regarding state aid, the model needs to explicitly clarify how the balancing act between financial stability and competition will be achieved.

In this model, state aid control would therefore remain extremely important, although it would only be responsible for the second of the two objectives outlined earlier, namely limiting moral hazard and avoiding excessive bailouts by taking advantage of the power of the European Commission.

A second model: state aid control as a partial substitute for a European Banking Resolution Authority

Even if the first model were judged desirable, its implementation is likely to take several years, in which case coordination would still need to be reinforced. As explained in this sub-section, ex-post state aid control in the restructuring phase could then be used as a powerful lever to reinforce the incentive for national authorities to cooperate in the rescue phase of the management of a banking crisis.

There are several ways for the Commission to play a more prominent role in the coordination of national resolution authorities. Dispersed initiatives, some of which are still in the reflection phase, have been launched. These form a patchwork which, once integrated, should reinforce the resolution framework and facilitate a coordination role for the Commission. These initiatives deal with issues as diverse and challenging as the development of a common resolution toolkit for national authorities, the recognition of the group dimension in insolvency laws, or the burden sharing between states and with the private sector. All of these initiatives could benefit from a discussion with the state aid control authority (the European

Commission) to ensure that they are compatible with the discipline of European competition policy.

Another avenue worth exploring would be to see if the Commission could integrate in its state aid assessment criteria the possibility that non-cooperative decisions taken by a national resolution authority in one member state may have a detrimental impact on another member state. Thus, national authorities would still not be obliged to cooperate to resolve a crisis affecting their respective countries, even though crisis management and resolution is deemed to be a matter of common interest. But, at least the consequences for other countries of their decisions would be subject to the Commission's ex-post scrutiny.

Ex-post scrutiny by the Commission would constitute a useful complement to the currently incomplete ex-ante coordination framework. Authorities in Europe are currently investigating ways to reinforce ex-ante coordination. Given that the powers of resolution authorities are allocated to different authorities, this requires the devising of several coordination structures, suited to the various authorities of a similar nature. For instance, coordination between *supervisory authorities* in the rescue phase is clearly addressed in the Commission's proposal for a regulation of the European Parliament and the Council establishing a European banking authority (EBA) (Commission, 2009b). This proposal also contains safeguard measures, which might limit its efficiency, especially in an emergency situation⁹. The ex-ante coordination of *finance ministries* seems to be less well-defined, even though they decide on the allocation of public funds. The Council has, therefore, started to devise practical arrangements within the Council to enhance EU-wide coordination in cross-border crisis resolution between member state governments (see Council of the European Union, 2009). However, this coordination process seems to focus on general

8. A related topic, which is, however, not addressed in this policy contribution is to determine how the future European banking authority could contribute to the creation of this single resolution authority.

9. According to Article 10 of the proposal, the European banking authority may be called to facilitate and coordinate the action of supervisory authorities in emergency situations. Where necessary, the EBA can adopt individual decisions requiring supervisory authorities to take the necessary actions to ensure that financial institutions do satisfy legal requirements laid down in the relevant European directives. Yet, the same proposal also foresees that in cases in which this would impinge on its fiscal responsibilities, a member state can appeal against the decision of the EBA. In such a case, the Council is called to decide on the case.

'The Commission could integrate into its state aid assessment criteria the possibility that non-cooperative decisions taken in one member state have a detrimental impact on another. Thus, the consequences for other countries of state aid schemes would be subject to ex-post scrutiny.'

crisis management policies and not on specific crisis cases.

Finally, even if the *ex-ante* cooperation framework was significantly reinforced, it would still, in most cases, rely on voluntary agreements, such as the 2008 memorandum of understanding (ECFIN, 2008). However, national authorities may not necessarily have the incentives to cooperate or may even have dissenting opinions on how to resolve a crisis. These differences may result from a diversity of factors, including different assessments of the crisis situation, asymmetric information between national authorities, or the asymmetric impact on national financial systems of resolution measures.

Despite these difficulties and differences, national authorities in charge of crisis resolution should try to coordinate their actions and determine a common resolution path so as to resolve the crisis situation in an orderly way. Determining such a path need not imply that all the countries participating in a resolution implement the same set of actions. What it does imply, however, is that situations should be avoided in which the authority in one country ignores the negative externalities that its actions could cause on other participating countries. For instance, a member state should not be allowed to rescue a domestic institution in such a way that it would directly threaten the survival of its systemic foreign subsidiaries. This could happen, for example, if home authorities require, at short notice, the stopping of liquidity flows to subsidiaries previously funded by the mother company.

The European Commission could play a key role in this process. Indeed, DG Competition's *ex-post* assessment of state aid cases could explicitly incorporate the required degree of cooperation between the different member states. Article 107.3(b) of the Treaty on the Functioning of the

European Union (TFEU) specifies that a state 'aid to remedy a serious disturbance in the economy of a member state' may be considered to be compatible with the single market and, therefore, authorised. In fact, one could argue that if such aid creates a 'serious disturbance' to the economy of another member state, it should be judged as incompatible with the single market and, therefore, not be authorised. The awareness on the part of national authorities of these rules would reduce their motivation to act non-cooperatively and would encourage cooperation in the early phases of a rescue process. It would, thus, result in coordinated, orderly restructuring efforts, thus benefiting the Europe's financial industry as a whole.

In this model, the role of DG Competition would therefore be significantly enhanced: it would participate explicitly in the resolution regime by enforcing competition rules and limiting moral hazard, and it would give strong incentives to cooperate, already in the rescue phase. Therefore the European Commission's *ex-post* assessment, focused on cooperation between authorities, would usefully complement the *ex-ante*, currently incomplete, cooperation model. Consequently, such reform would contribute to achieving the two overriding objectives of a new resolution framework, namely improving coordination and limiting moral hazard.

4 CONCLUSION

Improving the bank resolution framework is a crucial priority for the reform process in Europe. It should be tackled with two objectives in mind: improving coordination between member states and alleviating moral hazard. While Europe faces quite a challenge with respect to the first objective, it should take full advantage of the commitment power that state aid control represents and which, as this policy contribution has argued, could in fact help with both objectives.

REFERENCES

- Barnier, M. (2010) 'Laying the foundations for crisis prevention and management in Europe', European Commission *Conference on cross-border crisis management*, Brussels, 19 March
- Beck, T., D. Coyle, M. Dewatripont, X. Freixas and P. Seabright (2010) *Bailing out the Banks: Reconciling Stability and Competition. An analysis of state-supported schemes for financial institutions*, CEPR
- Bolton, P. and D. Scharfstein (1996) 'Optimal Debt Structure with Multiple Creditors', *Journal of Political Economy* 104, pp. 1–26
- Council of the European Union (2009) 'Council conclusions on strengthening EU financial stability arrangements', 2967th Economic and Financial Affairs Council Meeting, 20 October, available at http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/en/ecofin/110617.pdf, accessed 13 May 2010
- ECFIN (2008) 'Memorandum of understanding on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross-border financial stability', available at http://www.c-ebs.org/getdoc/2dc61357-4742-48b2-8daa-9084f4ee8809/2008MoUFinalsigned_000.aspx, accessed 13 May 2010
- European Commission (2009a) *Proposal for a Regulation of the European Parliament and of the Council on Community macro prudential oversight of the financial system and establishing a European Systemic Risk Board*, 2009/0140 (COD)
- European Commission (2009b) *Proposal for a Regulation of the European Parliament and of the Council establishing a European Banking Authority*, 2009/0142 (COD)
- European Commission (2009c) *Communication from the Commission to the European Parliament, the Council the European Economic and Social Committee, the European Court of Justice and the European Central Bank on An EU Framework for Cross-Border Crisis Management in the Banking Sector*, COM(2009) 561/4
- Nguyen G. and P. Praet (2010) 'Which banking resolution authority for Europe?', *VoxEU.org*, April 16
- Pisani-Ferry, J. and A. Sapir (2010) 'Banking crisis management in the EU: and early assessment', *Economic Policy* 62, pp. 341-373
- Strauss-Kahn, D. (2010) 'Crisis Management Arrangements for a European Banking System: Building a Crisis Management Framework for the Single Market', keynote speech, *European Commission Conference on cross-border crisis management*, Brussels, 19 March